Assessment Of Customer Satisfaction At The University Of Limpopo Using SERVQUAL Model

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ASSESSMENT OF CUSTOMER SATISFACTION AT THE UNIVERSITY OF LIMPOPO USING SERVQUAL MODEL

by

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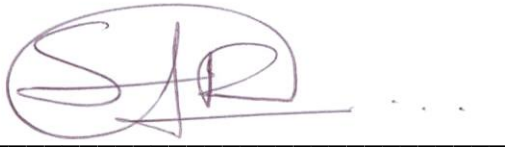## (Turfloop Graduate School of Leadership)

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UNIVERSITY OF LIMPOPO

Supervisor: Prof TJ Musandiwa

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DECLARATION

I declare that the <u>Mini-dissertation</u> hereby submitted to the University of Limpopo, for the degree of <u>Master of Business Administration</u> has not previously been submitted by me for a degree at this or any other university; that it is my work in design and in execution, and that all material contained herein has been duly acknowledged.

_____   <u>**08 April 2024**</u>

Rikhotso, SSB (Mr)   **Date**

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ABSTRACT

Service quality plays an integral role in the Higher Education Institution's reputation, competitiveness and most importantly in students' satisfaction. Service quality in the Higher Education Institutions (HEIs) distinguishes one institution from another, and its assessment can lead to a competitive advantage and the development of marketing and business initiatives. If students are not satisfied with the quality of services being offered by the university, they are likely not to recommend others through word of mouth to enrol at that institution, it can tarnish the brand image of the institution, and it may not attract future students which will ultimately has a negative impact on the financial state of the institution.

This study was then conducted to assess customer satisfaction of the administrative services that are provided to the University of Limpopo students using the SERVQUAL model. The study was designed in such a way to begin the process of determining the students' expectations of the services and how they perceive the quality of administration services after receiving them as well as evaluating the level of satisfaction of these services provided by the employees of the institution. A better understanding of whether the students' expectations are met or not, would then assist the institution in improving the quality of their services provided to students if they are found to be lacking, a quantitative, descriptive approach was conducted to determine whether students at the university of Limpopo are satisfied or dissatisfied with the administration services provided by the university's central administration offices. Self-administered online and physical questionnaires were utilised to collect data for the study. The questions were based on the SERVQUAL model where a first set of questions were based on the expectations on service quality, the second set were based on the perceptions of service received across all the dimensions of the model namely tangibility, reliability, responsiveness, assurance and empathy.

A total number of 288 students participated in the study. The overall findings revealed that students are dissatisfied with the quality of administration services provided by the University of Limpopo's central administration offices across all dimensions of the SERVQUAL model. This was determined by the low perceptions scores of service quality as compared to the expectations scores. Therefore, the

study recommended an improvement of service quality in order to enhance the students' satisfaction.

Keywords: Customer satisfaction, customer expectations, customer perceptions, service quality.

ACRONYMS

UL	University of Limpopo
SERVQUAL	Service Quality
HedPerf	Higher Education Performance
HEI	Higher Education Institution
DHET	Department of Higher Education and Training
FTE	Full-Time student Equivalents
SERVPERF	Service Performance
EDT	Expectancy-Disconfirmation Theory
HBCU	Historically Black Colleges and Universities
TVET	Technical Vocational Training
MEDUNSA	Medical University of South Africa

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

Chapter 1: INTRODUCTION AND BACKGROUND

1.1.   BACKGROUND AND INTRODUCTION

"Higher Education Institutions (HEIs) have been entrusted with the responsibility to train and transform students into valuable human resources that will ultimately contribute to the economic growth of the nation", (Abbas, 2020). HEIs are amongst the service industry organisations, however, they specialise in educational services that are offered to the target audience which are students. There are several debates on whether students in HEIs should be regarded as customers or clients. The nature of the services offered at HEIs is in a way implying that amongst other target markets, students are the primary target audience and priority customers. They are the main consumers of the services offered by the HEIs. Apart from consuming teaching services provided by the HEIs, students also make use and benefit from the administrative services offered by the HEIs. The kind of services offered includes registration, finance, students' enquiries, financial aid and many others.

As it is with other service providers outside the education sector, quality service delivery is now considered to be a competitive advantage that HEIs can exploit to attract students to enrol, (Josanov-Vrgovic *et. al.*, 2020). It is therefore important for universities to ensure that their service offerings are of high quality in order to induce their potential students in believing that their institution is the 'university of choice,' considering that these institutions generate revenue, directly and indirectly through the students.

Another important aspect of service quality that Ramya, Kowsalya and Dharanipriya (2019) have alluded to is its positive link to market share and customer satisfaction. In the case of HEIs, the quality of the university's administrative and support services are inseparable from students' satisfaction. If students are not satisfied with the service quality, it will have implications on the revenue, brand and future enrolment of the institution. This is supported by Wirtz and Lovelock (2022) indicating that if there is higher customer satisfaction, there will be improved repeat purchases, and referrals.

According to Greene (2014), the service quality and customer satisfaction study conducted at Durban University of Technology (DUT) had shown that the DUT's service quality is a source of dissatisfaction for both staff and students. The results show that customers generally had high expectations in the tangibles, reliability, and assurance dimensions, with the assurance dimension receiving the highest perceptions. These studies were conducted on both academic and administrative service quality. A similar study was also conducted by Makoe and Sama (2019) at University of South Africa (UNISA) which revealed that there is a gap

between students' expectations and UNISA's students' quality support services specifically in the tangibles, reliability and delivery dimensions of service quality. While the focus was generally on staff and students as well as on both academic and support services, a specific study focusing on only students and on administrative services was found lacking. On the other hand, the study at UNISA, which focused on administrative and support services, it was based on the distance learning institution. A study on a contact institution of higher learning was found to be lacking in this regard, hence a study at University of Limpopo was necessary.

The purpose of this study was to look into customer satisfaction of the university students at the University of Limpopo (UL) with a special focus on administration services. The targeted participants for this study were students currently enrolled at the institution. The study was prompted by the observation made through interacting with the students and through the institution's social media platforms. The students would often complain about the poor services provided to them by the administrative staff of the institution. Amongst others, the complaints would include enquiries not attended to timeously, telephones and emails not being responded to on time, as well as unfriendly administrative staff members. The study sought to investigate the satisfaction of the students on the quality of administrative services provided by the University of Limpopo with a specific focus on the central administration offices. The central administration offices of the university play a key role as the face of the institution in providing student enrolment services, student finances and students records. The study will help the institution understand how satisfied and/or dissatisfied the students are with their services and therefore help improve the quality of the student administration services. Service quality in HEI distinguishes one institution from another, and its assessment can lead to a competitive advantage and the development of marketing and business initiatives, (Abbas, 2020).

1.2. PROBLEM STATEMENT

Service quality plays an integral role in the higher education institution's reputation, competitiveness and most importantly in students' satisfaction. Abbas (2020) claims that there has been little research conducted with regards to the service quality of HEIs from the students' perspective. He further notes that students are the primary customers and principal stakeholders; therefore, they are the definers of service quality. If students are not satisfied with the quality of services being offered by the university, they are likely not to recommend others through word of mouth to enrol at that institution. If the institution's enrolment is low, the revenue generated via student enrolment and the funding from the Department of Higher

Education and Training (DHET) will also be negatively affected. According to Universities South Africa (2016), the DHET block grant based on the system of full-time student equivalents (FTEs) and student fees are the principal sources of funding for public universities.

When dissatisfied customers (students) publicise their complaints or frustrations with regard to the poor service quality of the institution in the public domain such as social media, there is a likelihood of creating a negative image of the institution and tarnish its brand. This study is thus designed to begin the process of determining how the students at UL perceive the quality of administration and support services as well as evaluating the level of satisfaction of these services provided by the employees of the institution. A better understanding of whether the students' expectations are met or not will assist the institution in improving the quality of the services provided to students, especially if they are found to be lacking, as well as contribute to the broader literature regarding service delivery at HEIs.

1.3. SIGNIFICANCE OF THE STUDY

The study may add value to improve UL's service provision to their principal stakeholders, which are the students. Not only will this study contribute to UL or Higher Education Institutions in general, it will also be valuable to the service industry in general and also in assessing their service quality from the perspective of their customers. The study will also contribute to the body of knowledge in the area of service marketing, service quality and customer relationship management.

1.4. AIM OF THE STUDY

The aim of the study is to assess customer satisfaction of administrative services that are provided to the University of Limpopo students using the SERVQUAL model.

1.5. OBJECTIVES OF THE STUDY

- To determine the students' expectations and perceptions of the administrative services at UL.
- To evaluate the students satisfaction level with the actual administrative services provided by the UL employees.

1.6. RESEARCH QUESTIONS

- What are students' expectations and perceptions of the administrative services at UL?

- Which level of students' satisfaction as compared to the actual services provided by the UL's university administrative staff?

1.7. DEFINITION OF CONCEPTS

1.7.1. Customer Satisfaction

"Customer satisfaction can be referred to as the correlation between the expected and perceived product and service quality as well as the significance of each property", (Biesok and Wyrod-Wrobel, 2011). Students' satisfaction can therefore be attributed to the expectations and perceptions of the service quality of the university's service quality.

1.7.2. Customer Expectations

According to Tukiran, Tan and Sunaryo (2021), customers employ internal standards known as customer expectations to judge the quality of a service experience. The authors further describe customer expectations as predictions made by customers on what is likely to happen during a forthcoming transaction (Parasunaman, 1991). In this context, the customers, which are students, have certain expectations of service quality offered by the University of Limpopo's administration offices.

1.7.3. Customer Perceptions

In a customer context, Madichie and Kapoor (2012) define perception as "a process in which a customer selects, organises, and interprets information inputs in order to construct meaning that would assist him or her in making a decision". In the context of this study, customers being referred to are students.

1.7.4. Student Services

Ciobanu (2013) defines Student Services as the divisions or departments in HEIs that provide services and support to students. In this study, the student services in question are the administration services offered by the central administration of the University of Limpopo.

1.7.5. Service Quality

There are many definitions in literature with regard to Service Quality. Lovelock and Wirtz (2022) describe quality services as a high degree of performance that continuously meets or surpasses the customers' expectations.

1.7.6. Administrative Support Staff

Stanford University (2022) describe Administrative Support Staff as non-academic employees of the university that often assist in the university's administrative and technical needs of the institution.

1.8. LIMITATIONS OF THE STUDY

There are number of the UL's administrative services which include amongst others students general enquiries, Financial Aid, Central Registration Services, and Student Finance. This study will not cover all the administrative support services of the university, however, it will focus on two aspects; which are central to this specific study and students' engagement with the university's administrative staff is on a regular basis. Therefore, the study will not generalise its findings.

1.9. OUTLINE OF THE PROPOSED RESEARCH

Chapter 1

The chapter entails the background and introduction of the study. The aim of the background is to provide the context of the study to the reader. The introduction details the variables being investigated. The section further provides the background of the problem and states the problem being studied. The aims and objectives together with the research questions are also subsections of this chapter. The value and significance of the study is made explicit in this chapter so as to give a reader the contribution this study will make in the body of knowledge as well as in academia and everyday practise.

Chapter 2

This chapter entails the literature review, which is a critical evaluation of prior research on the topic understudy that has been conducted by other academics/scholars as well as the current research being undertaken on it. The literature review is structured in a way that it provides what has been studied at a global context, coming down to the South African context and ultimately zooms in to the institutional level. Sections of the literature review include subsections namely: theoretical concept, definition of concepts and detailed review of scholarly literature on key variables of the study including perceived service quality and customer satisfaction, student administrative and support services, service quality at higher education institutions, students' perception and satisfaction on service quality of higher education institutions. At the end, the researcher links the reviewed literature's findings with that of the findings after the field work has been completed.

Chapter 3

The literature review and theoretical concept from chapter two serve as the foundation for this chapter's outline. The chapter entails the research techniques employed to collect and

analyse the data to address the problem being investigated. The section also details the research design, sampling, sampling method and size of the student population under study.

Chapter 4

A thorough discussion of the research findings in relation to the themes that served as the theoretical concept and models for the questionnaires is provided in this chapter. Tables and charts have been used to present the results and summarise participants' responses. The researcher's comments at the end also form part of this chapter.

Chapter 5

The conclusions and recommendations in this chapter are presented along with the implications of the study. The beneficiary will get access to the research report's results, recommendations and implications. The limitations of the study will also be highlighted in this section for the reader and the beneficiary so as to avoid generalising the findings to all areas of student administrative services that are being studied.

CHAPTER 2: LITERATURE REVIEW

Introduction

This chapter presents the analysis of literature, theoretical concepts and models concepts related to customer satisfaction. Service quality models and theories will be discussed together with customer satisfaction theories that include Expectancy-Disconfirmation and Value percept as they are relevant to the study being conducted. Various subtopics related to the variables under study will be explored and their linkages to the problem being investigated will be analysed through reviewing different literatures. Arguments will be made and gaps will be identified amongst the explored literature on the topic being investigated.

2.1. Theoretical concepts

2.1.1. Service Quality Theories

There are several models that have been and are being used to measure service quality in various service industries. Existing academic research supports the claim that SERVQUAL and SERVPERF are the two key scales that served as the foundation for service evaluating the quality of various service industries (Adil, Ghaswyne and Albkour, 2013).

(a)   SERVQUAL Model

The SERVQUAL model was developed and implemented in the late 1980s. According to Jusufbasic and Stevic (2022), the SERVQUAL model was developed in 1985 in order to measure the quality of a service based on customer perceptions and expectations along specific dimensions. Wirtz and Lovelock (2022) define it as an all-purpose measuring tool applicable to a broad spectrum of service industries. Its basis is the notion that customers assess a company's quality of customer service by comparing their expectations and their own perceptions of five service quality dimensions (tangibles, reliability, responsiveness, assurance, empathy). Considering the importance of service industries to often measure the quality of their services, Morrison-Coulthard (2004) claims that there was no measurement method that had been developed before the time when SERVQUAL was developed, that could be used universally across all service sectors to ascertain consumers' expectations and perceptions of the services being supplied. According to Jusufbasic and Stevic (2023), when the SERVQUAL model was first created, there were many dimensions, which made it impossible to conduct actual measurements. As a result, the number was decreased to ten

dimensions. The model has undergone significant evolution over time, and it consisted of 22 questions for perception and 22 questions for expectation, distributed along five fundamental dimensions. Ramya, Kowsalya and Daranipriya (2019) briefly explain these five dimensions as follows:

- Reliability- It has to do with delivering and providing the service promises that the organisation has made to its customers in an accurate and dependable way. Keeping the promises made to the customers is a key element in this regard.
- Responsiveness- This element focuses on how clients' requests, questions, grievances, and issues are resolved. Additionally, it emphasises professionalism, presence, timelines and other attributes.
- Assurance- It is described as the ability of an organisation and its employees to build the trust and confidence of customers. This aspect focuses on the organisation's security measures as well as the workers' accuracy, job knowledge and other qualities.
- Empathy- It is regarded as the considerate, personalised treatment that customers receive from the service provider or organisation. Through tailored or individualised services, this dimension seeks to convey to the organisation how valuable and distinctive every customer is.
- Tangibility- It is defined as the physical facilities, communication tools and the technological look of the organisation- all of these give customers an ample of information about the level of service provided by the organisation and improve its reputation.
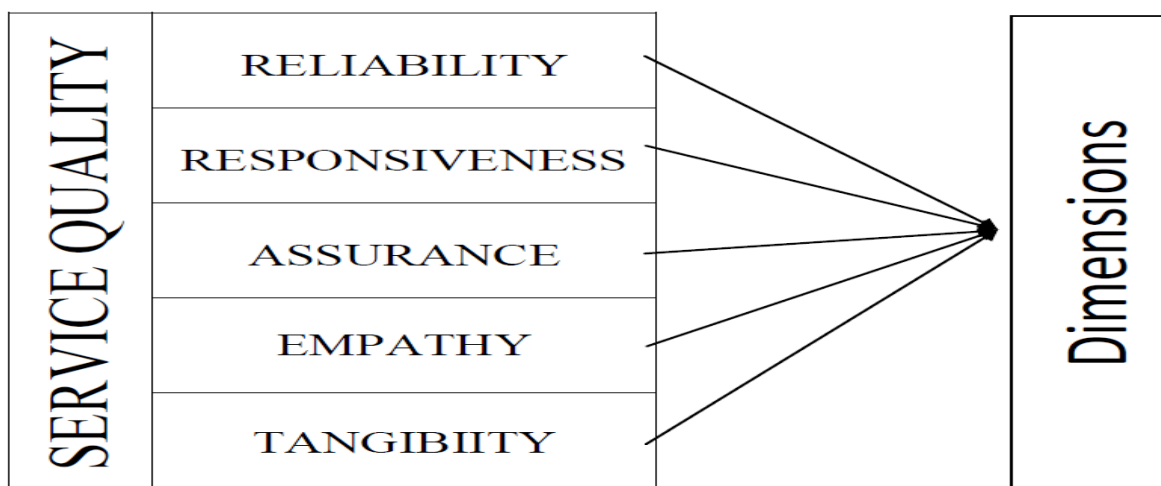
Figure 1:

Dimensions of service quality (Ramya, Kowsalya and Daranipriya, 2019)

The model has been deemed as the most appropriate tool to measure service quality; it has also received some criticism from both theoretical and empirical point of view, (Jusufbasic and Stevic, 2023). Amongst others, the model disregards the expenses incurred to improve service quality (Anderson, 1992; Magasi,Mashenene and Dengenesa, 2022); the five SERVQUAL dimensions are more context-specific than universal(Sureshchandar et al,2001; Dengenesa, 2022) and lastly, the physical environment and other uncontrolled elements that affect service quality are disregarded by SERVQUAL (Brady et al, 2002; Dengenesa, 2022). Another critique about the model is that it has questioned if the SERVQUAL model is reliable as a general tool for assessing service quality in various service industries. And that to assess service quality in various service environments, a simple updating of the SERVQUAL items is insufficient (UKEssays, 2018).

Not all the criticism of the SERVQUAL Model is negative. The SERVQUAL scale could be applied in a context-specific manner and combined with additional research, to identify the root causes of the major problem areas or gaps found, (Parasuraman, Berry and Zeithmal, 1991; Bui *et al.*, 2022). The study that was conducted by Gregory (2019) further provide the positives that come with using SERQUAL model as he found that the model that was utilised at a university's doctoral programme, provided it with a detailed, useful information that might be used to enhance the program. This also support the notion of applying the tool in a context specific manner and in this context as well as the context of this study, a university environment was utilised. Bui *et al.* (2022) claims that HEIs frequently use SERVQUAL for evaluating perceived service quality. It is therefore the reason why it is utilised in this study. According to Wirtz and Lovelock (2022) in its generic form, SERVQUAL has been frequently utilized. Many managers discovered, nevertheless, that when the metric is customised for their particular context and business, it offers more information. Therefore, in this study, the researcher would be able to alter, expand, or remove statements used to gauge service quality of the administration services offered to students at University of Limpopo.

Alongside the SERVQUAL Model, a GAP model was developed. According to Mauri, Minnazi and Muccio (2013), the Gaps Model was initially published in 1985, and the same authors (of SERVQUAL Model) continued to refine and modify it in subsequent publications. The authors further indicate that the model shows how consumers evaluate quality while taking into account the many factors that define quality: Users perceive quality after utilising a service; Businesses supply quality; and Customers expect quality.

The SERVQUAL model authors, Parasuraman, Zeitham, and Berry, according to Business Bliss Consultants FZE (2018) showed how a set of five unique gaps that exist in organisations affect consumers' perceptions of quality and gaps, which may prevent the delivery of services that clients consider to be of high quality. These gaps include:

- Gap 1: Disparity between management's views of consumer expectations and actual expectations of consumers.
- Gap 2: Disparity between management's opinions of customer expectations and requirements for service excellence.
- Gap 3: Disparity between expected service quality and what is actually provided.
- Gap 4: Disparity between the provision of services and the information provided to customers.
- Gap 5: Disparity between perceived service quality and service expectations.

These gaps are one way or the other useful to the measurement of service quality in the context of this study, especially gaps 3 and 5.

(b) SERVPERF Model

After a gap was identified on the SERVQUAL model, a service performance model called SERVPERF was developed. Similar to SERVQUAL, the SERVPERF model has the five service dimensions namely, tangibles, reliability, responsiveness, assurance and empathy coupled with a two sets of 22 item statements (Rasyida *et al.*, 2016). According to Akdere, Top and Tekingunduz (2020) SERVPERF was an instrument used for performance-based evaluation after discarding the SERVQUAL's customer expectation portion of the tool. Cronin and Taylor introduced the SERVPERF scale and offered actual data from the banking, pest control, dry cleaning, and fast food industries to support the superiority of their performance-only instrument over the disconfirmation-based SERVQUAL scale (Rasyda *et al.* 2016). Del Carmen and Avolio (2020) debated that the SERVPERF model only takes into account customers' perceptions about service quality as compared to the SERVQUAL model.

In another comparison to SERVQUAL, Sohail and Hasan (2021) also argue that since SERVPERF is a single-item measure and can indicate more variation in overall service quality than SERVQUAL, it is a stronger indicator of service quality empirically than SERVQUAL. In the study conducted by *Adil et al.* (2013) of the banking sector in India, they found that SERVPERF surpassed SERVQUAL because it did not only decrease the number

of variables but also the work required to conduct customer surveys and helped produce objective results.

Considering that the study at hand is in a university or higher education institution context, the results of the study that was conducted by Ha *et* al. (2022) revealed that SERVPERF is an effective model for evaluating service quality, particularly for reliable theoretical models, and that it requires less work to adapt tools for a given environment, such as higher education. Even though the model provides the greater discriminant and convergent validity, it is however criticised for less diagnostic ability to pinpoint areas requiring managerial interventions (Machado, Riberio and Basto, 2014). According to Endeshaw (2019), the SERVPERF model encountered a few more number of criticisms which include that the model does not fit in terms of different cultures; it needs to be examined in industries that involve high levels of complexity; it does not explain how resources can be integrated to excel in technical and functional service quality; it needs to be adjusted to each service setting; and it needs to be tested using multiple measures of the dimensions. Attempts to modify the model for real-world use revealed it to be of limited utility. The model was created without regard to technical quality, simply utilitarian quality. Furthermore, when creating the model, the perspectives of other stakeholders were not taken into account. The model might not be appropriate because it was so broad. Just like the SERQUAL model, the model is considered to be so generic; it might not work in other situations.

To note, Carrillat et al. (2007) indicate that both scales (SERVPERF and SERVQUAL) are adequate and equally valid predictors of overall service quality. While the SERVQUAL scale could be of greater interest for practitioners as it provides richer diagnostic value to marketers for strategic decision making purposes.

(c) HedPerf Model

The SERVQUAL and SERVPERF models have been without a doubt instrumental in measuring service quality in service industries, however, the Higher Education Industry required a model that was not generic but specific to its situation and operations. It was then when a HedPerf (Higher Education Performance) model was developed. According to Arieta and Avolio (2020), the Higher Education PERFormance-only (HedPERF) model was first developed by Firdaus in 2005, then Abdullah improved it in 2006 by adding two HedPERF

factors—the academic and non-academic aspects—as well as two SERVPERF factors—reliability and empathy. The HEDPERF scale, which is made up of 41 elements and is only thought to be relevant to the high education sector, considers both academic and non-academic facets of the total service environment as perceived by students, (Danjuma *et al.*, 2018). According to Silva *et al.* (2017), the HEdPERF scale was changed from its original six dimensions to five, comprising non-academic elements, academic aspects, reputation, access, and program difficulties, and was proved to be initially superior to the original scale in later investigations.

- Non-Academic aspects- Supplies required for students to complete their academic obligations. It relates to the administration staff's duties
- Academic aspects- Tasks for which the teaching staff is solely accountable for
- Reputation- Matters that highlight how crucial it is for HEIs to provide a credible image.
- Access-Accessibility, contact ease, availability, and convenience-related items
- Programme Issues-Articles that stress the value of offering a broad choice of programs that are credible and have adaptable structures and study schedules.
- Understanding - Information on understanding the unique counselling and health requirements of students

The only aspects being dealt with in this study are non-academic aspects, reputation and access. This is due to the specific focus of this study on administrative service quality under investigation. Abdullah(2006), from his comparative study on HEdPERF,SERQUAL and SERVPEF claimed that HEdPERF scale was a better fit as compared to the other two due to its higher criterion and construct validity, greater explained variance, and more reliable estimations. The author also claims that the recent analysis also demonstrated SERVPERF's appalling performance. Although SERVPERF was created and later demonstrated to be the best general scale to assess service quality across a variety of service industries, it did not offer a better viewpoint for the higher education environment. Danjuma *et al.* (2018) argues that Managers would be able to pinpoint and enhance the customer-perceived dimensions by using SERVQUAL to assess service quality instead of HedPERF,the authors further claimed that the SERVQUAL scale is more reliable than the restrictive-oriented HEDPERF scale as well as the performance-only SERVPERF scale.

Number of authors compared the three instruments and also made a recommendation on the most reliable model to use in measuring service quality at Higher education institutions. In a

comparison of the SERVPERF and HEDPERF scales' reliability, Abdullah (2006) established the superiority of the HEDPERF measurement tool. However, researchers like Ginns et al. (2007) in their study challenged the HEDPERF scale as being inadequate and underutilised, untested, not standardised, and too limiting (Brunson, 2010). Furthermore, Brunson (2010) criticised the HEDPERF scale for failing to link loyalty variables to quality perception and satisfaction. All these authors agreed that it would be desirable to have a scale that compares what prospective students, who are the main clients of the institutions they choose, expect to receive from those institutions before enrolling in those institutions (the expectations paradigm) to what they actually received (the perceptions paradigm), thereby establishing SERVQUAL as a reliable indicator of service quality (Danjuma *et al.* 2018). The authors further emphasise that the SERVQUAL scale is more reliable than either the performance-only SERVPERF or the restrictive-oriented HEDPERF scales because service quality is a characteristic that is extrinsically perceived based on the customers' experiences of the service interactions (Parasuraman *et al.*, 1985).It is therefore due to the reasons discussed above why the SERVQUAL model has been chosen as the reliable scale to assess the customer satisfaction at the University of Limpopo.

2.1.2. Customer Satisfaction Theories

2.1.2.1. Expectancy-Disconfirmation Theory
Elkhani and Bakri (2012) describe Expectancy-Discomforting Theory as a theory that uses perceived product or service quality to gauge consumer satisfaction. According to Churchill and Surprenant, (1982); Kim, Magnusen and Kim (2014), expectations, product performance, and disconfirmation are the three constructs that make up the expectancy-disconfirmation paradigm as: customer expectations for the performance of goods and services are referred to as expectations. Meanwhile, disconfirmation is the difference between a customer's initial expectation and actual performance, while performance is related to consumers' experiences using goods or services and represented in their perceived performance, which may match or fall short of their expectations (Elhani and Bakri, 2012). The disconfirmation/confirmation paradigm brought forward by Wirtz (1993), suggests that consumers asses their consumption experiences and decide on their satisfaction by making a comparison of perceived performance of product/services with standards they set before consumption.
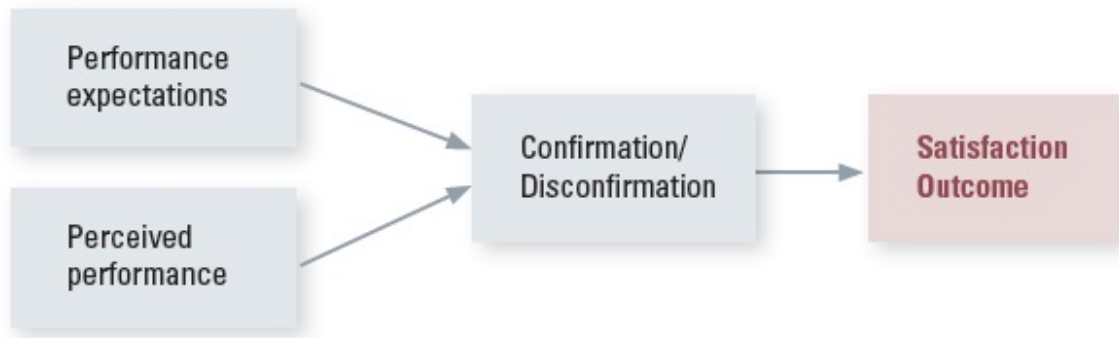
Figure 2: The Expectancy-disconfirmation model of Satisfaction (Wirtz, 2018)

To expand more on the expectancy-disconfirmation model, the following will be discussed:

    a. Performance Expectations

Elkhani and Bakri (2012) define Expectations as what a client expects a product or service to do. In other words, the customer would anticipate the performance of the product or service based on several factors including but not limited to experience if the customer is not the first time buyer or consumer of the product or service. The authors further indicate that there is multiple ways in which customers conduct their purchase process. First, clients have preconceived notions based on their past use of a particular good or service. It is more reasonable to anticipate repeat business from this kind of customer from a specific company. Secondly, new customers who are buying from a particular business for the first time and are unaware of how well the goods or services work. First expectations for these clients usually come from media, ads, and remarks they hear from other consumers, (Elkhani and Bakri, 2012).

In the context of this study, the performance expectations of students in the Higher Education Institutions of the services may not been based on the previous experience since to some it is their first time being at the university. However, some are coming from another institution or have used the services of this institution before, which therefore may inform their expectations from the university under study based on their previous experience.

    b. Perceived performance

The experience that customers have when they get or utilise the goods or service will determine how satisfied they are. Customer expectations are thus determined by customer experience (Mahlatji, 2021). Elkhani and Sakhri (2012) further describe Perceived performance as a summary of a customer's experience that may or may not meet their expectations after using the goods or services. Tse and Wilton(1998); Kim,Magnusen and

Kim(2014) posit that the product(service) performance can apply to both the best possible performance of a product as well as what consumers feel performance might be in the future.

In this study, students will determine their perception of the administrative services after having utilised them in order to judge whether they are better or worse. This will also apply to future usage of the services from the university under study or even at other universities.

c. Confirmation/disconfirmation

Du Plesis (2015) describes confirmation as the situation where service performance meets expectations; therefore the confirmation between perceptions and expectations yields satisfaction results. Disconfirmation is classified into three categories in the literature: positive disconfirmation, negative disconfirmation, and simple disconfirmation, (Elkhani and Bakri, 2012). The authors further describe the three constructs as follows:

- Negative disconfirmation results from when actual performance of a certain product or service falls short of the customer's expectations.
- If perceived performance of a certain product or service is able to surpass consumer satisfaction, this will result in positive disconfirmation and customer happiness.
- When a customer's expectation and the actual performance of a particular good or service are same, perception and expectation are equal, and a simple confirmation occurs.

These imply that negative disconfirmation may lead the customers to dissatisfaction since their expectations are not met, whereas positive and simple disconfirmation could result in satisfaction as the expectations will be met and even beyond expectations. One of the objectives of this study includes determining the students' expectations and perceptions of the administrative services at UL. This means that if students' expectations of the administrative services offered by the university employees are not met, negative disconfirmation will occur and will lead to dissatisfaction. However if their expectations are met or excessively met, there will be simple or positive disconfirmation which therefore leads to satisfaction.

d. Satisfaction

According to the Expectancy-Disconfirmation Theory (EDT), customers' satisfaction is crucial to an organisation's success. Biesok and Wyrod-Wrobel (2011) defines customer satisfaction as the correlation between the expected and perceived product and service quality as well as the significance of each property. Baquero (2022) also agrees that customer satisfaction

results from the belief of the customers that the service they received met their expectations. Which would simply means the students of the University of Limpopo's satisfaction is determined and informed by their expectations of the administrative service offered being met

The Expectancy Disconfirmation Theory allowed the researcher the freedom to investigate how customers view and anticipate each service quality criterion in order to measure customer satisfaction. at the University of Limpopo's administrative services; hence it was chosen as the theoretical framework for this study. Data would then demonstrate how the service provided met the needs of the customer and how it could be improved to raise customer satisfaction.

2.1.2.2. Value percept Theory

The Value percept theory, also known as Value Percept disparity theory was formulated by Locke in the 1960s. According to this theory, satisfaction or dissatisfaction is an emotional reaction brought on by a cognitive-evaluative process in which one's values are contrasted to their perceptions of an object, activity, or condition (or needs, wants, desires), (Westbrook and Reilly,1983). Mustaffa, Bing and Ab Wahid (2016) further cite this theory's assertion of the causal sequence of post-purchase cognitive-affective processes. In other words, the more closely one's views of an object, action, or circumstance align with their beliefs, the more consistent the theory is. The appraisal is more favourable the stronger the development of good affect related to goal attainment, specifically satisfaction. Conversely, a greater value-percept parity results in a less favourable appraisal, less positive affect, and a greater amount of negative affect associated with goal frustration or dissatisfaction. According to this theory, an individual will form a more positive opinion of a product, service, or condition the closer their perception of it is to their values (Garnesh, Haslinda and Raghavan, 2016). The authors further alluded that according to the theory, the approach only needs to satisfy three requirements. First, one or more perceptions of a good or service, an organisation, or market behaviour; second, one or more consumer-held values; and thirdly a conscious or unconscious assessment of the connection between a person's perception and their value.

The value percept theory argues that the Expectancy-Discomforting Theory fails to recognise the contrast between cognitive and evaluation notions (Zeithmal, 2012). However, Westbrook and Reilly discovered that the disconfirmation of expectations had a greater effect on satisfaction than the difference between value and perceptions. They argued that both constructs—expectations and values—were necessary to explain consumer happiness, and

that neither the expectation-disconfirmation model nor the value percept model was enough on its own. (Yuksel and Yuksel, 2008). It would therefore imply that in this study, the two variables, namely customer's perceived value and customer expectations had to be analysed.

2.2. Customer expectation, Perceived Quality and customer satisfaction

According to Tukiran, Tan and Sunaryo (2021), customers employ internal standards known as customer expectations to judge the quality of a service experience. The authors further describe customer expectations as predictions made by customers on what is likely to happen during a forthcoming transaction (Parasunaman, 1991). According to William, Appia and Botchway (2016), expectations are formed by experiences with each type of service they have used before as well as their overall experiences with services, learn about services from other people and also by the marketing efforts made by the service provider such as advertising and promotions. William et al. (2016) identifies 5 levels of customer expectations which are; Ideal service levels, desired service level, adequate service level, zone of tolerance and predict service level:

- Ideal Service level- Considered as the highest level of expectations which customers anticipate receiving in a perfect scenario.
- Desired level outcome- It is a combination of what customers think can and should be delivered, as well as the level of performance they expect from the service.
- Adequate service level: It is considered the lowest level of service expectations described as the absolute minimal level of service that a consumer will tolerate before losing patience.
- Zone of tolerance- It is used to describe the distinction between intended and adequate service levels. Customers will be willing to put up with the services' wide range. If the performance exceeds the ideal service level, the customer will be overjoyed. Customers will be dissatisfied and generate a negative judgment if performance falls short of the required level of service.
- Predicted service level- It is the level where customers actually expect a certain level of service from service providers.

Almsalam (2014) found that consumer expectations have a strong, favourable impact on customer satisfaction. Customer satisfaction can be referred to as the correlation between the expected and perceived product and service quality as well as the significance of each property (Biesok and Wyrod-Wrobel, 2011). Whilst Guido (2014) defines customer

satisfaction as the evaluation of a customer's degree of fulfilment in relation to choices made about the acquisition and utilization of specific goods and services. Factors that are considered to be influencing customer satisfaction include amongst others customer expectations, perceived service quality, product quality, perceived value and price (UKEssays, 2018). Customer expectations are amongst the determinants of customer satisfaction as customer's judge the quality of the service rendered based on their expectations. If the customer's expectations on the service rendered, the customer will be dissatisfied. If the customer's expectations are met or excessively met, the customer will be satisfied (William *et al.*, 2016).

Customer satisfaction is significantly and positively impacted by perceived service quality. Snoj et al. (2004) cited in Tukiran et al. (2021) define Customer Perceived Quality as the perception of an entity's services by customers as being overall excellent or better. To establish whether the customer is satisfied with the services offered to them, organisations cannot rule out assessing what is the customers' definition of service quality. Uzunboylu (2016) states that customer perceptions should be considered as their reality because after evaluating the service quality, whether they are satisfied or not, they will establish the perceptions of the service they would have received. To measure the customer's perceived service quality, Ullah (2012) suggests that the discrepancy between the perceived performance and expectations need to be considered.

Literature had consistently stated that there is a correlation between perceived quality and customer satisfaction. As important as it is to measure perceived quality, the significance of measuring and understanding the customer satisfaction dimensions cannot be over emphasised because it plays a role in the organisation's long-term performance and customer purchase behaviour, (Ngo, 2015). The relationship between perceived quality and customer satisfaction has been centred on perceived quality being the major determinant of customer satisfaction (Boornletvanich, 2019; Pooya, Abhed-Khorasani and Gholomiam-Ghouzdi, 2020)

Accodring to Wulandari (2022) the customer is the most important aspect of every business and further indicates that satisfying the physical and emotional needs of the customer can result in loyalty, which ultimately affects the growth of sales and profits for the business. In reviewing various literatures, Hamzah and Shamsudin (2020) emphasise that customer satisfaction benefits the organisations in many ways including buying more, repeat buying, customer loyalty, recommendations of clients and gaining more sales and profits. They

further indicated that if the customer is not satisfied, it will lead to organisation's strategic edge towards rivals' decline, market share loss, losing market potential, bad recommendations and may as well lead to customers taking legal action towards the organisation.

As much as the HEIs under this study are regarded as non-profit organisations, the loyalty of their customers (students) is an important aspect that should be taken into consideration. In the context of the HEI's, Weerasinghe, Lalitha and Fernando(2017) regard students satisfaction as a mindset that is short-termed as a result of assessing the services, resources, and educational opportunities available to students.

2.3. Customer satisfaction at Higher Education Institution
2.3.2. Student as a customer

There have been several debates in literature on whether students should be regarded as customers at Higher Education Institutions. Mark (2013) states that the students' status as a customer is not universally acknowledged. However, Guilbault (2016) argues that we should consider how to address students as customers rather than continuing to deny that they are customers because doing so has repercussions for student satisfaction and retention. Tukiran, Tan and Sunaryo (2021) posit that more than ever, educational institutions are adopting the marketing theory and the notion that students and parents are customers who purchase educational services and activities. Hinson (2020) defines students as groups of external university customers who purchase items, services, or idea from universities in exchange for an agreed-upon fee. It is the basis of this argument that this study focus on student as customer if not a primary customer as compared to others within the Higher Education Institutions. Regarding students as a customer in South Africa has Consumer Protection Act (CPA) implications, of which Reddy(2012) advises HEIs to should take into account their policies, particularly those addressing the following rights: fair and equal marketing practices; disclosure and information; fair and equal access; fair and acceptable terms and conditions; fair value and good quality.

2.3.3. Historically Black HEI

In the United States of America, Historically Black Colleges and Universities (HBCU) were established after the civil war and were purposively created to educate black citizens (Gasman, 2013). In the context of South Africa, Green (2004) indicates that Historically Disadvantage Institutions (for Africans, Asians and coloureds) were established in 1959 after the Extension of University Education Act was imposed to restrict then then existing African

institutions to primarily white people. In so doing, the goal of these ethnic universities was to maintain traditional Black and White social, economic, political, and cultural practices. South Africa boosts about 26 public universities across all the nine provinces (USAF, 2023). Within the public higher education institution space in South Africa, there also more than 50 higher education training colleges also known as Technical Vocational Training(TVET) Colleges (Tjonnneland, 2017). As of February 2023, the South African Department of Higher Education and Training had 92 registered Private Higher Education Institution and 45 provisionally registered institutions (DHET, 2023)

Student satisfaction in the historically disadvantage institutions can be traced in the literature on the basis of HBCU. Harms (2013) emphasises the evidence of customer service at Higher education institutions by highlighting that the customer service in a university setting is visible when the staff is aware of the students, kind and professional, and personnel that fulfils student requests promptly and cherishes students. Debates on whether customer service and students' satisfaction is significant at the institutions of higher learning as compared to academic progress has been explored by different scholars. However, Hammonds-Greene (2016) argues that Student satisfaction is a significant factor in the health of higher education institutions, much like customer satisfaction is in other businesses. Additionally, customer service will need to advance in importance as HBCUs' operational efforts and strategic priorities as the competitive nature of higher education increases, even though the author acknowledges that the changing nature of higher education, and particularly HBCUs, makes it difficult to gauge student satisfaction.

The importance of placing such a strong emphasis on student satisfaction is due to the beneficial effects it has on student engagement, motivation, retention, recruitment efforts, and money. HBCUs can regularly assess how well they are achieving student expectations by concentrating on student happiness (Elliot, 2002; Raisman, 2014; Hamonds-Greene, 2016). Green (2014) conducted a study at Durban University of Technology, which revealed that both university students and staff were dissatisfied with the quality of service offered at the institution on the following dimensions; commitment to serve, general attitude, human factors as well as physical and academic services. It is critical that customer service at the historically black institutions evolve in light of losses in student enrolment and closure, they must come up with strategies to meet the demands of their students while also delivering high levels of satisfaction and excellent customer service (EASE Project, 2015).

2.4. Service quality at higher education institutions

"Prioritising service quality in both product and service industry has been a common goal across all these sectors", this is according to Josanov-Vrgovic *et al.* (2020). The quality of service at higher education institutions is largely determined by the expectations of its students and their perceptions of the service's performance. This necessitates that the institutions of higher learning has to assess the expectations of its students with regards to the quality of the services as well as determining their perceptions of these services so as to align accordingly to provide the expected satisfaction. Amongst other benefits of having satisfied students with the quality of services, students' contentment with the university's high-quality services has a significant beneficial impact on their commitment to the institution, (Khan, Nasir and Naz, 2020). Since administration appears to play a significant role in the delivery of high-quality services, Malca and Albulesco (2020) advise that it is imperative to scientifically investigate the key elements of the services. As a result, there is a growing desire to improve the quality of the provided services

Considering the relationship between student's expectations and actual service quality offered by HEIs, Kokalan, Yumusak and Gurleyen (2022) found that students attending Turkish universities have high service quality expectations, but the universities are unable to fully match these demands. In the South African context, using the SERVQUAL model to measure quality services at the University of South Africa, Makoe and Samba (2019) discovered that expectations were higher than opinions in each of the three service quality categories, with the tangibles component showing the largest differences. The expectations of the students were not fulfilled in the areas of tangibles, reliability, and delivery. Assurance was the sole feature that scored higher for perceived service. These results, though, come from the open distance learning organisation. This necessitates that more studies be conducted on contact learning higher education institutions.

To understand whether the students are satisfied with the services provided by the university, the institution needs to understand how they perceive the quality of these services; Duzevic, Ceh Casni and Laziba2015) claim that the service quality sector, which is based on perceived quality, is where higher education's quality analysis originates. Using the Higher Education Performance (HedPERF) model, they further found that students in Croatia perceive the access dimension as the most important aspect in Higher Education's institution's service quality. The access dimension in this context includes issues like approachability, contactability, availability, and convenience, Duvezic *et al.* (2015). It can be deduced from this

finding that HEIs management cannot ignore these dimensions in their quality improvement plans.

Royo (2017) advices management of HEIs to consider students priorities and expectations as they play a role in changing the focus and shape up the university's activities and he further warns them not to only perceive the quality of their service offering from the management's point but also consider what students perceive as quality service. The ultimate results in this process will have to lead to students' satisfaction, in which Biesok and Wyrod-Wrobel (2011) indicate that it results from expectations and perceptions of service quality by the customer (student). Makoe and Sama (2019) found that there is a gap between students' expectations and University of South Africa's students' quality support services specifically in the tangibles, reliability and delivery dimensions of service quality. One can argue that the tangibles would be a differentiating factor between open distance learning institution and the contact learning institution, however, reliability and delivery cannot be excused from both. Another study in a South African Institution of higher learning was conducted at the Durban University of Technology and the findings indicate that customers' expectations at Durban University of Technology were typically high in terms of tangibles, reliability, and assurance, with the assurance component garnering the highest opinions (Green 2014). To compare these results, further similar studies in other South African Universities was recommended. This study was carried out using SERVQUAL model in a contact learning institution and was focusing on both students and staff as well as on both academic and administrative services.

Becho and Govender (2020) conducted a service quality and student satisfaction at a South African Private institution using the HedPerf model. The results show that there was a substantial relationship between student satisfaction and the five HedPerf dimensions: academic aspects, non-academic aspects, reputation, access program issues, and understanding. While the study focused on academic lecturers and programme conveners (administrators), it was important to note that lecturers are recommended to understand students expectations, programme conveners should be accessible and contactable and most importantly, provide more efficient services. The study further recommended that studies should be conducted on other similar institutions of higher learning. A service quality study conducted by Sanja and Govender (2018) employing SERVEPERF Model at university campuses in KwaZulu-Natal Province revealed that the responsiveness and empathy dimensions were rated high in terms of service quality whereas tangibility and empathy dimensions rated low. The authors recommended that enhancing personal attention to

students could lead to a higher rating of empathy dimension; similarly, better equipment condition within the institutions could raise the tangible dimension rating.

Malca and Albulescu (2020)'s study's clear and consistent findings make it even more important for higher education institutions to be aware of the students' expectations. The institutional management has a responsibility to match expectations in order to reduce perception gaps between secretaries and students. The authors further recommend that a future service contract should be made available as a way to ensure that expectations are met, which may lead to greater student satisfaction.

2.5. Student administrative and support services

HEIs provide various academic and non-academic services to their stakeholders. In this context, the focus is on the principal stakeholder, the student. When referring to student services, Ciobanu (2013) describes them as student support services offered by Higher Education institutions. These are non-academic services which are rendered by HEI's administrative and support staff. Morgan (2012) listed amongst others, a number of non-academic services that university students in the UK perceive as student services. They include accommodation, dealing with student complains, financial and study advice, enrolment and registration, sports and recreation. Ciabonu (2013) emphasised the importance of student support services as they are key to students' growth and progress throughout the students' academic careers.

2.6. Conclusion

Customer satisfaction is of paramount importance to service industries such as higher education institutions. To measure customer satisfaction at higher education institution, various models can be applied including SERVQUAL, SERVPERF and HedPerf. They have been reviewed and SERVQUAL model has been chosen as the reliable scale to assess the customer satisfaction for this study. Amongst other customer satisfaction theories, Expectancy-disconfirmation and value precepts theories have been critically reviewed and Expectancy-disconfirmation theory was found to be relevant to the study and it has been chosen as the theoretical framework in which this study was based on. Students as customers were critically discussed. The gap was identified after reviewing various literature, majority of studies have been conducted in measuring service quality of academic services at

higher education institutions however customer satisfaction on service quality on non-academic service quality such as administration services have been found lacking. These services play a key on student's growth and progress throughout the students' academic careers.

CHAPTER 3: RESEARCH METHODOLOGY

3.1. INTRODUCTION

This chapter presents the research methods that have been utilised to collect data to answer the questions outlined in chapter one. The chapter includes features such as the research methodology, research design employed, study area, the target population, sampling method, data collection methods used to collect data and data analysis. The chapter also provides an overview of ethical concerns that have been taken into consideration to protect the wellbeing of the respondents who participated in this study.

3.2. RESEARCH DESIGN

Cresswell and Guetterman (2018) define research design as "procedures for collecting, analysing and reporting research in quantitative and qualitative research". According to Thomas and Zubkov (2023) the research design seeks to present a systematic method of how quantitative research questions are addressed. It will outline precise objectives derived from research questions, enumerate the sources the researcher intends to use for data collection and analysis, discuss ethical issues, and enumerate the inevitable obstacles they will encounter (Saunders, Lewis and Thornhill, 2019). The section will discuss the philosophical approach, research design strategy, approach to theory development and the methodological choice applied in this research study

- **Positivist approach.**

According to Mauthner (2020), research philosophies provide theories about the nature of the reality being studied as well as the methods used to gather and validate data supporting this reality. The study applied the Positivist Philosophy. According to Park, Konge and Artino (2020) the positivist approach is predicated on the idea that there is only one tangible reality, one that can be comprehended, recognised, and measured. Mcloed (2023) asserts that the positivist worldview holds that scientific methods should be used to study society. Sociology should employ the same research approach as the natural disciplines. It should be objective, reasonable, and consistent with the hypothetico-deductive model. Starting with theory from the literature, the hypothetico-deductive approach is a cyclical process that develops testable hypotheses, plans an experiment by operationalizing variables, and conducts an empirical research based on experimentation (Park, Konge and Artino, 2020). Mcleod, (2023) shows that a positivist approach prefers to use unbiased research methods, such as experiments,

structured interviews, and closed questionnaires, to collect quantitative data. They will be able to supply the social facts required to control society by doing this since they will be able to recognise and measure behavioural patterns. The positivist method limits the researcher's duties to the collection and equitable analysis of data. These kinds of investigations typically yield observable and quantifiable research outputs, (Qadir, 2022). In this study, a positivist approach has been applied as quantitative data was collected using close ended questionnaires with the objectivity of the researcher in which his responsibility was only to collect data and analyse it.

In research studies, there are three methods that are utilised to answer the research questions or trying to find the solution to the existing problem. These methods include qualitative, quantitative and mixed methods. Saunders, Lewis and Thornhill (2019) differentiate the three methods according to their data and the data collection technique used by each. Quantitative method is concerned with numeric data collected by questionnaires. Meanwhile, qualitative method is interested in non-numeric data such as words, videos, images, audio recordings and others with the use of interviews to collect this data. In the case of mixed methods, it is the combination of both qualitative and quantitative methods and their data collection and analysis techniques.

The study employed the quantitative method approach. Amongst the methodologies used in quantitative also known as descriptive studies include observation, correlational and survey research methods. The method utilised for this study was survey research. According to Leedy and Ormrod (2021), survey research is not difficult to design and it helps collect information about people's previous experiences, views, attitudes or even behaviours. The chosen method was best fit for this study considering that the nature of the study sought to determine the participants' views and experiences of the quality of services of administrative services offered at University of Limpopo. The study also employed the cross-sectional survey design due to the time constraints given for the competition of this qualification. Cross-sectional survey approaches collect data at a single point in time as compared to Longitudinal survey design where Data collection occurs multiple times over a specified period at defined intervals(Sullivan and Calderhood, 2016; Thomas and Zubkov, 2023) . The phenomena being investigated is an existing theory or model which through the collection of data and at the end of the study was tested, therefore, the deductive approach was utilised. According to Saunders *et al.* (2019) a deductive method is used in quantitative research, with the goal of using data to test hypothesis or theory.

3.3. AREA OF STUDY

The study was conducted at University of Limpopo, Turfloop campus. The university is situated at Mankweng Township, 30 km from Polokwane city. The university of Limpopo, formerly known as University of the North has been in existence since 1959 until it was merged with Medical University of South Africa(MEDUNSA) in 2005 and it has been called University of Limpopo since the merger and even after the merger was no longer in existence.
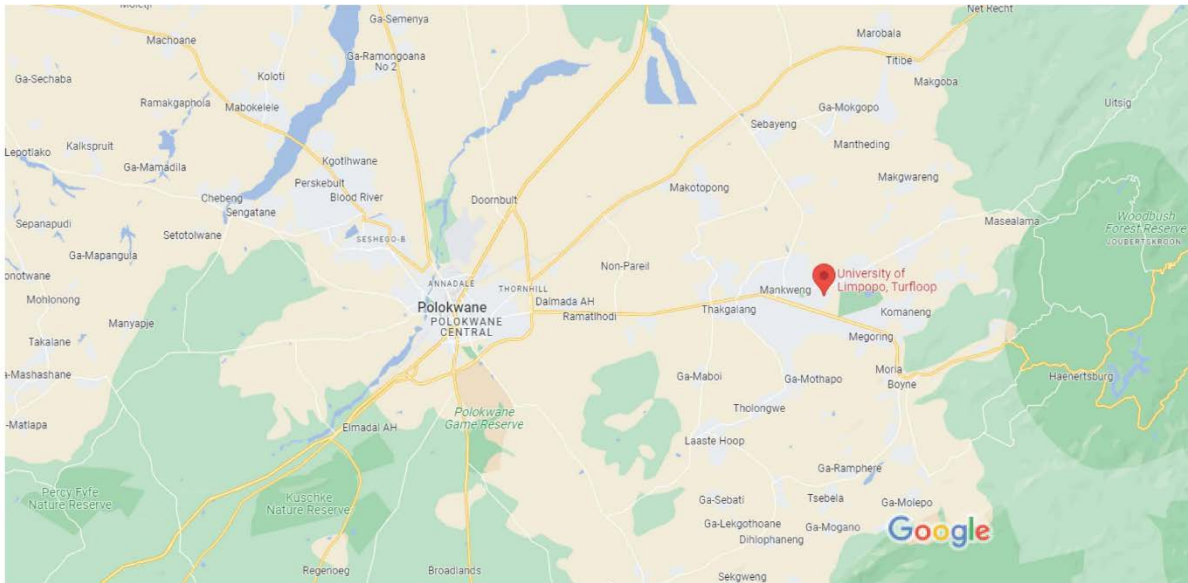
Figure 3: University of Limpopo Map (Google, 2023)

3.4. TARGETED POPULATION

According to Shukla (2020), a population is a collection of all the units with the variable characteristic under investigation, to which the findings of the study can be applied. The author further outline which units that are being referred to in this regard and they include persons, objects, living beings, time, incident, occasion, words, sentences, place, society and institution. University of Limpopo, a Higher Education Institution registers an average of 22 000 students per annum, (University of Limpopo, 2019). The targeted population for this study were registered students of the university. Considering that it is not practical to study the entire population of students due to time constraints as it is a large population (Saunders *et al.* (2019), only a sample of students can be studied.

3.5. SAMPLING

Leedy *et* al. (2021) define a sample as a subset of a population of people, another species of living things, or non-living objects; information gathered from this subset is then utilised to make inferences about the population from which it originated. Shukla (2020) advises that a

sample should be such that it saves time, energy and money for the researcher. It is therefore the reason why not the entire population cannot be studied but a sample was used instead in this study. There are two sampling techniques that exist in research, namely probability and non-probability sampling. Probability sampling is defined as is a method of quantitative sampling in which the researcher chooses participants from the population in such a way that each person has an equal chance of being chosen, (Creswell and Guetterman, 2018). Malik, Sheik and Yousaf (2022) regard it as the most objective but can also be the most time- and energy-consuming sample for a given level of sampling error.

Whilst on the other hand, in Non-probability sampling none of the units have a fixed or guaranteed probability of being chosen in the sample (Shukla, 2020). Non-probability sampling was employed to select a sample of participants on the study. Creswell and Guetterman (2018) describe it as a method of quantitative sampling where the researcher selects participants based on their availability, convenience, and representation of a characteristic under study. Brink, van der Walt and van Rensburg (2018) advise researchers to evaluate and select participants who have most knowledge of the phenomenon and can articulate and explain intricacies. Therefore, the selected participants have been registered with the university for more than a year, either at an undergraduate or postgraduate level; as a result the sample consists of participants who have experienced the services under study. To eliminate the biasness of responses, employees of the university who were also registered with the institution were excluded from participating in the study.

The convenience sampling technique was used to select participants from the student population. Convenience sampling is described as a technique in which the researcher purposively selects participants on the basis of the availability of the participants at a particular place and at the particular time (Archarya *et al.*, 2013). In this regard, the students that were selected were conveniently located at the University of Limpopo campus where the study was conducted. Considering that experience was fundamental in this study, the administered questionnaire had a question on the year the students were registered for data analysis purposes. The physical copies that were distributed physically were distributed in second year of students' classes. The sampled students were a representative sample of all four university faculties namely, Faculty of Management and Law, Faculty of Health Sciences, Faculty of Humanities and Faculty of Science and Agriculture. Raosoft's sample size calculator was used to calculate to obtain sample size of 267.

3.6.   DATA COLLECTION

Self-administered questionnaires were utilised as an instrument to collect data as this is a quantitative research study. To gain the insight of the phenomenon under study, Leedy and Ormrod (2021) advise the use of questionnaires as they provide the participants with anonymity and they may as well be truthful as compared to when they are interviewed on the face-to-face situation. Close ended questionnaires were drafted and utilised. Questions were aligned to categories as outlined in the SERVQUAL dimensions namely, tangibles, reliability, responsiveness, assurance, empathy. A 5 point Linkert scale was used to measure the respondents' opinions and experiences. The questionnaire was pre-tested with 10 students to determine the functionality of the data collection instrument. The SERVQUAL model uses a common data collection instrument which has been tried and tested, therefore, a pilot study in this regard was not extensively conducted. For convenience and to maximise the reach of a large number of participants, questionnaires were administered electronically via email sent to all registered students at University of Limpopo with a link that led the participants to a Google form questionnaire. Due to a slow rate of responses, the similar questionnaire was administered using physical copies of the questionnaire distributed in lecture classes on campus

3.7.   VALIDITY AND RELIABILITY

3.7.1. Validity

Validity is defined as the degree to which a concept is accurately quantified in a quantitative investigation (Healy and Twycross, 2015). Healy and Twycross (2015) describe it as a type of validity that is used to examine how well the instrument covers all the material that it should in relation to the variable. The researcher did not conduct an extensive pilot study per se, except validating the instrument with the first 10 respondents' determination to ensure that it answers the research questions, since the SERVQUAL model uses a common data collection instrument which has been tried and tested, therefore, an actual pilot study in this regard was not necessary. The use of the instrument was done in consultation with the supervisor. The content validation by experts is encouraged and supported by Fenandez-Gomez *et al.* (2020), as they stated that experts have a crucial role in defining, incorporating, and/or changing the necessary elements of the instrument/content as they have experience in the topic and possess academic background in the subject matter.

3.7.2. Reliability

Reliability refers to the consistency with which a procedure evaluates something; a measurement is considered dependable if the same outcome can be consistently achieved using the same methods under the same circumstances, (Middleton, 2023). According to Tshikhundamalema, (2022), when a questionnaire can produce comparable results when used at several times, it is regarded as reliable. The strategies that were employed in this study to ensure reliability include following the relevant research process as prescribed by the literature as well as using a questionnaire which did not contain vague and ambiguous items which would perplex the participant.

3.8.   DATA ANALYSIS

According to Taherdoost (2022) data analysis "is simply the process of converting the gathered data to meaningful information". The collected data was analysed using statistical analysis with the aid of Statistical Package for the Social Sciences Software (SPSS). Leedy and Ormrod (2021) differentiate between descriptive and inferential statistics as the former has to do with how data looks like whilst the latter enable researchers to gather information from relatively small samples and derive conclusions about vast populations. Descriptive statistics was employed for this study and was done in two steps namely, preliminary and primary analysis. The respondents' demographic details were given in order to make the data easier to interpret for the preliminary analysis, which mostly uses descriptive statistics to summarize the data. The primary analysis was the gap score analysis, which employed descriptive statistics to characterize customer expectations and perceptions. To find the gaps in service quality, we computed the perception minus expectation ratings for every item and dimension. Raw data was collected through online Google Form surveys and self-administered physical copies of the questionnaires. The google form administered the questionnaires automatically and generated a spreadsheet with responses. The physical questionnaires response were manually entered into the google form generated spreadsheet and sorted using Microsoft excel spreadsheet. Every single question and response was coded and analysed by IBM Statistical Package for Social Sciences (SPSS) version 28.0.1.0 as well as using Microsoft Excel spreadsheet. For this analysis, the researcher employed Cronbach's Alpha, a measure of internal consistency and the degree of similarity amongst groups of variables. The reliability statistics for 288 respondents are shown in table 3.1. Cronbach's Alpha for these results is 0.937, which is more than 0.7; therefore, the Cronbach Alpha indicates that it is incredibly accurate. This outcome also confirms that the questionnaire's assertion is right and reliable.

Table 3.1: Reliability Statistics

Reliability Statistics	
Cronbach's Alpha	N of Items
,937	45

3.9.   ETHICAL CONSIDERATION

According to Leedy and Ormrod, (2016), When planning a study, researchers need to consider the ethical ramifications of their proposed actions carefully where humans and other creatures are involved. A variety of ethical considerations were taken into account in this study when collecting data and at any step where ethics were applied. Informed consent and voluntary participation; protection from harm, anonymity and confidentiality; and permission to conduct study are among the ethical issues that have been followed.

- **Ethical Clearance:** Before the study could be conducted, ethical clearance was requested from the University of Limpopo's Turfloop Research Ethics Committee (TREC). The ethical clearance certificate was then issued.
- **Informed Consent and Voluntary participation:** The majority of human research needs informed consent, so participants must be aware of the study's purpose and provide written approval, (Leedy and Ormrod, 2021). Participants in the study received a permission letter outlining the study's purpose and providing a detailed explanation of the procedure. The letter's goal was to offer participants the information they needed to give informed consent to a study and to allow them the option to withdraw from the study if they believed the procedure was not up to grade. They were also assured that participation in the study was voluntary and they could withdraw from participating at any stage of the study.
- **Protection from harm**: The participants in this study were protected from any form of physical and physiological harm. According to Fleming and Zegwaard (2018), the research design must consider the risk of injury to the participants, the investigator, the general public, and the organisation. There could be loss of resources, reputation, emotional distress, or bodily harm. Questions being asked were determined to ensure that participants did not find them to be emotionally abusive or so. Should they feel the questions were not appropriate, they were at liberty to decline answering the question.
- **Anonymity and confidentiality**: According to Sunders *et al.* (2016), at all stages of the study process, privacy should be protected. The participants' right to privacy was

taken into consideration in this regard. Roshaidai and Arifin (2018) emphasise that privacy and confidentiality of the interview setting must be carefully preserved during telephone interactions, face to face interviews, data analysis and the reporting of the findings. The questionnaire did not collect confidential information from participants such as their names, student or identity number. The report of this study was no way or the other exposing the participants' personal details such as their names, identity or student number.

- **Honesty**: According to Brink, van der Walt and van Rensburg (2018), conducting and reporting research involves ethical obligations for researchers and further advice that researchers must be capable, ensure accuracy and importantly act honestly at all times. The findings of this study were presented in all honesty without fabricating any data to favour the research objectives. In communicating the results of this study, the researcher ensured that the work that was presented is original and free from misconduct and plagiarism as well as certainly communicating the results accurately.

- **Permission to conduct the study**: According to Saunders *et al.* (2016), assurances made to the participation organisation regarding the confidentiality of information about the organisation should be upheld. The permission letter to conduct the study was sought from the University of Limpopo through the designated gatekeeper(s) as the participants were registered students of the institution at the time and the variables under study were attached to the very institution.

3.10. LIMITATIONS OF THE STUDY

There are number of UL's administrative services which include amongst others student housing, Information and Communication Technology (ICT), Library, Student Enrolment, Financial Aid, Student Record, Student Finance and many others. This study did not cover all the administrative support services of the university, however, it only focused on administration services offered at central administration office of which were central to this specific study and students' engagement with the university's administrative staff is on a regular basis. Therefore, the study did not generalise its findings.

3.11. CONCLUSION

In this study, the quantitative research was employed and discussed in detail. Sampling, data collection and data analysis methods associated with the chosen quantitative research

method were broadly detailed. Every aspect of ethical consideration was discussed. The following chapter will discuss how data was analysed and key findings will be presented.

CHAPTER 4: DATA PRESENTATION, ANALYSIS AND INTEPRETATION

4.1. Introduction

This chapter presents and discuss data collected and analysed for this study. The study's main goal was to assess customer satisfaction of the university of Limpopo students on the administrative services using the SERVQUAL model. The objectives of this study were:

- To determine the students' expectations and perceptions of the administrative services at UL.
- To evaluate the students satisfaction level with the actual administrative services provided by the UL employees.

Data was collected by administering an online survey using Google Forms as well as physical distribution of questionnaires. Online surveys entries were automatically captured on the Microsoft Excel spreadsheet and data collected using physically were entered manually and added on the very excel spreadsheet created by Google form. The excel data was then exported to SPSS Software for analysis. The data obtained from the SPSS software analysis is presented below:

4.2. Demographic Characteristics of respondents
Table 4.1: Gender distribution

		Frequency	Percent	Valid Percent	Cumulative Percent
Gender					
Valid	Male	93	32,3	32,5	32,5
	Female	192	66,7	67,1	99,7
	Other	1	,3	,3	100,0
	Total	286	99,3	100,0	
Missing	System	2	,7		
Total		288	100,0		

The total participants in this study were 288, with 2 that did not indicate their gender status. The percentage of participants was as follows: 66.7 % of Females, 32.3 % of Males, 0, 3% other as well as 0,7% who did not indicate their gender. Females had a higher participation percentage.

Figure 4.2. Ethnicity distribution

<table>
<tr><th colspan="6">Ethnicity</th></tr>
<tr><th></th><th></th><th>Frequency</th><th>Percent</th><th>Valid Percent</th><th>Cumulative Percent</th></tr>
<tr><td>Valid</td><td>African</td><td>283</td><td>98,3</td><td>99,0</td><td>99,0</td></tr>
<tr><td></td><td>Coloured</td><td>3</td><td>1,0</td><td>1,0</td><td>100,0</td></tr>
<tr><td></td><td>Total</td><td>286</td><td>99,3</td><td>100,0</td><td></td></tr>
<tr><td>Missing</td><td>System</td><td>2</td><td>,7</td><td></td><td></td></tr>
<tr><td colspan="2">Total</td><td>288</td><td>100,0</td><td></td><td></td></tr>
</table>

With regards to ethnicity, Africans were the highest participants with 99% and coloured were the only other participants with 1%.

Table 4.3. Age Group distribution

<table>
<tr><th colspan="6">Age Group</th></tr>
<tr><th></th><th></th><th>Frequency</th><th>Percent</th><th>Valid Percent</th><th>Cumulative Percent</th></tr>
<tr><td>Valid</td><td>16-20</td><td>131</td><td>45,5</td><td>45,8</td><td>45,8</td></tr>
<tr><td></td><td>21-25</td><td>123</td><td>42,7</td><td>43,0</td><td>88,8</td></tr>
<tr><td></td><td>26-30</td><td>19</td><td>6,6</td><td>6,6</td><td>95,5</td></tr>
<tr><td></td><td>31-35</td><td>6</td><td>2,1</td><td>2,1</td><td>97,6</td></tr>
<tr><td></td><td>35+</td><td>7</td><td>2,4</td><td>2,4</td><td>100,0</td></tr>
<tr><td></td><td>Total</td><td>286</td><td>99,3</td><td>100,0</td><td></td></tr>
<tr><td>Missing</td><td>System</td><td>2</td><td>,7</td><td></td><td></td></tr>
<tr><td colspan="2">Total</td><td>288</td><td>100,0</td><td></td><td></td></tr>
</table>

Participants of age group between 16-20 years were higher with 45.8%, followed by 21-25 age groups with 43.0%. The other age groups percentage was as follows: 26-30 at 6.6%, 31-35 at 2.1% and lastly 35+ years at 2.4 %.

Table 4.4. Faculty distribution

		Frequency	Percent	Valid Percent	Cumulative Percent
	Faculty you are registered under				
Valid	Faculty of Science and Agriculture	197	68,4	68,4	68,4
	Faculty of Humanities	37	12,8	12,8	81,3
	Faculty of Health Sciences	7	2,4	2,4	83,7
	Faculty of Management and Law	47	16,3	16,3	100,0
	Total	288	100,0	100,0	

Participants registered under the Faculty of Science and Agriculture and Agriculture comprise a higher percentage of participation in the study by 68.4%, followed by participants in the Faculty of Management of Law at 16.3%, 3rd on the rank was Faculty of Humanities at 12.8% and lastly was Faculty of Health Sciences at 2.4%.

Table 4.5. First year of registration distribution

		Frequency	Percent	Valid Percent	Cumulative Percent
	What is your First year of registration?				
Valid	2010	1	,3	,4	,4
	2011	2	,7	,7	1,1
	2012	1	,3	,4	1,5
	2013	1	,3	,4	1,9
	2014	1	,3	,4	2,2
	2015	1	,3	,4	2,6
	2016	2	,7	,7	3,4
	2017	5	1,7	1,9	5,2
	2018	6	2,1	2,2	7,5
	2019	19	6,6	7,1	14,6
	2020	20	6,9	7,5	22,1
	2021	46	16,0	17,2	39,3
	2022	148	51,4	55,4	94,8
	2023	14	4,9	5,2	100,0
	Total	267	92,7	100,0	
Missing	System	21	7,3		
Total		288	100,0		

The participants registered with the university as for as 2010 up to 2023. Participants who registered in 2022 were the highest participants with 55.4%, followed by those registered in 2021 at 3rd rank were the participants registered in 2020 at 7.5% followed by those registered in 2020 at 7.1%. The rest of the participants were 5.2% and below. 7.3% of the participants didn't indicate their year of registration, however they responded to the questions

4.3. The overall service quality as perceived by University of Limpopo Students
Table 4.6. Summary of customer expectations and Gap Scores

Dimension	Statement	Expectation Score	Perception Score	Gap Score	Overall Gap Score
Tangibility	Ideal central administration offices should have modern equipment.	4	4	-1	
	Their physical facilities (shelves, student service counters, computers, lights) should be visually appealing.	4	3	-1	
	The central administration office staff members should be well dressed and appear neat.	4	4	0	-2
Reliability	When central administration staff members promise to do something by a certain time, they should do so.	5	3	-1	
	When a student has a problem, central administration admin staff members should show a sincere interest in solving it.	5	3	-1	
	Central administration staff members should perform the service right the first time.	4	3	-1	
	They should provide their services at the time they promise to do so.	4	3	-1	
	They should keep their records accurately.	5	4	-1	-5
Responsiveness	Registration should be timely and error free	5	3	-1	
	Central Admin staff	5	4	-1	

47

	members should make information easily obtainable by the student.				
	Central Admin staff members should give prompt service to student.	4	3	-1	
	Central Admin staff members are always willing to help student.	5	3	-1	
	Central Admin staff members should never be too busy to respond to student' requests.	4	3	-1	-6
Assurance	The behaviour of central admin staff members should instil confidence in student	4	3	-1	
	Student should be able to feel safe in their transactions with central admin staff members in the counters.	5	4	-1	
	The central admin staff members should be polite.	5	3	-1	
	Central Admin staff members should have the knowledge to answer student' questions.	4	4	-1	-4
Empathy	Central Admin staff members should give student individual attention.	4	3	-1	
	Their operating hours should be convenient to all their students.	4	4	-1	
	Central Admin staff members should give students personal service.	4	3	0	
	The central admin staff members should understand the specific needs of the student.	4	3	-1	-3

The Expectations and Perceptions were measured using the 5 point Linkert scale in which the highest number 5 represented the higher expectation or higher perception and the lowest number 1 represent the lower expectations or perception. Considering the average gap scores of expectations and perceptions across all the SERVQUAL dimensions, customer

expectations exceeded their perceptions as the results show a negative overall gap scores across majority of the items. The Gap score was calculated as follows: **Gap Score= Perception – Expectations**

The items that had highest expectations scores include, when central administration staff members promise to do something by a certain time, they should do so; when a student has a problem, central administration admin staff members should show a sincere interest in solving it; they (central administration office) should keep their records accurately; registration should be timely and error free; Central Admin staff members should make information easily obtainable by the student; Central Admin staff members should always be willing to help students; students should be able to feel safe in their transactions with central admin staff members in the counters and the central admin staff members should be polite.

The scores are however not significantly different from the other items on expectations, which means that students at the university of Limpopo have high expectations from the university's administration services offered by the Central administration offices. The items that had the highest scores on the actual service perceived by students include: Central Admin staff members keep their records accurately; Central Admin staff members make information easily obtainable by students and students feel safe in their transactions with Central Admin staff members in the Student service counters. The Gap score of 0 in items, Central Admin staff members are well dressed and appear neat as well as the Central Admin staff members give students personal service represent that the students' expectations were met, meaning that the expectations and perceptions are equal. According to Parasuraman *et al.* (1985), when Expectations are equal to Perception, perceived quality is satisfactory.

Generally, the perceptions are lower than the expectations even though the perceptions score differ by small margins. The difference between the perceptions and the expectations result in gap score. Therefore, these gaps score measure the service quality and ultimately determine the satisfaction. The largest gaps that exist in this study are the ones of where they promise to do something by a certain time, they do; Registration is timely and error-free; Central Admin staff members are always willing to help students; Central Admin staff members are polite with students.

In Summary, the perceived quality is low (-5). This means that the quality of service they expect is not matched nor exceeded by the services they have experienced. Therefore, students are not satisfied with the administrative services offered by the university's central administration offices. Lovelock and Wirtz (2022) describe quality services as a high degree

of performance that continuously meets or surpasses the customers' expectations. Similarly, customer satisfaction can be referred to as the correlation between the expected and perceived product and service quality as well as the significance of each property (Biesok and Wyrod-Wrobel, 2011). Therefore, there is a relationship between service quality and customer satisfaction in these findings. The findings are also in support of the Gap 5 of Parasuraman *et al.* (1985)'s GAP model which differentiates between perceived service quality and service expectations.

4.4. Service quality dimensions that bring satisfaction in University of Limpopo

Table 4.7. Average Gap Score on expectations and Perceptions

Dimension	Statement	Expectation Score	Perception Score	Gap Score	Overall Gap Score	Average Gap Score
Tangibility	University of Limpopo's Central Administration offices have up- to-date equipment (such as computers, telephones etc.).	4	4	-1		
	Their physical facilities (shelves, student service counters, computers, lights) are visually appealing.	4	3	-1		
	Central Admin staff members are well dressed and appear neat.	4	4	0	-2	**-0.76**
Reliability	When they promise to do something by a certain time, they do.	5	3	-1		
	When a student has a problem, they show a sincere interest in solving it.	5	3	-1		
	Central Admin staff members performs the service right the first time.	4	3	-1		
	Central Admin Staff Members provide the service at the time they promised to do so.	4	3	-1		
	Central Admin staff members keep their records accurately	5	4	-1	-5	**-1.08**

Responsiveness	Registration is timely and error-free	5	3	-1		
	Central Admin staff members make information easily obtainable by students	5	4	-1		
	Central Admin staff members give prompt service to students.	4	3	-1		
	Central Admin staff members are always willing to help students.	5	3	-1		
	Central Admin staff members are never too busy to respond to students requests.	4	3	-1	-6	**-1.13**
Assurance	The behavior of Central Admin staff members instill confidence in students	4	3	-1		
	Students feel safe in their transactions with Central Admin staff members in the Student service counters.	5	4	-1		
	Central Admin staff members are polite with students.	5	3	-1		
	Central Admin staff members of at University of Limpopo have the knowledge to answer students' questions.	4	4	-1	-4	**-1.01**
Empathy	Central Admin staff members give students individual attention.	4	3	-1		
	Their operating hours are convenient to all their students.	4	4	-1		
	Central Admin staff members give students personal service.	4	3	0		
	The Central Admin staff members understand the specific need of their student.	4	3	-1	-3	**-0.64**
					Total	**-5**

51

average Gap Score

Table 4.3 is an extension of table 4.2 which presents the average gap score for each SERVQUAL dimension. According to Parasuraman *et al.* (1985), when expectations are greater than Perceptions, perceived quality is subpar and will tend toward unsatisfactory quality, increasing the discrepancy between Expectations and Perceptions, when Expectations are equal to Perceptions, perceived quality is satisfactory. When Expectations are less than Perception, perceived quality is above average and will tend towards ideal quality, increasing the discrepancy between expectations and perceptions. All average Gap scores are negative, which means the students' perceptions of the administration services of the University of Limpopo did not meet their expectations. Descriptions of all SERVQUAL dimensions are presented as follows:

a) Tangibility

The dimension reported the overall Gap score of (-2) and the average gap score of (-0.76). Students are not satisfied with the physical facilities and modern equipment of the central administration offices. In this dimension, students were only satisfied with the appearance of staff members being well dressed and appear neat. The University of Limpopo should improve on their physical facilities and purchase modern equipment.

b) Reliability

Reliability received an overall score of (-5) and an average gap score of (-1.08). This implies that the University of Limpopo's central administration office staff members should be reliable to satisfy the students by ensuring that when they promise to do something for them at a certain time, they should do it; they should show a sincere interest in solving students problems, they should perform the service right the first time, and they should keep their records accurately.

c) Responsiveness

Responsiveness received an overall Gap score (-6) and an average score of (-1.13). This means that the university's central administration office need to improve on their registration system that it must be timely and, has less errors or no errors at all; they need to give prompt service to students, willing to help them, they must never be too busy to respond to students and should make information easily obtainable.

52

d) Assurance

Assurance dimension received an over score of (-4) and an average gap score of -1.01. The staff members' behaviour does not instil confidence on the students; students do not feel safe when making transactions with central admissions office at the service counters, staff members need to be polite when dealing with students and staff members do not exhibit full knowledge when answering the students' questions or enquiries.

e) Empathy

Empathy obtained an overall gap score of (-3) and an average score of (-0.64). The students are not satisfied with the central admin staff's service as they do not give them individual attention, the operating hours are not convenient, the students are not given satisfactory personal service and staff members do not seem to understand the specific need of their students.

The results that have been obtained from table 4.3, students perceive the quality of services rendered by the university's central administration offices to be less of what they expected across all the five dimensions. This means that students are not satisfied with any of the dimensions. There is a gap between expected services and perceived service in all dimensions which means the University of Limpopo need to improve in all the dimensions so as to close the gap and ultimately bring satisfaction to the students.

4.5. The overall students' satisfaction level with the administrative services provided by central administration office.

The respondents were asked to rate the overall level of satisfaction level with the services offered by the University's central administration offices using a 5 point Linkert scale.

1- Very Dissatisfied

2- Dissatisfied

3- Neither satisfied nor dissatisfied

4- Dissatisfied

5- Very Satisfied

The services that were rated include student enrolment, student finances and student records services.

i) Student enrolment services

Figure 4.1. Level of satisfaction with student enrolment services

1. How satisfied were you with the Student Enrollment services
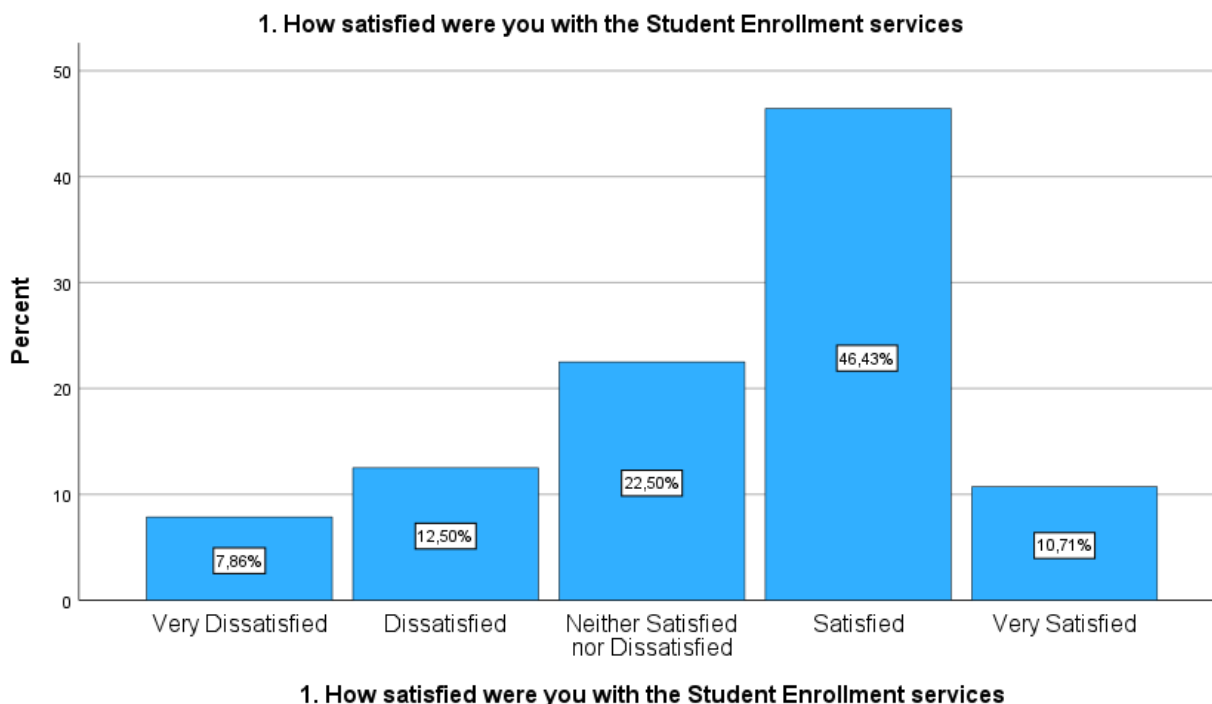
The mean score rating of the students' enrolment services is 3, meaning students cannot tell whether they are satisfied or dissatisfied. Majority of the students ranked their satisfaction level at 4 with a percentage of 46.4% is satisfactory, however, the cumulative percentage of dissatisfaction is at 20.4% and the cumulative percentage of satisfaction is at 57.1%. There is 22.5% of respondents who are uncertain of their satisfaction in this particular service. Disregarding the undecided respondents, this means that overall; students are satisfied with the enrolment service of the University of Limpopo's administrative services offered by the central Administration office which include applications for admission, registration of students and all admissions and registration enquiries.

ii) Student finance services

Figure 4.2. Level of satisfaction on student finance services
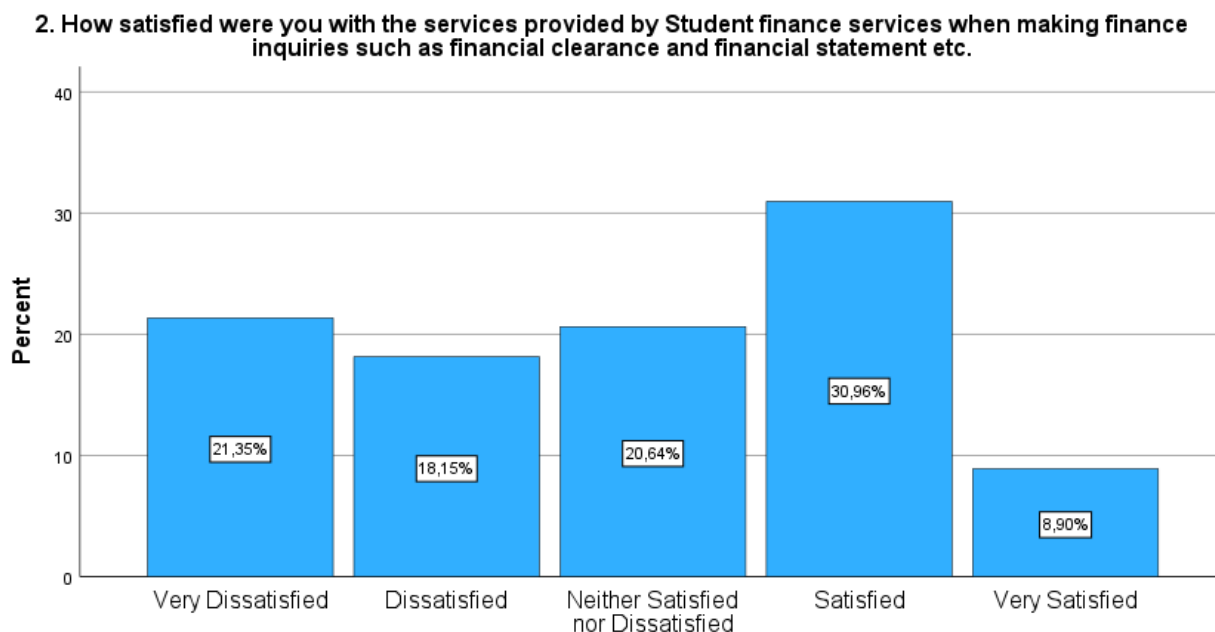
2. How satisfied were you with the services provided by Student finance services when making finance inquiries such as financial clearance and financial statement etc.

The mean score rating of student finance service is 3 with a cumulative percentage of dissatisfied respondents at 36, 5 whilst the satisfied respondents is 39, 86%. There is a difference by a slight margin between the two meanwhile there is 20, 64% of respondents who are neither satisfied nor dissatisfied. This means that there is more or less equal number of the respondents who are satisfied and those that are not satisfied with the students finance services of the university. The students finance section need to improve their services in order to have a majority of students satisfied with their services.

iii) Student records

Figure 4.3.: Level of satisfaction on student records services

3. How satisfied were you with the service received from student records when requesting for academic transcripts
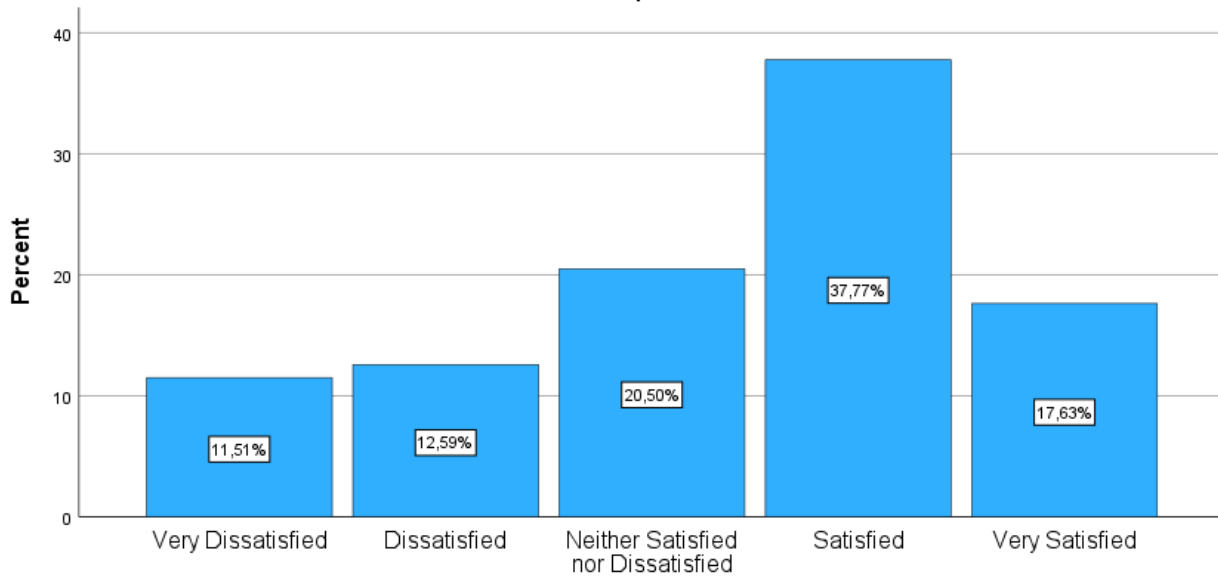
3. How satisfied were you with the service received from student records when requesting for academic transcripts

The mean score rating for student services was 3 and the cumulative dissatisfied percentage of respondents is 24, 16% and the satisfied respondents percentage is 55.4% meanwhile the undecided respondents are at 20,5 %. This means that the students are satisfied with the student record services of the university which deals with issuing of academic transcripts, results enquiries and graduation certificates matters.

4.6. Cross Tabulation

a) Registration

Figure 4.4.: Registration timely and error-free
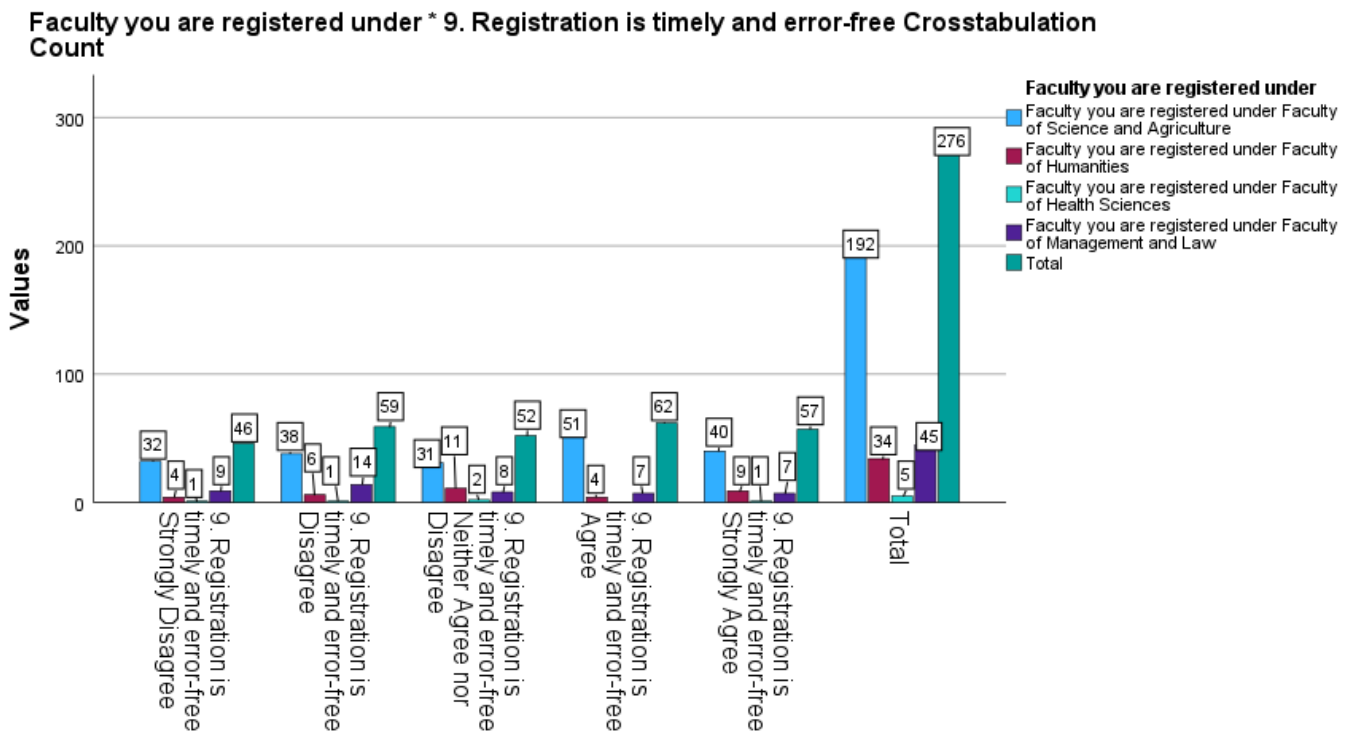
The overall highest respondents for the study are from the Faculty of Science and Agriculture. Considering that this is the faculty that offers computer sciences and computer related studies, it can be assumed that their knowledge of computers had an effect on their responses to the registration issue as registration is done online. Hence they have a high frequency of respondents who agree that registration is timely and free of errors.

b) Student records

Table 4.8: First Year of registration and student record services

Table 4.8.1. First year of registration

		Frequency	Percent	Valid Percent	Cumulative Percent
				What is your First year of registration?	
Valid	2010	1	,3	,4	,4
	2011	2	,7	,7	1,1
	2012	1	,3	,4	1,5
	2013	1	,3	,4	1,9
	2014	1	,3	,4	2,2
	2015	1	,3	,4	2,6

	2016	2	,7	,7	3,4
	2017	5	1,7	1,9	5,2
	2018	6	2,1	2,2	7,5
	2019	19	6,6	7,1	14,6
	2020	20	6,9	7,5	22,1
	2021	46	16,0	17,2	39,3
	2022	148	51,4	55,4	94,8
	2023	14	4,9	5,2	100,0
	Total	267	92,7	100,0	
Missing	System	21	7,3		
Total		288	100,0		

Table 4.8.2: First Year of registration and student record services

<table>
<tr><th colspan="8">What is your First year of registration? * 3. How satisfied were you with the service received from student records when requesting for academic transcripts Crosstabulation</th></tr>
<tr><td colspan="8">Count</td></tr>
<tr><td></td><td></td><td colspan="5">3. How satisfied were you with the service received from student records when requesting for academic transcripts</td><td></td></tr>
<tr><td></td><td></td><td>Very Dissatisfied</td><td>Dissatisfied</td><td>Neither Satisfied nor Dissatisfied</td><td>Satisfied</td><td>Very Satisfied</td><td>Total</td></tr>
<tr><td rowspan="14">What is your First year of registration?</td><td>2010</td><td>0</td><td>0</td><td>1</td><td>0</td><td>0</td><td>1</td></tr>
<tr><td>2011</td><td>0</td><td>0</td><td>0</td><td>2</td><td>0</td><td>2</td></tr>
<tr><td>2012</td><td>0</td><td>1</td><td>0</td><td>0</td><td>0</td><td>1</td></tr>
<tr><td>2013</td><td>0</td><td>0</td><td>0</td><td>1</td><td>0</td><td>1</td></tr>
<tr><td>2014</td><td>0</td><td>0</td><td>0</td><td>1</td><td>0</td><td>1</td></tr>
<tr><td>2015</td><td>0</td><td>0</td><td>1</td><td>0</td><td>0</td><td>1</td></tr>
<tr><td>2016</td><td>0</td><td>0</td><td>0</td><td>2</td><td>0</td><td>2</td></tr>
<tr><td>2017</td><td>2</td><td>0</td><td>1</td><td>2</td><td>0</td><td>5</td></tr>
<tr><td>2018</td><td>1</td><td>1</td><td>1</td><td>1</td><td>2</td><td>6</td></tr>
<tr><td>2019</td><td>6</td><td>2</td><td>1</td><td>5</td><td>5</td><td>19</td></tr>
<tr><td>2020</td><td>4</td><td>2</td><td>7</td><td>4</td><td>2</td><td>19</td></tr>
<tr><td>2021</td><td>6</td><td>3</td><td>12</td><td>15</td><td>7</td><td>43</td></tr>
<tr><td>2022</td><td>11</td><td>24</td><td>27</td><td>55</td><td>27</td><td>144</td></tr>
<tr><td>2023</td><td>1</td><td>1</td><td>2</td><td>8</td><td>1</td><td>13</td></tr>
<tr><td colspan="2">Total</td><td>31</td><td>34</td><td>53</td><td>96</td><td>44</td><td>258</td></tr>
</table>

Figure 4.5: First Year of registration and student record services
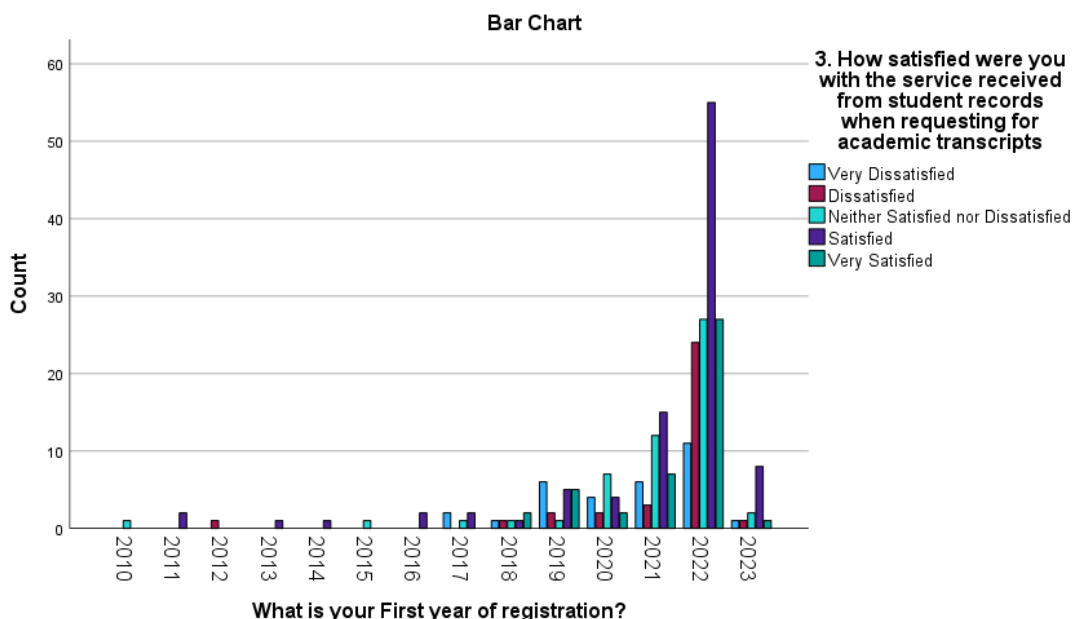
The first year of registration plays a significant role in the student records services since there are responses from students who enrolled in 2023 as their first year of registration. The assumption would be that this group has not fully utilised the student services to an extent that they may not rate it accordingly. The highest respondents in this category are students whose first registration was in 2022, followed by 2021, where 2020 and 2019 had the same number of respondents; meanwhile there are also few respondents whom their first year of registration was in 2018 and dating back to 2010. 21 respondents did not indicate their first year of registration and nine (9) out of the 21 did not respond to question on student records services; hence the total number of participants in this question is 258. However, the overall results indicate the true reflection of the service rating at student records office as they may be students who utilised the services for academic transcripts as well as graduation certificates and results enquiries.

4.7. Conclusion

Results obtained from the collected data show that the expected service quality from the University of Limpopo's administrative services were not met according to the gap score calculations, all the scores were negative. This means that that when expectations are not met, then customers are not satisfied. The analysis was also made based on the SERVQUAL

Model dimensions, namely, tangibility, responsiveness, reliability, assurance and empathy. It was found that none of the dimensions were found to be satisfactory according to the Gap score calculations. Students also indicate in the overall level of satisfaction on the overall services offered by the central administration office that they are satisfied with student enrolment and student finance services, however equally satisfied and dissatisfied with the student records services. In general, the university needs to improve in all service quality dimensions so as to satisfy their customers, in this case, the students.

CHAPTER 5: CONCLUSIONS AND RECCOMENDATIONS

5.1. Introduction

This chapter will present summary of the findings, make recommendations, and draw conclusions from the results obtained from the field data. The chapter will also present the managerial implications of the findings as well as the opportunity for future research.

5.2. Summary of findings

The summary of the findings are presented below according to the objectives of the study and ultimately answering the research questions:

5.2.1. To determine the students' expectations and perceptions of the administrative services at UL

The customers, in this context the University of Limpopo students had high expectations on the quality of administrative services at central administration offices in all dimensions of the service quality (SERVQUAL) model. However, as compared to the perceptions after their experiences with these services, their perceptions were lower than their expectations. Even though the difference might be by small margins, the overall outcome was that the gap scores did not match with expectations being higher than the perceptions

- Tangibility: The students expected that that the university should have modern day equipment, shelves, and the staff members should dress well and appear neat. However, the overall results from the perception scores show that they are not as expected.

- Reliability: The students expected that staff members at the central administration offices should perform their tasks as they promised and at the time they indicated, they should show sincere interest in solving problems and they should perform services right the first time. The evidence from the results show that staff members do not perform these tasks as expected.

- Responsiveness: Students' expectations in this regard are not met according to the results in this dimension as their perceived scores are lower than their expectations score. The students expected that their records are kept accurately, registration should be timely and error-free, information should be easily obtainable, the staff should give prompt services, the staff members should always be willing to help and must never be too busy to respond to students' requests.

- Assurance: The overall evidence show that the behaviour of the staff member does not instil confidence in the students, students feel unsafe in their transactions with the central administration staff members in the service counters, staff members are not polite enough and they do not seem to have adequate knowledge to answer the students queries

- Empathy: The results obtained show that students' expectations in this dimension do not match with the perceived services they experienced in this regard. The students expect that operating hours must be convenient in the central administration offices, they must be given personal service and the staff members should understand the needs of the students.

5.2.2. To evaluate the students satisfaction level with the actual administrative services provided by the UL employees

The evidence from the results obtained from the field data based on the expectations and perceptions of the students on university's administrative services reveal that the perceived services do not match the expected services. The expectations are higher as compared to the perceptions, which mean that students are dissatisfied with the actual services provided by the University of Limpopo's administration services provided by central administration offices. The dissatisfaction is across all the SERVQUAL model dimensions. This means that the university need to improve their services in all dimensions of the service quality so as to enhance customer satisfaction.

Judging from the overall satisfaction level in key areas of the central administration services, students singled out the students finance section as the one they are dissatisfied with meanwhile student enrolment and students' records sections are somewhat satisfactory. This means the university has to pay more attention in improving their student finance section but not neglecting the other sections as well.

5.2. Implications of the findings

Implications to the University of Limpopo's management is that they need to draw their focus in making significant efforts to improve the service quality of the central administration offices which will subsequently lead to higher perceived service quality and customer satisfaction. The university need to invest on modern day equipment, advanced and secure technologies as well as training of staff in order to provide satisfactory services to the university's principal

stakeholders and customers, which are the students. The findings also have implications on the strategies of the university with regards to administration, they need to be reviewed

5.3. Recommendations

The following recommendations are made towards the University of Limpopo's management drawing from the findings of the study:

I) The University need to improve on the reliability and responsiveness dimensions of service quality by ensuring that the administrative staff members provide the services as they promised to the students, the staff members should show interest and always willing to help the students. Most importantly, the institution has to improve their registration system so that the registration is timely and error-free. The university should also not neglect the other dimensions as they develop an improvement plan.

II) The University of Limpopo need to conduct service quality and customer satisfaction research from time to time to gain a broader understanding on the customer satisfaction levels against the administration service offerings on what can be done and which strategies to implement so as to achieve customer satisfaction goals. For instance, the reliability and responsiveness dimension of the institution's service quality are of concern in this regard. Strategies to improve in these two dimensions should be prioritised.

III) Customer satisfaction strategies need to be put in place supported by acquiring modern day equipment and upgrading of physical and technological infrastructure. This will help the institution to ensure that students are satisfied with the safety and access of their records as well as when they are conducting any transactions with the institution.

IV) The University of Limpopo should provide more customer and service quality trainings for administrative staff members at the Central administration offices in order to improve service quality and customer satisfaction.

V) The university may need to employ more administrative staff members at the central admissions office considering the number of students that the institution serve so as to improve the efficiency of the services provided by the office.

5.4. Suggestions for Future research

Further and similar research study can be carried out with a larger sample and the inclusion of other administrative departments within the university in faculties' schools and departments; student housing departments, safety and security division, library, Information and Communication Technologies (ICT) division and many others. The study presents an opportunity to conduct research targeting university administrative employees on the challenges they face in providing service quality.

5.5. Conclusion

It is evident from the overall findings that the customers (students) at the University of Limpopo are dissatisfied with the service quality of the administrative services offered by the university's central administration office across all SERVQUAL Model's dimensions, which are tangibility, reliability, responsiveness, assurance and empathy. The findings imply that the university need to consider the suggested strategies which include acquisition and upgrading of equipment, training and hiring of the staff members as well as putting customer satisfaction strategies in place. This will improve the service quality and customer satisfaction so that the institution can improve its brand image, gain a competitive advantage amongst the competitors within the Higher Education Institutions sector, attract more students and retain students who would like to study further with the institution.

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ANNEXURE A: Ethical Clearance Letter

University of Limpopo
Department of Research Administration and Development
Private Bag X1106, Sovenga, 0727, South Africa
Tel: (015) 268 3935, Fax: (015) 268 2306, Email: anastasia.ngobe@ul.ac.za

TURFLOOP RESEARCH ETHICS COMMITTEE
ETHICS CLEARANCE CERTIFICATE

MEETING: 29 November 2022

PROJECT NUMBER: TREC/571/2022: PG

PROJECT:

Title: Assessment of customer satisfaction at the University of Limpopo using Servqual Model

Researcher: SSB Rikhotso

Supervisor: Prof TJ Musandiwa

Co-Supervisor/s: N/A

School: Turfloop Graduate School of Leadership

Degree: Master of Business Administration

PROF D MAPOSA
CHAIRPERSON: TURFLOOP RESEARCH ETHICS COMMITTEE

The Turfloop Research Ethics Committee (TREC) is registered with the National Health Research Ethics Council, Registration Number: REC-0310111-031

Note:
i)   This Ethics Clearance Certificate will be valid for one (1) year, as from the abovementioned date. Application for annual renewal (or annual review) need to be received by TREC one month before lapse of this period.
ii)   Should any departure be contemplated from the research procedure as approved, the researcher(s) must re-submit the protocol to the committee, together with the Application for Amendment form.
iii) PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES.

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ANNEXURE B: Request for permission letter

Request for permission to conduct a study

I am Sandile Sindile Buwazi Rikhotso, a candidate for a Master of Business Administration at the University of Limpopo, Turfloop Graduate School of Leadership. I am currently writing a research project titled: **Assessment of customer satisfaction at the University of Limpopo using SERVQUAL model**

The aim of the study is to assess customer satisfaction that is provided to the university of Limpopo students using the SERVQUAL model. In this study, the customer refers to registered students at University of Limpopo and are required to evaluate the service quality of administration services offered by the university's staff. This will help determine if the expectations of the students are met or not after the students have received such services. A better understanding of whether the students' expectations are met or not, will assist the institution in improving the quality of services provided to their customers. The study will also add value to improve UL's service provision to their principal stakeholder, which is the students.

I would therefore like to request for permission to conduct the study at the university. Kindly note that the questionnaires to collect data will be administered electronically via email, which will be sent to all registered students at UL with a link that will lead the participant to a Google form questionnaire. All ethical considerations will be taken care of while conducting this study.

Your approval will be highly appreciated in this regard. I look forward to your positive response.

_____

Mr. S.S.B. Rikhotso **(Researcher)**

Student No.:

ANNEXURE C: Permission letter from University of Limpopo

University of Limpopo
Office of the Registrar
Private Bag X1106, Sovenga, 0727, South Africa
Tel: (015) 268 2407, Fax: (015) 268 3048, Email: Kwena.Masha@ul.ac.za/Retha.Balie@ul.ac.za

12 December 2022

SSB Rikhotso

Email: Sandile.Rikhotso@ul.ac.za

Dear SSB Rikhotso,

GATEKEEPER PERMISSION TO CONDUCT RESEARCH

TITLE: ASSESSMENT OF CUSTOMER SATISFACTION AT UNIVERSITY OF LIMPOPO
         USING SERVQUAL MODEL

RESEARCHER/S: SSB RIKHOTSO
SUPERVISOR: Prof. TJ Musandiwa
CO-SUPERVISOR/S: N/A
INSTITUTION: Turfloop Graduate School of Leadership
DEGREE: Master of Business Administration

Kindly be informed that Gatekeeper permission is granted to you to conduct research at the University of Limpopo entitled: **"Assessment for customer satisfaction at University of Limpopo using servqual model".**

Regards,

_____
PROF. JK MASHA
UNIVERSITY REGISTRAR

Cc.   Prof. RJ Singh: Deputy Vice-Chancellor; Research, Innovation and Partnerships
       Prof. RN Madadzhe: Deputy Vice-Chancellor: Teaching and Learning
       Dr. T Mabila, Director: Research Development and Administration
       Prof. D Maposa – Chairperson: Research and Ethics Committee
       Ms M Hutamo – Assistant: Ethics Secretarist
       Ms A Ngobe – TREC Secretariat

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ANNEXURE C: Consent Form

INFORMED CONSENT

Statement concerning participation in a Research Project

I am Sandile Sindile Buwazi Rikhotso, a candidate for a Master of Business Administration at the University of Limpopo. I kindly invite you to participate in the research project titled: **Assessment of customer satisfaction at the University of Limpopo using SERVQUAL model**

The aim of the study is to assess customer satisfaction that is provided to the university of Limpopo students using the SERVQUAL model. In this study, the customer refers to registered students at University of Limpopo and are required to evaluate the service quality of administration services offered by the university's staff. This will help determine if the expectations of the students are met or not after the students have received such services.

I would appreciate it if you could take your time to complete the attached questionnaire. Please note that participating in this study is voluntary, you may opt not to take part altogether or not to answer any questions you do not wish to answer. You are assured that the responses given will remain confidential and anonymous. The collected data from this study will be protected and no one else will know your answers to this questions being asked.

Your participation will be highly appreciated. I look forward to your responses.

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Mr. S.S.B. Rikhotso **(Researcher)**

PARTICIPANT CONSENT

I had the chance to ask questions and have heard and understood the aim of this study. I am aware that taking part in this study is voluntary and anonymous. I have been informed that this study's findings may be published and that it will be used for educational and developmental purposes. I will participate in this study as long as my privacy is protected.

I hereby give consent to participate in this Study.

_____   _____   _____
Signature of participant   Date   Place

_____   _____   _____
Signature of Witness   Date   Place

ANNEXURE 1: Data Collection Instrument

QUESTIONNAIRE TO INVESTIGATE CUSTOMER SATISFACTION AT THE UNIVERSITY OF LIMPOPO USING SERVQUAL MODEL

PARTICIPANT CONSENT: I hereby give consent to participate in this Study. *

Mark only one oval.

Yes ◯

No ◯

SECTION A: DEMOGRAPHICAL QUESTIONS

1. **Gender**
   a) Male
   b) Female
   c) Other

2. **Ethnicity**
   a) African
   b) Asian/Indian
   c) Coloured
   d) White

3. **Age group**
   a) 16-20
   b) 21-25
   c) 26-30
   d) 31-35
   e) 35+

4. **Faculty You are registered Under**
   o Faculty Of Science and Agriculture
   o Faculty of Humanities
   o Faculty of Health Sciences
   o Faculty of Management and Law

5. **What is your First year of registration?** _____

SECTION B: EXPECTATIONS

This section deals with your opinion of university's administrative services at central administration section at Admin Block. Please, show the extent to which you think these

offices 'should' possess the following features. We are interested in knowing your expectations from ideal.

Instructions: Please rate how strongly you agree or disagree with each of the following statements by placing a check mark in the appropriate box.

		Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
1.	Ideal central administration offices should have modern equipment.	1	2	3	4	5
2.	Their physical facilities (shelves, student service counters, computers, lights) should be visually appealing.	1	2	3	4	5
3.	The central administration office staff members should be well dressed and appear neat.	1	2	3	4	5
4.	When central administration staff members promise to do something by a certain time, they should do so.	1	2	3	4	5

5.	When a student has a problem, central administration admin staff members should show a sincere interest in solving it.	1	2	3	4	5
6.	Central administration staff members should perform the service right the first time.	1	2	3	4	5
7.	They should provide their services at the time they promise to do so.	1	2	3	4	5
8.	They should keep their records accurately.	1	2	3	4	5
9.	Registration should be timely and error free					
10.	Central Admin staff members should make information easily obtainable by the student.	1	2	3	4	5
11.	Central Admin staff members should give prompt service to student.	1	2	3	4	5
12.	Central Admin staff members are always willing to help student.	1	2	3	4	5
13.	Central Admin staff members should never be too busy to respond to student' requests.	1	2	3	4	5
14.	The behavior of central admin staff members should instill confidence in student	1	2	3	4	5
15.	Student should be able to feel safe in their transactions with central admin staff members in the counters.	1	2	3	4	5

16.	The central admin staff members should be polite.	1	2	3	4	5
17.	Central Admin staff members should have the knowledge to answer student' questions.	1	2	3	4	5
18.	Central Admin staff members should give student individual attention.	1	2	3	4	5
19.	Their operating hours should be convenient to all their students.	1	2	3	4	5
20.	Central Admin staff members should give students personal service.	1	2	3	4	5
21.	The central admin staff members should understand the specific needs of the student.	1	2	3	4	5

SECTION C: PERCEPTIONS

The following statements deal with the perceptions of service experienced. Please, show the extent to which these statements reflect your perception of service you received at Central Administration offices

Instructions: Please rate how strongly you agree or disagree with each of the following statements by placing a check mark in the appropriate box.

		Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
1.	University of Limpopo's Central Administration offices have up- to-date equipment (such as computers, telephones etc.	1	2	3	4	5
2.	Their physical facilities (shelves, student service counters, computers, lights) are visually appealing.	1	2	3	4	5
3.	Central Admin staff members are well dressed and appear neat.	1	2	3	4	5
4.	When they promise to do something by a certain time, they do.	1	2	3	4	5
5.	When a student has a problem, they show a sincere interest in solving it.	1	2	3	4	5
6.	Central Admin staff members performs the service right the first time.	1	2	3	4	5
7.	Central Admin Staff Members provide the service at the time they promised to do so.	1	2	3	4	5
8.	Central Admin staff members keep their records accurately	1	2	3	4	5
9.	Registration is timely and error-free	1	2	3	4	5
10.	Central Admin staff members make information easily obtainable by students	1	2	3	4	5
11.	Central Admin staff members give prompt service to students.	1	2	3	4	5

12.	Central Admin staff members are always willing to help students.	1	2	3	4	5
13.	Central Admin staff members are never too busy to respond to students requests.	1	2	3	4	5
14.	The behavior of Central Admin staff members instill confidence in students	1	2	3	4	5
15.	Students feel safe in their transactions with Central Admin staff members in the Student service counters.	1	2	3	4	5
16.	Central Admin staff members are polite with students.	1	2	3	4	5
17.	Central Admin staff members of at University of Limpopo have the knowledge to answer students' questions.	1	2	3	4	5
18.	Central Admin staff members give students individual attention.	1	2	3	4	5
19.	Their operating hours are convenient to all their students.	1	2	3	4	5
20.	Central Admin staff members give students personal service.	1	2	3	4	5
21.	The Central Admin staff members understand the specific need of their student.	1	2	3	4	5

SECTION D: OVERALL SATISFACTION

Based on section B and C , what is your overall satisfaction with the following categories of Central Administration office services that you have received? Choose appropriate option.

		Very Dissatisfied	Dissatisfied	Neither Satisfied Nor Dissatisfied	Satisfied	Very Satisfied
1	How satisfied were you with the Student Enrolment services	1	2	3	4	5
2	How satisfied were you with the services provided by Student finance services when making finance inquiries such as financial clearance and financial statement etc.	1	2	3	4	5
3	How satisfied were you with the service received from student records when requesting for academic transcripts	1	2	3	4	5