#### UNIVERSITY OF KWAZULU-NATAL

# STUDENTS PERCEPTION OF SERVICE QUALITY DELIVERED AT THE UNIVERSITY OF KWAZULU-NATAL, WESTVILLE CAMPUS.

By

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A dissertation submitted in partial fulfilment of the requirements for the degree of MASTER OF COMMERCE

## SCHOOL OF MANAGEMENT, INFORMATION TECHNOLOGY AND GOVERNANCE COLLEGE OF LAW AND MANAGEMENT

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#### **DECLARATION**

#### I, Yolanda Mfingwana, Student number 210550625 state that;

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  have for success.

#### **DEDICATION**

My humble efforts are dedicated to my family that I love sincerely, Makhosi Mfingwana, my dad, my mother, Nomthunzi Ncanywa and my brother Litha Mfingwana. I desire to furthermore stir the virtue of education to my future children. I hope to inspire all those who aspire to further their education.

"The most miraculous things in life tend to transpire right before the moment you're about to give up"

KEEP THE FAITH!

#### **ABSTRACT**

Service quality is crucial for organisations, to measure customers' perceptions, as they are factors that influence customer behaviour in the market environment. This study investigated service quality in higher education – so as to access and understand the perceptions of students, in order to deliver satisfactory service. Students encounter diverse challenges as they register in Institutions of higher education, while unprivileged students face immense economic pressure (Jensen and Markland, 1996). Institutions of higher education do not always follow the ethics of quality customer service, which has a great influence on students' perceptions on unsatisfactory service, which may in turn lead to conflict between students and management.

The quality of service delivered by the finance department of the University of KwaZulu-Natal, Westville Campus may have an influential effect on students, hence the need to investigate students' perceptions. It is significant to understand students' perceptions on service quality rendered, as it remains a prominent feature of presentation in organizations (Jensen and Markland, 1996). The intention of this study was to examine students' perceptions on service quality delivered, to enable the researcher gain invaluable insight on the effectiveness and efficiency of service quality rendered to UKZN students. The study used the SERVQUAL model introduced by (Parasuraman, Zeithaml, and Berry, 1985) to direct the study.

This study was conducted at UKZN in 2017. The aim of the investigation was to analyse the perceptions of students on service delivery at UKZN. Students are forever striking, due to financial service and fee increment every year, and their issues remain unattended to by the universities (Davis and Waghid, 2016). Service quality remains crucial in such organisations, hence the SERQUAL model was utilised in this research study, namely its five dimensions: Reliability, responsiveness, assurance, empathy and tangibles. Data was collected using quantitative survey methods. A sample of 97 students was targeted for the study. Questionnaires were administered to honours students in the disciplines of management, supply chain, marketing management and ISTN. The SPSS test was employed to analyse the data gathered from respondents.

The study achieved its objectives on the efficiency and effectiveness of service quality delivered at UKZN (Westville Campus). The information gathered from the study assisted in the research recommendations for the study, and for future researchers.

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#### List of abbreviations

**DEPT-** Department

IT - Information technology

ISTN - Information system and technology

MGT - Discipline of Management

UKZN - University of KwaZulu-Natal

SCM - Supply Chain Management

SPSS - Statistical Package for the Social Sciences

## Appendix

Appendix A - Ethical clearance

Appendix B - Informed consent

Appendix C - Questionnaire

Appendix D - 2-tailed correlation within factors or dimensions

#### **CHAPTER ONE**

#### OVERVIEW OF THE STUDY

#### 1.1 Introduction

In the service industry, service has become very phenomenal that it has concerned researchers. Over the years, many studies have examined a wide range of services in organizations including; banking, insurances, fast food services and hotels (Parasuraman, Zeithaml, and Berry, 1985). Hence, this research tries to approach service excellence from the perception of students and prospects of the quality of service delivered, compared with the actual service delivery at UKZN, Westville Campus. Service quality delivered may have a negative impact on universities to gain competitive advantage (Naidoo and Mutinta, 2014).

Therefore, the study is crucial, so as to thoroughly understand students' perceptions on service quality delivered by the Institution, to find the gaps and to improve the quality of service to its utmost standard and satisfy students and the community as a whole. The results of the study can contribute to improvement of service quality in the University of KwaZulu-Natal (Westville Campus). The study will go ahead and look at the students' perception on reliability, responsiveness, assurance, empathy and tangibles at the finance department, while simultaneously measuring the quality of service delivered by staff at the finance department at UKZN, Westville Campus.

### 1.2 Background of the Study

Service quality studies have always interrelated with customer satisfaction studies from time to time. A study by (Taylor and Baker, 1994), focused on variables as a single entity. Several studies have tried to look at student perceptions and service quality, some of which include: (Butt and Rehman, 2010), investigated 'student gratification in higher learning in Pakistan', this study examined the quality of educational services rendered by the institution, by accessing the perceptions of the students. (Hemsley-Brown *et al*, 2010), investigated the different student satisfaction perceptions across the different programs on offer at the business college. (Oldfield and Baron, 2000), also investigated students' perspectives on the service quality in higher education at a UK university, the study looked at the population that is not really involved with the delivery of the course contents at the institution.

All of the above service quality articles sought 'students' perceptions, and most of the study was conducted in an institution. Much of the studies on student perceptions and service quality in higher educational institutions have most times focused on retention of students, quality of the programs, and teaching content, as well as the effectiveness of delivery of the course contents (Oldfield and Baron, 2000). This study was motivated by the different literatures on service quality to investigate students' perceptions on service excellence in the Institution (UKZN).

To measure the quality of service in an organization, information is accessed from the clients or customers, as the case may be (Oldfield and Baron, 2000). For higher educational institutions, the students are the respondents, for research study. Due to the proliferation of service quality studies on higher education institutions, this research study will narrow it down further by looking at Students' perceptions on service quality delivered in an educational institution. Central to the core function of a service sector is the satisfaction of its clients or customers.

Due to this notion, success of financial service institutions is determined, among other things, on the quality of services, and how innovative it can meet its clients' needs. This study intends to investigate students' insights on quality of service delivered at the finance department at the Institution of higher education. The University (UKZN) comprises four university grounds specifically; Westville campus, Edgewood campus, Howard campus, and Pietermaritzburg campus. This research study will examine students at UKZN (Westville campus). Students have their own perceptions and different expectations of the services provided at the University of KwaZulu-Natal (Naidoo and Mutinta, 2014).

The University (UKZN) has a diversity of different ethnicities; with different backgrounds, hence they may need different individual attention from the staff (Soutar and McNeil, 1996). This study is necessary, as service quality is crucial in higher learning, for the University to gain positive advantage in the market. This is mainly because higher educational institutions have increased competition among themselves, in jostling for students. The institutions now have to seek new creative ways to provide quality services.

Every higher education institution now strives to retain and foster strong loyalties and relationships with the students (Naidoo and Mutinta, 2014). When students are dissatisfied with the services that are delivered in a particular institution, they tend to move to other universities who can offer better services.

Thus, it is crucial for higher education to provide service quality to its students, to gain competitive advantage, and be an attractive place of learning for undergraduate and postgraduate students (Naidoo

and Mutinta, 2014). This study, however, intends to contribute to academic knowledge by examining students' perceptions on quality service delivered at the University of KwaZulu-Natal.

Furthermore, (Rust and Oliver, 1993), stated that the literature of service quality has grown, and the importance of service satisfaction has risen. Service quality is derived from two research paradigms; (Zeithaml, Parasuraman and Berry,1990), stated that in studies of service quality and satisfaction, these two terms are presented as synonyms within the service industry. (Forgas and Bower,1987) and (Tornow and Wiley,1991), establish a connection between the attitudes of customers and personnel that their satisfaction correlates with attitude and perception, based in that organization. The level of service and effectiveness has great impact on the attitudes and values of an organization. (Eskildson,1994), posts that both public and private organizations had hoped to improve services, with the aim to satisfy their customers.

Past research articles have shown that organizations fail to meet customers' expectations. Being able to serve customers' needs with satisfaction is important for all organizations in the market environment. Researchers debate that there is a connection between satisfaction and the objective to buy. (Andreassen, 2001), states when a customer is satisfied, service quality can be easily linked and compared to expectations and the actual experience. When a service fails to meet the expectations of an individual, it is called service failure. When a customer complains, it opens a door to recover the service to move from dissatisfaction to satisfaction.

According to (Anderson, Fornell, and Lehmann, 1994); (Rust and Zahorik, 1993), the marketers have increased the demand for service quality, to measure how the business is operating in the market environment. Service quality is how the service provider's market meets the demands, and how they meet customer satisfaction (Shank and Langmeyer, 1994). Universities are in constant competition in attracting students by using the service quality as a way to gain competitive advantage (Naidoo and Mutinta, 2014). This study will highlight the students' perceptions on service quality delivered at the University of KwaZulu-Natal.

#### 1.3 Research Problem

Students face challenges as they enroll in Universities, unprivileged students face massive financial stress. Institutions of higher education do not follow the ethics of quality customer service, and this has a great influence on students' perceptions on unsatisfactory service, which may lead to conflict between students' and management.

Service quality is extremely crucial for students, as they come from different backgrounds, and their needs need to be met, as they contribute significantly and financially to universities. Such issues need to be addressed and accommodated, to gain competitive advantage. The quality of service delivered by the finance department of the University of KwaZulu-Natal, Westville Campus, may have an influential effect on students; hence students' perceptions need to be investigated. It is important to understand students' perceptions on service quality rendered, which remains a prominent measure of presentation in organizations (Jensen and Markland 1996).

The University of KwaZulu-Natal is an academic service-rendering organization that also renders other different services, like financial services, information communication services, and human resource services offered to both staff and students together. These services need to be of a high-quality, with reduced issues or conflicts. Studies on students' perceptions of the service rendered by the finance office within higher education institutes in South Africa are known (Naidoo and Mutinta, 2014). There is data on student perceptions within the University of KwaZulu-Natal; however, data on the finance department within this institution is rare. To the best of our knowledge, no report exists, or has ever been published on this topic. By doing so, the study seeks to examine the students' perceptions on service quality delivered at the University of KwaZulu-Natal, Westville Campus. Students have their own perceptions and diverse expectations regarding services rendered at the University of KwaZulu-Natal (Naidoo and Mutinta, 2014). This study was spurred by the unsatisfactory service quality students get at the finance department, with their massive financial stresses, which may then lead to conflict between students and management, and furthermore lead to violent student protests.

#### **1.4 Research Questions**

- 1.4.1 What are the students' perceptions on service reliability at the finance department at the University of KwaZulu-Natal?
- 1.4.2 What are the students' perceptions on service responsiveness at the finance department at the University of KwaZulu-Natal?
- 1.4.3 What are the students' perceptions on service assurance at the finance department at the University of KwaZulu-Natal?

- 1.4.4 What are the students' perceptions on empathy of staff at the finance department at the University of KwaZulu-Natal?
- 1.4.5 What are the students' perceptions on tangibles provided at the finance department at the University of KwaZulu-Natal?
- 1.4.6 What are the students' perceptions on service quality delivered at the finance department at the University of KwaZulu-Natal?

#### 1.5 Research Objectives

#### 1.5.1 The key objective

The key objective of the study is to investigate the students' perceptions of the service quality offering at the finance department at the University of KwaZulu-Natal, Westville Campus.

#### 1.5.2 Specific objectives

Specific objectives of the study are:

- 1. To investigate students' perceptions on service reliability at the finance department;
- 2. To examine the students' perceptions on service responsiveness at the finance department at the University of KwaZulu-Natal;
- 3. To examine students' perceptions on service assurance at the finance department at the University of KwaZulu-Natal;
- 4. To establish the students' perceptions of empathy of staff at the finance department at the University of KwaZulu-Natal;
- 5. To investigate students' perceptions on tangibles provided at the finance department at the University of KwaZulu-Natal;
- 6. To establish students' perceptions on service quality delivered at the finance department at the University of KwaZulu-Natal.

#### 1.6 Significance of the Study

The outcomes of this research may contribute towards the improvement of the quality of service, such as better communication systems, people-centred staff (mostly at finance office) delivered to the university of KwaZulu-Natal' students. There are over hundreds of literatures that have investigated service quality in organizations or commercial organizations. Many have looked at different dimensions of services from retail services (Macintosh and Lockshin, 1997), to banking services (Abratt and Russell, 1999) provision of social amenities (Ekinci, 2002), Information technology services (Miller and Doyle, 1987), and even Educational services (Beaumont, 2012); (Brown and Mazzarol, 2009); (Douglas, McClelland and Davies, 2008) in higher institutions of learning.

There are several service quality literatures that have focused on higher institutions of education; we have literatures from the developed countries of the world, United kingdom (UK) (Anderson et al., 1994); (Beaumont, 2012); (Oldfield and Baron, 2000) and United States, literatures form the Asian nations like Iran, Malaysia (Ibrahim, Rahman, and Yasin, 2012), India (Ravindran and Kalpana, 2012), and Pakistan (Butt and Rehman, 2010), and quite a few in South Africa (Van der Wal, Pampallis and Bond, 2002); (vanZyl, 2013).

There are limited literatures on specific services in the higher institutions of learning, most times what research has revealed is perceptions of service quality on Educational services and course delivery and contents of modules (Butt and Rehman, 2010); (Douglas *et al.*, 2008); (Naidoo and Mutinta, 2014). There has been nothing from the other kinds of services at the higher educational institutions. This research focuses on service quality delivered at the University of KwaZulu-Natal, Westville campus. Service quality delivered to an extent also influences some of the decisions of students, whether to stay or leave the institution for other Universities, especially when there is high competition to retain students, and admit more for higher returns (Naidoo, 2015).

#### 1.7 Ethical Consideration

The ethical clearance approval was sought from the ethics research committee of the University of KwaZulu-Natal. The gatekeeper's letter was required from the University Registrar. Upholding of human dignity, confidentiality, privacy and concealment were firmly obeyed to. Each respondent was handed a letter of consent and was apprised of the reason and purpose of the research study before the survey was administered.

This was to protect the rights of participants in the study who wished to withdraw and allow them to make their decisions on participating in the study. This was also to allow privacy and confidentiality to participants who wished to be anonymous in the study.

#### 1.8 Definition of Terms

#### Service quality:

According to Berry, service quality is described as a presentation and an act, and deeds (Kumar, *et al.* 2013).

#### **Students:**

Pupils studying a course in higher education to obtain a degree/diploma (Rau, Coetzee and Vice, 2010).

#### **Perceptions:**

The means in which a specific thing or case is understood, observed or assumed (Harcourt, 2010).

#### Service delivery:

A determination of an organization to place data or process (Crous, 2013).

#### 1.9 Limitation of the Study,

Since the study focuses on UKZN (Westville campus), it will be limited to UKZN Westville students. Therefore, findings cannot be generalised to other campuses of UKZN, or other Universities in South Africa. It was also anticipated that the sensitivity of the topic to some of the participants (students) may hinder their ability to fill out the questionnaires. This was encountered by a number of respondents, which could have resulted in false responses, due to privacy concerns.

The subsequent limitations and predictable difficulties in the research study: The study was limited to one institution in South Africa, University of KwaZulu-Natal. It is not easy to generalise the findings

of the study. The study also concentrated on (Westville Campus), out of three campuses; namely

Howard Campus, Pietermaritzburg Campus, and Edgewood Campus.

The sample consisted of honours students in the discipline of MGT, SCM, ISTN, Governance and

Marketing. It was solely based on the fact that it was more convenient for the researcher, and time

consuming.

The major limitation envisaged for this study was getting access to students in one place, as the

researcher had to manually administer the questionnaires to the students.

There was a difficulty in accessing students, because of their busy class schedules. As a result, the

researcher had to know the students' timetables. Another clear limitation was not receiving 100%

responses from students during the data collection, as some students were unwilling to respond or

complete the survey.

1.10 Thesis Structure (Chapter Overview)

**Chapter One: Introduction** 

In Chapter One of the research, all aspects were concisely debated. The crucial aspects such as the

background of the study, the problem statement, the objectives of the study, and the research questions,

which are still to be undertaken, research methodology and the limitations of the study which were

also debated.

**Chapter Two: Literature Review** 

In Chapter two the analysis of the existing literature by other previously done studies is fully discussed.

The theoretical framework of the study is briefly discussed. The literature review furnished the

researcher with an understanding of the nature of service quality, and how it should satisfy implicit

needs of customers, and meet client expectations. The literature review discussed service quality;

namely perceived service quality, customer expectation, and in detail, explained the dynamic model

of expectations. The literature reviews also examined customer satisfaction and understanding

customers' wants and needs, to meet their expectations. The literature review discussed the service

delivery.

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**Chapter Three: Research Methodology** 

Chapter three deliberates on the research methodology, the study questions being revised, the research

method, which is the approach that will be taken to go ahead with this study. And it will also discuss

the research design, which is a framework of how the study will be conducted, site and setting is the

site in which the study will be conducted, Population is the people that will be the people that the study

will research on, Sampling is the group that will participate in the questionnaires. Data collection,

questionnaire design, data quality control, ethical consideration and data analysis will be discussed.

Chapter four: Presentation of results and Data analysis

Chapter four will present the data analysis and findings of the study, with reference to the objectives

of the study.

**Chapter five: Discussions of findings** 

Chapter five will further discuss the main findings presented in chapter four

**Chapter six: Recommendation and Conclusion** 

Chapter six will outline the recommendations of the study and conclude.

1.11 Summary

This chapter has outlined the study, and the key aspects of the research; namely the motivation of the

study, background, research questions and objectives, ethical consideration, description of terms and

the limitation of the study. In the next section, Chapter Two literature from past researchers will be

deliberated on; the next Chapter three, the methodology; chapter four, the findings of the study; and

five, the recommendations for forthcoming research.

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#### **CHAPTER TWO**

#### LITERATURE REVIEW

#### 2.1 Introduction

This chapter delivers an outline of previous research on information sharing and intranets. It presents the framework. The main purpose of the literature review is to get an insight of previous studies conducted. A range of existing literature was reviewed from different studies, to formulate this chapter. Service quality remains an important component of performance in organizations (Jensen and Markland 1996). In Academia, researchers measure service quality to better understand it, and find better ways to improve the service rendered by the institutions, to gain competitive advantage and build relations with their customers (Palmer and Cole, 1995).

Service quality is vital for any organization, to sustain relationships with its clients and potential customers, as it is a prominent measure to indicate customer satisfaction. The first part of this chapter will briefly discuss service quality and existing models that have been connected to service quality. The main research questions supported in this study are used to deliver an outline of the framework, through which literature is examined, prepared and accessible. It will also further the theoretical framework Gaps model of service quality formulated from (Zeithaml, Parasuraman and Berry, 1990),

#### 2.2 The Conceptual Definition of Service Quality

#### What is service quality?



Figure 2.1: The conceptual definition of service quality

Source: (George and Kumar, 2014)

#### 2.2.1 Service Quality

There are diverse models that define service quality, the SERVQUAL and SERVPERF measure functional quality. Accordingly, diverse models have been adopted in Universities to measure service quality, as students are not seen as customers. The SERVQUAL model introduced by (Parasuraman, Zeithaml and Berry, 1985) identifies five sources that influence customers. This includes the gap between 1) customer expectation and management perception of these expectations; 2) the perception of service delivered by the management; 3) Measuring service quality, 4) what is promised, 5) perceived performance and expectation (Barro, Lee, Jong-Wha, 1994); (Holdford and Reinders, 2001). Different researchers define service in different perspectives, the most predominant researchers on service quality with two perspectives is the SERVQUAL model with five dimensions; namely reliability, responsiveness, assurance, empathy and tangibles. The SERVQUAL model will be utilized in the study. The SERVOUAL model was the relevant model for this sector, as it measures expectations which relate to perceptions (Parasuraman, Zeithaml and Berry, 1985). (Grönroos, 1990) introduced the Technical/Functional quality framework. According to (Parasuraman, Zeithaml and Berry, 1988) defined service quality as an over-all result or attitude related to the dominance of a service comparative to competitive offerings. Service quality is the gap between customer expectations of service, and their perceptions of the experience service quality delivered by the organization (Parasuraman, Zeithaml and Berry, 1985). (Shostack, 1997) debated that in higher learning institutions, the intangible service is education, as services are intangible. (Hittman, 1993) suggested that all forms of experience in tertiary education should be measured in the SERVQUAL model.

Service quality is also the judgment of customers' relative inferiority/superiority of the organization (Bitner and hubbert, 1994). According to (Gronroos, 1984), service quality is the overall outcome of the process where customers have a certain expectation with the service rendered and compares with the service perceived to have received. Berry defines service quality as act, deeds and performance (Kumar, et al., 2013). The AMA defines service as something intangible that you benefit from or satisfactory connected with the sale or goods. (Kotler, 1997) defines service as a process that is provided by the organisation that benefits an individual in an institution. (Geotsh and Stanley, 1998) argue that service is an act of providing or carrying an activity for another individual. According to (McColl, Collaghan and Palmer, 1998) Service quality is how well an organisation meets customer wants and needs. Services can be defined as something that is rendered to a customer through performance and efforts. ASQC explains quality is the whole feature of a product, or service that stands on its capacity to fulfill specified or implicit needs. Quality should completely please customer desires at the lowest rate. Service quality is how well a service meets the client's expectations. According to (Shah, Zeis, Regassa and Amadian, 2008), Service quality is measured in two constructs;

expectation and perceived performance. Scholars have viewed service as diverse from fulfillment. Past researchers also related quality with fulfillment.

There has been more focus in studies on service quality. (Gronroos, 1990) argues that currently service quality is purely based on service economy, and because service marketing and product vary. They are challenges in outlining and assessing the quality of services. According to (Gronroos, 1990) there are four sources of quality (design, relation, delivery and product.)

This study will explore the notion of service quality and different perceptions of students on service at the university. Students have consumed the service, so service quality will be substituted with perceived service quality, as the organization serves its customers with the intention to satisfy them. (Shah, Zeis, Regassa and Ahmadian, 2008)

#### 2.2.2 Perceived Service Quality

According to (Zeithaml, Parasuraman, and Berry, 1990), perceived service quality is when an organization or a firm serves its customers with a purpose to satisfy them. Customers' judge the perceived quality through the experience of the service delivered they enjoyed with the organization. (Ghobadian, Speller, and Jones, 1994), also alluded by stating that the expectations of the consumer or client, service delivery and service outcome plays a huge role on perceived service quality.

(Edvardsson, Gustafsson, and Roos, 2005), also stated that at the point of service of process delivery, production and consumption, consumers form the perceptions of service quality. Furthermore, he concluded that there are certain things that have an immense impact on perceived service quality: the experience, which one encounters with the service being rendered, whether it is favorable or unfavorable, and their emotions towards the service.

(O'Neill and Palmer, 2003), stated that the customer's perception of service quality may be hugely influenced by the experience with a service they have encountered before. (Aldridge and Rowley, 1998), debated that perceived quality is an attitude one has experienced before, but not the same as satisfaction.

#### • Continuum of Perceived Service Quality



Figure 2.2: Continuum of Perceived Service Quality

Source: (Parasuraman, Zeithaml and Berry, 1985).

#### 2.2.3 Customer Expectation

(Ekinci, 2002), debates that expectation in service quality has diverse meanings with different individuals. According to (Gronroos, 2007), for an orderly service long-lasting quality, customers' needs should be satisfied. Furthermore, he derived a model of expectations that elaborates on, and describes professional services and building customer relationship overtime.

The model has three types of expectations;

Fuzzy Expectations: This is when a customer expects a response to a problem that is not resolved.

**Explicit Expectations:** Which are divided into two: realistic and unrealistic. This is when the expectation is nice and clear in the consumers' mind, and vice-versa.

**Implicit Expectation:** This refers to when the service is clearly obvious to the consumer, they are fully aware of what to expect (Gronroos, 2007).

#### • A Dynamic Model of Expectations



Figure 2.3: A Dynamic Model of Expectations

Source: (Grönroos, 2007)

According to Meredith (Estepon, 2011), cited by (Ismail, Rose and Foboy, 2016) in the article "service quality as an antecedent in enhancing customers behavioural intentions", Customers always have expectations when it comes to organizations, and organizations should meet these expectations, and be able to meet them, to reach customer satisfaction

However, this process may be challenging for organizations, as customers' expectations can be immensely dynamic. Moreover, when customers are dissatisfied with the results they expected, they become unhappy customers.

Quality is measured by the customer service. It also determines how your customer expectations determine the reputation of your service. Hence, it is prominent to worry about customer service for an organization to become a success in the market environment. Service quality is hugely determined by customer expectations (Ismail, Rose and Foboy, 2016).

#### 2.3 Customer Satisfaction

According to (Achrol and Kotler,1999), for any product to be a success in the market, it has to satisfy the targeted market. Satisfaction is the person's feeling, emotions whether negative or positive, towards an outcome or expectation of the product or service. For a market to deliver satisfaction to its customers, promises and expectations have to be met. The organization has to understand the wants and needs of the market, to meet expectation and satisfaction.

The organization needs to have the ability to respond quickly to arising problems that could cause a threat. Customers' experiences are very important, because they are likely to tell other people about the experience they had with the product or service. According to (Macintosh and Lockshin, 1997), Customer satisfaction is dependent on developing a relationship with your customers. Individual to individual interfaces form a vital component in advertising of services (Crosby, Evans, and Cowles, 1990); (Czepiel, 1990).

#### **2.4 Service Delivery**

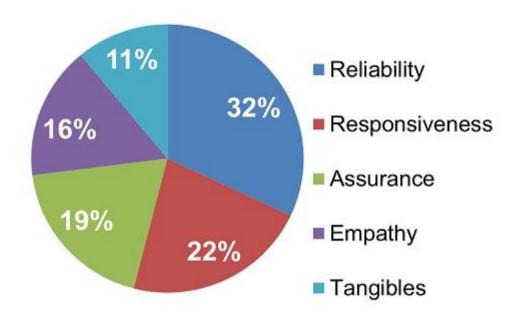
According to (Tornow and Wiley, 1991), service delivery in South Africa is used to describe the basic resources which are namely; water, electricity, sanitation infrastructure, land and housing. Often time's protests erupt towards government public organizations, if there is service failure or the service failure to meet the expectations of the people. In higher institutions of learning, poor service delivery could lead to withdrawal of the student, which could discourage other students or might even lead to protests in some cases. (Beaumont, 2012), in a study conducted stated that students perceptions of the experience they encountered at the institution were lower than what they expected to be served (Markovic and Raspor, 2010).

Universities strive to attract the same segment of students - both nationally and internationally - as this provides a wider range for students to choose from, poor service delivery experienced in higher institutions ranges from challenges with registering at the beginning of the year, poor learning resources such as computers, poor service from administrators, and use of temporary staff during registration (Naidoo, 2015). Universities strive to be unique in service delivery, with degrees, diplomas, it offers funding, scholarships, and a safe learning environment (Naidoo and Mutinta, 2014). The experiences of students should be exceptional in the services that are provided on campus to gain competitive advantage. (Harvey and Green, 1993), stated that quality can be defined as transformative, value for money, perfection, constituency, purpose, exception and fitness.

According to (Le Chen *et al.*, 2014) Service delivery is commonly employed in South Africa to describe the basic resources which are namely water, electricity, sanitation infrastructure, land and housing. Usually organizations protest to demand better service delivery in organizations, if they fail to meet their demands. In higher learning, service delivery is widely available, where students are offered poor service. (Ghadomisi and de Jager, 2009) in a study conducted, stated that students' perceptions of the experience they encountered at the institution were lower than what they had expected in their service (Markovic and Raspor, 2010).

#### • The Five Service Dimensions Customers Care About

What this means for service providers?



**Figure 2.4: Service Dimensions Customers Care About** 

Source: (Arlen, 2008)

The five service dimensions were designed to measure consumer expectation and perception. According to (Arlen ,2008) in an organisation the most crucial is Reliability (32%), Responsiveness (22%), Assurance (19%), Empathy (16%) and least crucial out of the five is Tangibles (11%) as exposed in Figure 2.4.

Reliability in service quality is one of the most crucial dimensions of quality, as it is vital to gain trust from customers, and the organization is willing to deliver as promised. (Hamad, Karmarudin *et al.* 

2015). According to (Davis, 2013) reliability is based on customer experience, how each time the service is being delivered.

(Hardiman, 2012) argues that reliability can be defined in different ways, based on the different parts of the system. Database administrator regards reliability as accurate data. A network engineer regards reliability as a message delivered as they work with reliable protocols and unreliable protocols. According to a re-seller, reliability is seen as an insurance for customers. A researcher regards reliability as something which is accurate. According to a consumer, reliability is when an organization never fails to deliver on time (Hardiman, 2012). The customers' perception is very crucial, regarding service quality delivered by the organization, as to gain competitive advantage and trust in a B2C environment, reliability is a crucial factor. (Hardiman, 2012) and (Hamad *et al.* 2015). Reliability has the following attributes which can make the students fully aware of the consistency and credibility of the finance department at the University of KwaZulu-Natal;

- Feedback given whenever promised
- Department being dependable
- Having convenient operating hours
- Having contradictive responses from all staff

According to (Arlen, 2008), providers have to do what they promised they would do, as customers want to count on the providers to deliver good reliable service. It is more important to be more service reliable first, than to have fancy tangibles to assist consumers, though this does not mean tangibles should not be appealing to the eye.

Responsiveness in service quality (Arlen, 2008), for service quality and customer satisfaction, an organisation has to respond promptly and immediately to issues or queries. Responsiveness plays a crucial role in service quality. It is important that customers acknowledge that providers respond to their requests. Assurance in service quality (Margaret Rouse, 2007) defined assurance as something that has to meet specified requirements in the process of service. Providers of service are expected to be the experts of the service they are delivering. Customers will not acknowledge highly skilled customers, if customers do not recognise that, they will perceive service quality as low (Arlen, 2008).

Empathy in service quality (Kimberleo, 2017), empathy provokes emotion. It is a state of helping customers and negotiating to have a "win-win" situation. Firstly, being able to listen to customers' complaints, queries, and paying attention to all their grievances. Customers always want attention, and that may lack in service delivery, and may be a problem that may anger customers.

It is crucial to convey an understanding attitude when a customer is upset with the service. It is also crucial to show the consumer that you will do your best to resolve their issue, to meet customer satisfaction. Being polite also plays a huge role in service quality and keeping your tone low and allowing the customer to vent out, while trying to think of ways to resolve the issue. To improve service quality, it is vital to ask for customers' input, such as solutions that will satisfy the customer, and finding out about their expectation (Kimberleo, 2017). According to (Arlen, 2008), Customers may have a perception that providers do not care about them, and this affects their view of service quality in the organisation.

Tangibility in service quality, According to (Panda *et al.* 2014), a tangible service is defined as something that is visible to the eye, something that a customer can feel without having to purchase the service and be satisfied. Tangibles could be advanced equipment, computer systems, offices that can give customers a perception of good quality. Similarly, the University of KwaZulu-Natal employs people to improve the quality of service at the finance department, thereby improving customer satisfaction (Panda *et al.* 2014). In organizations which render service, customers rely on reliability, assurance, empathy and responsiveness. (Arlen, 2008), tangibly is the least vital dimension in the dimensions, appeal is crucial but not as important as the above-mentioned dimensions. It is crucial that all the five dimensions fall into place, and not have one fall short in assuring good quality service delivery.

(Vandamme and Leunis, 1993), in a study which measure services in public hospitals argued that the most crucial dimensions are tangibility and assurance in the five dimensions. The study highlighted consumers' perceptions on service appearance. Furthermore, in a study conducted by (Bushoff and Gray, 2004) examined the relationship between service quality, customer satisfaction & loyalty among patients in the private health care industry in South Africa, three dimensions had a positive impact on patients' loyalty namely; empathy, assurance and tangibles. In this study, the significance of tangibles was vital to the patients.

#### 2.7 Challenges Associated with Service Quality

Service marketing and management are both liable for service quality and customer satisfaction (Harris, Baron, and Ratcliffe, 1995).

(Best, 2005) highlighted that when analyzing the dimensions of product quality, customers' expectations, durability, performance and respect to conformance should be included in the strategy.

According to (Naidoo, 2015) when looking at higher education in terms of quality, we refer to good facilities, equipment, lecturer and recreational venues, Admin staff who are mainly dealing with students on a daily basis and staff. All the above are meant to deliver good quality service, for the institution to gain competitive advantage by producing customer satisfaction. According to (Kasper van Heldersdingen and Gabbot, 2006) highlights, that quality refers to attributes being rendered, provided and produced by the organization.

Satisfaction and dissatisfaction is the feedback received from customers, which measures the service quality delivered. The dissatisfaction and satisfaction of service to customers is what measures the organization. Another prominent factor in service marketing is branding. Brands are a crucial factor of an organization, as they are a source of competitive advantage, and add value to the firm. Brands initiate a buying behavior for customers. Different branding strategies are used in the market environment to differentiate one brand from another, to gain competitive advantage and increase buying behavior and attract potential customers (Bruhn and Georgi, 2006). In the study conducted by (Naidoo, 2015) on South African universities, she highlights that the gaps regarding the service delivered in universities can be closed, using information provided by researchers, as students are the main target in high education.

#### 2.6 Service Quality in Educational Institutions

According to (Marzo-Navorro *et al*, 2005) Students are the priority customers in educational institutions. (Guolla, 1999) argues that students can also be seen as the clients, products and producers. In the service quality, literature according to (O'Neill and Palmer, 2004) service quality is defined as the relationship involving students' expectations to receive the perception of the service delivered by the institution. According to (Owlia and Aspinwall, 1996) the student is perceived as the purchaser of the service being rendered in the service exchange, which means the student is regarded as the customer.

(Svensson and Wood, 2007) argue that describing a student as a customer in higher education is seen as unsuitable. It has been found that students, when choosing a University, the first thing they consider before making a decision is service quality, which makes them gain competitive advantage. Donald and (McNicholas, 2004) this generally creates an advantage for a University as higher education institutions are in constant battle in competition for students (Duckworth, 1994).

According to (Hill, 1995) Students when arriving in Universities, as they are perceived as customers have their own expectations that must be achieved by the institution. It is vital that an institution notifies first year students on what to expect, and to knowledge them about lectures and teaching programmes.

(Masson, 2005) points out that it is fundamental to comprehend students' expectations in higher education. This study follows the student's perception on service quality delivered by UKZN (Westville campus) as students' perceptions of service quality may be satisfaction and unsatisfactory, which may lead to students protest. According to (Elliot and Shin, 2002), Students being satisfied with service delivery can automatically encourage them. In a study conducted by (Voss *et al.*, 2007) he established that students expect lectures to be more understanding on them and be politer and friendlier, as this may affect the service quality of the institution. (Winsted, 2000) and (Zeithaml *et al*, 1990) highlight that Service providers need to understand customers, in order to satisfy them. A critical understanding of their behaviours and attitudes. It is also important for staff to be informed about what students expect. This may have a positive impact in improving levels of satisfaction. Oldfield and Baron highlighted that not much attention has been focused on service quality in higher education and suggests that institutions should focus more on what students want, because it is more important. According to (Joseph *et al.* 2005), studies in higher education are more concentrated on researching academic insiders than on students, and understanding their wants, as they are the primary customers.

According to (Heck *et al.*,2000) Higher education institutions are where people are qualified and trained; therefore, it is crucial for the service quality delivered to satisfy, as it may affect other sectors. In higher education, students are seen as the input and output of the organisation in the service process. A study by (Solomon, 1993) "Total quality in higher learning "the study highlighted that quality is more profound and broader than a quality assurance system. She suggested that the quality includes the change in the mindset of the individuals. (Solomon, 1993) noted that organizations find it challenging to change the mindset of employees and attitudes about quality. Attitudes change is vital and essential for service industries, and to get an understanding of the employees in order to meet customer wants and needs. The topic did not get a student's perception, as customer needs are crucial in the tertiary education sector. However, (Patterson, 1991) suggested that for students in the tertiary educational institutions, the key issue should be students' experience, and their needs to be addressed. The experts of the experience should be of institution life.

(Steadman and Dagwell, 1990) study of overseas students' perceptions on tertiary education' presented that there were different sentiments of courses and staff.

There was a lower assessment on library facilities. An additional study in Australian Universities highlighted that students who were achievers made use of "support service" more extensively. (Hittman, 1993) suggested that the approach has been too narrow, and not much attention was paid on the non-academic aspects of the educational experience. He believed that quality was of more significance than just educational experience, and that the depth of students' satisfaction should be more complete, as quality seems to be the main challenge in higher education. (Liu, 2005) adds that organizations need to fill students' expectations and have to know specific conditions to meet these needs, to ensure students' satisfaction. (O'neill and Palmer, 2004) highlights that the difference students expect from the Universities and the service quality delivered is the perception of service quality. (Cheng 1990); (Tan and Sei, 2004) argues that in the market environment, the services rendered by the industrial institution and educational institutions are different, as staff give different roles and services of these organizations. In Universities, different faculties offer services to the students, talk to lecturers' administrators in the service quality process about their issues, having expectations that they will be resolved, which therefore affects students' perceptions of service delivery (Cheng 1990; Tan & Sei, 2004). Proficiency can easily influence quality delivered by the institution; this includes behavior, performance, and knowledge. Therefore, having qualified staff increases perceptions of service quality in higher education (Eres & Clothey, 2013). It is crucial for the management to understand the needs of students.

#### 2.8 Theoretical Framework

This study utilised the service quality model by Zeithaml *et al.*, (2006). This model proposed five dimensions; assurance, Reliability, responsiveness, empathy and tangibles. The SERVQUAL model was used to measure consumer insights of quality and customer satisfaction. In the study (Zeithaml *et al.*, 2006) highlighted that it was vital to satisfy customers, and assess the level of customer service through the service quality assessment. The constructs for this model are as follow;

#### 2.8.1 Assurance

According to (Zeithaml *et al.*, 1990) assurance is the ability of the organization to render service to aspire confidence, trust, and the employee's knowledge. According to (Saad Andaleeb and Conway, 2006), guarantee may not be so prominent in most organizations where the threat is higher, and the purpose of using the service is not known. Assurance may be very crucial when it comes to deciding a place where one can do an operation; hospital and surgeon. Hence, trust and confidence may be signified in the individuals who tie the consumer to the organization (Gupta and Zeithaml, 2006). This construct will be utilized to evaluate the level of assurance at the finance department, UKZN.

## **2.8.2 Empathy**

Empathy is defined as being able to care for the individual, giving special attention. It is how an organization treats its customers (Zeithaml *et al.*, 1990). There are many ways in which customers can be treated uniquely and special: providing their needs and knowing your consumer. This dimension may be crucial for organizations who built relationships with their clients to gain customer loyalty, and ensure survival of the organization in the market environment (Saad Andaleeb and Conway, 2006). This construct will be employed to assess the level of empathy of the finance department, UKZN.

#### 2.8.3 Reliability

Reliability is defined as being able to fulfill your promised service to customers, and delivering the promise (Zeithaml *et al.*, 1990). This dimension is critical, as customers remain loyal to organizations that keep their promises. This is crucial, because word of mouth plays an immense role in the market, as organizations can either gain positive or negative comments from their current customers, to potential customers. This construct will be used to measure the level of reliability of the finance department, UKZN.

## 2.8.4 Responsiveness

Responsiveness is clarified as willingness to assist your consumers, and deliver prompt service. This dimension deals (Zeithaml *et al.*, 1990) with being able to respond quickly to customer complaints, concerns, requests and questions concerning your service. When a firm can communicate effectively with its customers, it is known to be responsive. This construct will be employed to assess the level of responsiveness at the finance department, UKZN.

#### 2.8.5 Tangibles

Tangibles, this dimension is defined as something you can see, the physical appearance, this could be the staff, tables, uniform etc. these physical appearances play a huge role in defining the company's image and perceived quality (Zeithaml *et al.*, 1990). According to a study conducted by (Sohail, 2003), in accordance with the significance of tangibles examined, quality of service provided by the private hospitals, it was revealed that Facilities and appearances were relatively low, compared to expectations of cleanliness.

This construct will be utilized to gain insight on students' perceptions on the tangibles of the finance department, UKZN. (Figure 2.5), below will be utilized to measure the service quality delivered by the finance department at the University of KwaZulu-Natal.

## • Perception of Service Quality and Customer Satisfaction

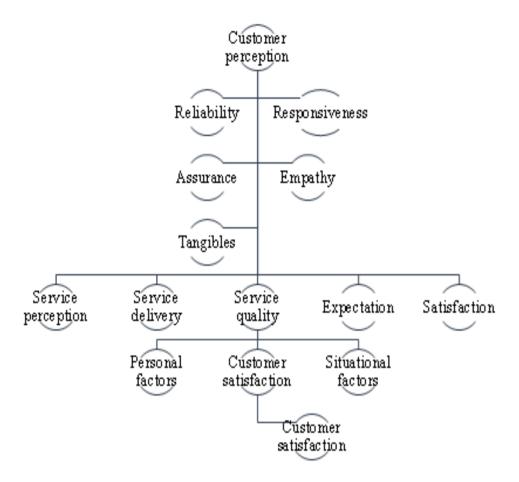


Figure 2.5: Perception of Service Quality and Customer Satisfaction.

Source: Adapted after (Zeithaml et al., 1990)

The service quality model adapted from (Zeithaml et al., 1990) was identified as the model with constructs which could be utilized for this study, namely; Reliability, responsiveness, assurance, empathy and tangibility. They are factors of service quality, which influence customers in the market environment, externally and internally. The model was utilized to measure the service quality delivered at UKZN (Westville Campus). The framework was designed to fit the nature of perception of students of service excellence delivered in higher learning. The additional element to the model was customer perception, which is centred in five dimensions that measure service, namely; Reliability, responsiveness, assurance, empathy and tangibility (Zeithaml et al., 1990). In addition, service

perception, service delivery, service quality, expectation, satisfaction, personal factors, customer satisfaction, situational factors and customer satisfaction.

According to (Panda *et al.*, 2014), service quality is based on the customers' perception, and customer satisfaction in an organization is a strategic goal.

## 2.9 Summary

This study clarified the dimension, methods of service quality. According to the literature review, it can be said that SERVQUAL was the most utilised model when assessing service quality. This chapter discusses the literature that has been conducted by other researchers of service quality. The main aim was to examine the different literature investigated from scholars, and the chapter goes forward to the debate of the theoretical framework reinforced in the study.

Chapter 3 will further elaborate on the methodology implemented in the study.

#### **CHAPTER THREE**

#### RESEARCH METHODOLOGY

#### 3.1 Introduction

According to (Cooper and Schindler, 2008), a research design is the blueprint for attaining the study goals, objectives, and answering to the research investigations. Research methodology refers to a deliberate course of action, and/or structure in which an experiential study follows or observes and the means employed to achieve the study questions (Ngau and Kumssa, 2004). Therefore, it entails laying down the procedures and methods for information gathering from the field, and choosing the cases which play a part in the research. The process for the study guides the researcher during data collection, analyses and understanding of the data or facts collected from the field.

This chapter describes the methodology adopted in the study, as well as methods used in the design of the research, and to achieve the research objectives. It focuses, among others, on the study plan, selection strategies and sample population, means of information gathering, formation of the questionnaire and ways of distribution, as well as description of data analysis techniques. Statistical techniques utilised in the study, namely exploratory factor analysis and confirmatory factor examines with Chi-square test, where attributes are tested with their association, dependency and relationship for qualitative variables (nominal or ordinal) method, are explained.

A research worldview or paradigm refers to a set of basic beliefs that motivate a study or guide an act (Lincoln, Lynham and Guba, 2011). Therefore, paradigms are significant because they form the way research is conducted. A basis from which information is created, and the procedure that will underlie the research design, and therefore understanding of the findings is grounded on a viewpoint. (Gage, 1989) confirms that a paradigm indicates a person's view or belief of the world and nature, his/her position in it and the likely links that he/she may have in various portions of that. Worldviews are shaped by numerous factors such as the discipline the researcher is undertaking, previous research experiences, and the beliefs held by the researcher's advisers (Creswell, 2014). These principles held by a researcher frequently lead to the choice of the research approach. Therefore, understanding and putting oneself in a specific research philosophy allows the whole research procedure to take shape and the knowledge claims. Methodological pluralism is acceptable but philosophical pluralism is not (Karl, 2004).

This section introduces the research plan and methodology, thereafter a summary of this research study. It comprises the assortment of students' expectations and perceptions and the identification discrepancies and/or gaps amongst perceptions of the quality of service delivered, the effect of gender, age, race and position on perceptions of the quality of service. It summaries the pilot study, sample process, survey administration, research tools, reliability and validity of instruments, and data analysis.

(Russell, 2005) noted that providing a high quality of service has been apparent as an important goal for higher education learning. As they are part of a service, commerce, education institutions can implement the techniques established by other industries for measuring the quality of services and the satisfaction of customers (Sahney, Banwet and Karunes, 2003). Study presented that higher education is increasingly being recognised as a service industry, and one that places emphasis on meeting the expectations and needs of its customers (Cheng and Tam, 1997).

For educational institutions such as UKZN to attain competence, they must compete for both finance and customers (Edith and Joseph, 1996) (Joseph, 1998) debates that to compete effectively in the market environment, Institutions of higher education need to differentiate themselves from their rivals. Providing services that are perceived by the customers as of outstanding quality is highly likely to give an organisation a competitive advantage. To obtain and sustain this benefit, institutions of higher education must first determine where they stand in the eyes of the students. Fronting mounting tuition costs, students are gradually choosy about what they are getting for the fees they pay to the institutions. (Marcus, 2017) In order to survive the competition within higher education, universities need to deliver better services to their students; hence the need for more dimension of the quality of their services (Naidoo and Mutinta, 2014) notes that all employees of institutions of higher education should follow the principles of quality customer service, whether they are in academic or front-line administrative roles. (Wiers-Jenssen, Stendaker and Grogaard, 2002) established that the quality of the services rendered by front-line administrative staff, such as finance department staff should not be undervalued when trying to advance students' satisfaction; in fact, they have the effect and a very direct impact on students' assessment of the quality of service (Wiers-Jenssen, Stendaker and Grogaard, 2002).

## 3.2 Research Design

Research design is a well-crafted approach and orderly procedure used by the investigator to carry out a research, and effectively permits objective answers to be attained to the problem of the research (Babbie and Mouton, 2007).

Similarly, (Creswell, 2009) states that research design delivers a road map that includes three things – philosophical assumptions, strategies for inquiry, and specific methods. Numerous factors need to be put into deliberation when choosing the design of a study, namely the aim or goal, setting, unit of analysis, degree of partaking of the researcher, kind of research (quantitative or qualitative) and the amount of time it will take to collect data (Sekaran, 2006).

The current study was based on a positivism worldview assumption, which considers exact quantitative data and delivers answers to the set research questions and validation of hypotheses set. A cross-sectional survey design strategy was employed in that data were collected at one point in time (Cooper and Schindler, 2008). According to (Cohen, Manion and Morrison, 2005), the abovementioned survey strategy delivers an overall view of a given population at a given time. Firstly, contrast of various variables that have been collected can be done at similar time periods. Secondly, a survey assists in knowledge about peoples' attitudes, beliefs, values, behaviour, opinions, habits and desires. It also assists to cover an extensive area using a representative sample. In this study, data was collected from honours students at UKZN Westville Durban, South Africa, within a period of about six months. Thirdly, a quantitative approach was favoured because of particular requirements of the study such as the size of the survey, data used (numerical or categorical) and statistical analysis to be applied to analyse the hypotheses (Kline, 2011). Furthermore, a quantitative approach was less time consuming, there were reduced cost elements, it enabled the researcher to collect data from a large sample of respondents, and the researcher was able to secure the cooperation of the respondents within a short period of time. Similar instruments containing the same questions for the two sets of participants were used to collect the data. Piloting exposes what works and what does not, in terms of unclear instructions and vague questions (Mugenda and Mugenda, 2003). Quantitative data collected through the use of self-administered questionnaires is deemed to increase the chances of reliability. Finally, through a survey and use of quantitative methods, the researcher was able to examine the links between the service quality and customer satisfaction constructs, using specified and appropriate statistical analysis.

In this investigation, the research design adopted was a descriptive research plan. According to (Saunders, Lewis, and Thornhill, 2012), a descriptive research plan provides an in-depth explanation of a problem that is being investigated, hence this study implemented an explanatory research design in order to deliver a detailed explanation of students' perceptions on quality service delivered at the finance department.

## 3.2.1 Descriptive Research

This study is a descriptive investigation that is grounded on survey-based approaches, which analyse students' perception on quality service delivered at the finance department UKZN, Westville campus in South Africa. According to (Amin, 2005), a descriptive study is one of the most frequently used approaches in social sciences, used to collect information from a sample of a population at a particular time. (Parasuraman *et al.*, 1998) (Zeithaml *et al.* 2009) delivers a linkage between service quality and customer satisfaction, presenting that service quality is a motivated assessment that reflects the customers' perceptions of SERVQUAL factors. Satisfaction, on the other hand, is more encompassing, because it is formed by sights of the service, product and cost, together with conditional factors such as economic conditions, political circumstances and environmental issues and personal issues such as attitudes and perceptions. As a result, the SERVQUAL instrument is the more suitable instrument, and will be used in this study to examine students' perceptions and expectations of the quality of service offered at the finance department of the UKZN. The survey consists of two sections (validity and reliability) (demographic and quality services delivery) based on the respondents (students), their expectations and perceptions of the finance department's reliability, responsiveness, assurance, empathy and their tangibility at UKZN, with regard to quality services they delivered.

The conceptual framework illustrated (Figure 2.5), which consists of independent and dependent variables for this study. Explanation and discussion of the conceptual framework appears in the following sections, and abstracts of the conceptual framework for the hypotheses are developed.

In general, experimental design is a procedure that allows for the maintenance of control over all factors that may influence the result of the experiment (Saunders *et al.*, 2009). In the current experimental research, design is to determine or predict what may be revealed. Experimental research is frequently utilized where there is time priority in a causal relationship, there is consistency in a causal relationship and the magnitude or association of the correlation is great (Saunders *et al*, 2009). The classic experimental design identified an experimental group and a control group. The independent variable is administrated to the experimental group and to the control group, and both groups are measured on the same dependent variable

#### 3.2.2 Selection of Participants

A pool of student population sample was selected based on Gender, Age, Race and Discipline. The respondents were registered students at UKZN from different department in the school of MGT, SCM,

ISTN, Governance and Marketing. These honours students were requested to participate in this study. Considering the worth from the students' viewpoint can provide valuable data to University management, specifically to the finance department, helping them to allocate resources and design programs that will better satisfy students (Seymour, 1992); and helping them to gain or maintain a competitive edge (Schmidt 2002; Watson 2003). Studies of student satisfaction in universities from a customer-oriented perspective may provide additional dimensions to the educational planning activities of universities (DeShields and Kaynak, 2005). Student perception, service quality and satisfaction surveys can also provide institutions with a tool to understand the complexity of the total learning experience and include the institutional leadership more directly in quality development issues.

For this study, Honours students of the school of Management, IT and Governance at the Westville campus of University of KwaZulu-Natal were targeted for this study, because undergraduate students are new to higher education, and may have little or no prior knowledge or experience of universities, and no comparative basis or framework of reference from which to evaluate their experiences. Their expectations are likely to be based on information gathered during their years in high school or college, which are very different environments from a university. Honours students were selected, as they were expected to be familiar with the department of finance at UKZN and services, having had some years to gather knowledge and experience of their university's services and its environment. The use of all students is supported in (Ling and Piew's, 2010) study, which finds a positive relationship between senior student's perceptions and universities services. Feedback from these students as a whole will offer UKZN finance divisions' information that will help them to improve the services they provide to the customers (existing and potential students).

## 3.2.3 Exploratory Design

According to (Maxwell, 2013) explorative research is on understanding the fundamental reason of a problem.

This study focuses on why things happen the way they do and understand students' perceptions on service quality delivered by the finance department at UKZN, hence it employed the exploratory method.

#### 3.3 Research Method

Research method refers to an approach or procedure that is carried out when conducting a study. An approach a study adopts depends on the nature and intent of the study (Saunders and Tosey, 2013). There are two main methods in a research study – a quantitative method and a qualitative method. A quantitative method is an approach that uses mainly a questionnaire to gather data from respondents, and the results are analysed using statistical test (Saunders and Tosey, 2013). A qualitative method on the other hand uses an interview to gather data from respondents, and the results are analysed using thematic analysis (Van Wyk, 2012). However, a combination of both questionnaire and interview is referred to as a mixed method approach.

### 3.3.1 Quantitative Approach

This study adopted a quantitative method approach because it uses only a questionnaire as the mode of data collection, and the results gathered are analysed using statistical test.

#### 3.3.2 Target Population

The geographical location for this research was the UKZN, Westville campus, Durban, South Africa. The choice of finance department and the UKZN as a study location was motivated by the challenges that student at the higher education sector, specifically UKZN, have been facing over the past few years, due to unprecedented growth amid competition in education provision. The population, generally, refers to all cases about which research findings can be generalised. It is the entire aggregation of a group of people, things of interest or events of one or more characteristics in common that the researcher has interest in, wishes to investigate, infer, and about which information is desired (Sekaran and Bougie, 2010). It is an eligible population that is included in research; and therefore, a researcher ends up deriving a sample that participates in the study. The students and employees are the key service consumers of a higher education institution's services (Quin *et al.*, 2009). To achieve the goal and objectives of this study, the target populations were students from various departments and fields of studies. Students were selected to ensure that the views on internal satisfaction are consistent.

## 3.4 Sampling Plan and Design

According to (Cohen *et al.*, 2005), implementing appropriate strategies to sampling, survey instruments development, and methods and procedures will result into a valid and meaningful research. Furthermore, an adequate sample ensures that the researcher can confidently be sure that a matched sample of another study is likely to produce nearly related results (Mugenda and Mugenda, 2003; Wiersma, 1995). In addition, (Koul, 1990) notes that a survey design requires a large sample, particularly if inferential statistics are to be calculated as is done in this study. Therefore, a large sample is crucial to reduce the sampling error.

(Saunders, Lewis and Thornhill, 2007) state that sampling from the population is a significant process in research. Sampling involves processes of choosing adequate elements or sub-sections of a population that permits the researcher to understand character traits, qualities or features of such a population, thus permitting generalisations to a whole population (Sekaran, 2006). A sample, therefore, refers to a portion of a population representative of the whole population. As such, sampling techniques fall under two extremes: probability and non-probability. Numerous reasons can be used to clarify this. For instance, quantitative data needs large samples (Creswell and Plano, 2007). However, it is significant to note that it was impracticable to survey the whole population of university students (Saunders *et al.*, 2007).

A representative is a subcategory of the population that should indicate the whole group (Malhotra & Birks, 2007).

The sample size in (Table 3.1) below is determined based on the (Krejcie and Morgans, 1970), table. The Krejcie and Morgans table degree of accuracy is at (.05).

**Table 3.1: Representation of the population** 

Discipline of Management – 18
Supply Chain Management – 70
Marketing Management – 15
Information systems & technology – 27
The total number of the population is 130.
Sample Size 97

The sample size for this study will be 97 questionnaires to be administered to honours students in the above schools.

This research employed quantitative such as non-probability sampling designs to arrive on the sample. According to (Chauturvedi, 2011), this method makes use of researcher's judgement to select elements in the population, which he or she believes are representative of the population. It actually relies on the researcher's subjective assessment, choice or decision.

#### 3.5 Data Collection Approach

The researcher used a systematic approach to gather information from a variety of sources, in order to obtain a complete and accurate picture of the area of interest, which is the finance department within the UKZN (Cooper *et al.*, 2003). The main tool for data collection was a survey form (questionnaire). Prior to designing the questionnaires, relevant literature was reviewed to identify the key research variables. Questions, which would shed light on both the independent and dependent variables of the study, were incorporated in the questionnaire. The questionnaires were carefully designed to ensure relevance and accuracy of the data collected (Zikmund *et al.*, 2010). (Boyce, 2003) emphasises that it is important to develop a good questionnaire, since it is not possible to change the already collected data, and researchers rarely have another opportunity to refer to the respondents. Furthermore, (Sekaran, 2006) asserts, primary data is collected at the actual site where the event occurs. This thesisnecessitated collection of data on students' perceptions on service quality and their interrelationships as envisaged in the conceptual framework illustrated in the previous chapter, thus requiring specific direct information for verification of hypotheses proposed.

#### 3.5.1 Construction of the Research Instrument

The research instruments that is student questionnaire was structured according to the quantitative approach (see Appendix B). For example, the questionnaire had two sections with related instructions that sought information on demographics (section one), service quality, student satisfaction and challenges of service quality implementation at UKZN (section two). (Parasuraman *et al.*,1988) proposed that the questionnaire should carry comprehensible instructions, and clear presentation of the questionnaire that is appealing to the respondents. The physical design of the instruments was

considered, for good presentation and administration of the survey, including ensuring minimal errors and understandable instructions.

#### 3.5.2 Pretesting and Validation of the Questionnaire

The degree to which an empirical measure taps the concept set out to be measured, and not something else is referred to as validity (Babbie and Mouton, 2007). Therefore, it refers to the degree to which a test measures what it was actually intended to measure. Furthermore, validity indicates the extent to which results obtained in a study are the actual outcomes of what was being measured and could give wider generalisation of the sample. Tests were conducted to determine whether the questionnaires were valid, and that the respondents will be able to answer all the questions without difficulties. This was due to the fact that content validity ensures that the measurement items sufficiently represent the universe of the concept under study. A thorough review of the literature was done, to ensure content validity, and operational definitions of terms were provided. In addition, the questionnaires were checked, to ensure they covered all the main areas of the study. In order to ensure survey validity, the questionnaires were developed in close consultation with the candidate's academic supervisor, and to other academic research experts for their independent judgement of how well the instrument met the standards i.e. their independent assessment of the test items. Their suggestions and inputs were included in the questionnaire after they attested to the content of the questionnaire.

## 3.5.3 Administration of the Questionnaires

According to (Kombo and Tromp, 2006), data collection refers to the process of collecting particular data with the intention to concur or contradict certain truths.

The process of collecting data is crucial in any study, since information collected can accurately be disseminated and also assist in the advancement of important platforms. Prior to embarking on the research, several preparatory measures were undertaken. For example, the researcher wrote to the Academic Affairs (Research) of the UKZN, requesting permission to collect data from their institutions.

Once permission was granted and population samples confirmed participation, the researcher expressed appreciation for their participation and/or agreement, and thereafter described the steps of the survey.

The researcher offered assurances to enable the respondents to relax and provide honest responses. The questionnaires (Appendix C) were accompanied by an introductory statement to emphasise confidentiality and other ethical considerations.

The instrument was also evaluated by the school of Management, IT and Governance at the (Westville campus) University of KwaZulu-Natal and the UKZN ethical clearance committee. (Saunders *et al.*,2007) suggests that providing peers and experts' review instruments for survey validity helps establish their relevance. By considering the model, and the measurement instrument being used (Cooper and Schindler, 2008), construct validity was ensured through operationalization of the variables, and application of exploratory factor analysis, where acceptable levels of construct validity were achieved through deletion of individual items that could have compromised the instrument's validity. In addition, the respondents were allowed to answer the questionnaire in their own time and space, which eliminates any form of bias. Questionnaires were randomly distributed to different students (see appendix C).

#### 3.5.4 Collection of the Questionnaires

The collection of the questionnaire was based upon the respondents' availability. Some of the respondents were unwilling to answer the questionnaire. However, since the questionnaires were anonymous, and that all information gathered would be confidential, and would be used for the purpose of this study. There was a 100% response rate and 58% of the surveys distributed had missing data. The reasons for these individuals (students) not completing the survey are unknown.

## 3.6 Data Analyses

Studies proposed diverse methods towards analysing quantitative and qualitative information, and their proposals were followed in conducting this study (Creswell, 2014; Creswell and Plano, 2007). The data from the two section questionnaires datasets (demographic and improved quality service delivered) were screened and amended to detect faults and omissions. Formerly, it was serialised in readiness for coding, entry, and analysis. Coding is the procedure of giving values to responses so that responses can be put in groups (Cooper and Schindler, 2008). Then, datasets were taken into excel for inspection and manipulation and easier conversion to data that was desirable.

The information for each respondent group was analysed distinctly, and then utilised to employ a single report (Creswell, 2014). The Statistical Package for Social Science (SPSS) version 24 was used to perform the analyses.

Descriptive statistics were computed to gain an overall understanding of the staff (at UKZN finance department) and respondents' characteristics in terms of demographic information, thus enhancing frequency and percentage distributions. (Marshall and Rossman, 1999) notes that descriptive statistics includes alteration of raw information into a form that would deliver data to describe a set of factors in circumstances, therefore assisting the reader to have a detailed summary of the variables and characteristics of the sample. Inferential statistics were computed in the second phase of the analysis, as clarified in the next section.

## 3.7 The Concept of the Questionnaires

For the statistical consultant working with social science investigators, approximation of reliability and validity is a task often encountered (Gay, 1987). Dimension issues vary in the social sciences in that they are connected to the quantification of abstract, intangible and unobservable constructs. In many instances, then, the meaning of quantities is only inferred.

## 3.7.1 Validity

According to (Bougie and Serkaran, 2010), validity is the degree of a tool intended to measure how precise the measure is. This study utilised the face validity approach for the questionnaire. The face validity was utilised to measure the service quality delivery at UKZN, and the questionnaire was sufficient for the study to gain insight on students' perception on service quality delivered at the finance department at UKZN.

#### 3.7.2 Reliability

According to (Gay, 1987); (Berk, 1979) reliability is the point to which a valuation instrument produces steady and reliable results. It is also defined as the grade to which the outcome of a dimension can be contingent on to be precise.

The questionnaire was intended in a way that similar scores would be attained each time it was used, and the survey was dependable since it was able to give related responses repeatedly. For the purpose of this study, Cronbach's alpha was used by the researcher, and the results are shown in Chapter four, section (4.7.1).

Where a "high" value for alpha does not indicate that the degree is unidimensional. In order to confirm that the survey was reliable, bias and uncertainties were reduced in order to get credible material and quality information.

#### 3.8 Ethical Consideration

The researcher obtained permission from the appropriate authorities before embarking on the study. All principled considerations were taken into account, to certify the confidentiality and anonymity of all respondents of this study. The ethical clearance approval was required from the ethics research committee of the University of KwaZulu-Natal. The gatekeeper's letter was given from the University Registrar. After the letter was issued, the questionnaires were administered to the students for surveying.

Upholding of human dignity, confidentiality, privacy and concealment to be strictly obeyed to: Each respondent was given a letter of consent and was apprised of the reason and objectives of the research study before the survey was administered. This was to protect the rights of participants in the study who wished to withdraw and allow them to make their decisions on participating in the study. This was also to allow privacy confidentiality to be held for participants who wish to be anonymous in the research.

## 3.9 Summary

This section described the research method that was used in collecting the information for this study. The investigation design, approach, data collection and statistical techniques used to analyse data was deliberated. The purpose of this study was to investigate students' perceptions of service and quality delivered at UKZN, Westville Campus, to improve quality services delivery faced by students at the finance department of this higher institution and provide recommendations on how to improve quality services delivered to its utmost standard so as to provide, satisfy student community as a whole.

#### **CHAPTER FOUR**

#### DATA ANALYSIS AND RESEARCH FINDINGS

#### 4.1 Introduction

The aim of this section is to present and interpret the results of the research study. Reporting the outcomes of an investigation is debatably one of the most challenging, but also a satisfying stage of the entire process of an investigation. According to (Sekaran, 2006), a report is a demonstration of all significant information backed by necessary information from the study, persuasively written with the intention of persuading the reader to comprehend the content. To contribute to the significant field, conclusions and recommendations are drawn, based on surveying past and current studies, the methodology used and emerging perspectives from the current surveys and data analyses. Descriptive statistics and inferential statistics are used to discover the relationship between these factors and students' perceptions of the service delivered at finance department at UKZN. Total arithmetical outcomes of the research are from the statistical computer programme SPSS version 24.0.

Overall, this chapter examines demographic data (Section A of the survey-Appendix C) attained from 97 respondents' views, perceptions and expectations on the quality service offerings at finance department, UKZN. A detailed examination of the findings relating to Section B of the survey is clarified. Subsequently, the section focuses on analysing the means gaps in terms of the different factors. The aforementioned analyses provided a foundation for the discussion of the statistical analyses using Chi-square analysis, and the structural equation model, and the path analysis. Eventually, correlation analysis, T-test for independent sample and the analyses of variances (ANOVA), see (Table 4.8) are used to determine relationships or differences of the factors influencing the student perceptions and expectations of the quality service delivered at the UKZN. Specifically, the presentation was organised and presented following the research objectives that were raised in chapter one. Data that addresses a particular research or question theme are presented together.

## 4.2 Descriptive Analyses

#### 4.2.1 Response rate

The sample size comprises of honours students enrolled at UKZN, Westville Durban, South Africa. The selection of students was according to non-probability convenience sampling technique (Aaker *et al.*, 1995). The management of the institution of higher education was knowledgeable about the purpose of the study, and after consent was given, 97 surveys were distributed to students.

In all, 97 about (100%) questionnaires were returned, and were found to be valuable, which signifies a 100% response rate from the initial sample of 97. The survey was conducted in June 2017.

The survey was based on students' perceptions and quality service delivered at UKZN, finance department. There were 27 items in all, measuring service quality in the University of KwaZulu-Natal. The investigation was conducted with 97 students. As an outcome of the primary study, the instrument was reworded for measuring perceived service quality delivered by the staff member of the finance department at UKZN. A five-point Likert measure was used for information gathering with '1' being 'strongly disagree (Likert *et al.*, 1934) and '5' being 'strongly agree'. Research shows that self-reported performance may lead to response bias. However, a meta-analytic review by (Churchill *et al.*, 1985) demonstrates that self-report measures do not necessarily lead to response bias.

A total of 97 questionnaires were administered within UKZN across different departments' school of law and management at UKZN out of which all were returned. Following the data editing process, 97 questionnaires were considered fit for analysis. The total response ratio for this research was 2.15% ratio of the total respondents. Overall, 58 questionnaires had missing data (i.e. 16 questions for empathy, 14 for Tangibles, 9 for Responsiveness, 8 for reliability and 8 questions for assurance). The response compares favourably to similar studies by (Nicholas *et al.*, 2017) whose sample was 684, (Naidoo and Mensah, 2014) 380, (Ramseook-Munhurrun *et al.*, 2010) 250, (Carol *et al.*, 2015) with 31 samples. This meant that the sample set satisfied the criterion validity requirements. (See Table 4.1 below) shows a summary of population realisation to the questionnaires across different departments within the College of Management, information technology and Governance at UKZN, Westville Campus.

Table 4. 1: Demographic of respondents

Demographic	Trait	No. of Respondents		
Gender	Male	42		
Gender	Female	55		
Age of responder	18-20	4		
	21-25	77		
	26-30	14		
	30>	1		
Race	Black	76		
	Indian	17		
	Coloured	4		
	White	0		
	Other	0		
Discipline responder	MGT	40		
	SCM	27		
	ISTN	12		
	Governance	3		
	Marketing	15		

## **4.3 Sample Profiles**

## 4.3.1 Demographic

This section describes the demographic profile of the respondents, including gender, age, and race distribution of the 97 respondents. The detailed information is explained as follows:

#### **4.3.2** Gender

As shown in Figure 4.1 A and B, the percentage of male respondents was 43.3% which comprised of 42 participants, while the percentage of female respondents was 56.7% (majority) which subsequently comprised of 55 participants.

## 4.3.3 Age

The demographic age profile of this study indicates that the 21 to 25 about 79.4% of respondents' age group was the dominant group. As shows in Table 4.1 and Figure 4.1B, 77 were in the 21-25 age group, followed by 14.6% (14) of the respondents were 26-30 years while less than 5% (4) were between 18-20 years of age and one was 1% (1) was over the age of 30 years old.

A further cross tabulation of occupational group and gender revealed that there were no major differences among students by gender since 56.7% were female while 43.3% were male. A similar situation was presented with gender and discipline (see Figure 4.1). Few (1) respondents was aged 30 years and above

## • Gender and Age

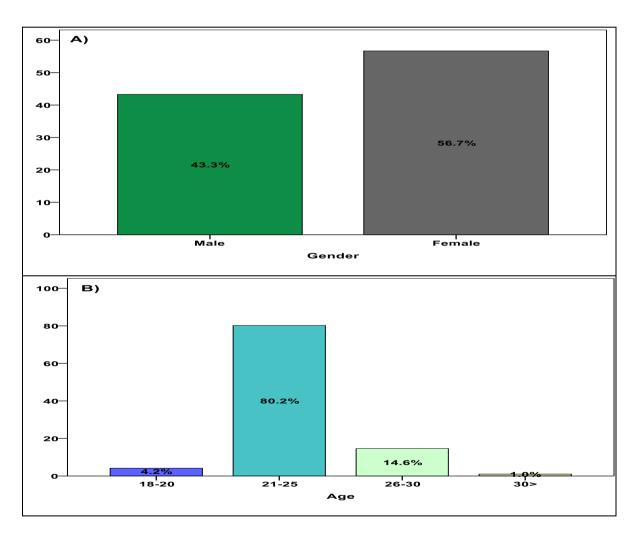


Figure 4. 1: Gender and age distribution of respondents: (A) gender and (B) age

#### 4.3.4 Race

Table 4.1 below presents a summary of students' respondent characteristics respectively. With reference to students, the statistics reveal that of the 97 students who participated in the study, 78.4% were black, while 17.5% were Indian or Asian students (Figure 4.2). A further cross tabulation of race revealed that there were differences among students by race, since 76 respondents were black while 17 were Indian whereas 4.1% (4) of the respondents were Coloured (Table 4.1).

## • Race distribution of respondents

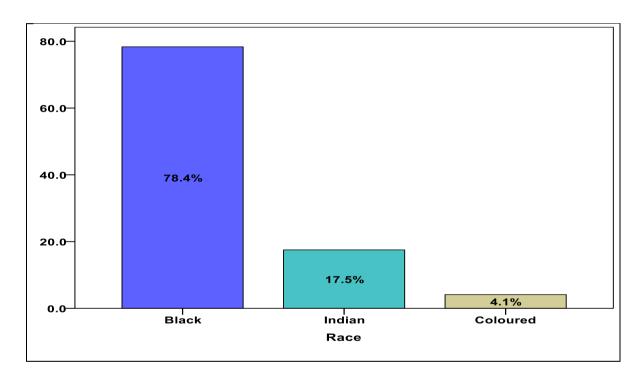


Figure 4.2: Race distribution of respondents

## 4.3.5 Discipline

Similarly, various proportions of discipline among students or respondents were observed as indicated in Table 4.1. The most dominant respondents in terms of discipline was MGT with 40 respondents accounted for 41.2% of the total questionnaire followed by SCM with 27 accounted for (27.8%), Marketing 15 (15.5%), ISTN 12 (12.4%) and Governance 3 (3.1%) (Figure 4.3).

## • Discipline of respondents

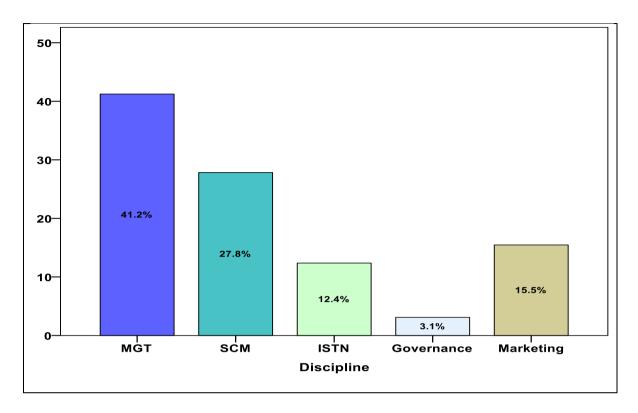


Figure 4.3: Discipline of respondents

## 4.3.6 Overall Demographic Analysis

Overall, demographic analyses of respondent yield different proportion with major significant race differences in the levels of student. Race was the most dominant in terms of demographic structure of the study accounting for 78.4% (Figure 4.2). Age distribution was the least in respondents' proportion among different categories within the demographic respondents. Overall, there were no major significant gender differences in the levels of students among male and female respondents (Table 4.1). Among students, the data shows that 79.4% were between the ranges of 21-25 of age, while 14.4% were between 26-30 years of age, whereas less than 5% was found to be over thirty years of age. With regard to gender, there were slightly more female respondents in all levels of survey 56.7% than male.

Table 4.2: Demographic breakdown of student sample and student characteristic based on discipline.

Demographic	Trait	No. of Respondents	Percentage (%)	
Gender	Male	42	43.3	
Gender	Female	55	56.7	
	18-20	4	4.1	
Age of responder	21-25	77	79.4	
	26-30	14	14.4	
	30>	1	1.0	
	Black	76	78.4	
Race	Indian	17	17.5	
	Coloured	4	4.1	
	White	0	0.0	
	Other	0	1.0	
Discipline responder	MGT	40	41.2	
	SCM	27	27.8	
	ISTN	12	12.4	
	Governance	3	3.1	
	Marketing	15	15.5	

## 4.4 Descriptive Statistic and Analyses

As outlined in the literature review, as well as in our questionnaire, there are five dimensions in evaluating the overall service quality (Appendix C). The study on measuring service quality has focused mainly on meeting or exceeding customers' or students' (in our case) expectations. In this section of the chapter, the data analyses focus on the mean scores on the perceptions and expectations scales for each of the 27 service quality attributes and their related factors (i.e. Reliability, responsiveness, assurance, empathy and tangibles). The following sections are comprehensive statistics of the original 27 questions or statements with reference to service quality and service delivery. All questions are measured on five-point scales ranging from "1=strongly disagree" to "strongly agree" (see Appendix C).

## 4.4.1 Reliability

This objective investigated student's perception on reliability of the finance department, UKZN (Figure 4.4).

This factor includes four questions about the reliability of the finance department with regard to quality of service delivered at UKZN by this branch of management. The questions included in this section of the study are as follows:

## • Reliability of the finance department

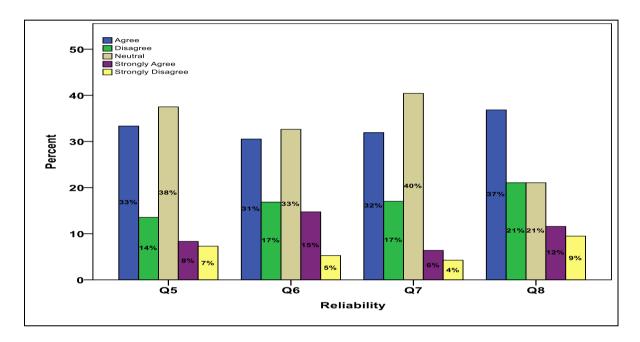


Figure 4.4: Reliability of the finance department

## 4.4.1.1 Question 5: Feedback from the finance department regarding queries?

The purpose of question five was to assess whether students get feedback from the finance department whenever they promise to get back to them, with regard to lodging queries. The response to this question indicated that UKZN finance department has no delays in terms of the fulfilment of promises. The expectations to the question in figure 4.4 were as follows: 7% (strongly disagree), 14% (disagree), 33% (agree) and 8% (strongly agree). It is fascinating to note that the expectations of students showed that 38% were neutral. Majority of the students surveyed seem undecided, as shown by the neutral responses.

## 4.4.1.2 Question 6: Contradicting response from different staff when you lodge a complaint?

Question six aimed to assess whether the student get contradicting response from different staff whenever the lodge complaint at finance department at the UKZN.

As shown in Figure 4.4, the responses were slightly positive. Nearly a three quarter (3/4) about 31% of the respondents were satisfied. Only 17% of the respondents disagreed with the question. Moreover, the expectations indicated that 5% of respondents were not convinced, while 33% did not pronounce or abstained.

## 4.5.1.3 Question 7: Finance department dependable in terms of resolving queries?

Question seven aimed to assess whether the finance department at the UKZN is liable or dependable in problem solving. Our analysis revealed that, the responses were highly positive. As revealed in Figure 4.4, the insights of respondents were as shown: 40.1% (neutral), 32% (agree), 17% (disagree), 6% (strongly agree) and 4% (strongly disagree). Less than twenty percent of respondents were disappointed. Additionally, the expectations indicated that only 4% of respondents were not convinced.

#### 4.4.1.4 Question 8: Staff of finance department have convenient hours?

In Figure 4.4, the data revealed that expectations and insights of respondents in this study, with regards to convenience of operating hours. The expectations to the question were as follows: 21% (strongly disagree), 21% (disagree), 21% (neutral), 12% (agree) and 9% (strongly agree). Five out of 10 respondents were uncertain that the finance department could provide reasonable and convenient operating hours for student queries and complaints. Therefore, the student's insights also indicated that 21% of the respondents disagreed that operating hours are convenient. Nine percent of the respondents were completely disappointed. The percentage that disagreed was less than that of agreed (37%).

## 4.4.2 Responsiveness

This objective examined students' perceptions on the responsiveness of the finance department, UKZN (Figure 4.5). This factor included five questions about responsiveness of the finance department, with regard to quality of service delivered at UKZN by this branch of management. The statements included in this section of the study are as follows:

## • Responsiveness of the finance department

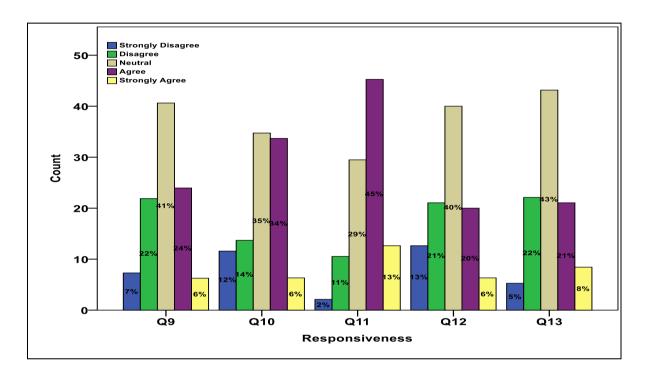


Figure 4.5: Responsiveness of the finance department

## 4.4.2.1 Question 9: Do you get a response every time you lodge a complaint?

Figure 4.5 revealed the expectations and perceptions of the respondents in this project in terms of response by staff at finance department of UKZN after lodging a complaint. About 24% of the respondents expected staff to get response, while 22% of the respondents disagreed with the statement. The neutral responses attributed to expectations and perceptions were 41% and 6% respectively. Majority of the students surveyed seem undecided, as shown by the neutral responses.

## 4.4.2.2 Question 10: Do staff show willingness to assist with questions?

Figure 4.5 revealed the expectations and perceptions of the respondents in this project in terms of staff at finance department's willingness to assist students with their concerns. As shown in Figure 4.5, 14% of respondents strongly disagreed with the statement, 34% disagreed, 35% being neutral, 34% agreed and 12% strongly agreed.

## 4.4.2.3 Question 11: Staff of finance department have up to date records?

The purpose of question eleven was to assess whether personnel at the finance department keep up to date records of all queries. Almost half of the respondents (45%) expressed satisfaction in finding available information about the services offered by the finance department. As shown in Figure 4.5 the perceptions to the question were as follows: neutral (29%), agree (45%), disagree (2%) and strongly agree (13%).

# 4.4.2.4 Question 12: Do staff at the finance department update on the progress of your request if left unresolved?

Figure 4.5 revealed the expectations and perceptions of the respondents in this project in terms of responsiveness of staff. As shown in Figure 4.5 below, the neutral scales of expectations and perceptions of the respondents were dominant, 39% and 33.3% respectively. Nearly over half (45%) of the respondents expected that staff will give prompt attention to students, while 11% disagreed with this question (Figure 4.5).

# 4.4.2.5 Question 13: Do staff at the finance department communicate effectively when you lodge a complaint?

The aim of question thirteen was to further estimate the influence of the knowledge and enthusiasm of staff. The expectations to the question in Figure 4.5 were as follows: 8% (strongly disagree), 22% (disagree), 43% (neutral), 21% (agree), and 8% (strongly agree). The relevant perceptions were as follows: 9% (strongly disagree), 36.2% (disagree), 35.8% (neutral), 9.3% (agree), and 6.2% (strongly agree). As with attribute 15, the neutral point of the scale is high.

#### 4.4.3 Assurance

This objective examined students' perception on assurance at the finance department at UKZN, (Figure 4.6). This factor includes four questions about student assurance to the finance department with regard to quality of service delivered at UKZN by this branch of management. The questions included in this section of the study are as follows:

## • Assurance of the finance department

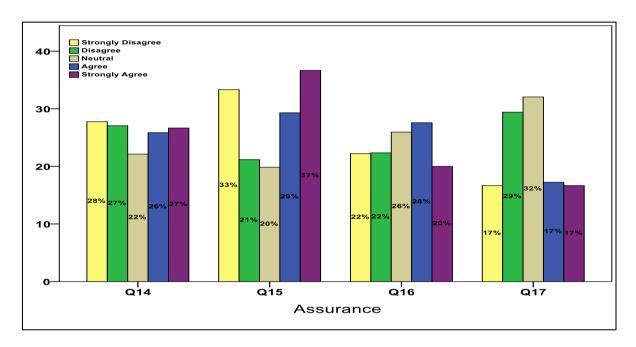


Figure 4.6: Assurance of the finance department

# 4.4.3.1 Question 14: Are you always satisfied with the level of service you get?

Question fourteen revealed the expectations and perceptions of respondents in terms of service provided by the by staff at finance department. As shown in Figure 4.6, the expectations to the statement were as follows: 8.4% (strongly disagree), 24.2% (disagree), 30.5% (neutral), 31.6% (agree) and 8.4% (strongly agree) respectively. However, 30.5% of the students surveyed seem undecided, as shown by the neutral responses.

## 4.4.3.2 Question 15: Can you trust the staff of the finance department?

Question fifteen aimed to determine whether students trusted staff of the finance department at UKZN. As shown in Figure 4.6, almost half of the respondents (27.4%) were uncertain. In addition, 35.8% of respondents agreed with the question, while the neutral responses for expectations indicated that 32.2% of respondents did not have a high expectation on the question.

## 4.4.3.3 Question 16: Do you get queries resolved at the finance department?

Question sixteen aimed to determine whether students were satisfied with staff, paid more attention to students in solving problems. As shown in Figure 4.6, almost half of the respondents (33.7%) did agree to the question, while 35.8% were uncertain. In addition, the neutral responses for expectations indicated that 33.1% of respondents did not have a high expectation on the question.

#### 4.4.3.4 Question 17: Do you receive prompt service at the finance department?

Question seventeen revealed the expectations and perceptions of respondents in terms of service and quality of services delivered to students by the department's staff. As shown in Figure 4.6, the expectations to the statement were as follows: 3.2% (strongly disagree), 26.3% (disagree), 44.2% (neutral), 21.1% (agree) and 5.3% (strongly agree) respectively. However, the majority of the students surveyed seemed undecided, as shown by the neutral responses.

## **4.4.4** Empathy

This objective examined students' perceptions on empathy of staff at the finance department at UKZN, (Figure 4.7). This factor included five questions about empathy of staff at the finance department, with regard to quality of service delivered at UKZN by this branch of management. The questions included in this section of the study are as follows:

## • Empathy of staff of the finance department

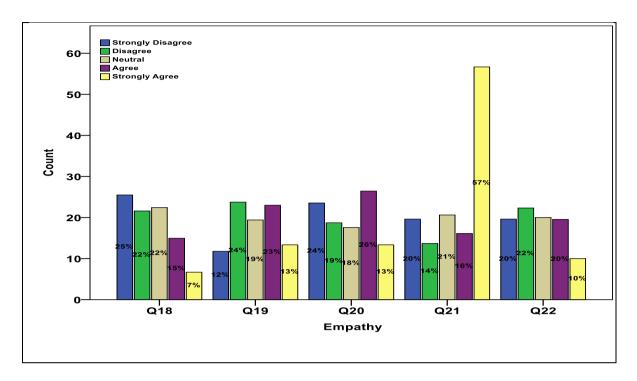


Figure 4.7: Empathy of staff of the finance department

## 4.4.4.1 Question 18: Do staff show empathy if request is left unattended to?

As shown in Figure 4.7, 14% of respondents strongly disagreed with the statement, 32% disagreed, 39% being neutral, 14% agreed and 2% for strongly agreed.

The percentage of the relevant expectation was far more than half (61.2%) respectively. However, 39% of the respondents surveyed seemed undecided, as shown by the neutral responses. KZN.

## 4.4.4.2 Question 19: Do you get personal attention from staff when there is an issue or query?

Question nineteen revealed the expectations and perceptions of respondents in this study, in terms of individualised attention of staff. Data surveyed in Figure 4.7 indicates the expectations to the question were as follows: 6% (strongly disagree), 35% (disagree), 34% (neutral), 21% (agree) and 4% (strongly agree) respectively. However, 33.4% of the respondents surveyed seemed undecided, as shown by the neutral responses.

## 4.4.4.3 Question 20: Are staff of the finance department polite?

Figure 4.7 revealed question twenty expectations and perceptions of respondents in this study in terms of politeness of staff in the UKZN finance department. More than half of the respondents (35%) disagreed with the question. Our data concurs with the respondents, in terms of this particular question. In fact, three out of five students have experienced this question.

## 4.4.4.4 Question 21: Do staff of the finance department have your best interest at heart?

This question aimed to determine whether the finance department at UKZN paid more attention to the students. In Figure 4.7, almost half of the respondents (51%) were uncertain. In addition, the neutral responses for expectations indicated that 48.2% of respondents did not have a high expectation on the question. However, the expectations to the question were as follows: 11% (strongly disagree), 20% (disagree), 51% (neutral), 15% (agree) and 3% (strongly agree) respectively.

## 4.4.4.5 Question 22: Do staff treat queries with some sense of urgency?

Question twenty two revealed the expectations and perceptions of respondents in terms of personalised attention of staff. As shown in Figure 4.7, the expectations to the question were as follows: 11% (strongly disagree), 33% (disagree), 35% (neutral), 18% (agree) and 3% (strongly agree). However, 33% of the students surveyed seemed undecided, as shown by the neutral responses.

## 4.4.5 Tangibles

This objective investigated students' perceptions on tangibles provided by the finance department, UKZN (Figure 4.8). This factor included four questions about tangibles at the finance department with regard to quality of service delivered at UKZN by this branch of management. The statements included in this section of the study are as follows:

## • Tangibles at the finance department

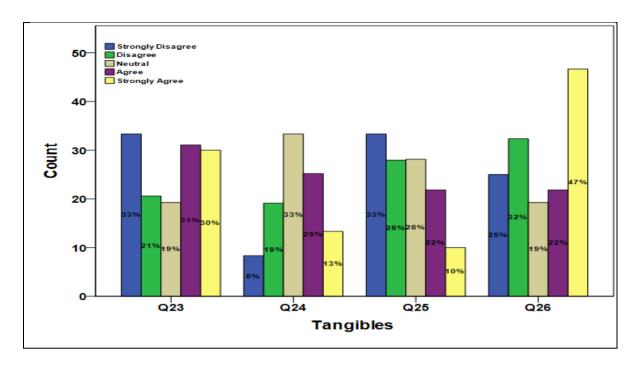


Figure 4.8: Tangibles at the finance department

# 4.4.5.1 Question 23: Do you think the University has adequate modern equipment to deal with the students?

In Figure 4.8, the data revealed that students agree to the question of the university having adequate and modern equipment. The expectations to the question were as follows: 39% (agree), 28% (neutral), 15% (disagree), 10% (strongly agree) and 9% (strongly disagree). Twenty-four of the respondents were competently unsatisfied with the equipment of the finance department. However, the student's perceptions of students agreeing was still higher 39% (agree) and 10% (strongly agree).

## 4.4.5.2 Question 24: Do you think the finance department provides solutions to student queries?

As shown in Figure 4.8, 48% of respondents were neutral with the question, 32% agreed, 14% disagree, 4% strongly agree and 2% for strongly disagreed. The majority agreed to the question, 32%. However, 48% of the respondents surveyed seemed undecided, as shown by the neutral responses.

## 4.4.5.3 Question 25: Are the physical facilities at the finance department appealing to the eye?

Figure 4.8 demonstrated that the majority of the respondents were impartial with the question, 40% of the 97 participants. Agree (28%), disagree (20%), strongly disagree (9%) and strongly agree (3%).

# 4.4.5.4 Question 26: Do you think the quality of service rendered by the finance department often leads to student's protest?

In terms of the response rate concerning quality of service leading to students' protest, as shown by Figure 4.8, there was no significant difference between those who agreed to the statement (28%) and impartial respondents (28%), The additional indicated to disagree (23%), strongly agree (15%) and strongly disagree (6%) to the statement.

## 4.5 Overall rate of service at the finance department?

This question investigated students' perceptions on the rate of service delivered at the finance department at UKZN, (Figure 4.9). This factor includes rate of service, ranging from [very poor], [poor], [average] and [excellent] at the finance department, with regard to quality of service delivered at UKZN by this branch of management. The questions included in this section of the study are as follows:

## • Overall rate of quality service delivered at the finance department.

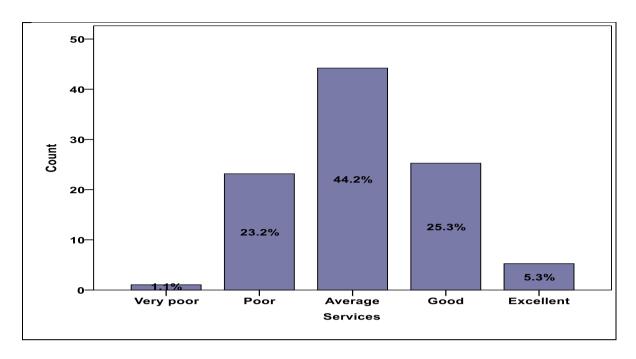


Figure 4.9: Overall rate of quality service delivered at the finance department.

# 4.5.1 Question 27: how would you Rate the quality of service(s) rendered by the finance department?

In terms of the response rate, (Figure 4.9) revealed that, overall, the students rate the service as average (44.2%), in terms of the quality of service at the finance department of UKZN. Furthermore, 25.3% rated it as good, poor (23.2%), excellent (5.3%) and very poor (1.1%).

## 4.6 Reliability as factor one

These questions were to assess the reliability of quality of work regarding the service delivered by the finance department at the UKZN. As indicated in Table 4.3, the four questions varied in frequency distributions, in terms of student perceptions based on statements. Overall questions relatively mean scores ranging from 3.17 to 3.33 and standard deviation ranging from 0.94 to 1.09 among the four questions or statement comprising reliability factor. The question that had the high expectation mean scores are questions five and six.

Do you get feedbacks from the finance department whenever they promise to get back to you regarding your queries" (3.22) and Mean score value of (3.33) for question: "do you get contradicting responses from different staff when you lodge a complaint"?

Table 4.3: Factor One-Reliability' frequency the total mean and standard deviation of the statement

Reliability	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean (SD)
Q5	1	7	13	36	32	3.22 (1.03)
Q6	5	16	31	29	14	3.33 (1.09)
Q7	1	4	16	38	30	3.19 (0.94)
Q8	9	20	20	35	11	3.20 (1.18)
Total	16	47	80	138	87	3.23 (1.06)

Q5-Q8 = Reliability questions or statements: five to eight; SD = standard deviation (value in brackets).

#### 4.6.1 Responsiveness as Factor two

Questions in this factor primarily described the willingness to attend to student queries at the finance department, to aid students and provide rapid service, as well as the workers' skills and abilities to work together with students as customers. As shown in Table 4.4, the probability scores ranged between (2.86) and (3.54), while total frequency for respondents varied 38 to 179 individuals.

The largest frequency was 179 abstainers. It was revealed that Q11"do the staff at finance department have up to date records" had the biggest mean standard deviation score between all attributes, and needs to be investigated for further improvements. The least statement in terms of mean score per question in responsiveness of staff at finance department was Q12 "Do the staff at finance department update you on the progress of your request if left unsolved" (2.86; Table 4.4).

Table 4.4: Responsiveness as Factor two

Responsiveness	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean (SD)
Q9	7	21	39	23	6	3.00 (1.01
Q10	11	13	33	32	6	3.09 (1.09)
Q11	2	10	28	43	12	3.54 (0.95)
Q12	12	20	38	19	6	2.86 (1.08)
Q13	6	21	41	20	8	3.05 (0.99)
Total	38	85	179	137	38	3.11 (1.03)

#### 4.6.2 Assurance as Factor three

As shown in Table 4.5 the expectations means reflected the highest score (2.37) for "Q15" and closely followed by a mean score of (3.18) for "Q16". The lowest mean score (2.99) is attributed to "Q17".

In general, the perceptions means statements indicated that four statements have similar means scores, namely across all questions or statements with slightly variation (e.g., "Q17"). The lowest mean score (2.99) is attributed to "do you receive prompt service from staff member at the finance department of UKZN".

**Table 4.5 Assurance as Factor three** 

Assurance	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean (SD)
Q14	5	23	29	30	8	3.14 (1.01
Q15	6	18	26	34	11	3.27 (1.09
Q16	4	19	34	32	6	3.18 (0.98)
Q17	3	25	42	20	5	2.99 (0.91)
Total	18	85	131	116	30	3.14 (1.00)

### 4.6.3 Empathy as Factor four

The attributes in Table 4.6 were to evaluate the empathy dimension of service quality of the finance department at UKZN.

Two statements in this factor, namely: "Q19", "Q20" and "Q21" are suitable to all staff understands the specific needs of their role had similar expectation scores of (2.82), (2.80)

And (2.80) respectively. The expectation score for "do you get personal attention from staff of the finance department when there is an issue or a query" was the highest (2.82) in this dimension of service quality. The lowest perception score (2.59) is for the statement "do the staff show empathy if your request is left unattended to", followed by (2.70) is for the statement "do staff treat your queries with some sense of urgency".

**Table 4.6: Empathy as Factor four** 

Empathy	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean (SD)
Q18	13	30	37	13	2	2.59 (0.96)
Q19	6	33	32	20	4	2.82 (0.98)
Q20	1	12	26	29	23	2.80 (1.08)
Q21	10	19	48	14	3	2.80 (0.93)
Q22	10	31	33	17	3	2.70 (0.99)
Total	40	125	176	93	35	2.74 (0.06)

### 4.6.4 Tangible as factor five

This quality dimension is related to physical facilities, equipment, materials, and appearance of the service delivery.

As presented in Table 4.7, the expectation mean score of (3.28) is attributed to "adequate and modern equipment are visually appealing", while physical facilities is visually appealing and personnel are neat in appearance for expectation achieved similar mean scores of (2.97) respectively. The lowest mean score (2.97) was for "are the physical facilities at finance department appealing to the eye?" It is evident that the mean score (3.28) relating to perception for "modern looking equipment" is the highest. The largest mean score (2.38) was for "adequate and modern equipment to deal with the students' financial issues".

Table 4.7: Tangible as factor five

Tangible	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean(SD)
Q 23	8	14	26	37	9	3.28 (1.09)
Q24	2	13	45	30	4	3.22 (0.82)
Q25	8	19	38	26	3	2.97 (0.98)
Q26	6	22	26	26	14	3.21 (1.15)
Total	24	68	135	119	30	3.17 (0.147)

#### 4.7 Comparison of quality dimensions

Overall, the general trends of the mean scores as indicated in Table 4.8, exhibit negative Mean Gap scores ranging across all the dimensions and fluctuating between -0.07 and -1.07. The study reveals a mean gap for all the 23 attributes to be -0.99. "Empathy "(What is the students' perception on empathy of staff at the finance department at the University of KwaZulu-Natal?)" quality has the smallest negative mean gap score of -0.07, while "Tangibles "(What is the students' perception on tangibles provided at the finance department at the University of KwaZulu-Natal?)" has the largest negative mean gap scores of -1.07. Generally, the findings implied that relatively speaking, students experienced less inconsistency between their expectations and perceptions towards "Empathy" than towards "Tangibles" provided by the finance department at the UKZN.

Similarly, Table 4.6 revealed that the scores for expectation were significantly higher as compared to perception' scores at the 95% probability level for each dimension. In the mean gap scores analysis of service expectations and perceptions, it can be detected that the "assurance" is ranked second lowest (G=-0.28) between the expectation and perception of service quality. However, this finding does not mean that "assurance" is not important. It simply means that "assurance" is relatively less important in comparison with the other factors, as respondents reflected in the survey.

As can be seen from the five dimensions, expectations for the finance department's service offering at the UKZN, "Empathy" rates the highest (3.74) and responsiveness rates the lowest (3.10). While reliability (3.23) is relatively high for expectation, it is the highest for perception (3.01). By comparison to the other dimensions, relating to perceptions that are mentioned in Table 4.8 below, "empathy" (2.67) is rated very low.

The highest gap score (-1.07) was attributed to the "empathy" dimension. As stated in the literature, "reliability" was seen to be the most critical factor affecting the finance department at the UKZN.

The gap was significantly higher by comparison to the other quality dimensions. The low "reliability" may not be due to lack of staff competence, but inconsistency between what is externally communicated and what the service delivery system is actually able to provide to students within the system. However, the gap scores for the three other dimensions, namely: "assurance" (-0.28), tangibles" (-0.44), "reliability" (-0.22) and, "empathy" (-1.07) were higher.

Table 4.8: Comparison of quality dimension based on students mean and standard deviation for expectation and perception

Dimension	Number	Expectation Mean(SD)	Satisfaction Mean (SD)	Gap (satisfaction (Perception)	or	Expectation)	1984
Reliability	380	3.23(1.06)	3.01(0.98)	-0.22			
Responsiveness	479	3.10(1.02)	2.98(0.89)		-0.	12	
Assurance	380	3.14(1.01)	2.86(0.64)	2	-0.	28	
Empathy	472	3.74 (1.12)	2.67(0.55)	8	-1.	07	
Tangibles	376	3.17(1.02)	2.73(0.85)	6	-0.	44	

#### **4.8 Test**

## 4.8.1 Comparison of overall demographic scores

 a) Comparison of overall scores between male and female (gender) students using One-Way ANOVA

Table 4.9: Male and female

ANOVA							
5	Sum of Squares	df	Mean Square	F	Sig.		
Between Groups	1.699	1	1.699	0.513	0.475		
Within Groups	314.322	95	3.309				
Total	316.021	96					

b) Comparison of overall scores within student races using One-Way ANOVA

Table 4.10: Race

ANOVA			r		
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	0.001	1	0.001	0.005	0.946
Within Groups	26.555	95	0.280		

As shown above in Table 4.10, our results indicate that there is an association in the level of perception and satisfaction at the 95% level between race groups (p<0.05).

c) Comparison of overall scores between student ages using One-Way ANOVA

**Table 4.11: Disciplines** 

ANOVA							
	Sum of Squares	df	Mean Square	F	Sig.		
Between Groups	1.373	4	0.343	1.407	0.238		
Within Groups	22.442	92	0.244	2 0			
Total	23.814	96		\$ 3			

d) One sample test analysis and Pearson correlation at the 0.01 significant level (2-tailed) measurement per dimension.

Table 4.12: Ages

ANOVA								
	Sum of Squares	df	Mean Square	F	Sig.			
Between Groups	0.320	1	0.320	1.491	0.225			
Within Groups	20.180	94	0.215	89				
Total	20.500	95	VOISSANGOOD SOOS					

The comparisons between age groups were conducted using One-way ANOVA. The results indicated significant difference among the age groups at the 95% (p<0.05).

**Table 4.13: Reliability** 

ž –				One-Sample	Test	1)			
	Test Value = 0								
		(2) 9:8		95% Confidence Interval	of the Difference				
	t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper			
Q5	29.222	96	0.000	3.186	2.97	3.40			
Q6	27.305	96	0.000	3.258	3.02	3.49			
Q7	28.180	96	0.000	3.093	2.87	3.31			
Q8	24.590	96	0.000	3.134	2.88	3.39			

Table 4.14: Reliability's 2-tailed correlation within factors or dimension

		Q5	Q6	Q7
Q5	Pearson Correlation	1		
	Sig. (2-tailed)	: :	- 10	
	N	97	- 33	
Q6	Pearson Correlation	0.036	1	
	Sig. (2-tailed)	0.726	- 12	
	N	97		
Q7	Pearson Correlation	0.021	0.137	1
	Sig. (2-tailed)	0.839	0.182	
	N	97	97	
Q8	Pearson Correlation	0.043	0.054	0.329**
	Sig. (2-tailed)	0.674	0.599	0.001
	N	97	97	97

Superscript asterisk (\*\*) shows that the correlation between factor is important at the 0.01 level (2-tailed, \*\* = P < 0.01).

**Table 4.15: Responsiveness** 

				One-Sample Tes	t				
	Test Value = 0								
		8 38	Sig. (2-	Mean	95% Confidence In Differen				
	t	df	tailed)	Difference	Lower	Upper			
Q9	29.240	95	0.000	3.000	2.80	3.20			
Q10	27.616	94	0.000	3.095	2.87	3.32			
Q11	35.063	95	0.000	3.521	3.32	3.72			
Q12	25.889	94	0.000	2.863	2.64	3.08			
Q13	29.955	94	0.000	3.053	2.85	3.25			

Table 4.16: Responsiveness 2-tailed correlation within factors or dimension

	ACT 000 100 100 100 100 100 100 100 100 10	Q9	Q10	Q11	Q12
Q10	Pearson Correlation	0.183	1	19976	.0 59
	Sig. (2-tailed)	0.076	3 - 33		
	N	95			
Q11	Pearson Correlation	.415**	š 10	1	
	Sig. (2-tailed)	0.000	0.243		
	N	96	95		
Q12	Pearson Correlation	0.176	.544**		1
	Sig. (2-tailed)	0.088	0.000	0.125	
	N	95	95	95	
Q13	Pearson Correlation	.329**	.339**	.384**	.325**
	Sig. (2-tailed)	0.001	0.001	0.000	0.001

<sup>\*\* =</sup> P < 0.01

Table 4.17: Assurance

One-Sample Test						
Test	Value = (	)				
exercise.	t	df	Sig. (2- tailed)	Mean Difference	95% Confidence Interval of the Difference	
			2 75 37		Lower	Upper
Q14	29.177	94	0.000	3.137	2.92	3.35
Q15	29.117	94	0.000	3.274	3.05	3.50
Q16	32.031	94	0.000	3.179	2.98	3.38
Q17	32.196	94	0.000	2.989	2.81	3.17

<sup>\*\* =</sup> P < 0.01

Table 4.18: Assurance 2-tailed correlation within factors or dimension

		Q14	Q15	Q16
Q15	Pearson Correlation	.551**	1	10 53
	Sig. (2-tailed)	0.000		**
	N	95		
Q16	Pearson Correlation	.595**	.465**	1
	Sig. (2-tailed)	0.000	0.000	10
	N	95	95	10
Q17	Pearson Correlation	.551**	.529**	.525**
	Sig. (2-tailed)	0.000	0.000	0.000
155	N	95	95	95

<sup>\*\* =</sup> P < 0.01

**Table 4.19: Empathy** 

				One-Sampl	e Test	
Test	Value = 0	0		sens tr		v
20500	t	df	Sig. (2- tailed)	Mean Difference	95% Confidence Interval of the Difference	
			200	0	Lower	Upper
Q18	26.236	94	0.000	2.589	2.39	2.79
Q19	28.107	94	0.000	2.821	2.62	3.02
Q20	25.038	93	0.000	2.798	2.58	3.02
Q21	29.038	93	0.000	2.798	2.61	2.99
Q22	26.389	93	0.000	2.702	2.50	2.91

\*. Correlation is significant at the 0.05 level (2-tailed) and \*\* = P < 0.01

Table 4.20: Empathy 2-tailed correlation within factors or dimension

	515.00	Q18	Q19	Q20	Q21
Q19	Pearson Correlation	.577**	1	2000-000 I	E-39555
	Sig. (2-tailed)	0.000		10	S
	N	95		10	S
Q20	Pearson Correlation	0.193	.271**	1	
	Sig. (2-tailed)	0.062	0.008	2.5	ĵ
	N	94	94	2.7	9
Q21	Pearson Correlation	.562**	.579**	10 :	1
	Sig. (2-tailed)	0.000	0.000	93	
	N	94	94		
Q22	Pearson Correlation	.500**	.457**	.243*	.584**
	Sig. (2-tailed)	0.000	0.000	0.018	0.000
	N	94	94	94	94

**Table 4.21: Tangibles** 

	One-Sample Test					
Test	Value = 0	0				
				12	95% Confidence Interval of the Difference	i.
	t	df	Sig. (2- tailed)	Mean Difference	Lower	Upper
Q23	29.103	93	0.000	3.277	3.05	3.50
Q24	38.181	93	0.000	3.223	3.06	3.39
Q25	29.432	93	0.000	2.968	2.77	3.17
Q26	27.004	93	0.000	3.213	2.98	3.45

Table 4.22: Tangibles 2-tailed correlation within factors or dimension

	2	Q23	Q24	Q25
Q24	Pearson Correlation	.472**	1	00 578 00 578
	Sig. (2-tailed)	0.000	8	3
	N	94	80	se .
Q25	Pearson Correlation	.432**	.291**	1
	Sig. (2-tailed)	0.000	0.004	2
	N	94	94	10
Q26	Pearson Correlation	244*	301**	-0.070
	Sig. (2-tailed)	0.018	0.003	0.501
	N	94	94	94

<sup>\*.</sup> Correlation is significant at the 0.05 level (2-tailed) and \*\* = P<0.01

Table 4.23: Mean and standard deviation based on comparison of quality and service dimensions

Dimension	Number	Mean	SD
Reliability	380	3.23	1.06
Responsiveness	479	3.10	1.029
Assurance	380	3.14	1.008
Empathy	472	2.74	0.991
Tangibles	376	3.17	1.023

#### 4.8.2 Cronbach alpha Analysis: Reliability

Cronbach's alpha is a degree of core reliability, that is, how closely related a set of items are as a group. It is considered to be a measure of scale reliability. Theoretically speaking, Cronbach's alpha is not an arithmetical test, but a coefficient of consistency.

In general, Cronbach alpha principles that are less than 0.60 are deliberated to be poor, those in the 0.70 range, acceptable, and those over 0.80, good. A great value for alpha does not suggest that the degree is unidimensional. According to Sekaran (2010) the closer the Cronbach's alpha is to one (1), the greater the internal consistency reliability. As indicated in Table 4.24, the Cronbach's alpha coefficients for expectation and satisfaction were 0.882 and 0.883, respectively. These coefficients did slightly exceed the recommended significance level of 0.80. This implies that the research instrument's continuous study variables have high internal reliability and consistency.

Table 4.24: Cronbach' Alpha test

Dimension	Cronbach' Alpha	Number of items
Expectation	0.882	5
Satisfaction	0.883	5

#### 4.9 Summary

This chapter presents the results of the analyses based on empirical study. It deals mainly with study survey conducted for the purpose of this research. The questionnaire had 27 items of which 4 items dealt with demographics and 23 questions.

Firstly, the explanation of the results started with the discussion of the demographic information and percentages. These findings indicated that most of the respondents (79.4%) were between the ages 21-25 and 56.7% of the total respondents were female. Secondly, a comparison of the service quality delivery and perceptions of service delivered by the finance department at the UKZN were determined by computer numeric tables. The results of all statements indicated that the actual service quality in this type of environment did meet the students' expectations and satisfaction.

The first four items from the questionnaire were only based on demographics of the sample. The results indicated that 79.4 to 80.2% of respondents are between the ages of 21-25 of age, which means they are still younger, while there was only one respondent within 30 years of age and above. There was a slight difference between females in terms of gender. The race level was not a problem since the majority of respondents were black, while Indians were second in frequency, and distributions than did coloured.

#### **CHAPTER FIVE**

#### DISCUSSION OF FINDINGS

#### 5.1 Introduction

This section will further discuss the main findings that were analysed in chapter four from the research study. The discussion will highlight the study contributions to knowledge, and the conflicts of results will be discussed. The chapter will also identify the unexpected findings in chapter four. Literature from previous studies will be used as a reference to further the argument in the study. The research objectives will configure the discussion of the findings.

### **5.2** The research objectives

The discussion of the results is based on the six research objectives of the study. The findings from the study have been based on the following study objectives;

- 1. To investigate students' perceptions on service reliability at the finance department.
- 2. To examine the students' perceptions on service responsiveness at the finance department at the University of KwaZulu-Natal.
- 3. To examine students' perceptions on service assurance at the finance department at the University of KwaZulu-Natal.
- 4. To establish the students' perceptions of empathy of staff at the finance department at the University of KwaZulu-Natal.
- 5. To investigate students' perceptions on tangibles provided at the finance department at the University of KwaZulu-Natal.
- 6. To establish students' perceptions on service quality delivered at the finance department at the University of KwaZulu-Natal.

# 5.2.1 Research objective 1: To investigate students' perceptions on service reliability at the finance department.

In summary, the first research objective investigated students' perceptions on service reliability at the finance department. According to (Hamad, Karmarudin, Kamaruzziman and Malaysia, 2015), reliability is the most crucial dimension in an organization of quality, as well as important in the SERVQUAL model/scale because it helps to gain trust from consumers. In this section participants were presented with 4 questions measuring reliability, which they were asked to indicate if they [strongly agree], [disagree], [neutral], [agree] and [strongly agree]. The significant finding of the study given in chapter four indicated that the majority of the participants regard the finance department as reliable; this means that students can be dependable on the finance department.

Furthermore, the bulk of the respondents were neutral to the statement. This indicated that participants were not supporting or on either side of the statement. The unexpected finding reported that there is a significant agreement that; Feedback from the finance department is given when promised, and contradicting responses from different staff are received. This reported a positive response to the reliability of service quality delivery at The University of KwaZulu-Natal (Westville Campus). Therefore, students are content with the feedback given when promised, and contradicting responses from the staff at the finance department.

# 5.2.2 Research objective 2: To investigate students' perception on service responsiveness at the finance department.

The second objective set out to address the students' perceptions on service responsiveness at the finance department. According to (Arlen, 2008), in the six dimensions of service quality, responsiveness is regarded as the second significant measure of what customers care about, and responsiveness plays an important role in the market environment. (Zeithaml *et al.*, 2006) found that responsiveness is the willingness to assist your consumers and deliver prompt service. This dimension deals with being able to respond quickly to customer complaints, concerns, request and questions concerning your service. A number of deductions can be drawn from the results presented in chapter four; there was a significance in terms of mean score as per question; "Do the staff at finance department update you on the progress of your request, if left unsolved" (2.86) which indicates a negative response in responsiveness.

In addition, the majority of the participants were neutral to the responsiveness of the finance department. The neutrality overall, in relation to the objective means that respondents agree to disagree, so perhaps the finance department is too slow in terms of responsiveness. According to (Arlen, 2008) an organisation has to respond promptly to issues affecting customers. It is important for the institution to satisfy and take note of students' issues and find ways to resolve them for a prompt response, because the students count on the finance department to resolve their issues.

# 5.2.3 Research objective 3: To investigate students' perception on service assurance at the finance department.

The objective evaluated students' perceptions on assurance at the finance department. The significant finding indicates the lowest mean score (2.99) as attributed as per question; "Do you receive prompt service from staff member at the finance department of UKZN". This entailed that students are not completely content with service assurance of the finance department, and there seems to be a slight difference between students who agree and those who are neutral with the service assurance at the finance department at UKZN (Westville campus). According to Margaret (Rouse, 2007), in service assurance certain elements have to be met, to satisfy wants and needs, such as trust confidence who tie the consumer to the organisation (Gupta and Zeithaml *et al.*, 1990) and to approve them that assurance of the organisation. Based on these objective respondents are in an impartial state of the assurance of the finance department. Service providers have to assure customers of the service they are providing, to gain their trust and loyalty (Arlen, 2008).

# 5.2.4 Research objective 4: To investigate students' perception on service empathy at the finance department.

This section set out to address students' perceptions on service empathy. In accordance to the study, a lot was revealed in this objective, and many disagreements were found. The essential finding of the study revealed a mean gap for all the 23 attributes to be -0.99 for empathy. Therefore, this entails numerous disagreements from students, regarding empathy of staff at the finance department. Furthermore, most respondents were neutral to the empathy of the finance department at the University of KwaZulu-Natal (Westville Campus). The results indicated that respondents are not satisfied with the empathy of staff at the finance department at UKZN.

According to (Kimberleo, 2017), empathy demonstrates a sentiment. Accordance to this study empathy has provoked a negative emotion for the respondents, regarding service empathy at the finance department. In the service market, it is important to pay attention and give special attention to customers and display an understanding emotion with regards their issues (Pereda, Airey, and Bennett, 2007). Studies found that the behavior and attitudes of the staff provide an effect of perception on students in higher quality education.

# 5.2.5 Research objective 5: To investigate students' perception on service tangibles at the finance department.

This section investigated the students' perceptions on tangibles at the finance department. According to (Panda, Tapan and Das, 2014), tangibles in an organization are something that can be seen, anything appealing to the eye. In Universities this could be the physical facilities such computers. According to (Arlen, 2008), tangibles in an organisation are the least important dimension among the six dimensions of service quality. The studies' significant finding was the lowest mean score (2.97) for the question; "Are the physical facilities at finance department appealing to the eyes". A conclusion can be drawn that students are not fully satisfied with the tangibles at the finance department.

According to a study conducted by (Sohail, 2003), in accordance with the significance of tangibles examined, quality of service provided by the private hospitals, it was revealed that Facilities and appearances were relatively, low compared to expectation of cleanliness. According to the findings, the study respondents indicated to being impartial to the tangibles of the finance department, although there was a significant agreement that the university has adequate and modern equipment to deal with students' financial issues at the finance department. The overall findings showed that with the department providing solutions to students, there is no significant agreement nor significant disagreement.

# 5.2.3 Research objective 6: To investigate students' perception on service quality delivered at the finance department.

The aim of this objective was to gain insight on students' perceptions on service quality delivered by the finance department. The research question aimed to get the overall rate of quality service delivered by the finance department. Participants were asked to rate the service from [very poor], [poor], [average], [good] and [excellent]. It was fascinating to discover that the majority of the participants indicated that the service quality delivered at the finance department was average.

The significant finding is that there was not much difference between good and poor. This generally indicated that students are not fully satisfied with the overall service quality at the Finance department at the University of KwaZulu-Natal (Westville Campus). This can impact the University in losing students, due to unsatisfactory service delivered by the finance department as Universities are in constant battle for students (Naidoo and Mutinta, 2014).

#### 5.3 Summary

This chapter presented the discussion of service reliability mainly under 6 objectives, namely; reliability, responsiveness, assurance, empathy, tangibles and overall service quality delivered at the finance department. In addition, it provided the discussion and insight derived from the findings in Chapter four. The discussion showed that respondents find the service average and furthermore remain unsure about the service delivered by the finance department. This may entail that service quality should be improved to satisfy students 'wants and needs.

The next chapter will conclude this study and make recommendations which emerge through the overall findings discussed in this chapter.

#### CHAPTER SIX

#### SUMMARY, RECOMMENDATIONS AND CONCLUSION

#### **6.1 Introduction**

In the previous Chapter, discussion of the findings were discussed in detail. This chapter outlines the discoveries of the study, summary, conclusion, and implications of the study and recommendations of students' perceptions on service quality delivered at the finance department at the University of KwaZulu-Natal, Westville campus.

### 6.2 Overall Aim of the study

This study aimed to examine the students' perceptions on service quality delivered at the finance department at the University of KwaZulu-Natal, Westville Campus. The study was spurred by the unsatisfactory service quality students receive at the finance department at the University of KwaZulu-Natal (Westville Campus), contributing towards violent student protests.

### **6.2.1 Primary Objectives**

The main objective of the study was to investigate the students' perceptions of the service quality offering at the finance department University of KwaZulu-Natal, Westville Campus.

### **6.2.2 Secondary Objectives**

The objectives of the study can be restated as follows;

- 1. To investigate students' perceptions on service reliability at the finance department.
- 2. To examine the students' perceptions on service responsiveness at the finance department at the University of KwaZulu-Natal.

- 3. To examine students' perceptions on service assurance at the finance department at the University of KwaZulu-Natal.
- 4. To establish the students' perceptions of empathy of staff at the finance department at the University of KwaZulu-Natal.
- 5. To investigate students' perceptions on tangibles provided at the finance department at the University of KwaZulu-Natal.
- 6. To establish students' perceptions on service quality delivered at the finance department at the University of KwaZulu-Natal.

#### **6.2.3 Main Research Questions**

- 1. What is the students' perception on service reliability at the finance department at the University of KwaZulu-Natal?
- 2. What is the students' perception on service responsiveness at the finance department at the University of KwaZulu-Natal?
- 3. What is the students' perception on service assurance at the finance department at the University of KwaZulu-Natal?
- 4. What is the students' perception on empathy of staff at the finance department at the University of KwaZulu-Natal?
- 5. What is the students' perception on tangibles provided at the finance department at the University of KwaZulu-Natal?
- 6. What is the students' perception on service quality delivered at the finance department at the University of KwaZulu-Natal?

#### **6.3 Summary of the Main Findings**

To fulfil the above aim of the study, a problem was formulated. This study was spurred by the unsatisfactory service quality students receive at the finance department, with their massive financial stresses at the University of KwaZulu-Natal, which may then lead to conflict between students and management and furthermore lead to violent student protests. In pursuing the aims of the study, In Chapter four of the findings a qualitative approach was adopted in the study and questionnaires were distributed randomly to selected honours students of the school of Management, IT and Governance at the Westville campus of University of KwaZulu-Natal.

This chapter mainly presents the findings in Chapter four. The first results which were presented are the demographic profile, followed by the five service quality dimensions, specifically; reliability, responsiveness, assurance, empathy and tangibles.

The demographic profile revealed that the majority of the main participants in the research study were female respondents, which were over fifty percent and these respondents were mostly between twenty one to twenty five years of age. In addition, the study established that blacks were the main respondents, mainly from the discipline of management.

With regards to the five service quality dimensions, Chapter four emphasized that the students surveyed seemed undecided on the service quality delivered at the University of KwaZulu-Natal (Westville Campus), as shown by the neutral responses, expectations and disappointments. The results also gave an insight that the students are not fully satisfied with the responsiveness of the department, as per the question "Do the staff at finance department update you on the progress of your request if left unsolved" this revealed disappointments in terms of responsiveness of the finance department. The respondents were not fully convinced with staff updates of the progress of students' requests at the finance department. Students were also unsatisfied with the service they receive at the finance department, as per the question "Do you receive prompt service from staff members at the finance department of UKZN?"

In addition, the respondents were rather disappointed with the empathy of the staff at the finance department. It is crucial that the staff of the finance department pay attention to students when they need assistance. Pereda, Airey, & Bennett (2007). The One sample test revealed several disagreements from the respondents. And there were some unsatisfied respondents, regarding the service quality delivered by the finance department.

Given these findings, it seemed reasonable to conclude that the University of Kwa-Zulu Natal needs to improve the service quality delivered by the finance department, to satisfy students. Furthermore, students are not satisfied with the tangibles, the facilities of the finance department.

#### **6.4 Recommendations**

The following recommendations are offered relating to the research study;

#### **6.4.1** Recommendations relating to the study

- It would also be advantageous to conduct surveys every year, to gain knowledge of the service that is being given by the finance department, and how it can be improved, to gain competitive advantage as the University needs to improve service to gain competitive advantage, as higher education institutions are in constant battle, in competition for students
- The finance department needs to be more responsive in terms of updating students on issues which are left unresolved, to improve their service quality. This would also be advantageous for students to have their issues resolved at the finance department, as unsatisfactory service can impact the University in losing students due to unsatisfactory service delivered by the finance department (Naidoo and Mutinta, 2014). The staff of the finance department needs to be prompt when delivering service to students, to enhance the quality of service at the finance department.
- Recommendations in terms of empathy of staff, the finance department needs to be more empathetic with students when resolving students' issues, so they regard themselves as attended to in a nice manner in the institution. Studies established that the behavior and attitudes of the staff provide an effect of perception on students in higher quality education. Improving empathy would give students a different insight, and help the university gain a competitive advantage. Quality of service could also be improved by effectively addressing students' queries and complaints lodged by students to create assurance revealed by the undecided responses. In terms of tangibles, the University needs to improve physical facilities at the finance department, to be appealing to the eye" although tangibles are the least significant measure, when it comes to customer care, out of the five dimensions (Arlen, 2008).

(Andreassen, 2001), states when a customer is satisfied, service quality can be easily linked and compared to expectations and the actual experience. When a service fails to meet the expectations of an individual it is called service failure. When a customer complains, it opens a door to recover the service to move from dissatisfaction to satisfaction (Andreassen, 2001).

#### **6.4.2 Indication for further researchers**

- The study was only conducted at Westville campus. It would be advantageous to examine all the five campuses, and more data drawn from a broader spectrum, to get a clear view of students' perceptions on service quality delivered at KwaZulu-Natal (Lavrakas, Shuttles, Steeh, and Fienberg, 2007).
- The researcher recommends that further research be conducted, to understand that Students' protests affect the university as a brand. The results would be quite fascinating.

#### **6.5 Conclusion**

In Institutions of higher learning, service quality is important, and ensuring consumer satisfaction. With unsatisfactory service, students easily have a negative perception of service delivered. Numerous studies have investigated service quality including; banking, insurances, fast food services and hotels (Parasuraman *et al*, 1985). This study mainly focused on students' perceptions on service quality delivered. The study donated to the current body of knowledge in the field of service quality delivered at the University of KwaZulu-Natal.

Addressing issues such as efficiency and effectiveness of service quality delivered at the University of KwaZulu-Natal. The research study has provided knowledge on students' perceptions regarding service quality. Customers have their own perspectives on service quality delivered, hence it is important for organizations to understand them, in order to deliver satisfactory service. The study met its limitations and objectives in gaining insight on students' perceptions on service quality delivered. Comprehensive recommendations were knowledgeable by the study and for future researchers.

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#### APPENDIX A: ETHICAL CLEARANCE LETTER



10 October 2017

Ms Yolanda Philile Mfingwana (210550625) School of Management, IT & Governance **Westville Campus** 

Dear Ms Mfingwana,

Protocol reference number: HSS/0361/017M New project title: Students perception on service quality delivered at UKZN (Westville Campus)

Approval Notification – Amendment Application

This letter serves to notify you that your application and request for an amendment received on 15 August 2017 has now been approved as follows:

- Change in Title
- Change in Supervisor

Any alterations to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form; Title of the Project, Location of the Study must be reviewed and approved through an amendment /modification prior to its implementation. In case you have further queries, please quote the above reference number.

PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for period of 3 years from the date of original issue. Thereafter Recertification must be applied for on an annual basis.

Best wishes for the successful completion of your research protocol.

Yours faithfully Dr Shenuka Singh (Chair)

Cc Supervisor: Dr Andrisha Beharry Cc Academic Leader Research: Professor Isabel Martins

Cc School Administrator: Ms Angela Pearce

**Humanities & Social Sciences Research Ethics Committee** Dr Shenuka Singh (Chair) Westville Campus, Govan Mbeki Building Postal Address: Private Bag X54001, Durban 4000 Telephone: +27 (0) 31 260 3587/8350/4557 Facsimile: +27 (0) 31 260 4809 Email: ximbap@ukzn.ac.za / anymanm@ukzn.ac.za / mohunp@ukzn.ac.za Website: www.ukzn.ac.za

1910 - 2010 100 YEARS OF ACADEMIC EXCELLENCE Medical School Founding Campusas Edgewood Moward College Pietemaritzburg Westville

## APPENDIX B: INFORMED CONSENT

## COLLEGE OF LAW AND MANAGEMENT

## M.COM (MGT) Coursework

**Researcher**: Yolanda Mfingwana **Supervisor**: Dr. A Beharry

**Research Office**: (031 260 8350)

# **Respondent No:**

CONSENT	
I, (Full names o	f participant) hereby
confirm that I understand the content of this document and the natu	are of the research
project.	
I also understand that I am at liberty to withdraw from the project a	nt any time, should I so
desire.	
I hereby consent / do not consent to participate in this study.	
SIGNATURE OF PARTICIPANT	DATE

**APPENDIX C: QUESTIONNAIRE** 

STUDENTS' PERCEPTION OF SERVICE QUALITY DELIVERED AT THE UNIVERSITY OF

KWAZULU-NATAL, WESTVILLE CAMPUS

M.Com (MGT) Coursework

Discipline of Management

College of Law and Management

University of KwaZulu-Natal (Westville Campus)

Researcher: Yolanda Mfingwana

Supervisor: Dr. Andrisha Beharry

INTRODUCTION

My name is Yolanda Mfingwana, an M.com student in the Discipline of Management, College of Law

and Management at the University of KwaZulu-Natal, Westville campus, Durban, South Africa.

The purpose of this questionnaire is to gather information from you in order to investigate students'

perception of service quality delivered at UKZN. The questions asked in this questionnaire will enable

me gain insights on the effectiveness and efficiency of services rendered to UKZN students, more

importantly it will enable me thoroughly understand students' perception of service quality at UKZN.

Through your participation, and with the result of the survey, I hope to provide recommendations on

how to improve financial services to its utmost standard so as to provide quality services rendered to

UKZN students' community as a whole.

The filling of the questionnaire should take about 15 - 20 minute.

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## **SECTION A**

## **DEMOGRAPHIC INFORMATION**

<ol> <li>GENDER</li> </ol>
I. GENDER

1.□MALE 2.□ FEMALE

## 2. AGE

 $1.\Box 18-20$   $2.\Box 21-25$   $3.\Box 26-30$   $4.\Box 30$  and above

## 3. RACE

1.□ Black 2.□Indian 3. □Coloured 4. □White 5.□Other, Please specify \_\_\_\_

## 4. DISCIPLINE

1.□ MGT 2.□ HRM 3.□ SCM 4.□ ISTN 5.□Governance

6. □ Marketing

# **SECTION B**

## RELIABILITY.

# Please tick where appropriate.

	Strongly	Disagree	Neutral	Agree	Strongly
Questions	Disagree				Agree
5. Do you get	1.	2.	3.	4.	5.
feedbacks from					
the finance					
department					
whenever they					
promise to get					
back to you					
regarding your					
queries?					
6. Do you get	1.	2.	3.	4.	5.
contradicting					
responses from					
different staff					
whenever you					
lodge a					
complaint?					
7. Is the finance	1.	2.	3.	4.	5.
	1.	2.	3.	4.	3.
department					
dependable in					
terms of					
resolving					
queries?					

8. Do staff of	1.	2.	3.	4.	5.
the finance					
dept. have					
convenient					
operating hours					
for all students					
and clients?					

## RESPONSIVENESS

	Strongly	Disagree	Neutral	Agree	Strongly
Questions	Disagree				Agree
9. Do you get	1.	2.	3.	4.	5.
response to					
queries every					
time you lodge					
a complaint?					
10. Do the staffs	1.	2.	3.	4.	5.
at the finance					
department					
show					
willingness to					
assist with your					
questions?					
11. Do staff of	1.	2.	3.	4.	5.
the finance					
department					
have up to date					
records					
12. Do the staff	1.	2.	3.	4.	5.
at the Finance					
department					
update you on					

the progress of					
your request if					
left unresolved?					
13. Do the staff	1.	2.	3.	4.	5.
at the finance					
department					
communicate					
effectively to					
you when you					
lodge a					
complaint?					

# ASSURANCE

	Strongly	Disagree	Neutral	Agree	Strongly
Questions	Disagree				Agree
14. Are you always satisfied with the level of service you get at the finance department?	1.	2.	3.	4.	5.
15. Can you trust staff of finance department at UKZN?	1.	2.	3.	4.	5.

16. Do you get	1.	2.	3.	4.	5.
your queries					
resolved					
whenever you					
visit the finance					
department?					
17. Do you	1.	2.	3.	4.	5.
receive prompt					
service at the					
finance					
department of					
UKZN?					

## **EMPATHY**

	Strongly	Disagree	Neutral	Agree	Strongly
Questions	Disagree				Agree
18. Do the	1.	2.	3.	4.	5.
staff show					
empathy if your					
request is left					
unattended to?					
19. Do you get	1.	2.	3.	4.	5.
personal					
attention from					
staff of the					
Finance					
department					
when there is an					

issue or a query?					
20. Are staff of the dept. polite?		2.	3.	4.	5.
21. Do staff of the finance dept. have your best interest at heart?	1.	2.	3.	4.	5.
22. Do the staff treat your queries with some sense of urgency?	1.	2.	3.	4.	5.

# **TANGIBLES**

	Strongly	Disagree	Neutral	Agree	Strongly
Questions	Disagree				Agree
23. Do you	1.	2.	3.	4.	5.
think the					
university's					
finance					
department					
have adequate					
and modern					

equipment to deal with the students' financial issues?					
24. Do you think the financial department provide solutions to students' queries?	1.	2.	3.	4.	5.
25. Are the physical facilities at the finance department appealing to the eyes?	1.	2.	3.	4.	5.
26. Do you think the quality of service rendered by the finance department often lead to	1.	2.	3.	4.	5.

students'					
protest?					
27. How would	l you rate the qua	lity of service(s)	rendered by the f	finance departme	nt at UKZN?
		•	·	•	
1.□ Very poor	<b>2.</b> □ Poor	3.□ Average	4 □ Good	<b>5.</b> □ Excellent	
1.□ Very poor	2.01001	J. Average	4. U 000u	3.   Excellent	
28. In your own	n words, suggests	s ways by which	the quality of se	rvice(s) rendered	by the financial
department at UI	XZN can be impro	oved upon?			
		- · · · · · · · · · · · · · · · · · · ·			
•••••		•••••	•••••	• • • • • • • • • • • • • • • • • • • •	•••••

Thank you for participating!

# APPENDIX D: 2 TAILED CORRELATIONS WITHIN FACTORS OR DIMENSIONS

		Q 5	Q 6	<b>Q</b> 7	Q 8	Q 9	Q 1 0	Q 1 1	Q 1 2	Q 1 3	Q 1 4	Q 1 5	Q 1 6	Q 1 7	Q 1 8	Q 1 9	Q 2 0	Q 2 1	Q 2 2	Q 2 3	Q 2 4	Q 2 5
Q 5	Pe ars on Co rre lati on	1																				
	(2- tail ed)																					
	Ν	9 7																				
Q 6	Pe ars on Co rre lati on	0, 0 3 6	1																			
	Sig (2- tail ed)	0, 7 2 6																				
	N	9 7																				
Q 7	Pe ars on Co rre lati on	0, 0 2 1	0, 1 3 7	1																		
	Sig (2- tail ed)	0, 8 3 9	0, 1 8 2																			
	Ν	9 7	9 7																			
Q 8	Pe ars on Co	0, 0 4 3	0, 0 5 4	.3 2 9	1																	

	rre lati on															
	Sig (2- tail ed)	0, 6 7 4	0, 5 9	0, 0 0 1												
	N	9	9 7	9												
Q 9	Pe ars on Co rre lati on	3 9 7 *	0, 0 3 7	0, 1 9 2	0, 0 5 2	1										
	Sig (2- tail ed)	0, 0 0	0, 7 2 1	0, 0 6 2	0, 6 1 8											
	Ν	9	9	9	9											
Q 1 0	Pe ars on Co rre lati on	0, 0 6	0, 1 5 2	3 2 9 :	0, 2 0 0	0, 1 8 3	1									
	Sig (2- tail ed)	0, 5 2 6	0, 1 4 2	0, 0 0 1	0, 0 5 3	0, 0 7 6										
	N	9 5	9 5	9 5	9 5	9 5										
Q 1 1	Pe ars on Co rre lati on	3 0 2 ::	0, 0 9	0, 0 8 0	0, 1 4 6	.4 1 5	0, 1 2 1	1								
	Sig (2- tail ed)	0, 0 0 3	0, 3 8 0	0, 4 3 9	0, 1 5 5	0, 0 0	0, 2 4 3									
	N	9	9	9	9	9	9 5									
	Pe ars	0,	0,	.2 3	.2 6	0, 1	.5 4	0, 1	1							

Q 1 2	on Co rre lati	0 0 1	0 4 3	9	4	7 6	4	5 8									
	Sig (2- tail ed)	0, 9 9	0, 6 7	0, 0 2	0, 0 1 0	0, 0 8	0, 0 0	0, 1 2 5									
	N	9	9	9	9	9	9	9									
Q 1 3	Pe ars on Co rre lati on	0, 1 5 4	0, 0 9	0, 1 5 3	0, 1 8 1	3 2 9 **	.3 3 9 **	.3 8 4 #	3 2 5 **	1							
	Sig (2- tail ed)	0, 1 3 5	0, 3 6 0	0, 1 3 8	0, 0 7 9	0, 0 0 1	0, 0 0 1	0, 0 0	0, 0 0 1								
	N	9	9	9	9	9	9 5	9	9								
Q 1 4	Pe ars on Co rre lati on	.2 7 6	.2 8 3	0, 1 3 2	2 3 5	0, 1 8 1	.3	.2	3,75	.4 5 3	1						
	Sig (2- tail ed)	0, 0 0 7	0, 0 0 6	0, 2 0 1	0, 0 2	0, 0 7 9	0, 0 0	0, 0 3 4	0, 0 0	0, 0 0							
	N	9	9	9	9	9	9	9	9	9							
Q 1 5	Pe ars on Co rre lati on	.2 4 7	0, 1 6 5	0, 1 4 6	0, 0 0 7	.3	.2 8 0	.4 0 6	.2 0 3 *	.5	.5	1					
	Sig (2- tail ed)	0, 0 1 6	0, 1 1 0	0, 1 5 9	0, 9 5 0	0, 0 0 2	0, 0 0 6	0, 0 0	0, 0 4 8	0, 0 0	0,000						
	N	9 5	9 5	9 5													

Q 1 6	Pe ars on Co rre lati on	.2 7 9	0, 1 6 8	.2 9 2	0, 1 5 5	.2 9 4	.3 5 6	0, 0 9 0	.3 2 0 **	.4 3 3	.5 9 5	.4 6 5	1						
	Sig (2- tail ed)	0, 0 0 6	0, 1 0 5	0, 0 0 4	0, 1 3 5	0, 0 0 4	0, 0 0	0, 3 8 7	0, 0 0 2	0, 0 0	0, 0 0	0, 0 0							
	N	9	9	9	9	9	9 5	5	9	9	9	9							
Q 1 7	Pe ars on Co rre lati on	.2 6 4 **	.2 4 5	0, 1 5 6	0, 0 9 2	.3 6 1	.2 3 8	.2 4 4 *	0, 1 9 5	3,56:	.5 5 1	.5 2 9	5 2 5 :	1					
	Sig (2- tail ed)	0, 0 1 0	0, 0 1 7	0, 1 3 2	0,3 7 8	0, 0 0	0, 0 2 0	0, 0 1 7	0, 0 5 9	0, 0 0	0, 0 0	0, 0 0	0,000						
	Ν	9	9 5	9 5	9 5	9 5	9	9	9	9	9	9	9						
Q 1 8	Pe ars on Co rre lati on	0, 1 3 5	0, 1 3 5	0, 0 9	.2 4 2 *	.2 6 3 .	.2 9	0, 1 4 0	.3 7 6 **	3 5 7 **	.3 9 4	.2	.5 2 6 ::	.3 4 9	1				
	Sig (2- tail ed)	0, 1 9 2	0, 1 9 2	0, 3 8 1	0, 0 1 8	0, 0 1 0	0, 0 0 4	0, 1 7 5	0, 0 0	0, 0 0	0, 0 0	0, 0 0 3	0, 0 0 0	0, 0 0 1					
	Ν	9	9.5	9 5	9 5	9 5	9	9	9 5	9	9	9	9	9					
Q 1 9	Pe ars on Co rre lati on	0, 1 0 3	.2 2 5	0, 0 5 1	0, 1 3 3	0, 1 5 1	.3 4 5	0, 1 6 5	.4 5 1	3 0 5	.4 9 1	.2 4 5	3 8 3 :	.2 9 8 **	.5 7 7	1			
	Sig (2- tail ed)	0, 3 2 2	0, 0 2 9	0, 6 2 1	0, 2 0 0	0, 1 4 5	0, 0 0 1	0, 1 1 1	0, 0 0	0, 0 0 3	0, 0 0	0, 0 1 7	0, 0 0	0, 0 0 3	0, 0 0				

	N	9	9	9	9	9	9	9	9	9	9	9	9	9	9						
Q 2 0	Pe ars on Co rre lati on	0, 0 4 7	0, 0 3 2	3 6 5 :	.2 9 4 **	0, 0 1 8	.3 1 4	0, 0 0 1	2 9 9 #	0, 1 0 9	3 9 2	0, 1 2 6	.2 7 4 **	2 0 9 .	0, 1 9 3	.2 7 1	1				
	Sig (2- tail ed)	0, 6 5 3	0, 7 5 7	0, 0 0	0, 0 0 4	0, 8 6 6	0, 0 0 2	0, 9 9	0, 0 0 3	0, 2 9 4	0, 0 0	0, 2 2 6	0, 0 0 8	0, 0 4 4	0, 0 6 2	0, 0 0 8					
	N	9	9	9	9	9	9 4	9	9	9	9	9	9	9	9	9					
Q 2 1	Pe ars on Co rre lati on	0, 0 8 8	2 1 8 *	0, 0 4 1	0, 1 0 8	.2 4 1	.2 1 7	0, 1 6 1	294:	9,60:	90:	3 2 8 #	270:	2 6	9601	5,79:	0, 0 5 5	1			
	Sig (2- tail ed)	0, 3 9 7	0, 0 3 5	0, 6 9 4	0, 3 0 2	0, 0 1 9	0, 0 3 6	0, 1 2 0	0, 0 4	0,000	0, 0 0 5	0, 0 0 1	0, 0 0 8	0, 0 3 6	0, 0 0 0	0, 0 0 0	0, 6 0				
	N	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9				
Q 2 2	Pe ars on Co rre lati on	0, 0 7 1	.2	.2 1 1	0, 0 6 4	.2 3 9 *	.4 0 0	0, 0 3 9	3 7 5 *	.3 3 1 **	.3 4 6 **	.2 0 5	3 9 7 **	0, 1 9 2	5 0 0 :	.4 5 7	.2 4 3 *	.5 8 4 **	1		
	Sig (2- tail ed)	0, 4 9	0, 0 3 8	0, 0 4 1	0, 5 4 1	0, 0 2 0	0, 0 0	0, 7 0 7	0, 0 0	0, 0 0 1	0, 0 0	0, 0 4 8	0, 0 0	0, 0 6 4	0, 0 0	0, 0 0	0, 0 1 8	0, 0 0			
	N	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9			
Q 2 3	Pe ars on Co rre lati on	0, 1 1 3	0, 0 8 3	0, 0 5 3	0, 0 6 2	.2 4 1	2 3	2333	0, 0 4 9	2 8 2 :	2 0 3 .	3 0 4 ::	0, 1 5 3	0, 1 9	2 6 1	0, 0 9 5	0, 0 5 7	2 4	0, 0 7	1	
	Sig (2-	0, 2	0, 4	0, 6	0, 5	0,	0, 0	0,	0, 6	0,	0,	0,	0, 1	0,	0,	0, 3	0, 5	0,	0, 4		

	tail ed)	7	2	1 5	5	1	3	2	4 2	0	4	0	4	5	1	6	8	3	6			
	N	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9			
Q 2 4	Pe ars on Co rre lati on	0, 0 8 7	.2 8 1	0, 1 8 1	0, 1 8 4	2 5 7 *	.4 5 9 **	2 6 6 :	3 2 5 :	3 8 0 :	3 2 9 **	3 5 1	3, 1 3 ::	27 6:	3 2 1	2 9 2 **	0, 0 8	.4 2 5 **	3 8 7 ::	4 7 2	1	
	Sig (2- tail ed)	0, 4 0 5	0, 0 0 6	0, 0 8 1	0, 0 7 6	0, 0 1 2	0, 0 0	0, 0 1 0	0, 0 0 1	0, 0 0	0, 0 0 1	0, 0 0 1	0, 0 2	0, 0 7	0, 0 0 2	0, 0 4	0, 4 0	0, 0 0	0, 0 0	, 0 0 0		
	N	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9 4		
Q 2 5	Pe ars on Co rre lati on	0, 0 6 0	0, 0 8 1	.2 0 5	0, 1 3 6	0, 1 4 2	.2 9 4	0, 0 5 1	0, 1 9 0	0, 1 6 7	0, 1 3 0	0, 1 0 1	0, 1 8 9	0, 0 9 7	3 7 9 **	.2 4 6	0, 1 3 6	.2 9 9 **	0, 2 0 1	4 3 2	.2 9 1	1
	Sig (2- tail ed)	0, 5 6 4	0, 4 3 5	0, 0 4 7	0, 1 9	0, 1 7 3	0, 0 0 4	0, 6 2 8	0, 0 6 7	0, 1 0 8	0, 2 1 3	0, 3 2	0, 0 6 8	0, 3 5	0, 0 0	0, 0 1 7	0, 1 9	0, 0 0 3	0, 0 5 3	0 0 0	0, 0 0 4	
	N	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	
Q 2 6	Pe ars on Co rre lati on	0, 0 3 6	0, 0 5 3	0, 0 6 8	0, 0 1	0, 0 1	.2 7 9	0, 0 2	0, 1 1 6	0, 0 7 5	0, 1 3 8	0, 0 9 5	0, 0 7 6	0, 0 1	0, 0 8 0	0, 0	0, 1 0 3	0, 0 2	0, 1 5	2 4 4	.3	0, 0 7 0
	Sig (2- tail ed)	0, 7 3 0	0, 6 1 0	0, 5 1 8	0, 9 2 4	0, 9 1 5	0, 0 0 7	0, 8 2 7	0, 2 6 5	0, 4 7 1	0, 1 8 4	0, 3 6 3	0, 4 6 9	0, 9 2 1	0, 4 4 6	0, 9 2 9	0, 3 2 4	0, 8 5 2	0, 1 4 7	0 , 0 1 8	0, 0 0 3	0, 5 0 1
	N	9	9 4	9	9	9	9 4	9	9	9 4	9 4	9 4	9	9	9 4	9 4	9 4	9 4	9 4	9 4	9 4	9