DECLARATION

I declare that EXPLORING THE QUALITY OF STUDENTS SUPPORT SERVICES IN DISTANCE LEARNING ENVIRONMENTS is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

SIGNATURE------------------------------------- DATE-----------------------------
DEDICATION

This work is dedicated to my family.
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First of all, I would like to thank God for being with me throughout this journey and for availing the right people that assisted me along the way.

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ABSTRACT

Delivering education through open and distance learning (ODL) mode imposes upon ODL institutions a responsibility to provide support services deemed adequate to address students' expectations and learning needs. Student support services are a vital part of academic success in distance learning environments because of the nature of distance education. Therefore, it is critical to provide student support services whose quality levels are acceptable to those who use them.

Quality and its measurements are a contentious issue in higher education and distance education. Efforts to help service quality researchers in distance education understand service quality and its evaluation have come from marketing researchers. Among different approaches of service quality assessment is the SERVQUAL model.

This study explored and examined the quality of students' support services in distance learning environments from students' perspective, using a modified SERVQUAL model. The objectives of the study were to examine students' expectations and perceptions of the quality of support services; analyse the gaps between expectations and perceptions; develop and validate a service quality model and a scale to evaluate the quality of distance education students' support services.

A sequential mixed methods design was used to collect and analyse the data. Data were collected in two phases. The first phase involved collecting data qualitatively. The qualitative data were used to develop a context specific service quality model and a scale. The model and the scale were validated in the second (quantitative) phase of the study.

The results of the study showed that the students' expectations exceeded the perceived performance levels of the student support services. The largest gaps related to feedback, study material delivery and spaces for quiet learning. The study also found that distance education student support services can be measured by four service quality dimensions, namely: tangibles, reliability, delivery and assurance.

Keywords: Open and distance learning, Student support services, Service quality.
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Delivering education through open and distance learning (ODL) mode imposes a huge responsibility on ODL institutions to provide student support services that are deemed adequate and of acceptable quality. Student support services are developed by distance education (DE) institutions to help students with their learning and to complete their studies. Student support services are a vital part of academic success in higher education in general and very critical in ODL because of the nature of DE. (In this study, the terms distance education (DE), open and distance learning (ODL) and distance learning are used interchangeably).

DE serves different groups of students: working adults, unemployed persons and school leavers who need tertiary education. The distinguishing characteristic of ODL is that it takes place outside the traditional classroom. The student and the tutor/instructor/teacher are separated geographically, and the communication between them is facilitated through the use of various technologies, for example print and electronic materials. Belanger and Jordan (2000:15) point out that distance learning not only separates the teacher from the student, but it also separates the student from other students. This clearly means that DE students are virtually on their own. They are expected to engage in independent study (Wedemeyer, 1981), perhaps with or without occasional face-to-face student-teacher interactions.

Moore (1993) indicates that the separation of students and their teachers in DE is not only geographical, "but more importantly", pedagogical. Moore (1993:22) refers to this pedagogical separation as transactional distance. Transactional distance is described as a psychological and communications gap that occurs due to the separation of students and their instructors in DE institutions. This separation "profoundly" affects both teaching and learning (Moore 1993:22) in that it creates an interaction (learning and teaching transaction) gap. For example, the transaction gap is said to contribute to students' feelings of isolation and disorientation, which can lead to reduced levels of motivation, engagement and attrition (Moore 1993:22). To demonstrate the point of isolation, a report by the Higher Education Quality Committee (HEQC) (2010:10) found that many of the students
who are registered with the University of South Africa (Unisa), the largest DE institution in Africa, go
to the university's study centres and the main campus "seeking physical and social spaces where they
can study, develop and belong to a community of higher education students".

Most DE institutions are inherently at the other end of the continuum of interactions due to ODL's
unique characteristics. Inherently, interactions of student–teacher and student–student in distance
learning are lower than interactions in the conventional learning mode. This culminates in
communication and pedagogical gaps (Moore 1989), which are likely to lead to high drop-out and
failure rates and non-completion of studies. This assertion is supported by Simpson (2002) and Jung et
al (2002). It is believed that providing appropriate student support services can address the
communication and pedagogical gaps that are inherent in DE and can also help students overcome
most of their other learning difficulties.

In ODL, students' support services are broad and include services such as registration, advisory
services, learning support services (academic), counselling, career services, provision of study centres
and financial assistance (Robinson 1995). They can be categorised into services that support students'
social and emotional needs and those meant for academic success. Although all these services are
essential to help students perform well in their studies, the scope of this study is focused on support
services designed to facilitate students' learning. Examples identified from the literature (Robinson
1995; SAIDE 2003) are: tutoring, guidance on learning and assignments, feedback, interactions with
teaching and non-teaching staff, study centres and student-student interactions.

Student support services serve as the interface between the institution and the student (Krishnan
2012:460). In addition, many DE practitioners such as Mannan (2008); Fraser and Killen (2005); Davies
(1999); Gunawardena (1996); Robinson (1994); and Sewart (1993) have stressed the importance of
student support services in helping students achieve their learning outcomes. For example, Mannan
(2008:2) points out that the degree of success of students depends on the amount of support services
that are made available to them on their doorstep. According to the Commonwealth of Learning
(2001:80), "in South Africa, the likelihood is very high that a large number of learners will fail if they do
not receive learner support from their respective institutions and other interested parties"; because
"a large number of learners are still disadvantaged and underprepared".
Moreover, Thorpe (2004:1) points out that student support services impact “very directly” on the effectiveness of the courses in terms of retaining students and helping them achieve their learning outcomes. This is echoed by Oaks (1996) cited in Galusha (1997:10), who observed that “success in attracting, serving, and retaining students will hinge more on excellent student support services than on any technology issues.” To reiterate, Fraser and Killen (2005); Thorpe (2004); and Oaks (1996) cited in Galusha (1997) also highlight the importance of support services in retaining students at higher learning institutions. In addition, Sewart (1993:11) points out that United Kingdom’s (UK) Open University’s (OU) success in teaching and learning lies in recognising the need for student support. Sewart (1993) finds support in The Guardian [online] newspaper, which interviewed an OU student who was surprised by the quality of academic rigour, tutor support and resources at OU. The student stated, “I worked really hard to get the grades required to get on to my first university course ... The OU may be open access, but expectations were much higher, as was the level of tuition and support”.

Much as it is critical to provide student support services in DE, it is equally so to provide student services whose quality levels are acceptable to those who use these services. This finds support in Simpson (2002), who cautions that there is little point in providing student support services unless the quality of those services is appropriate and valued by students themselves. The importance of providing and delivering quality student support services in DE has also been emphasised by researchers Aluko and Hendrikz (2012); Belawati and Zuhairi (2007); Thorpe (2004) and; Tait and Mills (2003). According to Aluko and Hendrikz (2012), DE institutions are no longer judged by the quality of their learning materials only; greater emphasis is now placed on the quality of student support services they provide. The emphasis on the provision of quality student support services has become one of the most important aspects of teaching and learning in DE as stakeholders in many countries compel their higher education institutions to produce high quality services, processes and students (Belawati & Zuhairi 2007:2).

1.2. BACKGROUND AND CONTEXT FOR THE STUDY

Over the years, many countries have developed and implemented quality assurance standards in their higher education institutions. To date, there are many quality assurance bodies that help facilitate
developments and implementation of quality assurance standards in their higher education institutions. These efforts can be attributed to quality agencies such as the European Network of Quality Assurance (ENQA), the International Network of Quality Assurance Agencies for Higher Education, the Commonwealth of Learning (COL) and the HEQC in South Africa. According to Westerbeijden et al (2007), quality assurance schemes in European higher education were first introduced in France in 1984 and a year later were introduced in the UK and the Netherlands. By 2010, an association called the European Association of Quality Assurance in Higher Education had been established. This is an umbrella body that represents quality organisations from higher education in Europe. Furthermore, quality assurance agencies for higher education have been established in Australia, Canada and the US. In India, quality assurance activities were established in response to the “mushrooming of higher education institutions” (Prasad 2005), which were seen as compromising the quality of education. In 1994, the University Grants Commission established a higher education quality assurance agency called the National Assessment and Accreditation Council (NAAC). This is an autonomous body, which assesses and accredits institutions of higher education.

In South Africa, quality assurance processes emerged in the late 1990s through South Africa’s Higher Education Quality Committee (HEQC) and the Council for Higher Education (CHE). Among the functions of South Africa’s quality assurance agency is the development of a system of quality assurance for higher education including programme accreditation, institutional audits, quality promotion and capacity development and standards development. These efforts have helped in the promotion of quality principles in higher education institutions in the country. One of the higher education institutions in South Africa notable for its striving for quality improvement is Unisa, the only dedicated distance learning university in South Africa. It is one of the oldest distance universities in the world, and the biggest in Africa. Unisa started as an examination centre in the 1800s and it became a correspondence education institution in the 1950s. Today Unisa is one of the biggest ODL institutions in the world, with close to 400 000 students from South Africa and different parts of the world. Although more than 90% of students are South African, about 9% are from other African countries and more than 1 000 students are from the rest of the world.
Quality assurance processes emerged at Unisa in 2007, when the institution “consciously subjected its institutional quality assurance initiatives to external scrutiny” (Unisa, 2010:6). In that year Unisa requested the COL to audit its quality plans in preparation for its August 2008 HEQC external audit. According to Clarke-Okah and Daniel (2010:19), “Unisa found the panel’s report highly beneficial”. One of the findings of the COL report (2008) was about the quality of student support services. The recommendation in this regard (COL 2008:20) was that Unisa should revisit its priorities in order to ensure that student support services provision was made “clearer as the main priority”.

The COL audit (2007) was followed by the HEQC audit in 2008. The findings and recommendations of this audit were released in a 2010 HEQC report. The report (HEQC 2010) acknowledged that Unisa had achieved much with regard to its business processes and systems, academic offerings, teaching and learning, research and community engagement. Some of the achievements cited in the report included winning awards for learning material in several disciplines, and for the quality of ODL research by the Institute of Curriculum and Learning Development (ICLD), presently known as DCLD, just to name a few. Nonetheless, the report also highlighted a series of serious challenges that Unisa faces. One of these was that Unisa’s student support system was not “adequate” to address the needs of local and international students. The council went on to recommend that Unisa should develop and use better-quality student support management techniques for students’ learning. Furthermore, the HEQC (2010) asserted that Unisa was in the process of examining the philosophical implications of ODL and its vast technological and organisational implications. “Fundamental among these is the definition of what constitutes quality provision in the ODL context and what Unisa’s responsibilities are in this regard” (HEQC, 2010:8). This present study was sparked off by the HEQC’s (2010) finding about the quality of Unisa’s student support services.

Unisa had earlier raised the issue of inadequate support services in its portfolio on self-reflective evaluation and analysis of the effectiveness of its quality arrangements. The university pointed out that the level and depth of its student support system was still not adequate, despite having adopted and implemented most important support services from the world’s good models (Unisa, 2007). According to Unisa (2007:145), the students support service system did not match the NADEOSA’s (National Association of Distance Education and Open Learning in South Africa) minimum targets.
Searches of the literature uncovered more quality concerns raised over the years by other researchers (Robinson 1995; Tait 1995; Miller 1999; Simpson 2003; Ruth 2005; Welch & Glennie, 2005) regarding student support services in ODL. The literature revealed that support services in ODL do not get the attention they deserve, yet they are crucial in helping students perform well in their studies. According to Tait (1995:232), the rationale for student support in ODL "has been weakly conceived and realised". In addition, a report by Welch and Glennie’s (2005), shows that there are still bad practices, which lead to ineffective and poor-quality student support in DE in South Africa, despite the existence of the Quality Standards Framework on student support. The report further indicates that in one course of study, which had enrolled over 10 000 students, student support covered only 10% of those students. Moreover, less than three hours of student support was provided per module and the support consisted “merely of showing a video of a lecture to the students” (Welch & Glennie 2005:10).

Furthermore, The Commonwealth of Learning (2001); Guijjar (2009); Bbuye (2006); Kangai Rupande & Rugobye (2011); Oosthuizen, Loedolff and Hamman (2010;) also indicate that the system of support services for students in ODL is not satisfactory. Bbuye (2006) found that support given to Ugandan ODL students was neither adequate nor systematic, but just “chance support”. The understanding that one gets from the phrase “chance support” is that the support given is not planned or formally organised, but just happens; perhaps as “an afterthought” (Tait 2000:107). Moreover, a study on perceptions of students on the effectiveness of support services at Zimbabwe Open University (ZOU) (Kangai et al 2011), found that students were not satisfied with most support services. More than two-thirds of students found services such as assignments, coursework, weekend tutorials and distribution of study materials ineffective. A study by Oosthuizen, Loedolff and Hamman (2010) on Unisa support services found that many Unisa students were not satisfied with their support services.

The concept of adequacy of student support services is undefined in the student support services literature (Floyd & Casey-Powell, 2004; Thorpe, 2002; 2004; Robinson, 1995; Mckenzie et al, 1975; Tait, 1995, 2000, 2010; SAIDE, 2000; HEQC, 2010; NADEOSA, 2010; Mills & Tait, 2000; International Barometer Survey, 2010; Ozoglu, 2010; Nonyongo & Ngengebule, 1998; Sewart, 1993). Most of these works have focused on issues ranging from planning and management of student support to variations
and types of support services given to students in DE institutions. Furthermore, the NADEOSA (2010) and HEQC quality standards for student support (2004) do not define adequate support services.

Efforts to help service quality researchers understand services and how to evaluate their quality have come from veteran service quality researchers Parasuraman, Zeithaml & Berry (1985; 1988). These authors designed the SERVQUAL model, a framework that measures and manages service quality. The SERVQUAL has been adapted and used in different service industries including the education sector (Galeeva, 2016; Afridi, Khattak & Khan, 2016.; Yousapronpaiboon, 2014; Dursun et al, 2014; Moenikia et al, 2013; Van Schalkwyk & Steenkamp, 2014); and has remained the most popular model to understand and assess service quality. It is hoped that the SERVQUAL will help us have a clear understanding of service quality and how to assess it in distance education institutions. Rumble (2000:1) reiterates that "it is in the service industries that most of the really good thinking about 'customer' care has gone on". A customer ("service user" from now on) is someone who uses services provided by a service provider in an industry, organisation or institution. In the marketing literature, services are defined as activities offered to a "customer" by a service provider (Zeithaml et al, 1990). An adequate service is described as the level of service quality a service user is willing to accept (Shrinivasan, 2010; Parasuraman et al, 1994).

Service quality as conceptualised by Parasuraman et al (1988) results from the comparison of service users’ expectations with their perceptions of the performance of services. It can also be defined as a measure of how a particular service meets the needs of a service user (Groonros 1992). Other authors define it as the extent to which a service meets or exceeds the service user's expectations and needs (Seilier 2004; Zahari, Yusoff & Ismail, 2008). Therefore adequate students’ support services should be conceived as the level of service quality a DE student is willing to accept, as a user of student support services offered in a DE environment. In addition, adequate student support services in DE should meet or exceed the students’ needs and expectations. This means that DE institutions should provide the required and desired student support services within the limits of the available resources.

According to Parasuraman et al (1985, 1988), there are several reasons why services become inadequate, that is, why they fail to meet or exceed expectations and needs of users. Firstly, an organisation providing a service may not always understand:
what features connote high quality to consumers in advance;
what features a service must have in order to meet consumer needs;
what levels of performance on those features are needed to deliver high-quality service (Parasuraman et al 1985:44).

Secondly, in their theory of service quality, Parasuraman et al (1985) suggest that a series of gaps occurring within an organisation prevent the delivery of services to service users. These gaps can only be experienced (perceived) by the service users. Therefore, in order to have a full understanding of service quality and service quality gaps within an organisation, services must be assessed. Parasuraman et al (1985) suggest that an appropriate approach to assess the quality of services is to measure service users’ expectations and their perceptions of the performance of the experienced service. This is so because service users’ expectations and perceptions about a particular service shape the user’s assessment of that service (Parasuraman et al 1985). In other words, for any DE institution to understand the quality of its student support services, the institution must allow the students to assess, judge, determine and define the quality of those services, because they are the service users.

The notion of judging, determining and defining service quality from the service user’s perspective is supported by Simpson 2002; Schneider and White 2004; Pollit 1992; Zeithamal, Parasuraman & Berry 1990; Gronroos 1990; and Parasuraman et al 1985; 1988; 1990. Nonetheless, this view might be unfamiliar to higher education institutions, including DE institutions, because there is an inclination to view the quality of services in higher education institutions from an organisational perspective (Oldfield & Baron 2000). In addition, Kangai (2011) reiterates that providers of DE have often used students’ characteristics and their needs in planning students’ support services. This therefore could explain Unisa’s persistent problem of inadequate student support services. It is unlikely that support service guidelines and models used by Unisa can address the students’ needs and expectations because those models have been determined from the organisational perspective.

1.3. PROBLEM STATEMENT

For support services to be declared inadequate over a period of many years is a clear indication that there are persistent deficiencies and gaps within that student support structure. It is also clear that
inappropriate models and frameworks are used to guide the provision and delivery of support services in some ODL institutions, given the following facts:

First, the determination of support services is done from the institution's perspective. This perspective contravenes the belief that students, as service users, are the best judges of their educational needs and how these should be met. The determination of services by the service users is consistent with the literature (Simpson, 2002; Schneider & White, 2004; Pollit, 1992; Zeithaml et al, 1990; Gronroos, 1990; Parasuraman et al, 1985; 1988; 1990). Moreover, Zeithaml et al (1990:16) emphasise that the only criteria that count in evaluating service quality are defined by the service users. In addition, according to O’Neill and Palmer (2004), more attention is now being paid to perceived service quality from university students’ perspective.

Second, Unisa employs models such as the NADEOSA quality standards (Unisa 2007) to understand the provision, delivery and the quality of its student support services. NADEOSA (2003) quality standards are good criteria for products, not services. Moreover, these quality standards have been determined by NADEOSA and Unisa and do not involve the views of students. Models like these are of little or limited importance in addressing the expectations and the needs of the students, who are users of services. Again, the standards are broad and not tailored to the needs of DE students.

Similarly, the HEQC approaches the evaluation of higher education institutions quality from a broad perspective, using tangible measurements. Higher education institutions, including DE institutions, measure their students' satisfaction using surveys to understand quality. These surveys ask students about their satisfaction with a range of issues pertaining to learning and teaching, including support services. The satisfaction surveys are said to be indicators of quality (Uka, 2014). We would like to argue that the satisfaction surveys being used in higher education and DE are not adequate measurements or indicators of service quality in higher education and DE. Furthermore, these surveys cannot be relied upon as appropriate to measure and understand the quality of student support services. This finds support in Shaik, Lowe and Pinegar (2006), who assert that alumni surveys, programme evaluation and instructor and course evaluation questionnaires are not designed to address the issue of service quality. They point out that data from these evaluations are used to make inferences about students' satisfaction with educational services. These evaluations do not impact
students’ needs “directly” and therefore do very little to address the issues of support services. Services have unique characteristics and these should be acknowledged by any quality evaluators who assess the quality of institutions that provide services.

Whilst we know that DE institutions view quality from the institutional perspective, much is not known about the quality of student support services from the perspective of the students themselves. Moreover, not much is known about the determinants of service quality that DE students can use to evaluate the student support services provided by their institutions. The researcher believes that it is unlikely that support service guidelines or frameworks based entirely on the views of people who do not use the services can address the students’ needs. It could be that incorrect criteria, methodologies and measurements are being used to determine and define student support services. The users of services are the best judges of their educational needs and how they should be met. Furthermore, service quality has been identified as very difficult to evaluate, unlike product quality (Parasuraman 1988) because of services’ unique characteristics. This problem has been observed in DE as well (Belawati & Zuhairi 2007). This fact should be acknowledged by DE institutions so that appropriate service quality assessment models and measurements can be used.

Students interact with their learning environment all the time. These interactions have some influence on how students perceive and experience services provided to them. It is through students’ expectations and perceptions of their experiences that the quality of the support services can be understood. Investigating the quality of these services from the students’ perspective will help the university understand students’ views of service performance and delivery and also know what type of support services could best meet students’ expectations.

1.4. THE PURPOSE OF THE STUDY

The aim of this study is to examine the quality of students’ support services from DE students’ perspectives. The study is intended to serve the following purposes:

- Help the researcher understand the quality of ODL student support services in meeting the users’ expectations and desired needs.
• Provide feedback that will help the researcher understand the quality of students support services from the students' point of view.
• Assist the researcher to design a context specific framework for student support services.

1.5. THE OBJECTIVES OF THE RESEARCH

In order to achieve the study’s aim, the following objectives were set:

β Examine DE students’ expectations and perceptions of their experiences of the quality of student support services.
β Analyse service quality gaps between students' expectations of their support services and their perceptions of experienced service, in order to determine the extent of those gaps.
β Identify underlying service quality dimensions that can measure student support services.
β Develop and validate a context-specific framework for understanding student support service quality within DE environments.

This study therefore attempts to address the following questions:

β What are students' expectations and their perceptions of experiences of the quality of student support services in a DE environment?
β What are the gaps between students' expectations and their perceptions of their experiences?
β What are the underlying service quality dimensions of student support services in DE environments?
β Can a context-specific student support service framework be designed to understand service quality in DE environments?

1.6. PARADIGMATIC PERSPECTIVE OF THE STUDY

In order to address the research problem and questions, the researcher needs to identify the most appropriate paradigm. Researchers' choice of paradigmatic stance is often influenced, on one hand, by their philosophical positions (beliefs) and on the other hand by the demands and needs of the study. That is why different researchers view the world differently and approach their studies differently. Burrell and Morgan (1979:4) put this more succinctly by stating that if we look at the world in a
particular way, it means we are located in a particular paradigm. Husen (1988) points out that a paradigm “determines the criteria according to which one selects and defines problems and how one approaches them theoretically and methodologically”. Furthermore, Mackenzie and Knipe (2006) argue that without nominating a paradigm as the first step for one’s research, there is no basis for subsequent choices regarding methodology, methods or research design. In addition, the researcher’s paradigm has a direct bearing on the planning, execution and the findings of the research (Kirsten 2001:10; Guba & Lincoln 1994). Mertens (2005:7) defines a paradigm as a way of looking at the world and that world is composed of certain philosophical assumptions that guide and direct thinking and action. To expound on Mertens’s (2005) view, Guba and Lincoln (1994) describe a paradigm as a worldview that defines the nature of the world, the individual’s place in it and a range of possible relationships to that world. There are different paradigms to choose from when embarking on research. Mackenzie and Knipe (2006) have identified the following paradigms: post-positivist and positivist; interpretivist/constructivist; transformative; and pragmatism. This study rests on the pragmatic paradigm.

Pragmatism allows a combination in one study of two different research approaches whose philosophical orientations differ, to understand reality. On one hand, it uses a positivist perspective and on the other it uses a constructivist–interpretive perspective to understand research reality. This means that a pragmatic paradigm provides researchers with a philosophical framework for mixed-methods research (Creswell, 2009; Teddlie & Tashakkori, 2009). It allows a combination of qualitative and quantitative data collection and analysis methods in one study, thus bringing clarity to the research question that would not be achieved by only one methodology (Creswell & Plato Clark, 2011; Macmillan & Schumacher, 2006). Furthermore, according to Creswell (2003:12), using a pragmatic paradigm provides an opportunity “for multiple methods, different worldviews, and different assumptions, and different forms of data collection and analysis.”

The epistemology of pragmatic paradigm posits that, firstly, a researcher is free to study a subject that is of interest and of value to her or him. Secondly, the phenomenon of interest can be studied in different ways deemed appropriate in order to achieve the purpose of the research. For example, Maxcy (2003) asserts that the mixed-methods approach provides the criteria for knowing what
methods are appropriate if the method is to achieve its purpose. Thirdly, the methods are chosen from those most likely to provide insights into the question, with no philosophical loyalty to any alternative paradigm.

1.6.1. Research approach

The approach identified for this study is the mixed-methods methodology. The mixed-methods approach is located within the pragmatic paradigm and combines both qualitative and quantitative methods in one study to attempt to answer the research questions. In essence, the mixed-methods methodology allows a combination of two methodologies that belong to two different paradigms. This methodology (Greene 2006) is, according to Creswell (2006) new in research design. According to Creswell (2006:5) the use of the term "mixed methods" "is clean and concise and resonates with many researchers".

The mixed-methods approach has been described as a combination of qualitative and quantitative approaches (Tashakkori & Teddlie 1998); a methodology in which a researcher combines elements of qualitative and quantitative approaches (Johnson 2007); qualitative and quantitative methods as a “combined methodology” and a “methodological triangulation” (Creswell 2006:165). The understanding and sense that we draw from these definitions is that a mixed-methods approach combines both qualitative and quantitative methods (techniques) within one research study to form "a distinct research design" or methodology (Creswell 2006:163).

Furthermore, in his most current work with Plano Clark, Creswell defines mixed methods in terms of its “core characteristics” (Creswell & Plano Clark, 2011). These authors point out that in mixed-methods research, the researcher:

- collects and analyses persuasively and rigorously both qualitative and quantitative data (based on research questions);
- mixes (integrates or links) the two forms of data concurrently by combining them (or merging them) sequentially by having one method built on the other or embedding one within the other;
- gives priority to one or both forms of data (in terms of what the research emphasises);
- uses these procedures in a single study or in multiple phases of a program of study;
frames these procedures within philosophical worldviews and theoretical lenses; and
combines the procedures into specific research designs that direct the plan for conducting the study (Creswell & Plano Clark 2011).

Although the pragmatic paradigm allows the use of qualitative and quantitative methods in one study, there is some debate regarding the use of these methodologies in one study (Cameron 2013; Makenzie & Knipe 2006; Jones 2004). The fundamental disagreement in educational research is the fact that each methodology is located within its own paradigm, with its own set of philosophical assumptions. In his paper titled "Quantitative and Qualitative Research: Conflicting Paradigms or Perfect Partners?", Jones (2004) asks whether these two approaches, which amount to two different paradigms, could be used jointly in a principled manner. According to Jones (2004), the differences between quantitative and qualitative approaches are so great that their methods cannot just be mixed.

Nevertheless, many researchers including Creswell and Plano Clark (2011); Creswell (2003); Macmillan and Schumacher (2006); Johnson and Onwuegbuzie (2004); Thomas (2003); Raudenbush (2005); and Krathwohl (1993) view the integration of qualitative and quantitative methods as complementary. In addition, education researchers such as Pryjmachuk, Gill, Wood, Olleveant and Keeley (2012); Price, Richardson and Jelfs (2007); Kangai (2011); Ruth (2005); and Mowes (2005) have used mixed methods in their studies. Pryjmachuk et al (2012) used a mixed-methods approach in a study that evaluated a course unit designed to support undergraduate students. This approach was employed to establish the extent to which the unit was effective and fit for purpose. The researchers used an online quantitative survey and the qualitative method of face-to-face interviews to collect the data. This approach yielded useful information for the study.

Using research methods that are both qualitative and quantitative is helpful for the triangulation of the findings of the study. Triangulation is a research technique whereby multiple research methods are used to validate the research findings. This finds support in Bryman (2004), who asserts that researchers should ensure that they are not over-reliant on one method, but should employ different methods when investigating a research problem.

Two issues have been raised in the literature regarding the mixing of qualitative and quantitative methodologies in one study. The first concern is whether two methodologies that amount to two
different paradigms can be used jointly in a principled manner (Jones, 2004). The second issue raised is that studies employing qualitative and quantitative methodologies do not explicitly document how the mixed-methods approach is used (Cameron, 2013). To address these concerns the researcher used some quality criteria guidelines that help researchers combine qualitative and quantitative methods “in a principled manner”. These guidelines have been derived from Good Reporting of Mixed Methods Study (GRAMMS) (2008). GRAMMS is a quality framework for mixed-methods studies developed by O’Cathain, Murphy and Nicholl (2008). These guidelines are applied throughout the research processes to validate the use of mixed methods in this study. The guidelines are:

- Describe the justification for using a mixed-methods approach to the research process;
- Describe the design in terms of the purpose, priority and sequence of methods;
- Describe each method in terms of sampling, data collection and analysis;
- Describe where integration has occurred and how it occurred; and
- Describe any insights gained from mixing or integrating methods.

Given the fact that the pragmatic paradigm offers a framework to combine qualitative and quantitative methodologies in one study, it is appropriate to describe how these two methodologies were used in the study.

1.6.2. The research design

Two of the most common procedures followed when combining qualitative and quantitative research methods are sequential and concurrent designs. In concurrent designs, the researcher collects qualitative and quantitative data at the same time and merges the data "in order to provide a comprehensive analysis of the research problem" (Creswell, 2003:16). In sequential designs, the researcher begins with one methodology (for example, qualitative) and follows up with another methodology (quantitative) to “elaborate on or expand the findings” (Creswell, 2003:16) of one methodology with the findings of another methodology.

According to Creswell and Plano Clark (2011), Sequential Designs are called two-phased designs because they involve two phases of data collection and analysis. Creswell and Plano Clark (2011) and Creswell (2003) point out that sequential designs serve two purposes. The first purpose is to conduct
an exploratory study to shed light on a less understood concept. According to Creswell and Plano Clark (2011), the main purpose of exploratory studies is based on the premise that measurements or instruments are not available. The second purpose of sequential designs is to generate data in order to develop an instrument that will be used to collect data in the second phase of a study.

This study used sequential design procedures. A sequential design was chosen because it allowed the researcher to explore the quality of student support services, in a DE environment, by interviewing a small number of students, in the first phase. Then the findings from the qualitative (exploratory) study were used to develop a service quality model and a scale instrument that would be used to evaluate the quality of student support services from students' perspectives, in the second (quantitative) phase. The quantitative methodology helped the researcher collect and analyse data from a sample of Unisa students in order to provide statistical evidence to answer the research questions. It is also hoped that the results will be generalised to the wider population. Moreover, the quantitative methodology was also used to validate the proposed model of service quality and the scale instrument. The use of quantitative methodology is consistent with Creswell and Plano Clark (2011), who assert that exploratory results need to be explained and further examined.

It is hoped that the context-specific model of service quality will help DE institutions understand, interpret and evaluate the quality of DE student support services.

1.6.2.1. Phase 1: Qualitative data collection and analysis
The first procedure in Phase 1 involved the development of the instrument to collect data qualitatively. The researcher reviewed different sources on student support services in order to draw out the content that would be used to develop an instrument for the qualitative data. The following universities' and organisations’ frameworks were reviewed: Unisa, Open University (OU), the South African Institute for Distance Education (SAIDE) and HEQC. Literature (Robinson, 1994; Sewart; 1993; Tait, 2000) was also reviewed for the same purpose.

The second process was to conduct semi-structured interviews with Unisa students. The target population for this study was any student registered for undergraduate or postgraduate studies at Unisa. A small sample of students was drawn using a combination of two non-probability sampling techniques, convenience sampling and snowball sampling.
The third process involved analysing data using the thematic analysis (TA) technique. The insights from the qualitative data were used to formulate questions for the questionnaire. The insights were also used to develop a context-specific service quality model in order to understand distance support services quality.

1.6.2.2. Phase 2: quantitative data collection and analysis

The development of the scale instrument was based on and guided by the SERVQUAL model (Parasuraman et al 1985; 1988; 1990). The SERVQUAL model has been identified as the appropriate model to help the researcher understand and measure the quality of student support services in a DE environment. The choice of this instrument is based on its ability to measure service users’ expectations and their perceptions of the quality of those services. The SERVQUAL model conceptualises service quality as the difference between service users’ expectations and their perceptions of the service delivered to them. SERVQUAL was adapted to guide the development of the questionnaire because its original dimensions might not all be applicable to the context of ODL student support services. In their research that investigated perceptions and expectations of Asian students in Hong Kong and China, Kwan and Ng (1999) used an adapted SERVQUAL model that considered cultural variables in service quality in the Asian context. Other researchers who adapted the SERVQUAL model to their needs included Galeeva (2016); Afridi, Khattak & Khan (2016); Yousapronpaiboon (2014).

To contextualise the questionnaire, the content of some items was drawn from the exploratory data and the literature (Tait 2003; Robinson 1994; Sewart 1993). The questionnaire was administered to 600 Unisa students. Some questionnaires were administered face-to-face, some were posted to students and others were e-mailed.

1.7. THE SIGNIFICANCE OF THE STUDY

The evaluation frameworks that are presently used to measure service quality in DE have limitations. As such, the data collected using such instruments do not provide adequate information to help decision-makers address the requirements of the students. Service quality is context-specific, so generic measurements are not appropriate. This study attempted to address this gap by exploring the quality of student support services in DE from the students’ perspective. The data collected were used to develop a context-specific framework that can be used by institutions to understand, monitor and
manage the provision, delivery and the quality of student support in a DE environment. This attempt answers calls for the development of “valid, reliable and replicable measures of perceived service quality” (Martinez-Arguelles, Castan & Juan 2010:151).

Having a context-specific student support service quality framework will help DE institutions make informed decisions regarding students’ needs and expectations and provide the best service possible within the limited available resources, because resources will be directed to the relevant educational needs.

1.8. **ETHICAL CONSIDERATIONS**

It is good research practice to seek ethical clearance and approval before carrying out any research using human or animal subjects. Unisa has established an ethics review system aimed at the following: First, to “protect potential human participants, animal and other living or genetically modified organisms” (Unisa 2007:1). Second, to “contribute to the highest attainable quality of scientific and ethical research” (ibid). Therefore researchers may not carry out research activities involving human beings, animals and other living or genetically modified organisms without approval from Unisa’s research review committee, if research is “done on the premises of Unisa or in any of its Units or if it uses Unisa facilities and involves Unisa employees or students” (Unisa 2007:1). According to Unisa (2007), the Executive Director of research is the responsible person who ensures that the guidelines for ethics review are publicly available at the Unisa Research Directorate and registers all research that has obtained ethics clearance.

In this study, the researcher followed two application routes. The first route was to apply to the Unisa College of Education Research Ethics Committee for approval of the research, which was to involve Unisa staff and students. The College of Education Ethics Committee approved my application for ethical clearance in August 2013 and issued a clearance certificate that was a prerequisite to apply to Unisa’s Senate Research and Innovation and Higher Degrees Committee for approval to conduct research. The Committee granted me permission to conduct research involving Unisa staff, students and data, on 17 April 2014.
A consent form was distributed to individuals who had agreed to participate in the study before the commencement of the interviews. The consent form reassured the participants that the information they provided would be treated with confidentiality and that their names would not be used. They were also reassured that there would be no risks in participating in the study.

1.9. **STRUCTURE OF THE STUDY**

This study is structured in the following manner:

**Chapter 1:** Introduction and Background. This chapter contains the introduction to the study, the study's context, the research problem, objectives and questions, and the research methodology.

**Chapter 2:** Literature Review. In this chapter literature pertaining to service quality and DE student support services is reviewed.

**Chapter 3:** Conceptual Framework. In this chapter different but related concepts of service-quality evaluation and theories on distance learning are explored to establish the conceptual framework.

**Chapter 4:** Qualitative research data collection and analysis processes and procedures are discussed.

**Chapter 5:** Quantitative research data collection and analysis processes and procedures are discussed. These include the development of the survey instrument, the sampling technique, the pilot study and methods and procedures of collecting and analysing data.

**Chapter 6: Discussion of Findings:** This chapter discusses the findings of both the qualitative and quantitative research studies carried out in this study.

**Chapter 7:** Conclusions. The summary of the findings and the recommendations are presented in this chapter.
CHAPTER 2: LITERATURE REVIEW

2.1. INTRODUCTION

The aim of this chapter is to review the literature pertaining to issues of quality and DE student support services. The review examines reports and research on quality matters in higher education and DE. The review also examines studies that have investigated DE students’ perceptions and/or expectations of different support services such as learning and teaching interactions, feedback and study centres. Furthermore, the review focuses on studies that have used similar methodological approaches to the present study. Such approaches are qualitative and quantitative methodologies or a combination of the two methodologies (mixed methods).

This review focuses on the following themes:

- the concept of quality
- quality issues in higher education
- distance education (DE)
- student support services
- studies on student support services

First to be discussed is the concept of quality. Secondly, the conceptualisation of quality in higher education in general is analysed. Thirdly, the role of DE is discussed, followed by student support service systems in DE and their role. Lastly, student support service studies relevant to this study are discussed.

2.2. THE CONCEPT OF QUALITY

Although this study’s focus is on service quality in DE, it is equally important to understand what quality in general entails in higher education and DE. In order to engage in a meaningful conversation about quality in higher education, it is important to agree on what is meant when referring to quality (Dew 2009).

Quality is a very important issue across the world. To date, many countries around the globe have developed and implemented quality assurance standards in their higher education institutions.
(Jung, Wong, Li, Baigaltugs & Belawati 2010). The concept of quality can be traced to as far back as the work of the first quality American pioneers: Edwards Deming, Joseph Juran and Phillip Crosby. In 1950, Edwards Deming introduced a quality management approach that involved a planned and “systemic approach” to quality improvement. Deming’s management approach follows 14 points that serve as guidelines for “good organisational behaviour” regarding quality improvement management within organisations. Furthermore, Deming’s philosophy of quality management suggests a quality circle of management, which means that management should plan operations; implement them; assess measures to determine success and take action. Deming’s philosophy implies that by improving quality within a system, costs decrease and the customer morale and satisfaction increases.

Another quality pioneer, Joseph Juran, defined quality as fitness for intended use – meeting or exceeding users’ expectations. He believed that quality should be defined by the “customer”, who is the user of the service (Juran, 1986). He emphasised that people should not focus only on the technical aspects of quality, but on the management of quality as well. Another pioneer, Phillip Crosby, introduced the concept of “zero defects”, which is applied by many organisations today. The emphasis of zero defects is that faults are undesirable and unacceptable. Crosby’s (1979) notion of quality emphasises that quality should meet set criteria or satisfy the requirements or standards. This notion is used in many education institutions to measure the performance of those institutions.

2.2.1. Contextualising quality in Higher Education

Although the origin of the concept of quality can be traced to manufacturing industries, the concept is being applied in the education sector. Sahney et al (2004) point out that quality in higher education follows the definitions of quality in general. In accordance with the literature, (UNESCO, 2011; Cheng & Tam, 1997; Damme, 2002; Beckett & Brooks, 2008), the concept of quality in higher education means different things to different people and as a result there is no consensus on the definition of quality, despite years of operational experience in quality assurance in higher education (Damme, 2002:43). For example, according to UNESCO (2011:9), to higher education students, quality may mean being provided with facilities and the perceived
usefulness of education for future employment. Teachers and other stakeholders, on the other hand, may have their own definitions of quality. Furthermore, Cheng and Tam (1997:23) suggest that education quality is “rather a vague and controversial concept”. Beckett and Brooks (2008:41), also point out that quality measurement and management in higher education have “proved to be contentious”. Brady and Cronin (2001) have also noted that the conceptualisation and measurement of service quality have been the most debated and controversial topics in the services marketing literature.

UNESCO (2004:46–48) defines quality in higher education as “a multi-dimensional, multilevel, and dynamic concept that relates to the institutional mission and objectives, and to specific standards within a given system, institution, programme or discipline”. The latest conceptualisation of higher education quality has been proposed by Schindler, Welzant, Puls-Elvidge and Crawford (2015). Their conceptual model categorises quality into four broad conceptualisations, namely purposeful, exceptional, transformative and accountable. By these researchers’ admission, their conceptualisations are identical to those of Harvey and Green (1993) and Green (1994). Therefore Green’s (1994) conceptualisation of quality is considered next.

Green (1994) identified different approaches to quality in the field of higher education. According to Green (1994), quality can be viewed in terms of the following “dimensions”: exceptional highest standards; conformity to standards; fitness for purpose; and meeting customers’ stated or implied needs.

**Exceptional highest standards**

Quality as exceptional highest standards means excellence or exceeding standards. According to Harvey and Green (1996), the “excellence” notion of quality in education tends to focus on inputs and outputs. For example, the provision of good quality resources falls under this category. In the context of services provision in DE, quality as exceeding standards therefore means providing and delivering excellent resources and services to enable students do their work and succeed.

**Conformity to standards**
Quality as conformity (conformance) to standards means that quality should meet the standards or criteria stated.

Quality as fitness for purpose

Quality as fitness for purpose has several definitions. The first notion equates quality with the fulfilment of a specification or stated outcomes (Harvey 2012). For example in industries, a product or a service is assessed according to its own stated purpose. The second notion of quality as fitness for purpose is described as "one of the possible criteria for establishing whether or not a unit meets quality, measured against what is seen to be the goal of the unit" (Campbell & Roznyai 2002:132). The third notion of quality as fitness for purpose is described by Woodhouse (1999:29–30) as the type of quality that allows institutions to define their purpose in their mission and objectives. Therefore, quality is demonstrated by achieving those objectives and mission statements. The fourth notion of quality as fitness for purpose views quality as fulfilling a customer's requirements, needs and desires, thus putting the responsibility for quality determination in the hands of the customer. In other words, the customer specifies his or her own requirements.

A closer look at the notions of quality as fitness for purpose reveals some problems regarding their implementation. Firstly, these notions view quality from the perspective of the institutions or the organisations that are responsible for ensuring quality (Oldfield and Baron, 2000). In South Africa, the HEQC aligns itself with this notion of quality. The HEQC defines quality as fitness for purpose with regard to the manner in which institutions' missions and academic activities meet national priorities and needs; and in terms of ways in which higher education institutions achieve their missions and goals (CHE 2007).

The problem posed by these three views of quality is that they limit quality determination to institutions only. In the context of DE, viewing quality from the perspective of the DE institutions (service providers) limits quality determination to management and therefore does not involve students who are service users.
Generally, quality conceptualisation is a problem in higher education and DE because quality means different things to different people. Nonetheless, Martinez and Martinez (2010:9) warn that acknowledging this inherently leads to the evaluation of quality dimensions being distorted, because it would appear to some people that the dimensions that they are evaluating do not match the dimensions of the concept they conceive. We need to ask ourselves whether we can have only one theory of quality (Doherty, 1994).

2.2.2. Quality Assurance in Africa

In Africa, the growth of African higher education and the spread of open learning prompted the need to implement quality assurance activities in African universities (Sawahel 2012). Quality agencies emerged in the 1990s (Sawahel 2012). These agencies were formed under the auspices of the Association of African Universities (AAU), an association created to promote cooperation among African universities. One of its functions is to support and promote quality assurance activities across its member agencies.

The AAU collaborates with the European University Association (EUA) regarding quality developments between European and African universities. They share quality practices and their collaboration has resulted in "a White Paper on Africa-Europe Higher Education Cooperation for Development: Meeting Regional and Global Challenges, which highlights the important role of higher education in development cooperation" (EUA 2012:11). The two associations have formed Joint Africa–EU, which is a policy framework for dialogue and cooperation between Africa and Europe. One of their successful collaborations was a 2012 pilot project called Europe–Africa Quality Connect: Building Institutional Capacity through cooperation (2012:11). The aims of the project included contributing to internal quality assurance development nationally and regionally by promoting institutional self-evaluation “as a means to build institutional capacity for change for universities in Europe and Africa” (2012:11). A second aim was to promote international dialogue and cooperation on institutional development and quality assurance as core partnerships between universities in Africa and Europe (2012:11).
Although AAU's membership seems to be growing, quality activities in some DE institutions, more especially those in the sub-Saharan countries, are still in their infancy and a lot needs to be done (Materu 2007; Sawahel 2012). In addition, Robinson (2004:18) points out that some countries do not have any national or state quality assurance agencies for higher education and there are no national standards for ODL. Quality assurance activities in such countries are said to lie "almost entirely" in the hands of the institutions. This situation seems to be comparable to the one in India. According to Prasad (2005), in India there is a small number of quality institutions, departments and centres that form the quality sector in higher education.

Another organisation that promotes and supports quality in DE institutions in the African continent is the African Council for DE Quality Assurance and Accreditation Agency (ACDE QAAA). The ACDE QAAA has drawn up a framework of standards to measure quality in ODL and E-Learning in African higher education. The framework contains criteria statements and performance indicators for institutional audits and programme accreditation. The framework covers different areas within an institution, including student/learner support. The student support criteria component consists of 15 broad criteria that can be used to evaluate different areas of student support such as programmes, processes, progression, retention, feedback and feedforward, peer interactions and staff work efficiency. Examples are:

- Criterion 7.1: The programmes of the institution reflect its mission, goals and objectives
- Criterion 7.7: Learner support is provided using a range of media including appropriate ICTs
- Criterion 7.14: The institution has mechanisms to facilitate student progression
- Criterion 7.15: Learner support systems include monitoring of retention rates, provision of pre-emptive support and provision of remedial interventions (ACDE QAAA, n.d.).

Although the ACDE QAAA document is a good initiative in quality promotion in DE, its standards are very broad and tangible. Furthermore, sources of evidence and performance are measured on a five-point scale, from 0–Fails to meet criterion, 1–Unsatisfactory, 2–Marginal, 3–Good to 4–Excellent. The ACDE QAAA document might be difficult to use without major modifications.
2.2.3. Quality Assurance in South Africa

In South Africa, quality assurance processes emerged in the late 1990s through the HEQC and the CHE quality committees. Among the functions of South Africa’s quality assurance agency are the development of a system of quality assurance for higher education including programme accreditation, institutional audits, quality promotion and capacity development and standards development. These efforts are meant to promote quality principles in higher education institutions in the country. The HEQC carries out programme evaluations to determine the accreditation status of programmes. It also carries out institutional audits. During these audits institutions are required to provide evidence of their self-evaluation report on quality processes.

Furthermore, institutions have established their own internal quality assurance committees. One of these institutions is Unisa. Unisa’s Department of Strategy, Planning and Quality Assurance is responsible for guiding quality-related matters at the university. The unit helps to facilitate internal quality assurance processes for colleges, departments and schools of the university. These processes are carried out by quality assurance committees, which have been appointed within each college, school or department to oversee quality assurance and management matters. The student support section has its own quality assurance body called the Learner Support and Student Quality Assurance Forum, established in 2009. Internal quality assurance processes that are carried out by these committees include self-evaluation; making preparations for external evaluation of programmes; and facilitating the promotion of quality through training workshops and programmes to build the requisite ODL quality assurance capacity within the institution’s processes (Unisa Annual Report, 2009).

One of the frameworks or standards to guide the evaluation of student support services in DE in South Africa is the HEQC criteria for quality learner support. These criteria approach quality from a broad perspective and therefore fall short of addressing the needs of individual DE students. The HEQC criteria propose the following:

- Real two-way communication is used.
- Various technologies for tutoring at a distance; contact tutoring; assignments; and stimulation of peer support structures are used.
Learners are encouraged to create and participate in communities of learning in which the individual learner thinks and solves problems with others engaged in similar tasks. This is facilitated through a range of student support mechanisms: peer support sessions, tutorials/contact sessions, teaching on assignments, support in the workplace, e-mail and internet communications.

Academic support is built into the design of the course materials.

Learner access to technology that is relevant for the programme/course is facilitated and learners are shown how to use the technology for learning and communication.

Learners’ performance is monitored and learners at risk are identified.

Timeous educational intervention is provided for such learners.

There are systems to organise and monitor decentralised support for remote learners – grouping of learners, allocation of tutors, location of suitable sites of learning close to where the learners live/work and monitoring of attendance of tutors and learners.

The tutor ratio is sufficiently small to enable tutors to know their learners (HEQC 2003).

Another body that promotes quality in South Africa is NADEOSA. NADEOSA (2003) has published some 13 standards, in the *NADEOSA Quality Criteria for DE in South Africa*, to guide student support in DE in South Africa. The criteria include policy and planning; learners; programme development; course design; course materials; assessment; learner support; human resource strategy; management and administration; collaborative relationships; quality assurance; information dissemination; and results. The learner support standards range from course delivery and the size of contact sessions to telephone support. NADEOSA quality criteria are said to guide some quality processes at universities such as Unisa. Furthermore, the guidelines have had some impact as they are also being applied to guide research in some other institutions in South Africa (Aluko & Hendrikz, 2012).

Nonetheless, SAIDE’s report (2003) indicates that although there are quality standards to guide higher education institutions in South Africa, some institutions have a tendency either to ignore them or to pay lip service. It is evident from the literature (Sawahel, 2012; Materu, 2007; Robinson, 2004; SAIDE, 2003) that there are plenty of quality-assurance teething problems
despite efforts by many countries, governments and education ministries/departments to have quality principles in their higher education and DE institutions. We are told that only 19 out of 55 states in Africa have a national quality agency (Sawahel, 2012). It is clear that quality assurance initiatives are still in their infancy in Africa.

Another problem observed is that quality is approached from a broad perspective by quality organisations such as ACDE QAAA, NADEOSA and HEQC. Much as there are quality standards to guide higher education, including DE institutions in South Africa and Africa as a whole, these standards are broad and tangible and cannot be applied to all cases such as assuring the quality of students' support services in DE institutions. DE has unique characteristics that need to be acknowledged. The next section discusses DE.

2.3. Distance Education

DE is an educational system that takes place outside the traditional classroom. The student and the tutor/instructor/teacher are separated geographically, and the communication between them is facilitated through the use of various technologies such as print and electronic materials. Hence, DE students are expected to engage in independent study (Wedemeyer 1981). Furthermore, Belanger and Jordan (2000:15) point out that distance learning not only separates the teacher from the student, but also separates the student from other students. This separation of students from their instructors affects learning and teaching (Moore 1989; 1993).

DE has been practised for many decades. According to the COL (2000:2) the term “open and distance learning” (ODL) is relatively new in the field of education, “having gained prominence in the last 15 to 20 years”. According to the COL, more commonly used terms related to ODL are: correspondence education, independence study, home study, continuing education, distance teaching, adult education, technology-based or mediated education and open learning. However, Perraton (2007:10) points out that the term “distance education” (DE) remains the more usual term. To reiterate, Keegan (96:38) adds that the term has gained strength and acceptance since the 1980s. According to Spector (2008:261), a shift to have a wider range of other learning and teaching technologies led to the adoption of the term “distance education”. Spector (2008:261)
points out that correspondence education's delivery mode of using printed material and postal services only was not adequate to address the needs of the students.

According to Casey (2008:46), DE began with correspondence courses in 1850s that were introduced to address the problem of students who were too poor to afford campus-based institutions; those who lacked the formal qualification to gain entry into campus-based institutions; those who lived far from such institutions; and those who were employed and wanted to further their studies (Spector 2008:260). However, in recent years the demographics of ODL institutions have changed and ODL no longer caters only for working adults who want to improve their education. The demographics show that ODL universities cater for whoever needs tertiary education. DE institutions also provide education to school leavers who are looking for avenues of learning and have become an alternative education provider for people who want to study from the convenience of their own homes. As a result of providing education opportunities to everybody who needs higher education, DE institutions have large numbers of students. Some of these institutions have become so large that they have been given the label "mega-universities" (Daniel, 1996:70). A mega-university is a higher education institution with over 100 000 students (Jung, 2005:79). To date, there are many mega-ODL universities across the globe and ten of these are in Asia (Jung et al, 2011:64). Unisa is one of the DE mega-universities.

One important feature of DE is that DE institutions serve students with diverse characteristics (Zimmerman, 2002; Wang et al, 2008). According to these authors, these characteristics can be divided into two categories, namely demographic and psychological. They include the following:

- female and male students of different age groups located in different geographic locations
- working and unemployed adults
- school leavers who need tertiary education
- separated and isolated from their teachers
- varied learning environments
- holders of school-leaving certificates
- Independent, self-directed, motivated and confident students
This list of DE students’ characteristics indicates the uniqueness of this type of learning and teaching mode. Apart from this uniqueness, DE has many other problems. These range from poor quality of education (SAIDE, 2003), large number of students (Prasad, 2005; Sawahel, 2012); poor quality and inadequate students’ support services (Fraser & Killen 2006; Belawati & Zuhairi, 2007; Simpson, 2003); to high drop-out rates (Carr, 2000; Garrison, 1997; Tucker, 2000; Simpson, 2003; Jung et al, 2002; Pierrakeas, 2004; Simpson, 2002; Perraton, 2000).

The problem that is usually highlighted in DE is the issue of drop-out rates. According to Carr (2000), Garrison (1997) and Tucker (2000), drop-out rates are significantly higher in DE than in face-to-face conventional classrooms. In addition, according to Simpson (2002), most if not all ODL institutions in the world have fewer students who complete their courses and graduate than those in face-to-face institutions. Simpson (2002:1) further cautions that “any company that failed its customers on such a scale would be out of business in months if not days.”

There could be many reasons for drop-out numbers in DE. Suggestions in the literature (Fraser & Killen 2006; Belawati & Zuhairi, 2007; Simpson, 2003) indicate that failure to provide adequate support services leads to dissatisfaction among DE students, which in turn makes them neglect their studies (Simpson, 2003). This is supported by Jung et al (2002) who also observe that social isolation, inadequate faculty attention and lack of adequate student support lead to high drop-out rates. According to Sewart (1993), when the student interacts with the DE institutions’ services, he or she judges whether the service is good, bad or indifferent. If the student is dissatisfied, he or she drops out and if the student is satisfied he or she completes the course of study (Sewart, 1993). In addition, Kwek, Lau and Tan (2010) point out that students’ performance and retention are influenced by the service quality provided by higher education institutions.

We learn from the literature (Kwek, et al 2010; Sewart, 1993; Fraser & Killen, 2006; Belawati & Zuhairi, 2007; Simpson, 2003) that the provision of student support services can have a "significant direct" impact on DE students’ satisfaction and dissatisfaction of services provided. Nevertheless, the provision of support services has been said to be inadequate in DE for many years (Bbuye, 2006; Unisa, 2007; HEQC, 2010; Kangai, 2009; Simpson, 2003). Other problems of
support services relate to Information Communication Technology (ICT). ICT plays a very important role in DE. Studies show a range of problems with regard to ICT quality, ranging from poor provision (Sefotho, 2010), infrastructure inadequacies (Owoeye, 2009), underutilisation of technology (Mabunda, 2010) to ICT students’ under-preparedness (Liebenberg, 2012; Owoeye, 2009; Seymour & Fourie, 2004).

In this study, consideration was given to the term “inadequate” student support services. Although the terms "inadequate" or "adequate" support services have not been defined in the DE literature (Floyd & Casey-Powell, 2004; Preble et al, 2004; Thorpe, 2002; 2004; Robinson, 1995; McKenzie et al, 1975; Tait, 1995, 2000, 2010; SAIDE, 2000; HEQC, 2010; NADEOSA, 2010; Mills & Tait, 2000; International Barometer Survey, 2010; Ozoglu, 2010; Nonyongo & Ngengebule, 1998; Sewart, 1993), the understanding we get from service quality literature (Shrinivasan, 2010; Parasuraman et al, 1994) is that an adequate service is the level of service quality a service user is willing to accept. Those in the marketing field have defined service quality as a measure of how a particular service meets the needs of a service user (Groonros, 1992). Service quality has also been defined as the extent to which a service meets or exceeds the service user’s expectations and needs (Seilier, 2004; Zahari et al, 2008). Therefore adequate student support services in DE should meet or exceed an individual student’s needs and expectations. In order to understand service, we need to understand what student support services really are. The next section discusses student support services in DE environments.

2.4. STUDENT SUPPORT SERVICES IN DISTANCE EDUCATION

Support services are not a new concept in higher education. They can be traced as far back as 1918, when a group of university deans convened a meeting at the University of Wisconsin to discuss “establishing a group to support student personnel at colleges and universities” (NASPA, 2012–2014) [Online]. The purpose was to discuss the most effective methods of helping students in their intellectual, social, moral and personal development (NASPA, 2012–2014).

The roots of student support services can be found in the student affairs “phenomenon”. Student affairs is described as “the department or division of services for students at institutions of higher education to enhance student growth and development in the United States and broad” (NASPA)
According to NASPA, (2012), these services departments are called "Student Support" or "Student Services" outside the US. NASPA is a large organisation today, as it has expanded to other countries outside the US. Nonetheless, the work of NASPA is beyond the scope of this study.

In DE, student support services are described differently by different authors (Krishnan, 2012; Tait, 2000; Gupta & Gupta, 1999; Simpson, 2000; Thorpe, 2002). Nonetheless, the sense that these definitions give is that student support services are activities that are meant to assist students to perform well in their studies. Tait (2000) describes student support services as the range of services for individuals and students in groups, which complement the course materials that are uniform for all students. According to Tait (2000), DE student support services are a three-part system of support that has the following functions:

1. **Cognitive**: Services that cater for learning (academic) needs. These involve tutoring and assessment.
2. **Affective**: Services that cater for social and emotional needs.
3. **Administrative**: Services involving the administration of the DE system.

At the centre of these services are students who interact with these services during service performance and service delivery. Furthermore, Tait (2000:289) points out that these functions are both essential and interdependent and that ineffectiveness of any of these functions will affect the proper running of other functions and therefore will “push out” students from the system.

Krishnan (2012) defines student support services as a cluster of facilities and activities that are provided to make the learning process easier and more interesting for the learner. According to Gupta and Gupta (1999), support services are any service other than the actual course material that an institution provides to its students to realise the instructional objectives of the course. Simpson (2000) defines support services as all activities beyond the production and delivery of course material that assist in the progress of students in terms of learning, interacting and effective communication. Thorpe (2002:108) defines student support services as "all those
elements capable of responding to a known learner or group of learners, before, during and after
the learning process”.

Other researchers have described support services in terms of their qualities. Sewart (1993)
defines a service in terms of its characteristic, that is, as an intangible activity that cannot be
stored. Furthermore, SAIDE (2003) points out that student support is “support” if it is available
for every student; if it affects the student’s success; and if it is part of the teaching and learning
on the course. Moreover, Tait and Mills (2003) emphasise that student support services should
be fit for the purpose for which they are designed. In addition, Thorpe (2004:1) links student
support with student retention by pointing out that the quality of student support impacts “very
directly” on the effectiveness of the course in terms of retaining students and helping them
achieve their learning outcomes. Other studies (Simpson, 2002; Mannan, 2008; Fraser & Killen,
2005; Davies, 1999; Gunawardena, 1996; Sewart, 1993) have shown that the provision of proper
student support in DE helps students succeed in their studies. In addition, Thorpe (2004:1)
believes that student support systems should deliver quality support services. And, if that quality
has not been determined and defined by the students themselves, there is no point in providing
the support (Simpson 2002).

These definitions of services in DE literature (Krishnan, 2012; Tait, 2000; Gupta & Gupta, 1999;
Simpson 2000; Thorpe 2002) parallel the definition of services found in the academic marketing
literature (Zethaml & Bitner, 2000; Zeithaml, et al 1990; Gronroos, 1990). Generally, services are
described as activities offered to a service user (customer) by a service provider. Zethaml and
Bitner (2000) refer to services as deeds, processes and performances. According to Zeithaml et
al (1990), services encompass the following: the process, delivery and the outcome of the activity.
Gronroos (1990:27) defines a service as a process consisting of a “series of more or less intangible
activities that normally, but not necessarily always, take place in interactions between the
customer and service employees and/or physical resources or goods and/or systems of the
provider, which are provided as solutions to customer problems”.

Sewart (1993:9) points out that DE support service systems are a service industry that meets
most of the general criteria applicable to services in service industries. As in the marketing sector,
in the DE context (Tait, 2000; Thorpe, 2002; Gupta & Gupta, 1999; Sewart, 1993; Simpson, 2002), service providers are institutions and service users are students who have registered with the institution. Therefore, DE student support services should be conceived as various forms of processes and transactions that are used to offer the curriculum, as dictated by the course requirements, the expectations of the students and the nature of DE. These services can range from services delivered through the postal system to those that involve student-lecturer face-to-face interactions (tuition), to those delivered through modern technologies such as computers and telecommunications media. Furthermore, student support services should be regarded as intangible experiences and performances that do not "always" take place between the student and the university personnel. For example, study material is delivered to students via postal services or computer-mediated services. The institution is never present when the students receive their study material. They work through the study material on their own. This seems to be consistent with Rushton, Croucher and Baker (2010), who point out that service provision is complex and this complexity should be recognised.

What makes services and their provision complex are their unique characteristics. Parasuraman (1985) notes that due to these characteristics, service quality is more difficult to evaluate than goods quality. All services are said to bear the following characteristics: intangibility, heterogeneity, inseparability (Parasuraman et al, 1985) and perishability. Sewart (1993) acknowledges this. To show complexity of services, their characteristics are outlined below.

§ Services are intangible

Services as opposed to goods are intangible. This means that services cannot be seen or touched or stored because they are not objects like goods. They can only be experienced and perceived by the users because they are experiences (Parasuraman, 1985). Those who perceive and experience these transactions (the delivery of study material and lessons) are the students. For this reason services can best be measured using the perceptions of service users, not tangible measurements. Doherty (1994:251) rightly puts it thus: "the experience of satisfaction creates
the perception of good quality”. In addition, Sewart (1993) calls these intangible experiences moments of truth whereby the service user perceives good or bad service.

Services are inseparable

Services as opposed to goods are inseparable in terms of the way they are produced or used. Goods quality, on one hand, can be observed and evaluated before the goods are sent to the end user. Conversely, quality in services often takes place during service delivery – during interactions between the service user and the service provider (Zeithaml et al, 1990). Services cannot be manufactured and their quality cannot be tested before they can be used by the end users.

This can best be demonstrated by looking at goods. Goods can be produced and their quality can be checked. After these checks the goods can be delivered. Services on the other hand cannot be produced in a factory, checked for defects and then delivered to the user. Instead, the processes of production and consumption cannot be separated because they occur simultaneously (Bolton & Saxena-Iyer, 2009). This applies to DE student support services as well. They cannot be produced like goods, tested and then delivered. Services are used/consumed where they are and their quality can only be understood from the users' perspective. As the saying goes: “the proof of the pudding is in the eating”. Moreover, for the service to occur, both the service user and the service provider should be at the same place at the same time (Gilmore, 2003). Nonetheless, in DE, it is not possible for the service provider to be present during service delivery and consumption. That is why evaluation of services is important.

Services are heterogeneous

Services, as opposed to goods, are heterogeneous. This means that services can be delivered in different ways. Their performance differs from one service provider to the other; from one service user to the other; and from day to day (Zeithaml et al, 1990:15). So, it is not easy to ensure their consistency, because what the service provider intends to deliver may be entirely different to what the service user receives. This happens because service production and service
delivery involve a lot of human interaction. This situation can be dire where there are no standards to maintain service quality.

Heterogeneity is very visible in DE due to the nature of its service industry. For example, service delivery is in the hands of several structures, not necessarily the service providers (the management of the DE institution). Structures responsible for study material compilation are different from those handling dispatch and from those involved in the delivery. Similarly, those responsible for handling administrative issues are different from those in management. There is hardly ever coordination; that is why services should be evaluated for quality.

Services are perishable

This means that services cannot be stored to be used later. This characteristic can present a challenge during service delivery, because if the service user experiences unsatisfactory service delivery, he or she immediately forms a negative impression of the quality of the service.

Can research help explain these characteristics of services in DE environments? A study by Price et al (2007) explored the extent of the inseparability and heterogeneity characteristics of services in DE. In their research, which investigated students’ experiences of face-to-face and online tutoring, Price et al (2007) discovered that students were expecting online tutors to lead the way on every aspect of online tutoring, which was something the tutors were not actually doing. For example, students wanted their tutors to provide pastoral care; to demonstrate enthusiasm for the subject through facial expressions and hand gestures; to initiate group learning and encourage student-student interactions; and also become part of group discussions. Due to the inseparable nature of service, the students in Price et al’s (2007) research wanted their tutors to be part of every bit of service provision and delivery.

Moreover, students expect variations in the delivery of services due to the heterogeneity of services. Students in Price et al’s (2007) study wanted particular attention to be given to each service encounter (transaction). For example, they expected the online tutor to use facial expressions, and "an enthusiastic tone of voice which can even be detected on e-mails" (Price et al 2007:15). Again, tutors were expected to provide animation and warmth, online.
We should acknowledge therefore that DE by nature is a high-involvement service industry, with multiple service encounters. Encounters are different service transactions such as online tutoring, face-to-face tutoring, and telephonic interactions with tutors, lecturers and administrative staff. So, as a service industry, DE has to follow all the good practices of service industries such as involving students as service users in evaluating and determining the services they receive.

The approach of allowing service users to judge and determine the quality of their support services maybe uncommon in higher education and DE, because quality is determined from the organisational point of view (Kangai et al., 2011; Oldfield & Baron, 2000; Martinez-Arguelles et al., 2010). A study by Minoque and Hardy (2008) found that there are no service user involvement models that could be used to involve students in determining their own support services. Small and Rhodes (2000) define service user involvement as the involvement or participation of people who use services. There are suggestions (Humphries, 1998; Bitner, Faranda, Hubbert & Zeithaml, 1997) on how service users can be involved in the determination of services. One suggestion is that service industries can include service users’ opinions in their improvement plans. Furthermore, Bitner et al (1997) suggest three levels of service users’ participation: "low", "moderate" and "high". According to Bitner et al (1997), all forms of education fall under high levels of service user participation, whereby service users can be involved in co-creating the service. This means that students who get involved in the services receive good rewards from the service.

Researchers such as Ruth (2005) have found that service users’ approach to students' needs is a good approach for the improvement of services for virtual students. Ruth (2005:94) suggests that the results could be used as “a part of the strategic planning process for developing, implementing and refining the types of services offered to online students”.

2.4.1. Variations of support services in DE

There are many variations of students support services in DE. According to Sewart (1993:2) “there is an almost infinite variation in student support systems in distance education”, and “each
student support system represented in any distance teaching is unique”. Sewart (1993) lists the following as examples of student support variations in DE:

- class teaching at study centres
- individual tutorials at study centres or other locations
- annual residential schools (compulsory or optional)
- study or self-help groups
- social events
- counselling sessions at study centres
- correspondence with tutor and counsellor
- telephone contact with tutor and counsellor
- group telephone tutorials
- radio tutorials
- audio-cassette “correspondence”
- computer-mediated communication
- student newspapers

Robinson (1995) proposes slightly different variations of support services, including:

- tutoring
- guidance on learning and on assignments
- feedback
- support for progress as learner
- course-related peer study groups
- the provision of study centres

Tait (1995)’s variation is similar to Sewart’s and Robinson’s (1995). Tait (1995) suggests the following support services:

- tutoring – group and individual
- feedback
- peer-group support
- the learning of study skills
- counselling
- language support
- career guidance
- administrative support

Other student support service variations from different sources include e-services, feedforward, career guidance and financial assistance. Unisa also has different student support services as shown in Table 2-1.
Table 2-1: Unisa student support services

<table>
<thead>
<tr>
<th>Service</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MyUnisa</strong></td>
<td>Unisa’s online student portal</td>
</tr>
<tr>
<td><strong>MyLife e-mail account</strong></td>
<td>All registered Unisa students get a free myLife e-mail account. Important information, notices and updates are sent exclusively to myLife.</td>
</tr>
<tr>
<td><strong>Social Media</strong></td>
<td>Facebook, Twitter, LinkedIn and YouTube are great channels through which to share ideas, find other students, ask questions and generally stay informed.</td>
</tr>
<tr>
<td><strong>Unisa Radio</strong></td>
<td>Internet-based Unisa Radio is a vibrant and informative platform of information and topics focused on Unisa students. Its programming consists of music, informative interviews and talk shows.</td>
</tr>
<tr>
<td><strong>e-Tutors</strong></td>
<td>Unisa has introduced e-tutoring in all undergraduate learning programmes, thus integrating support that is potentially accessible to each student, irrespective of their geographical location. A group of about 200 students is linked to one e-tutor. Students in a group are able to interact and learn from one another.</td>
</tr>
<tr>
<td><strong>Regional Centres</strong></td>
<td>Unisa is divided into seven regions: Gauteng, KwaZulu-Natal, Limpopo, Midlands, Mpumalanga, Eastern Cape and Western Cape. Together the regions comprise 28 service centres and agencies that serve students. At most of the regional offices are learning centres, where students get face-to-face tutorials and access to computers.</td>
</tr>
<tr>
<td><strong>Telephones</strong></td>
<td>Through the telecentres initiative, Unisa students have access to 1450 computers with internet access in rural areas throughout South Africa. Telecentres are private facilities equipped with computers connected to the internet, printers, photocopiers, scanners, faxes and telephones. There are administrators to assist students.</td>
</tr>
<tr>
<td><strong>The Dean of Students and Student Affairs</strong></td>
<td>The Dean of Students promotes students’ psychosocial needs and develops globally networked student leadership.</td>
</tr>
<tr>
<td><strong>Student Counselling</strong></td>
<td>Unisa’s counselling services provide career, academic and personal support to students. Support is available online and by e-mail, in person, by telephone and by letter.</td>
</tr>
<tr>
<td><strong>Library</strong></td>
<td>Knowing how to use the library is central to the successful Unisa student experience. It is the largest academic library in Africa, containing more than</td>
</tr>
</tbody>
</table>
Athabasca University, which is a DE university, has gone further in its support system by specifying standards to help them maintain the quality of their students’ support services. Table 2-2 shows standards used by the university.

<table>
<thead>
<tr>
<th>Service</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,7 million items: books, reference resources, e-books, e-newspapers and e-journals.</td>
<td></td>
</tr>
</tbody>
</table>

(Athabasca 2002)

All these variations discussed here are considered essential for helping students perform well in their studies. However, the assessment of the quality of student support services in this study is based on a combination of Robinson’s (1994) and Sewart’s (1993) DE support service examples, namely: tutoring, guidance on learning and assignments, feedback, study centres and resources, communication with staff, and study (learning) groups. Although this choice of support services does not reflect Unisa’s variation of student support services that appears in Table 2-1, this combination of support services covers different aspects of services experienced by Unisa students. These services reflect the practical day-to-day experiences of a DE student at Unisa.
2.5. STUDIES ON STUDENT SUPPORT SERVICES

Interest in understanding service quality in higher education is mounting, given the numerous studies on service quality in the literature. Researchers Kangai et al (2011), Daweti (2003), Bernath et al (2003), Moenikia, Farajollahi and Dortaj (2013) and Price et al (2007) have investigated the educational contexts of their students, by relating their research either to specific aspects of an institution’s student services or to countrywide support services (Kwan & Ng, 1999; Hampton, 1993, Tan & Kek, 2005; Shaik et al, 2007). However, most of these studies have examined different transactions, not the service quality of student support services. Their investigations have focused on transactions of student support services such as tutoring (face-to-face and/or online), feedback, student-student interactions and study centres. According to Parasuraman et al (1985), service quality evaluation entails assessing the performance of different services within a service organisation. Investigating the performance of one service (transaction) does not translate into perceived service quality.

Nonetheless, the review is on these studies that have measured students’ perceptions and/or expectations of a transaction or a specific student support service because their investigations share a similar focus with the present study. Studies that have examined tutoring, feedback, student-student interactions and study centres in DE environments have been found to have used similar methodological choices as this study. Some studies have used qualitative methodology and others have used a combination of qualitative and quantitative methodologies. It should be mentioned that all the studies reviewed have been found to offer invaluable information on DE students’ perceptions and expectations of student support services.

2.5.1. Tutoring

Tutoring support can be described as organised interactions between students and teachers during face-to-face tutorials or online. Interactions are regarded as an important element of quality learning environments (Juwah 2006; Garisson & Anderson 2003). Tutoring support is underpinned by Moore’s (1989) student–teacher interactions, one of the three components of
the theory of interactions in DE. Moore (1989) identified three types of interaction, namely student–teacher, student–student and student–content, as a way of addressing transactional distance in DE. Student–teacher interactions are communication between the instructor and the student in a course. Student–student interaction is communication between two or more students in a course. Student–content interaction is a process in which students examine, consider and process the course information presented during the educational experience. These interactions are said to be essential in addressing the interactional gap that is inherent in DE. This section of the study focuses on tutoring (student–teacher interactions).

There are two types of student–teacher interaction in DE institutions: face-to-face tutorials and online tutoring. According to Sukumar et al (2001), more teacher-to-student interactions, similar to those found in traditional instruction, are being incorporated into online programme material. Daweti (2003:7) points out that face-to-face classes should be of the highest quality because they are “an opportunity which is not always offered by DE providers”. Daweti (2003) discovered that these classes contributed to students’ decision to join an education course.

Moenikia et al (2013) investigated the quality of DE support services and its impact on students’ academic achievement using the SERVQUAL dimensions – tangibles, reliability, responsiveness, assurance and empathy. The study involved 476 students from two universities in Tehran and measured the gap between expectations and perceptions using the 22 SERVQUAL questionnaire dimensions. The results showed that face-to-face tutoring was significantly related to DE students’ academic achievement.

Furthermore, a study by Sulcic and Sulcic (2007) found that good quality online tutoring support service can improve part-time students’ study outcomes. Conversely, a study by Bernath et al (2003) found that when online tutorials were introduced at the Center for DE at Carl von Ossietzky University of Oldenburg, in Germany, they could not replace face-to-face tutorials. Another finding was that there was a gap between the expected online tutoring service and the service the students were receiving from their universities. Despite the fact that students were not satisfied with the tutoring service, they still performed better than those who did not attend tutoring lessons.
Price et al (2007) conducted three studies in which they investigated the experiences (perceptions) of students taking a course by DE in which tutoring support was delivered face-to-face and online. The students were asked to compare the two forms of service – online and face-to-face. Quantitative surveys were used in the first two studies and qualitative interviews were held with students in the third study. The results of the three studies showed that students were happier with face-to-face tutoring interactions than they were with online tutoring and in fact reported negatively about online tutoring. The students were expecting pastoral care, whereby the tutor offered them support and encouragement; listened to personal difficulties; and developed a personal relationship with the students. Unfortunately they did not receive the care that they were expecting in online tutoring. Lentell (2003) says that the role of a tutor is “intensive” and personal to each DE student. Therefore, it is not surprising that the students in Price et al’s (2007) study expected a caring online tutor. Moreover, the students wanted the online tutor to use facial expressions, and “use an enthusiastic tone of voice that can even be detected on e-mails” (Price et al. 2007:15). Tutors are also expected to provide animation and warmth, and constructive feedback, to the students.

Segoe (2014) also found that DE students need constant tutor support for motivation and success. Furthermore, the participants’ responses in Segoe’s (2014:168) study confirmed that the main responsibility of the tutor in DE is to give guidance to students, clarify issues, provide motivation and encourage “togetherness as peers”.

Another study whose findings on interactions have some similarities with those of Price et al (2007) is a study conducted by Lin, Cranton & Bridglall (2005) in which they examined students’ reactions to DE. The study concluded that the ways in which students interacted with the online medium were consistent with the ways in which they interacted with the face-to-face learning environment.

There could be many reasons for students not liking online interactions. Technophobia theory helps us understand why some students do not like computers. Technophobia or computer phobia is defined as a resistance to, fear of and anxiety towards computers or having hostile thoughts about computers. A survey by Dell Computers on the use of ICT (1993) showed that
more than half of the US population was technophobic. Another study (Gilbert, Lee-Kelly & Barton, 2003) conducted in the UK showed that technology anxiety correlates with demographic variables such as age, gender and academic qualifications. Older people and women are usually regarded as the most fearful when it comes to computers. Despite the increased use of ICT and the Internet in education the world over, there are still people who do not use computers either out of fear or dislike or for some other reasons. The implication of this for DE is that an educational environment such as "cyberspace" can impede learning, making the service performance and delivery inadequate.

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 ZOU. 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.

2.5.2. Feedback as a form of support

There are various suggestions in the literature on what good-quality feedback entails. Feedback is said to be affective, cognitive, corrective, developmental (Hattie & Temperly, 2011), informative (Hattie & Temperly, 2011; Nicol & Macfarlane-Dick, 2006), and motivational (Gibson & Simpson, 2002; Mensah, 2009; Omorogiuwa, 2010; Chokwe, 2015). Furthermore, feedback delivers high-quality information to students about their learning (Nicol & Macfarlane-Dick, 2006). Another variable of quality feedback is that it should be timely. Fulton (1992) regards timely feedback to students on the work done as one of the fundamentals necessary for effective DE programmes. According to Demiray (2008), timely feedback motivates; and if it is delayed, it can sometimes cause students to drop out.

Omorogiuwa (2010:6) conducted a quantitative study on the perceived benefits and challenges of feedback at a distance learning institution in Nigeria. The study revealed that the students perceived the following as the benefits of feedback: "knowing the content that is to be learned",...
“guidance to improve performance” and “being encouraged to learn”. The perceived benefit of being encouraged to learn is supported in Hattie and Temperly (2007) and Gibson and Simpson (2002). Some students felt that the challenge they had about feedback was the open scrutiny of their work. This finding is similar to Chokwe’s (2015), who points that one student requested tutors not to "look down upon them" when marking their assignments.

A study by Segoe (2014) that investigated DE students' opinions and needs on tutor support revealed that some students were not happy with the feedback they received because it was discouraging and insufficient. Moreover, tutors were said to put ticks and allocate marks without any feedback to justify the mark. Most students stated that they received their feedback on assignments late, “immediately before or after writing the examinations”.

In a qualitative study conducted by Chokwe (2015), it was also found that marking was generally of poor quality. Some markers did not give comprehensive feedback as expected by students, and the markers' comments were not clear and therefore not useful. Some students who had received high marks did not get any comments about their work except the word “Excellent” (Chokwe, 2015). The problem of "low marks not related to marking itself" was also noted in Daweti (2003).

Mensah and Osei (2009) also found similar results where participants indicated late return of marked assignments, no tutor comments on assignments, and the fact that feedback motivated them. The results of the study that they conducted to assess the effectiveness of written assignment feedback at Kwame Nkrumah University of Science and Technology, Ghana, showed that 58.3% of the undergraduate students indicated that assignments were not marked promptly and that 66.7% indicated that marked assignments did not have tutor comments apart from marks. Of the respondents, 61.1% indicated that the feedback they received motivated them to learn (Mensah & Osei, 2009). The findings from postgraduate responses in the same study indicated late return of marked assignments.

Furthermore, study conducted by Fraser and Killen (2005:34), investigating perceptions of lecturers and students about the most important factors that were likely to influence students’
academic success at university, showed that “regular and comprehensive feedback” was rated low by students because they “were not accustomed to receiving such feedback”.

Another issue that has been raised in the literature is that students expect personalised feedback. In a study on recruitment and retention involving online students, Noel-Levitz (2006) reports that online students want personalised feedback, which is also implied in the work of Price et al (2007) and Chokwe (2015). In Chokwe (2015:45), one student indicated that markers “pinpoint all the mistakes, so I get a clear understanding of what I should do next time.” Another student stated: “I like knowing what the lecturer/tutor thought about my essay and what they found exciting and not so exciting, the feedback is of great importance.”

Students’ perceptions and expectations of feedback give us a good sense of how feedback is experienced by students as service users. This information is important and can be used to improve the provision of support services. Hence we say service users should evaluate and determine the services they receive.

2.5.3. Peer interactions

Peer interactions are underpinned by Moore's (1993) theory of student–student interactions. This involves sharing knowledge and helping one another. While some studies uncovered that student–student interactions were found to be beneficial in helping students with their studies, other studies indicated that student–student interactions were ranked as the least preferred form of interaction. In the phenomenological study that Liu (2008) conducted, it was found that some students wanted to study on their own, some liked to interact, some wanted their professors to be part of the discussion and others did not know about the existence of study groups. According to Liu (2008), students who were not keen on student interactions indicated that student–student interactions depended on individual students’ learning styles and the demands of the course. One student mentioned that if a course has high demands, working within a group may lead to one working more than when one was on his or her own. Another reason was lack of motivation. Some students were not motivated to join groups, citing lack of incentive to correspond with others. Furthermore, according to Liu (2008), those who were
interested in interacting with others felt the lack of interactions in certain courses decreased their interest in those courses. Balaji and Chakrabarti (2010:2) add that “confusion, anxiety, apprehension in writing and time constraints” are some of the reasons DE students fail to participate in group work.

Rhodes (2009) conducted a study on the quality of interactions within self-paced online learning environments. The study found that instructor–student interaction and content interaction were rated the most important. Student–student interactions were ranked the least preferred form of interaction. Similar studies on the value of student–student interactions (Miyazoe, 2009; Bernard et al, 2009) found that student–student interactions were the least preferred form of interaction. However, Unisa [Online] suggests the following benefits of belonging to a study group.

- Study groups offer opportunities to discuss problems.
- Students can check how their own understanding of a subject compares with how others understand it.
- Students have the opportunity to link new subject matter to sections of the work they have already mastered

2.5.4. Study Centres

The provision of study centres is also recognised as a very important service that closes the communication gap amongst students and minimises isolation. HEQC (2010:10) observed that many of the students who are registered with Unisa go to the university’s study centres in the regions and to the main campus “seeking physical and social spaces where they can study, develop and belong to a community of higher education students”. Furthermore, study centres offer services such as face-to-face tutorials, discussions, administrative support, study group support and access to learning resources such as computers and other available learning equipment.

There are different models of study centres, judging from the literature (Tait, 2003; Bernath, 2003) and the universities’ websites. A few examples are discussed in this study. According to
Unisa’s website (http://www.unisa.ac.za/), the university has 28 study centres spread across seven regions. This model is similar to the Open University (OU). According to Tait (2003:3) a network of 260 study centres in 13 regions has been established throughout the UK. The centres provide tutorials, thus making students feel “nearer” to the university “whose headquarters are in central England”.

Another similarity between Unisa and the OU model of study centres is that there are tutors assigned to a certain number of students. These tutors are responsible for student assessment and course development (Bernath et al 2003). However, Unisa and the OU’s model of student support service is different from FernUniversitas, in Germany. According to Bernath et al (2003), tutors are referred to as mentors not tutors because they are not responsible for course development and student assessment. Another difference between the OU and FernUniversitas is that whereas the OU has a network of study centres, FernUniversitas has one centre - the Centre for Distance Education. Another DE university whose study centres provide a good model is the Central Queensland University, a leading DE university in Australia that has study centres in several cities.

2.5.5. Administrative staff support

One of the functions of the administrative staff in DE institutions is to give administration support to DE students. At the centre of these services are students who interact with these services during service performance and service delivery. According to SAIDE (2003), DE programmes require administrative support more than face-to-face institutions. DE administrative staff are responsible for student registration; material production and study material dispatch; technical management and support; assignment management; and administration of tutorial classes.

There are not many studies on students’ perceptions or expectations of administrative staff. However, 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”.
2.6. CONCLUSION

Strengths and weaknesses were identified in the literature. Although quality and its measurements are a contentious issue in higher education, researchers in academic marketing have been able to conceptualise service quality so that service industries and organisations can measure service quality in their industries. DE meets most of the characteristics of a service industry, therefore its quality and the measurements thereof should be approached from service quality point of view.

A problem identified with regard to quality measurements is that the measurements that have been proposed by ACDE QAAA, NAPTOSA and HEQC seem to be broad and tangible. Although tangible measurements can be used for goods (products) quality, they cannot assess services because services are intangible and they have other characteristics that do not allow tangible measurements. The quality of services is evaluated and determined by service users and this should happen in DE environments.

There are many studies on student support services in DE literature. However, most of these studies have focused their investigations on specific aspects that address the context of a particular institution’s student support services or a transaction. According to Parasuraman et al (1985), service quality is an overall assessment of an institution’s services. Looking at one support service (a transaction) may not provide the answer to the quality problems of an institution.

Another problem identified in the literature, more especially with regard to DE in South Africa, is the fact that the concept of student support as a service has not been given a lot of attention and therefore there are few studies that address this issue. It is hoped that this study will contribute to helping other researchers and DE institutions view support services as falling under service industries, and that correct measurements will be used to assess the quality of student support services.

The next chapter discusses the conceptual framework, which will help establish measurements for assessing the quality of student support services in DE environments.
CHAPTER 3: CONCEPTUAL FRAMEWORK

3.1. INTRODUCTION

The aim of this chapter is to present a conceptual framework that guides the research process for this study. Miles and Huberman (1994:18) define a conceptual framework as a product that "explains, either graphically or in narrative form, the main things to be studied – the key factors, concepts or variables – and the presumed relationships among them". Due to the lack of a single theory of quality, and the fact that quality is conceptualised differently by different authors, a conceptual framework was devised for this study. This conceptual framework attempted to put together different but related concepts, to understand the problem this study is pursuing, and to answer the research questions. The researcher’s understanding of service quality was guided by the work of academics in the field of service quality. The base model for the conceptual framework is the SERVQUAL model (Parasuraman, 1985; 1988).

The first section of this chapter discusses service quality models that help researchers understand service quality. The next section presents and discusses the development of the SERVQUAL model and constructs that make up SERVQUAL’s components. The next sections present models and theories that can be linked to service quality. The last section discusses the adaptation of SERVQUAL. The SERVQUAL is adapted to consider the underlying characteristics of DE support services.

3.2. SERVICE QUALITY MODELS

Kang and James (2004) have identified two perspectives that are employed when assessing the quality of services in service industries. These are the American and European perspectives. The American perspective follows Parasuraman et al’s (1985; 1989; 1991) model of service quality and the European perspective follows Gronroos’s (1982) model of service quality. These two perspectives have influenced the development of various models that are used to judge and assess the quality of services in industries and educational organisations. An overview of some of service quality models is presented here. These models are: Parasuraman et al’s (1985; 1988); SERVQUAL; Cronin and Taylor’s (1992) SERVPERF; Firdaus’s (2004) HEdPEF; Shaik’s (2007) DL-
sQUAL; and Tan and Kek’s (2004) enhanced SERVQUAL. Some of these models were designed specifically to measure service quality in education.

The SERVQUAL model was the first instrument developed to measure service quality. It was designed and introduced by Parasuraman et al (1985; 1988). The SERVQUAL model was developed following research studies on service quality (Parasuraman et al 1985; 1988). A detailed description of this model is given in the next section as it is the base model for our conceptual framework.

The SERVQUAL model was criticised on theoretical and operational bases. Researchers such as Buttle (1996) noted that SERVQUAL’s five dimensions (reliability, assurance, responsiveness, tangibility and empathy) are generic and cannot apply to all services. Another criticism is that the expectation measurements of the model were not necessary because perceptions were found to be sufficient to measure service quality (Cronin & Taylor 1992). As a result, Cronin and Taylor (1992) developed a performance-only instrument called SERVPERF to measure service quality. SERVPERF is referred to as performance-only instrument because it measures service quality using perception measurements.

It should be noted that SERVPERF is an adaptation of the SERVQUAL model. Its major limitation for this study was found to be its perceptions-only measurements, without measuring expectations. Expectations have been found to have a diagnostic value (Parasuraman et al, 1988; Jain & Gupta, 2004) that can help managers ascertain where the quality shortfalls prevail and “what possibly can be done to close the gap” (Jain & Gupta, 2004:29).

In 2004, Firdaus Abdullar developed a model specifically to measure service quality in higher education. It was meant to address the lack of appropriate models. The HEdPERF (“Higher Education Performance-only”) is a performance-based scale developed to measure service quality. Nonetheless, the HEdPERF was not found suitable for this study because its dimensions are broad and not suitable to measure DE student support services content.

Randheer (2015) modified HEdPERF to suit the context of Arab higher education culture. The modified HEdPERF called CUL-HEdPERF was evaluated as a better instrument to measure service
quality in higher education in Saudi Arabia (Randheer, 2015), than the original HEdPERF and SERVPERF. Furthermore, Tan and Kek (2004:18) developed a survey instrument that they claimed was "especially for use by a university". They combined Kwan and Ng’s (1999) and Harvey’s (2002) instruments, which are both based on university students' views about their university experience. Tan and Kek (2004) piloted their instrument and refined it afterwards. The instrument consists of eight factors. However, none of the instrument's factors was found to be reflective of DE support services. For that reason the instrument was not considered for our study.

Another model the researcher reviewed was the DL-sQUAL scale. The DL-sQUAL scale was developed by Shaik et al (2007), to measure distance learning service quality. This instrument is based on research that involved students from a DE institution in the south-east US. According to Shaik et al (2007), the DL-sQUAL scale demonstrates psychometric properties based on the reliability and validity test analysis. The scale measures three types of service, namely “instructional quality services”, “management and administrative services” and “communication”. Nonetheless, the content of the items of this scale seems to be representative of the types of service offered in that particular DE institution. For example, one item from instructional quality services reads, “Toll-free phone number is available to contact staff for assistance”. One item from management and administrative services reads, “I feel safe in my online financial transaction using the college website”. One item from communication reads, “It is not a hassle to get a refund for dropping or withdrawing from the course(s)”.

The items in Shaik et al's (2007) scale seem to be limited to the services of a particular DE university. As a result of that, the scale could not be considered for this study. According to Kwan & Ng (1999), students’ expectations and perceptions are influenced and shaped by their cultural environments.

Having reviewed various models of service quality in higher education and distance education, the SERVQUAL model was considered for this study. The SERVQUAL was found to be more flexible than the other models because it can be used across all service industries. Although the SERVQUAL model was designed to measure services in industries, it can be modified to make it
appropriate to measure services in an educational setting. On the other hand these models were developed to address particular contexts, which is not surprising because service quality is context-specific.

3.3. THE DEVELOPMENT OF THE SERVQUAL MODEL

The development of the SERVQUAL model started in the 1980s and continued to the early 1990s. The model was developed by A Parasuraman, Valerie Zeithaml and Leonard Berry, following a number of empirical studies. This section of the chapter discusses the important insights of the studies that contributed to the development of the SERVQUAL model. The discussion looks at service quality gaps and the Gap Model; perceived service quality; and the SERVQUAL model.

3.3.1. The Gap Model of Service Quality

The Gap Model of service quality was developed by Parasuraman et al (1985) to help service providers manage service delivery in their sectors. It preceded the SERVQUAL model. The Gap Model is a measurement and a management framework that was designed after an empirical study (Parasuraman et al, 1985). During the initial stages of their study, Parasuraman et al (1985) noted that there was little literature on areas of service quality but abundant literature on the area of goods (product) quality. They also noted that there was hardly any tangible evidence or indicators to be used to evaluate the quality of services. The only tangible evidence found in the service area is “limited to the service provider’s physical facilities, equipment and personnel” (Parasuraman et al 1985:42). These researchers also found that quality management principles for goods were used to understand and evaluate service quality. They pointed out that quality management principles for goods were inadequate to evaluate service quality, because service quality is an abstract construct that cannot be measured objectively using tangible measures. They proposed that an appropriate approach to assess the quality of services in service industries was to measure service users’ expectations and their perceptions of the experiences of the service offered by service providers.

Parasuraman et al’s (1985) first empirical work on service quality began with an exploratory investigation of service quality in four different service sectors. The investigations involved focus
group and in-depth interviews with service users and executives (managers) from the following service sectors: credit card, retail banking, securities brokerage, product repair and maintenance. The results of the exploratory investigation revealed the following important insights into service quality.

- Firstly, service users evaluate service quality by comparing expectations (the service they expect to receive) with perceptions (the service actually received) on quality dimensions. (This result confirmed earlier studies (Boom & Lewis, 1983; Gronroos 1982), that service users (consumers) compare the service they expect with the service they receive).
- Secondly, the results revealed a set of service quality discrepancies or gaps associated with service providers.
- Thirdly, service users used the same determinants to evaluate quality.

From these insights Parasuraman et al (1985) developed a service quality model referred to as the Gap Model of service quality. It is an "integrated view" which shows the relationship between an organisation and a service user. The main aim of the Gap model is to identify the gaps between service users' expectations and their perceptions of the services offered at different stages of service delivery, and to explain the causes of these gaps that occur as a result of quality shortfalls within the organisations.

The Gap Model proposes that service users' perception of service quality depends on these gaps. In addition, the model depicts that service users’ expectations are highly influenced by statements made by an organisation and its personnel. For example, an advertisement about a service may state that the organisation provides excellent service. However, when the service is delivered, the user's expectations of "excellent" might be frustrated. The gap will arise when the expectations of “excellent” service are not fulfilled at the time of delivery of the service. According to Parasuraman et al (1985:44), “These gaps can be major hurdles in attempting to deliver a service”.

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Figure 3.1: The model of service quality (Parasuraman et al 1985)

Figure 3.1 shows the gap model of service quality. There are five service-quality gaps depicted in The Gap Model. These are: Gap 1, Gap 2, Gap 3, Gap 4 and Gap 5. These five gaps arise as a result of an organisation not meeting service users' expectations and needs. The first four gaps are called "company gaps" or internal gaps. Gap 5 is called the service users' gap. Parasuraman et al (1985) point out that what a service user perceives in a service is a function of the magnitude and direction of the gap between expected service and perceived service. This means that service
users’ perceptions are influenced by a series of gaps that prevent the delivery of services within an organisation that provides services. In other words, before the service quality gap can be closed, other gaps should also be addressed. All the gaps are elaborated and explained below:

- **GAP 1: The gap between service users’ expectations and management perceptions of service users’ expectations**

  Gap 1 arises when the management of an organisation that provides service does not correctly perceive the service user’s expectations, or what the service users want. For instance, DE institutions’ administrators may think delivering a lot of study material is what students want, but the students may be more concerned with how to access lecturers and tutors to assist them.

- **GAP 2: Gap between management’s perception and service quality specification**

  Gap 2 (standards gap) occurs when the management of the organisation that provides a service correctly perceives what the service user wants but does not set performance standards. This means the organisation cannot translate the service user’s expectations into clear quality standards. As a result, there are no quality specifications to guide the personnel of the organisation. In most cases, some standards are described as “adequate” without defining different levels of adequacy.

- **GAP 3: The gap between service quality specification and service delivery**

  This gap arises when the specifications of services delivered are not met. This could occur due to poor management or putting service delivery in the hands of people who lack expertise, or have been poorly trained, or are incapable of or unwilling to meet the set service standard.

- **GAP 4: The gap between service delivery and external communication:**

  Service users’ expectations are highly influenced by statements made by companies or organisations’ representatives and advertisements. The gap arises when expectations are not fulfilled at the time of delivery of the service. For example, a DE institution may advertise itself
to be the best, yet in reality it may be delivering very poor services that fail to meet students’ expectations.

\section*{GAP 5: The gap between expected service and experienced service}

Gap 5 is called the service users’ gap because it is experienced by the service user. It is also referred to as perceived service quality gap. Gap 5 is the difference between service users’ expectations of service and their perceptions of the service actually delivered. It arises when a service user’s perceptions of the experience with the service do not match the user’s expectations of the service due to a series of shortfalls within the service provider’s organisation.

Perceived service quality is conceptualised differently by researchers. Zeithaml (1987) defines perceived quality as a service user’s judgement of the excellence of a particular service. Parasuraman et al (1985) on the other hand define perceived service quality as the difference or the discrepancy between service user’s expectations and perceptions. This discrepancy depends on the size and the direction of the four gaps concerning the delivery of service by the organisation. Perceived service quality is multi-dimensional in nature. According to Parasuraman (1988:15), perceived quality is a “form of attitude, related to but not equivalent to satisfaction”. Furthermore, Parasuraman et al (1985) state that:

\begin{itemize}
  \item When expected service is less than perceived service, perceived quality is less than satisfactory and will tend to be totally unacceptable quality, with decreased discrepancy between expected service and perceived service.
  \item When expected service is equal to perceived service (ES=PS), perceived quality is satisfactory.
  \item When expected service is greater than perceived service (ES>PS), perceived quality is more than satisfactory and will tend towards ideal quality.
\end{itemize}
Figure 3-2 shows that perceived quality is multidimensional in nature. There are ten determinants or dimensions that can be used to measure perceived service quality.

### 3.3.2. Determinants of service quality

Through the focus group interviews, Parasuraman et al (1985) found that service users judge the quality of services delivered to them by the service provider using ten determinants/dimensions, namely: tangibles, reliability, responsiveness, competence, access, courtesy, communication, credibility, security and understanding/knowing the service user. Each of the ten dimensions was found to be consistent among the focus groups. Furthermore, the authors found that the ten dimensions could be used to evaluate the quality of services in various service organisations – emphasising that the specific evaluative criteria may vary from service to service. Table 3-1 tabulates the ten service quality dimensions and their explanations.
Table 3-1: The ten dimensions of service quality and their explanation

<table>
<thead>
<tr>
<th>DIMENSION</th>
<th>EXPLANATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reliability</td>
<td>• The service is carried out in the way that was promised.</td>
</tr>
<tr>
<td></td>
<td>• The organisation performs service right the first time.</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>• Services are carried out promptly according to the needs of the service user.</td>
</tr>
<tr>
<td>Competence</td>
<td>• The staff of the service provider has the knowledge and skills required for delivering the service in a proper way.</td>
</tr>
<tr>
<td>Access</td>
<td>• Physical location of service is convenient.</td>
</tr>
<tr>
<td></td>
<td>• Service is easily available, operation hours are convenient</td>
</tr>
<tr>
<td>Courtesy</td>
<td>• The staff is polite, friendly and respectful.</td>
</tr>
<tr>
<td>Communication</td>
<td>• The staff understands and listens to service users.</td>
</tr>
<tr>
<td></td>
<td>• The staff keeps the service users informed in a language that they can understand.</td>
</tr>
<tr>
<td>Credibility</td>
<td>• The service provider is trustworthy, believable and honest.</td>
</tr>
<tr>
<td></td>
<td>• The service provider has the service user’s interest at heart.</td>
</tr>
<tr>
<td>Security</td>
<td>• There is freedom from danger, risk or doubt.</td>
</tr>
<tr>
<td></td>
<td>• There is financial security.</td>
</tr>
<tr>
<td>Understanding the service user</td>
<td>• The service provider makes an effort to understand the needs and wants of the individual service users.</td>
</tr>
<tr>
<td>Tangibles</td>
<td>• Physical objects that are needed for carrying out the service such as facilities and equipment are available.</td>
</tr>
</tbody>
</table>

3.3.3. The SERVQUAL Model

Subsequent to their first study, (Parasuraman et al, 1985), Parasuraman, Zeithaml and Berry carried out another study on service quality (Parasuraman et al, 1988) whose aim was to develop a multiple-item scale instrument for measuring perceived service quality (Gap 5). The model was called SERVQUAL. The Gap Model lacked a scale of its own so the new model offered a methodology to measure service quality. This means that the Gap Model offers theory only and the SERVQUAL model offers a theoretical and a methodological framework.
The first stage of the scale development was the generation of 97 item statements (descriptors) for the ten determinants/dimensions of service. Each item was "recast" into two statements, one to measure expectations and the other to measure perceptions. In order to ascertain the reliability and validity of the scale measurements, Parasuraman et al (1988) carried out extensive statistical and non-statistical tests on the measurements. Several steps were observed. The first step was the collection of data on expectations and perceptions from 200 respondents who were service users in five different service sectors. After the data collection, the ten dimensions went through what Parasuraman et al (1988) call "the purification process" to create a scale to measure service quality. The ten dimensions and their 97 items were subjected to stages of refinement. The initial ten determinants of service quality uncovered in Parasuraman (1985) were then combined and reduced to five, namely: tangibles, reliability, responsiveness, assurance and empathy. The 97 items were reduced to 34, then to 22. (Each item was “recast” into two statements, one statement to measure expectations and the other to measure perceptions). The total scale reliability was found to be 0.9. The scale was found to have “sound and stable psychometric properties” (Parasuraman et al, 1988:24). The validity of the SERVQUAL scale was also tested and the instrument was found to be a valid document. The final version of the instrument was called SERVQUAL.

The SERVQUAL authors propose that the SERVQUAL model can be used by service providers to better understand service users’ expectations and perceptions and to improve the level of service quality in their organisations. They also suggest that the items could be modified according to the needs of the organisation that wants to measure service quality. According to Parasuraman et al (1988), the model represents a global measurement across many service encounters.

Table 3-2 shows how some of the dimensions were combined to create new ones. The table also shows the explanations of the dimensions. The first three dimensions, namely: “tangibles”, “reliability” and “responsiveness”, were retained. The “competence”, “courtesy”, “credibility” and “security” dimensions were combined to create the “assurance” dimension. The “access”, “communication” and “understanding the customer” dimensions were also combined to create a new dimension called “empathy”.

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Table 3-2: The ten dimensions combined to create five dimensions

<table>
<thead>
<tr>
<th>Ten dimensions</th>
<th>Five dimensions</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tangibles</td>
<td>Tangibles</td>
<td>The physical facilities, equipment, appearance of personnel</td>
</tr>
<tr>
<td>Reliability</td>
<td>Reliability</td>
<td>The ability to perform the desired service dependably, accurately and consistently</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>Responsiveness</td>
<td>The willingness to provide prompt service and help service users</td>
</tr>
<tr>
<td>Competence</td>
<td></td>
<td>Employees' knowledge, skills, courtesy, and ability to convey trust and confidence</td>
</tr>
<tr>
<td>Courtesy</td>
<td>Assurance</td>
<td>Employees' knowledge, skills, courtesy, and ability to convey trust and confidence</td>
</tr>
<tr>
<td>Security</td>
<td></td>
<td>Employees' knowledge, skills, courtesy, and ability to convey trust and confidence</td>
</tr>
<tr>
<td>Access</td>
<td></td>
<td>The provision of caring, individualised attention to service users</td>
</tr>
<tr>
<td>Communication</td>
<td>Empathy</td>
<td>The provision of caring, individualised attention to service users</td>
</tr>
<tr>
<td>Understanding</td>
<td></td>
<td>The provision of caring, individualised attention to service users</td>
</tr>
</tbody>
</table>

3.3.4. How the SERVQUAL instrument is used

SERVQUAL provides us with the operationalisation of service quality. Each of the SERVQUAL dimensions is measured by a certain number of items (four to five items), making a total of 22 items across the five dimensions. Each of these 22 items measures:

1. the expectations of service users about a particular service
2. the perceived levels of service actually given (experiences)

Respondents are asked to indicate their degree of agreement with a certain statement on a seven-point Likert-type scale (1 = “strongly disagree” to 7 = “strongly agree” and from “poor” to “excellent”). For each item, a so-called “gap score” (G) is calculated as the difference between
the raw "perception-of-performance" score (P) and the raw "expectations score" (E). The greater the "gap score" (calculated as G=P minus E), the higher the score for perceived service quality.

3.3.5. Expectations and perceptions

Two dominant concepts researchers use to understand service quality are expectations (desires and wants) and perceptions (perceived experiences). Perceptions and expectations explain the behaviour of people in psychology. These two variables are analysed in the next sections to illustrate their relationship with service quality.

3.3.5.1. Expectations

In SERVQUAL, the expectations component has been designed to measure service users’ "normative" expectations (Parasuraman et al., 1994), and it is "similar to the ideal standard" in the service user satisfaction/dissatisfaction literature (Zeithaml et al., 1991). Studies (Cronin & Taylor 1992; Teas, 1993) assert that expectations are not good measurements of service quality. Taylor and Cronin (1991) and Teas (1993) developed performance-only models to measure service quality. Nonetheless, Parasuraman et al. (1991) argue the expectations component in the SERVQUAL instrument is diagnostic and therefore necessary. In a study that investigated the relationship between service user’s expectations and perceptions of service quality, Hamer (2006) found that the relationship between expectations and perceptions was stronger than the previous literature had suggested. Another very important finding was that expectations were predictors of service quality. Jain and Gupta (2004) also found that expectations were diagnostic.

In a study on students’ perceptions of online and face-to-face tutoring, Price et al. (2007) found that although there were no questions about students’ expectations in the questionnaire, the students "chose" to tell the researchers what their expectations were about the course they had received. This shows that expectations are a critical component of perceived quality (Parasuraman et al., 1985) and this is consistent with Gronroos (1982) and Parasuraman et al. (1985), who discovered that service users compare their expectations (the service they expect) with perceptions of their experienced service when evaluating service quality.
In their earlier research, Parasuraman et al (1988:17) defined expectations as “desires or wants of service users – what they feel a service provider should offer rather than would offer”. In their later work, Parasuraman et al (1994) defined expectancy as a service users’ desire or need that should be provided by the service provider. These three researchers reiterated that expectancy is not what could be provided but what should be provided by service providers (Parasuraman, 1994). For example, when students enrol at a university, they have certain service expectations that should be fulfilled by their university. If these needs are met, students are satisfied, but if they are not met they become dissatisfied service users.

Zeithaml et al (2006:49) describe service users' expectations as beliefs about service delivery that serve as a comparison standard to judge the performance of the service delivery perceived by the service user. This view is consistent with Gronross (1984) and Parasuraman et al (1985). Berry (1988) reiterates that service users' expectations of a service shape their evaluation of the service. If there are discrepancies (gaps) between service users’ expectations and the management’s perceptions (understanding) of these expectations, perceived service quality is affected.

Miller (1997) has identified four different types of expectation. These are: ideal expectations, expected expectations, deserved expectations and minimum tolerance:

- Ideal expectations are the level of service performance “wished for”.
- Expected expectations are what is expected.
- Deserved expectations are what the service user feels he or she should get.
- Minimum tolerance is the bottom level of performance.

There are several factors that can influence service users' expectations. Zeithaml (1999) has identified four. The first one is “word-of-mouth communications”. This refers to what service users hear from other people (other service users) who have had experience with the service. The second factor is service users’ personal needs, which are conditions essential for the physical and psychological well-being of the service user. These are said to be pivotal factors that shape what service users desire from the service. According to Balaji (2002), a service user with high social and dependency needs may have relatively high expectations of the service. The third
factor is the extent of past experience using the service – prior exposure to the service. The fourth factor is the external communications from service providers – direct and indirect. These could be publicity and communication controlled by the institution, as in advertising, price and selling. For example, it is believed that price can influence the choice of a service provider.

Expectations can also be influenced by personal service philosophy. The explanation of this influence is that people who have been using the service for a long time or who know about the service through experience “have a strong service philosophy.”

These factors are supported by what is termed “Consumer Behaviour Theory”. The consumer behaviour theory draws from expectation disconfirmation theory, which posits that service users form an initial expectation of service prior to use of the service. When consumers use the service, they form perceptions of their experience. They then compare their post-use experience /perceptions of the service performance with their expectation of the service, to determine whether their expectations were met or not (confirmation or disconfirmation). If they are satisfied with the service they will continue with it; if not they can decide to discontinue the service. In a study on expectations, Chadwick (2000) found that students’ expectations did not differ across disciplines. This was because of the institution’s marketing communication and communication among students.

### 3.3.5.2. Perceptions

Perceptions play a very important role in service quality assessment. In general psychological terms, perception is defined as the process in which an individual receives, selects and interprets stimuli to form a meaningful and coherent picture of the world (Scheffiman, et al 2001:148). Morris and Maisto (2010) and Wade and Tavis (2009) describe perception as the cognitive process in the mind and body of human beings that enables them to select, analyse, organise, interpret and understand sensory stimuli and impressions (sensations) from the environment. This can be a way of regarding, understanding and interpreting something – a mental impression.

In service quality literature, perceptions are described as the service user’s judgement of the performance of a service experience. A perception is therefore understood to be a subjective assessment of the actual service as experienced by a service user. Differences in perceptual
processes and experiences are believed to make people respond to same stimuli differently. We are often told that biological and psychological differences in people often make perceptual processes selective and unique to each individual. This talks to all service industries, including the DE service sector. If we apply this theory in DE, we could say that the way students perceive a particular service is based on their experience of that service. If a DE institution fails to honour its promises to one or all its students, the perceptual thought registered in the mind of the students would be that their university never honours promises. This is illustrated by Daweti’s (2003) study of DE students’ perceptions of a certain course of study. The data indicated that students lost interest in future face-to-face meetings with their lecturers because the lecturers failed to organise meetings they had promised to organise for them (students). The students labelled their lecturers “incompetent” and the administrative staff “unreliable”. According to Patterson and Johnson (1993), service users are forced to rely heavily on their prior beliefs (attitudes) concerning the service provider, which may be based on word of mouth or market-controlled communication and their perceptions of current service performance.

The evidence shows that students’ perceptions of their experiences of support services can make a valuable contribution to the quality of these services. There is evidence in the literature (Price et al 2007; Daweti 2003; Chokwe 2015; Kangai 2011; Segoe 2014; Mensah & Osei 2009) that measuring perceptions of service users’ experiences can make a valuable contribution to improving the quality of those services. In these studies, questions on students’ perceptions of the performance of different academic student support services such as online and face-to-face interactions and feedback on assignments yielded valuable information.

In this study, DE students’ expectations and perceptions of their experiences of the support services they receive are examined qualitatively in order to understand service quality. The data generated from the interviews are used to develop an instrument to gather statistical data that can be generalised.
3.4. RELATED MODELS AND THEORIES

There are several models, concepts and theories that can be used to interpret service quality from the perspective of the user. These models and concepts/theories are elaborated in the next sections.

3.4.1. Gronroos’s (1982) and Lihtinen and Lihtinen’s (1982) models of service quality

Earlier models of service quality were developed by Gronroos (1982) and Lihtinen and Lihtinen (1982). It is evident that these models had a lot of influence on the work of Parasuraman et al (1985). Gronroos’s (1982) perceived service quality model is based on the disconfirmation paradigm, which posits that service users evaluate service quality by comparing their service expectations with their perceptions of the services received (experiences). Gronroos’s model (1982) proposes two dimensions of service quality: technical quality and functional quality. Technical quality involves the actual service received by the service user during the service encounter, and functional quality involves the manner in which the service is delivered. Functional quality explains/reflects how the service is delivered by defining the service user’s perceptions of the interactions that take place during the service (Brady & Cronin 2001). Figure 3-3 shows the model of service quality.

![Figure 3-3: Gronroos’s Model of Service Quality](image)

Another model to measure service quality was suggested by Lihtinen and Lihtinen (1982). These authors suggest that service quality has three dimensions. These are physical quality,
refers to buildings and equipment; corporate quality, which refers to the image of the organisation; and interactive quality, which refers to interactions between service users and service providers’ personnel and among service users themselves.

3.4.2. Disconfirmation and Conformation Theory

Parasuraman et al’s (1985) study proposed that when perceived service quality is high, it leads to increased service user’s satisfaction. The model that helps us understand the relationship between service quality and satisfaction is the Expectations Disconfirmation Theory developed by Oliver (1984). The model proposes that service users’ expectations are a function of disconfirmation. Thus, satisfaction is said to be influenced by the discrepancy between expectancy and perceived performance (Oliver 1980). Parasuraman et al (1985:42) observe that satisfaction is related to “the size and direction of the disconfirmation experience, where disconfirmation is related to the person’s initial expectations.”

Kohler and Clarke (1987) define satisfaction as a state felt by a person who has experienced performance or an outcome that fulfils his or her expectations. The Oxford Dictionary defines satisfaction as “a good feeling you have when you have achieved something or when something you wanted to happen does happen”. Students' satisfaction literature (Kashan, 2012; Athiyaman, 1997) indicates that service users' satisfaction or dissatisfaction with a service is as a result of either confirmation or disconfirmation of the individuals’ expectations of a service. Therefore service performance can have a “significant direct” impact on the service user's satisfaction and dissatisfaction.

Furthermore, Sewart (1993:8) illustrates confirmation and disconfirmation in DE by stating that, when the student comes into contact with the DE institutions' service industry, “there is a moment of truth” in which the student receives a good, bad or indifferent impression of the service. According to Sewart (1993), the cumulative effects of these moments of truth determine whether the student, as the service user, is dissatisfied or satisfied. If the student is dissatisfied, he or she drops out and if the student is satisfied he or she completes the course of study (Sewart, 1993).
Several studies across different study fields such as retailing (Naik et al, 2010); the hotel industry (Oh, 1999); entertainment parks, aerobic schools and investment consulting (Lee 2000); library services (Wang & Shieh, 2006); banking (Mosahab et al, 2010) sporting events (Caro & Garcia, 2006) have used the SERVQUAL model, looking at service quality and the service user’s satisfaction. Most of these studies found that service quality as measured by SERVQUAL can predict the service user’s satisfaction and can increase his or her loyalty.

Hasan, Ilias, Rahman and Razak (2008) examined the relationship between service quality dimensions - the five SERVQUAL dimensions and overall service quality and satisfaction of students in a university. A questionnaire was used to collect data from students to measure their satisfaction. The relationship between service quality and student satisfaction was confirmed.

Usman (2010) carried out a study which examined the impact of different quality services on students’ satisfaction, in higher education institutes in Punjab, Pakistan. The results of the study showed that the students were satisfied with Tangibility, Reliability, Assurance and Empathy services.

Although this study does not measure the relationship between service quality and satisfaction, satisfaction is a very important variable in quality. Therefore, satisfaction is regarded in this study as an antecedent of service quality, because logically good quality should precede satisfaction.

3.4.3. Service user-based quality perspective

Perceived service quality parallels user-based quality (Parasuraman, 1988), an approach used to define quality. User-based quality was first introduced by Joseph Juran, the man who made contributions to the field of quality management and helped to revolutionise Japan’s quality philosophy. This approach was expounded by Garvin (1984). Juran (1974) believed that the user of the service should define quality. Juran and Blyton (1999) define quality as fitness for intended use – meeting or exceeding users’ expectations.

The service user-based quality perspective premises that quality is quality if it satisfies the user’s needs and wants. “If it meets their wants and needs it is a quality service, if it doesn’t, it is not” (Pollit, 1992:3). Furthermore, the quality of services from the user’s perspective is a concept
linked to a market-orientation approach in dealing with service users. This approach means that the organisations that provide services will react to the users’ expectations, wants and needs in terms of services and will do as promised, not what the organisation wants (Zemke & Woods, 1999). According to this approach, the users of services are the best judges of the services. In addition, Schneider and White (2004:11) note that the user-based approach to quality has been found to be superior for evaluating the quality of services because services are intangible, that is, they cannot be seen or touched, but can only be perceived.

In DE, the user-based quality perspective finds support in theories of transactional distance (Moore, 1993); self-directed learning (Knowles, 1975; Kasworm, 2010; Garrison, 1997; Rogers 1969); self-regulated learning (Pintrich, 2000); and independent studies (Wedemeyer, 1981).

Firstly, in his first paper on learner autonomy, Moore (1972) argued that correspondence universities neglected the ability of their students to share the responsibility for their own learning. This assertion later found support in the data (Moore, 1993) which indicated that many students used teaching materials and programmes “to achieve goals of their own, in their own ways, under their own control” (Moore, 1993:31). He referred to that as learner autonomy. Learner autonomy is described as the extent to which the learner rather than the teacher determines the goals, the learning experiences and the evaluation decisions of the learning programme (Moore, 1993:32). An autonomous learner is someone who is “emotionally” independent of his or her teacher. Learner autonomy places the learner as the one selecting the direction of his or her learning.

Moore’s learner autonomy theory is consistent with self-directed learning as argued by Knowles (1975), Kasworm (2010), Garrison (1997) and Rogers (1969). According to Knowles (1975:18) self-directed learning is a process in which a learner takes the initiative, with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies and evaluating learning outcomes. Garrison (1997:18) expands the definition of this perspective by describing self-directed learning as an approach in which students are motivated to assume
personal responsibility and elaborative control of the cognitive and contextual processes in constructing and confirming meaningful and worthwhile learning outcomes. Thus, self-directed learning is viewed from a collaborative constructivist perspective. In this perspective an individual student takes up the responsibility for constructing meaning, while at the same time including the participation of others in "conforming worthwhile knowledge" (Garrison 1997:18). Rogers (1969) adds that self-directed learning is about taking responsibility for internal cognitive and motivational aspects of learning. Research (Schunk, 2005) shows that self-regulated learning skills and motivation are related. If students are motivated to learn they will be able to drive themselves to learn.

Furthermore, Knowles (1975) argues that the ability to learn on one’s own is a basic human competence. Therefore, an ODL student, as the user of services in ODL, has competence enough to contribute to the design and development of services that will be suitable for his or her learning needs. In addition, Kasworm, Rose and Ross-Gordon (2010:17) point out that self-directed learning not only helps promote the constructional and contextual nature of knowledge; it also promotes reflection, creative problem-solving and critical thinking. Thus being given the opportunity to contribute to one’s own learning challenges one to think critically and make serious and responsible decisions about learning.

Merriam (2001) cited in Kasworm, Rose & Ross-Gordon (2010:17), illustrates the point further to suggest that self-directed learning has three perspectives, namely: humanistic, transformational and emancipatory. Humanistic perspective suggests that adult learners can develop their capacity to be self-directed because they possess varying degrees of self-directedness and can develop it further through self-motivation and the help by others. Transformational perspective is said to be experienced by learning critical self-reflection (Kasworm et al, 2010:17). This paradigm attempts to explain how adults make meaning from their lived experiences. Self-reflection is classified as critical because it can lead adults to understand their own needs, wants and interests, thus opening the door for future learning and development (Kasworm et al, 2010:17). Emancipatory, on the other hand, positions adults towards political and social actions (Merriam, 2001) cited in Kasworm et al, 2010).
Cheurprakobkit et al (2002) suggest that students in online learning environments must possess "self" behaviours such as self-discipline, self-monitoring, self-initiative and self-management, which are characteristics of self-regulated or self-directed learning. The "self-behaviours" are said to be DE students' psychological characteristics (Zimmerman, 2002; Wang et al, 2008). These characteristics of being an independent, self-motivated and self-directed learner are said to help DE students take control of their studies.

3.5. STUDIES THAT HAVE USED SERVQUAL IN HIGHER EDUCATION

Since there are not many studies that have used SERVQUAL in DE, it is worthwhile examining studies that have used the SERVQUAL model in higher education in general. There is substantial literature (Kwan & Ng, 1999; Slate, Harker & Harker, 2000; Soutar & McNeil, 1996; Sultan & Wong, 2012; Git & Sulaiman, 2012; Van Schalkwyk & Steenkamp, 2014; Koni, Ibrahim & Zainal, 2013; O'Neill et al, 2001; Wright & O'Neill, 2003; Galloway, 1998; Yu, 2008; Hasan et al, 2008; Wai Fong Yu 2008) to indicate that SERVQUAL is used in higher education to measure service quality. Some studies have used the SERVQUAL without adaptations while others have adapted the model. Adaptation of SERVQUAL could involve adding new dimensions to the existing SERVQUAL dimensions, decreasing the number of dimensions or modifying the items of the measuring scale.

A recent study by Dursun et al (2014) looked at DE support services from students' perspectives in five universities in Turkey. The researchers modified the SERVQUAL model to suit the cultural orientation (Kwan & Ng, 1999) of the students in Turkey. The results of the study showed that the overall perceptions were below expectations and there was general dissatisfaction.

Yousapronpaiboon (2014) investigated service quality in higher education in Thailand, using SERVQUAL’s five dimensions. The results of the study showed that there were negative gaps between expectations and perceptions. This means that the scores of the perceptions were lower than their expectations.
A study by Moenikia et al (2013) also used the SERVQUAL questionnaire to investigate the quality of DE support services and their impact on students' academic achievement in two DE universities in Tehran. Five SERVQUAL dimensions were used. Gaps were also measured. The results showed that the students' expectations exceeded their perceptions, so there were negative gaps. Other studies whose results indicated lower perception scores than expectation scores include Tan and Kek (2004); Green (2014) who investigated the quality of services in higher education.

Soutar and McNeil (1996) used a modified SERVQUAL model in their study assessing service quality (students’ expectations and perceptions) in an Australian university. They added two more dimensions, namely “knowledge” and “communication” to Parasuraman et al's (1988) five dimensions. They found that there were gaps between students’ expectations and their perceptions of reliability, responsiveness, assurance, empathy, knowledge and communication for the academic services assessed. Soutar and McNeil (1996) concluded that the SERVQUAL generic dimensions were applicable to measuring service quality in the higher education sector.

Slate et al (2000) used the SERVQUAL instrument with 19 items in their research, in which they asked their respondents to rate their service perceptions of their university on a 1-to-9 Likert-type scale. Gap analysis was performed using the Gap model. They concluded that SERVQUAL was sufficient to evaluate service quality in higher education.

Kwan and Ng (1999) used an adapted SERVQUAL instrument in their research, which investigated perceptions and expectations and overall satisfaction of Asian students in Hong Kong and China. Kwan and Ng (1999) adapted SERVQUAL in order to consider cultural variables in service quality in the Asian context. They developed 51 attributes adapted from Hampton (1993) to measure students’ perceptions and expectations. They argued that Hampton's (1993) survey was based on the context of the US. The researchers also used the Gap analysis model. The modified SERVQUAL was found appropriate to measure service quality in higher education.

Oldfield and Baron (2000) used an adapted SERVQUAL (performance-only) instrument to investigate students’ perceptions of service quality in a university in the UK. They found that
service quality in higher education has three dimensions, namely “requisite elements”, “acceptable elements” and “functional elements”.

- **Requisite elements.** These are essential services that enable students to fulfil their study obligations, such as academic staff having the knowledge to respond to students’ questions. Other factors include confident and caring academic staff; administrative staff with an interest in solving problems; prompt assistance; and understanding of students’ needs.

- **Acceptable elements.** These are desirable but not essential services to students. They include individual attention; services being provided within the expected time; courteous staff; and caring academic staff.

- **Functional elements.** These are services of a practical or utilitarian nature, such as convenient operating hours; up-to-date equipment; and rendering promised services (Baron & Oldfield 2000).

Wright and O’Neill (2003) conducted a study involving two focus group interviews and a quantitative survey to evaluate the online library service of a university, using a modified SERVQUAL contextualised to higher education environments, but retaining the five SERVQUAL dimensions. The authors used a five-point Likert-type scale with scale items largely based on the original SERVQUAL instrument. O’Neill et al (2001) used a similar research process approach when evaluating online services. The authors developed 18 items largely based on the 22 SERVQUAL items, but modified enough to address the higher education context. A five-point Likert-type scale from 1 = strongly disagree to 5 = strongly agree was used.

Yu (2008) used SERVQUAL to measure computer support users’ satisfaction in higher education environments. A gap analysis of service quality performance against customer service quality needs was successfully conducted using SERVQUAL. SERVQUAL was found appropriate for higher education.

Green (2014) adapted five SERVQUAL dimensions to measure students’ expectations and perceptions at a University of Technology in South Africa. The study revealed that students had
high expectations in the assurance, reliability and tangible dimensions and high perceptions in the empathy dimension.

Other studies used SERVPERF, an adaptation of SERVQUAL. Those include Aldridge and Rowley (1998) who measured students’ satisfaction at a university college; Faganel (2010); and Vazi and Mansori (2006) who used SERVPERF to measure students’ satisfaction using the five dimensions of SERVQUAL. Furthermore, Kontic (2014) used SERVPERF to measure service quality in higher education in Serbia. Five dimensions of SERVQUAL were used and the researcher found that the dimensions were adequate to measure service quality in a higher education environment.

Calvo-Porrál, Levy-Mangin and Novo-Corti (2013) adapted SERVQUAL’s five dimensions of service quality to measure service quality and used SERVPERF to measure service quality in private and public higher education institutions in Spain by looking at teaching and the students’ whole educational experience. The dimensions were found adequate for higher education.

Dursun et al (2014) adapted the SERVQUAL model by modifying all the items to measure the quality of student support services of some universities in Turkey. The attributes in the questionnaire reflected the universities’ context. For example, tangibles attributes covered features such as an accessible DE portal, sufficient resources, understandable web pages and safe portal environments.

It is evident that the SERVQUAL model is widely used to understand and measure quality in higher education. Most studies reported that the SERVQUAL dimensions were appropriate to measure service quality. This study adopted and adapted SERVQUAL to suit the context of DE. The adaptation of SERVQUAL is supported by Parasuraman et al (1988:28), who state that items under each dimension can be “suitably reworded and/or augmented to make it more germane to the context in which the instrument is to be used”.

3.6. SERVICE QUALITY DIMENSIONS FOR THE PRESENT STUDY

When choosing quality dimensions for this study, the researcher had to set some guiding principles. Firstly, it has been pointed out that service quality is multidimensional (Brady and
This means that the study should consider a number of dimensions to measure the quality of student support services. Initially Parasuraman et al (1985) suggested ten service quality dimensions and later reduced them to five. Gronroos’s (1982) and Lehtinen and Lehtinen’s (1982) models comprise three dimensions of service quality. Other service quality models with multiple dimensions are: SERVPERF (Cronin & Taylor, 1992); HEdPEF (Firdaus, 2004); DL-sQUAL (Shaik et al, 2007); Enhanced SERVQUAL (Tan & Kek, 2004).

Secondly, the dimensions and the measurements should be reliable and valid. This is consistent with Martinez-Arguelles et al’s (2010) assertion that one of the most important themes in service quality is the development of reliable, valid, and replicable measurements to measure service quality.

Thirdly, the dimensions should bear characteristics that reflect educational matters. According to Sangeeta et al (2004), when developing dimensions for education, it is necessary to identify customers’ requirements and the design characteristics that make up an educational system. In addition, Brooks (2005) points out that the measurement of quality should include more of universities’ activities.

Having considered all these principles, the researcher decided to have six quality dimensions to measure the quality of DE support services. Four of these dimensions were SERVQUAL dimensions, namely tangibles, reliability, responsiveness and assurance. Two other dimensions were added to the SERVQUAL model. These were delivery and user participation. All these dimensions are backed by the literature. The SERVQUAL dimensions’ credibility is based on the fact that the model was empirically researched and the reliability of the dimensions was tested and found appropriate to measure service quality in any service sector. SERVQUAL dimensions have been employed to measure service quality in different service sectors such as education, health, transportation, sports and others.

The two additional dimensions, delivery and user participation, also find support in the literature. Delivery is a dimension used in higher education to assess services (Owlia & Aspinwall, 1996; Sangeeta et al, 2004). Furthermore, the researcher decided to add “user participation” as a
The concept of service user involvement/participation in service provision is supported in the literature (Minoque & Hardy 2008; Small & Rhodes, 2000; Bitner et al, 1997; Humphries, 1998). Service user participation in the provision of services finds support in DE theories such as Dialogue and Learner Autonomy (Moore, 1993) and self-directed learning (Knowles, 1975). Each dimension is discussed below to indicate its relevance in assessing DE students’ support services.

β Tangibles
The tangibles dimension was found to be relevant to measure the quality of study centres and the resources at the centres. Many studies measuring service quality in higher education have included the tangibles dimension. When Parasuraman et al (1985) determined the importance of tangibles, the dimension was found to be more important in the area of banking services than in any other service.

β Reliability
Reliability is about trust and responsibility. An institution of learning is supposed to be reliable. Failure to be reliable and do what is right leads to broken promises. When ranked with other dimensions (Parasuraman et al 1988), the reliability dimension was found to be consistently “the most critical dimension” of all the five dimensions.

β Delivery
This dimension was derived from the work of Sangeeta et al (2004) and Owlia and Aspinwall (1996) because it relates to educational contexts. Delivery attributes are core activities for students’ learning in a learning environment such as DE. In DE these activities are delivery of study material, feedback, students’ interactions with staff and encouragement of students by staff. The dimension includes empathy, which is an affective function of student support (Tait, 2003).

β Responsiveness
The responsiveness dimension is linked to the length of time that service users have to wait for the service, answers to queries and attention to their needs. In this study attributes to be measured include lecturers’ willingness to help students and to provide services.
Assurance

Assurance dimension focuses on lecturers’, tutors’ and administrative staff’s subject knowledge, work knowledge and skills. This is an important dimension for DE universities due to the lack of physical interaction. A DE lecturer/tutor should have the appropriate knowledge and skills to prepare authentic and good-quality study materials for students. Tutors and administrative staff should also have technical skills such as computer skills and interpersonal skills.

User participation

Service-user participation and involvement in service quality are important. The inclusion of this dimension was inspired and prompted by the students’ responses in the exploratory study. When one of the respondents was asked to comment on the guidance they were given on learning and on assignments, her responses were:

- There is no guidance on assignments. We rely on peers who have previously done that module. They also don’t understand even though they have done the module.

- Most times we get help from peers who have previously done that module, but who also don’t know much. We are not studying to learn; we go out there knowing nothing (Respondent. 4).

The respondent repeated her reliance on “peers” twice; first when asked about guidance on assignments and again when asked about guidance on learning. This participant’s experiences suggest that students like helping one another amid the obvious inadequate academic support they receive. Although this respondent’s observation provides evidence to highlight that student–student interactions are very important, they become inadequate where academic support is inadequate. Including service user participation as a dimension in this study helps illustrate the extent of the importance of peer support.

3.7. OPERATIONALISATION OF EXPECTATIONS AND PERCEPTIONS

As mentioned in the earlier sections, expectations and perceptions are used when evaluating service quality. However, these two variables are not directly observable. According to Lawton and Willard (2015), variables must be operationalised; meaning must be clearly defined in order to be measured. In this study, expectations were defined as the desires and needs of students –
what they expect from their support services as the users of those services in DE. Perceptions were described as perceptions of experiences. These are different encounters that students have with their different support services or the personnel. After defining expectations and perceptions, the study identified student support service attributes that bore the characteristics inherent to DE so that they could be measured by expectations and perceptions. These attributes were drawn from the literature (Robinson 1994; Sewart, 1993; Tait, 1995; Saanen, Sol & Verbraack, 1999; Hopker & Hole, 2001). Below are the attributes identified to be examined and measured in this study.

- tutorial classes
- guidance on assignments and on learning
- feedback on assignments and examination
- communication (e-mail, telephone/cellphone, postal services)
- lecturers’ and tutors’ attitude to students (empathy)
- lecturers’ and tutors’ knowledge of subject
- students’ interactions with lecturers and tutors
- students’ interactions with administrative staff
- study centres
- delivery of study material

The choice of these attributes is consistent with Lehtinen and Lehtinen’s (1982) finding that service users use three dimensions to understand service quality, namely: Physical quality, which is quality associated with buildings and equipment; Corporate quality which involves the image of the organisation; and Interactive quality, which is about interactions between the personnel (service provider’s employees) and service users, and interactions among service users themselves.

3.8. EXPLORATORY STUDY

The exploratory study was a very important part of the conceptual framework. Exploratory interviews were held with DE students on the quality of their support services. The aim of the exploratory interviews was to collect data in order to have concepts to broaden the conceptual
framework. The interviews were also meant to help the researcher understand the concept of service quality in DE.

The results of the exploratory study were used, therefore, to verify and validate the relevance of the dimensions identified for this study. Furthermore, the data were also used to validate student support service attributes identified for the study, and to develop the items for the dimensions. Table 3-3 shows the dimensions proposed for the study and their explanations.

**Table 3-3: Identified service quality dimensions**

<table>
<thead>
<tr>
<th>Dimension and Author</th>
<th>Explanation (Attributes)</th>
<th>DE Support Services/Structures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tangibles</strong></td>
<td>• adequate and appropriate physical facilities, equipment</td>
<td>• study centres</td>
</tr>
<tr>
<td></td>
<td>• friendly personnel</td>
<td>• resources</td>
</tr>
<tr>
<td></td>
<td>• Al Alark &amp; Alnaser 2012</td>
<td>• administration staff</td>
</tr>
<tr>
<td></td>
<td>• Parasuraman et al (1985)</td>
<td>• lecturers and tutors</td>
</tr>
<tr>
<td><strong>Reliability</strong></td>
<td>§ the ability to perform the desired service dependably, accurately, and consistently</td>
<td>§ tutorial classes</td>
</tr>
<tr>
<td></td>
<td>§ keeping promises</td>
<td>§ online interactions</td>
</tr>
<tr>
<td></td>
<td>§ match to the goals</td>
<td></td>
</tr>
<tr>
<td></td>
<td>§ handling complaints and solving problems</td>
<td></td>
</tr>
<tr>
<td></td>
<td>§ understanding users’ needs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>§ tutorial classes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>§ online interactions</td>
<td></td>
</tr>
<tr>
<td><strong>Delivery</strong></td>
<td>§ access to teachers and administrative staff</td>
<td>§ feedback</td>
</tr>
<tr>
<td></td>
<td>§ feedback</td>
<td>§ guidance on learning</td>
</tr>
<tr>
<td></td>
<td>§ encouragement of students</td>
<td>§ guidance on assignment</td>
</tr>
<tr>
<td></td>
<td>§ (links with empathy)</td>
<td></td>
</tr>
</tbody>
</table>

85
<table>
<thead>
<tr>
<th>dimension and Author</th>
<th>Explanation (Attributes)</th>
<th>DE Support Services/Structures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsiveness</td>
<td>willingness to help students beyond the call of duty</td>
<td>response to telephone, e-mails and letters</td>
</tr>
<tr>
<td></td>
<td>willingness to provide prompt service</td>
<td>prompt delivery of study material</td>
</tr>
<tr>
<td></td>
<td>effective administration</td>
<td></td>
</tr>
<tr>
<td>Hussain &amp; Birol</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2011)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Assurance:

| Parasuraman et al | the knowledge and competence of the personnel | lecturers |
| (1985)            | possession of necessary skills | tutors |
|                   | courtesy of the personnel and their ability to inspire trust and confidence | administration staff |
| Service User      | students taking part in the service production and delivery | study groups |
| Participation and Involvement | | self-motivation |

3.9. CONCLUSION

Due to a lack of one single theory of quality, different but related concepts have been drawn together to form the conceptual framework for this study. The SERVQUAL model, which conceptually service quality as the discrepancy between service users’ expectations and their perceptions of the services they receive from service providers, is the base model for the conceptual framework. The SERVQUAL model has been adapted to address the needs of the study. The adaptations include adding two new service quality dimensions to four of the five SERVQUAL dimensions. The following dimensions were identified to measure expectations and perceptions of students from a DE environment: tangibles, reliability, delivery, responsiveness, assurance and user participation. Each dimension is measured by three to five items. The SERVQUAL items have been modified to make them appropriate for measuring DE students’ support services.
CHAPTER 4: QUALITATIVE DATA COLLECTION AND ANALYSIS

4.1. INTRODUCTION

The aim of this chapter is to present the data collection and analysis procedures that were carried out in the exploratory study marking the first research phase of this study. The chapter is divided into four sections. In the first section, the methodological approach is explained. The second section describes and presents the data collection and analysis approach, sampling and interview procedures. The third section presents the procedures and processes involved in the analysis of the qualitative study. The fourth section presents the insights of the exploratory study and the development of a context-specific service quality model to interpret the quality of student support services in DE environments.

4.2. THE INTERPRETIVE APPROACH

Qualitative methodology is a social science research approach that helps researchers to understand the behaviours and experiences of research participants and their social and cultural contexts. In addition, it allows researchers to collect data throughout the process of research, for example during the literature search. Furthermore, Denzin and Lincoln (2000:3) posit that qualitative approach “consists of a set of interpretive, material practices that make the world visible”. According to these authors, qualitative researchers study things in their natural settings, “attempting to make sense of, or to interpret, phenomena in terms of the meanings people bring to them”.

The philosophical underpinnings of the qualitative approach are interpretivism and constructivism. Interpretive methodology is directed at understanding a phenomenon from an individual’s perspective (Cresswell 2009:8). Interpretive theory is inductive as it is generated from the data and does not precede it (Cohen 2007:22). According to Scotland (2012:12) interpretivist researchers believe that “value-free knowledge is not possible”. The ontology of interpretivism is relativism. Interpretivism posits that reality is subjective and differs from one person to the other (Guba & Lincoln 1994:110). Moreover, the interpretivist’s intention is to understand people’s experiences of the world. In addition, reality (ontology) is “socially constructed (Mertens
This means that the researcher and the research participants interact and share information as they try to understand reality. A researcher working under the interpretivist tradition tends to rely upon the “participants' views of the situation being studied” (Creswell 2003:8). The method is called *Verstehen*, meaning – looking through the eyes of the participants. This enables qualitative researchers to be attached to their participants.

Interpretist research is contrasted with what is called the positivist approach, whose position is that reality is objective. Proponents of positivism criticise the interpretist approach as not being value-free because of its subjective stance. They argue that qualitative approach uses unscientific methods, which are viewed as a threat to the credibility and validity of research results. The proponents of qualitative methodology, on the other hand, argue that reality is a social construction.

Data collection tools for qualitative approach are interviews, document reviews and observations. The qualitative data is presented textually.

In this study, qualitative methodology has been used to explore the quality of student support services in a DE environment and to generate data for developing a scale that will be used in a further quantitative study to understand service quality in DE. Martinez and Martinez (2010:13) point out that a qualitative approach to service quality can help researchers find out more about the meaning of service quality for the users. It is also hoped that the exploratory data will be useful in developing a context-specific model of service quality in order to understand and interpret the service quality of DE student support services.

4.3. **RESEARCH APPROACH**

The methodology the researcher employed to carry out the exploratory research is the mixed method. The approach to the data collection and analysis should be understood within the context of the following definition of mixed methods (Tashakkori & Creswell 2007:4): the mixed method is "research in which the investigator collects and analyses the data, integrates the findings and draws inferences using both qualitative and quantitative approaches or methods in a single study or program of inquiry".
In this study, a sequential exploratory mixed-methods design was used to collect and analyse the data. During the first phase, qualitative interviews were used to explore service quality in DE from the perspectives of Unisa students in order to answer the following questions:

- What are students’ expectations and the perceptions of experiences of the quality of student support services in a distance education environment?
- What are the gaps between students’ expectations and the perceptions of their experiences?
- What are the underlying service quality dimensions of student support services in distance education environments?
- Can we design a context specific student support service framework to understand service quality in distance education environments?

To answer the research questions, data were collected from students who had volunteered to participate in the study. One-on-one interviews were used to explore students' perceptions of their experiences and their expectations of the quality of their support services in a DE environment in South Africa. The data were analysed using the TA technique. The findings of this exploratory study provided a conceptual basis for the second phase of the study. The themes that emerged from the data helped the researcher to modify and contextualise the SERVQUAL scale instrument to be used to collect, analyse and interpret the data for a quantitative research study in the second phase of the research. The second phase involved a larger sample whose results were to be generalised to the wider population.
4.4. DATA COLLECTION PROCESSES

4.4.1. Sampling

In light of Parasuraman et al’s (1985) pioneering work on service quality, the sampling criteria for this study involved sampling male and female Unisa students of different ages, enrolled in different disciplines and who were the current users of student support services. The sampling process commenced with the determination of the sampling criteria. In research, sampling criteria involves selecting research participants who meet the predetermined criterion (Patton 2001). When sampling for their first study on service quality, Parasuraman et al (1985) screened their respondents to ensure that they were current or recent users of the services. Gender was another variable they used, to ensure that both female and male participants were sampled.

After establishing the sampling criteria, the researcher opted for a combination of two non-probability sampling techniques: convenience sampling and snowball sampling as the research was conducted with geographically dispersed students. Researchers use convenience sampling to get research volunteers who can easily be approached. The snowball sampling technique on the other hand is employed when members of a population are difficult to locate (Barbie 2012).

The initial contact with all the students who volunteered to participate in the research was done by telephone. The first two interviewees were requested to suggest names of other students who might be willing to participate in the research. One of these volunteer students suggested two names, but decided to contact the people first to find out whether they would be willing to participate. Times and dates for the interview were suggested for the two people who originally agreed to participate in the research. Each student who volunteered to participate in the research was sampled and also asked to identify one or two additional people who they thought might be willing to participate in the research study. This technique is supported by Mason (2002), who points out that, as a matter of principle, sampling should be dynamic and ongoing. That was how the snowball sampling process unfolded.

One student who participated wanted to find out how she would personally benefit from the research. The researcher explained that the research was meant to understand their expectations with regard to the quality of support services offered by Unisa, and that the results
of the research would be disseminated to the student's institution. The positive attitude shown by students who volunteered to participate in the research and those who suggested names boosted the researcher's sampling efforts, as more people indicated willingness to participate in the research.

Initially, the study had planned to sample 20 students for the qualitative research. However, after interviewing ten students, the researcher decided to stop inviting participants because there was no new information being provided by the respondents. This is called data saturation. According to Mason (2002:Para. 1) data saturation point is reached when the research data stops telling the researcher “anything new about the social process under scrutiny”. Mason (2010:Para. 2) further states that as the study goes on, “more data does not necessarily mean more information”. This is supported by other researchers (Harris 2010; Mason, Richie, Mason & Elam 2003) who point out that a qualitative study, unlike a quantitative one, does not require a large number of participants. Mason (2010) points out that qualitative research is concerned with meaning and not generalised hypothesis statements. Moreover, the aim of qualitative interviews is to gather in-depth insights on the attitudes, actions and thoughts of the participants (Kendall 2008).

Table 4-1 shows the profile of the respondents. The profile included the gender of the respondents, their year of study, the study programme (the course) and whether they were employed or unemployed.

<table>
<thead>
<tr>
<th>Respondent A</th>
<th>Gender</th>
<th>Year of Study</th>
<th>Study Programme</th>
<th>Employed/Unemployed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Female (F)</td>
<td>2</td>
<td>Financial Management</td>
<td>Self-Employed</td>
</tr>
<tr>
<td>Respondent B</td>
<td>Male (M)</td>
<td>1</td>
<td>Law</td>
<td>Unemployed</td>
</tr>
<tr>
<td>Respondent C</td>
<td>Female (F)</td>
<td>2</td>
<td>Social Work</td>
<td>Employed</td>
</tr>
<tr>
<td>Respondent D</td>
<td>Female (F)</td>
<td>2</td>
<td>Law</td>
<td>Part-time Employment</td>
</tr>
</tbody>
</table>
4.4.2. Building rapport with participants

Building rapport with the students who had indicated that they wanted to be interviewed over the phone was most critical for creating trust between the student and the researcher. In as much as some students were willing and preferred to be interviewed telephonically, the researcher believed that the lack of the interviewer’s physical presence was likely to make students less cooperative, so they would hold back important information, lose interest or be sceptical about the whole situation. This observation is prompted by immediacy gap theory, which assumes that as members of a group become isolated, their participation in the group activities decreases (Williams et al., 1981). Inherently, DE students experience transactional gaps (Moore 1989). According to Moore (1993:22) the transaction gap contributes to students’ “feelings of isolation and disorientation”, which can lead to “reduced levels of motivation, engagement and attrition”. HEQC (2010) also noted that Unisa students go to study centres to seek “physical spaces” in order to become part of a physical community.

The first initiative in building rapport with the research volunteers was to phone to thank them for agreeing to participate in the study; and to arrange the dates and times for interviews. Those who could not be interviewed face-to-face were interviewed telephonically. Seven telephone interviews were conducted on different days. The reason for the telephonic interviews was that some participants wanted interviews to be held in the evening or at night, while they were at

<table>
<thead>
<tr>
<th>Respondent</th>
<th>Gender</th>
<th>Year of Study</th>
<th>Study Programme</th>
<th>Employed/ Unemployed</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td>F</td>
<td>2</td>
<td>Law</td>
<td>Employed</td>
</tr>
<tr>
<td>F</td>
<td>F</td>
<td>2/3</td>
<td>BCom Management</td>
<td>Unemployed</td>
</tr>
<tr>
<td>G</td>
<td>M</td>
<td>2</td>
<td>IT</td>
<td>Employed</td>
</tr>
<tr>
<td>H</td>
<td>M</td>
<td>2</td>
<td>IT</td>
<td>Employed</td>
</tr>
<tr>
<td>I</td>
<td>M</td>
<td>1</td>
<td>BSc</td>
<td>Employed</td>
</tr>
<tr>
<td>J</td>
<td>M</td>
<td>2</td>
<td>Education</td>
<td>Employed</td>
</tr>
</tbody>
</table>

*Table 4-1: Respondents’ profiles*
their homes and the other reason was that some participants were not within easy reach. For instance, two students lived in another country (Lesotho).

After the telephone rapport building, follow-up SMSes bearing interview topics were sent to each participant to allow them time to familiarise themselves with the topics before the actual interviews. Giving questions days before the interviews were held was intended to avoid losing time and causing confusion trying to explain the terminology used in student support system, which they might not have been familiar with.

4.4.3. Bracketing: the researcher’s role

The phenomenon under investigation in this study was service quality. The main aim of the study was to understand this phenomenon from the perspective of DE students as users of student support services. To achieve this, the researcher had to take “on the mind-set of a phenomenologist” and employed a concept of “bracketing” to allow the research participants to describe their own experiences of service quality. This is consistent with the qualitative literature (Ahern 1999; Tufford & Newman, 2012; Giorgi, 1975), who opine that in qualitative research, researchers are required to suspend their presuppositions so that the true experiences of research participants are reported.

Bracketing is a key principle underpinning phenomenological research (Webster-Wright, 2009). Bracketing is used to describe “a specific strategy for separating impressions, feelings and early interpretations from descriptions during qualitative data collection” (Hatch, 2010:86). The idea behind bracketing is that researchers should pay attention to the description of the experiences given by the research participants. Gearing (2004:1430) describes bracketing as “a scientific process through which a researcher suspends or holds in abeyance his or her presuppositions, biases, assumptions, theories or previous experiences to see and describe the phenomenon”.

The idea of employing bracketing in this study was prompted by three factors: firstly, not much has been written about service quality in DE in South Africa. According to Creswell (2003), when not much is known about a phenomenon of interest, exploration studies are employed to understand the phenomenon. So an exploratory study carried out for this research was meant to
explore service quality in order to understand the concept. Bracketing was employed so that the researcher could "capture as closely as possible the way in which the phenomenon is experienced within the context in which the experience takes place" (Giorgi & Giorgi, 2003:27). There was no interpretation or any social construction of the research findings. The researcher captured only participants' descriptions of their perceptions of experiences and their expectations of the quality of student support services.

Secondly, in accordance with service literature (Simpson, 2002; Schneider & White, 2004; Pollit, 1992; Zeithamal et al, 1990; Gronroos, 1990; Parasuraman et al, 1988), the users of the service evaluate, judge and determine the quality of the services provided to them by the service provider. This necessitated that the researcher's expertise, knowledge, suppositions and values be suspended because they would not be relevant, since service quality is determined by service users themselves. Thirdly, bracketing is a scientific method that helps to increase rigour in research. According to Ahern (1999) bracketing is a way of demonstrating the validity of the data collection and analysis processes of research.

Furthermore, researchers in the interpretivist tradition study things in their natural settings, attempting to make sense of or to "interpret phenomena in terms of the meanings people bring to them" (Denzin & Lincoln 2000:3). In trying to understand what people say to one another, they usually apply their individual presuppositions and assumptions to find meaning. Knowledge and experience are also used to construct meaning. There is usually fear that in the process of interpreting and constructing meanings, the researcher interferes with the research findings. Conversely, in bracketing the researcher cannot reconstruct meaning in order to understand research participants. Research participants relate their own experiences without the researcher's interference.

In service quality research, the role of a service user is important. Service users assess the quality of the services they receive, not the other way round. The voice of an individual service user narrating his or her encounters with the service itself and the service provider is unique and more powerful than and superior to the next service user's voice. Bracketing helped the researcher fully understand the phenomenon being studied from the idiographic perspective.
Bracketing continued during the data collection and during the earlier stages of data analysis. The analysis was data driven and there was no application of theories to categorise the themes that were emerging. All the themes were a reflection of the research participants’ experiences and expectations. In service quality evaluations, ‘the voice of the service user’ is dominant.

4.4.4. Interview structure

The researcher formulated a structured interview instrument consisting of one main question followed by a set of topics. These questions were based on different student support services and their attributes offered at DE institutions. Hard copies of these structured questions (topics) were printed for face-to-face interviews. Interview topics were also sent to prospective telephone interviewees by SMS before the commencement of the interviews to allow them to familiarise themselves with the study. This is supported by Burke and Miller (2001), who suggest that before conducting telephone interviews, a prepared script should be used to introduce the study at the beginning of the interview. The researcher conducted three face-to-face interviews, all held at different places and two of them on the same day. The third participant was interviewed at a place not far from the workplace. Furthermore, all the interviewees could express themselves in English, so there was no need for translations. During the processes of face-to-face and telephone interviews, the researcher used a notepad to take notes. It was important to pay attention to details being described by the participants.

Semi-structured interviews were carried out to guide the interviewees. According to Zenobia et al (2013), in semi-structured interviews, the interviewer has a schedule to guide the interview, not to dictate it. When researchers maintain their curiosity about what they might not know, the participants feel free to express themselves. Moreover, Finlay (2011) points out that phenomenological researchers pay close attention to their participants through empathy, compassion and curiosity.

The open-ended questioning technique was useful in that it allowed explanations, discussions and probes of the interview topics and questions. According to Morse and Richard (2002), in semi-structured interviews, researchers devise open-ended questions utilising some clarifying
questions. The open-ended questioning technique was deemed necessary as it would be helpful in clarifying unfamiliar terms and other issues.

In each interview, the researcher introduced herself, thanked participants and explained the purpose of the study, making sure that her potentially powerful position of "researcher" remained under control. According to Finlay (2010), much as researchers may assert their "potentially powerful oppressive" position, they need to be humble and modest.

After the process of the interview the researcher asked the participant to suggest the names of students they knew who might be interested in participating in the research. The participant explained that he did not know any student at Unisa personally. He said he had joined Unisa after completing grade 12, so all his friends were at different institutions. Another interesting revelation was that he neither knew any of his fellow course mates nor was he a member of any study group or learning community, as he wanted to be an independent learner. He explained that he opted for DE because he wanted to study by himself. After this casual conversation, the researcher once again thanked the participant for agreeing to participate in the research.

After each face-to-face interview, the researcher would read and re-read the notes and expand them to form complete sentences and coherent texts. After this, the initial coding was done. At the end of the whole process of face-to-face data collection, the data had passed through the first stage of data analysis.

Telephone interviews lasted for 40 minutes to an hour. After the interview, the data were read and re-read and the notes were expanded into texts. Just as in the face-to-face interviews, data were analysed in order to identify emerging themes and to avoid being ‘swallowed up’ by a lot of information, which might happen if the data were to be analysed only at the end of the whole interview process. Analysing data during the data collection process is supported by Lacey and Luff (2009) who assert that data analysis should take place during the stages of data collection. Lacey and Luff (2009) point out that if analysis does not take place at the same time as data collection, the researcher runs the risk of being swamped by data that “become increasingly more difficult to analyse”. The researcher found that she became more and more familiar with the data as she analysed it.
Ten students were interviewed, six (60%) men and four (40%) women. They were all current users of student support services in a DE institution, and registered for any academic discipline, and were willing to participate in our study. The interviews were held in July, 2014.

4.5. QUALITATIVE DATA ANALYSIS PROCESSES

After data collection, the analysis was done using inductive and deductive approaches. The inductive approach involves a predetermined framework to analyse research data and the deductive approach involves analysing data without any predetermined framework. This approach is said to be suitable where little is known about the data. Nonetheless, a combination of these two approaches is possible if mixed methods approach is the methodological choice of a study.

A similar approach was followed by Fereday and Muir-Cochrane (2006:80), who used “a hybrid approach of qualitative methods of thematic analysis technique”. Fereday and Muir-Cochrane (2006) used a combination of deductive and inductive analysis that followed a step-by-step process. Similarly, in this study the researcher used a TA technique and incorporated a combination of inductive and deductive approaches.

4.5.1. Thematic analysis

There are a number of techniques or methods available to analyse qualitative data. Most commonly used include Thematic Analysis (TA); Interpretive Phenomenology Analysis (IPA), grounded theory and qualitative content analysis. This study used Braun and Clarke’s (2006) TA method to analyse the exploratory study data. The choice of TA over other data analysis methods was based on its flexibility to be used within different frameworks to answer different types of research questions (Braun & Clarke 2006). In order to understand the difference between TA and other qualitative data analysis approaches, a review of TA, IPA, grounded theory and content analysis was done.

TA is a widely used qualitative data analysis method defined as “a qualitative analysis method for identifying, analysing and reporting patterns (themes) within data” (Braun & Clarke 2006:6). It identifies patterns of meaning across datasets that provide an answer to the research question
being addressed. Patterns are identified through a rigorous process of data familiarisation, data coding and theme development.

TA involves approaching data analysis inductively, i.e. analysing data without using any predetermined theory or framework. The advantage of employing an inductive data analysis method for this study is that the data are allowed to “speak for themselves by the emergence of conceptual categories and descriptive themes” (Braun & Clarke 2006). Although there are many qualitative analyses, TA was used in this study because it was determined by the research question and objectives. Unlike grounded theory that aims at developing theory to describe research findings, TA summarises research data into themes.

Grounded theory is a systematic procedure for analysing qualitative data and was developed by Strauss and Corbin (1998). The idea was to allow researchers to develop a theory of their interest from the data, to describe research findings. Constructivist grounded theory advocated by Carmaz (2003:250) "assumes relativism of multiple social realities, recognises the mutual creation of knowledge by the ‘viewer’ (interviewer) and the ‘viewed’ (interviewee) and aims at an interpretive understanding of subjects' meanings". This means that the researcher and the research participant share a reality. Nevertheless, this was not used in this study because the researcher and the participant did not share the same reality.

Phenomenology was not used as an analytical tool because it explores individuals’ lived experiences of a phenomenon and how they make sense within the context in which the experiences take place. Phenomenology is either descriptive or interpretive (Reiners 2012; Giorgi 2007). Whereas Amedeo Giorgi’s phenomenological psychology describes lived experiences of research participants, IPA gives an interpretive analysis of research participants’ lived experiences. IPA is said to draw from different principles: phenomenology, hermeneutics, psychology and idiographic interpretive; and according to Jill (2014) this component combination is what makes IPA distinct from all other qualitative analysis approaches.

Content analysis was also considered but not used. Content analysis techniques and approaches can be either quantitative or qualitative. Quantitatively they are used to generate codes, clusters
and categories and count the frequencies of those. Qualitatively, they allow researchers to understand social reality in a subjective but scientific manner.

A common tenant central to TA, grounded theory and phenomenology is the notion of allowing research participants to relate their own experiences in their own voices. However, the difference between grounded theory, IPA, TA and content analysis is that the first two are methodologies that consist of theoretical frameworks on how to conduct research; whereas TA and qualitative content analysis are techniques or methods to analyse different types of qualitative data. IPA is a methodology and a theoretically informed framework on how to do research, not a method or a technique for collecting and analysing data. IPA provides an entire framework for conducting research.

The researcher analysed the data manually, and at times employed simple excel based tools and did not use sophisticated computer-assisted software programs. Although there are several computer-assisted software packages such as Atlas. ti and NVivo, to help in the analysis of qualitative data, Burnard, Gill, Stewart, Treasure and Chadwick (2008) point out that these programs do not analyse the data, but simply manage it and make data handling easier. The authors stress that data analysis is the task of the researcher.

4.5.2. Thematic analysis procedures

Interviews were conducted with students to explore their perceptions of their experiences and their expectations of student support services. The interviews generated sufficient data that was analysed using the TA technique. This study considered Braun and Clarke's (2006) six-step guidelines of thematic data analysis. These are:

- Become familiar with the data.
- Generate initial codes.
- Search for themes.
- Review themes.
- Define and name themes.
- Report.
Phase 1: Familiarising oneself with the data

Familiarisation with the data took place during the data collection period, because data collection and data analysis were performed concurrently. This entails reading and re-reading the data to the point of immersion to understand the content. Immersion involves repeated readings of the data as one searches for meanings and patterns (Braun & Clarke 2006:16). Furthermore, Braun and Clarke (2006:17) caution that there should not be any temptation to skip this first phase as it “provides the bedrock for the rest of the analysis”.

After every interview, the researcher familiarised herself with the data by reading and re-reading the hand-written field notes (raw data) immediately. An interview questionnaire template was used and saved as separate files so that each dataset could have its own file (ten in total) to expand the field data from each interview. The reading was done in an active way (Braun & Clarke 2006:16): the font colour red was used to note some important meanings. Each box indicated whether it contained experiences and/or expectations. The researcher also indicated which questions to delete from the interview tool after interviewing the first respondent. The processes of reading, expanding the data and searching patterns were carried out after every interview and the researcher thus became familiar with the depth and breadth of the content (Braun & Clarke 2006). Furthermore, the ten interview texts required proper management and storage and as such hard copy texts were filed while soft copy documents were saved on various electronic storage places like memory sticks and external hard drives.

Table 4-2 is an example of how the field notes were expanded into text. The first column contains field notes before expansion and the second column shows the expanded version.

<table>
<thead>
<tr>
<th>Field notes</th>
<th>Expanded and typed field notes</th>
</tr>
</thead>
</table>
| **Interviewer:** Unisa is expected to provide support services to its students. What do you understand by student support services? | }
<table>
<thead>
<tr>
<th>Field notes</th>
<th>Expanded and typed field notes</th>
</tr>
</thead>
</table>
| Res: Support for students – maybe mentorship – not really sure | Respondent: It is support given to students, maybe mentorship. I am not really sure.
*Not familiar with terminology. Will other participants know? Maybe not. Discontinue the question. It is not a good ice-breaker! |
| **Interviewer:** Examples of support services are: Tutorials: face-to-face, online; Feedback on assignments and examination - We shall talk about these later. Were you oriented about available student support services at Unisa? |  |
| Res: Read online | Respondent: I read about these online.
*Discontinue this question |
| **Interviewer:** The following are student support services provided by Unisa: ... I would like to hear your opinion about them. What are your perceptions and expectations? Are you happy? What would you like to see? Let us start with face-to-face tutorials. |  |
| Res: Should be available for everyone. Never attended. Necessary, important for stunts with no internet | Respondent: Face -o-face tutorial classes should be made available to everyone. I have never attended any, but I believe they are very important and necessary for students who do not have access to the internet.
*Relates experiences and expectations |
| **Interviewer:** What about online tutorials? What are your perceptions and expectations? |  |
| Res: The best, excellent – so far | Respondent: Online is the best, actually. It is an excellent service, (pauses) so far.
*Experience |
| **Interviewer:** What about feedback on assignments and examinations? |  |
| Res: Good feedb. on assignments. For exam only marks given. Want details for exam. Marks not helpful. | Respondent: Feedback on assignment is good. But feedback for exams is not good because we are given only marks. I want detailed feedback on examination as well. The marks are not helpful.
*Experiences and expectations |
| **Interviewer:** What are your perceptions and expectations of your lecturers/tutors regarding attitude, knowledge and teaching skills? |  |
| Res 1: Excellent attitude. Fair teaching skills. Want one-on-one communication - | Respondent: Their attitude is excellent. Their teaching skills are fair. We would like to have more one on one type of communication – I mean interaction. Right now there is none. |
interaction. Right now none. Group interactions only not enough. Want one-on-one. There are group interactions only and that is not good enough. I want one-on-one interactions with them.

*Experiences and expectations*

### Phase 2: Generating initial codes

The process of identifying codes started with reading through the data text under each question. For each question and its response, the respondent’s “perceived experiences” were highlighted using turquoise and “expected service” using grey. Highlighting codes in different colours is recommended by Ryan and Barnard (2003). Any interaction or encounter that a respondent had with a service was regarded as a perceived experience, and any desire or wish or request was regarded as expected service.

At the end of the coding process much of the data had been identified and highlighted with appropriate colour codes. Below are two examples of the coded interview texts. Text 4.1 is for Respondent 1 (face-to-face interview) and Text 4.2 is for Respondent 4 (telephone interview).

**TEXT 4.1 Coding students’ experiences and expectations. Data text is for Respondent 1 (Face-to-face interview)**

Respondent 1 is a 20-year-old second-year Financial Management student. He lives in an upmarket suburban home with his family. He opted for distance learning because he believed in independent study. He is a businessman and a student and copes well with both.

<table>
<thead>
<tr>
<th>CODED INTERVIEW TEXT</th>
</tr>
</thead>
<tbody>
<tr>
<td>The interviewer greets the respondent by name. The interviewer introduces herself, thanks the respondent for agreeing to participate in the research and explains the purpose of the study.</td>
</tr>
<tr>
<td><strong>Interviewer:</strong> Unisa is expected to provide support services to its students. What do you understand by student support services?</td>
</tr>
<tr>
<td><strong>Res 1:</strong> Support given to students, classes, maybe, mentorship. I am not really sure.</td>
</tr>
<tr>
<td><strong>Interviewer:</strong> Examples of support services are: Tutorials: face-to-face, online, feedback on assignments and examinations – We shall talk about these later. Were you oriented about available student support services at Unisa?</td>
</tr>
</tbody>
</table>
Res 1: Ah, well …. (He looked a bit confused. So I continued)

Interviewer: Other examples of student support services are under question 4. Let us go through them together.

Res 1: (looked at the question mentioned intently and allowed his eyes to move down and up the script for two minutes. Then he looked at the interviewer without saying anything).

Interviewer: Let us turn to the next page.

Res 1: (turned to the page and looked at the questions intently, once again. When he was through with the reading I asked him to turn back to the first page).

Interviewer: What are your perceptions and expectations of these services? Let us start with the first one: Tutorial Classes: face-to-face and online.

Res 1: Face-to-face tutorial classes should be made available for everyone. I have never attended any, but I believe they are very important for students who do not have access to the internet. I study from home.

Interviewer: What about online? What are your perceptions and expectations?
Res 1: Online tutorials are the best, actually. It is an excellent service (pauses) so far.

Interviewer: Feedback on assignments and examination?
Res 1: Feedback on assignment is good. But feedback on exams is not good because we are given only marks. I want detailed feedback on examination as well. The marks are not helpful.

Interviewer: E-mail communication?
Res 1: E-mail communication is very good. When it comes to notifications, communication is good.

Interviewer: What about teleconferencing?
Res 1: Well, eh, I have never heard of that.

Interviewer: And telephone/cellphone communication?
Res: 1 SMS communication is satisfactory. Telephones are never answered, so the service is not there. Maybe they should answer the phone.

Interviewer: What are your perceptions and expectations of your lecturers/tutors regarding attitude, knowledge and teaching skills?

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| Res 1: Their attitude is excellent. Their teaching skills are fair. We would like to have more one-on-one type of communication, I mean interaction. Right now there is none. There are group interactions only and that is not good enough. I want one-on-one interactions with them. |
| Interviewer: Interactions with lecturers? |
| Res 1: This service is available. Not everyone maybe aware of it. |
| Interviewer: Interactions with tutors? |
| Res 1: There are no tutors. |
| Interviewer: Administration support? |
| Res 1: It is excellent. But they should answer phones in future |
| Interviewer: Study (Learning) Centres? |
| Res 1: I study from home and I am happy, but I believe more study centres should be made available |
| Interviewer: Study material and delivery? |
| Res 1: DVDs are helpful. They are very good. They do a lot of work. Study material delivery is on time, no problem, But sometimes it can delay |
| Interviewer: Guidance on assignments? |
| Res 1: We get good guidance on assignments. We are given good-quality material that helps with assignments |
| Interviewer: Guidance on Learning? |
| Res 1: I prefer online one-on-one, not forum discussions. At the moment there are forum discussions. |
| Interviewer: What about MyUnisa? |
| Res 1: MyUnisa is a perfect service. It is straightforward and the instructions are clear |

TEXT 4.2 Coding students’ experiences and expectations. Data text is for Respondent 4 (Telephone interview)

Respondent 4 is a young female law student who lives in a flat and does not have a well-paying job.
Interviewer: Unisa provides students support services to its students. A list of these support services was sent to you. I would like to hear your opinion about each one of these. What are your expectations? Are you happy? What would you like to see? Let us start with tutorials: face-to-face and online tutoring.

Interviewer: Face-face tutorial classes?
Res 4: Face-to-face tutorial classes are not too bad. But they are not in every learning centre. They take place every Saturday. They are lectures for complex modules.

Interviewer: Online tutoring?
Res 4: Online tutorials are not enough. We need guidance. But they are rare and inaccessible where there is no internet. Tutorials are not bad. Some modules are difficult to learn so we need them. We really need guidance for danger modules. People who hardly have paying jobs cannot afford to go online. I cannot afford the internet. We need guidance for danger modules at least three days a week.

Interviewer: Feedback on assignments and examinations?
There is no feedback – there is very little given. Let me see, out of 14 modules I received feedback on only 3 assignments. (Chuckles). This is not the right direction.

Interviewer: E-mail communication?
I hardly go on myLife. One time I got wrong delivery. My books got lost. I tried to use Helpline communication. It is useless. Unisa students’ representative council is non-existent. I had to sms at my own cost.

Interviewer: Cell and telephone communication?
There is no communication. I don’t know of any communication.

Interviewer: What are your expectations of your lecturers/tutors regarding the following: their attitude, their teaching skills, their knowledge?
Excellent lecturers! Enthusiastic! They make our peers also enthusiastic. Lecturers make us passionate about our studies. I obtained some distinctions after having physical interactions with my lecturers. During my interactions with them, the lecturers created enthusiasm to the whole group of students – peers. Seeing them and hearing them speak motivated me and other students. Students can help each other without lecturers if we have physical interactions with the lecturers often.

Interaction with your lecturers?
So far I am happy. Online interactions are off point. Face-to-face interactions are on point. We have had interactions with lecturers once so far and that was excellent. We need more interactions.

Interaction with tutors?
We don’t have tutors

Interviewer: Administrative support?
They are not professional. They always tell us, ‘We are closing, we are closing.’ They are not the best. Not forthcoming. They are very moody. Today they are like this, tomorrow they are like this.

Interviewer: Study (Learning) Centre?
The study centre here is full. Classrooms are overflowing. The centre has lots of classrooms and can accommodate a lot more people, but only few classrooms are opened. The centre is meant for “everybody” in this area, but the space allocated to us is not enough. The workers refuse to open other classrooms. But there are lots of classrooms. They should open some classrooms for us.

The place is not conducive for learning. The floors are dirty. We eat from the classrooms. Secondly the classrooms are swept when we are there – I mean the cleaners clean while students are there. We are not treated like university students. The place is not productive at all. The Wi-Fi is terrible. We have to use internet cafes but we do not have money.
Interviewer: Study material and study material delivery?

Delivery of books is not fine. Books arrive two weeks before the assignment. The Post Office is not reliable. If we use Pnet, we have to pay for books. My books got lost one time. We should be given an option to pick up a book somewhere else, not from the post office.

Interviewer: Guidance on assignments?

There is no guidance on assignments. We rely on peers who have previously done that module. They also don’t understand even though they have done the module. We are doing assignments for the sake of it.

Interviewer: Guidance on learning?

We need guidance for practical modules. We need to see how they produce the practical modules. Some study guides do not help us understand difficult things. Some pages of the study guides are not relevant. We are doing assignments for the sake of doing them to pass. Most times we get help from peers who have previously done that module, but who also don’t know much. We are not studying to learn; we go out there knowing nothing. It will be nice to have lecturers to help us with difficult modules.

Interviewer: MyUnisa service?

Excellent. It gets work done!

Interviewer: What are your expectations as a Unisa student?

I want to do my entire degree with Unisa. But we struggle with exams. They are difficult. We need some scope for examination. We need past papers. I cannot afford to fail.

We also want to practise with other people. Not only Black Lawyers Association. We need more people to tell us about law.
We need debate classes so that we can share ideas. If there are no practicals of the things you do you are not going to have ideas of what you are doing. This is like teaching. We need to practise. We need to have experience.

Interviewer: As we conclude could you suggest names of students who might want to participate in the research?

Res 4: With pleasure! I will give you someone doing law, and two people doing Information Technology. I will send you their numbers after talking to them first. They won’t mind. They are people I know very well.

After identifying and coding the initial codes, responses were collated into one file.

**Phase 3: Searching for themes**

This phase entailed searching and "discovering" themes from the identified codes in Phase 2. King and Horrocks (2010:150) define themes as “recurrent and distinctive features of participants’ accounts, characterising particular perceptions and/or experiences, which the researcher sees as relevant to the research question”. Braun and Clarke (2006:8) further explain that a theme “captures something important about the data in relation to the research question and represents some level of patterned response or meaning within the data set”. Furthermore, Ryan and Bernard (2003:88) point out that themes come from “the characteristics of the phenomena being studied”.

The approach used to discover themes from the datasets was guided by Ryan and Bernard’s (2003, 2010) guidelines, which include “word repetitions”, “compare and contrast”, “social science issues, “metaphors and analogies” and “transitions”. This study considered a compare and contrast – (similarities and differences) – approach to identify themes and patterns within the data; that is, one theme is compared to other themes from the same data to identify similarities and differences. According to Ryan and Bernard (2003) the compare and contrast
approach is similar to the constant comparison method used in grounded theory. However, according to Leech and Onwuegbuzie (2007:565), constant comparison analysis has since been modified to be used to analyse data collected in a single round of interviews.

To facilitate the process of discovering similarities and differences in the data, I decided to follow a five-step approach to comparing themes, proposed by Boeije (2002), because it offered a more systematic way of approaching constant comparison analysis. However, Boeije (2002) points out that the number of steps will depend on the researcher’s work. Therefore in this study only two steps instead of five were used. These steps are also supported by King and Horrocks’s (2010) assertion that the word theme “implies some degree of repetition” across two or more interviews. Boeije’s (2002:392) steps are as follows:

**Step 1: Comparison within a single interview**

**Step 2: Comparison between interviews of the same group**

Step 1 was used to analyse single interviews for inconsistencies and contradictions. Step 2 was used to compare and contrast all the interview texts to identify similarities and differences in perceptions and expectations of student support services.

**Step 1: Comparison within a single interview**

According to Boeije (2002:395), a single interview comparison is “an attempt to interpret the parts of the interview in the context of the entire story as it has been told to us by the interviewee”. The process of theme identification began with scrutinising a “single interview”. In line with Strauss and Corbin (1990) and Ryan and Bernard (2003), a careful line-by-line analysis of the coded interview texts was conducted to look for consistencies in the data. The researcher also employed several of Boeije’s (2002) suggested “important questions” regarding this step of comparison, namely: “What is the message of this interviewee?” “Is the storyline consistent?” “Are there any expressions that are contradictory?” Another set of self-help questions considered were those suggested by Ryan and Bernard (2003). These are: “What is this about?” “How does it differ from the preceding or following statements?”
This technique was applied to each interview to identify consistencies and contradictions. This involved reading and re-reading the highlighted codes of a participant’s response and picking out the information that addressed the research questions. This information was summarised and written down below the response to represent a theme. It should be emphasised here that themes identified in single interviews were pieces of information relevant to the research question.

The following texts are from Phase 2: Generating initial codes. Each box contains a question and response. Themes were discovered from the coded categories and written below each interview response, labelled as either perception themes or expectation themes.

**TEXT 1: Themes from Respondent 1 coded data**

**Interviewer:** What are your perceptions and expectations of these services? Let us start with the first one: Tutorial classes: face-to-face and online.

**Res 1:** Face-to-face tutorial classes should be made available to everyone. I have never attended any, but I believe they are very important for students who do not have access to the internet.

PERCEPTION THEME: Tutorial classes are important

EXPECTATION THEME: Tutorial classes for everyone

**Interviewer:** Feedback on assignments and examination?

**Res 1:** Feedback on assignment is good. But feedback on exams is not good because we are given only marks. I want detailed feedback on examination as well. The marks are not helpful.

PERCEPTION THEME: Assignment feedback is good

EXPECTATION THEME: There is need for detailed examination feedback

**Interviewer:** E-mail communication?

**Res 1:** E-mail communication is very good. When it comes to notifications, communication is good.

**Interviewer:** And telephone/cellphone communication?

**Res 1:** SMS communication is satisfactory. Telephones are never answered, so the service is not there. Maybe they should answer the phone.

PERCEPTION THEME: Notifications communication is good. No telephone communication
EXPECTATION THEME: Phones should be answered

Interviewer: What are your perceptions and expectations of your lecturers/tutors regarding: attitude, knowledge and teaching skills?

Res 1: Their attitude is excellent. Their teaching skills are fair. We would like to have more one on one type of communication. I mean interaction. Right now there is none. There are group interactions only and that is not good enough. I want one on one interactions with them.

PERCEPTION THEME: Lecturers' teaching skill is fair. Lecturers' attitude is excellent

EXPECTATION THEME: One-on-one interactions with lecturers are a must

Interviewer: Interactions with lecturers?

Res 1: This service is available, although it is minimal. Not everyone maybe aware of it.

PERCEPTION THEME: Minimal interactions with lecturers

EXPECTATION THEME: Preference is on one-on-one interactions, not group interactions

Interviewer: Interactions tutors?

Res 1: There are no tutors

PERCEPTION THEME: No tutors available

TEXT 2: Data from Respondent 4's interview

Interviewer: Face-to-face tutorial classes

Face-to-face tutorial classes are not too bad. But they are not in every learning centre. They take place every Saturday. They are lectures for complex modules.

PERCEPTION THEME: Tutorial classes' standard is acceptable

EXPECTATION THEME: Tutorials are necessary for complex modules
Interviewer: Online tutoring?

Res 4: Online tutorials are not enough. We need guidance. But they are rare and inaccessible where there is no internet. Tutorials are not bad. Some modules are difficult to learn so we need them. We really need guidance for danger modules. People who hardly have paying jobs cannot afford to go online. I cannot afford the internet. We need guidance for danger modules at least three days a week.

PERCEPTION THEME: Support should fit the financial needs of the students

EXPECTATION THEME: Guidance on “danger” (complex) modules desperately needed

Interviewer: Feedback on assignments and examinations?

There is no feedback – there is very little given. Let me see, out of 14 modules I received feedback on only 3 assignments. (Chuckles). This is not the right direction.

PERCEPTION THEME: Very little feedback equals to no feedback

EXPECTATION THEME: Appropriate and detailed feedback should be given

Interviewer: E-mail communication?

I hardly go on myLife. One time I got wrong delivery. My books got lost. I tried to use Helpline communication. It is useless. Unisa students’ representative council is non-existent. I had to sms at my own cost.

Interviewer: Cell and telephone communication

There is no communication. I don’t know of any communication.

PERCEPTION THEME: No e-mail, cellphone and telephone communication

EXPECTATION THEME: There is need for working communication systems

Interviewer: What are your perceptions and expectations of your lecturers/tutors regarding the following: Their attitude, their teaching skills, their knowledge?

Excellent lecturers! Enthusiastic! They make our peers also enthusiastic. Lecturers make us passionate about our studies. I obtained some distinctions after having physical interactions with my lecturers. During my interactions with them, the lecturers created enthusiasm to the whole group of students – peers. Seeing them and hearing them speak motivated me and other students. Students can help each other without lecturers if we have physical interactions with the lecturers often.
PERCEPTION THEME: Lecturers’ teaching skill and attitudes are excellent. Lecturers have knowledge of their subject

EXPECTATION THEME: Interactions with the lecturers is required

What about interactions with your lecturers?
So far I am happy. Online interactions are off point. Face-to-face interactions are on point. We have had interactions with lecturers once so far and that was excellent. We need more interactions.

PERCEPTION THEME: Excellent face-to-face interactions with lecturers

EXPECTATION THEME: Interaction with lecturers is necessary

What about interactions with tutors?
We don’t have tutors

PERCEPTION THEME: No tutors for certain courses/modules

Step 1 Analysis

A lack of consistency was noted when Respondent 4 expressed the following perceptions about feedback: “There is no feedback. Very little is given”. I used the following questions to understand this contradiction: “What is the message of this interviewee?” Boeije (2002); “What is this about?” (Ryan & Bernard 2003). This expression was noted as a significant theme. This technique was applied to each interview.

Step 2: Comparison between interviews of the same group

According to Boeije (2002:298), the comparisons in step 2 are performed “between interviews within the same group, which means persons who share the same experience”. Line-by-line analysis was employed to look for similarities and differences in the coded texts that dealt with the same themes. When all the themes had been identified, they were put together to form patterns. These patterns showed similarities and differences in perceptions of experiences and expectations. Table 4-3 shows two different perspectives of support services. The themes show that Respondent 1 and Respondent 4 both have similar and different perspectives.
Table 4-3: Two different perspectives of perceptions and expectations

<table>
<thead>
<tr>
<th>THEMES</th>
<th>RESPONDENT 1</th>
<th>THEMES</th>
<th>RESPONDENT 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERCEPTIONS</td>
<td>EXPECTATIONS</td>
<td>PERCEPTIONS</td>
<td>EXPECTATIONS</td>
</tr>
<tr>
<td>No need for tutorial classes</td>
<td>Tutorial classes should be made available for those who need them</td>
<td>For difficult modules (&quot;danger&quot; modules), guidance on learning through tutorial classes is required</td>
<td>Support should match students' financial needs</td>
</tr>
<tr>
<td>Good assignment feedback</td>
<td>Expects to be given detailed feedback on exams</td>
<td>Little feedback is as good as no feedback at all</td>
<td>The situation should be corrected</td>
</tr>
<tr>
<td>Good notifications communication</td>
<td>Phones should be answered</td>
<td>Communication channels do not exist – the service is very bad</td>
<td>Systems should work</td>
</tr>
<tr>
<td>Lecturers have fair teaching skills. Their attitude to students is excellent</td>
<td>Wants one-on-one form of interactions with lecturers</td>
<td>Excellent lecturers' teaching skills Excellent attitude Provide motivation to do well Lack of lecturer-student interaction leads to peer dependency</td>
<td>Requires scheduled physical learning interactions with lecturers</td>
</tr>
<tr>
<td>No tutors for the programme</td>
<td>No need for tutors</td>
<td>Satisfied with interactions experienced with lecturers</td>
<td>Wants more learning interactions</td>
</tr>
</tbody>
</table>

Phase 4: Reviewing themes

The process of theme identification was performed. It involved data reduction by merging similar themes across all data sets and considering themes unique to individual interviewees. These
themes are important because service quality is context-specific and is understood from the perceptions of the service user. Considering individual codes finds support in King and Horrocks’s (2010:150) assertion that it is “useful to identify themes unique to an individual case” [interview].

The criterion used to reduce data was to merge only themes that were related to the research questions and found support in the data. Other themes that did not meet the criterion were discarded. It was also important to consider all parts of the data that would refine the proposed conceptual model. Themes covered the following support services: tutorials; feedback; communication; attitudes and subject knowledge of lecturers; interactions with teaching and administrative staff; guidance on learning and on assignments and delivery and quality of support material. Table 4-4 shows the research questions as topics and how perception and expectation themes were revised and merged to reduce their number.

<table>
<thead>
<tr>
<th>Topics</th>
<th>Perceived Service Initial Themes</th>
<th>Perceived Service Revised Themes</th>
<th>Expected Services Revised Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Face-to-face</td>
<td>*Not available for all subjects</td>
<td>1. Face to face tutorials are not available for all programmes</td>
<td>Tutorials should be prioritised</td>
</tr>
<tr>
<td>Tutorials</td>
<td>*Some teachers have less information</td>
<td>2. Some tutors lack competence and knowledge of subjects</td>
<td></td>
</tr>
<tr>
<td></td>
<td>*They are money driven</td>
<td>3. Tutors have money driven mentality</td>
<td></td>
</tr>
<tr>
<td></td>
<td>*Some tutors leave students without understanding</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>*No tutorials</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Topics</td>
<td>Perceived Service Initial Themes</td>
<td>Perceived Service Revised Themes</td>
<td>Expected Services Revised Themes</td>
</tr>
<tr>
<td>----------------------------</td>
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<td>-------------------------------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>Online tutorials</td>
<td>*Not accessible to students without the internet</td>
<td>1. Online tutoring is not available for all students.</td>
<td>Online support service should be given to students who have access to the Internet.</td>
</tr>
<tr>
<td></td>
<td>*Some students not registered for online tutoring</td>
<td>2. Online tutoring is only accessible to students with internet connection</td>
<td></td>
</tr>
<tr>
<td>Feedback</td>
<td>*Feedback works, satisfied</td>
<td>1. Satisfaction with the amount of feedback</td>
<td>1. Students want to be given detailed feedback on their examination and assignments</td>
</tr>
<tr>
<td></td>
<td>*Feedback given online is ok</td>
<td>2. Little feedback is perceived as no feedback</td>
<td>2. Timely Feedback be provided</td>
</tr>
<tr>
<td></td>
<td>*No feedback, very little given</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>*Feedback comes few weeks before exams</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>*We get stranded</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assignments Feedback</td>
<td>*Feedback on assignment is good</td>
<td>1. Satisfaction with the amount of feedback</td>
<td>1. Students want to be given detailed feedback on their examination and assignments</td>
</tr>
<tr>
<td></td>
<td>*Assignments are not marked by lecturers, but by students</td>
<td>2. Little feedback is perceived as no feedback</td>
<td>2. Timely Feedback be provided</td>
</tr>
<tr>
<td></td>
<td>*Feedback on assignments is not timely</td>
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<td></td>
</tr>
<tr>
<td>Topics</td>
<td>Perceived Service Initial Themes</td>
<td>Perceived Service Revised Themes</td>
<td>Expected Services Revised Themes</td>
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<td>---------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Examination Feedback</td>
<td>*Marks are given but are not helpful</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Online Communication</td>
<td>*No online communication is provided</td>
<td>1. There is no email or phone communication for learning purposes between the university and students.</td>
<td>2. SMS service is available for notification purposes</td>
</tr>
<tr>
<td>Telephone/cellphone Communication</td>
<td>*There is no telephone communication. *SMS service is available *Lecturers do not answer their phones</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Online Communication</td>
<td>*No online communication is provided</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MyUnisa Website</td>
<td>*Perfect Service, Excellent *Dislike for myUnisa and general computers</td>
<td>1. MyUnisa is an excellent service</td>
<td></td>
</tr>
<tr>
<td>Lecturers’ and tutors’ attitude to students (empathy)</td>
<td>*Have trust in lecturers because</td>
<td>1. Students trust their lecturers, and they</td>
<td></td>
</tr>
<tr>
<td>Topics</td>
<td>Perceived Service Initial Themes</td>
<td>Perceived Service Revised Themes</td>
<td>Expected Services Revised Themes</td>
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<tr>
<td></td>
<td>they have knowledge.</td>
<td>perceive them as a source of motivation.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>*Excellent lecturers</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>* Source of motivation</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>* Good towards students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lecturers’ knowledge of subject</td>
<td>*Lecturers have knowledge of their subject.</td>
<td>Lecturers are competent, have subject knowledge and fair teaching skills.</td>
<td>1. Students want access to lecturers.</td>
</tr>
<tr>
<td></td>
<td>*They motivate students to learn</td>
<td></td>
<td>2. Lecturers should answer their phones and reply to students’ emails.</td>
</tr>
<tr>
<td></td>
<td>* Fair teaching skills</td>
<td></td>
<td>3. More interactions for complex subjects are needed.</td>
</tr>
<tr>
<td>Tutors’ knowledge of subject</td>
<td>*Tutors do not have the knowledge required for subjects</td>
<td>Tutors are incompetent and lack knowledge of subjects</td>
<td>Employ tutors who are not money driven, but have subject knowledge</td>
</tr>
<tr>
<td></td>
<td>*They do not explain things</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>*Some students do not have tutors</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>*Some students have not had any interactions with tutors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Topics</td>
<td>Perceived Service Initial Themes</td>
<td>Perceived Service Revised Themes</td>
<td>Expected Services Revised Themes</td>
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</tbody>
</table>
| Students’ interactions with lecturers and tutors | * Students’ lack of access to lecturers leads to poor performance.  
* Students do not know their lecturers.  
* Students have never spoken to their lecturers in person or on the phone.  
* Interaction with lecturers/ tutors is available in first year of study only in some modules. | 1. There is limited access to lecturers and this leads to students’ poor performance.  
2. Students and lecturers do not interact. | Tutoring support for students who have problems in English language should be provided |
| Students’ interactions with administrative staff | * Strained relationship  
* Very unprofessional staff  
* Very rude  
* Disrespectful staff  
* Ignorant staff  
* They never answer the phones | 1. There is a strained relationship between students and the administration staff.  
2. Administration staff lack professionalism and knowledge of university culture | Students expect to be served by trained staff |
<table>
<thead>
<tr>
<th>Topics</th>
<th>Perceived Service</th>
<th>Expected Services</th>
<th>Revised Themes</th>
<th>Revised Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Initial Themes</td>
<td>Revised Themes</td>
<td></td>
<td>Revised Themes</td>
</tr>
<tr>
<td></td>
<td>*Have no idea as to how to treat students Moody and cold</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Study centres and equipment</td>
<td>Poor management of certain centres * Lack of accommodation * Overcrowding in classroom * No dining area for students * No internet access * Unclean classrooms * Lack of hygiene * Not enough computers * Work stations not enough * No plugs in the computer room * Monopoly of computers by students * Students eat in classroom</td>
<td>1. Poor management of study centres 2. Lack of study space 3. Lack of hygiene 4. Not enough equipment 5. Lack of maintenance of equipment and appliances.</td>
<td>1. Provide more classrooms 2. Maintain appliances such as sockets (plugs) 3. Have a dining area</td>
<td></td>
</tr>
<tr>
<td>Topics</td>
<td>Perceived Service Initial Themes</td>
<td>Perceived Service Revised Themes</td>
<td>Expected Services Revised Themes</td>
<td></td>
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<td>------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Delivery of study material</td>
<td>*Delays which affect assignment quality&lt;br&gt; *Material comes 2 weeks before assignments&lt;br&gt; *Material can be accessed online</td>
<td>Deliveries are never on time</td>
<td>students should be given option to collect their own material</td>
<td></td>
</tr>
<tr>
<td>Quality of Study Material</td>
<td>*Study Guides do not help with difficult subjects&lt;br&gt; *Practical type of learning should is not available&lt;br&gt; *Study guides have some grammatical errors&lt;br&gt; * CD’s are very good</td>
<td>1. Study guides do not address challenging areas of subjects&lt;br&gt; 2. Practical learning is not included in the curriculum of certain subjects&lt;br&gt; 3. CD’s are good and helpful&lt;br&gt; 4. Some study guides are full of errors</td>
<td>1. Include the content that addresses complex areas of subjects in the study guides&lt;br&gt; 2. Provide more CD’s&lt;br&gt; 3. Practical learning should be included in the curriculum&lt;br&gt; 4. Provide error free study guides</td>
<td></td>
</tr>
<tr>
<td>Guidance on assignments and on learning</td>
<td>*Available on online forum discussions&lt;br&gt; *There are module discussion communities at Unisa study centres.&lt;br&gt; *Tutors and lecturers provide guidance</td>
<td>The different forms of guidance on learning are in bits and pieces, not enough and do not cover everyone.</td>
<td>Support should be sufficient and relevant to the needs of individual students</td>
<td></td>
</tr>
</tbody>
</table>
Step 5: Refining and naming the themes

The themes were refined and reduced to 25 perception themes and 19 expectation themes and given names to identify the story that each theme tells. The theme names are identical to the topics used during the interviews: tutoring, feedback, communication, lecturers' and teachers' attitudes towards students, lecturers' and tutors' subject knowledge, students' interactions with administrative staff, study centres and the quality of study material. Table 4-6 shows the theme names, revised perceived service themes and revised expected service themes.

Table 4-5: Final themes

<table>
<thead>
<tr>
<th>Theme Name</th>
<th>Perceived Service Revised Themes</th>
<th>Expected Service Revised Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Face-to-face and online tutoring</strong></td>
<td>1. Face-to-face and online tutoring is not available for all programmes. 2. Some tutors lack competence and knowledge of subjects and are money-driven. 3. Online tutoring is only accessible to students with the internet connection.</td>
<td>1. Tutorials should be prioritised. 2. Online support service should be given to students who have access to the internet. 3. Support should be sufficient and relevant to the needs of individual students.</td>
</tr>
<tr>
<td>Theme Name</td>
<td>Perceived Service Revised Themes</td>
<td>Expected Service Revised Themes</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Feedback                                       | 1. Feedback on assignment is good.  
2. Assignments are not marked by lecturers, but by students.  
3. Feedback on assignments delays.  
4. Only marks are given and they are not helpful. | 1. Students want to be given detailed feedback on their examination and assignments.  
2. Timely feedback should be provided.                                                      |
| Communication                                  | 1. There is no e-mail or phone communication for learning purposes between the university and students.  
2. SMS service is available for notification purposes.  
3. MyUnisa is an excellent service.  
4. Postal deliveries are never on time.                                                        | 1. Provision of online one-on-one interaction between lecturers and students  
2. Students should be given different options on how to collect their study material.          |
| Lecturers’ and tutors’ attitude to students (empathy) | 1. Students trust their lecturers, and they perceive them as a source of motivation.               |                                                                                                |
| Lecturers’ and tutors’ subject knowledge       | 1. Lecturers are competent, have subject knowledge and fair teaching skills.  
2. Tutors are incompetent and lack knowledge of subject.                                         | 1. Students want access to lecturers.  
2. Lecturers should answer their phones and reply to students’ e-mails.  
3. More interactions for complex subjects are needed.  
4. Employ tutors who are not money-oriented, but have subject knowledge.                         |
| Students’ interactions with administrative staff| 1. Some good and some strained relationship between students and the administration staff.  
2. Some administration staff lack professionalism and knowledge of university culture.           | Train the administration staff.                                                                  |
### 4.6. QUALITATIVE STUDY FINDINGS AND DISCUSSION

The perception and expectation themes are discussed here in relation to the literature and the conceptual models.

#### Face-to-face and online tutoring classes

**Perceived Service**

The data showed a discrepancy between the expected tutoring service and the perceived service that the students were receiving from their university. This finding is in agreement with the findings of Moenikia et al (2013). All the students affirmed that they were aware of face-to-face tutoring offered by their university. However, some pointed out that they were unable to attend because the tutorials took place on Saturdays. Others said that the tutorials were meant for first-year students only. They all indicated that even though their university was a distance learning institution, face-to-face tutorials were important as they would help them succeed in their studies. These findings corroborate the findings of Segoe (2014); Moenikia et al (2013); Daweti
(2003); Price et al (2007); and Bernath et al (2003), who found that face-to-face tutoring was important and necessary for DE students.

Furthermore, students did not show a lot of enthusiasm for online tutoring. They indicated that online tutoring was only accessible to students with an internet connection. One of the Law students said:

Online tutorials are not enough. We need guidance. But they are rare and inaccessible where there is no internet. Some modules are difficult to learn so we need them. We really need guidance for danger modules. People who hardly have paying jobs cannot afford to go online. I cannot afford the internet. We need guidance for danger modules at least three days a week.

This is in agreement with Price et al (2007), whose three studies showed that students were happier with face-to-face tutoring interactions than they were with online tutoring.

**Expected Service**

Students value face-to-face interactions and they suggested that they would like to have them “once” or “twice” a week or in the “evenings”. However many students were not really keen on online tutorials, stating that not many people could afford to go online. They preferred WhatsApp communication to online communication.

**Students’ interactions with lecturers and the lecturers’ knowledge of their subjects**

**Perceived Service**

The majority of the students (8/10) had not had any interactions with their lecturers, either physically or using technology. One male IT student observed: “They are never available anywhere, they never answer their phones even though their phone numbers appear in the tutorial letters. They CANNOT pick up their phones.” The student went on: “We need lecturers
from time to time. They are knowledgeable. We need their physical presence. They should be there to support the students – on WhatsApp or any social media.”

One female student proudly and emphatically mentioned that the few times that she had had interactions with her lecturers were her best experience. She remarked “Excellent lecturers, enthusiastic.” She said she obtained some distinctions after having physical interactions with her lecturers. She explained that during her interactions with them, the lecturers created enthusiasm in “the whole group of students – peers.” She said seeing them and hearing them speak motivated her and other students. The student’s views on interactions with lecturers find support in Usun (2004), who asserts that less motivated students may benefit from interaction with the teacher or tutor.

Students’ frustrations about the lack of any or adequate interactions with their lecturers confirm Moore’s (1993) theory of transactional distance. This theory posits that the learning gap experienced by DE students can only be closed by applying different forms of interaction in DE institutions. These interactions are student–teacher, student–student and student–content. For students to report that they need their lecturers shows that one of the interactions – student–teacher – is being neglected. In this case students feel that student–teacher is an important interaction that leads to good success: “They are knowledgeable”. “I obtained some distinctions after having physical interactions with my lecturers. During my interactions with them, the lecturers created enthusiasm to the whole group of students – peers. Seeing them and hearing them speak motivated me and other students”.

These students’ experiences confirm that the transaction gap contributes to students’ feelings of isolation and disorientation, which can lead to reduced levels of motivation, engagement and attrition (Moore 1993:22). The HEQC (2010:10) quality report on Unisa confirmed that Unisa students go to the university’s study centres and the main campus “seeking physical and social spaces where they can study, develop and belong to a community of higher education students”.

On subject knowledge, all students agreed that their lecturers were knowledgeable in their subjects. When asked how they could tell that they were knowledgeable, one student said their DVDs were good, so it was obvious the lecturers were knowledgeable. Another student said he
would rate them “fair” because he had not had any one-on-one interactions with any lecturer. Others said they must be knowledgeable because they are lecturers and they work for a world-class university.

According to Parasuraman et al (1985), attributes of services such as “knowing whether people possess skills and knowledge to perform their job” is one of the service quality attributes that is difficult to evaluate, even after experiencing services. Service users are “never certain of these attributes” (Parasuraman et al 1985:48). In accordance with the data, to most students, anyone who becomes a university lecturer should be knowledgeable in their subjects.

Furthermore, referring to Unisa as a “world-class university” says a lot about the university’s image. This is consistent with a theory of perceptions that shows that service users’ opinions of service providers’ ability to fulfil expectations is based on the service provider’s image, amongst other things. Furthermore, according to Gronroos (1982), service users evaluate the quality of a service organisation by its image.

Even though the theories of Moore (1993), Wedemeyer (1981) and Knowles (1975) suggest that DE students are autonomous learners, the data of this exploratory study have shown that many students would like to have constant learning interactions with lecturers. Some believe that lack of access to lecturers leads to poor performance. Some students do not seem to have the psychological characteristics of being self-motivated (Zimmerman, 2002; Wang et al, 2008). One of the participants mentioned that he was happy studying by himself. However, he expressed his desire to have one-on-one learning interactions with his lecturers, not group discussions.

**Expected Service**

The students would like to have more interactions with lecturers, including one-on-one interactions. Moreover, they should be given opportunity to interact at least once or twice a week.

- **Interactions with tutors and their knowledge of the work**

**Perceived Service**
The majority of the students (8/10) have never had any interactions with tutors either. However, one said “They are keen in teaching”; and another said “They don’t have enough information.”

If some tutors are perceived as not having “enough information”, what could be the reason? Could it be that some tutors are not competent to teach university students or do not prepare for their lessons?

**Expected Service**

Tutors should be made available for “important modules” and to help students who struggle with subjects like English. In addition, the students indicated that they would like their lecturers and tutors to play a more supportive role in their learning, such as motivating them to work hard. This finding coincides with Segoe’s (2015) and Price et al’s (2007) findings.
Feedback on assignments and examination

Perceived Service

Half of the respondents were happy with the feedback they received and the other half was not happy. One student complained that his assignment was marked by another student and there were errors in the marking: “I understand that I was marked by another student. I had to complain because there were errors”. Another student stated “Out of 14 modules, I remember receiving feedback on only three assignments.” Another respondent said that feedback came a week or two before the examination.

“Late feedback”, “poor quality of marking” and “insufficient feedback” find support in the studies conducted by Mensah and Osei (2009); Segoe (2014); Chokwe (2015); Fraser and Killen (2005); and Daweti (2003). Chokwe (2015:47) indicates that if sufficient feedback is not given; obvious grammar errors have not been highlighted; and the only comment given on a script is "Good essay", this can mean that the marker did not read the essay because there is no evidence that that might have been the case. “A student who could have probably failed this assignment has passed with flying colours” (Chokwe 2015:47).

This literature (Chokwe, 2015; Mensah and Osei, 2009; Segoe, 2014; Fraser and Killen, 2005; Daweti, 2003) and the student’s feedback in this study, make ask the following questions:

- Who mark Unisa students?
- What qualifications do the markers hold?
- How many scripts are assigned to each marker?
- What are the required turnaround times for marking and feedback?

Expected Service

Students want detailed feedback, not just marks. This expectation finds support in Chokwe (2015) and Segoe (2014). Moreover, some students indicated that they would like to have face-to-face feedback in order to hear the voice of the “teacher”. Another expectation was that students should be told about avenues for remarking their assignments.
§ Communication with the university

Perceived Service

Of the four modes of communication identified by the respondents (MyUnisa, SMS, telephone and postal services), two were rated as excellent and the other two poor. The majority of the students were not happy with postal service delivery. They said the delivery of study material was not always on time. Half the students indicated that the postal service was only efficient when there were no post office strikes. However, five students had experienced constant delays that had affected their assignments’ quality. One student was not at all happy with the post office service. Her words were: “We should be given options to pick a book somewhere else, not the post office. Books come two weeks before the assignment’s due date. We just do assignments for the sake of it.”

Telephone communication was another service whose quality was labelled as inadequate by all the students. They all indicated that phones are never answered, despite having been given phone numbers by their lecturers.

A different picture was painted for SMS and myUnisa communication. All the participants indicated that SMS communication was the most reliable form of communication for “announcements.” In addition, nine out of ten students showed their satisfaction with the myUnisa service. Two students rated it “excellent”. It was also seen as “the best service so far”—“On point”. Conversely, one student said, “I dislike computers”. I asked the student whether she had an e-mail address or whether she ever used myUnisa, and she shook her head. I asked: “How do you communicate with your lecturers?” She had never done so, let alone knowing who they were.

The student’s dislike for computers corroborates a finding by Dell’s (1993) research on computer use and Gilbert et al’s (2003) study. This research shows that sometimes a service can impede knowledge instead of enhancing it. This is supported by this study’s data, whereby students indicated that online tutoring should be offered to those who have access to the internet. An online service is not useful to those who do not have access to the internet.
Another service that was assessed as efficient by most students was the online study material delivery service. However, some students expressed their unhappiness with the service because it is only accessible to those students who have access to the internet.

**Expected Service**

The students’ expectation is that different methods of study material delivery other than the post office and online delivery services should be devised. Another expectation is that study material should be sent early enough, not one or two weeks before the assignments due dates, and that the number of CDs should be increased.

**Students Interactions with administrative (support) staff**

**Perceived Service**

Administrative staff members in one of the centres were described as most uncooperative by the majority of the students. Students used negative words to describe the staff: "very unprofessional", "very rude", "disrespectful", "moody", "cold", "ignorant". One IT student stressed that administrative staff in that particular learning centre should be trained how to do their work and how to treat students. The centre was regarded as rendering the poorest service – "poor to the core"; "They always tell us, 'We are closing.'" Conversely, the services provided by two other centres in the same province were rated "Excellent" by all the students who have had interactions with the administrative staff of those centres.

Commonality emerged in the students' responses when they were asked about the telephone communication service with the administrative staff of the university. All the respondents said that administrative staff members never answered phones. This response is similar to the response given on students' communication with their lecturers. All the respondents said that their lecturers never answered their phones, even though their telephone numbers appear in the tutorial letters.

This finding on the administrative staff corroborates Daweti's (2003) finding, indicating that students found the administrative staff of their institution very unreliable, poor organisers and incompetent. Furthermore, one of the participants in this study suggested that the administrative
staff should be trained how to do their work. This suggestion matches Daweti’s (2003) observation that support staff needed opportunities “to acquire specific competencies to support students in a variety of ways”.

A discrepancy like the one raised on administrative staff usually happens when there are no formal standards to guide personnel on how to perform their duties and to treat service users appropriately. This problem can be explained by Gap 2 (standards gap) of the Gaps model of service quality (Parasuraman et al. 1985). Gap 2 occurs when the management of an organisation or an institution that provides a service correctly perceives what the service user wants but does not set performance standards. Although the management may understand the service user’s expectations, it may be unable to translate those expectations into clear quality standards. With regard to this finding, it is likely that there are no quality specifications to guide the administrative staff of Unisa, or that some standards are too complicated for implementation.

**Expected Service**

Students expect to be served by trained administrative staff members. Again, the university should employ people who know their job, who understand the needs of the students and the culture of the university and know how to handle students.

**Study (Learning) Centres**

**Perceived Service**

All the students pointed to the importance of study centres. One of the recurring themes on the study centres was that of locked classrooms at one study centre, and lack of access to the same centre during examinations. The students indicated that that particular centre becomes “packed” on weekends and during examination time. One student observed that the centre had “lots of classrooms” and could accommodate many more people, but only a few classrooms were opened. She indicated that the centre was intended to accommodate “everybody” in their area, however the space allocated to them was not enough. One student said, “The workers refuse to open other classrooms.” Another student’s desperate request to me was “Please ask them to open for us, more especially during exam time.”
Other problems raised about this particular learning centre were the lack of cleanliness, for example, dirty floors, dysfunctional plugs, lack of organisation and poor management. The feeling of the students was that they were not treated like university students. One student said "We eat from the classrooms. Secondly the classrooms are swept when we are there." One of the IT students' requests was "I would like to have the plugs repaired."

**Expected Service**

Students expect to have resources and equipment in working order. In addition, there should be enough classrooms for their studies. Two students emphasised that their university was one of the most recognised universities in the world and therefore should be able to take good care of its students and should provide good services.

The negative manner in which the participants assessed their university tarnishes its image. The data indicate that the university's image is important and therefore students' expectations are that their university should uphold its status and name. However the students' expectations have not been met. According to Lehtinen and Lehtinen (1982), service quality "is produced" when service users interact with their service provider's buildings, equipment and personnel. Therefore, bad service can compromise the image of an institution.

Furthermore, the researcher's observation is that Unisa advertises itself as Africa's leading ODL institution that has "world-class resources that inspire learners to create meaningful futures on their own terms" (Unisa) [Online]. Advertisements such as this raise students' hopes and expectations.

There are other models of study centres that are run well, like the Central Queensland University in Australia and the OU. The demand for well-managed and resourced study centres by Unisa students should not take us by surprise.
Guidance on assignments and guidance on learning

Perceived Service

Some students felt that they were not given any guidance on assignments. One respondent expressed her feelings about lack of guidance on assignments and learning in general:

We are doing assignments for the sake of doing them to pass. Most times we get help from peers who have previously done that module, but who also don’t know much. We are not studying to learn; we go out there knowing nothing.

This student's response about her experiences suggests several problems. First, amid issues of inadequate support services are issues pointing to students' incompetence in subjects. It could be that some students, if not most, complete their courses knowing a tiny percentage of the coursework, just enough to make them pass, because "Most times we get help from peers who have previously done that module, but who also don’t know much. We are not studying to learn; we go out there knowing nothing."

Another possible problem suggested by this response could be that the quality of marking is poor, and marks do not correlate with what is written in the assignment. Poor quality of marking in DE in South Africa was identified in Chokwe (2015) and Daweti (2003). Sewart (1993:6) warns us that higher education "must ever be alert to the threat that teaching can easily become instruction and even indoctrination rather than education".

Another finding was on the quality of study material. Whilst some students indicated that some study guides did not help them understand difficult things, others felt that the tutorial letters and CDs were good enough. Two students from the same faculty pointed out that their study guides had errors. "There are some with grammatical mistakes". Another problem with the study guides was that they were not good enough to address difficult areas of their modules. Another student stated "Some study guides do not help us understand difficult things. Some pages of the study
guides are not relevant." This finding on the poor quality of study material corroborates Daweti’s (2003) finding.

The students also talked about guidance on learning that occurs online during group forum discussions. Some students (who go online) perceived these discussions as very helpful in their learning. Other students did not have much to say about these discussions because they did not go online. Only one student felt that group forum discussions were not helpful. This particular student’s preference was one-on-one online interactions with the lecturers whenever necessary. This student’s expectation finds support in models of student-lecturer/tutor interaction, whereby individual students have their own personal tutors. The UK’s OU support service model of tutoring offers a personal tutor service, where each student enrolled with the university has a personal tutor who interacts with students one-on-one. One-on-one interactions were also indicated in Price et al’s (2007) work, where students stated that they wanted tutors who would listen to the students’ personal problems. Although this might sound extreme, Lentell (2003) believes that the role of a tutor is “intensive” and personal to each DE student.

**Expected Service**

Students expect more support from their lecturers and tutors on assignments and in their learning. In addition, practical-type learning should be introduced for Law modules, for example conferences and workshops with experts.

### 4.7. PROPOSED MODEL OF STUDENT SUPPORT SERVICES

The themes derived from the data of this study confirmed the relevance of the seven service quality dimensions proposed in Chapter 3 to measure service quality in DE. These are tangibles, reliability, delivery, responsiveness, assurance and user participation. Four of these dimensions (tangibles, reliability, responsiveness and assurance) are SERVQUAL quality dimensions. Two dimensions (delivery and user participation) were derived from the literature. This tells us that SERVQUAL quality dimensions are important components of service quality in DE. The following section discusses the themes in relation to quality dimensions and proposes a context-specific service quality model for students in DE environments (Figure 4.1).
• **Tangibles dimension**

Tangibles were regarded as an important dimension of service quality by the students. The tangible dimension is supported by the study centres theme. Tangibles such as study centres and facilities such as computers and plugs were considered very important attributes of service quality in DE by students. There is evidence in the data that students regarded study centres as their second home. This is indicated by their comments:

Respondent 1: More of study centres should be made available for students.

Respondent 3: Please ask them to open the locked classrooms for us. We need to access the centre during examination times. We don't have access.

Respondent 4: The centre has lots of classrooms and can accommodate a lot more people, but only a few classrooms are opened. The classrooms are overflowing. The workers refuse to open other classrooms. The centre is for everybody in our area, but the space allocated is not enough.

Respondent 4: The classrooms are very dirty, unhygienic. Students eat from the classrooms. We need a decent place to eat from. We are not treated like university students. Secondly the classrooms are swept when we are there. Why can’t the cleaners clean when there are no students?

Respondent 5: The classrooms are not fine. The floors are dirty. Push for cleaning. Arrange for cleaning.

Respondent 6: Our study centre’s computer room is fully packed on Sundays. We need to interact with each other.

Respondent 7: We need more classrooms. Study centres get packed, more especially on weekends and we fail to get a place to study.

Respondent 8: We need plugs for our computers. We are IT students.

• **Reliability dimension**
Another proposed service quality dimension that is regarded as important by students was the reliability dimension. The reliability dimension is supported by the theme of tutorial provision at Unisa. The qualitative data indicated that some services are provided as promised whilst others are not.

- **Delivery dimension**

Delivery is another dimension regarded as important in measuring service quality in DE as supported by the themes. Delivery themes relate to access to lecturers, tutors and administrative staff. Furthermore, delivery also involves giving students feedback and encouraging them. The delivery dimension has been derived from the work of Sangeeta et al (2004) and Owlia and Aspinwall (1996), and it finds support in the data of this study as evidenced in students’ comments about their lecturers, tutors and administrative staff:

- Tutors “don’t have enough information.”
- Lecturers “are never available anywhere, they never answer their phones even though their phone numbers appear in the Tutorial letters. They CANNOT pick up their phones.”
- “We need lecturers from time to time. They are knowledgeable. We need their physical presence. They should be there to support the students – on WhatsApp or any social media.”

- **Responsiveness dimension**

Responsiveness is another dimension that has been found to be important in measuring the quality of student support services. The responsiveness dimension refers to themes related to staff’s willingness to help students beyond the call of duty (Parasuraman 1985). It also refers to providing prompt service and effective administration. Attributes of responsiveness are responses to telephone calls, e-mails and letters. This dimension finds support in the literature (Parasuraman et al 1985; Hussain & Birol 2011). It also finds support in this study’s data; all students indicated that phones are never answered despite having been given phone numbers by their lecturers.
• **Assurance dimension**

This dimension was also found to be important in measuring service quality in DE and relates to the theme of lecturers' and tutors' knowledge of and competence of their work. It also refers to staff qualities such as courtesy towards their students and the ability to inspire trust and confidence in their students. This dimension finds support in the data, which indicates that this dimension is important. The administrative staff were said to be “very unprofessional”; “very rude”; “disrespectful”; “moody”; “cold”; “ignorant”; some however were regarded as “excellent.” On the other hand lecturers were regarded as “knowledgeable” by most of the participants.

• **User participation dimension**

User participation as a service quality dimension was proposed by this study and it is supported by themes of self-reliance and peer support groups. Although some students are independent learners (Respondent 1), other students “lean” on their support groups as they battle to understand the content. The data indicate that user participation is an important dimension to measure service quality in DE. One of the participants stated: “Most times we get help from peers who have previously done that module, but who also don’t know much.”

There were commonalities in the data which indicated a general consensus. According to Parasuraman et al (1985:44) commonalities suggest that “a general model of service quality can be developed”. This means that a model and measurements can be developed to understand and assess students’ expectations and perceptions of the quality of student support services in DE environments. Figure 4.1 shows the proposed model of service quality.
Figure 4.1: Student support service quality model
4.8. CONCLUSION

This chapter presented the data collection and analysis procedures that were employed during the exploratory phase of this study. Data collection and analysis approaches, sampling and interview procedures were explained. The insights of the study were also discussed. From the insights, it became evident that a context-specific service quality model can be developed.

The next chapter presents the processes and procedures that were followed during the quantitative phase of the study.
CHAPTER 5: THE QUANTITATIVE STUDY

5.1. INTRODUCTION

The aim of this chapter is to present the processes and procedures employed in collecting and analysing the quantitative data. In the first research phase of this study a new context-specific multidimensional model of service quality for DE student support services was proposed. This quantitative study was designed and conducted to collect and analyse service quality students' expectations and their perceptions; analyse the gaps between students' expectations of their support services and their perceptions; and validate the proposed model. In order to achieve these objectives, statistical evidence from a sample of Unisa students was gathered. This chapter discusses and presents the processes and procedures followed in conducting the quantitative research and reporting the results.

First to be presented is the methodological approach employed when conducting the research. Secondly, the steps followed in the development of the questionnaire are explained. Thirdly, sampling procedures are discussed. Fourthly, the data collection processes are discussed; and lastly procedures used to analyse the data are presented.

5.2. THE POSITIVIST APPROACH

The philosophy that underpins quantitative methodology is positivism, which assumes that reality is objective and observable. Moreover, positivists posit that there is a single, external and objective reality to any research question regardless of the researchers' beliefs (Carson et al 1988; Hudson & Ozanne 1988).

The ontological position of positivism is one of realism. According to Cohen (2007), realism is the view that objects have an existence independent of the knower. The epistemological position of positivism is that of objectivism, which is a belief that knowledge is absolute and that reality is objective. Positivists believe that the researcher is capable of studying a phenomenon without influencing it or being influenced by it (Guba & Lincoln 1994). The positivist's belief is that researchers' biases, beliefs and values can interfere with the way in which data are collected and analysed. For this reason, they assert that the researcher and the researched should be
independent of each other. In order to achieve the independence, the positivist researcher should detach him- or herself from the research participants. Epistemologically the researcher and the researched are independent entities.

Furthermore, positivists argue that their methodology is value-free or value-neutral. According to Denzin & Lincoln (1994) the goal of positivists is to “measure and analyse causal relationships between variables within a value-free framework”. Positivists argue that society should be studied empirically and scientifically. They use data collection tools that are usually represented numerically, such as “surveys”, “experiments”, “quasi-experiments” and “tests”. Quantitative methodology uses deductive logic which means that it begins with theory. In quantitative studies, the sample size is usually larger than qualitative research sample. This is to ensure that data are manipulated statistically in order to ensure representation.

In this study, quantitative methodology was used to collect and analyse data from a sample of Unisa students to provide statistical evidence to answer the researcher questions.

5.3. QUESTIONNAIRE DEVELOPMENT

During the literature analysis carried out to understand how quality is measured in DE, it was discovered that the quality of services is evaluated using very broad measurements that are not tailored to measure the quality of student support services. Moreover, it was discovered that objective measurements that are appropriate to evaluate the quality of products are used to measure the quality of student support services, instead of perceptions and expectations. This contradicts Parasuraman et al (1985, 1988) who indicate that the appropriate approach for evaluating the quality of services is to measure the expectations and perceptions of service users. Therefore, appropriate scale measurements, tailored to the context of student support services within a DE institution, are needed.

To address this need, a questionnaire was developed specifically to measure student support services. In this study the process of the questionnaire development was guided by the work of several researchers who describe the process of developing questionnaires in sequential steps or procedures, ranging from the University of Wisconsin Survey’s (2010) four steps to Parasuraman
et al’s (1988) 11 steps. The procedures covered in the work of these researchers (University of Wisconsin Survey 2010; Anderson & Morgan 2008; Radhakrishna 2007; Parasuraman et al 1988) have been summarised into themes as depicted below:

β Examine the study purpose, objectives and hypothesis.
β Map the conceptual foundations (literature, theoretical frameworks).
β Determine the population.
β Generate the questionnaire items (statements).
β Review questionnaire in preparation for piloting.
β Pre-test the questionnaire by piloting it.
β Establish the validity and reliability of the questionnaire.
β Revise the questionnaire (proofread).
β Questionnaire is ready for administration.

After identifying the themes necessary for questionnaire development, the following potentially relevant steps to guide the development of the study’s questionnaire were drawn up:

Step 1: The conceptual foundations of the questionnaire
Step 2: Generating items for the questionnaire
Step 3: Testing the construct validity of the questionnaire
Step 4: Conducting a pilot study
Step 5: Testing the reliability of the questionnaire
Step 6: Refining the questionnaire items

5.3.1. STEP 1: The conceptual foundations

Researchers Parasuraman et al (1988:13) point out that the development of a scale instrument should be preceded and rooted in a “sound conceptual specification of the construct being scaled”. In addition, Radhakrishna (2007) points out that the content used to generate question statements comes from the theoretical framework and literature. Moreover, Radhakrishna (2007) asserts that a well-crafted conceptualisation of the content and the transformation of the content into questions are essential to minimise measurement error.
In light of the above, a conceptual framework that provided the base for the content necessary to generate the questionnaire items (statements) was established based on the following: 1. The SERVQUAL model; 2. Concepts on support services in DE; 3. The empirical results of the qualitative research carried out in the first research phase of this study.

This study adopted and adapted the SERVQUAL instrument (questionnaire) and the SERVQUAL model to guide the process of developing the questionnaire. Some researchers tend to design their own scales and others adapt or use already developed questionnaires as was done in this study. The SERVQUAL model offered a theoretical basis for the questionnaire and the SERVQUAL instrument was used as a template to design a context-specific questionnaire. This questionnaire was tailored to address the context of student support services within a DE environment. This was in line with Parasuraman et al’s (1988:30) notion that SERVQUAL has been designed to be applicable to a broad spectrum of services. As such, it provides a basic skeleton through its expectations/perception format, encompassing statements for each of the five service quality dimensions. The skeleton when necessary can be adapted or supplemented to fit the characteristics or specific research needs of a particular organisation.

Thus, in adapting the SERVQUAL questionnaire, the researcher ensured that the questionnaire met the original specifications of SERVQUAL and that the measurement properties remained the same (Jupiter 2009).

The SERVQUAL model conceptualises service quality as the discrepancy (gap) between service users’ expectations of a service to be offered and their perceptions of the experienced service (Parasuraman et al 1985). In accordance with this model, the appropriate method for evaluating service quality is to measure the expectations and perceptions of the service user. This assertion finds support in an earlier model designed by Gronroos (1982) which proposes that service users compare the service they expect with the service they receive. In his later recent work, Gronroos (2005:54) points out that perceived quality is determined “by the gap between expected quality and experienced quality”, thus confirming Parasuraman’s (1985, 1988) service quality conceptualisation.
Furthermore, the SERVQUAL model helps us understand the distinction between perceived quality and product quality. It distinguishes service evaluation from product evaluation and provides a theoretical basis for correct measurements to evaluate the quality of services as experienced by people who use those services. In DE, the distinction between products and services is depicted in the work of Robinson (1995) (Table 5-1), who has identified aspects of quality that quality assurance and management procedures should consider when assessing quality.

Table 5-1: Areas for quality management in DE

<table>
<thead>
<tr>
<th>PRODUCTS</th>
<th>SERVICES</th>
<th>PROCEDURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Courses</td>
<td>Registration</td>
<td>Course production</td>
</tr>
<tr>
<td>Resources</td>
<td>Advisory services</td>
<td>Print and multimedia production</td>
</tr>
<tr>
<td>Examination</td>
<td>Tutoring</td>
<td>Learning and teaching</td>
</tr>
<tr>
<td>No. of graduates</td>
<td>Feedback</td>
<td>Delivery systems</td>
</tr>
<tr>
<td></td>
<td>Guidance on learning</td>
<td>Recordkeeping</td>
</tr>
<tr>
<td></td>
<td>Support for progress as learner</td>
<td>Scheduling</td>
</tr>
<tr>
<td></td>
<td>Provision of study centres</td>
<td></td>
</tr>
</tbody>
</table>

Adapted from Robinson (1995)

The most common difference between the two (services and products) is that services are intangible “performances” whose quality should be evaluated from the users’ perspective because they (services) can only be understood from the perspective of those who perceive them (Parasuraman 1985). On the contrary, products’ evaluation is objective oriented in nature because products can be “counted”, “inventoried”, “tested” and “verified” in “advance to assure quality” (Parasuraman 1985:42).

Moreover, Parasuraman et al’s (1988) model has established the differences between perceived quality and satisfaction. In accordance with the SERVQUAL model, perceived service quality is judged according to perceived satisfaction. The explanation is that if the quality of services meets or surpasses service users’ expectations, the service users will be satisfied.

Furthermore, Parasuraman et al (1985:46) proposed ten and later six determinants (dimensions) of service quality that service users use to evaluate services they expect and the service they
receive. This study considered four of the five SERVQUAL dimensions, namely tangibles, reliability, responsiveness and assurance, in developing the questionnaire. Another two dimensions considered for this study were delivery and user participation, which have been derived from the literature. The questionnaire development was also based on the literature on student support services. The items of the questionnaire were mostly based on elements dealing with students’ academic and personal development, such as tutorial classes; assessment feedback; support on assignments and learning; administrative support; study centres; and interactions between students and staff and among students themselves. Most of the information on these support services was derived from student support frameworks and standards developed by several DE universities such as Athabasca University, Unisa, the University of Queensland and organisations such as SAIDE. In addition, the results of the interviews conducted in the first phase of this study were also used to guide the process of generating item statements for the questionnaire. The themes that emerged from the data confirmed the relevance of the proposed dimensions.

Some attributes of student support services inherent to a DE university that were used to generate items for the six questionnaire dimensions are:

- tutorial classes
- feedback on assignments and examination
- communication (e-mail, telephone/cellphone, postal services)
- lecturers’ and tutors’ attitude towards students (empathy)
- lecturers’ and tutors’ knowledge of subject
- students’ interactions with lecturers, tutors and administrative staff
- study centres
- delivery of study material
- guidance on assignments and on learning

5.3.2. STEP 2 Generating questionnaire Items

The process of the generation of the questionnaire items was done in phases. The first phase involved constructing a pool of questions. Thereafter, the questions were changed into statements to generate items for the questionnaire. The second phase involved testing the
validity of the items. The third phase was the pilot study and the fourth phase involved testing the reliability of the questionnaire. These processes are elaborated in the next section.

During the first phase of questionnaire items generation, the researcher created a pool of 80 questions based on expectations and perceptions. Of the 80 items, 48 items were extracted. The 48 items were selected because they focused on student support services and could be measured by any of the six service quality dimensions. Those items that were found to be too broad and not specifically addressing the dimensions of service quality were discarded.

The 48 items were further reduced to 32. Items that were found to be addressing the same ideas were merged. All the 32 items were grouped together under relevant dimensions. The tangible dimension had seven items based on study centres and resources. The reliability dimension had five items based on trustworthiness of a DE institution. The delivery dimension had seven items based on delivery of feedback and study material; availability of lecturers; and assistance with assignments. The responsiveness dimension had six items based on lecturers' responsiveness to students' e-mails, phone calls and problems. The assurance dimension had five items based on academic and administrative staff's knowledge and skills, and their relationship with students. The service user participation dimension had four items based on students' involvement in their own learning.

All the original SERVQUAL items were modified to suit the context of DE environment. Below are examples of the original SERVQUAL tangible dimension items adapted from (Parasuraman et al 1988):

**Tangibles dimension expectation items:**

1. Firms should have up-to-date equipment.
2. Their physical facilities should be visually appealing.
3. Their employees should be well dressed and appear neat.
4. The appearance of the physical facilities of these firms should be in keeping with the type of services provided.

**Tangibles dimension perception items:**
1. ABC has up-to-date equipment.
2. ABC’s physical facilities are visually appealing.
3. ABC’s employees are well dressed and appear neat.
4. The appearance of the physical facilities of ABC is in keeping with the type of services provided.

The following examples illustrate how the SERVQUAL items were changed to suit the DE context.

**Tangible dimension perception items:**

1. A good DE university will provide study (learning) centres equipped with modern resources such as computers and internet connection.
2. A good DE university will provide clean and comfortable study centres.
3. A good DE university will create space for group learning.
4. A good DE university will create individual study spaces for quiet study at its study centres.
5. A good DE university will provide basic resources in working condition at its centres.

**Tangible perception items:**

1. Unisa’s study centres are equipped with modern learning resources such as computers and internet connection.
2. The Unisa study centre I go to is clean and comfortable.
3. Unisa has created space for group learning at study centres.
4. Unisa has created individual study spaces for quiet study at its study centres.
5. Unisa provides basic resources in good working condition at its study centres.

The structure of the questionnaire was divided into three sections. Section A comprised the respondents’ demographic details. The questions in this section were based on gender, age, highest qualification, study programme and year of study. Section B consisted of 32 statements on expectations, and Section C consisted of 32 statements on perceptions. In Section B, the respondents were asked to assess their institution’s student support services and give their views on their expectations of the support services they received from their institution. In Section C,
the respondents were asked to give their perceptions of their experiences of the services they received.

Furthermore, the questionnaire items were ranked from lower order to higher order. According to Creswell (2009) and Cohen, Marion and Morrison (2011), ranking Likert-type scale item values from low to high helps respondents make a wise selection. Each item was to be measured using a 1: 5-point Likert-type scale ranging from 1: "Strongly Disagree"; 2: "Disagree"; 3: "Partially Agree"; 4: "Agree"; to 5: "Strongly Agree". Each service quality dimension was measured by several items, and each of the items was measured in two ways:

1. the expectations of service users on a service
2. the perceptions of experienced service

5.3.3. STEP 3 Testing the validity of the questionnaire items

The validity of the questionnaire was then tested to determine whether it measured the construct it was intended to measure. The starting point was to assess whether the questionnaire's items had captured all the aspects of student support services in a DE environment, whose quality, as expected and experienced by the students, was to be measured.

The first validity test to be carried out was face validity using Johns and Lee-Ross's (1998) checklist. The checklist included:

- Check whether all questions are relevant to members of the particular sample.
- Check whether respondents understand the questions.
- Check the logic of the question order.
- Check whether any questions have double meanings or lead or confuse respondents.
- Show how long it takes to complete the questionnaire.

The researcher adapted some of the steps that were deemed relevant for assessing the face validity of the study's questionnaire. Below are the steps developed by the researcher:

- The researcher read through each item to check sense and spelling mistakes.
• Simple and familiar words were used to replace some unfamiliar words.
• Some items were rephrased in order to keep them as short as possible, at the same time retaining the meaning.
• Redundancy was checked to determine whether ideas were not repeated. Items that were found redundant were removed. The number of items was reduced from 48 to 32.

The second validity test was the construct analysis. Although the SERVQUAL instrument has established itself as a valid document to measure service quality, its validation was deemed necessary here because the instrument was reworded and augmented to make it germane to the context of DE support services. So it was important to check whether the reworded items matched the SERVQUAL dimensions. It was also critical to determine whether the two added dimensions were measured by relevant content (of the items). According to Krippendorff (1980:77) construct validity “relies heavily on established theories and tested hypotheses or other undisputed knowledge about the source”.

The process of testing construct validity involved assessing whether the questionnaire was relevant to students’ stated expectations and perceptions of their experiences. Firstly, each item of the questionnaire was assessed against the findings of the exploratory research to determine whether students’ views were well captured. Secondly, the items were assessed against concepts of student support services found in the literature. Thirdly, a pilot study that was conducted thereafter added to the predictive validity of the questionnaire. The researcher carefully followed the processes to ensure that construct validity had been adequately established for our questionnaire.

5.3.4. STEP 4: Conducting a pilot study

A pilot study was conducted to pre-test the questionnaire in order to establish its reliability and validity. This is supported by Blessing, Lucienne and Chikrabarti (2009:114), who point out that the aim of a pilot study is “to try out the research approach; to identify potential problems that may affect the quality and validity of the results”.
To pre-test the instrument, the questionnaire was sent to two groups of students: those who had participated in the qualitative study and a group of new volunteers. One main reason was to help validate whether the aspects of the construct (service quality) discussed in the interviews had been captured in the questionnaire. One of the methods of checking the trustworthiness of the results is the use of stakeholder checks, which is a research procedure in which the participants are asked to evaluate the interpretation drawn from the research data.

The students were asked to give their views on expectations and perceptions of their experiences of student support services offered by their university by filling in the questionnaire. They were also asked to comment on the language used in the questionnaire and on whether the aspects discussed during the interviews were covered. The findings from the pilot respondents regarding construct and content validity showed no inconsistencies. First, all the respondents mentioned that the language used in the questionnaire was clear and not difficult. Second, the respondents indicated that the questions were straightforward and easy to answer, although the questionnaire was long. Third, they mentioned that the aspects discussed during the interviews were reflected in the questionnaire.

5.3.5. **STEP 5: Testing questionnaire reliability**

The technique that was found suitable to test our questionnaire was Internal Consistency Reliability. This type of technique estimates how well questionnaire items reflect similar results for the same item. There are different types of internal consistency measure. This study used Cronbach’s Coefficient Alpha. Cronbach’s alpha is a measure of internal consistency of a scale, which measures how closely related a set of scale items are as a group. The Cronbach’s alpha is the frequently used reliability estimate of internal consistency where there are many items. A scale is believed to be internally consistent if all of its items are strongly correlated. A high average correlation among the items suggests that they are all measuring the same thing.

Parasuraman et al (1988) also used Cronbach’s Coefficient Alpha to estimate the reliability of their 97-item instrument during the process of purifying the SERVQUAL questionnaire. This method helped Parasuraman and his team reduce the 97 items to 54, then to 34, then to 22. This 22-item instrument became known as the SERVQUAL measuring scale for service quality.
Because this study’s questionnaire was measuring students’ expectations and perceptions of the quality of student support services, the questionnaire was split into two tests (factors). Questions on expectations became one test and those on perceptions another. Then the researcher calculated Cronbach’s alpha for each test – for expectations only – and a different alpha for perceptions, covering all the six dimensions.

According to reliability theory, reliability ranges between 0 and 1. A fully reliable measure is 1 and an unreliable measure is 0. There are cases where reliability can be in the negative. Nunnally (1978) recommends as a rule of thumb that reliability is 0.7. However, another researcher (Malhotra, 2010) indicates that a Cronbach’s alpha value of more than 0.6 is generally acceptable.

In this study the overall reliability of expectation items was 0.9089 and the overall reliability for perception items was 0.8966. This means that the questionnaire was reliable. Nonetheless, the following three dimensions: user participation, assurance and responsiveness had very low alphas. These dimensions were not deleted but were tested again in the second process of questionnaire refinement during the quantitative phase. It was hoped that a larger sample size would help improve their alphas. Nunnally (1967) recommends a minimum acceptable reliability for preliminary research to be 0.5 to 0.6. Table 5-2 shows the coefficient alpha values for the dimensions.

<table>
<thead>
<tr>
<th>Dimension of service quality and attributes</th>
<th>Expectations Coefficient Alpha</th>
<th>Number of items</th>
<th>Perceptions Coefficient Alpha</th>
<th>Number of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tangibles</td>
<td>0.8489</td>
<td>6</td>
<td>0.7952</td>
<td>6</td>
</tr>
<tr>
<td>Reliability</td>
<td>0.7257</td>
<td>6</td>
<td>0.7203</td>
<td>6</td>
</tr>
<tr>
<td>Delivery</td>
<td>0.7130</td>
<td>8</td>
<td>0.7802</td>
<td>8</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>0.4588</td>
<td>6</td>
<td>0.6380</td>
<td>6</td>
</tr>
<tr>
<td>Assurance</td>
<td>0.5502</td>
<td>4</td>
<td>0.2410</td>
<td>4</td>
</tr>
<tr>
<td>User Participation</td>
<td>0.4444</td>
<td>4</td>
<td>-0.1095</td>
<td>4</td>
</tr>
</tbody>
</table>
5.3.6. **STEP 6: Refining and identifying the final questionnaire items**

During this stage, the researcher began the process of refining the questionnaire by reducing the items. Radhakrishna, (2007) advises that in order to preserve the content the researcher should not delete more than 20% of the questionnaire items. In light of this, items that sounded the same were merged in order to preserve the content. The number was reduced from 32 to 24. The final questionnaire had three sections. Section A: Demographic details, Section B: 24 Expectation items and Section C: 24 Perception items. The items for expectations and perceptions measured the six dimensions of service quality. Each dimension was measured by four to five items, making a total of 24 items across the six chosen dimensions. The final questionnaire and the research proposal were presented to a statistician for comments. There were no changes effected to the questionnaire.

5.4. **DATA COLLECTION**

Following the development of the questionnaire, data were collected from students who were currently enrolled at Unisa during the time of the study. The data were collected over a period of 5 months, from September 2014 - February 2015. The target population for this study included men and women aged 20 years old and above, registered with Unisa for any degree programme of study and residing in five regions. The exclusive criteria were students registered with Unisa for non-degree modules, for example bridging courses. Data were collected from a quota sample of 400 men and women across all ages and gender groups.

5.4.1. **Sampling technique**

The sampling technique used in the study was quota sampling, which is a method of stratified sampling in which the selection of research participants within strata (groups) is non-random. According to Schmidt and Brown (2014) the difference between quota sampling and stratified random sampling is that in quota sampling, research participants are conveniently selected from each stratum rather than randomly selected. The choice of quota sampling was motivated by the following reasons: Firstly, a probability random sampling technique to determine the sample for
this study was not feasible because of privacy regulations at Unisa. In this university, students' records – names, addresses and telephone numbers – are restricted by the Protection of Personal Information Policy of the university. So, a sampling frame from which a random sample could be drawn was not accessible to the researcher. This restriction therefore invalidated the process of random sampling. Schmidt & Brown (2014) point out that quota sampling is used in “predominantly” quantitative studies where it is difficult to determine a sampling frame due to the absence of a list from which to draw a sample. Thus, the availability and unavailability of the sampling frame will determine the choice of the sampling technique – probability sampling or non-probability sampling.

Secondly, according to Creswell (2002), sample size is often a problem in a mega-university because the final size is dictated by issues such as the number of participants who volunteer to participate in the research and the number available to the researcher. Thirdly, the literature (Barbie 2012; Dodge 2003; Schmidt & Brown 2014) regards quota sampling as equivalent to stratified sampling, which is a probability sampling technique. According to Barbie (2012:192), quota sampling, like stratified sampling, addresses the issue of representativeness in research, although the two techniques approach the issue differently. The difference is that whereas stratified sampling uses random sampling to fill the groups (strata), quota sampling uses judgement/purposive sampling to assemble a representative sample. For example, in quota sampling, subjects who bear suitable characteristics that represent the population are handpicked on a volunteering basis to form a representative sample. According to Barbie (2012:192) these subjects are selected into a sample on the basis of pre-specified characteristics, so that the same sample will have the same distribution of characteristics assumed to exist in the population studied.

This study rests therefore on quota sampling’s premise that if the sample effectively represents the characteristics of the population being studied, the population will be “correctly” represented. The ability to generalise research results to the target population depends “heavily on the appropriateness of the sampling method used” (Schmidt & Brown. 2014). According to Barbour (2001) quota sampling is the most widely used technique in market research studies.
Parasuraman et al (1988) collected data for the refinement of their 97-item instrument from a quota sample of 200 male and female adults aged 25 years old and older.

In this study a combination of quota sampling and purposive sampling, both of which are non-probability sampling techniques, was used. It has to be emphasised that although quota sampling is a non-probability sampling, it is regarded by researchers as equivalent to stratified sampling, which is a probability sampling technique (Yang & Banamah, 2014). Kangai et al (2011) used stratified sampling for their research. In light of this, Unisa’s four regions and an international region were considered as strata: Gauteng, North West, Northern Cape, Orange Free State and an international regional centre (Lesotho) - (Figure 5.1). Students in all these regions have similar characteristics: men and women, across different age groups, who are registered for different courses and are therefore current users of student support services. Purposive sampling was used to sample students from different strata who volunteered to participate in the study.

5.4.2. Questionnaire administration

When the context is too diverse and segmented, as is the case with most DE institutions, it is always wise to use as many different methods of questionnaire administration as possible to ensure a good response rate. Initially, the researcher had planned to use as many methods of administering the questionnaire as possible; for example, e-mailing questionnaires to students; using a website (MyUnisa); distributing questionnaires to study centres; and going door-to-door. However, the researcher was confined to using two methods of administering the questionnaire due to policy restrictions.
Although the researcher had applied for an ethics certificate and had obtained permission from the university’s Senate to conduct the research, students’ information such as e-mail addresses, postal addresses and telephone numbers could not be released to the researcher due to personal information protection policy of the institution. So the main method the researcher had to use was door-to-door. The emailing collection method was eventually used after obtaining email addresses through other student respondents.

The door-to-door method was a very slow, tedious and expensive process because in certain cases, the researcher had to phone to find out which students were willing to participate in the study so that the questionnaire could either be taken to them or e-mailed. Another method used that was also expensive was to look for students to distribute the questionnaire to other students who belonged to one study group. Professionals of goodwill also helped the researcher distribute
5.4.3. The response rate

Four hundred people were sampled and 600 questionnaires were administered to the research respondents face-to-face and on e-mail. These were self-completion questionnaires. Questionnaire administered to students face-to-face received a relatively good response rate. However, questionnaires delivered electronically, via e-mail, did not yield a satisfactory response rate. Of the 300 face-to-face questionnaires, 196 questionnaires were returned. The face-to-face response rate was 58%. On the other hand, of 100 questionnaires sent via e-mail, 17 were returned. The response rate was 17%. Despite numerous reminders and requests to respond to questionnaires, the overall number of questionnaire collected and correctly filled was 209 and the overall response rate was 50.75%. According to Babbie and Mouton (2001:261), a response rate of more than 70% is considered very good. Nevertheless, some researchers believe that the response rate between 45–50% is not uncommon. For example, Babbie (1990) argues that a response rate of 50% is adequate. The survey results of a study conducted by Liebenberg (2012) on the use of technology by Unisa students, reveal that of 282 248 online students, 22 216 managed to complete the survey, resulting in a small response rate. It has been noted that some successes in high response rates, in certain cases, are achieved if a cash prize is promised to respondents. This can happen if the research is financially well supported.

5.5. PROCESSES OF QUANTITATIVE DATA ANALYSIS

Quantitative data analysis processes were used to analyse the data. Two commonly used analytical tools in quantitative research are Microsoft Excel and SPSS programmes, both of which were used to perform most of the statistical and mathematical calculations in this study. Furthermore, both descriptive and inferential statistics analyses were used to analyse the data. Descriptive statistics analysis was used to summarise and describe the data in order to understand patterns in the variables and measures of variability. Two measures that were used
to describe the data were the mean, which is a measure of central tendency, and the standard deviation, which is a measure of variance.

The inferential statistics analysis method was also used to perform reliability and t-test analyses. According to Coughian, Cronin and Ryan (2007), inferential statistical tests are used to identify if a relationship or difference between variables is statistically significant. An independent T-test was used to measure and analyse the gap score. The gap score is the difference between expectations and perceptions. The Gap score for each dimension was calculated by subtracting the expectation score from the perception score. Furthermore, a reliability analysis was performed to test the reliability of the scale and inner consistency of the extracted factors. Cronbach's alpha efficiency was calculated.

The analysis of the results follows this approach: first to be presented is the data capturing. Second, demographic characteristics of the respondents are discussed; third, the descriptive statistics are presented; fourth, the reliability analysis is presented and fifth, the Gap score analysis is presented.

5.5.1. Data capturing

Following the collection of data, the quantitative data were captured on a personal computer using a Microsoft Excel spreadsheet. Table 5-3, which resembles a spreadsheet page, illustrates how data were captured. Parallel to this table, a similar table bearing the same contents was drawn and given the title "Perceptions". This table captured perceptions data.
Table 5-3: Example of spreadsheet page showing data capturing

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<thead>
<tr>
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<th>B</th>
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<tbody>
<tr>
<td>EXPECTATIONS</td>
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<tr>
<td>8</td>
<td>M</td>
<td>3</td>
<td>M</td>
<td>1</td>
<td>BA</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5-3 is an example of how data on expectations were captured on a spreadsheet. Similar capturing was done for perceptions data.

5.5.2. Demographic findings

209 students registered in different programmes, participated in the survey. Table 5-4 shows that there were more male students (55.5%) than female (45.5%) in the survey. Most of the respondents were between 20–25 years of age (41.3%) and 31–40 years of age (26.4%) respectively. Sixty-two per cent of the respondents’ highest educational qualification was Matric. Of the respondents, 74% were in their first and second years. Most of the students (62.7%) were registered in a Degree/Postgraduate degree programme. This shows that at Unisa Bachelor’s degrees are the most commonly sought undergraduate degrees, possibly because Bachelor’s degrees are a requirement for entry into different career fields.
### Table 5-4: Demographic characteristics of DE students

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>55.5</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>45.5</td>
</tr>
<tr>
<td>Age</td>
<td>Between 20 - 25 years</td>
<td>41.3</td>
</tr>
<tr>
<td></td>
<td>Between 26 - 30 years</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>Between 31 - 40 years</td>
<td>26.4</td>
</tr>
<tr>
<td></td>
<td>Between 41 - 50 years</td>
<td>5.8</td>
</tr>
<tr>
<td></td>
<td>Above 50 years</td>
<td>1.4</td>
</tr>
<tr>
<td>Highest educational qualification</td>
<td>Matric</td>
<td>62.2</td>
</tr>
<tr>
<td></td>
<td>Certificate</td>
<td>9.1</td>
</tr>
<tr>
<td></td>
<td>Diploma</td>
<td>24.4</td>
</tr>
<tr>
<td></td>
<td>Undergraduate degree</td>
<td>2.9</td>
</tr>
<tr>
<td></td>
<td>Master’s degree</td>
<td>1.4</td>
</tr>
<tr>
<td>In which academic year are you?</td>
<td>1</td>
<td>43.3</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>31.3</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>21.6</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>3.8</td>
</tr>
<tr>
<td>In which programme are you registered?</td>
<td>Diploma / Postgraduate diploma</td>
<td>37.3</td>
</tr>
<tr>
<td></td>
<td>Degree / Postgraduate degree</td>
<td>62.7</td>
</tr>
</tbody>
</table>

#### 5.5.2.1. Distribution by gender

Figure 5-2 shows that 55% of the respondents were male and 45% were female. This demographic characteristic indicates the intended target audience, which is male and female students who are the current users of Unisa’s student support services. Although studies (Worcester Polytechnic Institute, 2007; Bird & Morgan 2003; Makoe 2007) show that there are more female students than male in some DE institutions, including Unisa, this study shows that participation in a survey or any research study can go either way.
5.5.2.2. The age distribution of the respondents

The age distribution chart indicates that the majority of the respondents were between the ages of 20–25 (41%). This indicates that Unisa places a significant role in providing access to young school leavers who are looking for avenues for learning.

The second-largest age group of respondents lies between 26–30 and 31–40 years of age. The percentages for these age ranges are 25% and 26% respectively. This does not come as a surprise because many studies have shown that DE is becoming the learning mode of choice for many young to middle-aged people. The age groups with the smallest proportion of respondents were those between 41–50 at 6% and 50 and above, at 2%. This data show that there are fewer adult learners above 50 years old than younger learners between the ages of 20–40. Could this be an indication that the demographic characteristic with respect to age at Unisa are changing?
5.5.3. Patterns in the Descriptive statistics

This section presents patterns emerging from the descriptive data. In examining the descriptive data different patterns were noted as shown in Tables 5.5 to 5.12. It was noted that the items do not all fall in the middle of the range. Those that do not fall in the middle of the range have higher standard deviation (SD). Also observed was the fact that some items have low means and there are differences in the variability of the items. Furthermore, descriptive statistics were used to determine if there was any item that seemed not to measure the same construct as all the other items.

In Table 5.5, we notice that Expectation Tangibles items do not all fall in the middle of the range. For example, item QB4 has a mean of 3.97, while all the other items have a mean of at least 4. There are also differences in the variability of the items. Item QB4 has a Standard Deviation (SD) of 1.193, while other items have lower standard deviations.
Table 5-5: Scale: students’ expectations – tangibles

<table>
<thead>
<tr>
<th>Tangibles Dimension: Expectation Items</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>QB1. A good distance education university will provide study centres (learning centres) equipped with modern resources such as computers.</td>
<td>4.17</td>
<td>0.978</td>
<td>209</td>
</tr>
<tr>
<td>QB2. A good distance education university will provide study centres equipped with the Internet connection.</td>
<td>4.40</td>
<td>0.872</td>
<td>209</td>
</tr>
<tr>
<td>QB3. A good distance education university will provide clean and comfortable study centres.</td>
<td>4.32</td>
<td>0.813</td>
<td>209</td>
</tr>
<tr>
<td>QB4. A good distance education university will create individual study spaces for quiet study at its study centres.</td>
<td>3.97</td>
<td>1.193</td>
<td>209</td>
</tr>
<tr>
<td>QB5. A good distance education university will provide basic resources in working condition at its study centres.</td>
<td>4.25</td>
<td>0.704</td>
<td>208</td>
</tr>
</tbody>
</table>

Table 5-6: Scale: students’ expectations – reliability

<table>
<thead>
<tr>
<th>Reliability Dimension: Expectation Items</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>QB6. When good distance education universities promise to do something by a certain time, they do it.</td>
<td>4.18</td>
<td>0.766</td>
<td>207</td>
</tr>
<tr>
<td>QB7. Good distance education universities provide tutorial classes as promised.</td>
<td>4.21</td>
<td>0.920</td>
<td>209</td>
</tr>
</tbody>
</table>

In Table 5-6 above, all items centre at the middle of the range.

Table 5-7: Students’ expectations – delivery

<table>
<thead>
<tr>
<th>Delivery Dimension: Expectation Items</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>QB8. Students in good distance education universities will receive feedback in time to prepare for examinations.</td>
<td>4.12</td>
<td>0.874</td>
<td>208</td>
</tr>
</tbody>
</table>
In Table 5-7 not all items fall in the middle of the range. For example, QB12 has a mean of 3.90, while all the other items have a mean of at least 4. There are also differences in the variability in the items, for example, QB12 has a standard deviation of 1.038.

<table>
<thead>
<tr>
<th>Delivery Dimension: Expectation Items</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>QB9. Lecturers in good distance education universities will give their students feedback that identifies areas for improvement.</td>
<td>4.22</td>
<td>0.873</td>
<td>209</td>
</tr>
<tr>
<td>QB10. Lecturers in good distance education universities are available on email or phone.</td>
<td>4.46</td>
<td>0.672</td>
<td>209</td>
</tr>
<tr>
<td>QB11. Good distance education universities' lecturers give their students assistance and guidance on their assignments.</td>
<td>4.20</td>
<td>0.783</td>
<td>209</td>
</tr>
<tr>
<td>QB12. Good distance education universities deliver study material in good time and students start work in good time.</td>
<td>3.90</td>
<td>1.038</td>
<td>209</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Assurance Dimension: Expectation Items</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>QB13. Lecturers in good distance education universities will have required knowledge and skills to answer students' questions.</td>
<td>4.33</td>
<td>0.797</td>
<td>209</td>
</tr>
<tr>
<td>QB14. Lecturers in good distance education universities will encourage their students to work hard.</td>
<td>4.14</td>
<td>1.031</td>
<td>209</td>
</tr>
<tr>
<td>QB15. Lecturers in good distance education universities will instill confidence in their students.</td>
<td>4.02</td>
<td>0.863</td>
<td>209</td>
</tr>
<tr>
<td>Assurance Dimension: Expectation Items</td>
<td>Mean</td>
<td>Std. Deviation</td>
<td>N</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------</td>
<td>------</td>
<td>----------------</td>
<td>----</td>
</tr>
<tr>
<td>QB16. Administrative staff in good distance education universities will have required knowledge to answer students’ questions.</td>
<td>4.12</td>
<td>0.799</td>
<td>209</td>
</tr>
</tbody>
</table>

Table 5-8 shows that the items are all centred in the middle of the range. There are also differences in the variability in the items. QB14 has a S.D of 1.031 which is higher than the standard deviation of all the other items.

### Table 5-9: Scale: students’ perceptions of experiences – tangibles

<table>
<thead>
<tr>
<th>Tangibles Dimension: Perception Items</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>QC1. Unisa’s study centres are equipped with modern learning resources such as computers.</td>
<td>3.95</td>
<td>1.317</td>
<td>208</td>
</tr>
<tr>
<td>QC2. Unisa’s study centres have the Internet connection.</td>
<td>4.09</td>
<td>1.353</td>
<td>208</td>
</tr>
<tr>
<td>QC3. Unisa’s study centre I go to is clean and comfortable.</td>
<td>3.82</td>
<td>1.064</td>
<td>207</td>
</tr>
<tr>
<td>QC4. Unisa has created individual study spaces for quiet study at its study centres.</td>
<td>2.75</td>
<td>1.533</td>
<td>208</td>
</tr>
<tr>
<td>QC5. Unisa provides basic resources in good working condition at its study centres.</td>
<td>3.86</td>
<td>1.089</td>
<td>207</td>
</tr>
</tbody>
</table>

In Table 5-9, item QC4 is not centred at the middle of the range (mean=2.74) and has the highest standard deviation (1.533).
Table 5-10: Scale: students’ perceptions of experiences – reliability

<table>
<thead>
<tr>
<th>Reliability Dimension: Perception Items</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>QC6. When Unisa promises to do something by a certain time, it does it.</td>
<td>3.84</td>
<td>1.080</td>
<td>209</td>
</tr>
<tr>
<td>QC7. Unisa provides tutorial classes as promised.</td>
<td>4.07</td>
<td>0.998</td>
<td>209</td>
</tr>
</tbody>
</table>

In Table 5-10 all items centre at the middle of the range.

Table 5-11: Scale: students’ perceptions of experiences – delivery

<table>
<thead>
<tr>
<th>Delivery Dimension: Perception Items</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>QC8. I receive feedback in time to prepare for examinations.</td>
<td>3.36</td>
<td>1.359</td>
<td>209</td>
</tr>
<tr>
<td>QC9. My lecturers give me feedback that identifies areas for improvement.</td>
<td>3.76</td>
<td>1.149</td>
<td>203</td>
</tr>
<tr>
<td>QC10. My lecturers are available on phone or email.</td>
<td>4.24</td>
<td>1.102</td>
<td>209</td>
</tr>
<tr>
<td>QC11. My lecturers or tutors give me assistance and guidance on assignments.</td>
<td>3.77</td>
<td>.933</td>
<td>206</td>
</tr>
<tr>
<td>QC12. Unisa delivers study material in good time and I start my work in good time.</td>
<td>3.42</td>
<td>1.231</td>
<td>209</td>
</tr>
</tbody>
</table>

In Table 5-11, item QC10 is not centred at the middle of the range (mean=4.25). The item has the highest mean of all items.
Table 5-12: Scale: students’ perceptions of experiences – assurance

<table>
<thead>
<tr>
<th>Assurance Dimension: Perception Items</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>QC13. My lecturers have required knowledge and skills to answer my questions.</td>
<td>4.34</td>
<td>0.835</td>
<td>209</td>
</tr>
<tr>
<td>QC14. My lecturers encourage me to work hard.</td>
<td>4.15</td>
<td>0.948</td>
<td>209</td>
</tr>
<tr>
<td>QC15. My lecturers instill confidence in me.</td>
<td>4.06</td>
<td>0.910</td>
<td>209</td>
</tr>
<tr>
<td>QC16. Administrative staff members at Unisa have required knowledge to answer students’ questions.</td>
<td>4.14</td>
<td>0.938</td>
<td>209</td>
</tr>
</tbody>
</table>

In Table 5-12, all the items are centred at the middle of the range.

5.6. MEASURING QUESTIONNAIRE RELIABILITY

A reliability test was conducted to assess the internal consistency of the questionnaire (scale) to refine the dimensions and their items. According to Wong, Ong and Kuek (2012:214), a questionnaire that is reliable “has to be stable over time and conditions”.

The researcher employed different techniques to assess and establish the questionnaire’s reliability. Firstly, the internal consistency of the questionnaire was calculated using Cronbach Alpha. A scale is said to be internally consistent if all of its items are strongly correlation. Secondly, the items of the questionnaire were examined to determine whether they were genuine ‘members’ of the group. Thirdly, item total correlation test was performed to examine whether all questionnaire items were useful. Lastly, we used descriptive statistics to determine whether there was any item which seemed not to measure the same construct as the other items.

The first test carried out was to measure the internal consistency of the questionnaire. We used SPPS to calculate Cronbach’s Alpha coefficient to test the reliability of the dimensions. Cronbach Alpha is the most widely used objective measure of reliability (Tavakol & Dennick, 2011). The internal consistency of the modified SERVQUAL items was assessed by computing the total
reliability scale. Two dimensions: User Participation and Responsiveness registered very low alphas and were deleted. Four dimensions, namely Tangibles, Reliability, Delivery and Assurance, had acceptable alphas. The overall Cronbach alpha values for expectations and perceptions were .843 and .846 respectively, for the 16 items. The dimensions whose reliability show coefficients higher than 0.7, indicate that they comprise of various items that are a true measure of the scale.

The reliability values for our study were found substantial considering the fact that the highest reliability that can be obtained is 1.0. According to Streiner (2003) a very high reliability (0.95) might not be desirable after-all because some items may be redundant and not contributing any new knowledge. Table 5.13 shows the alphas for each dimension and the overall alphas.

**Table 5-13: Dimension coefficients**

<table>
<thead>
<tr>
<th>DIMENSION</th>
<th>NUMBER</th>
<th>EXPECTATION ALPHAS</th>
<th>PERCEPTION ALPHAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tangibles</td>
<td>5</td>
<td>679</td>
<td>0.765</td>
</tr>
<tr>
<td>Reliability</td>
<td>2</td>
<td>754</td>
<td>0.772</td>
</tr>
<tr>
<td>Delivery</td>
<td>5</td>
<td>669</td>
<td>0.622</td>
</tr>
<tr>
<td>Assurance</td>
<td>4</td>
<td>690</td>
<td>0.648</td>
</tr>
<tr>
<td>Overall model reliability</td>
<td>16</td>
<td>0.843</td>
<td>0.846</td>
</tr>
</tbody>
</table>

Looking at the reliability coefficients of all four dimensions in Table 5-13, some dimensions have coefficients slightly below 0.7. These are tangibles (0.679), delivery (0.669) and assurance (0.690). According to Boyle (1991), there is no universal consensus on what constitutes an acceptable level of alpha. There are different views on this. Nunnally (1978) has recommended 0.7. However, Robinson, Shaver and Rightsman (1991) assert that the alpha of 0.6 is acceptable for exploratory studies. This is consistent with Nunnally (1967), who points out that an alpha between 0.5 to 0.6 is acceptable for preliminary research.

The second reliability analysis carried out was a test to determine the value of the alpha if any item was deleted. This would help us know whether the deleted item was genuine or not. According to Angelova and Zekiri (2011:251), if the Cronbach’s alpha for a dimension increases when an item is deleted, that shows that the item is not genuine in that dimension. All the 16 items for expectations and perceptions were analysed. Tables 5.14 and 5.15 show the reliability scale for each dimension, calculated when each item is deleted from the dimension.
From Tables 5.14 and 5.15, we observed that almost all Tangibles dimension items showed a lower value of reliability when deleted except QB4, which had a higher value. The researcher wonders whether QB4 is not a true measure under this dimension because when it is deleted the coefficient alpha increases to 0.771. For Reliability dimension (Tables 5.14 and 5.15), all the alphas are stable. For Delivery dimension, (Tables 5.14 and 5.15), almost all the items showed a lower value of reliability when deleted except QB11 and had a higher value showing it might not a true measure under this dimension. That is, when QB11 is deleted from this dimension, the alpha increases to 0.715. For Assurance dimension, (Tables 5.14 and 5.15), when all the items except QB16 are deleted we observe a lower value of reliability. The reliability increases slightly to 0.693 when QB16 is deleted.

**Table 5-14: Expectations dimension coefficients**

<table>
<thead>
<tr>
<th>Dimension: Expectations</th>
<th>No. of Items</th>
<th>Cronbach's Alpha for dimensions</th>
<th>Items</th>
<th>Cronbach's Alpha item is deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tangibles</td>
<td>5</td>
<td>0.679</td>
<td>QB1. A good DE university will provide study centres (learning centres) equipped with modern resources such as computers.</td>
<td>0.584</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>QB2. A good DE university will provide study centres equipped with the internet connection.</td>
<td>0.531</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>QB3. A good DE university will provide clean and comfortable study centres.</td>
<td>0.561</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>QB4. A good DE university will create individual study spaces for quiet study at its study centres.</td>
<td>0.771</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>QB5. A good DE university will provide basic resources in working condition at its study centres.</td>
<td>0.666</td>
</tr>
<tr>
<td>Reliability</td>
<td>2</td>
<td>0.754</td>
<td>QB6. When good DE universities promise to do something by a certain time, they do it.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>QB7. Good DE universities provide tutorial classes as promised.</td>
<td></td>
</tr>
<tr>
<td>Dimension: Expectations</td>
<td>No. of Items</td>
<td>Cronbach’s Alpha for dimensions</td>
<td>Items</td>
<td>Cronbach’s Alpha item is deleted</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-------------</td>
<td>--------------------------------</td>
<td>------------------------------------------------------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>Delivery</td>
<td>5</td>
<td>0.669</td>
<td>QB8. Students in good DE universities will receive feedback in time to prepare for examinations.</td>
<td>0.544</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>QB9. Lecturers in good DE universities will give their students feedback that identifies areas for improvement.</td>
<td>0.562</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>QB10. Lecturers in good DE universities are available on e-mail or phone.</td>
<td>0.594</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>QB11. Good DE universities’ lecturers give their students assistance and guidance on their assignments.</td>
<td>0.715</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>QB12. Good DE universities deliver study material in good time and students start work in good time.</td>
<td>0.647</td>
</tr>
<tr>
<td>Assurance</td>
<td>4</td>
<td>0.690</td>
<td>QB13. Lecturers in good DE universities will have the required knowledge and skills to answer students' questions.</td>
<td>0.597</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>QB14. Lecturers in good DE universities will encourage their students to work hard.</td>
<td>0.68</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>QB15. Lecturers in good DE universities will instil confidence in their students.</td>
<td>0.513</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>QB16. Administrative staff in good DE universities will have the required knowledge to answer students' questions.</td>
<td>0.693</td>
</tr>
</tbody>
</table>
### Table 5-15: Perception dimension coefficients

<table>
<thead>
<tr>
<th>Dimension: Perceptions</th>
<th>No. of Items</th>
<th>Cronbach’s Alpha for dimensions</th>
<th>Items</th>
<th>Cronbach’s Alpha item is deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tangibles</td>
<td>5</td>
<td>0.765</td>
<td>QC1. Unisa’s study centres are equipped with modern learning resources such as computers.</td>
<td>0.692</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>QC2. Unisa's study centres have an internet connection.</td>
<td>0.653</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>QC3. Unisa’s study centre I go to is clean and comfortable.</td>
<td>0.719</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>QC4. Unisa has created individual study spaces for quiet study at its study centres.</td>
<td>0.79</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>QC5. Unisa provides basic resources in good working condition at its study centres.</td>
<td>0.744</td>
</tr>
<tr>
<td>Reliability</td>
<td>2</td>
<td>0.772</td>
<td>QC6. When Unisa promises to do something by a certain time, it does it.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>QC7. Unisa provides tutorial classes as promised.</td>
<td></td>
</tr>
<tr>
<td>Delivery</td>
<td>5</td>
<td>0.622</td>
<td>QC8. I receive feedback in time to prepare for examinations.</td>
<td>0.587</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>QC9. My lecturers give me feedback that identifies areas for improvement.</td>
<td>0.457</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>QC10. My lecturers are available on phone or e-mail.</td>
<td>0.558</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>QC11. My lecturers or tutors give me assistance and guidance on assignments.</td>
<td>0.627</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>QC12. Unisa delivers study material in good time and I start my work in good time.</td>
<td>0.591</td>
</tr>
<tr>
<td>Assurance</td>
<td>4</td>
<td>0.648</td>
<td>QC13. My lecturers have the required knowledge and skills to answer my questions.</td>
<td>0.623</td>
</tr>
<tr>
<td>Dimension: Perceptions</td>
<td>No. of Items</td>
<td>Cronbach’s Alpha for dimensions</td>
<td>Items</td>
<td>Cronbach’s Alpha item is deleted</td>
</tr>
<tr>
<td>------------------------</td>
<td>-------------</td>
<td>---------------------------------</td>
<td>-------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>QC14. My lecturers encourage me to work hard.</td>
<td></td>
<td></td>
<td></td>
<td>0.557</td>
</tr>
<tr>
<td>QC15. My lecturers instil confidence in me.</td>
<td></td>
<td></td>
<td></td>
<td>0.512</td>
</tr>
<tr>
<td>QC16. Administrative staff members at Unisa have the required knowledge to answer students’ questions.</td>
<td></td>
<td></td>
<td></td>
<td>0.618</td>
</tr>
</tbody>
</table>

In the above analysis, most items did not increase the alpha value for the dimension when deleted. This shows that they are genuine.

Another perspective of reliability assessment performed in this study was total item correlation test. A scale is said to be internally consistent if all of its items are strongly correlational. A high average correlation among the items suggests that they are all measuring the same construct.

Using SPSS, we ran the item total correlation test to determine whether the questionnaire items for expectations and perceptions were useful constructs in the questionnaire. Table 5.16 shows total item correlations for expectation items, and 5.17 shows total item correlations for perceptions. These tables show the Cronbach’s alpha values that would result should a particular item be deleted. This information is helpful because it indicates which items contribute to the overall alpha value. For example, if item QC1 (Table 5-17) were to be removed, the overall Cronbach’s alpha would be .831 lower than 0.843. This means that this item is important because it has contributed to a high overall alpha value. However, if item QC4 (Table 5-17) were deleted, then the total alpha would improve to above 0.843. Nonetheless, item QC4 is not problematic so it cannot be deleted. Raykov (2008) warns that there is a possibility that the reliability of an instrument being developed can be seriously compromised while seeking components to remove in order to maximise coefficient alpha. In this analysis the intention was not to look for items to delete, but to determine the extent to which all the items were correlational.
Table 5-16: Scale: total item correlations – students’ expectations

<table>
<thead>
<tr>
<th>Expectation Items</th>
<th>Scale mean if item deleted</th>
<th>Scale variance if item deleted</th>
<th>Corrected item-total correlation</th>
<th>Cronbach’s Alpha if item deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>QB1. A good DE university will provide study centres (learning centres) equipped with modern resources such as computers.</td>
<td>62.80</td>
<td>51.497</td>
<td>0.502</td>
<td>0.832</td>
</tr>
<tr>
<td>QB2. A good DE university will provide study centres equipped with an internet connection.</td>
<td>62.56</td>
<td>49.467</td>
<td>0.754</td>
<td>0.818</td>
</tr>
<tr>
<td>QB3. A good DE university will provide clean and comfortable study centres.</td>
<td>62.62</td>
<td>52.119</td>
<td>0.583</td>
<td>0.828</td>
</tr>
<tr>
<td>QB4. A good DE university will create individual study spaces for quiet study at its study centres.</td>
<td>63.00</td>
<td>55.385</td>
<td>0.152</td>
<td>0.858</td>
</tr>
<tr>
<td>QB5. A good DE university will provide basic resources in working condition at its study centres.</td>
<td>62.72</td>
<td>54.711</td>
<td>0.414</td>
<td>0.837</td>
</tr>
<tr>
<td>QB6. When good DE universities promise to do something by a certain time, they do it.</td>
<td>62.77</td>
<td>53.916</td>
<td>0.447</td>
<td>0.835</td>
</tr>
<tr>
<td>QB7. Good DE universities provide tutorial classes as promised.</td>
<td>62.75</td>
<td>50.990</td>
<td>0.592</td>
<td>0.827</td>
</tr>
<tr>
<td>Expectation Items</td>
<td>Scale mean if item deleted</td>
<td>Scale variance if item deleted</td>
<td>Corrected item-total correlation</td>
<td>Cronbach's Alpha if item deleted</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------------</td>
<td>-----------------------------</td>
<td>--------------------------------</td>
<td>----------------------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>QB8. Students in good DE universities will receive feedback in time to prepare for examinations.</td>
<td>62.84</td>
<td>51.820</td>
<td>0.551</td>
<td>0.829</td>
</tr>
<tr>
<td>QB9. Lecturers in good DE universities will give their students feedback that identifies areas for improvement.</td>
<td>62.73</td>
<td>52.528</td>
<td>0.493</td>
<td>0.832</td>
</tr>
<tr>
<td>QB10. Lecturers in good DE universities are available on e-mail or phone.</td>
<td>62.50</td>
<td>53.734</td>
<td>0.539</td>
<td>0.832</td>
</tr>
<tr>
<td>QB11. Good DE universities' lecturers give their students assistance and guidance on their assignments.</td>
<td>62.76</td>
<td>55.655</td>
<td>0.277</td>
<td>0.843</td>
</tr>
<tr>
<td>QB12. Good DE universities deliver study material in good time and students start work in good time.</td>
<td>63.06</td>
<td>52.518</td>
<td>0.393</td>
<td>0.839</td>
</tr>
<tr>
<td>QB13. Lecturers in good DE universities will have the required knowledge and skills to answer students' questions.</td>
<td>62.63</td>
<td>52.996</td>
<td>0.504</td>
<td>0.832</td>
</tr>
<tr>
<td>QB14. Lecturers in good DE universities will encourage their students to work hard.</td>
<td>62.83</td>
<td>52.877</td>
<td>0.370</td>
<td>0.840</td>
</tr>
<tr>
<td>QB15. Lecturers in good DE universities will instil confidence in their students.</td>
<td>62.94</td>
<td>52.406</td>
<td>0.509</td>
<td>0.831</td>
</tr>
<tr>
<td>Expectation Items</td>
<td>Scale mean if item deleted</td>
<td>Scale variance if item deleted</td>
<td>Corrected item-total correlation</td>
<td>Cronbach's Alpha if item deleted</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------------</td>
<td>-----------------------------</td>
<td>--------------------------------</td>
<td>----------------------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>QB16. Administrative staff in good DE universities will have the required knowledge to answer students' questions.</td>
<td>62.83</td>
<td>53.078</td>
<td>0.494</td>
<td>0.832</td>
</tr>
</tbody>
</table>

Table 5-17: Scale: total items – perceptions of experiences

<table>
<thead>
<tr>
<th>Items</th>
<th>Scale mean if item deleted</th>
<th>Scale variance if item deleted</th>
<th>Corrected item-total correlation</th>
<th>Cronbach's Alpha if item deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>QC1. Unisa’s study centres are equipped with modern learning resources such as computers.</td>
<td>57.85</td>
<td>83.607</td>
<td>0.565</td>
<td>0.831</td>
</tr>
<tr>
<td>QC2. Unisa’s study centres have the internet connection.</td>
<td>57.72</td>
<td>80.931</td>
<td>0.665</td>
<td>0.825</td>
</tr>
<tr>
<td>QC3. The Unisa study centre I go to is clean and comfortable.</td>
<td>57.99</td>
<td>87.487</td>
<td>0.502</td>
<td>0.836</td>
</tr>
<tr>
<td>QC4. Unisa has created individual study spaces for quiet study at its study centres.</td>
<td>59.03</td>
<td>89.133</td>
<td>0.246</td>
<td>0.855</td>
</tr>
<tr>
<td>QC5. Unisa provides basic resources in good working condition at its study centres.</td>
<td>57.96</td>
<td>83.701</td>
<td>0.678</td>
<td>0.826</td>
</tr>
<tr>
<td>QC6. When Unisa promises to do something by a certain time, it does it.</td>
<td>57.93</td>
<td>85.970</td>
<td>0.585</td>
<td>0.831</td>
</tr>
<tr>
<td>Items</td>
<td>Scale mean if item deleted</td>
<td>Scale variance if item deleted</td>
<td>Corrected item-total correlation</td>
<td>Cronbach's Alpha if item deleted</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>----------------------------</td>
<td>-------------------------------</td>
<td>----------------------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>QC7. Unisa provides tutorial classes as promised.</td>
<td>57.74</td>
<td>85.976</td>
<td>0.643</td>
<td>0.829</td>
</tr>
<tr>
<td>QC8. I receive feedback in time to prepare for examinations.</td>
<td>58.44</td>
<td>88.976</td>
<td>0.308</td>
<td>0.848</td>
</tr>
<tr>
<td>QC9. My lecturers give me feedback that identifies areas for improvement.</td>
<td>58.03</td>
<td>86.163</td>
<td>0.522</td>
<td>0.834</td>
</tr>
<tr>
<td>QC10. My lecturers are available on phone or e-mail.</td>
<td>57.55</td>
<td>84.608</td>
<td>0.654</td>
<td>0.828</td>
</tr>
<tr>
<td>QC11. My lecturers or tutors give me assistance and guidance on assignments.</td>
<td>58.02</td>
<td>91.733</td>
<td>0.336</td>
<td>0.843</td>
</tr>
<tr>
<td>QC12. Unisa delivers study material in good time and I start my work in good time.</td>
<td>58.39</td>
<td>91.112</td>
<td>0.256</td>
<td>0.849</td>
</tr>
<tr>
<td>QC13. My lecturers have the required knowledge and skills to answer my questions.</td>
<td>57.47</td>
<td>90.866</td>
<td>0.445</td>
<td>0.839</td>
</tr>
<tr>
<td>QC14. My lecturers encourage me to work hard.</td>
<td>57.64</td>
<td>91.985</td>
<td>0.318</td>
<td>0.844</td>
</tr>
<tr>
<td>QC15. My lecturers instil confidence in me.</td>
<td>57.74</td>
<td>91.476</td>
<td>0.361</td>
<td>0.842</td>
</tr>
<tr>
<td>QC16. Administrative staff members at Unisa have the required knowledge to answer students' questions.</td>
<td>57.66</td>
<td>88.748</td>
<td>0.547</td>
<td>0.835</td>
</tr>
</tbody>
</table>
All these analyses were carried out to validate the questionnaire's reliability. We are certain that our questionnaire is a reliable and valid document. The validity of the questionnaire was assessed before and after the pilot study.

5.7. ANALYSIS OF STUDENTS’ EXPECTATIONS AND PERCEPTIONS AND THE GAP SCORE

This section of data analysis addressed the following two objectives:

- To measure students’ expectations and perceptions of their experiences of the quality of students support services in a DE environment.
- To calculate the gap score.

5.7.1 Expectations, and perceptions and the Gap score

Expectations and perceptions were both measured using a 5-point Likert-type scale in which the higher numbers indicate higher levels of expectation or perception. The questionnaire covered four dimensions, namely tangibles, reliability, assurance and delivery. Each dimension had its own items to measure students’ expectations and the perceptions.

The expectation and perception data were computed and calculated to get the scores. The data showed that generally, students’ expectations exceeded the perceived level of students support services as shown by both expectation and perception scores (Table 5-18). This resulted in a negative gap score.

The gap score between students’ expectations and perceptions of student support services was also analysed to determine service quality gap. According to Parasuraman (1988) a service quality gap is calculated (G) as the difference (discrepancy) between the raw “perception-of-performance” score (P) and the raw "expectations score" (E). The greater the “gap score” (calculated as G=P minus E), the higher the score for perceived service quality (Parasuraman, 1985). A negative gap score indicates that the expectations are higher than the perceptions.

Table 5.18 shows expectations scores, the perception scores and the gap score. The expectations are higher than the perceptions for all dimensions with Tangibles having the biggest gap.
Furthermore, the expectation scores of all the items are not very different from one another, implying that students expect good quality from distance education student support service system. However, Assurance dimension items rated highest for the actual perceived service. These were: knowledge and skills of lecturers (4.34), knowledge of the administrative staff (4.14) and the encouragement by lecturers (4.15).

The overall gap score was -0.30075. The largest gap scores were: individual study spaces for quiet study (-1.23), feedback in time to prepare for examinations (-0.73), delivery of study materials on time (-0.49) and lecturers providing feedback to identify areas for improvement (-0.46).

**Table 5-18: Scale: students' perceptions of experiences – overall**

<table>
<thead>
<tr>
<th>dimension</th>
<th>Item</th>
<th>Expectation Score</th>
<th>Perception Score</th>
<th>Gap Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tangibles</td>
<td>Study centres are equipped with modern learning resources such as computers.</td>
<td>4.16</td>
<td>3.96</td>
<td>-0.2</td>
</tr>
<tr>
<td></td>
<td>Unisa’s study centres have an internet connection.</td>
<td>4.4</td>
<td>4.09</td>
<td>-0.31</td>
</tr>
<tr>
<td></td>
<td>The Unisa study centre I go to is clean and comfortable.</td>
<td>4.33</td>
<td>3.81</td>
<td>-0.52</td>
</tr>
<tr>
<td></td>
<td>Unisa has created individual study spaces for quiet study at its study centres.</td>
<td>3.97</td>
<td>2.74</td>
<td>-1.23</td>
</tr>
<tr>
<td></td>
<td>Unisa provides basic resources in good working condition at its study centres.</td>
<td>4.25</td>
<td>3.87</td>
<td>-0.38</td>
</tr>
<tr>
<td>Reliability</td>
<td>When Unisa promises to do something by a certain time, it does it.</td>
<td>4.18</td>
<td>3.84</td>
<td>-0.34</td>
</tr>
<tr>
<td></td>
<td>Unisa provides tutorial classes as promised.</td>
<td>4.2</td>
<td>4.07</td>
<td>-0.13</td>
</tr>
<tr>
<td>Delivery</td>
<td>I receive feedback in time to prepare for examinations.</td>
<td>4.11</td>
<td>3.38</td>
<td>-0.73</td>
</tr>
<tr>
<td></td>
<td>My lecturers give me feedback that identifies areas for improvement.</td>
<td>4.22</td>
<td>3.76</td>
<td>-0.46</td>
</tr>
<tr>
<td></td>
<td>My lecturers are available on the phone or e-mail.</td>
<td>4.46</td>
<td>4.25</td>
<td>-0.21</td>
</tr>
<tr>
<td></td>
<td>My lecturers or tutors give me assistance and guidance on assignments.</td>
<td>4.19</td>
<td>3.78</td>
<td>-0.41</td>
</tr>
<tr>
<td></td>
<td>Unisa delivers study material in good time and I start my work in good time.</td>
<td>3.89</td>
<td>3.4</td>
<td>-0.49</td>
</tr>
<tr>
<td>Assurance</td>
<td>My lecturers have the required knowledge and skills to answer my questions.</td>
<td>4.33</td>
<td>4.34</td>
<td>0.01</td>
</tr>
</tbody>
</table>
### Table: Expectation, Perception, and Gap Scores

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Item</th>
<th>Expectation Score</th>
<th>Perception Score</th>
<th>Gap Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>My lecturers encourage me to work hard.</td>
<td>4.14</td>
<td>4.15</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td>My lecturers instil confidence in me.</td>
<td>4.02</td>
<td>4.06</td>
<td>0.04</td>
</tr>
<tr>
<td></td>
<td>Administrative staff members at Unisa have the required knowledge to answer students’ questions.</td>
<td>4.12</td>
<td>4.14</td>
<td>0.02</td>
</tr>
</tbody>
</table>

**Overall gap score for all four dimensions** -0.30075

### 5.7.2 T-test analysis for the Gap score

In this study, the “gap score” was calculated as the difference between students’ expectations and perceptions of experienced (perceived) service. There were gaps between expectations and perceptions. Nonetheless, the researcher wanted to understand the statistical significance of the gaps. A two-sample t-test analysis was performed. A two-sample t-test is a statistical procedure that is used to test hypotheses or answer research questions (Munro, 2005). According to Coughian, Cronin and Ryan (2007:662) statistical significance “helps researchers rule out one important threat to validity, and that is, that the result could be due to chance rather than to real differences in the population”. In order to ensure a clearer understanding of the analysis, the researcher set the following hypothesis:

**H0**: "No significant difference exists between students’ expectations and students’ perceptions of experienced service with respect to the dimensions"

**H1**: "There is a significant difference between students’ expectations and students’ perceptions of experienced service with respect to the dimensions"

Levene’s Test was performed to determine whether to use the t-statistic for equal variances or unequal variances for each dimension. If the p-value associated with F-statistic is >0.05, the t-statistic is used where variances are not assumed to be equal. Since the p-value associated with the F-statistic was greater than 0.05, we used the t-statistic where variances were not assumed to be equal. The results of the t-test analyses on each dimension are given below.
T-Test for Tangibles dimension

For the tangibles dimension, F-statistic was 0.314, p-value (p) was 0.576. Therefore the t-statistic=0.245, p=0.807>0.05. We reject the null hypothesis at a 5% significance level. Hence we conclude that there is a significant difference between students' expectations and students’ perceptions of experienced service with respect to Reliability.

Table 5-199: T-test for Tangibles dimension

<table>
<thead>
<tr>
<th>Factor/Dimension</th>
<th>Test for Equality of Variances</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F-Statistic</td>
<td>Significance (p-value)</td>
</tr>
<tr>
<td>Gap score</td>
<td>Equal variances assumed</td>
<td>0.314</td>
</tr>
<tr>
<td>Tangibles</td>
<td>Equal variances not assumed</td>
<td>0.314</td>
</tr>
</tbody>
</table>

T-test for Equality of Means

<table>
<thead>
<tr>
<th>Equal variances assumed</th>
<th>t-statistic</th>
<th>Significance (p-value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equal variances assumed</td>
<td>0.245</td>
<td>0.807</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>0.245</td>
<td>0.807</td>
</tr>
</tbody>
</table>

T-Test for Reliability dimension

Reliability dimension’s F-statistic=0.183, p=0.669. Therefore the t-statistic =0.067, p=0.947. We reject the null hypothesis at a 5% significance level. The conclusion is that there is a significant difference between students’ expectations and students' perceptions of experienced service with respect to reliability.

Table 5-20: T-test for Reliability dimension

<table>
<thead>
<tr>
<th>Factor/Dimension</th>
<th>Test for Equality of Variances</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F-Statistic</td>
<td>Significance (p-value)</td>
</tr>
<tr>
<td>Gap score</td>
<td>Equal variances assumed</td>
<td>0.183</td>
</tr>
<tr>
<td>Reliability</td>
<td>Equal variances not assumed</td>
<td>0.183</td>
</tr>
</tbody>
</table>

t-test for Equality of Means

<table>
<thead>
<tr>
<th>Equal variances assumed</th>
<th>t-statistic</th>
<th>Significance (p-value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equal variances assumed</td>
<td>0.066</td>
<td>0.947</td>
</tr>
</tbody>
</table>
T-Test for delivery dimension

Delivery dimension’s F-statistic=0.13 and p=0.719. Therefore the t-statistic =0.123, p=0.220. We reject the null hypothesis at a 5% significance level. The conclusion is that there is a significant difference between students’ expectations and students’ perceptions of experienced service with respect to delivery.

Table 5-211: T-Test for Delivery dimension

<table>
<thead>
<tr>
<th>Factor/Dimension</th>
<th>Test for Equality of Variances</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F-Statistic</td>
</tr>
<tr>
<td>Delivery</td>
<td></td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>0.13</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>0.1219</td>
</tr>
</tbody>
</table>

T-test for assurance dimension

Assurance dimension’s F-statistic=0.628, p=0.429. Therefore the t-statistic =1.584, p=0.115. We reject the null hypothesis at a 5% significance level. The conclusion is that there is a significant difference between students’ expectations and students’ perceptions of experienced service with respect to assurance.
Table 5-222: T-test for assurance dimension

<table>
<thead>
<tr>
<th>Factor/Dimension</th>
<th>Test for Equality of Variances</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F-Statistic</td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>0.628</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>0.628</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>t-statistic</td>
</tr>
<tr>
<td>Equal variances assumed</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
</tr>
</tbody>
</table>
The researcher conducted independent-Samples t-test and One Way ANOVA analyses to examine the significance of the relationship between gender and the gap score; and between programme of study and the gap score. The results showed that there was no significant gap between either of them. These analyses appear in Tables 5-23 and 5-24.

Table 5-23: Significance of Relationship between gender and gap scores

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>Std Deviation</th>
<th>Mean Difference</th>
<th>Levene’s Test for Equality of Variances</th>
<th>t-test for Equality of Means (Sig.(2-tailed))</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>F</td>
<td>Sig</td>
</tr>
<tr>
<td>Tangibles</td>
<td>Male</td>
<td>116</td>
<td>0.5431</td>
<td>1.14688</td>
<td>0.0388</td>
<td>Equal variances assumed</td>
<td>0.546</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>93</td>
<td>0.5043</td>
<td>1.13143</td>
<td></td>
<td>Equal variances not assumed</td>
<td>0.245</td>
</tr>
<tr>
<td>Reliability</td>
<td>Male</td>
<td>116</td>
<td>0.2414</td>
<td>1.25885</td>
<td>-0.0113</td>
<td>Equal variances assumed</td>
<td>0.183</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>93</td>
<td>0.2527</td>
<td>1.17867</td>
<td></td>
<td>Equal variances not assumed</td>
<td>-0.067</td>
</tr>
<tr>
<td></td>
<td>Delivery</td>
<td>Assurance</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>-------------------------------</td>
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</tr>
<tr>
<td><strong>Male</strong></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>116</td>
<td>116</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>93</td>
<td>93</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Significance difference test between demographics and gap scores</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Equal variances assumed</strong></td>
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<tr>
<td><strong>Equal variances not assumed</strong></td>
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</tr>
<tr>
<td><strong>Assurance</strong></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Equal variances assumed</strong></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Equal variances not assumed</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Delivery | Male | 116 | 0.4065 | 0.89159 | -0.1462 | Equal variances assumed | 0.13 | 0.719 | -1.219 | 0.224 |
| Female  | 93   | 0.5527 | 0.82239 |          |          | Equal variances not assumed | -1.23 | 0.22  |
| Assurance | Male | 116 | -0.0927 | 0.77707 | -0.1626 | Equal variances assumed | 0.628 | 0.429 | -1.567 | 0.119 |
| Female  | 93   | 0.0699 | 0.70361 |          |          | Equal variances not assumed | -1.584 | 0.115 |

| Sum | 0.628 | 0.429 |
Table 5-244: Significance of Relationship between gender and gap scores

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>N</th>
<th>Mean</th>
<th>Std Deviation</th>
<th>Mean Difference</th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means (Sig.(2-tailed))</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>F</td>
<td>Sig</td>
</tr>
<tr>
<td><strong>Tangibles</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diploma/Postgrad. Degree</td>
<td>78</td>
<td>0.6218</td>
<td>1.1115</td>
<td>0.1531</td>
<td>Equal variances assumed</td>
<td>0.095</td>
</tr>
<tr>
<td>Degree/Postgrad. Degree</td>
<td>131</td>
<td>0.4687</td>
<td>1.15306</td>
<td></td>
<td>Equal variances not assumed</td>
<td>0.95</td>
</tr>
<tr>
<td><strong>Reliability</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diploma/Postgrad. Degree</td>
<td>78</td>
<td>0.3718</td>
<td>1.14652</td>
<td>0.2</td>
<td>Equal variances assumed</td>
<td>1.865</td>
</tr>
<tr>
<td>Degree/Postgrad. Degree</td>
<td>131</td>
<td>0.1718</td>
<td>1.26152</td>
<td></td>
<td>Equal variances not assumed</td>
<td>1.175</td>
</tr>
</tbody>
</table>
### Significance difference test between demographics and gap scores

<table>
<thead>
<tr>
<th>Delivery</th>
<th>Diploma/Postgrad. Degree</th>
<th>78</th>
<th>0.5686</th>
<th>0.92164</th>
<th>0.1549</th>
<th>Equal variances assumed</th>
<th>0.083</th>
<th>0.774</th>
<th>1.257</th>
<th>0.21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree/Postgrad. Degree</td>
<td>131</td>
<td>0.4137</td>
<td>0.82353</td>
<td></td>
<td></td>
<td></td>
<td>0.848</td>
<td>0.358</td>
<td>1.6</td>
<td>0.111</td>
</tr>
<tr>
<td>Assurance</td>
<td>Diploma/Postgrad. Degree</td>
<td>78</td>
<td>0.0865</td>
<td>0.70806</td>
<td>0.1705</td>
<td>Equal variances assumed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Degree/Postgrad. Degree</td>
<td>131</td>
<td>-0.084</td>
<td>0.76624</td>
<td></td>
<td></td>
<td></td>
<td>0.848</td>
<td>0.358</td>
<td>1.6</td>
<td>0.111</td>
</tr>
</tbody>
</table>
5.9 CONCLUSION

This chapter presented and discussed the procedures and processes carried for data collection and analysis of the quantitative study. The first to be presented were the processes followed to develop a scale (questionnaire) for our study. Also presented were the results of a pilot study conducted to test the reliability and validity of the questionnaire. The sampling technique was then presented, followed by data collection processes. Finally, the processes and procedures of data analyses were presented. The analyses included reliability testing and the gap score analysis.

The next chapter presents and discusses the results of the quantitative study.
6 DISCUSSION OF RESEARCH RESULTS

6.1 INTRODUCTION

This chapter presents and discusses the findings of the qualitative and quantitative research studies carried out to answer the research questions posed in Chapter 1 of this study. The purpose of the study was to explore and understand the quality of students support services from the perspective of students in a DE environment. The study set the following objectives:

- Examine students’ expectations and perceptions of their experiences of the quality of student support services in a DE environment.
- Analyse service quality gaps between students’ expectations of their support services and their perceptions of experienced service, in order to determine the extent of those gaps.
- Identify underlying service quality dimensions that can measure student support services.
- Validate a context specific framework for understanding student support service quality within DE environments.

A sequential exploratory mixed methods approach was used to collect and analyse the data. A mixed-methods approach uses both qualitative and quantitative data collection and analysis methods and tools in a single study (Tashakkori & Creswell, 2007:4). In this study, two sequential research phases were employed for this purpose.

During the first phase, qualitative interviews were held with Unisa students. A combination of convenience and snowball sampling techniques was used to recruit the participants. The data were analysed using thematic analysis (TA).

The findings of the study showed that there were service quality discrepancies (service quality Gap 5) between students’ expectations and the perceptions of their experiences of the quality of student support services. (The discrepancy between services users’ expectations and perceptions is referred to as Gap 5). In addition, the findings of the qualitative study offered empirical support for the six service quality dimensions proposed in the study to assess the quality of student support services in DE environments. The qualitative data suggested that student support service
quality can be measured by these dimensions: tangibles, reliability, delivery, responsiveness, assurance and user participation.

In order to probe these findings further, a quantitative study was conducted as the second phase of the study. The themes that were uncovered from the qualitative data after the analysis process were then used to develop a context-specific questionnaire to investigate service quality in relation to student support services, from the perspectives of students. The SERVQUAL model was adopted and modified to guide the development of the framework, retaining four of the five SERVQUAL dimensions, namely tangibles, reliability, responsiveness and assurance, and adding two new dimensions: delivery and user participation. Each dimension was measured by a number of items, making a total of 24 items across the six chosen dimensions. The content of the items was also changed to consider DE student support service attributes so that the instrument could be relevant to measure student support services. The instrument measured students’ expectations and their perceptions of experienced service.

6.2 RELIABILITY AND VALIDITY OF THE ANALYSIS PROCESS
Processes to ensure reliability and validity in both studies (qualitative and quantitative) were followed. In the qualitative study, validity was established through the use of “member checks” procedures. Construct validity was also performed. In addition, for the analysis process, I used quotes from the participants’ accounts to support the themes that were generated from the data. Constant comparison was used to discover themes.

In the quantitative study, two reliability test procedures were performed to ensure the reliability of the scale. It is believed that all the processes followed were able to enhance reliability and validity of the analysis procedures and therefore the results.

6.3 QUALITATIVE RESULTS SUMMARY
The purpose of the exploratory qualitative interviews was two-fold. The first aim was to help the researcher understand and gain insights into students’ expectations and perceptions of the quality of student support services, from their perspective, as users of Unisa student support services. The second aim was to collect data in order to develop a model and a scale to further measure students’ perceptions
and their expectations of support services, in the second research phase. The researcher interviewed 10 students who were the current users of Unisa student support services.

The findings of the study showed that students’ expectations were higher than their perceptions of their experiences. According to Parasuraman et al (1988), it is common for expectations to exceed perceptions. There were many insights in the exploratory study and these research insights were consistent with Parasuraman et al’s (1985:44) research on service quality:

The university management and the staff (both administrative and teaching) may not always understand what features connote high quality of services to students; what feature a service should have in order to meet students’ needs; what levels of performance on those features are needed to deliver high quality service.

Furthermore, interviews proved to have a diagnostic value (Parasuraman et al 1994; Gupta 2004) in that they generated information that pinpointed the shortfalls in service delivery. Students raised a number of important issues concerning their experiences of the support they received, on the performance of their support services and on their expectations as students in a DE university. In addition, their evaluations of the quality of their support services reflected the outcome of their experiences and the process of the delivery of services. This is consistent with Parasuraman et al’s (1985) finding, that service users do not evaluate service quality "solely on the outcome of a service; but they also consider the process of service delivery."

6.4 THE RESULTS OF THE QUALITATIVE AND QUANTITATIVE MERGER

The relationship between the themes identified from the qualitative data and the SERVQUAL dimensions were established. The themes showed consistent patterns of commonalities with regard to student support services in DE. The themes confirmed the relevance of the six service quality dimensions proposed in Chapter 3 to understand and measure service quality in DE. Four of these dimensions were SERVQUAL dimensions, namely tangibles, reliability, responsiveness and assurance. Two other dimensions (delivery and user participation) were added to the SERVQUAL model. The common patterns in the data suggested an answer to research question (RQ) 3: Can we develop a context specific student service quality framework for DE?
6.5 THE RESULTS OF THE QUANTITATIVE STUDY

The quantitative study was conducted to serve two purposes: firstly, to expand the qualitative research findings by quantitatively measuring students’ expectations and their perceptions of the quality of students' support services and determine the existence of discrepancies (service quality gaps). Secondly, the quantitative research was intended to develop a scale to measure students' expectations and perceptions and to validate the scale and the proposed student support service quality model designed from the qualitative data.

Two hundred and nine (209) Unisa students were selected by quota sampling technique. The data were collected using the modified SERVQUAL questionnaire. The questionnaire was divided into three sections, namely: Section A - Demographic details, Section B - 24 questions measuring students’ expectations and Section C - 24 questions measuring perceptions of experiences. The questionnaire covered 6 dimensions, namely: Tangibles, Reliability, Delivery Responsiveness, Assurance and User Participation. Items were measured on a 1-5 Likert-type scale:

1= Strongly Disagree;
2= Disagree
3= Partially Agree
4= Agree
5= Strongly Agree

Several quantitative data analysis procedures were followed to analyse the data. These were frequency distributions, descriptive analysis, reliability tests, independent samples t-test (Analysis of variance). Descriptive statistics were calculated for students’ expectations and their perceptions of their experiences of the quality of students' support services. The mean for expectations was 4.18 and 3.85 for perceptions. The results are discussed in relation to research question.

R Q 1: What are students’ expectations and the perceptions of experiences of the quality of student support services in a DE environment?
Students’ expectations and their perceptions of experiences of the quality of student support services were both measured using a 5-point scale, whereby higher numbers indicated higher levels of expectations or perceptions. The analysis of the questionnaire was based on four dimensions, namely Tangibles, Reliability, Assurance and Delivery, as the other two Responsiveness and User participation were deleted. Each dimension had its own items to measure the quality of DE student support services.

The data showed that, generally, the students’ expectations exceeded the perceived performance levels of the student support services. According to Parasuraman (1985:48), when expected service is greater than perceived service, “perceived quality is less than satisfactory and will tend towards totally unacceptable quality”. This is supported by Bitner (1990) who points out that if expectations exceed service performance, dissatisfaction occurs. This result confirmed the findings of Kangai et al (2011); Bbuye (2006); Unisa (2007); HEQC (2009); Simpson (2003) that student support services in distance education are inadequate.

The overall mean for expectations was 4.1894 and the standard deviation was .48276. The standard deviation was close to the mean score; meaning that the scores of the expectation attributes (items) were not very different from one another. What is implied by this is that distance education students expect very high performance from their university’s student support service system. Furthermore, this shows that there were many commonalities. This result supports the qualitative data. According to Parasuraman et al (1985), commonalities indicate that a general model of service quality can be designed. Moreover, this result shows that students’ expectations are an important evaluation tool. This confirms Jain and Gupta’s (2004) and Parasuraman et al’s (1988) assertion that expectation questions have a diagnostic value; and that they can help managers ascertain where the quality shortfalls prevail and “what possibly can be done to close the gap” Jain and Gupta (2004:29).

On the other hand, perceptions of experiences result showed how spread out many students’ experiences were with regard to their support services. The mean for perceptions of experiences was 3.85 and the standard deviation was .617. The logical interpretation here would be that the student support services performed well in certain areas and dismally in other area. According to
the results, the items rated high for the actual service perceived were knowledge and skills of lecturers (4.34), knowledge of the administrative staff (4.14) and the encouragement by lecturers (4.15). This means that Unisa support service system performs well in these areas. These are the only areas of support services that have met or surpassed the expectations and needs of students. This result is supported by the qualitative data. The participants commended their lecturers for their knowledge, skills and enthusiasm. Many studies have shown that service users’ expectations are higher than their perceptions.

**RQ 2: Are there gaps between students’ expectations and the perceptions of their experiences?**

The gap score was calculated as the difference between the expectation scores and the perception scores. These gap scores measure service quality and hence DE students’ satisfaction. According to Parasuraman (1985:48), when expected service is greater than perceived service, “perceived quality is less than satisfactory and will tend towards totally unacceptable quality”.

The data revealed that there were gaps between students’ expectations and the perceptions of their experiences. The closer perceptions are to expectations, the higher the perceived level of quality. The largest gap scores were: individual study spaces for quiet study (-1.23); feedback in time to prepare for examinations (-0.73); delivering study materials on time (-0.49); and lecturers providing feedback to identify areas of improvement (-0.46).

Furthermore, an Independent-Samples t-test was conducted to examine the significance of relationships between the demographic characteristics of DE students and the gap scores. The demographic characteristics examined were gender and programme of study. Levene’s test for equality of variances was performed and Levene’s test showed that there were no significant differences between gender and Gap scores and between programme of study and Gap scores.

Studies such as Green (2014); Moenikia et al (2013), Tan and Kek (2004) that used SERVQUAL dimensions to assess service quality in higher education recorded negative gaps between students’ expectations and perceptions.

These results are supported by the qualitative study. These gaps across all dimensions indicate that there are huge discrepancies between the type of service students expect and need and the service they receive.
RQ 3: What are the underlying service quality dimensions of student support services in DE environments?

The results of the qualitative and quantitative studies have found that Tangibles, Reliability, Delivery and Assurance are the underlying service quality dimensions to assess the quality of distance education students support services. These multi-item dimensions are based on the empirical evidence and the literature; and they are specific to address distance education contexts. Moreover, the reliability of these dimensions and their items was tested and we are confident that we can now have a model to help distance education institutions understand student support services. Their reliability was evaluated and was found acceptable. The levels of alpha, ranged from 648 to 772. Furthermore this result shows that service quality is multidimensional.

RQ 4: Can a context-specific model of service quality and a scale to investigate and measure the quality of student support services be developed?

A reliability test was conducted using Cronbach’s alpha to establish how closely related the 16 items of the scale were. A scale is said to be internally consistent if all of its items are strongly correlational. A high average correlation among the items of the four dimensions was found, suggesting that they were all measuring the same construct. The overall alpha values for expectation and perception items were .843 and .846 respectively. This suggests that the items had a relatively acceptable internal consistency.

Furthermore, three validity evaluations were carried out to test the validity of our scale. The first validity test was face validity. In analysing face validity the researcher adapted Johns and Lee-Ross’s (1998) checklist to guide the process. The checklist included:

- Read through each item to check logic, sense and spelling mistakes
- Simple and familiar words were used to replace some unfamiliar words
- Some items were rephrased in order to keep them as short as possible, at the same time retaining the meaning.
- Redundancy was checked.

This whole process cut the number of the scale’s items by a third.
The second process was to test construct validity of the scale. This involved assessing whether the questionnaire was relevant to students' stated expectations and perceptions of their experiences. Each questionnaire item was assessed against the findings of the exploratory research to determine whether students' views were well captured; and against concepts on student support services found in the literature.

The third process was the use of stakeholder checks. The questionnaire was given back to some of the students who had participated in exploratory study. The participants mentioned that their views were well captured; that the language used in the questionnaire was clear and not difficult, and that the questions were straightforward and easy to answer.

The researcher is confident that the proposed model and the scale will help distance education institutions to understand and measure the quality of students' support services. The model finds support in Martinez-Arguelles, Castan and Juan's (2010) assertion that one of the most important themes in service quality is the development of, reliable, valid and replicable measures of service quality. Other models which have adapted SERVQUAL to address the needs of higher education and distance education include; the HEdPERF (Firdaus 2004); the enhanced SERVQUAL (Tan and Kek, 2004) and the DL-sQUAL scale (Shaik, Lowe and Pinegar, 2007).

6.6 CONCLUSION

This chapter highlighted the importance of a combination of qualitative and quantitative methodologies to answer the research questions. It also presented the results of the quantitative study and answered the research questions. The next chapter presents conclusions and recommendations.
CONCLUSIONS AND RECOMMENDATIONS

7.1 INTRODUCTION

Service quality is a complex phenomenon and perhaps not well understood in some higher education and DE institutions. This study uncovered some problems which, the researcher asserts, should be acknowledged by DE institutions and external quality assurance agencies.

The first problem is that service quality definitions and measurements are still elusive in higher education in general and in DE in particular. For example, there is no consensus on a definition of quality, and as a result there are no common measurements to replicate.

The second problem is that quality evaluations carried in many institutions are done from a broad perspective and tangible measurements are used. This is illustrated by the quality criteria developed by South Africa's HEQC and those developed by NADEOSA. These criteria are not tailored to understanding what students expect and want with regard to their support services.

The third problem is that DE institutions themselves evaluate the quality of student support services from the institutional perspective. This has limitations in that students, who are the users of services and who understand the performance of these services, are not given the opportunity to evaluate and determine the quality of their support services. Moreover, 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. Inappropriate measurements of assessment are not likely to address quality within DE support systems. This limitation could explain why support services have been declared inadequate at some DE institutions such as Unisa. Furthermore, the deficiencies within student support services might never be understood if the quality of these services is evaluated from the institutional perspective on an ongoing basis. According to service quality pioneers Zeithaml, Parasuraman and Berry (1990:16) the only criteria that count in evaluating service quality are those defined by the service users.
Although service quality has proven to be a complex phenomenon, the work of service quality researchers Parasuraman et al (1985; 1988) has helped researchers understand and measure it. Many researchers in higher education are showing increasing interest in service quality research, judging from the number of studies conducted. According to Martinez-Arguelles et al (2010:151), the most dominant theme in service quality studies in higher education is the "development of reliable, valid and replicable measures of perceived quality".

Research questions

All the research questions were answered.

1. What are students’ expectations and the perceptions of experiences of the quality of student support services in a distance education environment?
2. What are the gaps between students’ expectations and the perceptions of their experiences?
3. What are the underlying service quality dimensions of student support services in distance education environments?
4. Can we design a context specific student support service framework to understand service quality in distance education environments?

Firstly, students’ expectations and the perceptions of experiences of the quality of their support services were investigated and the gaps were measured to answer research questions 1 and 2. The study uncovered some gaps (discrepancies) between students’ expectations and the perceptions of experiences of the quality of their services. Secondly, the qualitative and quantitative data confirmed that the quality of student support services in DE can be measured by four quality dimensions, namely tangibility, reliability, delivery and assurance. This helped the researcher develop a context-specific model of service quality and a scale instrument to understand and measure the quality of DE students support services. This answered research questions 3 and 4.
7.2 DISCUSSIONS OF THE FINDINGS

Student support services are regarded as an integral part of DE. Studies (Kangai et al, 2011; Bbuye 2006, Unisa 2007, HEQC, 2009; Simpson, 2003) have shown that student support services in DE environments are inadequate. This means that the level of the quality of DE student support services is unacceptable and does not meet the needs of the students, who are the users of these services. In accordance with the literature, the quality of services in any given service industry is assessed from the service users’ perspective (Simpson 2002; Schneider & White 2004; O’Neill & Palmer 2004; Pollit 1992; Zeithaml et al 1990; Gronroos 1990; Parasuraman et al 1985; 1988; 1990). This is done by measuring the expectations and perceptions of service users. In DE, service users of students support services are students themselves and they should be afforded the opportunity to assess the services provided to them.

The model chosen to guide this study was the SERVQUAL model (Parasuraman et al 1985, 1988) which measures service users’ expectations and perceptions in order to understand service quality from the service users' perspective. The generic SERVQUAL model was modified so that it could measure expectations and perceptions of students in DE environments.

The study was limited to DE support services that directly impact learning and teaching, such as tutoring, guidance on learning and assignments, feedback, interactions with teaching and non-teaching staff, study centres and interactions among students. Two sequential research phases were employed, using both qualitative and quantitative data collection and analysis methods and tools. The first phase involved exploring service quality by interviewing students in order to understand the quality of their support services.

The findings of the exploratory study showed that students’ expectations exceeded their perceptions. Generally, the students responded negatively about their university, thus tainting the image of the university. Moreover, the data generated in the exploratory study offered empirical support for the proposed six service quality dimensions (tangibles, reliability, responsiveness, delivery, assurance and user participation). It meant that it was possible to develop a context-specific model of service quality. The qualitative data were also used to develop a questionnaire which was used in the second phase of the research to expand the
results of the qualitative study and to validate the dimensions. The reliability of the dimensions was tested in a pilot study and again during the quantitative study processes. Four of the six dimensions were found reliable to understand and assess the quality of DE student support services. A model of service quality was designed and the four dimension components were: Tangibles, Reliability, Delivery and Assurance. Items for these dimensions were generated to develop a scale to be used to measure the quality of student support services in DE (Appendix F). The model of student support service quality is depicted in Figure 7.1.

The study has revealed that students’ support services do not meet the needs of many students in this university. This means that the level of service quality is not acceptable to the students. The importance of good-quality student support services in DE has been emphasised by many researchers (Kangai 2012; Aluko & Hendrikz 2012; Belawati & Zuhairi 2007; Mowes 2005; Thorpe 2004; Tait & Mills 2003; Simpson 2002) because DE students’ academic success depends on the availability of quality support services. Moreover, students’ retention is influenced by the service quality provided by higher education institutions (Kwek, Lau and Tan 2010). Sewart (1993) puts it more succinctly by stating that if students are dissatisfied, they will drop out and if they are satisfied they will complete their courses. It is hoped that the framework proposed in this study will help many distance education institutions evaluate and manage the quality of their students’ support services.

Organisations such as the HEQC and NADEOSA offer methods to understand and improve the quality of distance support services. However, these methods have limitations in understanding, measuring and therefore improving the quality of DE students’ support services. Using tangible measurements to assess the quality of student support services is not appropriate to understand and improve service quality. Efforts to provide good-quality student support services in DE will continue to pose a challenge to DE institutions if inappropriate yardsticks to assess service quality are used.
7.3 THE STUDY’S LIMITATIONS

There were some limitations associated to this study. The first limitation was with regard to the use of SERVQUAL as a method of collecting data. The SERVQUAL model is widely used to assess the quality of services in many services industries, organisations and institutions. However, Buttle (1996) has noted that the SERVQUAL’s five dimensions (reliability, assurance, responsiveness, tangibility and empathy) are generic and may not be appropriate to assess service quality across all service industries. Nonetheless, Parasuraman et al (1988) stated that the SERVQUAL can be adapted to address the needs of specific service organisations. This study has adapted and modified the SERVQUAL model to address distance education contexts. It is hoped that the new model will be appropriate to assess the quality of services in all distance education institutions.

The second limitation concerns the sampling technique for this study. A probability random sampling could not be carried out because a sampling frame from which a random sample could be drawn was not accessible to the researcher. The University of South’s students’ records – names, postal and email addresses, and telephone numbers are restricted by the university’s Protection of Personal Information Policy (PPIP). This was a limitation because researchers cannot gain access to the list of the population. The advantage of probability random sampling is that it enables researchers to select a sample of respondents that are representative of the population.

In order to ensure that a proportion of the study’s sample participated in the research, a quota sampling technique was used. Although this form of sampling is non-probabilistic, researchers use it in quantitative studies where it is difficult to determine a sampling frame due to the absence of a list from which to draw a sample. The advantage of using quota sampling technique is that the sample represents the characteristics of the population being studied. Quota sampling is regarded as equivalent to stratified sampling, which is a probability sampling technique (Yang & Banamah, 2014). In this study, quota sampling allowed the researcher to choose research participants from five Unisa regions, which were considered as different strata, therefore ensuring some degree of representativeness. These strata were Gauteng, North West, Northern Cape, Orange Free State and an international regional centre. Students in all these strata had
similar characteristics: men and women, across different age groups, who were registered for different modules and were current users of student support services at Unisa.

7.4 CONTRIBUTION TO KNOWLEDGE

This study has addressed a gap by developing a context-specific student support service model to understand the quality of student support services within DE environments (Figure 7.1). This model shows that the quality of student support services consists of four dimensions, namely: tangibles, reliability, delivery and assurance; and that each dimension is measured by a number of attributes.

Another contribution to knowledge is the development of a scale to measure the quality of student support services (Appendix F). The researcher has no knowledge of a similar framework in DE in South Africa. By developing a framework to assess the service quality of DE students’ support services, the study has deepened the understanding of the concept of service quality in DE environments. This area has received limited research attention.

7.4.1 Student support service quality model

On the basis of the data generated from both qualitative and quantitative research in this study, it was found that DE student support services consist of four service quality dimensions, namely: tangibles, reliability, delivery and assurance. This is consistent with Parasuraman et al (1985), who revealed that service users use similar criteria when evaluating service quality. The proposed context-specific model of student support services is presented in Figure 7.1.
Figure 7.1: Student Support Service Quality Model

QUALITY DIMENSIONS

- Tangibles
  - Study Centres
  - Resources
  - Equipment
  - Administrative staff (personnel)

- Reliability
  - Tutorial Classes
  - Communication

- Delivery
  - Access to lecturers and administrative staff
  - Feedback
  - Guidance on learning and on assignments
  - Encouragement of students

- Assurance
  - Skilled, knowledgeable, courteous and trustworthy staff
7.5 RECOMMENDATIONS

DE institutions usually choose variations of support services in accordance with their offerings. However, it is crucial for DE institutions to identify and plan for student support services that are relevant to students' expectations. 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 provide support services that are not beneficial to students or cannot be used by students for various reasons.

Although measuring service quality from the perspective of students might not be a familiar approach in DE institutions and higher education in general, it is the only method regarded as appropriate to understand the quality of student support services because of services' unique characteristics. Therefore the quality of DE support services should be evaluated by the students who use those services.

The present practice in DE is to use student satisfaction surveys to gather students' perceptions of institutions' offerings. Nonetheless, these surveys have limitations because they do not evaluate service quality, but only one transaction or one support service. Service quality is an overall judgement of the quality of an institution's support services, so in order to understand the quality of services offered by an institution, all student support services should be measured.

The researcher therefore recommends that DE institutions should measure the quality of the different student support services they offer instead of measuring student satisfaction, which considers one or two transactions. By measuring service quality, institutions will better understand the overall performance of services they provide. Furthermore, the resources that are used to carry out student satisfaction evaluations can be transferred to measuring the overall service quality of student support systems.

Tangible and broad measurements should not be used to understand and assess the quality of student support services. They are only appropriate to measure goods or products quality. Moreover, broad measurements should be operationalised so that they are clear. The student support service quality model and the scale instrument developed in this study were developed
specifically to measure quality in a DE context. These are reliable and valid instruments to measure the quality of student support services because they are based on empirical evidence and the literature and their reliability and validity have been validated. Moreover, these instruments are based on the SERVQUAL model which is a recognised framework to understand and measure service quality. The SERVQUAL dimensions are able to measure both expectations and perceptions of service users in order to determine service quality gaps.

In order to maintain quality, it is recommended that Unisa set formal standards to help maintain quality. For example, to maintain the quality of communication, the university should determine what percentage of telephone calls and e-mails or letters should be responded to within five working days. In addition specifications should be made regarding telephone response times; for example, the telephone should be answered within two minutes.

Attention should be paid to different types of service in order to determine what works and what does not. It is hoped that the availability of a specific scale to measure the quality of student support services in DE will encourage further research on the quality of student support services. Such research should determine what type of support is suitable for certain individuals in DE. Support should be geared to students’ needs and should not be a one-size-fits-all phenomenon. In service industries, service users determine, define and judge the quality of the services they receive, by so doing driving “the extent to which the service is used” (Rumble 2000). Therefore services should address students’ needs and should be available to those who need them.

Despite the increasing interest in service quality research in higher education, there are few references to the application of SERVQUAL in DE research. The researcher does not know of any study that has measured student support services in DE environments, in South Africa. It is hoped that this study has addressed this gap.
7.6 FUTURE RESEARCH

For future research, it is recommended that the proposed model of service quality be expanded by including the two dimensions that were not included. These are Responsiveness and Service User Participation dimensions. These dimensions were found to be important variables in measuring the quality of student support services in distance education institutions as evidenced in the qualitative study. Responsiveness dimension relates to academic and administrative staff’s willingness to help students beyond the call of duty and providing prompt service. User participation on the other hand relates to the concepts of self-reliance and peer support, two concepts which are very important in distance education. Nonetheless, when the internal consistency of the items of our model was assessed during reliability testing, these two dimensions registered very low reliability and were eliminated. It is therefore suggested that suitable items (attributes) for these dimensions be generated and tested so that the dimensions can be included in the model.

7.7 CONCLUSION

This study explored service quality in a DE environment. The study as a whole has suggested useful insights into the evaluation of students’ support services in DE environments. The findings and the development of the service quality model and measurement tool serve as a starting point to understanding and measuring the quality of distance education support services. Although the model and the scale are at the preliminary stage, they have demonstrated psychometric properties based on reliability and validity analyses and are therefore credible. This model is deemed to be a useful tool because it addresses the multi-dimensionality of student support services. Service quality is “a global judgement” of a service user across all services offered by an organisation (Parasuraman et al 1988:16), therefore it can only be assessed through the use of a multi-dimensional measurement tool. Another advantage of this model is that it assesses perceptions of experiences and expectations. Service users’ expectations have a diagnostic value because they pinpoint shortfalls in service quality (Parasuraman et al 1994).

Furthermore, this model can be used by DE institutions to collect information on their students’ experiences and their expectations of their support services. It can also help DE managers and
administrators identify quality weaknesses in support service systems. For example, Unisa can use this tool to improve the evaluation and management of students’ academic and administrative support services. In addition, the measurements are tailored to the needs of DE support services, therefore the model has the potential to measure service quality across all student support services in an institution. The model’s properties are based on a variation of support services inherent to DE.

Lastly, the study followed a robust step-by-step approach to developing tools to collect and analyse data. Therefore, this study’s research processes and procedures can easily be replicated.
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**APPENDICES**

APPENDIX A: Letter Requesting Permission to conduct research

APPENDIX B: Ethical Clearance

APPENDIX C: Permission to do research

APPENDIX D: Consent form to participate in research

APPENDIX E: Interview questions

APPENDIX F: Questionnaire
APPENDIX G: Language editing certificate
APPENDIX A: Letter requesting permission to do research

FROM: Asteria Nsamba (Mrs)
P.O. Box 1548
Mondeor 2110
Johannesburg
Email: mmansamba@yahoo.com
Phone: 0829763016

TO: Senate Research and Innovation Committee
The University of South Africa
PO Box 192
Unisa, Pretoria, 0003

DATE: 01 April 2014

SUBJECT: REQUESTING PERMISSION TO CONDUCT RESEARCH AT UNISA

My name is Asteria Nsamba, a PhD student at the University of South Africa (Unisa). I am kindly requesting the Senate Research and Innovation Committee’s permission to conduct research at Unisa. The research I wish to conduct for my Doctoral thesis involves the exploration of open and distance learning (ODL) students’ perceptions and expectations of the quality of student support services offered at Unisa. This study will be conducted under the supervision of Professor Mpine Makoe, the Director of the Institute for Open and Distance Learning at Unisa.

I am fully familiar with the university’s policies on Research and Ethics. I promise to respect the rights of all those who will be participating in this study.

Attached are: a copy of my thesis proposal (with samples of interview questions questionnaire and participants consent form); CV and Ethical Clearance Certificate.

Yours faithfully

Asteria Nsamba
APPENDIX B: Ethical Clearance Certificate

Research Ethics Clearance Certificate

This is to certify that the application for ethical clearance submitted by

A Nsamba [33218137]

for a D Ed study entitled

Exploring students’ perceptions and expectations of the quality

of support services at Open Distance Learning (ODL)

environments

has met the ethical requirements as specified by the University of South Africa College of Education Research Ethics Committee. This certificate is valid for two years from the date of issue.

Prof CS le Roux 12 August 2013 1
CEDU REC (Chairperson)
lrouxcs@unisa.ac.za
Reference number: 2013 Aug/33218137/CSLR
Ms AN Nsamba
College of Education

Dear Ms Nsamba

PERMISSION TO DO RESEARCH INVOLVING UNISA STAFF, STUDENTS OR DATA

A study into "Exploring Students’ Perceptions and Expectations of the Quality of Support Services at Open Distance Learning (ODL) Environments"

Your application regarding permission to conduct research involving Unisa staff, students or data in respect of the above study has been received and was considered by the Unisa Senate Research and Innovation and Higher Degrees Committee (SRIHDC) on 17 April 2014.
It is my pleasure to inform you that permission has been granted for this study as set out in your application.

We would like to wish you well in your research undertaking.

Kind regards

__________________________

PROF L LABUSCHAGNE

EXECUTIVE DIRECTOR: RESEARCH
APPENDIX D: Consent form

STUDENT CONSENT FORM TO PARTICIPATE IN RESEARCH

You are being invited to participate in a research study titled “Exploring Students’ Perceptions and Expectations of the Quality of Student Support Services at Open and Distance Learning (ODL) Environments”. Please read this form carefully before agreeing to take part in the study.

PURPOSE: The purpose of the study is to explore experiences and expectations of open and distance learning (ODL) students with regard to the quality of student support services they receive. The researcher is interested in knowing ODL’s students views with regard to the delivery and the quality of student support services they receive.

The methods that will be used to meet this purpose include surveys and interviews.

You are encouraged to ask questions or raise concerns at any time about the nature of the study. There are no risks involved in participating in this study. Your name will not be revealed.

If you decide to participate, please write your name below. The researcher conducting this research is Asteria Nsamba. If you have any questions, please contact the researcher at mmansamba@yahoo.com, cell number: 0829763016.

Statement of Consent

By signing below I acknowledge that I have read the above information and I consent to participate in the study.

__________________________________ ____________________
Name                          Date
APPENDIX E: Interview Questions

Interviewer: Unisa provides students support services to its students. A list of these support services was sent to you. I would like to hear your opinion about each one of these. What are your expectations? Are you happy? What would you like to see? Let us start with tutorials: face-to-face and online tutoring.

Interviewer: Face-face tutorial classes?

Interviewer: Online tutoring?

Interviewer: Feedback on assignments and examinations?

Interviewer: E-mail communication?

Interviewer: Cell and telephone communication?

Interviewer: What are your expectations of your lecturers/tutors regarding the following: their attitude, their teaching skills, their knowledge?

- Interaction with your lecturers?
- Interactions with tutors?

Interviewer: Administrative support?

Interviewer: Study (Learning) Centre?

Interviewer: Study material and study material delivery?

Interviewer: Guidance on assignments?

Interviewer: Guidance on learning?

Interviewer: MyUnisa service?

Interviewer: What are your expectations as a Unisa student?

Interviewer: As we conclude could you suggest names of students who might want to participate in the research?
APPENDIX F: Questionnaire

RESEARCH QUESTIONNAIRE

My name is AsteriaNsamba. We are conducting a research study on the quality of students' support services in distance education environments. One of the aims of the study is to measure the impact of Unisa’s students' support services. We are interested in knowing your views on your experiences and expectations of student support services you receive at Unisa.

In all the questions, we ask about your personal opinions, so there is no right or wrong answer. All the information provided will be treated in confidence. If you have any questions, please email:

Email: mmansamba@yahoo.com

SECTION A: Demographic Details

Mark the appropriate box with X

1. Gender
   - Male
   - Female

2. Age
   - Age Range
   - Between 20-25
   - Between 26-30
   - Between 31-40
   - Between 41-50
   - Above 50

3. Highest qualification:
   E.g. Matric

4. In which academic year are you?
   ………………………………………………………………………

5. In which programme are you registered? E.g. BA, BSC etc.
SECTION B: STUDENTS EXPECTATIONS

Our research with students attending a distance education university has indicated that students expect their university to deliver good quality student support services which meet their expectations. Below are some of the expectations expressed by the respondents. Based on your experience as a distance education student, show the extent to which you agree with the statements below. Mark the appropriate box with X

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<th>A good distance education university will provide study centres (learning centres) equipped with modern resources such as computers</th>
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<td>A good distance education university will provide clean and comfortable study centres</td>
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<td>A good distance education university will create individual study spaces for quiet study at its study centres</td>
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<td>A good distance education university will provide basic resources in working condition at its study centres</td>
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<td>When good distance education universities promise to do something by a certain time, they do it</td>
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<td>Good distance education universities provide tutorial classes as promised</td>
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<td>A good distance education university's lecturers will answer students' emails or letters whenever they need help</td>
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<td>Administrative staff in good distance education universities will answer the phone in less than two minutes</td>
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<td>Administrative staff in good distance education universities will attend to students' problems in good time</td>
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<td>Students in good distance education universities will receive feedback in time to prepare for examinations</td>
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<td>Lecturers in good distance education universities will give their students feedback that identifies areas for improvement</td>
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<td>Lecturers in good distance education universities are available on email or phone</td>
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### Good distance education universities' lecturers give their students assistance and guidance on their assignments

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### Good distance education universities deliver study material in good time and students start work in good time

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### Lecturers in good distance education universities will have required knowledge and skills to answer students' questions

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### Lecturers in good distance education universities will encourage their students to work hard

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### Lecturers in good distance education universities will instill confidence in their students

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### Lecturers in good distance education universities will have required knowledge to answer students’ questions

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### Administrative staff in good distance education universities will be polite to students whenever they need help

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### Students in good distance education universities will motivate themselves to study

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### Students in good distance education universities will have confidence in themselves

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### Members of student support groups in good distance education universities will add value to one another

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### Members of student support groups in good distance education universities will be more supportive to group members than lecturers

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### SECTION C: STUDENTS' PERCEPTIONS OF EXPERIENCES

The following statements relate to your experiences and your feelings about support services offered at Unisa. For each statement, please show the extent to which you believe Unisa has the features described by each statement, by marking the appropriate number with X.

1 = Strongly Disagree  2 = Disagree  3 = Partially Agree  4 = Agree  5 = Strongly Agree

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<td>Unisa has created individual study spaces for quiet study at its study centres</td>
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</tr>
<tr>
<td>9</td>
<td>When I phone an administrative department at Unisa, the phone is answered in less than two minutes</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>10</td>
<td>When I encounter an administrative problem with my studies, the relevant administrative department attends to the problem in good time</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>11</td>
<td>I receive feedback in time to prepare for examinations</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>12</td>
<td>My lecturers give me feedback that identifies areas for improvement</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>13</td>
<td>My lecturers are available on phone or email</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>14</td>
<td>My lecturers or tutors give me assistance and guidance on assignments.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>15</td>
<td>Unisa delivers study material in good time and I start my work in good time</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>16</td>
<td>My lecturers have required knowledge and skills to answer my questions</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>17</td>
<td>My lecturers encourage me to work hard</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>18</td>
<td>My lecturers instill confidence in me</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>19</td>
<td>Administrative staff members at Unisa have required knowledge to answer students’ questions</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>20</td>
<td>Administrative staff members at Unisa are always polite whenever I need help</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>21</td>
<td>I motivate myself to study</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>22</td>
<td>I have confidence in myself</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>23</td>
<td>Members of the support group to which I belong add value to my learning</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Members of my support group are more supportive to me than my lecturers</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>24</td>
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</tbody>
</table>
24 February 2016

This is to certify that I have edited the dissertation of Asteria Nsamba submitted in fulfilment of the requirements for the degree of DEd in Curriculum Studies in the College of Education, Department of Curriculum Studies, Unisa.

Title:

Exploring the quality of students' support services in distance learning environments