



**SERVICE QUALITY OF THE SPORTS DEPARTMENT AT THE DURBAN
UNIVERSITY OF TECHNOLOGY**

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DECLARATION

I, Indresain Pather, hereby declare that this research dissertation is my own work and that all sources I have used or quoted to the best of my knowledge have been indicated and acknowledged by means of complete references.

I.R. Pather

ABSTRACT

Service quality is a vital concept for managers in the sports industry. The key to ensuring its survival is to listen to and design services according to its users' requirements.

On the other hand, detecting weaknesses establishes the necessary remedial actions, thus starting the path to continuous improvement within the organisation. Implementing and maintaining high levels of sports service quality will enable the University of Technology's sports department to attract the best athletes to join its sports clubs. This may enhance the profile and increase the competitiveness of the university's sports clubs. Hence, the service quality levels of the various sports codes offered at the University of Technology must be able to satisfy sports club members' desired needs.

The aim of this study was to assess the service quality and customer satisfaction of sports club members at the Durban University of Technology Sports Department. This study was a cross-sectional and descriptive study that employed a quantitative research methodology. The SERVQUAL questionnaire was used to assess customers' expectations and actual experiences of customer satisfaction, measuring expectations and perceptions according to five quality dimensions. These quality dimensions include tangibles, reliability, responsiveness, assurance, and empathy. A census survey method was used to collect data from 322 respondents, out of a total population of 1200 sports club members. The Statistical Package for the Social Sciences (SPSS) Version 2.5 was used to analyse data with descriptive and inferential statistical techniques.

The study showed that customers' expectations exceeded their actual experiences in all the service quality dimensions used in the SERVQUAL questionnaire. Tangibles had the largest gap of 0.10. The dimensions of assurance and empathy had the smallest gaps of 0.01 each. This study, therefore, indicated that the dimension of tangibles required more interventions.

In the university sports department, tangibles include sports equipment, physical facilities, and staff appearance. Modern-looking sports facilities are imperative for

effective and successfully administered sporting programmes. In conjunction with this, high-quality and technologically up-to-date sports equipment also enhances sports participation and improves the quality of service. This study, therefore, recommended that to attract elite sportspersons to the university and enhance the image of university sport, it is imperative that the university sports department invest in upgrading sports facilities that are both aesthetically pleasing and satisfy the demands of high-performance sports programmes. An engagement with university management, corporate affairs, and the finance department was recommended to brainstorm the proposal for sports facility upgrades. The upgrade of sports facilities also potentially serves as an avenue for third-stream income for the sports department by hiring out high-quality facilities to local and national sports federations.

The recommendations discussed in this study suggested some of the possible measures that could be taken by the management of the university sports department to improve customer satisfaction levels. Providing superior service quality that leads to customer satisfaction can give the university sports department a competitive advantage. It was envisaged that this study may have a positive impact on the delivery of good service quality, which in turn will assist the management of the DUT Sports Department to achieve superior customer satisfaction.

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LIST OF ACRONYMS

University Sport South Africa	(USSA)
Durban University of Technology.....	(DUT)
Quality excellence in sports facilities.....	(QUSEC)
Servperf.....	(Service Performance)
Teamqual.....	(Team Quality)
Zone of Tolerance.....	(ZOT)
University of Technology.....	(UOT)

CHAPTER ONE - INTRODUCTION

1.1 INTRODUCTION

The emphasis on facilitating high-quality sports services is an enduring and crucial facet of sports programmes at a university of technology. As a result, managers of university sports departments must place emphasis on the notion of perceived service quality. This allows organisations to identify and offer services to satisfy customers' requirements. As a result, deficiencies will be identified, and fundamental change activities will be designed in a way that begins the process of ceaseless change within the sports office.

Sport participation at a university of technology is considered unsatisfactory if the benefits received are smaller than those obtained from other activities. Therefore, the service quality levels of the relevant sport at a university of technology must satisfy the needs of the sports club members. Implementing and maintaining high levels of sports service quality enables the sports department to attract the best athletes to join sports clubs. This will enhance the profile and increase the competitiveness of the university sports clubs.

This chapter elaborates on the reason for the study, the research problem, the justification for the study, a theoretical framework, the study's goals and objectives, and the research technique that underpins the study. This chapter also provides a summary of the study's boundaries.

1.2 BACKGROUND OF THE RESEARCH

Organisations are affected in all areas of life by globalisation and increasing market competition. The sports industry has inevitably been impacted by these tides of change. The growth of sports technology has made it so that the sports industry is now one of the most fiercely competitive industries. Sports organisations are compelled into a heated competition that imperils their chances of survival and increasing revenue, enhancing consumer engagement, and bringing in new customers. (Yerlisu and Baştaç, 2012: 42-52). To ensure the above qualities, sports organisations must offer a

high-quality service that is expected by the customers. Universities must conform to these high levels of service to ensure that the highest quality programmes are offered to sports club members.

During primary and secondary schooling, the physical education curriculum encourages students to use sports facilities. Students at universities, on the other hand, are more likely to decide whether they want to use sports facilities. Therefore, it makes sense to examine the expectations and perceptions that university sports club members have of their sports department so that sports managers can better understand and meet those expectations.

Despite the relevance of investigating university sports club members' expectations and perceptions of service quality, few studies have been conducted on the subject matter. Sport facilities in South African universities, in particular, have received little attention.

With reference to Table 1.1 above, it is crucial to point out that the various areas of sports service quality investigated are spectators, fitness centres, team identification, and duathlon participants. No studies focused on service quality and customer satisfaction at a university sports department. Hence, the researcher identified a theoretical gap and designed this study to determine the relationship between sports club members' expectations of service quality and the actual service delivered at the University of Technology.

1.3 PROBLEM STATEMENT

Sport has a fundamental role to play in the life of a student at any university. Not only does sport provide the opportunity to compete at various levels, but it also provides an avenue to achieve wellness (live a healthy life) and engage in social cohesion. University sports clubs have always been at the forefront of student sport, both at the University Sport South Africa (USSA) level, as well as in community leagues. Over the years, the university sports department has produced various championship-winning teams and national team representatives.

The University of Technology, where the study was undertaken, excelled in sports, had a proud history of sportsmen and sportswomen, and were crowned national champions in various sporting codes. This tradition and dominance of student sport on both regional and national levels were consistent. Sport at the university was vibrant and sports club members were passionate about their sport.

However, sports club registration statistics have revealed a decline in sports club membership over the last four years (DUT Sport Administration 2019). This has led to a decline in sports participation at the university, resulting in the university sports club losing its reputation as a serial winner. This alarming statistical information raises cause for concern and resulted in the researcher conducting this study. According to Goslin (2014:11), significant contributing factors to the continued competitiveness of sport organisations and customer retention are customer satisfaction and the quality of sport services, which prompted the researcher to investigate the constructs of service quality and customer satisfaction at the university sports department. Thus, the goal of this study is to evaluate how members of the University of Technology's

sport clubs perceive the level of customer satisfaction and the quality of the services they receive.

This research is of importance as it may help identify possible gaps in the perceived and actual experiences of sports club members pertaining to service quality in the sports department. This study may contribute towards proposing remedial strategies to gap that exists between sports club members' expectations of service quality and the actual service delivered at the university of technology.

1.4 RATIONALE OF THE STUDY

A previous study on the service quality of sport at the Durban University of Technology identified the target population as being all students at the Durban University of Technology (Pillay, 2011). Not all students at the university utilise sports facilities or engage in sporting activities. Therefore, the researcher argues that the target population in the study was inappropriate.

University sports club members are the primary users of sports facilities. This segment of students makes up the majority of the sports facility users and enjoys a larger portion of sports administration resources (facilities, equipment, coaches, administrative personnel assistance, transport, funding). Students are required to register as members of a sports club to participate in the activities of the respective club. Sports club members are more frequent users of sports facilities and because they are exposed to more of the department's resources and operations, they are viewed as the ideal samples to use in a service quality study of the sports department. Hence, the target population for this study was university sports club members.

This study is aimed at assessing the service quality and customer satisfaction of sports club members at the Durban University of Technology in an attempt to address the problem of a decline in sports membership at the university. Previous studies pertaining to service quality and customer satisfaction in sport focused on spectator sport, health and fitness centres, sporting events and university residence students. No studies were found to have focused on the perception of service quality and customer satisfaction at a university sports department. The researcher identified a

gap in the literature pertaining to service quality and customer satisfaction of university sports club members. Hence the rationale behind the study.

The study may increase the awareness of managers about identifying the service gaps between the actual and perceived services rendered to sports club members. This increase in awareness could assist in positively addressing the service gaps and implementing remedial measures, thus improving the image of university sports.

1.5 THEORETICAL FRAMEWORK

The theoretical framework of this study is the underpinning from which all knowledge for the study is obtained. It helps to organise and provide support for the study's purpose, problem statement, aim, and objectives. The literature review is built on the theoretical framework. In this study, the researcher focuses on specific theories that form the crux of the theoretical underpinning. These include theories pertaining to service quality, customer satisfaction, SERVQUAL, and the gap model. Customer satisfaction and service quality are clearly central to this study, along with their relation to whether service quality affects customer satisfaction.

1.5.1 SERVICE QUALITY

Service quality is a paradigm that has generated noteworthy intrigue and debate in the service marketing literature. According to Parasuraman, Zeithaml, and Berry (1988:12–40), the distinction in the customer's expectations and perceptions is reflected in the service quality. Service quality, according to Lovelock and Wirtz (2011: 404), is the general opinion or attitude that customers hold about the organisation and its services and how good or bad they are in comparison.

According to Ferrell and Hartline (2012:349), service quality is a gauge of how well a company's products outperform those of its rivals or internal benchmarks. "Service" and "quality" according to Ramya (2019:38), are combined to form the term "service quality." The author also suggests that a "service" is any action or benefit that one party can provide to another that is inherently intangible and does not result in proprietorship of something. It is acknowledged that quality is a strategic instrument for achieving

operational effectiveness and improving corporate performance. Haddad (2017:146-155) depicts service quality as a state of mind or a general impression received by customers regarding the inadequacy or predominance of the organisation and its services. The study thus notes that consumer expectations determine their perceptions of service quality.

The descriptions of service quality persuade the researcher to conclude that service quality is an assessment by customers of how well the service meets their expectations in relation to how the service is **delivered**. Hence, service quality enhances customer satisfaction. A closer look at service quality in sports and service quality in sports facilities gives more insight on how the constructs of service quality and customer satisfaction influence participants in a sports setting.

1.5.2 CUSTOMER SATISFACTION

Customer satisfaction is a central component in achieving organisational objectives and is a fundamental standard of performance excellence of the service organisation (Theresia and Bangun 2017: 2). Al-Azzam (2015:48), indicates that the customer's belief of what should happen (anticipation of service performance), as compared with the situation post service (perceived performance), is an indication of customer satisfaction. Satisfaction strengthens quality perceptions and leads to repeat purchases or utilisation of services. The nature of the interaction between customers and suppliers of goods and services, more notably in the sporting sector, is a crucial component of customer satisfaction. More particularly, within the sports industry, customer satisfaction is fundamentally influenced by the nature of customer relationships with providers.

Al-Azzam (2015:48) indicates that customer satisfaction simply means the extent to which the customer is fulfilled by the service provider's offering. Conte, Caniels, and Schijns (2016:24) support Al-Azzam (2015:48) by stating that customer satisfaction is the result customers receive when the service experience exceeds their expectations. Research on customer satisfaction as it relates to sports facilities and services will provide beneficial insights for increasing participation rates.

1.5.3 SERVICE QUALITY AND CUSTOMER SATISFACTION

The literature in this study shows that there is a correlation between service quality and customer satisfaction. Increased service quality enhances customer satisfaction. The researcher thus implies that service quality is a determinant of customer satisfaction and customer satisfaction is a measure of service quality. A positive relationship between service quality and customer satisfaction has been validated in numerous studies. An organisation's profitability is impacted positively by enhanced customer satisfaction. Customer satisfaction is the cornerstone of any flourishing business because it promotes repeat business, brand loyalty, and positive word-of-mouth (Mohammed, Abdullahi, Rahman, Umami, Usman, and Bashir 2019:46). Rahman (2019:5) supports this by arguing that although they are distinct concepts, service quality and customer satisfaction are closely related.

Organisations emphasize the importance of service quality and customer satisfaction because they believe that they can differentiate themselves from their competitors by offering superior service quality and customer satisfaction.

1.5.4 SERVQUAL

Numerous models have been created to gauge service quality, claims Chaguluka (2018:440). These include the three-component model created by Rust and Oliver in 1994, the Nordic model created by Gronroos in 2007, and the Servqual model created by Parasuraman, Zeithaml and Berry. Oliver established the disconfirmation of expectancies model in 1997. However, Parasuraman, Berry, and Zeithaml's Servqual model is the most widely used for evaluating service quality (1985).

The Servqual model was created as a tool for assessing customer expectations and perceptions of service quality. The creators of SERVQUAL, Parasuraman *et al.* (1985), state that the gap between consumers' expectations and their actual perceptions of a service is what they refer to as "service quality. A multiple-item assessment called the Servqual model can be used to determine and infer consumer perception and service expectations (Ganiyu, 2016:98). Given that it gauges both client expectations and

perceptions, Servqual is regarded as relevant and dependable for assessing service quality across a range of industries. The foundation of Servqual is a comparison of customer expectations for how the service should be delivered with the five characteristics of service quality. The five aspects are typically described by 22 qualities, and respondents are asked to identify (on a seven-point scale ranging from "strongly disagree" to "strongly agree") what they anticipate from the service and how they have utilised it.

The customer's opinion of the service quality is important to Servqual. This rating is conceptualised as the discrepancy between what customers anticipate from various service providers and their evaluation of that provider's performance (Endeshaw, 2019:90). A modified version of the Servqual instrument is used in this study to determine the Service Quality of the Sports Department at the Durban University of Technology.

1.5.5 GAPS MODEL

Parasuraman, Zeithaml and Berry (1985), based Servqual on the gaps model of service quality. The gaps model predicts service quality based on the difference between customer expectations of the service and their perception of the service delivery by the service organisation. These differences are referred to as service gaps. Finding the discrepancies between the perceived and intended levels of service is made easier by the gaps model of service quality (Endeshaw, 2019:89). The process of providing services has five gaps, which are listed below;

- The gap between customer expectation and management perception
- The gap between service quality specification and management perception
- The gap between service quality specification and service delivery
- The gap between service delivery and external communication
- The gap between the expected service and experienced service.

The gaps model is effective as it allows management to make an analytical assessment of the cause of poor service delivery. This study uses the theories of Servqual and the gaps model as both theories are inter-related. Both Servqual and the

gaps model use the difference in customers' perceptions and expectations as a measurement to determine service quality.

This study employs the service quality theories of Parasuraman, Zeithaml and Berry and utilises the Servqual model of service quality to determine the expectations and actual experiences of the university sports club members. The gaps model is used to do gap analysis across the service quality dimensions to identify any significant service gaps. Subsequent recommendations are made to close identified gaps. The significance of this study is that it will contribute towards strengthening service quality to sports club members, hence increasing sports participation at the university of technology. This study also contributes to the body of literature on service quality in sports at universities.

1.6 AIM AND OBJECTIVES OF THE STUDY

The aim of this study is to assess service quality and customer satisfaction of sports club members at the Durban University of Technology.

The objectives of this study are:

- To examine sports club members' expectations of sports service quality.
- To examine sports club members' perceptions of sports service quality.
- To evaluate the GAPS between service quality and customer satisfaction at the Sports Department.

Research questions

- What are Sports Club Members' expectations of service quality at the Durban University of Technology?
- What are Sports Club Members' perceptions of service quality at the Durban University of Technology?
- What are the service quality GAPS that hinder customer satisfaction at the Sports Department?

1.7 RESEARCH METHODOLOGY

1.7.1 RESEARCH DESIGN

The deliberate planning of the conditions for the analysis and gathering of data in a way that strives to combine economic effectiveness with relevance for the study purpose is known as research design (Burns and Bush 2014:146). This study was a cross-sectional and descriptive study. The study applied a quantitative research approach. A quantitative approach was used as it allows research information to be collected quickly. Quantitative research is the collection, analysis, and interpretation of data. Due to the nature of the study, being a census study, the researcher was able to study all members of the population.

1.7.2 POPULATION

A population is the totality of elements that the researcher wants to intervene in (Heri 2017: 77). The population in this study comprised 1200 (879 from the Durban campus and 321 from the Pietermaritzburg campus) university sports club members. These statistics were obtained from the university sports club membership database.

1.7.3 MEASURING INSTRUMENT

Instruments to measure sports service quality include SERVPERF (Cronin and Taylor, 1994), TEAMQUAL (McDonald, Sutton and Milne, 1995) and QUSEC (Kim and Kim, 1995). Most of these models are based on modifications or adaptations of the scales proposed in the literature on the SERVQUAL instrument developed by Parasuraman, Zeithaml and Berry (1985:41-50).

A modified version of the Servqual instrument was administered in this study because the model is a validated instrument applied across a variety of service industries.

1.7.4 DATA ANALYSIS

The data was interpreted and presented in the form of numerical and graphical representations. The Statistical Package for Social Sciences (SPSS) version 25 was used to analyse the quantitative data collected from questionnaires administered to the

university sports club members. The study uses only the relevant statistical tests to analyse data based on the objectives of the study and type of data.

Researchers use data analysis to transform a mass of data into meaningful insights (Bhatia, 2018:5). Short descriptive coefficients that summarise a specific data set, which can be a representation of the entire population or only a sample of it, are what Kenton (2019:5) refers to as descriptive statistical analysis. According to O'Leary (2017:34), descriptive statistical analysis summarises the characteristics of sample distribution, percentage relationships, measures of central tendency, measures of dispersion, tables, and graphic presentations.

1.7.5 VALIDITY

In order for data collection methods to be considered valid, they must accurately measure the variables they are supposed to (Seyoum 2017:180). The study will not be considered valid if the findings do not support the study's objectives or purpose. Validity thereby resolves the researcher's worries over the accuracy of data measurement. Researchers have attempted to assess validity in many ways. The three basic methods for establishing validity are:

- Content Validity (Face Validity): A scale's content should logically represent what should be measured.
- Validity of the criteria: The Methods for collecting data must accurately measure the variables they are intended to in order to be considered valid (Seyoum 2017:180). a measure's connection with other common measures with comparable designs
- Construct validity: a measurement's ability to accurately capture and convey a certain notion (Zikmund and Babin, 2007:323).

Validity in this study was measured by using a factor analysis Factor analysis is the process of condensing a large amount of data into a more manageable and intelligible data set (Glen, 2011:201-226). It is a technique for uncovering hidden patterns, illuminating the points at which they converge, and highlighting the characteristics shared by many patterns.

1.7.6 RELIABILITY

Reliability is the dependability of a set of measurements or gauges, often used to describe a test (Seyoum 2017:180). Reliability is crucial since it determines whether the study achieved its predetermined goal and confirms that the findings are attributable to the study alone and not to any unrelated findings. The reliability in this study was assessed using Cronbach's alpha. The reliability of multiple-question Likert scale surveys was assessed using Cronbach's alpha tests. These inquiries gauge factors that are hidden or unobservable, such as a person's conscientiousness, psychosis, or openness. In the real world, these are incredibly challenging to quantify. Cronbach's alpha demonstrates how closely related a group of test items are to each other (Glen, 2011:201-226).

1.8 DELIMITATIONS

The study focused on registered university sports club members at the Durban and Pietermaritzburg campuses. The study's findings are specific to this population and cannot be applied to other users of university sports facilities who may perceive service quality differently. Although this was a census study, not all of the 1200 sports club members participated in the study due to access issues to campus during the COVID-19 lockdown period.

1.9 ANONYMITY AND CONFIDENTIALITY

Researchers protect the privacy of research participants during the process of collecting, analysing, and reporting data by following ethical practices of confidentiality and anonymity. By properly discarding, destroying, or deleting data/documents, restricting access to personally identifying information, securely storing data documents within closed locations, and putting security codes on computerised records, anonymity and secrecy are ensured.

1.10 ETHICAL CONSIDERATIONS

Research ethics are moral guidelines that help researchers perform and disclose their studies honestly and without intending to hurt the subjects of the studies or other members of society.

Considering the study's inclusion criteria and the study being a census study, all registered sports club members were recruited to participate in the study. Questionnaires were distributed personally to sports club members by volunteers comprising intern students, and sport club committees. The university's COVID-19 protocols were adhered to in the distribution and collection of questionnaires to safeguard the researcher and participants.

An application for a gatekeeper's permission was made to the university's Director of Research and Postgraduate Support prior to the research being conducted. Only the researcher and statistician had access to the data.

1.11 CHAPTER OUTLINE

The structure of the research study is as follows:

- Chapter One: Introduction

The study is introduced in this chapter. Along with the rationale, the theoretical framework of the study, the research methodology, and the delimitation of the research are all given, along with the problem statement, goal, and objectives. The chapter's conclusion describes the study's organisational framework.

- Chapter Two: Literature Review

The study's theoretical underpinnings are provided in this chapter, along with an overview of the relevant literature. Many theories about customer satisfaction and service excellence are explored. This chapter also highlights the issues identified by researchers and other experts in the fields of customer service and quality.

The functions of university sports and recreation in South Africa are discussed in this chapter. Sporting activities at the University of Technology are highlighted. This chapter highlights that the constructs of service quality and customer satisfaction are inter-related. The Servqual and gaps models are discussed followed by a subsequent

discussion of the dimensions of service quality. The chapter covers the characteristics of service and concludes with a discussion of the zone of tolerance.

- Chapter Three: Research Methodology

This chapter discusses the research method that was used during the research process to determine the service quality of the sports department at the university of technology. This chapter categorises the study as a cross-sectional and descriptive study with a quantitative research approach. Chapter Three highlights the main data collection sources as being primary and secondary data. Chapter Three highlights the appropriate survey method and choice of measuring instrument. A discussion of the Servqual questionnaire followed. Validity and reliability are discussed. The chapter concludes with an understanding of the ethical considerations of the study.

- Chapter Four: Results and Discussions

The results of the investigation are presented in Chapter Four, and an analysis is done using these results. The data is processed into meaningful results and presented in a manner that the reader will be able to interpret and understand. This chapter shows that the response rate of the study was 322 out of 700 questionnaires administered to all sports club members. The descriptive statistics reported in this chapter are based on the respondents' biographical data.

Inferential statistical tests were conducted in this chapter to determine the difference between sports club members' expectations and actual experiences of service quality. In this chapter, validity and reliability tests were carried out using factor analysis and Cronbach's alpha test, respectively. A gap analysis is conducted in this chapter across all service quality dimensions, measuring members' expectations and actual experiences.

- Chapter Five: Conclusions and Recommendations

In this chapter, the conclusions and suggestions derived from the findings are provided. The study is summarised theoretically and empirically. The study's findings

are also explored in connection to the dimensions of service quality. The largest and smallest gaps found in this study are noted in the gap analysis. The limitations of this study are also covered in this chapter, along with crucial suggestions for raising customer satisfaction at the university of technology's sports department. Future research recommendations are also made.

1.12 CONCLUSION

The background of customer satisfaction and service quality at the university of technology's sports department was discussed in this chapter. As well as outlining the study's aim and objectives, Chapter One explained why it was important to investigate how sports club members perceived the quality of the services given by the university. It also highlighted the theoretical framework, research methodology, delimitations, background of the study, the problem statement and posed the overall research question.

An overview of the literature on service quality and customer satisfaction in the sports industry will be presented in the next chapter.

CHAPTER TWO - LITERATURE REVIEW

2.1. INTRODUCTION

The researcher presents the study, examines the research design, establishes the aim and objectives, and explains the justifications for the study in Chapter One. Chapter Two provides an assessment of the literary works relevant to this study. The concepts of service quality and customer satisfaction are covered in this chapter, along with their guiding principles and how they relate to one another. Service quality models are highlighted, and the five service quality dimensions are discussed. This chapter concludes with the association between service quality and customer satisfaction.

2.2. OVERVIEW OF SPORTS AND RECREATION IN SOUTH AFRICA

Our current society's competitive landscape has forced several different organisations to compete for customers by improving their services to customers, retaining existing ones, and attracting new ones. Universities are not immune to this. (Grace, 2015:136-137).

To raise their profile and attract the brightest students in terms of academic and athletic abilities, universities engage in expensive marketing campaigns. "Universities are expected to produce and supply excellent quality sports services to prepare their athletes for national and international competition in order to attract excellent student-athletes"(Serra, Surujlal and Redda, 2016:170).

According to research, engaging in any kind of physical activity lowers students' probability of developing mental, emotional, and physical issues. In particular, for students from historically underprivileged neighborhoods, engagement in sports and leisure activities has the extra benefit of protecting against social exclusion or social isolation (Dhurup and Mokoena, 2017:1).

In South Africa, elite university athletic competition is governed by University Sport South Africa (USSA). USSA, which was known as the South African Students Sports Union (SASSU). USSA is the umbrella organisation responsible for managing, planning, and coordinating student sports events at the local, regional, and national levels in South Africa's higher education system (USSA, 2016a). Maximising student

engagement in sports and developing outstanding athletes is one of USSA's main goals. The different sports codes that universities in South Africa compete in are listed in Table 2.1 below.

Table 2-1 Sports codes constituted by USSA

Aerobics	Gymnastics	Dance Sport
Aquatics	Hockey	Darts
Athletics	Judo	Fencing
Badminton	Karate	Football
Basketball	Netball	Golf
Boxing	Rowing	Cricket
Canoeing	Rugby	Cycling
Surfing	Softball	Chess
Sailing	Table-Tennis	Volleyball
Yachting	Squash	Pool (Snooker)

Source: Mthethwa (2017:10)

Over 45 South African higher education institutions are currently members of USSA (USSA, 2016c). These organisations provide sporting activities to their constituents.

2.3. SPORTS AND RECREATION AT THE DURBAN UNIVERSITY OF TECHNOLOGY

Sport has a fundamental role to play in the life of a student at university. Not only does sport provide the opportunity to compete at various levels, but it also provides an avenue to achieve wellness (live a healthy life) and engage in social cohesion at Durban University of Technology. As such, Durban University of Technology Sport Administration on both Durban and Pietermaritzburg campuses offers a wide variety of sporting codes that prospective sports club members can engage in (DUT Sport Admin, 2019). The Durban University of Technology Sports Clubs have always been at the forefront of student sport at USSA level as well as in community leagues. Table 2.2 below shows the sports codes offered at Durban University of Technology.

Table 2-2 Sports Codes offered at Durban University of Technology

Aerobics	Cricket
Athletics	Dance
Aquatics	Football
Basketball	Golf
Boxing	Hockey
Chess	Karate
Capoeira	Kung-Fu
Cricket	Netball
Rugby	Table Tennis
Squash	Volleyball
Tennis	Sailing
Weight Training	

Source: DUT Sport Admin (2019)

Students can choose to participate in athletics, tennis, netball, football, aerobics, rugby, basketball, cricket, hockey, and dance at the Pietermaritzburg campuses (Indumiso and Riverside) (DUT 2019). The Steve Biko Campus in Durban has an indoor sports complex, squash courts and staff and student gymnasiums. The indoor sports complex plays host to numerous national and international sporting events and is a major attraction for students.

Due to Durban University of Technology's affiliation to USSA, its students compete against those from other colleges and universities both locally and nationally. In addition to gaining exposure, this gives them a chance to pursue their sporting ambitions further.

2.4. VALUE OF PARTICIPATING IN SPORTS AND RECREATION AL ACTIVITIES

Participation in sports, indisputably improves the quality of life. (WHO, 2014). One of the most important factors in the health and economic development of emerging nations is the promotion of good living practices (Jianyu, 2017:1-9). Universities are strategically located and vital settings for forming habits that last a lifetime.

Numerous studies have been conducted to determine the factors influencing participation in and absence from campus sporting activities in light of the significance of sports and recreation in fostering a healthy lifestyle. These studies were conducted with the intention of improving student health levels and learning more about how sport is delivered on campuses (Mthethwa, 2017:13). The author further notes that there is general agreement among academics that the motivations for and barriers to engagement in sport are the elements that influence student participation.

2.4.1. MOTIVES FOR PARTICIPATION IN SPORT

The development of our future leaders depends on participants' ability to strengthen their physiological, social, and psychological functioning through participation in sports and leisure activities (WHO, 2014). The importance of involvement in sports and leisure activities for maintaining physical fitness as well as the drawbacks of a sedentary lifestyle are further stressed by Wang and Sheih (2016:193-209).

University students are inclined to participate in sports and recreation for a broad range of reasons, according to Mthethwa (2017: 13–15), including fun and challenge, energy and stress reduction, social interaction, and health and physical well-being.

The research of Shuklev (2015:113–115) emphasises the importance of sports and recreation for students' growth, which helps to explain the decline in the number of students quitting university because of stress and sadness. Ismail and Yan (2016:269–283) corroborate this by reporting that after engaging in sporting activities, South African students had reduced levels of stress, depression and anxiety.

2.4.2. CONSTRAINTS TO SPORTS AND RECREATION PARTICIPATION

Masmanidis, Tsigilis, and Kosta (2015:9–18) cite two reasons why people do not engage in sporting activities. These elements fall under the categories of intrapersonal and structural constraints.

2.4.2.1. INTRAPERSONAL CONSTRAINTS

"Intrapersonal constraints are internal psychological conditions of a person", claims Heri (2017:38–46). Stress, depression, attitude, skills, perceived self-skill, religious beliefs, individual drive, self-esteem, and subjective judgment of tasks are some examples of intrapersonal restrictions. Lee (2017: 870-879) found that fatigue and fear of injury lead to non-participation in sports and leisure activities Wang and Sheih (2016: 193-209) emphasised that students made the decision to refrain from participating in physical exercise because they were conscious of how their peers would perceive them.

Intrapersonal restrictions are harmful because they can make it difficult to start and sustain a social life in the neighbourhood where one lives. A decline in student engagement in sport can be attributed to publications that highlight social issues that ultimately become intrapersonal limitations (Masmanidis, Tsigilis and Kosta, 2015: 9-18).

2.4.2.2. STRUCTURAL CONSTRAINTS

External considerations called structural restrictions get in the way of people's desires to participate in sports (McColl: 2015:48-54). Structured constraints include things like a lack of resources, the season, time, or facilities. The main reasons why people do not engage in sports and recreation are listed as being financial limitations and lack of access to sports facilities (Aftab and Sarwar, 2016:161-171). This statement is relevant to this study as the Department of Sport Administration at DUT operates on a budget lower than most other higher education institutions and the indoor sports complex is extensively used by other departments within DUT for non-sports purposes. This creates a barrier for sports club members to participate in sports at DUT.

Soni (2015:59) observed that the University of Venda's academic load, a scarcity of sports equipment, lack of transportation, and deteriorating sports facilities all contributed to low levels of sports participation. Limited access to qualified coaches and team management, a lack of variation in the programmes offered, a dearth of facilities, obsolete equipment, and a lack of parental financial support are all listed as barriers to participation in Gauteng.

2.5. SERVICE QUALITY

According to Rahim (2016:100), service quality is a concept that has generated a lot of attention and discussion in the literature on service marketing due to the difficulties in defining and assessing it and the lack of a universally accepted definition. Because of this, several academics have described service quality as an "alluring" and "general" idea that is problematic to operationalise and assess.

Ramya (2019:38) states that the words "service" and "quality" are combined to form the phrase "service quality." The author additionally makes a specific reference to the term "service," which refers to any action or advantage that one party offers to another that is basically intangible and does not result in ownership of anything. It is acknowledged that quality is a strategic instrument for achieving operational effectiveness and improving corporate performance.

Service quality is defined by Parasuraman, Zeithaml and Berry (1988:12–40) as the deviation from customer expectations and perceptions. Lovelock and Wirtz (2011:404) define service quality as a customer's attitude or overall opinion of the organisation and its services' relative inferiority or superiority. Furthermore, the authors discovered that customers' expectations, particularly when they have no familiarity with the service, impact how well they perceive the quality of the service. Durup et al. (2017:4) state that "after the participation experience, a participant acquires a service quality perception and a level of contentment." A participant who is extremely happy with the experience is more likely to stick with a certain service and eventually become a devoted client. Therefore, it's critical to evaluate client satisfaction levels. The same authors assert that sports services do not expire. For this reason, it's critical for

managers of sports programmes to guarantee the provision of prompt, optimum service.

According to Ferrell and Hartline (2012:349), service quality refers to how much the company's offerings outperform those of its rivals or internal benchmarks. The same authors advise service providers to be aware of consumer expectations, convert those expectations into quality standards, and uphold those standards throughout service delivery. In addition to the aforementioned explanations, Kim (2015:49) says that providing exceptional service entails consistently exceeding customers' expectations. The author went on to say that service providers had to continuously contrast what clients think they will get with what they really receive.

A comprehensive and more rational explanation of how service quality relates to client perceptions is provided by Winer and Dhar (2015:440). The authors go on to say that a customer's assessment of quality is based on a comparison of the quality actually experienced to what he or she expected to occur when the service was supplied. Perreault, Cannon, and McCarthy (2010: 232) claim that service quality is the ability of the service provider to accurately ascertain customers' requirements and to deliver the service at a level that satisfies their demands or criteria.

Kim (2015:49) asserts that there are several viewpoints on how to define service quality and how service providers, including public institutions, might attain it. According to Haddad (2017:146–155), service quality is an attitude or general perception that clients form regarding the weakness or excellence of the organisation and its services. The study concludes that consumers' evaluations of service quality are influenced by their expectations. Service quality is defined by Jang, Im, and Nam (2016:639–654) as the extent to which an organisation's offerings outperform those of its competitors or benchmarks established internally. According to Jang et al. (2016:639–654), service providers should comprehend the expectations of their clients, convert those expectations into quality standards, and respect those standards when providing services. Additionally, Mohamad and Mohamod (2019:17–21) imply that providing great service entails meeting client expectations.

An extended and clearer definition of service quality with regard to client perceptions is offered by Liu and Wang (2017:355–363). The same writers make note of the fact that a customer's opinion of quality is determined by a comparison between the quality they actually experienced and the quality they anticipated to happen when the service was rendered. Similar to this, Heri (2017: 38–46) claims that service quality refers to a provider's capacity to accurately assess customers' expectations and offer service at a level that satisfies their demands. Service companies are able to innovate by upholding service quality and thereby increasing client retention.

Although there are several approaches to obtaining service quality, the writers' explanations reveal a number of commonalities. One may argue that the goal of service quality is a favourable attitude or perception of the entire service offering. Generally speaking, attention is also required to guarantee that the services and related procedures outperform those of the rivals. The significance of service quality to the organisation's continued existence and financial success is another prevalent aspect. Customers' expectations and a company's perception of its level of service should be related (Kotler and Armstrong, 2013:241).

The definitions of service quality led the researcher to the conclusion that a customer's evaluation of how well the service lives up to their expectations in terms of their impression of actual service delivery constitutes a valid measure of service quality. Hence, service quality enhances customer satisfaction. The next section investigates service quality in sports and assesses the influence of service quality on customer satisfaction. The section concludes by exploring service quality in sports facilities.

2.5.1. SERVICE QUALITY IN SPORTS FACILITIES

Sports club members are the primary users of sports facilities at the University of Technology. Sports club members' satisfaction with service quality delivery is an extremely important issue for sport department managers to gauge the efficiency of the department. Hence, the DUT Sport Department must focus on implementing mechanisms for delivering excellent service quality (Yusof, Popa, and Geok, 2018:5) in order to satisfy sports club members' (customers') expectations. To motivate students to participate actively in sports, DUT has to provide appealing sports facilities.

During the primary and secondary phases of schooling, the physical education curriculum demands students use sports facilities. However, in contrast, students in universities choose whether they wish to utilise sports facilities. The expectations and perceptions of members of university sports clubs towards their university's sports department should therefore be examined to enable sports managers to gain a better understanding and satisfy their needs.

Providing high-quality service that makes the customer feel satisfied and encourages continued use of the facility is one strategy for getting students to use sports facilities (Tan, Pyun, and 2015:1-17).

Providing a quality service in sports centres will enhance the attraction of new customers, broaden the existing operations, and limit mistakes and the loss of existing customers. Ghasemi and Mohammad (2015:855-859) state that sports facilities with aesthetically pleasing features will appeal to users, thus attaining satisfaction and enhancing service quality. The tangible dimension of service quality measures the sports club members' perceptions and expectations of an aesthetically pleasing sports facility. This may indicate the level of satisfaction, thus portraying the service quality offered.

2.5.2. SERVICE QUALITY IN SPORT

Sports facilities, sports merchandise, and sports service organisations make up the sports industry (Lee, 2017:870-879). In order to ensure the survival of the organisation, it is important to listen to and design services that consider the needs of users. Furthermore, it is important to identify weak points and determine the steps that need to be taken for improvement, thus establishing a continuous improvement process within the organisation (Jung and Choi, 2016:521-531).

Organisations have been affected by globalisation and the expanding market competition over all facets of life. The sports industry has been unavoidably impacted by those tides of change. The technological evolution of sport has resulted in the sports industry becoming an extremely competitive sector. Like other service industries, sports have begun to draw attention for their high quality and significance. The decision by the European Association of Sport Management (EASM) to focus its sixth annual

Congress on "Service Quality in Sport" is one notable example (Yildiz, Polat, Güzel, 2018:87). To further promote the significance and awareness of service quality in sport, the "Symposium for Quality in Sport" was organised in Turkey in 2005, in addition to the EASM. This demonstrated a rise in the need for studies and discussions on knowledge assessment, which offer feedback on customer satisfaction and service quality in the sports industry.

To meet customers' expectations for service offerings, sports organisations must provide a high-quality presentation of the services that customers expect. An understanding of the definition of expectations assists organisations in enhancing their quality-of-service offerings. Therefore, anticipation is the expectation and prediction of a future circumstance, more especially of a potential advantage that can be realized when a need that is previously understood has been met. In other words, in sports facilities and enterprises, expectation is viewed as a crucial aspect in guaranteeing client happiness and continuity (Liu and Wang, 2017: 355-363). Customer expectations must be recognised and satisfied for a sports centre to succeed. These expectations could be met if high standards for service quality are maintained.

Lee (2017:870-879) asserts that sports facilities experiencing rapid expansion must satisfy patrons' needs to keep their patronage. The author goes on to note that the engagement of consumers with the physical environment, the relatively lengthy duration of stay in sports facilities, and the presence of people in sports facilities as participants make sports services a significant service area within the service industry. In the sports industry, a customer's experience is a key outcome. Consumers of sports services usually have a certain degree of expectation regarding the outcome of their consumption of the sports service. Theodorakis (2014:67) states that the concept of service quality is defined based on the characteristics of services and their delivery processes as viewed by the sports consumer. Previous research on service quality and customer satisfaction in sport includes Tan and Pyun (2015); Gencer, Demir and Aycan (2008); Theodorakis (2014); Pillay (2011).

2.6. CUSTOMER SATISFACTION

Customer satisfaction is the consequence of a company's performance in terms of product or service quality. Customer satisfaction may be broken down into two main categories: transaction-specific and cumulative (Ganiyu, 2016:100). While cumulative satisfaction is the overall evaluation of the whole service encounter process, transaction-specific satisfaction pertains to a given product or service encounter. Consumer satisfaction, expressed simply, is a means to create value by fostering and meeting customer preferences and expectations.

Customer satisfaction is a key element in achieving organisational goals and is a fundamental standard of service organisation excellence performance (Theresia and Bangun, 2017:2). Customer satisfaction is a person's emotion regarding how happy or disappointed they are with a product after comparing its performance to their expectations. This customer satisfaction is a collective response to the organisation's delivery of the service. Customers will be happier with a high level of service quality. Customer expectations and perceptions of service quality are therefore key determinants of customer happiness (Tan and Pyun, 2015:4).

Customer happiness, according to Al-Azzam (2015:48), depends on whether customers get what they expect (what they should happen) as opposed to what they think they would not get (perceived performance). Customer satisfaction is the result customers receive when the service experience surpasses their expectations, according to Conte, Caniels, and Schijns (2016:24), who concur with Al-Azzam (2015:48). In addition, customer contentment improves the image of quality and encourages customers to repurchase goods or use services. The nature of the interaction between consumers and providers of goods and services is particularly important to customer satisfaction in the sports industry.

Customer satisfaction, according to Koklic, Kukar-Kinney, and Vegelj (2017:188–196), is defined as the customer's assessment of a good or service in terms of whether it met his or her wants and expectations. Yadav and Rai (2015:18) note that customer satisfaction simply means the degree to which the customer is satisfied with the service provider's offering. Customer satisfaction is critical because happy customers guarantee repeat business and loyalty. According to Luker (2016:75), customer

satisfaction is a certain kind of attitude toward a product or service that has to do with how much customers enjoy or detest it after using it. Client satisfaction, according to Ganiyu (2016:100), refers to how the customer feels about the goods or services provided by a business as well as how well that relationship is going. Customer experience is a process that leads to customer satisfaction. From this vantage point, the method of measuring customer satisfaction compares the service received to prior expectations. The end-state happiness that results from the customer experience is the focus of the outcome method, on the other hand.

Customer satisfaction at a sports facility is impacted by assessments of the service quality, membership rates, the effectiveness and competence of employees, and the standard of the amenities offered (Tan et al. 2015:1-17). People evaluate customer satisfaction based on their interactions with particular aspects of the goods and services they get. Thus, it stands to reason for service organisations to use customer satisfaction evaluation as a valuable development benchmark.

The degree of customer satisfaction is correlated with higher levels of service quality, and it serves as a positive indicator of the caliber of the goods or services offered to the consumer (Seyoum, 2017:178). Customers are more satisfied with a service provider when they have a favourable perception of the quality of the offered services. Customer satisfaction will therefore be enhanced as a result of the service's quality.

This section is pertinent to the study because it discusses the importance of customer satisfaction as a gauge that businesses and marketers may use to control and enhance the quality of their services. This is supported by the literature, which demonstrates how service quality affects customer satisfaction and how customer satisfaction is a gauge of service quality.

Arising from the definitions and discussions of service quality and customer satisfaction, the study establishes that both constructs are inter-related. Hence, the study outlines in more detail the complementary relationship between service quality and customer relationships in section 2.8.

➤ CUSTOMER SATISFACTION WITH SPORTS FACILITIES

A key component of the success of any organisation, including sports, is customer satisfaction. Increased participation rates may be achieved by studying consumer satisfaction in relation to sporting goods and services. This study's aim is to rate the sports department's service quality at a university of technology. Satisfaction with a service encounter is influenced by the perception of service quality and the extent to which the service received exceeds expectations (Ampofo-Boateng, 2009:35).

A person's psychological and emotional state, which reflects either the benefit or result of the experience, determines whether they are happy with a good or service. For instance, contentment may be indicated by how well service is viewed in sports facilities (Budayci, 2018:220). A comparison of one's expectations and one's own assessment of service quality might reveal whether or not one is satisfied with using a sports facility. Although there are many variables that might affect satisfaction, this study focuses on the element of sports club member satisfaction related to service quality.

Therefore, the study shows that the dimensions of service quality have an impact on consumer satisfaction in sports. The satisfaction of sports club members is influenced by concrete factors like the availability of a range of sporting venues and simple-to-use equipment, which may elevate that satisfaction.

The capacity to provide the promised service consistently and precisely is referred to as reliability of service quality (Parasuraman *et al.*, 1988). If university sports departments provide accurate knowledge about injury prevention and modernise sports facilities, they can provide a reliable, quality service (Mthethwa, 2017:13). By providing reliable quality of service, sports club members are more likely to feel satisfied.

Responding to inquiries from sports club members and effectively resolving issues are all examples of responsiveness (Parasuraman *et al.*, 1988). An example of the responsive quality of service shows DUT's sports centre staff responding promptly to a member's email within 24 hours or providing an efficient booking system for sports

facilities. According to Beere *et al.* (1994), a speedy response often results in a higher level of customer satisfaction.

Assurance includes the knowledge and experience of employees; hence, the ability to project confidence in sports club members (Parasuraman *et al.*, 1988). For example, the sports centre staff could give exercise tips to members who want to lose weight at the gym and give them a sense of satisfaction.

Empathy entails showing the individual student sentiments of care, concern, and attention so that they may realize their value (Parasuraman *et al.*, 1988). For instance, students are often happier with the quality of service when sports centre staff are cognisant of students' fitness progression.

These five dimensions help practitioners to understand sports club members' expectations and perceptions of university sports service quality. According to Felix (2017:6), the concepts of customer satisfaction and service quality are intertwined. This study postulates that students' perceptions of service quality affect their degree of satisfaction. The correlation between service quality and customer satisfaction is discussed in more detail in the next section and demonstrates that service quality is a determinant of customer satisfaction and customer satisfaction is a measure of service quality (Ali, 2015:37-51).

2.7. RELATIONSHIP BETWEEN SERVICE QUALITY AND CUSTOMER SATISFACTION

Service quality and customer satisfaction are correlated. Customer satisfaction increases with improved service quality. Customer satisfaction is a process that starts before service quality and flows from it. Customer satisfaction has been demonstrated to be significantly influenced by service quality (Felix, 2017:6). Agbor (2011: 11) argues that while customer satisfaction is thought to be based on the customer's experience with a specific service encounter, it is consistent with the idea that service quality is a factor in determining customer satisfaction because service quality is determined by the results of the services provided by service providers in organisations.

Since both expectations and perceptions are considered when determining the quality of services and customer satisfaction, there is minimal difference between the concepts of service quality and customer satisfaction (Msosa and Govender, 2015:189). If organisations want to develop and remain competitive, they must grasp the importance of service quality and client happiness. To maintain a competitive advantage in today's competitive market, excellent service delivery is essential. Profitability of an organisation is positively impacted by customer happiness. Customer satisfaction generates repeat business, brand loyalty, and favourable word of mouth, which are the cornerstones of every successful organisation (Mohammed et al. 2019:46). In support of this, Rahman (2019:5) asserts that although being two different concepts, service quality and customer satisfaction are strongly connected. Figure 2.1 below depicts the relationship between service quality and customer satisfaction.

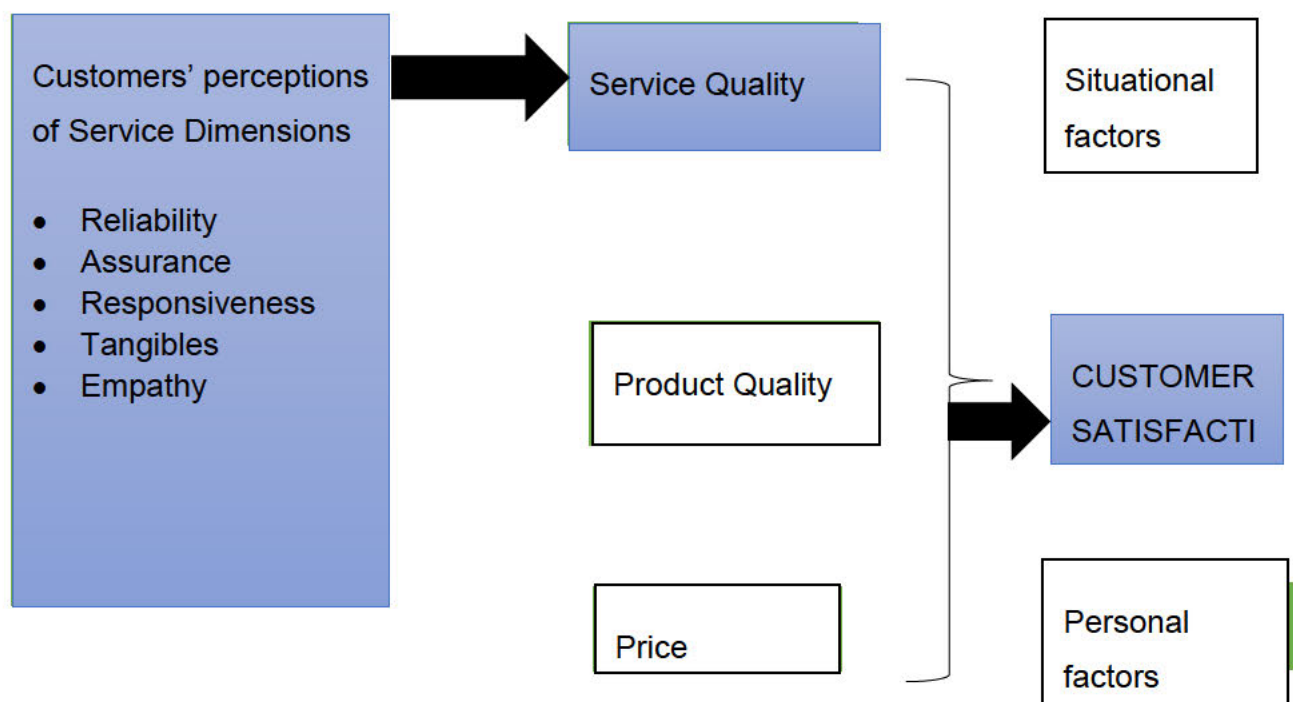


Figure 2-1 The relationship between Service Quality and Customer Satisfaction

Source: Rahman (2019:5)

One of the key factors impacting customer satisfaction is the service quality provided by any organisation (Belas and Gabcova 2016:289). According to studies, customer satisfaction and service quality are inter-related. Numerous studies in various industries, including Rod and Ashill (2009) and Szwajca (2018:2016) in the banking

industry, Hussain (2015) in the airline industry, and Saghier (2013) in the hotel industry, have proved this connection.

The degree of customer satisfaction improves along with an increasing level of service quality, which positively represents the quality of the goods or services offered to the consumer (Im and Kim, 2015:345-362). As a result, the more satisfied customers are with a service provider, the higher the level of satisfaction will be.

This section demonstrates the relationship between customer satisfaction and service quality. Customer satisfaction is a metric for evaluating service quality, while service quality is a determinant of customer satisfaction (Ali, 2015:37-51).

2.8. SERVQUAL

The link between service quality and customer satisfaction was established in the previous section, and the degree of service quality of the DUT sports department will be determined by the measure of customer satisfaction obtained from the SERVQUAL instrument employed in this study. The SERVQUAL instrument is discussed in this section.

Several authors, including West (2010:298; Capon (2016:478), Kotler and Keller (2012:378), Winer and Dhar (2011:37), and Lovelock and Wirtz (2011: 37) agreed that assessing service quality is difficult. All kinds of complications arise as the services are not tangible. They cannot be felt, seen, patented, or inventoried.

According to Chaguluka (2018:440), different models have been developed to measure service quality, including the SERVQUAL model developed by Parasuraman, Berry and Zeithaml (1985), the three-component model developed by Rust and Oliver (1994), the decrease of expectations model developed by Oliver (1997), and the Nordic model developed by Gronroos (2007). However, given it is the framework that directs the investigation, this discussion is focused on the SERVQUAL and gaps models.

The service quality model (SERVQUAL), which is based on the GAPS model of service quality, is the chosen paradigm for assessing service quality. Both models were developed by Parasuraman, Zeithaml, and Berry in the mid-1980s. The model was developed as a tool to assess customers' expectations and perceptions of service quality. The creators of SERVQUAL, Parasuraman *et al.* (1985), state that the gap between a customer's expectations and their actual assessment of a service is what they refer to as service quality. A multi-item assessment called the SERVQUAL model may be used to determine and infer customer views and service expectations (Ganiyu, 2016:98). In many industries, it is regarded as credible and dependable for assessing service quality.

Ninety-seven characteristics were identified by Parasuraman *et al.* as influencing service quality. These characteristics were divided into 10 categories, which underwent two phases of refinement to determine the instruments' effectiveness (Parasuraman, Zeithaml, and Berry, 1988:20). Ten criteria were created to evaluate service quality in the first round of refining, including tangibles, dependability, responsiveness, communication, credibility, security, competence, civility, understanding, assurance, and empathy. These 10 aspects were integrated into five dimensions at the second stage of refinement: tangibility, dependability, responsiveness, assurance, and empathy (Ganiyu, 2016:99).

The foundation of SERVQUAL is the five dimensions and a comparison of customers' experiences with the service and their expectations of how it should be delivered (disconfirmation or confirmation of expectations). On a seven-point scale from "Strongly Disagree" to "Strongly Agree," respondents are asked to explain what they anticipated from the service and how they viewed the service. Typically, 22 characteristics are used to describe the five dimensions. An overall quality score may be derived based on the differences between expectations and experiences in 22 different categories.

Servqual considers the customer's assessment of the quality of service to be a priority. Customers' expectations of a given type of service provider and their evaluation of that provider's performance are conceptualised as a gap in this rating (Endeshaw, 2019:90). The researcher will utilise a modified version of the SERVQUAL instrument

in this study to determine the Service Quality of the Sports Department at the Durban University of Technology.

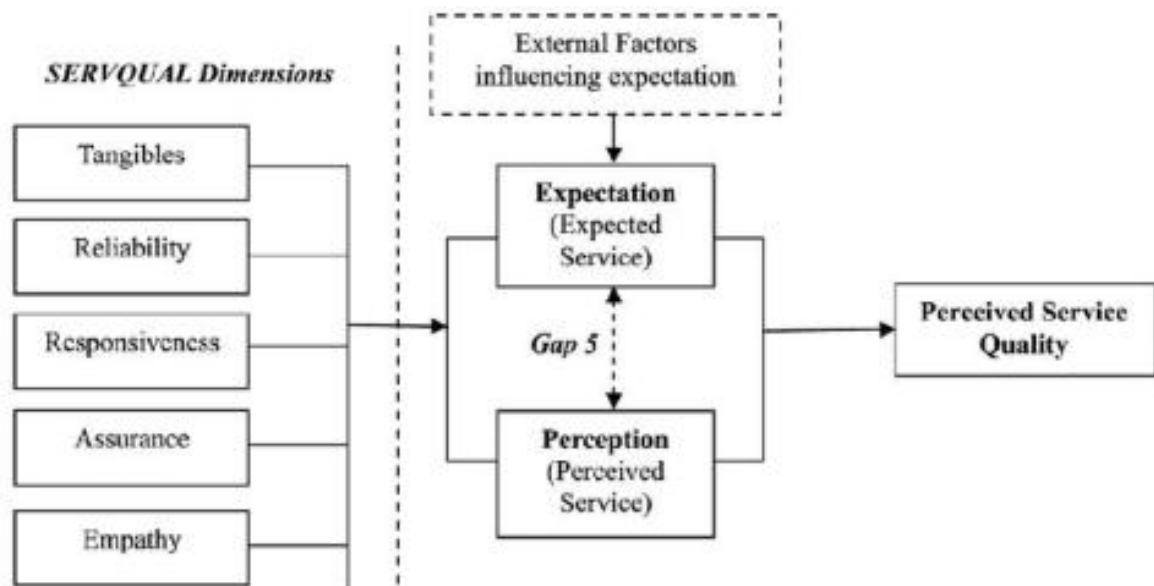


Figure 2-2 The Servqual Model

Source: Dhar (2015)

Parasuraman *et al.* (1985) are the developers of both the SERVQUAL Model and the GAPS Model to measure service quality. The GAPS model (discussed below in 2.10) depicts how various gaps in the service process may affect the customer's assessment of the quality of the service. The gap between perceived service and expected service (Gap 5) is the most crucial gap. Consequently, the authors developed SERVQUAL to measure the gap between expected service and perceived service (Ladhari 2009:172-198).

CRITICISM OF THE SERVQUAL INSTRUMENT

SERVQUAL has received some criticism regarding the length of the questionnaire, the measurement of expectations, and the validity of the five dimensions of service quality.

According to Pyun and Tan (2015:6), "the combination of expectation and perception questions in the survey results in a lengthy and extremely repetitive study." The questionnaire has a matched-pairs design with a total of 44 items due to the addition of 22 expectation items and 22 perception items. The typical questionnaire will include

about 60 items if researchers include demographic and other behavioural elements, such as past experience with a product or category and the usual array of demographics, including age, gender, occupation, and educational achievement, among other characteristics. In real terms, this indicates that administering the questionnaire in a face-to-face interview would take more than an hour for each respondent. Long surveys are known to exhaust respondents, which might compromise the validity of the data, according to Souca (2011:420-429). Long questionnaires can contribute to the cost and time associated with data gathering and processing. Due to the extensive questionnaires used and the huge samples used, coding, assembling, and analysing the data takes a lot of time and the findings cannot address immediate quality issues.

In some circumstances, 'fast and dirty' research may be required to be done while awaiting the findings of studies using stronger research designs.

The recommended five dimensions of reliability, assurance, tangibles, empathy, and responsiveness do not hold up under statistical scrutiny (Izogo and Ogba, 2015:0-269). According to Liu and Wang (2017:36), service quality is multifaceted, and the dimensions are interdependent. Similar to this, it is impossible to apply or implement the dimensions of service quality in their entirety in order to assess service quality across various economic sectors.

Some of the critiques of SERVQUAL centre on the use of expectations as a standard for evaluating service quality (Kim, 2015:228). The author also highlights the following three issues when comparing expectations and experiences across a range of attributes:

- If expectations are assessed following a service experience, which is commonly done for practical reasons, then what is assessed is not actually an expectation but something that has been impacted by the service experience.
- It could not be useful to gauge expectations before receiving the service, though, as such expectations might not be the same as the criteria that an individual would use to assess their experiences.

- A customer's expectations before a service experience affect how they perceive their experience. As a result, if expectations are measured first, followed by experiences, the measurements are not independent of one another, and the expectations are in fact measured twice.

Despite these concerns, SERVQUAL is still the most comprehensive effort to conceptualise and quantify service quality, according to Chikwawa (2019:284). SERVQUAL is an effective instrument for academics researching a variety of industries due to its adaptability.

2.9. GAPS MODEL

The gaps model of service quality, or SERVQUAL, is based on a disconfirmation paradigm, according to Parasuraman *et al.* (1985:42), and it predicts service quality based on the discrepancy between customers' expectations of the service and their assessment of how the service organisation delivers it. Measuring service quality has been a recurrent theme in management literature due to the need to develop reliable tools for the critical appraisal of business performance from the perspective of customers and the connection between perceived service quality and other important organisational outcomes (Rahim, 2016:100; Endeshaw, 2019:89).

The GAPS model highlights the five main areas of consumer satisfaction that businesses must close to achieve expectations. Customer satisfaction is mostly a product of perception according to the gap model of service quality. Customers will be happy if they believe that the service fits their needs

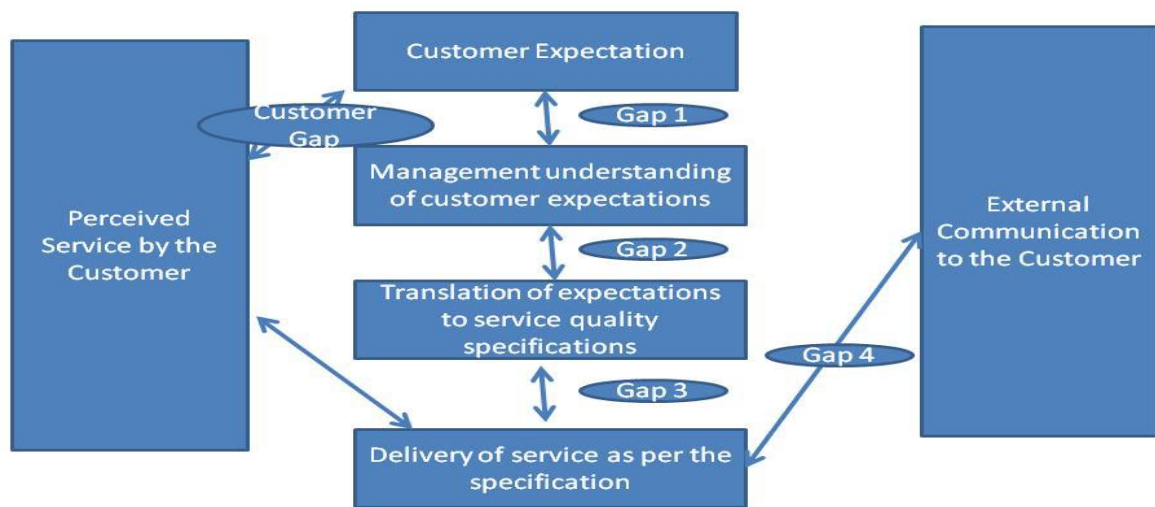


Figure 2-3 The Gaps Model

Source: Chin (2010: 33)

To explain the GAP Model, the study uses examples to show how each gap might manifest itself in the Sports Administration at a University of Technology

2.9.1. GAP 1: THE KNOWLEDGE GAP (GAP BETWEEN CUSTOMER EXPECTATIONS AND UNDERSTANDING OF CUSTOMER NEEDS)

The knowledge gap is the discrepancy between what the client expects from the service and what the business actually provides. Essentially, this discrepancy results from management's ignorance of the precise expectations of consumers (Polyakova and Mirza, 2016:78). Polyakova and Mirza (2016:78) state that this GAP occurs for the following reasons:

- Insufficient customer and management contact.
- A breakdown in communication between management and service personnel.
- Inadequate market analysis

If the DUT Sport Administration were to experience this gap, it may be because they do not provide their customers with the right sporting programmes, modernised equipment, or adequate facilities. Customers in this scenario desire these things, but they are just not provided.

2.9.2. GAP 2: POLICY GAP (GAP BETWEEN UNDERSTANDING OF CUSTOMER NEEDS AND SERVICE DRIVEN POLICIES)

Gap 2 occurs when management correctly perceives what customers want but fails to set a standard of performance to achieve what customers want. The policy gap is the disparity between management's comprehension of customer demands and how that understanding is translated into service delivery rules and standards (Wang and Shieh, 2016:193-209). The same author states that this GAP occurs for the following reasons:

- Inadequate customer service standards.
- Service levels that are not clearly established.
- Not updating service level benchmarks on a regular basis.

If the DUT Sport Administration were to experience this gap, it is possible that they would supply all the necessary athletic programmes, but the level of services provided within these programmes would not be of a high enough standard.

2.9.3. GAP 3: THE DELIVERY GAP (GAP BETWEEN SERVICE-QUALITY SPECIFICATIONS AND SERVICE DELIVERY)

The third delivery gap is the discrepancy between the service's actual delivery and its corresponding regulations and standards (Jadav and Rai, 2015:17-23). This GAP occurs for the following reasons:

- Gaps in the practices governing human resources.
- The misalignment between supply and demand.
- A lack of product expertise among the staff.
- The inability of the team to operate cohesively to produce the good or service

If the DUT Sport Administration were to suffer from this gap, then it could be because club members' requests for sports equipment, facility bookings, or resources to attend tournaments are not adequately and timeously satisfied. In this case, the service is not performing as it should.

2.9.4. GAP 4: THE COMMUNICATION GAP (GAP BETWEEN SERVICE DELIVERY AND EXTERNAL COMMUNICATION)

What is promised to customers in advertising and what is really delivered is the fourth communication gap (Zhu and Meyer, 2017:51-58). This gap occurs for the following reasons:

- Making promises to customers that the organisation cannot deliver on.
- Viewing external communications as separate to what is going on internally.
- Insufficient communications between the operations and advertising teams.

Communication gaps lead to customer dissatisfaction. This happens because what they receive is not what they were promised. In the worst case, it may cause them to turn to an alternative supplier (Polyakova, Olga, Mirza and Mohammed, 2015:78).

If the DUT Sport Administration were to experience this gap, then it could be because the service is good but not as good or as easy to use as depicted in the advertisements, orientation programmes, DUT web site, or marketing brochures.

2.9.5. GAP 5: THE CUSTOMER GAP (GAP BETWEEN PERCEIVED SERVICE AND EXPECTED SERVICE)

The discrepancy between consumer expectations and perceptions is known as the customer gap. Customers can fail to comprehend the value of the service they receive or mistakenly perceive the level of service excellence as the source of this discrepancy.

It's possible that many organisations are unaware of this disparity. This gap may exist as a result of one of the other four gaps or just as a result of the customer having an inaccurate perception of the service's quality. In the worst-case situation, it may cause a company to lose a significant number of its clients overnight (Zhua and Meyerb, 2017:51-58). Despite the fact that the organisation believed there was no gap, its consumers were actually only waiting for someone to fill the apparent vacuum.

The key to providing great service, according to Parasuraman (1988:13), is to fulfil or even go above and beyond what the customer had expected. In accordance with the gap model of service quality, closing the other four gaps in the model is the only method

to close the customer gap. The degree to which one or more of these four gaps exist will dictate the degree to which the product's perceived quality falls short of customers' expectations.

In terms of conceptualising these variables, creating metrics for them, and researching their impacts, a lot of attention has been paid to both customer expectations and perceptions since the advent of the GAPS model (Valarie, Zeithaml, Bitner, and Gremler, 2010:208-210). Identifying the dimensions of service quality has been a key area of study in both academic and practical contexts. The discovery of the five dimensions of service quality was the outcome of extensive exploratory and empirical effort.

2.10. SERVICE QUALITY DIMENSIONS

In the earlier section related to the SERVQUAL instrument, the study alluded to the fact that SERVQUAL is based on five dimensions, namely: reliability, assurance, tangibles, empathy, and responsiveness, on a comparison between customers' expectations and perceptions of how a service is rendered. Twenty-two attributes, or questions, are used to address the five dimensions. In this study, the researcher addresses tangibles with four attributes each, reliability with four attributes each, responsiveness with four attributes each, assurance with four attributes each, and empathy with six attributes each.

The dimensions of service quality may be seen from several angles. The process orientation advocated by Gronroos (2007:12–40) looks at service quality from the standpoint of what the customer really gets. Technical quality, functional quality, and reputational quality are identified as additional elements of service quality by this alignment.

The outcome of the service the client received is referred to as technical quality. In the context of university sport, the evaluation refers to whether the customer (members of the sports clubs) obtains the preparation necessary for competition participation or the intended results.

The delivery of the service and the behaviour of the staff during this interaction are referred to as its functional quality. This pertains to the customer expressing whether or not the staff members are kind and pleasant in connection to the interaction whilst participating in a university sport. Reputational quality relates to the organisation's reputation in the marketplace in terms of the services it provides (Perez et al. 2007: 34-151).

In relation to university sport, this would refer to the reaction of all stakeholders (university staff/students, general public, prospective university students, and sportspersons from other universities) when university sport is mentioned. The study examines the service quality dimensions in the next section and ties them into the context of sports at DUT.

2.10.1. RELIABILITY

Reliability, in the words of Zeithaml et al. (2013:89), is the ability of an organisation to provide a service that is accurate and dependable. The most significant factor in determining how people perceive the quality of a service is how reliability is further articulated. The definition of reliability given by Pakurár, Haddad, Nagy, Popp, and Oláh (2019:265-268) is the ability to accomplish and supply the promised services in an acceptable, correct and dependable manner, doing what is expected by the customer. Reliability, according to Parasuraman et al. (1993:140–147), refers to an organisation's capacity to deliver a service accurately the first time. Additionally, it demonstrates how organisations work hard to keep their word and focus on the outcomes. The SERVQUAL service quality model features reliability as its first dimension.

In the context of sports at DUT, reliability would relate to equipment purchase and travel requisitions being processed timeously, sport facility bookings being efficiently supervised, and sports equipment readily available for usage.

2.10.2. RESPONSIVENESS

This dimension can be defined in such a way that customers are informed about what services are provided and that they are responding quickly to their needs. According

to Zeithaml *et al.* (2013:90), responsiveness is the propensity of staff to quickly fulfil customers' service needs. According to this dimension, responding to customers' requests, inquiries, and complaints in a timely way is crucial. According to Lone and Rehman (2017:1–20), the ability of the service provider to satisfy the demands of the client constitutes what is meant by responsiveness. Customers get dissatisfied and have a poor impression of the quality of the service when they are kept waiting without a good explanation (Aftab, Junaid, Sarwar and Huma, 2016:161-171).

Responsiveness in the context of sports at DUT would relate to how employees respond to sports club members' complaints, and tactfulness when addressing members. As members' demands change, DUT Sport will adapt as well. For instance, it may expand the hours that members are permitted to use sports facilities.

2.10.3. ASSURANCE

The capacity of employees to build and instil confidence is addressed by this dimension. Assurance is defined by Pakurár (2019:265-268) as the capacity to carry out the desired result, notably in terms of courtesy and reliability. The expertise of staff in customer assurance is also highlighted as a crucial factor by Haense and Hofmann (2017:240-248).

The department head, sports officers, or other staff members are the primary sources of assurance in the context of sports at DUT. Their expertise and customer-interaction techniques foster trust in the company.

2.10.4. EMPATHY

Zeithaml *et al.* (2013:90-91) state that the manner in which organisations and their employees are able to be caring and provide personalised attention to customers is referred to as empathy. The message that consumers are special and distinctive is expressed by the essence of empathy. Customers should receive caring, individualised, and emphatic attention. In order to show empathy, organisations should pay close attention to the anxieties of their customers and reassure parents and guardians that they are aware of and sympathetic to their particular circumstances. (Haddad, 2017:57-71) states that in order to demonstrate empathy, service providers

need to exhibit an understanding of customers' individual needs. Jianyu *et al.* (2017:1-9) assert that service managers should adopt customer orientation by showing a human face when interacting with customers.

Empathy in the DUT sports environment may mean that customers are made to feel important. This may be demonstrated by dealing with one member at a time and making sure the customer is helped with their query before attending to the next one.

2.10.5. TANGIBLES

This aspect relates to appearance. Physical facilities, equipment, employees, and communication materials were all cited by Zeithaml *et al.* (2013:91) as tangibles. For clients to judge the quality of the services, tangibles offer actual representations or visualizations of such services. Tangibles are visual elements that will enhance the image of an organisation from the customers' perceptions. In their 2006 study, Hoffman and Bateson (2006:136) propose that customers utilise tangible criteria to assess services, and that service organisations may use these standards to enhance both their image to clients and their public image. The university sports administration can demonstrate quality to members and interest groups by improving the image of the facilities.

Tangibles in the context of DUT sports may include the appearance of sports facilities, offices, marketing and advertising materials, personnel appearance, and sports equipment.

2.11. MEANING OF SERVICE

An action associated with an intangible component is referred to as a service. It does not lead to a transfer of ownership but does entail some interaction with consumers or property owned by their company (Soni, 2015:13). "Service delivery may not always be related to the delivery of a physical object, and service conditions may vary" (Payne and McDonald, 2012:10).

In addition, Johnson (2017:12) claims that because services are consumed immediately and cannot be saved for later use, they are intangible. The concept of a

service is further complicated by the fact that each service is distinct and unique to a service provider. According to Lamb, Hair and McDaniel (2014:194), services have certain distinguishable characteristics that differentiate them from physical goods. Each of these characteristics is briefly described in the next section.

2.11.1 CHARACTERISTICS OF SERVICE

Marketing was previously predominantly about physical goods and products. In general, the marketing of tangible goods was viewed as the rule, while the marketing of services was viewed as an exception. In advanced economies, more services are created and traded than tangible products. This is how the area of service marketing developed at the end of the 1970s, which was differentiated from the area of goods marketing (Heri, 2017:38-46).

The core element of service marketing is that intangible services are distinct from physical commodities. The four distinctive qualities of intangibility, inseparability, heterogeneity, and perishability are the foundation for their distinction. It is subjective for each customer to determine what constitutes "service quality," rather than being objective (Bruhn and Georgi 2016: 11). Many scholarly authors in the field of service marketing have also pointed out the existence of the above unique characteristics of services (Rai, 2013:186-187). The various distinctive characteristics of services are examined, along with some of the difficulties they pose to marketers.

Without any explanation of the underlying logic, marketing academics are pretty much unanimous in their agreement on the features of services and the fact that these characteristics are prevalent in almost all circumstances (Essay Marketplace, 2020:34-47). These characteristics have not, however, undergone any theoretical or empirical testing. They have their roots in real-world experience and observations. Furthermore, there are several instances that demonstrate how the qualities of services do not sufficiently and consistently set them apart from physical items. The study also touches on exceptions to the service characteristics.

➤ INTANGIBILITY

The most important distinction between products and services is intangibility, which is seen as a crucial component of services and the point of origin for all other distinctions (Zeithaml *et al.*, 1985). In contrast to products, which have tangible qualities that can be physically experienced by the customer before making a purchasing choice (tasting, touching, feeling, and seeing), intangible services lack these qualities. Services are intangible since they are performed or rendered as opposed to being things or objects. Services provide customers access to experiences that do not lead to ownership (Baldwin, 2014:360-367). In addition, these services are individually assessed both pre-purchase and post-consumption. Marketers have difficulties since services are intangible. For instance, the services cannot be trademarked, which makes it difficult to design new goods (Rahman, 2014:74-93). Furthermore, services cannot be easily displayed, communicated, or appraised. Therefore, in order to help customers, evaluate a service before purchasing it, marketers frequently utilise tangible indications like physical facilities or staff (Soni, 2017:14). To build a positive organisation-wide reputation, marketers could also promote word-of-mouth advertising (Zeithaml *et al.*, 1985).

• EXCEPTION TO INTANGIBILITY

Since services lack tangible properties, they cannot be assessed prior to purchase because they are intangible. Despite the fact that the idea of intangibility is occasionally helpful, it cannot be applied uniformly to all services at all levels of service delivery (Lamb, Hair, and McDaniel, 2015:78–92), as certain services include supplying tangible products.

Rahman (2014:74–93) asserts that "service experiences are also surrounded by a built environment, comprising of the appearance of physical facilities, equipment, employees, and communication materials," in addition to the social environment that consists of the service providers and the other customers. The service provided by the hotel sector, of which the room is the main component, is an illustration of a service having physical components. The ability to rate a hotel room before paying for a service enables customers to do so. Additionally, prospective customers might judge the hotel's structure, amenities, staff demeanour and demeanour of other guests, as well

as the personnel's looks. Numerous services entail physical actions and tangible results, which consumers perceive with their senses while they get the service. A customer's experience of staying in a hotel may also be accessed through one or more of their five senses. A haircut or other beauty services are another illustration of this type of service. These services have tangible effects on the body; for example, getting a fresh haircut improves physical health (Blumberg and Cooper, 2014:197-199).

➤ **INSEPARABILITY**

The simultaneous creation and consumption of services is typically a defining feature. Services are usually sold, created, and used at the same time, in contrast to products, which are first produced, then sold, and then finally consumed (Gronroos, 2016:12-40). Thus, production and consumption are inseparable. Many services should be produced with the client in attendance, and they should participate actively in the process of developing new services. The service provider also takes part in the production process and is crucial to the customer's satisfaction. Since managing interactions between customers and providers is crucial for successful marketing, this idea of the inseparability of production and consumption fostered the idea of relationship marketing in the services industry (Essay Marketplace, 2020:34-47). Achieving high levels of service quality depends on how carefully the staff of the service provider is chosen, trained, and compensated. As the usage of the service may occur in the presence of other customers discussing their experiences, service providers should also be equipped to prevent or manage disputes amongst customers (Liu and Wang, 2017: 355-363).

• **EXCEPTION TO INSEPARABILITY**

The simultaneous creation and consumption that sets most services apart is referred to as inseparability. One of the most distinguishing qualities of services is inseparability, which has traditionally been noted (Heri, 2017:38-46). Nevertheless, there are many services whose creation and consumption do not occur concurrently, despite assertions that they are interdependent activities.

It is not necessary for customers to be present or to participate in the service planning process. Examples of these services include the delivery of freight, storage, laundry, cleaning, gardening, and equipment and facility repair and maintenance. Since

customers purchase these services to avoid executing or being involved in such duties, they are carried out without their presence. As a result of saving time and effort, customers are prepared to pay more and hire a professional to do the job better than they would, (Essay Marketplace, 2020:34-47). These services are intentionally separate from one another and are only offered when no customers are present. They are occasionally scheduled to be done when the customer is not there or are carried out at a different place.

The customer is not involved in the production process even if there may be an initial contact when buying and paying for the service. There is no engagement on the part of the customer in the actual supply of the service by merely leaving something behind or giving instructions to the service provider. Consumption of these services' advantages might also happen after manufacturing is finished.

Internet banking, accountancy, insurance, and research are a few more services that may be produced without the customer's presence, according to Baldwin (2014:360-367). The development of information technology and telecommunications has made it feasible to separate the production of many information-based services from their customers. Services like home entertainment and self-study, for instance, might be pre-recorded for usage at a different location and time, negating the requirement that customers be active in their development (Essay Marketplace, 2020: 34-47).

These examples together demonstrate that inseparability cannot be regarded as a distinguishing characteristic of all services since certain services allow for total separation between the production and consuming processes.

➤ **HETEROGENEITY**

The possibility for significant service output fluctuation is replicated by heterogeneity (Zeithaml *et al.*, 2013). Given that performance and quality vary from manufacturer to manufacturer, this is especially troublesome in the case of labour-intensive services. Furthermore, depending on the customer, the time of day, and other variables, the same manufacturer may supply services at various levels of quality. This makes it difficult to standardize and maintain high standards for services, and it makes customers perceive greater risks when buying services as opposed to products

(Armstrong and Kolter, 2014:249). In order to achieve consistency and reliability, service organisations must carefully recruit, train, and reward their personnel. This is because there is a large possibility for variation in service quality. Customer feedback on their interactions with personnel should be collected through evaluation systems (Essay Marketplace, 2020:34-47). In addition, the introduction of uniformed production processes and the development of internal marketing to promote service quality could result in greater consistency. Using reliable equipment and technology instead of human labour could also contribute to standardisation

- **EXCEPTION TO HETEROGENEITY**

Because it is challenging to provide a consistent result, especially for labour-intensive activities, services are often thought to be heterogeneous. The difficulty in creating standards derives from service personnel's inconsistent performance, even while dealing with the same customer day after day (Zeithaml *et al.*, 2013). Compared to labour-intensive services, machine-intensive services do not experience this effect since technology and equipment eliminate physical factors that cause variations. High levels of consistency and dependability can be achieved by replacing human labour with dependable machinery and technology.

The delivery of services including freight transportation, painting, automobile oil changes, dry cleaning of clothing, and storage of standardised components may be homogenized thanks to advancements in service quality and technology (Bruhn and Georgi, 2016:11). By making ATMs available, banks have also lessened the diversity of their offerings. The provision of amenities like leisure and education might likewise be homogeneous. Using performances that have already been recorded, they may be provided and delivered again several times without changing. A program can be transmitted uniformly to every viewer when it is aired via a media outlet like radio or television (Felix, 2017:245).

Furthermore, there are other regulated services, like banking and transportation, that reflect a mass customization strategy in which clients select from a number of customized modules to create the service package that best matches their needs. For instance, although the design of the regularly scheduled airline service is highly standardised, it offers a number of customized modules, including alternative flight

schedules, service to and from various airports, various classes, prices, and seat options, as well as a selection of drinks, food, and other amenities. Some hotel and restaurant chains also have standard offers, thereby ensuring consistent service and quality for customers.

➤ **PERISHABILITY**

Services that are perishable cannot be stored or saved for later use (Zeithaml *et al.*, 2013:164-171). Services ought to be used as soon as they are produced (Bruhn and Georgi, 2016:11). For instance, a hotel room that is unoccupied on a certain day cannot be preserved and would not bring in money on that day. A service's capacity is lost if it is not used when it is available. On the other hand, if the hotel is completely booked, it cannot offer hotel rooms to its guests. Therefore, the most difficult task for service companies is to match supply and demand. There are instances when demand is higher than the maximum supply that can be satisfied or the level of optimal supply. The creation of off-peak demand, the use of reservation systems and supplementary services, the employment of part-time employees or third parties, the sharing of capabilities, and the planning for expansion are some possible strategies to balance supply and demand (Keller and Kolter, 2015:174-187).

- **Exception to Perishability**

Services have the quality of being perishable, which means they should not be stored for later use but rather used right now. There are significant exceptions to this aspect of services, though. Additionally, services might be recorded in buildings and equipment (Essay Marketplace, 2020: 34-47). A place to store money is the ATM. The restaurant building is a warehouse for tables, whereas the hotel building is a warehouse for rooms. Before being bought or consumed, they might be stored.

Services could also be inventoried in terms of knowledge and people (Keller and Kolter, 2015:174-187). The education service is an example of this. Students save the knowledge they have acquired during their studies for life. Some information-based services could be inventoried in systems. These are educational, entertainment, informational and religious services. They could be inventoried by recording the live performances for later broadcast reuse or converted into a reusable asset in the form

of CDs, DVDs, tapes, or other storage media for later resale. In these cases, the manufacturer's output is durable and reproducible, and the customer can repeatedly enjoy the performance.

2.12. SERVICE MARKETING

An understanding of service marketing is required in order to communicate the concept of service quality. Pathirana (2019:1075–1085) notes that marketing is widely acknowledged as being essential to all types of organisations, both for-profit and non-profit. The foundation of contemporary marketing thought is a marketing orientation, sometimes known as the marketing concept. It is predicated on the knowledge that providing high-quality goods and services that will meet consumers' requirements is the social and economic justification for an organisation's existence. Simply said, services marketing is the practice of marketing services rather than actual goods

2.12.1. SERVICE MARKETING MIX

Addressing a number of important challenges is necessary for successful marketing. These include the items and services a business will offer, how it will distribute those goods and services to clients, and how it will educate customers on those goods and services. Businesses must concentrate on methods of meeting client wants and cultivating long-term connections in order to overcome this and outperform rivals (Wieland, Koskela-Huotari, and Vargo, 2016).

Businesses must comprehend the exact components of the marketing mix that should be used to draw in customers and satisfy them in order to accomplish this aim. The key component of the service marketing mix is the mixing of various components in order to meet organisational and customer goals. The 7Ps of marketing—product, pricing, location, promotion, people, processes, and physical evidence—are the components (Alnaser, 2017: 254). Customer satisfaction, which is a measure of service quality and the degree to which customers' wants and expectations are satisfied, results from the effective blending of the seven components.

Services marketing helps people visualize intangible items, or services (Ofiaç, 2014). According to a study by Mahmood and Khan (2014), offering additional products is not

the sole strategy for luring in new clients. Customers must be able to distinguish your items favourably from those of rivals.



Figure 2-4 Service Marketing Mix

Sourced: Alnaser (2017: 254)

➤ **PRODUCT**

The product is intangible, heterogeneous, and perishable in the case of services. Additionally, there is a close relationship between production and consumption. A product is what a business offers and comprises the characteristics, advantages, and benefits it provides to clients. Quality, accessories, style, repairs, and upgrades are among the important qualities and advantages that are the emphasis of product marketing. It is at the heart of what the business provides to clients.

Marketing will fail if the product is unable to live up to expectations. The business must determine if the supplied product or service is required, suitable for the target market, offers more than its rivals, and whether it is at least marginally better than its rivals in

some regard (Juneja, 2015: 4). You will comprehend the product more fully if you consider all of these variables.

The study thus asserts that, the product offered by a University Sport Administration is sport. The “sport” product encompasses all operations of the University Sport Administration, including fully equipped weight training gyms, facilitation for sports club members’ participation in leagues and tournaments, provision of modern equipment, and designation of qualified coaches for teams. The quality of the product must be able to attract students to become members of the university’s sports clubs. The Sport Administration must ensure that sporting codes offered at the University are in line with the participation needs of students.

➤ **PLACE**

The location of the service product is crucial since it must be delivered at the same time as it is produced and cannot be kept or transferred. Place deals with the distribution channels and getting the product to the consumer. At this stage, decisions are taken on, among other things, where retailers to locate the product in and whether a sales team is required. Transactional, functional, and logistical issues are also examined (Rai, 2016:257). Service providers must carefully examine where their services will be delivered.

In agreement, Tiwari (2019:24) cites the fact that place is where the items, products, and services are promoted, offered for sale, and delivered. The products that the business sells cannot be purchased or rented by customers if they do not have access to them. Ensuring that customers can find products and services and have simple access to them is essential. Designing distinctive shop spaces and using a variety of visual merchandising tactics are examples of marketing strategies for this. A crucial component of market penetration is choosing the appropriate location for the company. The perks are the main consideration when deciding where to locate the business. The greater the proximity to the customer, the greater the likelihood of purchases.

Thus, the DUT Department of Sport Administration is ideally located in the sports centre, which is the hub of DUT Sport Administration operations.

➤ **PRICING**

Pricing services is more challenging than pricing products. Services must consider additional expenses such as labour and overheads whereas the pricing of products may simply be priced based on raw material costs (Juneja, 2015: 4). Pricing, in Wang's view (2015:392-403), is the sum that customers pay as well as the avenue via which profits enter an organisation. The price structure establishes the price that consumers are prepared to pay in addition to a mark up to cover overhead, profit margins, and other expenses. The payment method is also decided by it. Customers might be lured in with the use of promotions and seasonal pricing in order to obtain a competitive edge. Customer satisfaction has a direct correlation to price. The customer is frequently more content while paying more. It is seen as a sign of excellence by many people. It is up to the organisation to determine if the product's price range is reasonable. Sometimes the cost of manufacturing and the materials used to create the product are too high, yet the final cost is too low. To help sell a product, a business may at times stretch the price over several months and give exclusive discounts and promotions.

In relation to this study, the DUT Sport Administration is allocated an annual budget to cover overhead costs of initiating and co-ordinating sporting programmes. In order to promote and encourage sports club membership, the sports club membership fee is set at an affordable rate. The membership fee is also a form of income for the respective sports clubs.

➤ **PROMOTION**

The service marketing mix now includes promotion as a crucial component. As a result of the ease with which services may be duplicated, a service's brand is typically what sets it apart from its competition (Vezi, 2016: 53). Tiwari (2019:24) defines promotion as the process of identifying an audience, creating a brand, and assessing the quality of the services offered to customers. Promotion and positioning must have a flawless or almost perfect correlation. Organisations utilise a range of promotional activities to increase public knowledge of the products and services they offer. Digital advertising, sponsorships and exhibits, special events, sales techniques, and direct marketing are among the most frequently employed tools. The company's products and services are

brought to the consumers' notice through promotional efforts. The way a business markets or promotes a product to customers is considered product promotion. An organisation must adopt new marketing techniques and make slight adjustments to its advertising efforts while analysing its marketing strategy (Ofia, 2014:28-43).

The researcher emphasises that good marketing and promotion skills are essential to the effective and efficient operation of the DUT Sports Department. Marketing strategies for DUT sports clubs could include:

- marketing sports clubs aggressively by advertising through print media such as posters, flyers, and the university newsletter;
 - marketing university sport when addressing students at the respective faculty orientations;
 - using the university radio station, and internal publications to share and highlight sporting achievements
 - collaborating with the University's Corporate Affairs department relating to Media Monitoring; and using media reports on sporting achievements to market university sport.
- **PEOPLE**

Since a service cannot exist without the person delivering it, people play a crucial role in the service delivery process. All marketing tactics are made possible by the people who work on them. They conduct all business activities for the company and guarantee that the strategy is carried out effectively (Wieland, 2016:210-226). Rahman (2014:74-93) believes that customers are more likely to return when a company's service is good because they feel satisfied and happy after using it. Various companies use different approaches to engage with customers using this technique. Positive customer experiences are shared by customers, which enhances brand recognition. Customers receive referrals as well. The people within the organisation determines the organisation's success. They serve as the cornerstone, and they are essential to attracting, choosing, and employing the best individuals, as well as maintaining workers and developing the necessary marketing abilities (Juneja, 2015:4). It increases the likelihood of corporate growth.

Personnel employed in sports administration make up the entirety of the department employees at the DUT Sport Administration. People have the power to build or ruin an organisation in service marketing. As a result, many organisations now place a high importance on staff training in customer service. Customer service training for personnel in a university setting would cover conflict management, health and safety, people skills, and the development of communication skills.

➤ **PROCESS**

Customers are guaranteed the same standard of service throughout the service delivery process. It speaks about the system in place to provide customers with the goods and services (Juneja, 2015: 4). A standard process established by the company ensures that the customer repeatedly receives the same quality standard. It increases the efficiency of the organisation and helps to save time and money. A defined way of working encourages customers to set the promised benchmark for the first time Tiwari (2019:24). Process mapping ensures that the target group can rely on the recognised services. Because of this, the majority of businesses have a service blueprint that outlines the specifics of the service delivery process, including the service script and appropriate greetings for service staff (Wieland, 2016: 210-226).

Relevant to this study, universities implement policies that govern operations such as finance, human resources, and academia matters. The DUT Sport Administration reinforces its operational procedures by drawing up operational plans that include procedures for the hire/usage of sports facilities, policies guiding sports club management, and financial guidelines (aligned with the University policy).

➤ **PHYSICAL EVIDENCE**

As anything that is aesthetically pleasing to the eye attracts attention, physical evidence, the last component of the service marketing mix, is a particularly crucial component. The nature of services is intangible, as was previously stated. To improve the customer experience, however, physical components are also provided with the service. Physical evidence comprises elements like the setting in which the goods and services are delivered, the store's interior design, the office's interior design, the branding and packaging, how the staff present themselves, and the store's outside.

(Ofila, 2014: 28 -43). Customers should be persuaded to invest their time and money in it because people believe what they see. Customer satisfaction is impacted.

In the case of DUT Sport, aesthetically appealing sports facilities with modern sports apparatuses and equipment would attract the attention of sports club members and promote an increase in sports participation. Physical evidence is widely applied in service marketing as a differentiation. Consequently, physical evidence serves as a determinant while choosing a university to play sport at (Luker 2016: 79).

This section on services marketing, in particular, is pertinent to the study because it emphasises providing customers with processes, experiences, and intangibles rather than tangible goods and transactions. It involves integrating customer attention throughout all organisational departments and services. To produce excellent services, all organisational components—marketing, sales, human resources, and operations—must collaborate. A thorough knowledge of service marketing and specifically the 7 Ps will enable DUT's sports department to design and implement an effective marketing strategy that will provide optimal service to sports club members and result in increased customer satisfaction.

2.13. MAINTAINING SERVICE QUALITY

The next challenge for service providers is to sustain service standards at the highest possible levels after attaining the anticipated level of service quality provided. This is equally crucial and challenging as setting service standards and achieving them initially (Juneja, 2015:14). Both the proactive and reactive tactics are used to maintain service quality requirements.

❖ Proactive approach

A proactive approach involves actively engaging with customers in an attempt to solicit their feedback on service quality and suggestions for improvement (Johnson, 2017:56-59). Gap analyses, questionnaire administration, staff training, and survey use can all be used to accomplish this.

➤ Surveys and questionnaires:

A brand may better predict client needs and expectations with this strategy, and then tailor its service offerings to meet those needs. The results of these polls might assist a business tailor its customer service by identifying common problems and desires of its target market (Shin *et al.*, 2017:164-186).

➤ Gap Analysis:

Another approach to analysing service quality is gap analysis (Shin *et al.*, 2017:164-186). In contrast to the current level of service offered, the company intends to provide its customers an ideal standard of service. By identifying the gap in this way, it is possible to act to close it while also laying the groundwork for other improvements to the service delivery.

➤ Staff Training:

The proactive strategy's employee training is another essential component. The training of employees to respond to customer questions and/or complaints is a major investment made by businesses nowadays (Johnson, 2017:56-59). This is particularly true if a business decides to alter the services it offers or asks for a price rise for those it already provides. For instance, staff have to answer a number of customer enquiries linked to membership fee hikes for sports clubs when DUT Sports Administration does so. Customer discontent would result if personnel failed to provide a suitable explanation, which would be a sign of low service standards.

❖ Reactive Approach

When a consumer complains about the poor quality of the service, a reactive strategy would be to immediately resort to a predefined service restoration procedure. The primary problem with this strategy is that the client has already had a negative interaction with the brand's service.

2.14. IMPROVING SERVICE QUALITY AMONGST EMPLOYEES

Employees must have excellent people skills. It is vital for the DUT Sports Administration to have employees who can inspire confidence in sports club members.

In order to inspire trust in customers, employees must also exhibit excellent behaviour, be knowledgeable about their duties, and be able to respond to inquiries from customers. Equally crucial is ensuring that visitors feel protected while they are within the organisation (Mohamad, Idrus, and Mohamod, 2019:17-21).

The management should emphasise the importance of employees' responsiveness and their consistent courtesy to customers (Keller and Kolter, 2015:174-187). Management must thus send employees for training in order to improve their interpersonal abilities. The employees may have a better understanding of the idea and significance of using new information, skills, and moral principles in order to improve job quality through this training program.

The effectiveness of administrative service quality as a predictor of student happiness has been demonstrated. Understanding administration in a logical and clear way is crucial for academic growth and contentment. The reception desk is the student's initial point of contact with the DUT Sport Administration; therefore, it should offer excellent customer service and help the student form a favourable opinion of the department.

In regard to this study, the researcher asserts that customer satisfaction is a measure of service quality and that service quality is an indicator of customer satisfaction (Ali, 2015:37-51). Hence, in order to establish and maintain good customer satisfaction, DUT Sport Administration personnel must strive to offer the best possible quality of service across all dimensions of service quality to sports club members and all other users of sports facilities.

2.15. IMPORTANCE AND BENEFITS OF SERVICE QUALITY

Organisations should not only focus on improving service quality; instead, they should comprehend the advantages and significance of doing so inside their institutions, since doing so may be advantageous to them in the long run. Seyoum (2017:79) highlights the following benefits that organisations can achieve with quality services:

Firstly, they create a competitive advantage by isolating customers from competitors. This is due to the inertia of customers. Customers will not switch regardless of

poaching tactics if their service is perceived as equal to or higher than their competitors.

Secondly, a high-quality service can reduce client recruitment costs due to positive word-of-mouth from existing clients offering free recruitment services to companies whose clients are happy. Marketing expenses can be used to keep current customers satisfied by spending less on gaining new ones (since fewer consumers are switching to rivals). Aftab (2016:161-171) draws attention to the fact that excellent service quality has the potential to lower expenses. A better level of service entails fewer mistakes and tedious chores, service recovery exercises, or reimbursements for dissatisfied clients. Through quality control procedures, preventative and corrective actions lower costs and boost output.

Promoting good reputation and word-of-mouth is the third important advantage. This occurs when clients discuss the service with others. As a way of reassurance that their provider is just as good as any other, customers regularly survey others about their consumption experiences on their work and social networks, and if the current transaction is not satisfactory, they can switch to alternative providers. A natural outcome of greater customer loyalty, decreased potential expenditure, and favourable word of mouth is improved financial performance.

Finally, customers exhibit helpful behaviours when they are pleased and make less complaints. They are more understanding of service interruptions, and the longer tenure made possible by greater loyalty rates enables the development of more lasting customer connections. A service organisation might become immune to price wars or become less vulnerable by providing high service quality. Service providers with a reputation for providing high-quality services have another advantage and can avoid falling into the service commodity trap. Given that they outpace the competition in terms of benefits, they can afford to demand a higher price. Customer loyalty has also risen as a result. Customer contentment is ensured by the quality of the service, which in turn promotes customer retention and boosts revenue. A high level of service might also result in a greater market share. Positive word-of-mouth generated by devoted customers increases the customer base at the lowest possible cost (Aftab, 2016:161-171). A good level of service can create devoted internal customers. Employee pride

in the business they work for, as an example, is understood to promote the provision of high-quality services. Reduced employee turnover lowers labour and training expenses, and the service provider can take use of the expertise and abilities of its staff.

2.16. CUSTOMER PERCEPTIONS OF SERVICE QUALITY

In order to evaluate the quality of a service, perception is an important factor that involves making judgements based on the mind or senses, beliefs, culture, language, previous experiences, values, interests, and assumptions (Alvarez-Garcia, Oliveira and Rueda-Armengot, 2017:23 -38). According to Harris (2016:16), a company's success is determined by how well its customers perceive its services. The customer's perception of the service is the sole determinant of its quality. With respect to expectations, perceptions are considered. Many factors influence customer perceptions, including depression, bitterness, and dissatisfaction, in addition to sound judgment. As a result, perception is a mystery, and in order to retain a favourable impression, it is crucial to account for consumer resistance based on prior experiences and always work to deliver great service.

Customers only keep the general impression of a past encounter; they are unable to recall specifics, and this, together with earlier experiences, shapes how the service provider perceives them (Harris, 2016:16). When comparing customer contentment to the service they are receiving, perception is increasingly significant.

2.17. THE ZONE OF TOLERANCE

The zone of tolerance (ZOT) is the margin between customers' expectations for the type of service they want and the bare minimum of service that is acceptable. The distinction is between what the client truly desires and what they will settle for before going to a competitor (Harmse, 2016:10-13).

The service given by the providers varies greatly for the same provider and even for the same service person because of the unique circumstances and diverse demands. Service that is desired is more reliable than service that is sufficient. The degree of service that a customer expects to receive is defined as "a mix of what the client feels

can and should be" in their words (Zeithaml *et al.* 2013). However, satisfactory service refers to "the quality of service the consumer will accept." The zone of tolerance (ZOT) distinguishes these two expectation criteria from one another. According to the ZOT model, contentment will happen as long as customers' perceptions of service performance are accurate.

After evaluating the concept of the ZOT, the researcher can apply it to this study. Sports managers must focus their corrective efforts on the characteristics that are fundamental to sports club members' perceptions of quality in order to successfully detect service deficiencies (service performance outside the zone of sufficient service). This will lead to higher operational efficiency and better service quality. By recognising the zones of tolerance of sports club members, the DUT Sport Administration can determine where service problems might exist and hence prevent experiences of displeasure before they occur.

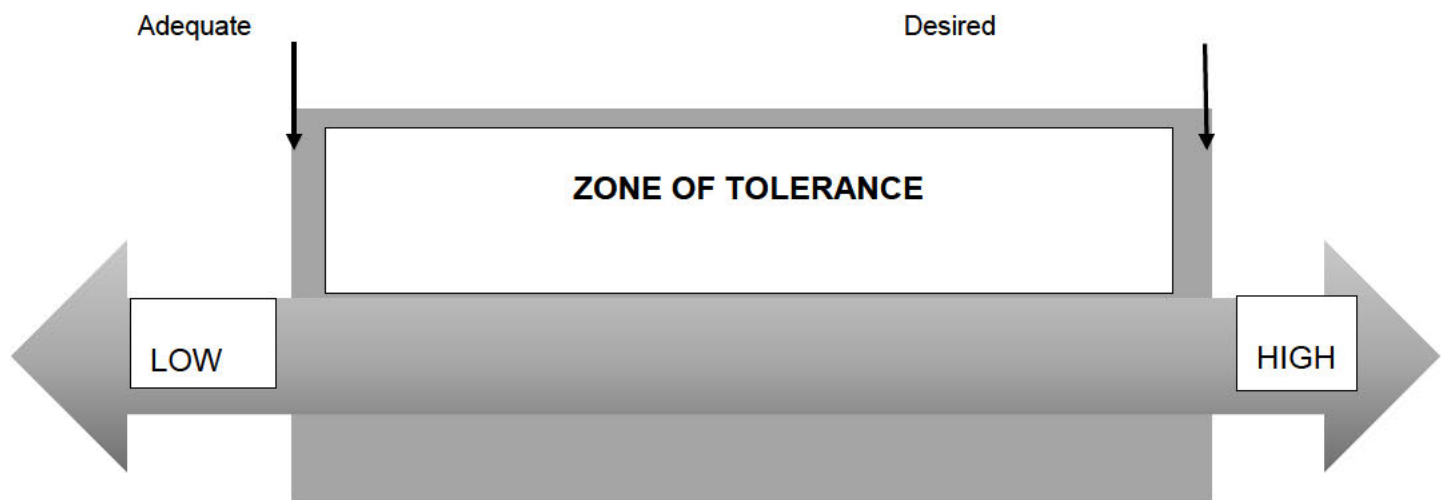


Figure 2-5 Zone of Tolerance

Source: Chiekezie (2015: 5)

2.18. CONCLUSION

The university sports administration should consequently put a priority on providing high-quality services and satisfying customers in order to successfully set itself apart from rivals and thereby obtain a competitive edge over others. The first and most crucial step in providing exceptional service is understanding what the consumer expects. Quality customer service is crucial, and this cannot be emphasised enough. However, knowing what makes for high service quality is necessary to deliver it.

This literature review presented literature on service quality, customer satisfaction, and service quality in sports, service quality dimensions, and service characteristics in an attempt to address the research problem. The literature also reviewed various service quality models in order to select the appropriate model for this study.

The next chapter presents the research methodology that is designed to meet the objectives of the study.

CHAPTER THREE - METHODOLOGY

3.1. INTRODUCTION

The technique by which researchers perform their studies is known as the research methodology. It demonstrates how researchers set out their research questions and objectives and gives findings from the information gathered throughout the study period (Sileyew, 2019:1). This chapter discusses the research methods that were used during the research process to determine the service quality of the Sports Department at the Durban University of Technology. The chapter outlines the research approach, research design, research method, target population, sampling method, measuring instrument, data analysis, delimitation of the study, validity and reliability, anonymity, and research ethics.

3.2. RESEARCH DESIGN

A research design is the general method used to combine the numerous study components in a coherent and logical manner, therefore guaranteeing that the research topic is adequately addressed. It offers the overall strategy for gathering, evaluating, and interpreting data (Creswell and Poth, 2018:41). Research design, in the opinion of Akhtar (2016:68), may be thought of as the framework of research. It is, in essence, a planned study work plan.

This research is cross-sectional and descriptive. In cross-sectional research, information from a population at a single moment in time is examined. Participants are chosen for this type of study depending on relevant variables (Cherry, 2019:1). Cross-sectional studies are classified as descriptive research since they are observational in nature. Cherry (2019:2) adds that instead of manipulating factors, researchers should simply capture the data that is there in a population.

A community's features can be described using this kind of study, but cause-and-effect correlations between various factors cannot be established. This technique is frequently used to draw conclusions about potential connections or to collect introductory data to encourage more study and testing.

The tactics, procedures, or techniques used in the gathering of data or evidence for analysis in order to unearth new knowledge or develop a deeper understanding of a topic are known as research methods (Williamson and Johanson, 2018:5). Three main approaches are used by researchers: mixed methods, qualitative, and quantitative.

Words are used to convey qualitative research. It is employed to comprehend ideas, perceptions, or experiences. You can gain comprehensive knowledge about poorly understood subjects from the sort of study you are doing. Common qualitative techniques include open-ended questions in interviews, written descriptions of observations, and literature studies that examine concepts and theories (Bhat, 2020:21). When a researcher wants to comprehend something, they perform qualitative research (concepts, thoughts, experiences).

Numbers and graphs are used to illustrate quantitative research. It is used to validate or test beliefs and presumptions. A topic's generalizable facts can be found through this kind of inquiry. Experiments, numerical observations, and closed-ended surveys are examples of common quantitative procedures (Bhat, 2020:21). Researchers use quantitative research (a theory or hypothesis) to verify or test a theory.

Mixed method research is a process for gathering, analysing, and "mixing" both quantitative and qualitative research approaches into a single study. Mixed method research is used to better comprehend a research topic (Bhat, 2020:21). You need to be conversant with both quantitative and qualitative research to use this approach effectively. The features of the three research approaches are depicted in Figure 3.1 below.



Figure 3-1 Characteristics of the three research methods

Sourced from: Curry and Marcella Nunez-Smith (2015:4)

A quantitative research methodology was used in this study with an understanding of the three research approaches outlined earlier and an overview of each research approach's characteristics. The collection and analysis of numerical data is a key component of quantitative research, which is further distinguished by a deductive methodology, a preference for natural scientific approaches, and an objectivist view of social reality (Dudovski, 2016:6-16). In other words, quantitative studies use statistical methods to primarily analyse correlations between variables that can be evaluated quantitatively. This method's selection was motivated by the objectivist philosophical stance, positivist epistemology, and deductive research methodology.

➤ Epistemological position of Positivism

Epistemology is a theory of cognition that deals with views about how occurrences are understood or how reliable knowledge is created (Giacomini, 2010:131). The conclusions of positivism's analysis are seen as positive or unquestionable facts about reality since it only takes observable or quantifiable (i.e., empirical) experiences of the world as data. The researcher used positivism in this investigation, according to the

golden rule of a quantitative study. Positivism is a philosophy that holds the conviction that only factual information acquired via observation, including measurement, is reliable. In positivist investigations, the researcher is restricted to gathering data and objectively interpreting it (Felix, 2017:6-10).

The adoption of a positivist philosophy in this quantitative study of the Service Quality of the Sports Department at the Durban University of Technology is justified because research findings in these kinds of studies are typically observable and measurable (Nel, 2016:84). This is supported by Bhat (2020:17), who suggests that positivism is dependent on quantitative observations that result in statistical analysis.

➤ Position of Objectivism

Independent of social behavior, an objective ontological perspective assesses social phenomena (usually associated with the quantitative approach). Objectivism is an ontological stance that maintains that social phenomena and their meanings have an existence separate from social actors, according to (Bryman and Bell, 2011:21). When conducting quantitative research, researchers frequently maintain an objective detachment from the issue at hand, focusing exclusively on accurate measurements and the study of specific ideas to provide a response to an enquiry (Davis, 2020:1).

➤ Deductive position

Deductive methods focus on creating a hypothesis (or hypotheses) based on an existing theory and then building a research plan to test the hypothesis (Wilson, 2020:7). Deductive research is defined by Dudovskiy (2019) as top-down research concerned with deducing conclusions from premises or propositions that uses quantitative methodologies and statistical inference with an outcome-oriented approach.

The figure 3.2 below shows the research methodology at a glance.

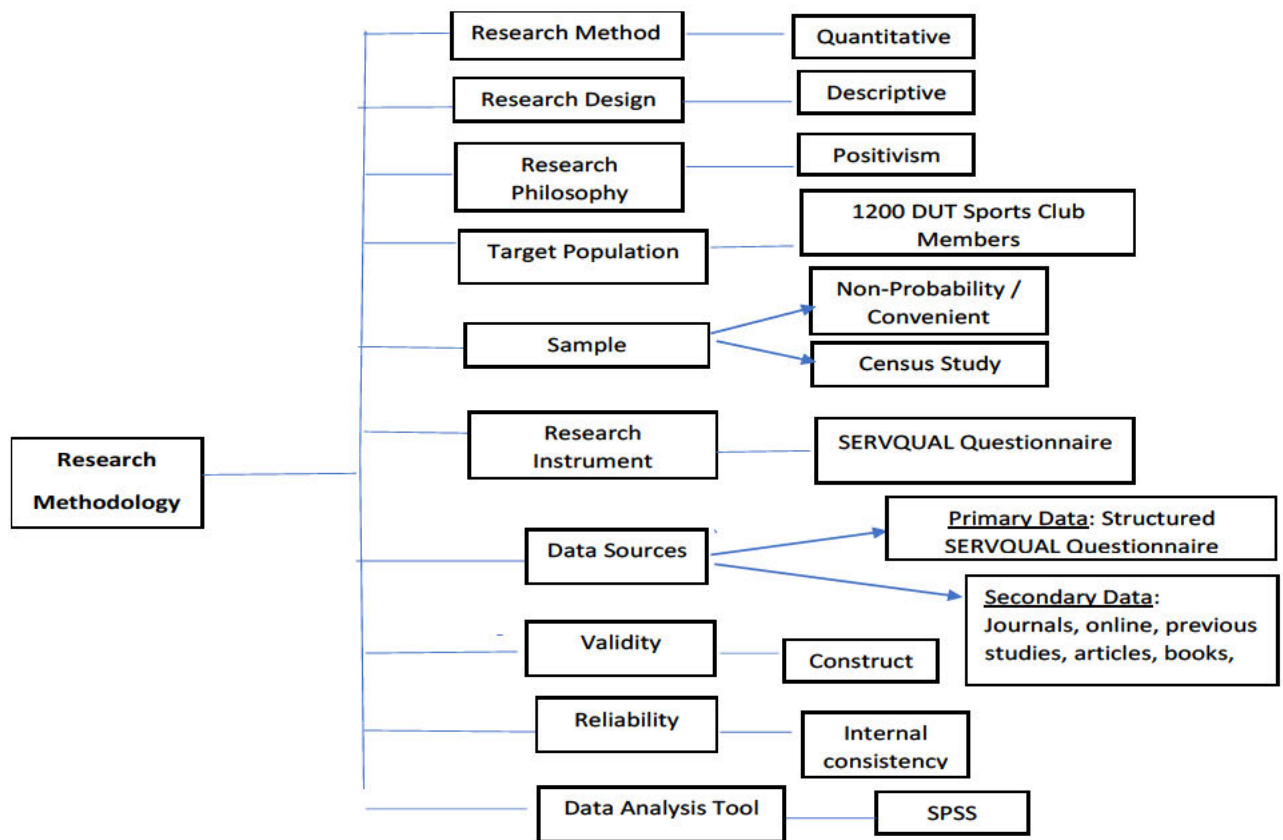


Figure 3-2 Research Methodology at a glance

3.3. RESEARCH METHOD

As alluded to in the research design section of this study, the three primary research methods are qualitative, quantitative and mix-method. A quantitative methodology was employed in this study to extract and quantify data using a SERVQUAL questionnaire.

In quantitative research, numerical data is gathered using standardised methods, and statistical tools are then used to extract insights from the data (Bhat, 2018:29-37). Bhat (2018) explains that the goal of the quantitative research approach is to gather numerical data from a small group of people before extrapolating the findings to a wider group to explain a phenomenon. When objective and definitive answers are needed,

researchers frequently utilise quantitative research. The association between variables of interest in a sample is determined after they have each been studied once (Gravetter and Forzano, 2016:292). Quantitative analysis is used to determine the correlation between service quality and customer satisfaction. Quantitative research allows for precise measurements with a valid data collection instrument, which strengthens the quality of research (Wild and Digges, 2015:65).

The researcher is further motivated to employ a quantitative methodology in this study because the quantitative methodology allows access to a larger sample size. Data is collected relatively quickly, uses random samples, research is performed with anonymity, and the interpretation of factual statistical data strengthens validity and reliability (Bhat, 2020:21).

3.4. SOURCE OF DATA

Primary and secondary data sources are used to obtain data for research. Data produced especially for the current study is referred to as primary data (Kent, 2007: 569). Secondary data, which forms the core of the literature review, is data drawn from textbooks, journals, articles, previous research, and internet sources. The sources of data used in this study included both primary and secondary data. Primary research's goal is to gather data to satisfy information needs pertaining to a particular issue or query (McGivern, 2006:61). Customer satisfaction in the DUT sports department was evaluated using a modified SERVQUAL questionnaire. Secondary data was collected from online sources, journals and articles on service quality, and other related topics. The sports club members' ratings were used as a source for the analysis of data on service quality expectations and perceptions in the DUT sports department.

3.5. CROSS-SECTIONAL SURVEY

Cross-sectional surveys are those that are conducted at a single moment in time (Williamson and Johanson, 2018:5). A cross-sectional study is carried out across a predetermined time period using the same set of variables (Bhat, 2020:12). Cross-sectional research, according to Bhat, covers people in a single instance with a clear beginning and end, in contrast to longitudinal studies, in which variables might alter throughout the course of extensive investigation. Participants in cross-sectional

research are chosen solely based on the study's inclusion and exclusion criteria, unlike those in case-controlled studies (Setia, 2016:261).

Cross-sectional studies offer a picture of the state of a group at a certain moment. They often assume a form that simplifies sets, explains behaviours, or attitudes, and is descriptive or exploratory (Nel, 2016:78). In order to assess the Service Quality of the Sports Department at the Durban University of Technology, the researcher used a cross-sectional descriptive methodology.

3.6. RESEARCH APPROACH

The researcher can conduct research studies either inductively or deductively, and in deductive research studies, he or she develops a theory and devises a strategy based on the data collection and analysis (Johnson, 2017:30). This typically occurs when it is challenging to pinpoint a specific construct's conceptual underpinnings. Quantitative research is where the deductive method is most effective.

This study employed a deductive methodology. The deductive method, in Heri's opinion (2017:38–46), must explain the connections between the variables. Through a review of the literature for this study, the researcher discovered a correlation between customer satisfaction and service quality: the greater the service quality, the higher the customer satisfaction. The principles of SERVQUAL as outlined by Parasuraman *et al.* (1985), were surveyed for relationships in order to get quantitative data. Controls should be established and used to guarantee the accuracy of the data. Construct validity was evaluated to see whether the survey's measures of service quality and customer satisfaction were accurate (Heale and Twycross, 2015: 66-67).

Despite working for the Durban University of Technology's Sports Department, the researcher is impartial with respect to the observations being made (Lee, 2017:870-879).

3.7 Selection of Survey Method

Specific processes for gathering and analysing data are known as research methodologies. The research design includes developing research methodologies as

a key component. There are two major choices to be made while deciding on research methodology (Roberts, 2016:1).

First, choose the method for gathering data. The sort of data needed to answer the research questions will determine the research methodology. Quantitative versus Qualitative: Do you plan to present your data in words or numbers?

Next, choose the data analysis strategy. You may use statistical analysis techniques to evaluate the associations between variables for quantitative data. You may interpret patterns and meanings in qualitative data using techniques like theme analysis (Roberts, 2016:1).

Individual and focus group interviews, ethnographic studies, text analyses, and case studies are examples of qualitative research methodologies. Survey research, descriptive research, and correlation research are examples of quantitative approaches. This study used a cross-sectional, descriptive research design and a quantitative approach. As a result, the researcher decided to gather data from the target demographic using a survey approach.

One of the most popular research techniques across all disciplines is the survey. In order to identify populations, explain behaviours and delve into unexplored territory, surveys are routinely utilised (Lazar, Feng and Hohheiser, 2017:105). According to the same authors, a survey consists of a few concise, well-phrased, and well-written questions that a person is asked to answer.

O'Leary (2017:226) asserts that quantitative data collected from a sample of related characteristics, attributes, and opinions requires a well-designed questionnaire. Survey data is original, logical, and can be collected fairly quickly. The survey involves knowledge of the target population for an effective sampling approach, clarity of data required, and access to participants (O'Leary, 2017:227). Mellinger and Hanson (2017:47) explain that a survey involves collecting respondents' opinions and perceptions using an instrument that is carefully designed and tested. The most common instrument is a questionnaire.

3.8. TARGET POPULATION AND SAMPLE

In their efforts to further academic discussion and understanding, researchers collect data or information from participants. These participants are a component of the study's target demographic, a collection of people with shared interests in the study's topic (Gravetter and Forzano, 2018:147). A population, according to Heri (2017:77), is the entire collection of individuals that the researcher wants to interact with. The population in this study comprised 700 (379 from the Durban Campus and 321 from the Pietermaritzburg Campus) DUT sports club members. Durban University of Technology offers the following sports codes: aerobics, athletics, aquatics, basketball, boxing, chess, cricket, capoeira, dance, hockey, football, golf, karate, kung-fu, netball, rugby, squash, tennis, table tennis, volleyball, sailing and weight training.

The study applied a census survey method. When the population is small enough, researchers have the resources to reach out to the entire population through a census. Jha (2017:1) defines a census survey as a survey that covers the entire target population. Conducting a census survey often results in a large number of respondents having a high degree of statistical confidence in the survey. A census is ideally suited for this study as the target population is relatively small.

3.9. MEASURING INSTRUMENT

A measuring instrument is a device used to gather, measure, and analyse information about a certain subject. There are several measurement tools used in research, such as surveys, interviews, experiments, participation and non-participation observations, and focus group discussions (Drew, Dardman, and Hosp, 2008:109-134). Ismail and Yunana (2016:269-283) assert that to assure the strength of your study, it is advisable to use previously validated instruments.

Numerical data is the foundation of the quantitative paradigm (used in this study). Mellinger and Hanson (2017:22) assert that variables must be converted into accurate numbers. It is imperative that measurements are accurate, consistent, and measure what they are supposed to measure. Hence, the measuring instrument of choice in this

study is a SERVQUAL questionnaire originally designed by Parasuraman *et al.* in 1985.

3.9.1 QUESTIONNAIRE DESIGN

A questionnaire is a well-designed research tool that consists of a number of closed- or open-ended questions. The questionnaire's mission is to gather information from respondents that is pertinent to the research study and may be utilised to further the goals and objectives of the study (Ndukwu, 2019:5).

A well-designed questionnaire should make it simple for participants to provide the essential information, allow the researcher to record the responses, and then be structured to allow for data analysis and interpretation (Roberts, 2016:1). Crossman (2019:17) is of the view that questionnaires should be spread out and uncluttered, simple, consistent, non-offensive, and comprise close-ended questions. In order to achieve this, the study used the SERVQUAL questionnaire created by Parasuraman, Zeithaml, and Berry in order to evaluate the service quality of the DUT Sports Department by using the five service quality dimensions to gauge expectations and perceptions of service quality. The five dimensions and their respective statements in the questionnaire were as follows:

DIMENSIONS	ATTRIBUTE	CORRESPONDING STATEMENTS (Section A)
1. Tangibles	Physical representations	1 - 4
2. Reliability	Delivering on service	5 - 8
3. Responsiveness	Willingness to help	9 - 12
4. Assurance	Inspiring trust and confidence	13 - 16
5. Empathy	Caring, individualised attention	17 - 22

3.9.2. SERVQUAL QUESTIONNAIRE.

To measure consumers' expectations and impressions of service quality, Parasuraman, Berry and Zeithaml created the model in 1985 (Chaguluka, Beharry-Ramraj and Amolo, 2018:441). Developers assert that the gap between what clients anticipate from a service and what they actually experience is the quality of service. In many different businesses, the SERVQUAL instrument is the one that is most frequently used to measure service quality.

As previously noted, data on the Service Quality of the Sports Department at the Durban University of Technology was gathered in this study using a modified version of the SERVQUAL questionnaire. The questionnaire was adopted from previous studies done by Pillay (2011); Lotz (2009); Jang and Liu (2009) and Jang and Han (2010). The five dimensions of service quality—tangibles, reliability, assurance, empathy, and responsiveness—are the foundation for the instrument's design. The SERVQUAL questionnaire comprised two sections. Section A (See Appendix 4) consisted of two questions, one to ascertain perceptions and one to ascertain expectations for each of the 22 items that represent the general expectations and perceptions of DUT sports club members pertaining to service quality of the DUT sports department. Four items were utilised to assess tangibility, four statements each for dependability, responsiveness, assurance, and reliability, and six statements to assess empathy. A seven-point Likert scale, from strongly agree to strongly disagree, was used to evaluate the assertions.

Section B (Appendix 4) consisted of classification data (demographic profiling data) such as year of study, indicate whether staff/student, DUT residence student, gender, race group, and age of respondents.

3.9.3. LIKERT SCALE OF MEASUREMENT.

In order to directly quantify attitudes, a variety of different instruments have been developed. The Likert Scale, created by Rensis Likert in 1932, is the measurement tool that is most commonly applied. According to McLeod (2019:4), the Likert scale is a five-or seven-point scale that allows a person to express the extent to which they agree or disagree with a particular statement.

Likert scales are based on the logic that the strength or intensity of attitudes are linear and can be measured on a continuum from strongly agree to strongly disagree. Each of the five (or seven) factors would have a numerical value that could be used to gauge the attitude being studied, according to (Bhat 2018:29–37). The frequency, quality, importance, and likelihood may all be evaluated using Likert scales. The perceptions and expectations of service quality among sports club members were measured in this study using a seven-point Likert scale.

3.9.4. ADMINISTERING OF THE QUESTIONNAIRE

The aim of this study was to determine Service Quality of the Sport Department at the Durban University of Technology (DUT). For the researcher to achieve this effectively and efficiently, questionnaires were administered to all DUT sports club members on the Durban and Midlands campuses. Intern students and the respective sports club committees were utilised as volunteers for the administering and collection of questionnaires.

Ntoyakhemv (2018:41) specifies four ways to collect survey information from respondents: in person, telephonically, electronically, and by mail. Sekaran and Bougie (2016:143) are of the view that personally (self) administered questionnaires are time-efficient and cost-effective. Additionally, it gives the researcher the chance to define the study's topic and encourage respondents to provide truthful responses. Therefore, in accordance with stringent University COVID-19 guidelines, the questionnaires for this study were self-administered.

3.10. DATA ANALYSIS

The process that comes following data collection is data analysis. Quantitative data analysis may involve the calculation of frequencies of variables and the differences between the variables. The process of obtaining meaningful insights from a large amount of data is known as data analysis (Bhatia, 2018:5). Descriptive statistical analyses, according to Kenton (2019:5), are concise descriptive coefficients that summarise a particular data set, which may be a representation of the total population or only a subset of it. The features of sample distribution, percentage relationships, measures of central tendency, measures of dispersion, tables, and visual

presentations are summarised by descriptive statistical analyses, according to O'Leary (2017:34). This section outlines the respective statistical theories applicable to this study. The practical application of the statistics that shows how they were used to analyse the data will be shown in the next chapter.

3.10.1. MEASURES OF CENTRAL TENDENCY

Measures of central tendency, according to Kenton (2019:5), define where a distribution is for a given data set. Measures of central tendency also show the most likely and suitable reaction, add Wild and Digges (2015:253). The mean, median, and mode, which quantify the predominant trends in the studied data set, are used to analyse the frequency of each data point in the distribution and to define it (Kenton, 2019:5).

In descriptive statistical analysis, Digges (2018:8) notes that the mean is the average and regarded as the most accurate indicator of central tendency; the median is the "middle" value or midpoint of the data; and the mode is the value or category that appears most frequently within the data.

3.10.2. FREQUENCY DISTRIBUTION

After data collection is complete, the data must be sorted meaningfully in order to enable easy identification of any trends that may have emerged. One common method of organising data is to construct a frequency distribution. Young (2019:1) states that a frequency distribution is a depiction in either a graphical or tabular format that shows the number of observations within a specific period. The same author also notes that frequency distribution, as a statistical tool, offers a visual depiction of the distribution of observations inside a certain data collection. The study applied this in Section A of the questionnaire to ascertain the sports club members' perceptions and expectations of service quality at the Sports Department at DUT. Mellinger and Hanson (2017:40) allude that the frequency distribution of a sample is a small table of descriptive statistical data that is divided according to variables like gender, age group and geographic clusters. The study applied this in Section B of the same questionnaire to ascertain the classification of data.

3.10.3. MEASURE OF DISPERSION

The measure of dispersion is the scatter or spreading away from the centre (Trochim, Donnelly, and Arora, 2016:294). Simply put, this means how far the scores are from the mean. There are many types of measures of dispersion, but this study focuses on range, variance, and standard deviation. Range is defined by Singh (2018:5-8) as the difference between the series' smallest and largest values, standard deviation is described as the square root of the arithmetic mean of the squares of the deviation of the values obtained from the mean, and variance is outlined as the square of the standard deviation.

3.10.4. TABLES, GRAPHS, PIE CHARTS, DONUTS, AND PERCENTAGES

The aim of using tables, graphs, pie charts, donuts, and percentages is to present data collected in a clear and accurate format that is easily interpreted. O'Leary (2017:307) states that percentages should be used together with ratios to portray realism. Putting data into meaningful categories like histograms, line bars, graphs, and pie charts allows data comparison to facilitate inferential deductions. Mellinger and Hanson (2017:52) add that bar charts are used, especially for ordinal data and histograms for the intervals of the Likert Scale results.

3.10.5. STATISTICAL PACKAGE FOR THE SOCIAL SCIENCES (SPSS)

The group of software applications that are bundled together into a single package is known as the Statistical Package for the Social Sciences (SPSS). To analyse scientific data pertaining to the social sciences, SPSS is used (Thomes, 2018:3). Surveys, data analysis, and market research may all be done with this data. Large data sets cannot be manually handled due to the quantitative nature of this investigation. Therefore, the researcher used the SPSS software version 25 in this study to analyse data collected.

3.11. INFERENCE STATISTICS

According to Kenton (2019:5), a descriptive statistical analysis is a series of concise descriptive coefficients that summarise a specific data set, which may be a representation of the complete population or only a sample of it. According to O'Leary (2017:34), descriptive statistical analysis summarises the characteristics of sample

distributions, percentage relationships, measures of central tendency, measures of dispersion, tables, and graphic presentations.

Statistical inference is the process of drawing conclusions beyond what is obvious from immediate results. As an illustration, we try to infer from the sample data what the population could be thinking using inferential statistics. To assess if the observed difference between groups is valid or just a coincidence, we may also utilise inferential statistics (Trochim, Donnelly and Arora, 2020:29-30). Descriptive statistics are used to simply explain what's happening in our data, but inferential statistics are used to draw conclusions about more general situations from the data collected. It can be said that inferential statistics are used to generalise from a sample to a population. While descriptive statistical analysis shows the patterns, inferential statistics relate the sample results to the population through deductions.

3.11.1. PEARSON'S CORRELATION COEFFICIENT

The test statistic used to determine the statistical association or link between two continuous variables is called the Pearson's correlation coefficient. Because it is based on the method of covariance, it is regarded as the best method for determining the association between variables of interest. It provides details on the size of the association or correlation as well as the relationship's slant (Obilor and Amadi, 2018:11-23). The strength of the linear link between two variables is gauged by the Pearson product-moment correlation coefficient. Each person in a sample is frequently assessed for a number of quantitative factors. It is occasionally interesting to see if there is a link between two of these variables when we take them into consideration, such as to determine whether they are correlated. By considering what occurs to one variable when the other grows, we may classify the type of correlation (Obilor and Amadi, 2018: 11-23).

Positive correlation denotes that the other variable generally increases as well.

When there is a negative association, the other variable tends to decline.

When there is no association, the other variable does not tend to either increase or decrease.

This study compared whether good service quality at the DUT Sports Department motivated sports club members' participation or whether service quality shortcomings were barriers to participation.

3.11.2. T-TESTS

A statistical test called a t-test is used to compare the means of two groups. It is widely employed to determine whether a procedure truly affects the population of interest or whether two groups vary from one another (Bevans, 2020:2). The larger the difference between the means, the lower the *p*-value and the lesser the sampling error (Pattern and Newhart, 2018:237). The means being compared must be from independent groups like females and males' average (Wild and Diggins, 2015:286).

3.11.3. ANALYSIS OF VARIANCE (ANOVA)

Systematic factors and random factors are the two categories into which the observed aggregate variability within a data set is divided by the statistical analysis tool known as analysis of variance (ANOVA) (Kenton, 2019:4). To ascertain the impact that independent variables have on the dependent variables, analysts use the ANOVA test. The groups in this study were expectations and perceptions that needed to be analysed.

3.12. VALIDITY AND RELIABILITY

A research study's success partially depends on its validity and reliability. To minimise the chance of an incorrect answer, the researcher should focus attention on the following factors:

3.12.1. VALIDITY

The degree to which data gathering techniques properly measure what they are designed to assess is known as validity (Seymoum 2017:180). The study will not be valid if the findings do not align with the goals or objectives. Hence validity is crucial. Despite being a validated instrument, SERVQUAL's applicability to the study of service quality in sport was determined by factor analysis. Factor analysis is a statistical technique designed to reduce data through factors. In survey research, factor analysis is typically applied when presenting a few hypothetical factors with several questions.

The measurement of validity in this study was done using factor analysis and a validated SERVQUAL questionnaire.

- **INTERNAL AND EXTERNAL VALIDITY.**

The level of assurance that the causal link being investigated is reliable and unaffected by other factors or variables is known as internal validity (Streefkerk, 2019:2). A measure's content validity reveals how effectively it samples the content of the region reflecting the construct in time (competitive validity), in the future (predictive validity), or in the past, according to Ame and Tegambwage's analysis (2016:100–107). A measure's ability to accurately evaluate the construct it is intended to measure is referred to as a measure's construct validity, a word that used to be used interchangeably but is now generally understood to relate to all types of validity.

In essence, construct validity seeks to understand a concept's relationship to other variables that it should ideally be related to.

As a result, construct validity is often determined by showing correlations between a measure of constructs and a series of other measures that, in theory, should be related to it (convergent validity) or differ independently from it (discriminant validity) (Ame and Tegambwage, 2016:100-107). Additionally, construct validity is confirmed when convergent and discriminant validity are evaluated at the same time. This suggests that examining convergent and discriminant validity together is the most effective technique to assess construct validity (Streefkerk, 2019:2). This study used a construct validity methodology.

How efficiently a study's findings should be extrapolated to different contexts is known as its external validity. In other words, this form of validity pertains to how generalizable the results are (Cuncic, 2020:45-50). The same author outlines the following factors that improve external validity:

- You should utilise inclusion and exclusion criteria to make sure that the demographic you are researching has been precisely defined.

- By giving participants a "cover narrative" about the purpose of the study, psychological realism—the term used to describe making sure that participants are perceiving the activities of a study as actual occurrences—can be ensured. If participants knew what to expect or what the purpose of the study was, they might occasionally behave differently than they would in real life.
- Replication is the process of running the experiment once more with new samples or under other circumstances to check if the results are the same. The reliability of an independent variable's influence may also be assessed using meta-analysis when several research studies have been carried out (based on examining the findings of a large number of studies on one topic).
- You may also do research outside of a lab setting in a natural setting by using field experiments.
- Using statistical techniques to compensate for issues with external validity is referred to as reprocessing or calibration. For instance, reweighting may be employed if the research has unequal groups for a certain feature (like age).

3.12.2 RELIABILITY

The consistency of a group of measurements often used to describe a test is known as reliability (Seyoum 2017:180). Alternatively, the frequency with which the same results are obtained using a research tool repeatedly in the same situation. Reliability measures whether a study is meeting its predicted goals and ensures that the results are attributable to the study and not to other superfluous outcomes. Cronbach's alpha was used to evaluate reliability in this study.

ENSURING RELIABILITY

According to Ame *et al.* (2016:100-107), reliability is the degree to which a questionnaire, test, or other measuring process yields the same findings on repeated trials. This definition of reliability is consistent with Seyoum's (2017:180) definition. In other words, it is the stability or consistency of scores over time or across ratters. The degree to which several components of the instrument are measuring the same thing

is referred to as internal consistency. An internal consistency index of dependability has the advantage of being calculated after only one test administration, which eliminates the issues with testing over various time periods (Ame *et al.*, 2016:100–107). This study looked on the internal consistency component of reliability for the reasons mentioned below (Mohajan, 2017:58–82).

- Internal consistency reliability is possible since it may be assessed with just one test administration because the study used a cross-sectional survey, which is the most crucial component of reliability in relation to the multiple item scale used in this study.
- An examination of internal consistency reliability is one step in the process of validating measurement instrument.

3.13. DELIMITATIONS

The researcher focused the study on DUT Sports Club members on the Durban and Midlands Campuses. The study's findings are exclusive to this cohort and cannot be applied to other users of university sports facilities who may perceive service quality differently.

3.14. ANONYMITY AND CONFIDENTIALITY

The process of obtaining the participants' willingness to participate in the study was undertaken and an informed document was signed by all participants prior to commencement of the study.

Anonymity is crucial since it protects privacy and enables respondents to share information that cannot be used to identify them. When a researcher maintains confidentiality, they take precautions to prevent the identity of their study subject from becoming public knowledge. Anonymity and confidentiality were ensured by:

- ❖ Efficiently discarding, erasing, and deleting data/documents.
- ❖ Restricting who has access to personal data.
- ❖ Properly keeping data documents in secure areas.
- ❖ Adding security codes to digital records

3.15. ETHICAL CONSIDERATIONS

A research and ethics committee at DUT approved the study prior to its beginning. Participants were sent a letter outlining the study's purpose and were requested to sign an informed consent form before returning it to the researcher. The research participants were made aware that they may leave the study at any time and would not suffer any consequences for doing so. Participants were also told that although the study's findings could be published in a peer-reviewed journal, anonymity is always protected through the use of coding, so the data would not be associated with any particular participant. Furthermore, statistical data had been precisely computed to prevent skewed or inaccurate outcomes.

3.16. CONCLUSION

The research methodology selected is designed to gather data and information related to Service Quality of the Sports Department at the Durban University of Technology. The aim was to analyse the data and identify any gaps between the expectations and perceptions of the respondents. As a result, the focus of this chapter was on the stages involved in conducting a comprehensive research study, the data collection instrument, and the administration and coordination processes that were employed.

The study adopted a cross-sectional descriptive research design in this study. A quantitative methodology was employed to extract and quantify data from the target population using a modified and previously validated SERVQUAL questionnaire. Data was sourced using primary and secondary sources. The study followed a deductive approach with a philosophy of positivism. The researcher employed a census survey in this study. The SPSS software version 2.0 was used to analyse the data collected. All ethical considerations were considered throughout the study.

The presentation and analysis of the collected data in order to shed light on the study's findings are the key themes of the next chapter.

CHAPTER FOUR - DATA PRESENTATION AND ANALYSIS

4.1. INTRODUCTION

The researcher created and described the research design, data gathering techniques, and questionnaire design in Chapter 3. Techniques for statistical analysis are also covered. This chapter's goal is to present, examine, explain, and analyse the conclusions drawn from the data received using the SERVQUAL questionnaire.

This chapter concentrates on the presentation and analysis of the data that was gathered and offers a glimpse into the research findings. Numerical and graphical representations are used to interpret and convey the data. The quantitative data gathered from surveys given to DUT Sports Club members was analysed using the Statistical Package for Social Sciences (SPSS) version 25. The researcher chooses only the relevant statistical tests to analyse data based on the objectives of the study and type of data.

4.2. RESPONSE RATE

Questionnaires were administered to all 1200 sports club members of the target population. 322 questionnaires were completed and returned.

4.3. DESCRIPTIVE STATISTICS

This section contains descriptive statistics based on the respondents' biographical data. According to Kenton (2019:5), a descriptive statistical analysis is a collection of concise descriptive coefficients that summarise a certain data set, which may represent the entire population or only a sample of it. Demographical information, which includes characteristics like gender, race, age, level of study and place of residence, is included in this section.

4.3.1 LEVEL OF STUDY OF RESPONDENTS

The table below represents the Level of Study distribution pattern of respondents.

Table 4.1 Response Rate

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	First	79	24.5	24.8	24.8
	Second	103	32.0	32.3	57.1
	Third	106	32.9	33.2	90.3
	Post-graduate	31	9.6	9.7	100.0
	Total	319	99.1	100.0	
Missing	System	3	.9		
Total		322	100.0		

Table 4.1. Illustrates that, from the total positive responses of 319 (99.1%), third-year students, with a response rate of 106 (32.09%), were the most dominant respondents. This is in comparison to first-year students' 79 (24.5%), second-year students' 103 (32%), and post-graduates' 31 (9.6%).

With second- and third-year students being the dominant respondents (sports club members), the rationale of this study to evaluate and enhance service quality at the DUT Sport Administration is justified. This suggests that second- and third-year respondents are in a better position to assess the service quality offered by the Sports Department at DUT, as was mentioned in the literature study. This is because of their exposure to the services of the Sports Administration for a longer period as compared to first-year respondents who had limited exposure to Sports Administration services.

4.3.2 STAFF/STUDENT MEMBERSHIP CATEGORY OF RESPONDENTS

The table below indicates the distribution of student and staff sports club memberships in this study.

Table 4.2 Student and Staff Membership

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Staff	15	4.7	4.7	4.7
	Student	305	94.7	95.3	100.0
	Total	320	99.4	100.0	
Missing	System	2	.6		
Total		322	100.0		

From the 320 responses, 305 (95.3%) represent students and 15 (4.7%) represent staff. These findings are indicative that sports club members at UOTs are predominantly students. These findings are affirmed by the researcher's position as a sports officer at a UOT and the interaction with other UOTs. The core role of UOTs is to provide sporting programmes for students as their primary targets. This is in accordance with the constitution of University Sport South Africa.

4.3.3 PLACE OF RESIDENCE

Table 4.3. Illustrates whether respondents reside at a university residence.

Table 4.3 Place of Residence

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	169	52.5	52.6	52.6
	No	152	47.2	47.4	100.0
	Total	321	99.7	100.0	
Missing	System	1	.3		
Total		322	100.0		

The findings of Table 4.3 indicate that 169 (52.6%) of the respondents reside at a university residence, compared to 152 (47.4%) of respondents who do not reside at a university residence.

4.3.4. GENDER OF RESPONDENTS

Table 4.4 is a representation of the gender composition of the population sample.

Table 4.4 Gender composition of population

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	178	55.3	55.5	55.5
	Female	143	44.4	44.5	100.0
	Total	321	99.7	100.0	
Missing	System	1	.3		
Total		322	100.0		

Table 4.4 reflects the gender of respondents in this study. The data indicates that there are more male respondents 178 (55.5%) as opposed to female respondents 143 (44.5%). The findings reveal that male respondents make up the majority of sports club members.

4.3.5. RACE GROUPS OF RESPONDENTS

Table 4.5 reveals the distribution respondents' race group.

Table 4.5 Race groups

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	African	302	93.8	94.1	94.1
	Indian	16	5.0	5.0	99.1
	White	3	.9	.9	100.0
	Total	321	99.7	100.0	
Missing	System	1	.3		
Total		322	100.0		

As reflected in Table 4.5, 302 (94.1%) of the respondents are African, 16 (5.0%) are Indian, and 3 (0.9%) are White. The demographic race profile demonstrates that the

dominant race group is African. The findings of this demographic race group profile are consistent with the 2021 DUT enrolment figures and population statistics. The 2021 DUT enrolment figures and population statistics show that of the 31 213 students enrolled, 28 501 are African, 2 008 are Indian, 272 are Coloured, 252 are White, and 180 are Other.

4.3.6. AGE OF RESPONDENTS

Table 4.6 displays the respondents' age distribution.

Table 4.6 Age of respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	19-20	126	39.1	39.3	39.3
	21-23	149	46.3	46.4	85.7
	24+	46	14.3	14.3	100.0
	Total	321	99.7	100.0	
Missing	System	1	.3		
Total		322	100.0		

The findings of age distribution indicate that 126 (39.3%) of respondents are between the ages of 19 - 20, 149 (46.4%) of respondents are between the ages of 21 and 23, and 46 (14.3%) of respondents are 24+ years old. The findings show that the predominant age group of respondents is between the ages of 21 and 23. The age group of 21 and 23 would be comprised mainly of second- and third-year students. The findings of the predominant age group conform to the rationale of the study alluded to earlier that affirms second-year, and third-year respondents are in a better position to rate the service quality of the Sports Administration at DUT. This is because they have been exposed to the services of the Sports Administration for a longer period as compared to first-year respondents who have limited exposure to Sports Administration services.

4.4. DEMOGRAPHIC DATA OF RESPONDENTS PRESENTED IN PERCENTAGES

Figure 4.1 below represents the composite percentages of gender, race, and age. Figure 4.2 that follows illustrates the composite percentages of level of study, staff and staff membership category, and reside in DUT residence.

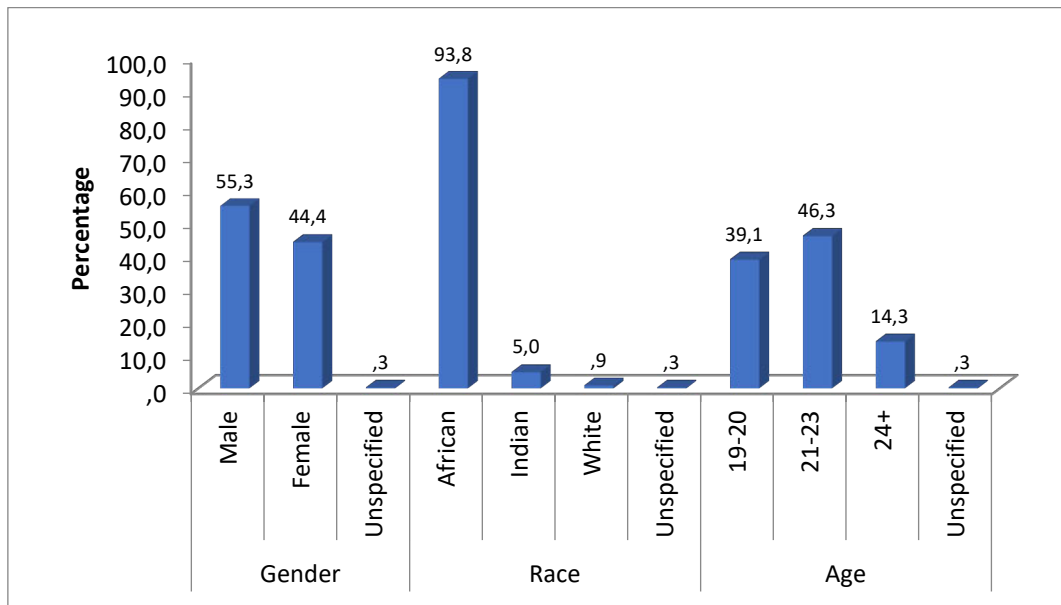


Figure 4-1 Percentage of Gender, Race, and Age

The findings in Figure 4.1 reveal that for gender 55.3% are male, 44.4% are female, and 0.3% are unspecified. Race is made up of 93.8% African, 5.0% Indian, 0.9% White, and 0.3% unspecified. The age group dispersion constitutes 19-20 years (39.1%), 21-23 (46.3%), 24+ (14.3%).

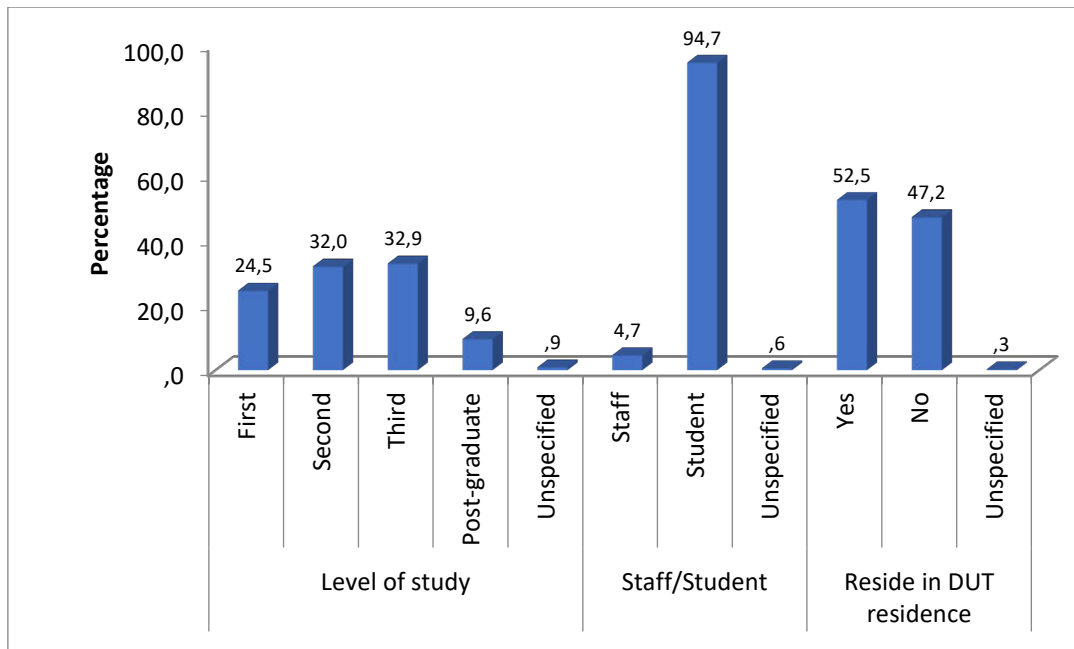


Figure 4-2 Percentages for Level of study, Student and Staff, and Reside at a DUT Residence

Figure 4.2 indicates that the level of study responses of first-year respondents are 24.5%, second year 32.0%, third year 32.9%, post-graduate 9.6%, and unspecified 0.9%. 94.7% of respondents are students, 4.7% are staff, and 0.6% are unspecified. 52.5% of respondents reside in a DUT residence, 47.2% of respondents do not reside in a DUT residence

4.5. FREQUENCY RESPONSE TO SERVICE QUALITY DIMENSIONS

After the data has been collected, the following step is to organize it in a meaningful way so that any trends, if any, may be seen in the data. One common method of organising data is to construct a frequency distribution. Young (2019:1) asserts that a frequency distribution is a picture in either a graphical or a tabular format that shows the number of observations within a certain period. The author also makes note of the fact that frequency distribution, as a statistical tool, offers a visual depiction of the distribution of observations within a certain data set.

This section consists of frequency response outputs for each question. The results are first summarised graphically for expectations and then for actual experiences. This is followed by an analysis to determine if there is significant agreement or disagreement

on each item. This section measures respondents' responses relating to their expectations and actual experiences of service quality at the DUT Sports Department. All replies to statements are scored on a seven-point scale with 1 denoting strongly disagree, 2 denoting disagreement, 3 denoting some agreement, 4 denoting neutrality, 5 denoting some agreement, 6 denoting agreement, and 7 denoting strong agreement.

Table 4.7 reflects the frequency distribution of data gathered from respondents pertaining to their expectations of services at the DUT Sports Department.

Table 4.7 Frequency response for expectations

ITEM	Response as Frequency (%)							n	Mean (SD)	t	df	p-value
	Strongly Disagree			Strongly Agree								
	1	2	3	4	5	6	7					
Tangibles												
The sports facilities have modern looking equipment	-	0.6	4.7	11.5	20.8	32.3	30.1	322	5.70	40.911	321	<.001*
Sports facilities are visually appealing	0.3	-	3.1	11.8	20.2	34.5	28.0	315	5.73	42.961	314	<.001*
Sport Administration employees are neat in appearance	0.3	0.3	2.8	8.1	16.5	25.5	45.0	317	601	46.308	316	<.001*
Sport equipment is visually appealing	-	.9	2.5	10.9	22.4	33.5	29.2	320	5.74	43.51	319	<.001*
Reliability												
Staff commits to delivering services timeously	.3	.6	1.2	9.0	24.5	25.5	33.9	306	5.83	43.852	305	<.001*
Administration staff are committed to solving members' problems	.9	.9	4.3	8.4	20.2	25.8	38.2	318	5.80	38.492	317	<.001*
Staff get things right on the first attempt	1.6	.6	2.8	13.0	22.0	30.7	28.0	318	5.61	372	317	<.001*
Staff provides services at the time they promise to do so	.6	1.2	2.2	9.3	23.9	27.3	34.2	318	5.77	40.667	317	<.001*
Staff will insist on error-free records	.3	.3	1.6	12.7	23.3	31.1	28.3	314	5.71	43063	313	<.001*
Responsiveness												

ITEM	Response as Frequency (%)							n	Mean (SD)	t	df	p-value
	Strongly Disagree			Strongly Agree								
	1	2	3	4	5	6	7					
Staff will inform members exactly when services will be performed	-	.30	2.5	7.5	20.2	27.3	40.4	316	5.97	48.079	315	<.001*
Staff delivers prompt service	.6	.9	2.5	11.2	18.9	26.4	36.0	311	5.80	38.719	310	<.001*
Staff always willing to assist members	.6	-	3.4	7.5	18.3	28.6	39.8	316	5.93	44.561	3115	<.001*
Staff make time to attend to members' requests	.3	.3	2.5	10.2	22.7	24.8	38.8	321	5.85	43.794	320	<.001*
Assurance												
Behaviour of staff instils confidence in members	.3	1.2	1.2	10.2	19.9	30.7	36.0	321	5.85	4.099	320	<.001*
Members feel safe when dealing with staff	.6	9.6	1.2	8.1	17.1	28.6	42.2	317	6.00	46.673	316	<.001*
Staff are polite	.6	.6	1.9	6.5	17.4	22.4	25.3	311	6.04	45.953	316	<.001*
Staff are competent enough to answer questions	.6	9.3	2.2	9.0	16.1	32.6	38.5	320	5.93	45.767	319	<.001*
Empathy												
Staff offers members individual attention	1.2	-	2.2	8.1	20.8	30.7	34.8	315	5.85	42.759	314	<.001*
Sports facility operating hours are convenient for members	.3	1.6	1.2	11.8	19.9	29.2	35.4	320	5.80	41.821	319	<.001*
Staff have members' best interests at heart	.3	1.2	3.1	6.5	20.2	31.7	36.0	319	5.87	43.628	318	<.001*
Staff understands specific needs of their members	.6	.3	2.2	6.8	23.0	31.1	35.7	321	5.88	46.091	320	<.001*
Sports facilities provide a social opportunity for members	.3	-	1.2	8.1	18.9	29.8	41.3	321	6.01	50.906	320	<.001*

Data extracted from the frequency response for expectations reveals that percentages of frequency response are higher on the Likert scale for measurements from 5-7 (somewhat agree to strongly agree). This means that the highest percentage of respondents agree with all service quality dimension statements regarding service quality at the DUT Sports Department. The data further reveals that all mean scores are >4 and p-values for all statements are <0.001*. The mean scores being > 4 (the study's central score) and p-values being <0.001* verify that there is a significant agreement to expectations from respondents.

Table 4.8 below shows the frequency distribution of data for actual experiences of respondents at the DUT Sports Department. Data presented on the 7-point Likert scale (ranging from strongly disagree to strongly agree) was reported as percentages.

Table 4.8 Frequency response for actual experiences

ITEM	Response as Frequency (%)							n	Mean (SD)	t	df	p-value
	Strongly Disagree Strongly Agree											
	1	2	3	4	5	6	7					
Tangibles												
The sports facilities have modern looking equipment	.3	1.9	6.5	10.6	23.3	28.6	28.9	322	5.56	35.037	321	<.001*
Sports facilities are visually appealing	.3	1.2	5.9	12.4	24.8	28.0	24.5	313	5.49	34.88	312	<.001*
Sport Administration employees are neat in appearance	.3	.6	2.2	7.8	15.5	27.0	44.7	316	6.03	47.02	315	<.001*
Sport equipment is visually appealing	0.6	1.2	3.7	11.2	21.4	28.3	32.0	317	3.68	37.75	316	<.001*
Reliability												
Staff commits to delivering services timeously	1.2	1.6	3.7	9.9	17.1	28.6	33.5	308	5.72	35.48	307	0.6<.001*
Administration staff are committed to solving members' problems	0.6	1.9	3.1	10.2	20.5	29.8	32.0	316	5.71	37.81	315	<.001*
Staff get things right on the first attempt	1.9	1.6	3.6	10.6	16.8	27.3	34.5	316	5.64	32.59	315	<.001*
Staff provides services at the time they promise to do so	0.9	1.9	3.7	10.9	16.1	26.7	36.6	312	5.75	35.87	311	<.001*
Staff will insist on error-free records	0.9	1.2	4.7	10.2	18.0	31.7	32.0	318	5.69	36.91	317	<.001*
Responsiveness												
Staff will inform members exactly when services will be performed.	0.6	0.3	3.4	10.2	17.4	25.2	41.0	316	5.88	41.48	315	<.001*
Staff delivers prompt service	0.6	0.9	3.4	9.9	20.5	25.2	35.7	310	5.77	38.78	309	<.001*
Staff always willing to assist members	1.2	0.9	3.7	9.9	15.8	24.2	41.3	313	5.84	37.50	312	<.001*
Staff make time to attend to members' requests	0.6	2.5	2.5	9.3	17.4	27.6	39.4	320	5.83	38.75	319	<.001*
Assurance												
Behaviour of staff instils confidence in members	1.2	0.6	3.7	12.1	17.1	27.0	37.30	319	5.76	37.38	318	<.001*
Members feel safe when dealing with staff	0.9	.09	1.2	7.1	17.4	27.0	43.8	317	6.00	44.86	316	<.001*
Staff are polite	-	1.9	2.8	6.2	15.5	23.9	46.9	313	6.03	44.28	312	<.001*
Staff are competent enough to answer questions	0.6	1.6	1.2	9.0	18.3	25.2	98.8	318	5.93	42.62	317	<.001*
Empathy												

ITEM	Response as Frequency (%)							n	Mean (SD)	t	df	p-value
	Strongly DisagreeStrongly Agree											
	1	2	3	4	5	6	7					
Staff offers members individual attention	0.3	1.9	3.1	8.4	18.9	26.4	37.9	312	5.83	39.73	311	<.001*
Sports facility operating hours are convenient for members	1.2	2.5	2.8	9.6	18.0	26.4	37.9	317	5.76	35.76	316	<.001*
Staff have members' best interests at heart	0.9	1.2	3.7	8.4	13.7	27.3	42.5	315	5.91	39.63	314	<.001*
Staff understands specific needs of their members	0.6	1.9	2.5	9.3	16.8	28.0	40.1	319	5.87	40.02	318	<.001*
Sports facilities provide a social opportunity for members	0.6	2.2	2.5	7.8	14.9	25.20	46.0	319	5.96	41.00	318	<.001*

The finding from the frequency response for actual experiences (reported in percentages) reveals that the response from sports club members increased substantially on the Likert scale from measurements 4-7 (from remaining neutral to strongly agreeing). This finding is a clear indication that the highest percentage of respondents agrees with statements pertaining to actual experiences. Further observations note that all mean scores are larger than the study's central score of 4, and that all p-values were <0.001*. The mean scores and p-values confirm that there is significant agreement from respondents regarding actual experiences of service quality at the DUT Sports Department.

Findings from the frequency response to service quality dimensions prove that this test is successful as it organised the data into a meaningful form so that a trend, if any, emerging out of the data can be easily identified. This identifiable trend is that the frequency response percentage increased from the Likert scale measurements 5-7 for expectations and measurements 4-7 for actual experiences. The frequency response also depicts mean scores and p-values that report significant agreements for both expectations and actual experiences of all service quality dimension statements by respondents. This significant agreement for both expectations and actual experiences of all service quality dimension statements by respondents is a consistent result in the various inferential statistical tests that follow.

4.6. TEST – ONE-SAMPLE T-TEST

A one-sample t -test is applied in this study to both expected and actual experiences in which the average score is tested against the central score of '4'. If the result is significant, it means the average score is significantly different from '4'. If significant and mean score is <4 , it is interpreted as significant disagreement. In contrast, if the mean score is >4 , it is interpreted as a significant agreement.

Table 4.9 One-Sample statistics for expectations

One-Sample Statistics for Expectations

	N	Mean	Std. Deviation	Std. Error Mean
EXP_Tan1 the Sports Facilities has modern looking equipment	322	5.70	1.184	.066
EXP_Tan2 Sports Facilities are visually appealing	315	5.73	1.127	.063
EXP_Tan3 Sport Administration Employees are neat in appearance	317	6.01	1.158	.065
EXP_Tan4 Sport Equipment is visually appealing	320	5.74	1.125	.063
EXP_Rel5 Staff commits to delivering services timeously	306	5.83	1.128	.064
EXP_Rel6 Sport Administration Staff are committed to solving members' problems	318	5.80	1.295	.073
EXP_Rel7 Staff get things right on the first attempt	318	5.61	1.278	.072
EXP_Rel8 Staff provides services at the time they promise to do so	318	5.77	1.213	.068
	314	5.71	1.117	.063
EXP_10 Staff will inform members exactly when services will be performed	316	5.97	1.096	.062
EXP_11 Staff delivers prompt service	311	5.80	1.242	.070
EXP_Res12 Staff always willing to assist members	316	5.93	1.169	.066
EXP_Res13 Staff make time to attend to members' requests	321	5.85	1.167	.065
EXP_Ass14 Behaviour of staff instils confidence in members	321	5.85	1.159	.065
EXP_Ass15 Members feel safe when dealing with staff	317	6.00	1.143	.064
EXP_Ass16 Staff are polite	311	6.04	1.166	.066
EXP_Ass17 Staff are competent enough to answer questions	320	5.93	1.147	.064
EXP_Emp18 Staff offers members individual attention	315	5.85	1.182	.067
EXP_Emp19 Sports Facility operating hours are convenient for members	320	5.80	1.199	.067
EXP_Emp20 Staff have members' best interests at heart	319	5.87	1.174	.066
EXP_Emp21 Staff understands the specific needs of their members	321	5.88	1.120	.063
EXP_Emp22 Sports Facilities provide a social opportunity for members	321	6.01	1.059	.059

A statistical test called a t-test is employed to compare the means of two groups. It is frequently employed to determine whether a procedure genuinely affects the target population or whether two groups differ from one another (Bevans, 2020:2). The findings reflected in Table 4.9 reveal that all the service quality dimension statements

for expectations and actual experiences achieved mean scores of >4, the study's central score. Assurance 16: staff are polite, received the highest mean score of 6.04. Tangibles 3: Sports Administration employees are neat in appearance and Tangibles 22: Sports facilities provide social opportunities for members had the joint second highest expectations mean scores (mean = 6.01). The mean scores being >4 reflects that there is a significant agreement with all 22 service quality dimension statements by the respondents.

Table 4.10 One- Sample T-test for expectations

	Test Value = 3					
					95% Confidence Interval of the Difference	
	t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
EXP_Tan1 The sports facilities have modern looking equipment	40.911	321	.000	2.699	2.57	2.83
EXP_Tan2 Sports facilities are visually appealing	42.961	314	.000	2.727	2.60	2.85
EXP_Tan3 Sport Administration employees are neat in appearance	46.308	316	.000	3.013	2.88	3.14
EXP_Tan4 Sport equipment is visually appealing	43.517	319	.000	2.738	2.61	2.86
EXP_Rel5 Staff commits to delivering services timeously	43.852	305	.000	2.827	2.70	2.95
EXP_Rel6 Sport Administration staff are committed to solving members' problems	38.493	317	.000	2.796	2.65	2.94
EXP_Rel7 Staff get things right on the first attempt	36.372	317	.000	2.607	2.47	2.75
EXP_Rel8 Staff provides services at the time they promise to do so	40.667	317	.000	2.767	2.63	2.90
EXP_Rel9 Staff will insist on error-free records	43.063	313	.000	2.713	2.59	2.84
	48.079	315	.000	2.965	2.84	3.09
EXP 11 Staff delivers prompt service	39.719	310	.000	2.797	2.66	2.94
EXP_Res12 Staff always willing to assist members	44.561	315	.000	2.930	2.80	3.06
EXP_Res13 Staff make time to attend to members' requests	43.794	320	.000	2.854	2.73	2.98
EXP_Ass14 Behaviour of staff instils confidence in members	44.099	320	.000	2.854	2.73	2.98
EXP_Ass15 Members feel safe when dealing with staff	46.673	316	.000	2.997	2.87	3.12
EXP_Ass16 Staff are polite	45.953	310	.000	3.039	2.91	3.17
EXP_Ass17 Staff are competent enough to answer questions	45.767	319	.000	2.934	2.81	3.06
EXP_Emp18 Staff offers members individual attention	42.759	314	.000	2.848	2.72	2.98
EXP Emp19 Sports Facility operating hours are convenient for members	41.821	319	.000	2.803	2.67	2.93
EXP_Emp20 Staff have members' best interests at heart	43.628	318	.000	2.868	2.74	3.00
EXP_Emp21 Staff understands the specific needs of their members	46.091	320	.000	2.882	2.76	3.00
EXP_Emp22 Sports facilities provide a social opportunity for members	50.906	320	.000	3.009	2.89	3.13

The t-test findings indicate that all service quality dimension statements are significant (shaded in red 0.00). All mean scores are >4, which indicate that a significant agreement from respondents to expectations. The p-value of <0.005 (rounded off to 0.00) confirms that there was a statistically significant difference between the expected and actual experience of respondents.

Table 4.11 One-Sample statistics for actual experiences

One-Sample statistics for Actual experience

	N	Mean	Std. Deviation	Std. Error Mean
ACT_Tan1 The sports facilities have modern looking equipment	322	5.56	1.311	.073
ACT_Tan2 Sports facilities are visually appealing	313	5.49	1.264	.071
ACT_Tan3 Sport Administration employees are neat in appearance	316	6.03	1.146	.064
ACT_Tan4 Sport equipment is visually appealing	317	5.68	1.266	.071
ACT_Rel5 Staff commits to delivering services timeously	308	5.72	1.344	.077
ACT_Rel6 Sport Administration staff are committed to solving members' problems	316	5.71	1.272	.072
ACT_Rel7 Staff get things right on the first attempt	316	5.64	1.438	.081
ACT_Rel8 Staff provides services at the time they promise to do so	312	5.75	1.353	.077
ACT_Rel9 Staff will insist on error-free records	318	5.69	1.302	.073
ACT_Res10 Staff will inform members exactly when services will be performed	316	5.88	1.235	.069
ACT_Res11 Staff delivers prompt service	310	5.77	1.260	.072
ACT_Res12 Staff always willing to assist members	313	5.84	1.340	.076
ACT_Res13 Staff make time to attend to members' requests	320	5.83	1.305	.073
ACT_Ass14 Behaviour of staff instils confidence in members	319	5.76	1.318	.074
ACT_Ass15 Members feel safe when dealing with staff	317	6.00	1.191	.067
ACT_Ass16 Staff are polite	313	6.03	1.211	.068
ACT_Ass17 Staff are competent enough to answer questions	318	5.93	1.227	.069
ACT_Emp18 Staff offers members individual attention	312	5.83	1.259	.071
ACT_Emp19 Sports Facility operating hours are convenient for members	317	5.76	1.371	.077
ACT_Emp20 Staff have members' best interests at heart	315	5.91	1.303	.073
ACT_Emp21 Staff understands the specific needs of their members	319	5.87	1.273	.071
ACT_Emp22 Sports facilities provide a social opportunity for members	319	5.96	1.290	.072

The statistical test in Table 4.11 reveals the mean scores for actual experiences across all service quality dimensions and compares the results against the study's central score of >4 to determine whether the results were significant. The findings indicate that all mean scores of actual experiences are >4, meaning that there is a significant agreement by respondents to all service quality dimension statements. The One-Sample t-Test for actual experiences, as per Table 4.12 hereunder, demonstrates sports club members' ratings of the 22 statements of service quality dimensions for actual experiences.

Table 4.12 One-Sample T-test for actual experiences

	Test Value = 3					
					95% Confidence Interval of the Difference	
	t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
ACT Tan1 The sports facilities have modern looking equipment	35.037	321	.000	2.559	2.42	2.70
ACT Tan2 Sports facilities are visually appealing	34.889	312	.000	2.492	2.35	2.63
ACT Tan3 Sport Administration employees are neat in appearance	47.027	315	.000	3.032	2.90	3.16
ACT Tan4 Sport equipment is visually appealing	37.755	316	.000	2.685	2.54	2.82
ACT Rel5 Staff commits to delivering services timeously	35.489	307	.000	2.718	2.57	2.87
ACT_Rel6 Sport Administration staff are committed to solving members' problems	37.814	315	.000	2.706	2.56	2.85
ACT Rel7 Staff get things right on the first attempt	32.592	315	.000	2.636	2.48	2.80
ACT_Rel8 Staff provides services at the time they promise to do so	35.870	311	.000	2.747	2.60	2.90
ACT Rel9 Staff will insist on error-free records	36.910	317	.000	2.695	2.55	2.84
ACT_Res10 Staff will inform members exactly when services will be performed	41.487	315	.000	2.883	2.75	3.02
ACT Res11 Staff delivers prompt service	38.780	309	.000	2.774	2.63	2.91
ACT Res12 Staff always willing to assist members	37.507	312	.000	2.840	2.69	2.99
ACT Res13 Staff make time to attend to members' requests	38.757	319	.000	2.828	2.68	2.97
ACT Ass14 Behaviour of staff instils confidence in members	37.383	318	.000	2.759	2.61	2.90
ACT Ass15 Members feel safe when dealing with staff	44.860	316	.000	3.000	2.87	3.13
ACT Ass16 Staff are polite	44.288	312	.000	3.032	2.90	3.17
ACT Ass17 Staff are competent enough to answer questions	42.625	317	.000	2.934	2.80	3.07
ACT Emp18 Staff offers members individual attention	39.736	311	.000	2.833	2.69	2.97
ACT Emp19 Sports Facility operating hours are convenient for members	35.795	316	.000	2.757	2.61	2.91
ACT_Emp20 Staff have members' best interests at heart	39.638	314	.000	2.911	2.77	3.06
ACT Emp21 Staff understands the specific needs of their members	40.205	318	.000	2.865	2.72	3.01
ACT_Emp22 Sports facilities provide a social opportunity for members	41.001	318	.000	2.962	2.82	3.10

This One-Sample t-test for actual experiences is conducted to determine whether there is a significant difference between the respondents' expectations and actual experiences mean scores. The larger the difference between the means, the lower the p -value and the lesser the sampling error.

The conventional way of presenting a result necessitates a statistical significance statement. A p -value is inferred from a test statistic. A finding that is significant is denoted by " $p < 0.05$ ". The p -values shown in Table 4.2 are all close to zero (rounded off). These results demonstrate that there is a large discrepancy between the predicted and experienced values and that the outcomes are not random. The t-Test findings for both expectations and actual experiences indicate that all statements are significant (shaded in red 0.00). All mean scores that are >4 indicate a significant agreement between expectations and actual experiences. This is significant to this study as the agreement to service quality dimension statements by respondents means that service quality gaps are relatively small. This indicates consensus of satisfaction with service quality at the DUT Sports Department.

Figure 4.3 below is a graphical representation of the mean scores for both expectations and actual experiences. Both sets of mean scores are presented on one graph so that it would be clear to see that there were no large gaps visible.

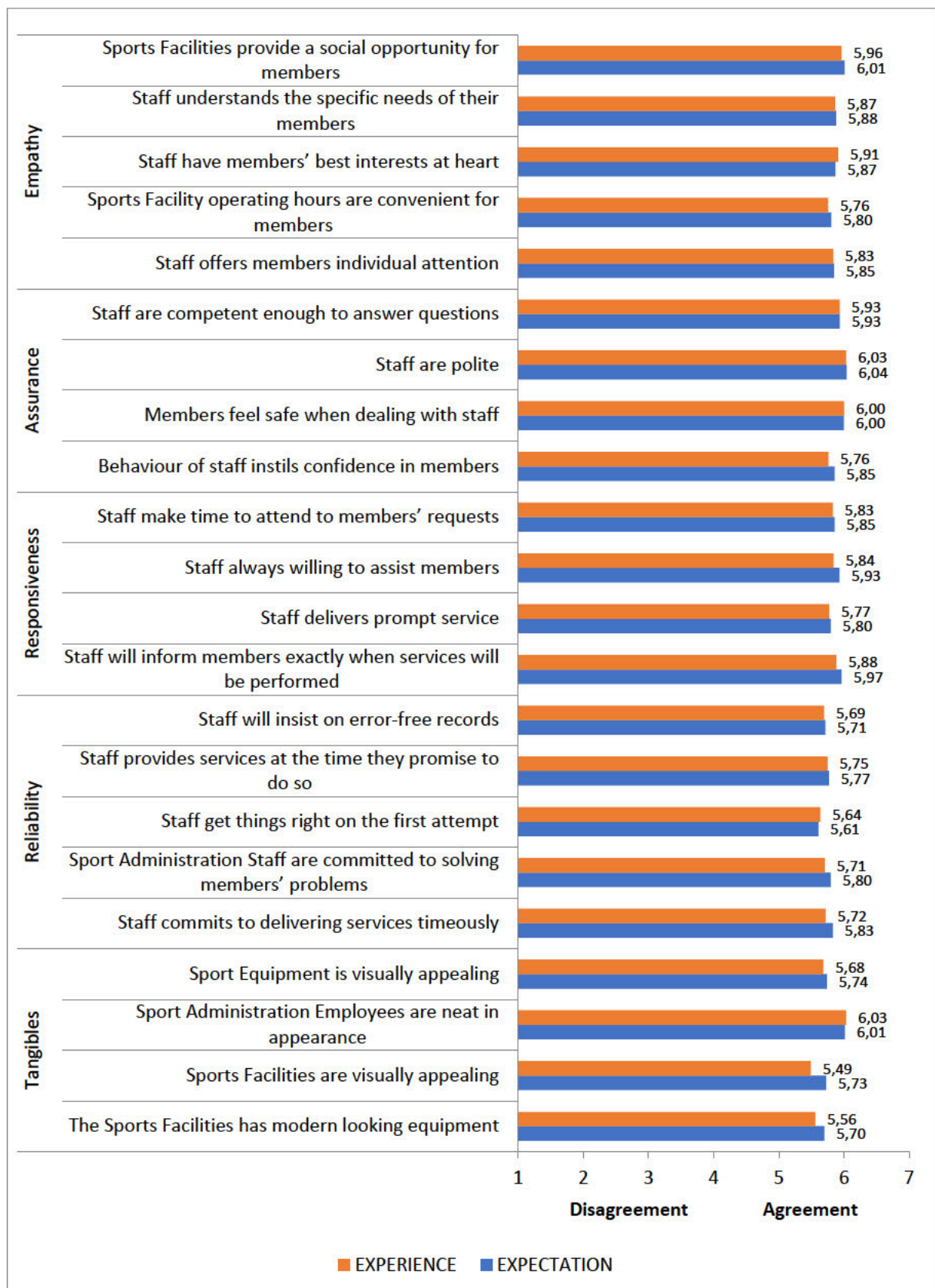


Figure 4.3 Average agreement mean scores of expectations and actual experiences.

In additions to the analysis done earlier in the one-sample statistics for Expectations, and the One-Sample Statistics for Actual experiences reporting on the significance of the respective mean scores, a further presentation of the composite measures in Table 4.13. also show that there is a significant agreement to all service quality dimension statements (items on the SERQUAL questionnaire).

Table 4.13 Average agreement mean scores of expectations and actual experiences.

	Test Value = 3						
	t	df	Sig. (2-tailed)	Mean Difference	N	Mean	Std. Deviation
EXP TAN	52.362	321	.000	2.796	322	5.80	.958
EXP REL	45.555	321	.000	2.716	322	5.72	1.070
EXP RES	48.243	321	.000	2.855	322	5.86	1.062
EXP ASS	51.699	320	.000	2.985	321	5.99	1.035
EXP EMP	52.781	320	.000	2.920	321	5.92	.991
ACT TAN	45.219	321	.000	2.697	322	5.70	1.070
ACT REL	41.118	321	.000	2.683	322	5.68	1.171
ACT RES	42.489	321	.000	2.802	322	5.80	1.183
ACT ASS	48.682	319	.000	2.977	320	5.98	1.094
ACT EMP	43.879	319	.000	2.907	320	5.91	1.185

The analysis of composite measures shows that there is significant agreement for both actual experiences and expectations. All mean scores are >4 which indicate significant agreement to expectations and actual experiences. These findings are supported in the one-sample statistics for expectation and actual experiences.

4.7. RELIABILITY

In this study, Cronbach's alpha is calculated to assess the overall results' reliability. Cronbach's alpha may be used to assess how effectively a collection of items measures a single one-dimensional latent variable. According to Seyoum (2017:180), it is considered acceptable to have a confidence level of >0.7 or higher.

In this study, items within each dimension were averaged to form single composite measures for each dimension. Cronbach's alpha is used to test each dimension for reliability. The findings indicate that the Cronbach's Alpha score for tangibles were .862 for Expectations and .879 for Experience. Reliability shows a Cronbach's Alpha score of .894 for Expectation and .895 for Experience. Responsiveness exhibits a Cronbach's Alpha score of .870 for Expectations and .892 for Experience. The findings indicate a Cronbach's Alpha score for Assurance as .875 for Expectation and .879 for Experience. Empathy shows a Cronbach's Alpha score of .863 for Expectation and .907 for Experience. The results are summarised in Table 4.14 below.

Table 4.14 Reliability of composite measures

Dimension	Number of items	Cronbach's alpha	
		EXPECTATION	EXPERIENCE
Tangibles	4	.862	.879
Reliability	4	.894	.895
Responsiveness	3	.870	.892
Assurance	3	.875	.879
Empathy	3	.863	.907

The results show that reliability has been achieved as all reliability composite scores are >0.7.

4.8. VALIDITY

The researcher uses factor analysis to achieve validity in this study. To ascertain the data's structure, factor analysis with promax rotation is done on the 22 items assessing expectations. The data was sufficient for effective and reliable factor extraction, according to a significant Bartlett's test (p.05) and a Kaiser-Meyer-Olkin measure of sampling adequacy (KMO) value of .951. Five components were identified, and they accounted for 70.91% of the data variation. In 7 iterations, the rotation converged.

During the process, some items were removed because either they did not load strongly onto any factor, or they loaded on to multiple factors. The factor loadings are summarised in Table 4.15

Table 4.15 Factor loadings

	Factor				
	1	2	3	4	5
EXP_Tan2 Sports Facilities are visually appealing	.841				
EXP_Tan1 the Sports Facilities has modern looking equipment	.811				
EXP_Tan4 Sport Equipment is visually appealing	.730				
EXP_Tan3 Sport Administration Employees are neat in appearance	.651				
EXP_Ass16 Staff are polite		.863			
EXP_Ass17 Staff are competent enough to answer questions		.651			
EXP_Ass15 Members feel safe when dealing with staff		.645			
EXP_Rel8 Staff provides services at the time they promise to do so			.916		
EXP_Rel7 Staff get things right on the first attempt			.817		
EXP_Rel6 Sport Administration Staff are committed to solving members' problems			.508		
EXP_Rel9 Staff will insist on error-free records			.431		
EXP_Emp21 Staff understands the specific needs of their members				.862	
EXP_Emp22 Sports Facilities provide a social opportunity for members				.627	
EXP_Emp20 Staff have members' best interests at heart				.609	
EXP_Res12 Staff always willing to assist members					.844
EXP_Res11 Staff delivers prompt service					.631
EXP_Res13 Staff make time to attend to members' requests					.583

The results indicate that validity has been achieved in this study. Validity is achieved by applying factor analysis to the expectation items to determine the structure of the data from the respondents and hence determine the groupings of the items. This ensures that construct validity (both convergent and discriminant validity) is achieved.

4.9. GAP ANALYSIS

As mentioned in the literature study (Chapter Two), evaluating service quality involves considering five different dimensions. According to Parasuraman *et al.* (1985:42), the gap between the customer's expectations of services and how they perceive the organisation's service delivery is the basis for the gaps model's prediction of service quality.

In this section, the study concentrates on the mean scores from respondents' expectations and their actual experiences scale for each of the 22 service quality attributes and the five related dimensions. In order to calculate gap scores in this study across service quality dimensions and their respective attributes, the formula ***GAP = Expectations – Actual Experience*** is employed.

4.9.1. DIMENSION ANALYSIS WITH GAP SCORES

This section focuses on how the dimension's gap scores are analysed. The following tables and figures provide the average scores for each statement as well as the gap scores (the discrepancy between expectations and perceptions) for each component. The five service quality dimensions each go through this process. The gap scores show how closely DUT Sports Club members' perceptions are to their expectations of service quality at the DUT Sport Administration. If the gap is >0 it indicates that sports club members get less than what they expected to get. If the gap is <0, it means that sports club members get more than they expected.

Dimension: Tangibles

Zeithaml *et al.* (2013:91) define tangibles as the perception of tangible resources, such as physical facilities, equipment, people, and communication materials. Customers will utilise tangibles to assess the quality of the services by seeing a real representation or a photograph of them.

Tangibles are visual elements that will enhance the image of an organisation from the customers' perceptions. Tangibles in the context of DUT Sport may include the appearance of sports facilities, offices, marketing and advertising materials, personnel appearance, and sports equipment. Figure 4.4 reflects the tangible attributes mean

scores for expected and actual experience by DUT Sports Club members as well as their respective GAP scores.

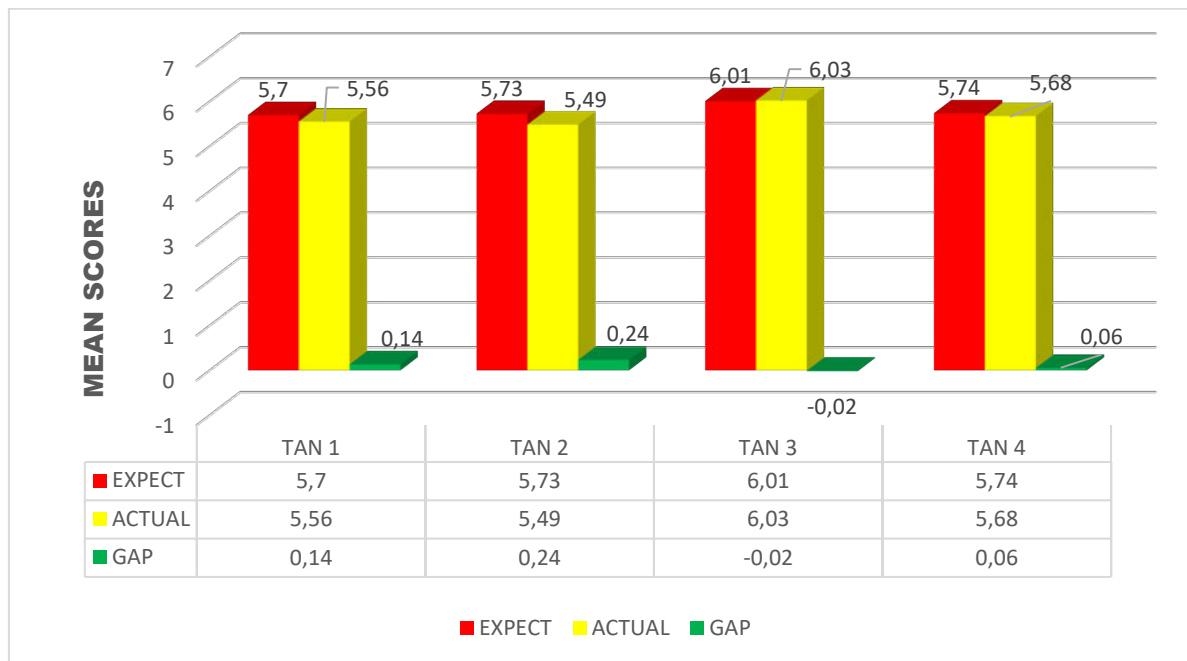


Figure 4.4. Tangible mean scores with gap scores

TAN 1: The sports facilities have modern looking equipment.

The data reflected earlier in Figure 4.2 reveals the expectations and actual experiences of respondents in this study in terms of the DUT Sports Department having modern-looking equipment. The aim of TAN 1 was to ascertain the expectations and actual experiences regarding the modernity of sports equipment. The expectations mean score was 5.70, and the actual experience mean score was 5.56 (on scales 1-7). The subsequent mean gap score was 0.14. The relatively small gap indicates that respondents are somewhat satisfied with the standard of equipment.

TAN 2: Sports facilities are visually appealing.

The aim of this statement was to determine the sports club members' expectations and actual experiences (perceptions) on whether the DUT Sports Department provides visually appealing facilities. As indicated in Figure 4.2, respondents' mean score for expectations was 5.73, and their mean score for actual experience was 5.49. Hence, the mean gap score was 0.24. The findings indicate that TAN 2 has the largest mean

gap score and, demonstrates that respondents were somewhat dissatisfied with the visually appealing facilities at the DUT Sports Department. Visually appealing facilities are crucial in the evaluation of a service; hence, the DUT Sports Department must address this gap with urgency.

TAN 3: Sport Administration employees are neat in appearance.

As seen in Figure 4.2, the respondents' mean scores for expectations of employees' appearance was 6.01, and their actual experience (perception) of employees' appearance was 6.03. The mean gap scores for TAN 3 were -0.02. Employees' appearance exhibited the lowest mean gap in the dimension of tangibles, revealing that respondents were highly satisfied with the neat appearance of employees at the DUT Sports Department.

TAN 4: Sports equipment is visually appealing.

Data portraying respondents' mean scores of their expectations and actual experiences of visually appealing sports equipment is illustrated in Figure 4.2. In TAN 4, the expectations and actual experience mean scores were 5.74 and 5.68, respectively. Hence, the mean gap score for visually appealing sports equipment was 0.06, which is relatively small and suggests that equipment at the DUT Sports Department is visually appealing to respondents.

In the preceding analysis of overall mean scores per dimension, it was observed that the average mean scores for the tangible expectation scores was 5.80, and the average mean scores for the tangible actual experience was 5.70. With the average mean scores being greater than the study's central score of 4, it indicates that there is a fair degree of agreement with the questions that constitute the dimension of tangibles. The findings indicate that sports club members are satisfied with items in this dimension, as illustrated by the mean scores. The average gap for tangibles was 0.10. However, it must be pointed out that TAN 2 – sports facilities are visually appealing – had the largest mean gap score of 0.24 across all service quality dimensions and will need urgent attention from the DUT Sports Department.

Dimension: Reliability

Zeithaml *et al.* (2013:89) contend that reliability is the ability of the organisation to provide a service that is accurate and dependable. It is further described as the most important determinant of perceptions of service quality. Reliability is defined as the capacity to supply products or services on schedule, accurately, and reliably as well as to fulfil customer expectations in Pakurár *et al.* (2019:265-268).

This dimension measures the timelines to solving and giving attention to customer problems. Figure 4.5 displays the mean scores for respondents' expectations and actual experiences, in addition to the mean gap scores for each reliability attribute.

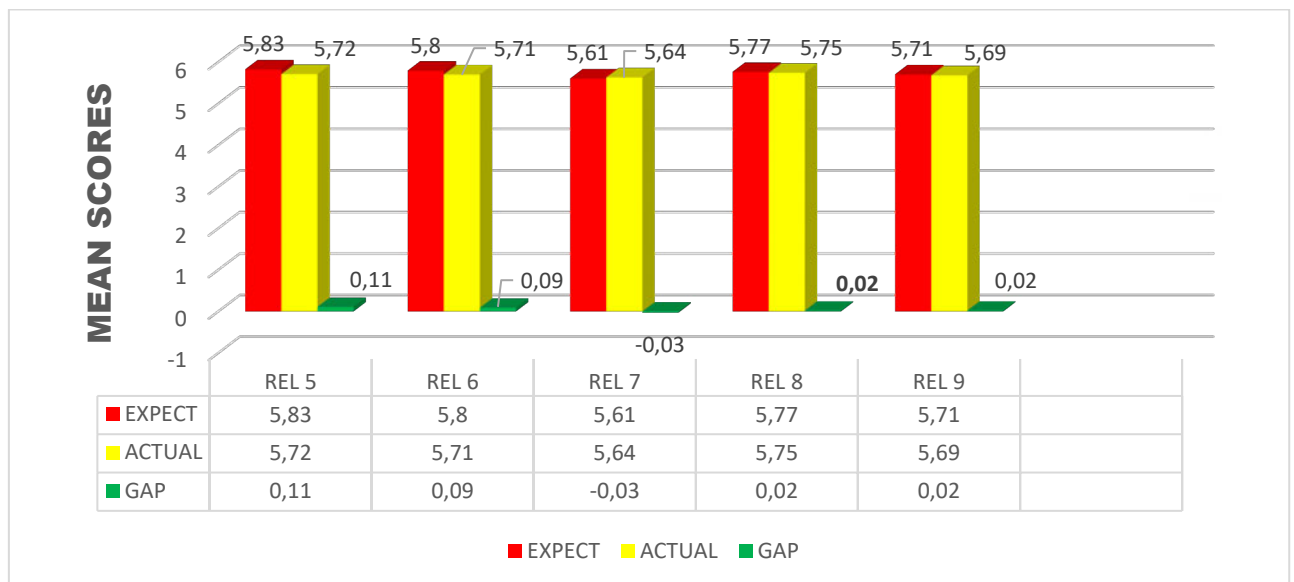


Figure 4.5 Reliability mean scores with gap scores.

REL 5: Staff commits to delivering services timeously.

The purpose of this dimension attribute is to assess the ability of the DUT Sports Department's staff to honour their promises of delivering services timeously. The mean score of expectations was 5.83, and the mean score for actual experiences was 5.72. This yielded a mean gap score of 0.11. The response for REL 5 reports the largest gap scores in the reliability dimension. The moderately low gap score of 0.11 for REL 5 shows that sports club members are satisfied with the commitment of the Sports Department staff to deliver services as promised.

REL 6: Sport Administration staff are committed to solving members' problems.

This statement is aimed at evaluating whether the Sports Department staff exhibit a commitment to solving members' problems. The data in Figure 4.5. illustrates the findings, with the mean score for expectations being 5.80 and the mean score for actual experiences being 5.71. The resulting mean gap score is 0.09. This is a clear indication that sports club members are satisfied with the commitment of staff to solve their problems.

REL 7: Staff get things right at the first attempt.

This reliability attribute provided an insight into sports club members' perceptions of staff efficiency. The findings of this reliability attribute shown in Figure 4.5 revealed that the expectations mean score was 5.61, and the actual experience mean score was 5.64. The resulting mean gap score was -0.03. The findings reveal that sports club members are highly satisfied with the REL 7 statement of "Staff getting things right the first time".

REL 8: Staff provide services at the time they promise to do so.

This attribute relates to the extent to which service providers deliver on the promises made to the customer. As shown in Figure 4.5 this reliability attribute yielded an expectation mean score of 5.77 and an actual experience mean score of 5.75. The resulting gap score is 0.02. This marginal gap score indicates that sports club members are satisfied with Sports Department staff providing promised services.

REL 9: Staff will insist on error-free records.

As shown in Figure 4.5, the expectations and actual experiences of sports club members are revealed in terms of the statement that staff insist on error-free records. The mean score for expectations is 5.71, and the mean score for actual experience is 5.69. The mean gap score is 0.02, showing that sports club members are satisfied with staff insisting on error-free records.

According to Zeithaml *et al.* (2013:89) reliability is the key factor in determining how people perceive the quality of a service. According to Parasuraman *et al.* (1993:140–147), organisations must deliver services reliably the first time. Additionally, it demonstrates how organisations try to keep their word and focus on the outcomes. The SERVQUAL service quality model's first dimension has been designated as reliability. Reliability in the DUT Sports Department refers to the prompt processing of travel and equipment requisitions, the effective management of reservations for sporting events, and the accessibility of sporting goods.

The average overall mean scores for reliability expectations and actual experience are 5.72 and 5.68, respectively. This yields an average overall mean gap score of 0.04. The relatively small gap implies that the DUT Sports Department achieved enough to satisfy the dimension of reliability. Furthermore, the respective expectation and actual experience mean score being >4 (the study's central score), reveals a significant agreement with all reliability service quality statements.

Dimension: Responsiveness

This dimension asserts that handling client requests, inquiries, and complaints requires being attentive and timely. According to Lone and Rehman (2017:1–20), responsiveness refers to the ability of the service provider to satisfy the client's demands. According to Zeithaml *et al.* (2013:90), responsiveness is the ability of staff to respond quickly to customers' service requests.

The DUT Sports Department staff's eagerness to help members and deliver quick service, as well as their possession of the necessary interpersonal skills and competencies, are all described in statements in this dimension. The mean ratings for expectations and actual experiences, as well as the gap scores for each statement, are shown in Figure 4.6 below.

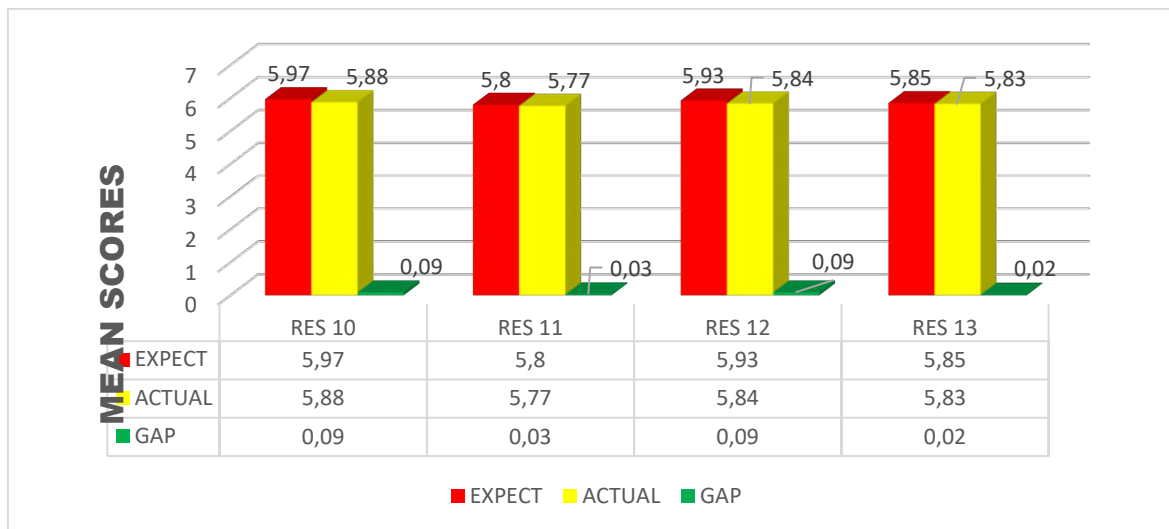


Figure 4.6 Responsiveness mean scores with gap scores.

RES 10: Staff will inform members exactly when services will be performed.

The objective of RES 10 was to evaluate whether DUT Sports Department staff inform members exactly when services will be provided. The expectations mean score was 5.97 and the actual experience mean score was 5.88, describing what members perceived they were being told regarding when service would be performed. The resulting gap score was 0.09. This relatively small gap implies that members' expectations are met.

RES 11: Staff delivers prompt service.

The purpose of RES 11 is to assess whether sports club members receive prompt service from Sports Department staff. The expectations mean score for this attribute was 5.80, and actual experience mean score was 5.77. The corresponding gap score was 0.03. The findings reveal that sports club members receive prompt service from the staff.

RES 12: Staff always willing to assist members.

The purpose of RES 12 is to determine whether staff are eager to help members. In terms of the staff's responsiveness to its members, Figure 4.6 shows the respondents' mean scores for expectations and the actual experiences (perceptions). As can be seen in Figure 4.6, the mean score for expectations is 5.93, while the mean score for actual experiences is 5.84, This yields a gap score of 0.09 as a result.

RES 13: Staff make time to attend to members' requests.

RES 13 measures whether staff are courteous to members and are committed to making time to attend to members' requests. The findings reveal that the expectations mean score is 5.85, and the actual experience mean score is 5.83. The gap score is 0.02. The expectations and actual experience mean scores were very close to each other, indicating that members are satisfied.

The average overall responsiveness expectations mean score was 5.86, and the average overall actual experience responsiveness mean score was 5.80. The resulting gap score was 0.06. All mean scores are >4, which indicate that there is significant agreement among respondents across all the responsiveness dimension statements. This indicates that members are satisfied with the responsiveness of DUT Sports Department staff.

Dimension: Assurance

Assurance is concerned with instilling trust and confidence. The purpose of the dimension is to calculate whether DUT Sports Department staff could instill confidence and trust in their members. The capability to achieve the promised result, particularly in terms of courtesy and dependability, is termed to as assurance by Pakurár *et al.* (2019:265-268).

Figure 4.7 reflects the assurance mean score for expectations and actual experiences, and the resulting gap scores.

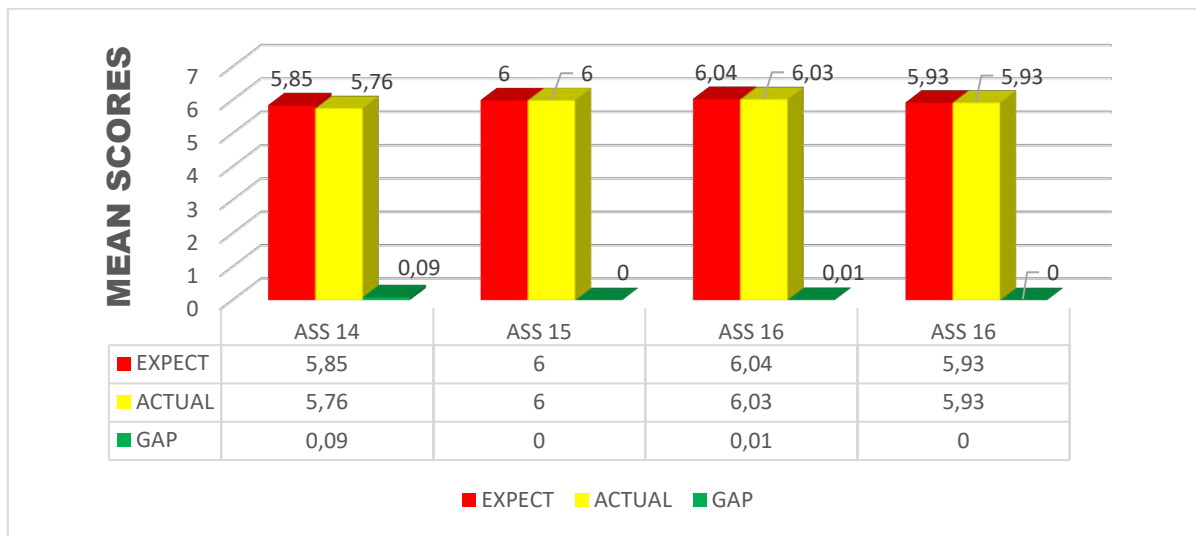


Figure 4.7 Assurance mean scores with gap scores.

ASS 14: Behaviour of staff instils confidence in members.

The aim of this Assurance attribute is to estimate whether staff can instil confidence in members. Furthermore, Haense and Hofmann (2017:240-248) stress that a crucial element in providing clients with assurance is the staff's expertise and ability. The findings, as reported in Figure 4.7, reveal that the expectations mean score is 5.85 and the mean score for actual experiences is 5.76, yielding a gap score of 0.09. Although this is the largest gap score in the assurance dimension, the marginal gap indicates that sports club members are somewhat satisfied with the degree of confidence instilled by staff. However, remedial measures should be implemented to close this service gap.

ASS 15: Members feel safe when dealing with staff.

The safety and security of members must be prioritised at all times by the DUT Sports Department. Feeling safe whilst using DUT Sports facilities will increase members' frequency of usage. In terms of feeling comfortable in their encounters with the DUT Sports Department staff, the data shown in Figure 4.7 represent the expectations and

actual experiences of the respondents in this study. The expectations mean score is 6.00 and the actual experience mean score is 6.00. This resulted in a gap score of 0.00. The findings indicate that there are no gaps in this assurance attribute, therefore, it is concluded that sports club members feel safe when dealing with staff.

ASS 16: Staff are polite.

The members' response to this attribute, as shown in Figure 4.8, reported the expectations mean score as 6.04 and the actual experience mean score as 6.03, yielding a gap score of 0.01. Once again, the findings reveal that there is a relatively small gap, hence revealing that members are relatively happy with the politeness of staff.

ASS 17: Staff are competent enough to answer questions.

The data in Figure 4.7 reveals the expectations and actual experiences for this assurance attribute in terms of professional knowledge of staff. The findings report the expectations mean score as 5.93 and the actual experience mean score as 5.93. Hence, yielding a gap score of 0.00. As in the case of ASS 15, members feel safe when dealing with staff; there is no service gap in this assurance attribute. Hence, members feel that staff are competent enough to answer questions.

The average overall mean score for the assurance expectations is 5.99 and the overall mean score for the Assurance actual experiences is 5.98, revealing an overall gap score of 0.01. The data reveals that this is not a large gap, hence indicating members' relative satisfaction with service deliver relating to the assurance dimension. In addition, all mean scores are >4 revealing a significant agreement with all statements relating to assurance.

Dimension: Empathy

Empathy focuses on considering participants as unique persons. Members are thus treated in a way that makes them feel valued by the organisation. Zeithaml *et al.* (2013:90-91) state that empathy refers to the organisation and its employees' ability to

be caring and provide personalised attention to the customers. The essence of empathy conveys the message that members are important.

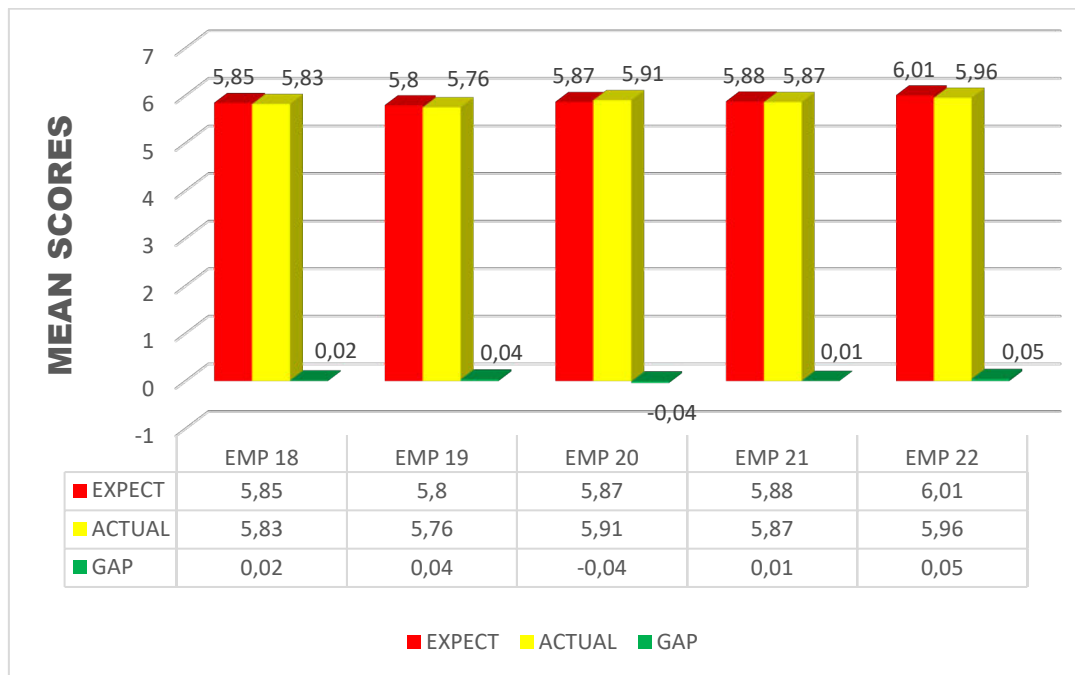


Figure 4.8 Empathy mean scores with gap scores.

EMP 18: Staff offers members individual attention.

The data in Figure 4.8 illustrates the expectations and actual experiences of sports club members in terms of whether they received individual attention from staff. The mean score for expectations is 5.85 and the mean score for actual experiences is 5.83, resulting in a gap score of 0.02. The gap score reveals that there is a very small service gap between what members expect and what they actually receive, hence indicating a degree of satisfaction with individual attention from staff.

EMP 19: Sports Facility operation hours are convenient for members.

Figure 4.8 reveals the expectations and actual experiences of members in terms of sports facilities' convenient operating hours. The expectations mean score is 5.80 and the actual experience mean score is 5.76, resulting in a gap score of 0.04. Although this is the second largest gap score for this dimension, the gap is still relatively small.

EMP 20: Staff have members' best interests at heart.

This statement, EMP 20, is aimed at determining whether the DUT Sports Department staff paid attention to their members' needs. The responses from sports club members, as shown in Figure 4.8, reflect the mean scores of 5.87 for expectations and 5.91 for actual experiences. The gap score is -0.04. The gap score of -0.04 is the lowest for empathy and is the lowest gap score across all the service quality dimensions. This outcome indicates that members strongly felt that staff had their best interests at heart.

EMP 21: Staff understand the specific needs of their members.

The aim of EMP 21 is to establish whether the DUT Sports Department staff understand the needs of their members and how to satisfy those needs. As illustrated in Figure 4.8, the respondents' mean scores for expectations and actual experiences are 5.88 and 5.87, respectively. The gap score between expectations and actual experiences is 0.01. Once again, the findings reveal a very small service gap between expectations and actual experiences, thus indicating that members are satisfied that their specific needs were understood by staff.

EMP 22: Sports facilities provide a social opportunity for members.

This statement, EMP 22, reveals the expectations and actual experiences of respondents in terms of their social interaction through the usage of sports facilities. Figure 4.8 reveals that the respondents' mean scores for expectations and actual experiences are 60.01 and 5.96, respectively. The resulting gap score is 0.05. This was the largest gap score in the dimension of empathy. The results suggest that although the gap is relatively small, attention should be paid to improving social interaction for members whilst using sports facilities.

The overall average mean score for expectations in the empathy dimension is 5.92 and the overall average mean score for actual experience is 5.91. The resulting overall mean score is 0.01. Empathy and assurance display the lowest gap scores in this

study, indicating that the respondents are satisfied with the statements that make up these dimensions.

4.9.2. OVERALL MEAN SCORES PER DIMENSION

Table 4.16 illustrates the expected and actual experience scores in addition to the gap scores for each service quality dimension overall for the DUT Sports Department.

Table 4.16 Overall mean scores per dimension

Dimension	Expectation	Actual Experience	Gap
Tangibles	5.80	5.70	0.10
Reliability	5.72	5.68	0.04
Responsiveness	5.86	5.80	0.06
Assurance	5.99	5.98	0.01
Empathy	5.92	5.91	0.01
Overall	5.86	5.81	0.05

According to these results, there are no appreciable gaps among the five dimensions. The DUT Sports Department's mean scores were analysed, and the results show that the average expectation across all five service quality characteristics is 5.86. The real mean score for experience is 5.81. The disparity in each of the five dimensions is on average 0.05. According to the relatively tiny gap, there is little discrepancy between respondents' expectations and actual experiences. As a result, this survey shows that the DUT Sport Administration has a high degree of customer satisfaction with the quality of its services.

An examination of the mean scores for expectations and actual experiences indicates that 'tangibles' has the largest gap of 0.10. The dimensions of 'assurance and empathy' have the smallest gaps of 0.01 each. This study therefore indicates that the dimension of tangibles requires more intervention by the DUT Sports Department.

At the DUT Sports Department, tangibles include sports equipment, physical facilities, and staff appearance. Modern looking sports facilities are imperative to contributing to effective and successfully administered sporting programmes. In conjunction with this,

high quality and technologically up-to-date sports equipment also enhances sports participation and improves quality of service.

4.9.3. TEST – ONE – SAMPLE T-TESTS

The following test One-Sample t-Test tests if the gap is significantly different from '0'.

Table 4.17 Test one-sample T-test

	Test Value = 0					
	t	df	Sig. (2-tailed)	N	Mean	Std.Deviation
GAP_Tan1	1.936	321	.054	322	.1398	1.29546
GAP_Tan2	3.206	321	.001	322	.2640	1.47731
GAP_Tan3	.000	321	1.000	322	.0000	1.21773
GAP_Tan4	1.301	321	.194	322	.1056	1.45590
GAP_Rel5	.702	321	.483	322	.0683	1.74593
GAP_Rel6	1.648	321	.100	322	.1242	1.35232
GAP_Rel7	.072	321	.943	322	.0062	1.55079
GAP_Rel8	1.388	321	.166	322	.1273	1.64608
GAP_Rel9	-.620	321	.536	322	-.0528	1.52865
GAP_Res10	.966	321	.335	322	.0807	1.49964
GAP_Res11	.437	321	.662	322	.0373	1.53013
GAP_Res12	1.626	321	.105	322	.1429	1.57613
GAP_Res13	.455	321	.649	322	.0342	1.34723
GAP_Ass14	1.460	321	.145	322	.1180	1.45066
GAP_Ass15	-.203	321	.839	322	-.0155	1.37050
GAP_Ass16	-.546	321	.585	322	-.0435	1.42889
GAP_Ass17	1.051	321	.294	322	.2112	3.60669
GAP_Emp18	.779	321	.436	322	.0683	1.57323
GAP_Emp19	1.172	321	.242	322	.0932	1.42650
GAP_Emp20	.234	321	.815	322	.0186	1.43161
GAP_Emp21	.623	321	.534	322	.0466	1.34222
GAP_Emp22	.985	321	.326	322	.0745	1.35827

Table 4.17 indicates that the only item that shows a significant gap is Tan2 – visually appealing facilities (.001). In this case, gap <0 indicating that what DUT Sports Club members get is significantly below the standard they expect. Statement TAN 2 (Tangibles 2) on the SERVQUAL questionnaire, represents visually appealing facilities. Customers will use tangibles to assess the quality of the services by seeing physical examples or photos of such services. Customers utilise tangibles to evaluate services, according to Hoffman and Bateson (2006:136), and service providers can use them to improve their reputation and indicate quality to customers. Having visually appealing facilities is crucial to the DUT Sports Department, as not only do visually appealing facilities attract more members, but they also speak to the modernity of the facilities that allow for the provision of high-quality sports facilities to members. This results in enhanced service quality.

4.9.4. GAP SCORES FOR EACH STATEMENT

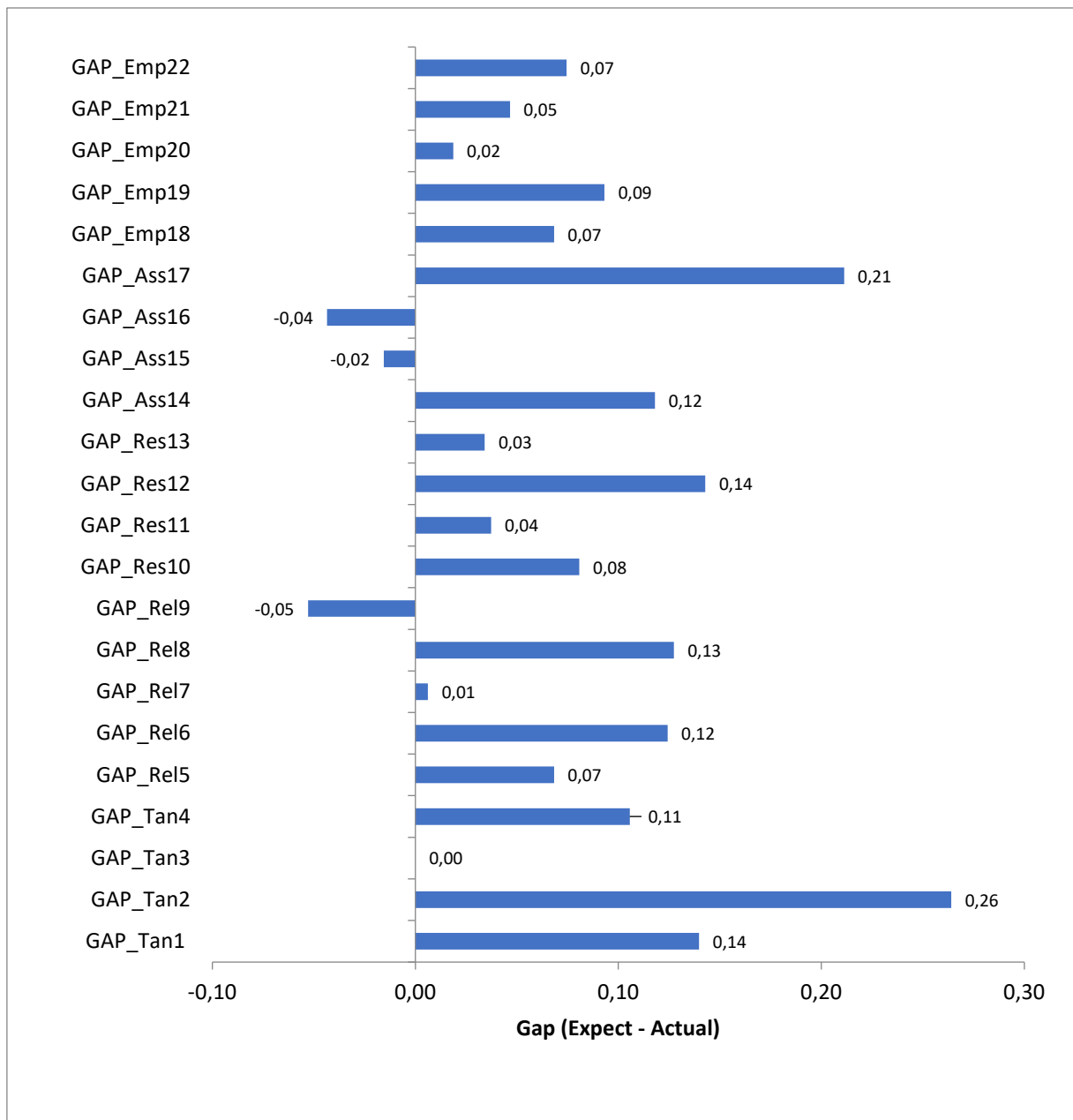


Figure 4.9 Gap scores per statement

The analysis of gaps indicates that there are no significantly large gaps to speak of, however, it illustrates the areas within the DUT Sports Administration with the largest service quality downfalls. The analysis of these gaps is as follows:

➤ Dimension: Tangibles

The term "tangibles" refers to the physical presence of buildings, equipment, employees, and communications resources (Lotz 2009:19). Therefore, this dimension was related to modern-looking equipment, visually appealing facilities, the appearance of staff, and visually appealing equipment. Each of these attributes scores gaps of 0.14, 0.26, 0.00, and 0.11, respectively. The findings indicated that the appearance of staff received the largest degree of satisfaction from respondents and that visually appealing facilities scored the largest gap. Visually appealing facilities (gap = 0.26) was the largest gap in the study. Thus, the DUT Sports Department needs to place more emphasis on improving the visual appearance of sports facilities. All other gaps were minimal, thus stressing members' satisfaction.

➤ Dimension: Reliability

According to Zeithaml *et al.* (2013:89), organisation's ability to deliver a service that is precise and reliable is what they mean by reliability. This dimension entails attributes such as timeous service delivery, commitment to problem solving, get things right on the first attempt, delivering services as promised, and insist on error-free records. The respective gap scores for Reliability were 0.07, 0.12, 0.01, 0.13, and -0.05. Delivering service as promised had the highest gap score of 0.13 and staff get things right the first time had the lowest gap score. The relatively small gaps are an indication of members' satisfaction with Reliability.

➤ Dimension: Responsiveness

Dealing with client requests, questions, and complaints requires careful attention to detail and promptness. Lone and Rehman (2017:1-20) believe that responsiveness refers to the service provider's competence to meet the needs of the customer. Figure 4.4 illustrates that staff will inform members when services will be performed and had a gap score of 0.08. Staff delivers prompt service had a gap score of 0.04. Staff willing to assist members had a gap score of 0.14. Staff make time to attend to members' needs had the lowest gap score of 0.03. Members' approval of DUT Sports Department staff's responsiveness is evident in the marginally small gaps.

➤ Dimension: Assurance

According to Pakurár *et al.* (2019:265-268), assurance is the ability to deliver on promises in a polite and trustworthy manner. Furthermore, Haense and Hofmann (2017:240-248) emphasise the importance of employees' knowledge and competence in customer retention.

As shown in Figure 4.4, ASS 14 behaviour of staff that instils confidence in members had a gap score of 0.12. ASS 15: members feel safe when dealing with staff had a gap score of -0.02. ASS 16: staff are polite had a gap score of -0.04, and ASS 17: staff are competent to answer questions had a gap score of 0.21. This dimension recorded contrasting results as Ass 15 and ASS 16 had the two lowest gap scores in the study, whilst ASS 17 had the second highest gap score in the study. Gap scores for ASS 15 and ASS 16 reflected that members received more than what they expected.

➤ Dimension: Empathy

Zeithaml *et al.* (2013:90-91) state that empathy refers to the organisation and employees' ability to be caring and provide personalised attention to the customers. Staff offers members individual attention had a gap score of 0.07. Sports facility operating hours are convenient for members had a gap score of 0.09. Staff have members' best interests at heart had a gap score of 0.02. Staff understand the specific needs of members had a gap score of 0.05, and sports facilities provide a social opportunity for members had a gap score of 0.07. Here as well, gap scores were minimal, stressing members' satisfaction.

4.10. ANOVA TEST

The gap analysis across demographic variables resulted in the researcher discovering significant gaps in the age groups only. The Anova test below indicates the significant differences found in four service quality dimensions across the age group.

Table 4.18 Anova test

		Sum of Squares	df	Mean Square	F	Sig.
GAP_TAN	Between Groups	5.549	2	2.774	2.920	.055
	Within Groups	302.183	318	.950		
	Total	307.731	320			
GAP_REL	Between Groups	12.205	2	6.102	4.645	.010
	Within Groups	417.797	318	1.314		
	Total	430.002	320			
GAP_RES	Between Groups	9.301	2	4.650	3.751	.025
	Within Groups	394.216	318	1.240		
	Total	403.517	320			
GAP_ASS	Between Groups	10.252	2	5.126	5.155	.006
	Within Groups	315.209	317	.994		
	Total	325.462	319			
GAP_EMP	Between Groups	8.838	2	4.419	3.769	.024
	Within Groups	371.676	317	1.172		
	Total	380.514	319			

Post hoc testing using Tukey's test revealed the following results for significant differences found in four service quality dimensions across the age group. The findings indicated that across the dimensions of Reliability, Responsiveness, Assurance, and Empathy, the age group of 21-23 perceives significantly larger gaps. The age group of 21-23 has already been identified in this study as the dominant age group of respondents. Hence, the probability of more gaps appearing amongst this age group is higher than the other age groupings.

REL 21-23 > 19-20, $p=.027$ (age group 21-23 perceive a sig bigger gap than age group 19-20) and 21-23>24+ (.049)

RES 21-23 > 19-20 (.030)

ASS 21-23 > 19-20 (.016) and 21-23>24+ (.042)

EMP 21-23 > 19-20 (.034)

There is a significant difference in the perceptions of the gap in Empathy across age groups, $F(2, 317) = 3.769$, $p=.024$. Post hoc analysis from Tukey's test shows that the 21-23 age group perceives a significantly bigger gap (.1890) than the 19-20 age group (-.1336), $p=.034$.

There is a significant difference in the perceptions of the gap in Assurance across the age groups, $F(2, 317) = 5.155$, $p=.006$. Post hoc analysis from Tukey's test shows that the 21-23 age group perceives a significantly bigger gap (.1957) than the 19-20 age group (-.1402), $p=.016$. Post hoc analysis from Tukey's test also indicates that the 21-23 age group perceives a significantly bigger gap (.1957) than the 24+ age group (-.2148), $p=.024$.

A significant difference in the perceptions of the gap in Responsiveness across the age groups, $F(2, 318) = 3.751$, $p=.025$. Post hoc analysis from Tukey's test shows that the 21-23 age group perceives a significantly bigger gap (.2405) than the 19-20 age group (-.1032), $p=.030$.

There is a significant difference in the perceptions of the gap in Reliability across the age groups, $F(2, 318) = 4.645$, $p=.010$. Post hoc analysis from Tukey's test shows that the 21-23 age group perceives a significantly bigger gap (.2483) than the 19-20 age group (-.1118), $p=.027$. Post hoc analysis from Tukey's test also indicates that the 21-23 age group perceives a significantly bigger gap (.2483) than the 24+ age group (-.2083), $p=.049$.

4.13. CONCLUSION

Chapter Four presents and analyses the most significant findings of the study, using descriptive and inferential statistics. This chapter applies numerous statistical methods of quantitative data analysis to analyse and interpret data. The results are presented in tabular and graphical forms.

It is established and reported how sports club members' expectations for service quality and their actual experiences at the DUT Sports Department compare. The discrepancies between expectations and actual experiences at the DUT Sports Department are also shown, according to the gap analysis of service dimensions. These findings point out aspects of service quality that should be improved at the DUT Sports Department. The results also show which aspect of tangibles' service needs the most attention from the DUT Sports Department.

The next chapter will present the conclusions, recommendations, limitations, and potential future research of the study.

CHAPTER FIVE – CONCLUSIONS AND RECOMMENDATIONS,

5.1. INTRODUCTION

This chapter provides a summary of the study and is organised into seven sections. Section 5.2 provides the theoretical summary and Section 5.3 the empirical summary of the study. Section 5.4 outlines the attainment of the research objectives. The limitations of the study are acknowledged in Section 5.5 and the suggested recommendations are stated in Section 5.6. The scope for future research is suggested in Section 5.7, and finally, the chapter provides the overall conclusion to the study in Section 5.8.

5.2. SUMMARY OF THE THEORETICAL STUDY

The aim of this study was to assess service quality and customer satisfaction of sports club members at the Durban University of Technology Sports Department.

An assessment of literary works relevant to this study was presented in Chapter Two. An overview of University Sport in South Africa (USSA) was discussed. This highlighted USSA's role as the umbrella body for student sport in South Africa and listed the various sports codes offered by USSA. In addition, sports and recreation at Durban University of Technology were discussed and highlighted that not only did sport provide the opportunity to compete at various levels, but it also provided an avenue to achieve wellness (lead a healthy life) and engage in social cohesion at DUT. Studies have shown that physical activity reduces the risk of psychological, emotional, and physical problems among students. Students from historically disadvantaged communities can also benefit, as participating in sport may reduce social exclusion or isolation.

The chapter also reviewed the appropriate service quality and customer satisfaction literature. The researcher first defined and explained the constructs of service quality and customer satisfaction and thereafter examined the relationship between both constructs. The gap between what customers perceive and what they expect defines

service quality. Customer attitudes or general impressions regarding the organisation and its services' relative superiority or inadequacy can also be referred to as service quality. Members of the DUT sports club consider service quality as an evaluation of how well the service meets their expectations in terms of perceptions of actual service delivery.

The level of the client's happiness with the service provider's product is known as customer satisfaction. Customer satisfaction is a principal element in achieving the goals of organisations and is a basic standard of excellence performed by the service organisation. At the DUT Sports Department, customer satisfaction is impacted by perceptions of the level of service, membership fees, the effectiveness and competence of the employees, and the standard of the facilities. According to the literature, service quality and customer satisfaction are related and have a positive correlation with one another. Customer satisfaction is a metric for measuring service quality, while service quality is a determinant of customer satisfaction.

It was highlighted how important it is for the DUT Sport Department to uphold high standards in terms of customer expectations and perceptions, as well as the qualities and dimensions of service quality. The general marketing of tangible items is viewed as not applying to services. The fundamental tenet of service marketing is that intangible services are distinct from physical commodities. Intangibility, inseparability of production and consumption, heterogeneity, and perishability are used to distinguish them from one another. In the explanation of the SERVQUAL model, the dimensions of service quality—tangibles, assurance, empathy, responsiveness, and reliability—are further addressed.

According to a review of the literature, the SERVQUAL model, which used a comparison of perceptions and expectations using the five aspects of service quality, served as the foundation for measuring customer satisfaction among DUT sports club members. Customer evaluations of service quality are given priority by SERVQUAL. This rating is defined as the difference between what customers expect from a group of service providers and how well they believe a certain supplier performs.

As a result, the literature review covered the gap model of service quality. Based on the discrepancy between customer expectations of the service and their judgements of the performance of the service by the service organisation, this gap model anticipates service quality gaps. This model demonstrates how gaps develop. The most crucial gap to fill in order to increase customer satisfaction is Gap 5, which measures the difference between consumer expectations and views of the quality of the service. The fifth gap, or the discrepancy between customers' expectations and perceptions of service quality, was the subject of this study.

5.3. SUMMARY OF EMPIRICAL STUDY

An analysis and interpretation of the study results were presented in Chapter Four. The Statistical Package for the Social Sciences (SPSS) software was used to analyse and interpret data extracted from the 322 questionnaires received from the DUT sports club members. The results revealed that there were marginal gaps between sports club members' expectations of the service and their perceptions of the service at the DUT Sports Department. However, the one-sample *t*-test of this study revealed that there was a significant agreement on all service quality dimension statements by DUT sports club members. The gaps indicated vital aspects of service quality that need to be addressed by the DUT Sports Department in order to enhance service quality and satisfaction. A summary of the main findings of the empirical study is presented here.

The study generated a response rate of 322 completed questionnaires out of 700, accounting for a rate of 46%. Third-year students accounted for the highest response rate of 106 (32.09%), followed by second-year students with 103 (32%). With third-year students being the majority of respondents (Sports Club Members), the rationale for this study was justified. This implies that third-year respondents were in a better position to rate the service quality of the Sports Administration at DUT as they had been exposed to the services of the Sports Administration for a longer period. 94.7 % of respondents were students. 52.5% of respondents resided in a DUT residence. The study had more male respondents, 178 (55.3%) as opposed to female respondents, 143 (44.4%). Respondents from the African race group were the majority in this demographic category with 93.8%.

A frequency response for service quality dimensions for expectations and actual experiences was done to determine whether there is a significant agreement for service quality dimension statements. The subsequent results reveal a significant agreement across all service quality dimension statements by respondents for both expectations and actual experiences. This finding of a significant agreement in service quality statements by respondents was verified in the preceding one-sample *t*-Tests and one-sample statistics for expectations and actual experiences. where all mean scores are >4 (the study's central score).

Cronbach's alpha was used to compute reliability in the study. An acceptable measurement to achieve reliability is a reliability coefficient of 0.07 or higher. The results showed that reliability had been achieved as all reliability composite scores were >0.07. Factor analysis was applied to achieve validity in the study. The 22 items assessing expectations were subjected to factor analysis using Promax rotation to ascertain the structure of the data. The data were sufficient for successful and reliable factor extraction, according to a significant Bartlett's test (*p*.05) and a Kaiser-Meyer-Olkin measure of sampling adequacy (KMO) value of.951.

In order to calculate gap scores across service quality dimensions and their respective attributes, the formula ***GAP = Expectations – Actual Experience*** was employed. A dimension analysis with gap scores follows to illustrate the mean scores for each statement, as well as the gap scores (the difference between the expectations and perceptions) for each component. All mean scores were >4, (revealing a significant agreement with the statements). There were no significantly large gaps to be reported. In the preceding section of Overall Mean Scores per Dimension, the findings indicated that there were no significant gaps across all five dimensions. The DUT Sports Department's mean scores were analysed, and the results showed that the average expectation across all five service quality characteristics was 5.86. The actual mean score for experience is 5.81. The gap in each of the five dimensions is, on average, 0.05. The narrow gap suggests that there was little variance between respondents' expectations and actual experiences. Hence, this study revealed that there was a high level of customer satisfaction of service quality at the DUT Sport Administration. Tangibles had the largest gap of 0.10. The dimensions of assurance and empathy had the smallest gaps of 0.01 each.

Test – One-Sample t-tests were used to test if the gaps were relatively different from “0”. The findings indicated that the only item, Tangibles 2 – visually appealing facilities (.001), showed a significant gap. In this case, gap <0 indicated that what DUT Sports Club members get is significantly below the standard they expect.

An analysis of gaps for each statement per dimension confirmed that there were no significantly large gaps to speak of but indicated areas that needed immediate intervention by the DUT Sports Department. Tangibles relate to modern looking equipment, visually appealing facilities, the appearance of staff, and visually appealing equipment. Each of these attributes scored gaps of 0.14, 0.26, 0.00, and 0.11, respectively. Reliability entails attributes such as timeous service delivery, commitment to problem solving, get things right on the first attempt, delivering services as promised, and insist on error-free records. The respective gap scores for reliability were 0.07, 0.12, 0.01, 0.13, and -0.05. The dimension of responsiveness reflected that staff will inform members when services will be performed had a gap score of 0.08. Staff delivers prompt service had a gap score of 0.04. Staff willing to assist members had a gap score of 0.14. Staff make time to attend to members’ needs had the lowest gap score of 0.03.

In the dimension of assurance, behaviour of staff instils confidence in members had a gap score of 0.12. Members feel safe when dealing with staff had a gap score of -0.02. Staff are polite had a gap score of -0.04, and staff are competent to answer questions had a gap score of 0.21. The dimension of empathy showed that staff offers members individual attention had a gap score of 0.07. Sports facility operating hours are convenient for members had a gap score of 0.09. Staff have members’ best interests at heart had a gap score of 0.02. Staff understands the specific needs of members had a gap score of 0.05, and sports facilities provide a social opportunity for members had a gap score of 0.07.

5.4. ATTAINMENT OF RESEARCH OBJECTIVES

Research objectives served as the motivation to conduct the study. The attainment of the study’s research objectives is discussed below.

5.4.1. TO EXAMINE DUT SPORTS CLUB MEMBER' EXPECTATIONS OF SPORTS SERVICE QUALITY.

The literature on the crucial characteristics and the five dimensions of service quality was reviewed in Chapter Two. Data on customer expectations were identified, tested, and analysed in Chapter Four. By means of a SERVQUAL questionnaire and GAP analysis, the researcher was able to measure the gap between sports club members' expectations and actual experiences across service quality dimensions.

Tangibles showed an overall mean score for expectations of 5.80, and an overall mean score for actual experiences of 5.70. The gap score for tangibles was 0.10. Reliability had an overall mean score for expectations of 5.72, and an overall mean score for actual experiences of 5.68. The gap score for reliability was 0.04. Responsiveness had an overall mean score for expectations of 5.86, and an overall mean score for actual experiences of 5.80. The gap score for responsiveness was 0.06. Assurance showed an overall mean score for expectations of 5.99, and an overall mean score for actual experiences of 5.98. The gap score for assurance was 0.01. Empathy had an overall mean score for expectations of 5.92, and an overall mean score for actual experiences of 5.91. The gap score for empathy was 0.01.

An analysis of the mean scores for the DUT Sport Administration indicated that the overall expectations of the service quality dimension were 5.86. The actual experience mean score was 5.81. The average gap for all five dimensions was -0.05. The results revealed that sports club members' satisfaction with service delivery at the DUT Sports Department was good because of the relatively small gaps that existed between what they expected and what they received. Therefore, the first research objective had been achieved.

5.4.2. TO EXAMINE DUT SPORTS CLUB MEMBERS' PERCEPTION OF SPORTS SERVICE QUALITY

In Chapter Four, sports club members' perceptions of sports service quality were measured according to members' perceptions of the five service quality dimensions. Tangibles showed an overall mean score for expectations of 5.80, and an overall mean score for actual experiences of 5.70. The gap score for tangibles was 0.10. Reliability

had an overall mean score for expectations of 5.72, and an overall mean score for actual experiences of 5.68. The gap score for reliability was 0.04. Responsiveness had an overall mean score for expectations of 5.86, and an overall mean score for actual experiences of 5.80. The gap score for responsiveness was 0.06. Assurance showed an overall mean score for expectations of 5.99, and an overall mean score for actual experiences of 5.98. The gap score for assurance was 0.01. Empathy had an overall mean score for expectations of 5.92, and an overall mean score for actual experiences of 5.91. The gap score for empathy was 0.01.

The results indicated that the overall mean score for actual experience (perception) was 5.81, which was lower than the average mean score for expectations, 5.86. The relatively small gap of -0.05 indicated that members' expectation exceeded their perceptions of sports service quality. Hence, the second research objective was achieved.

5.4.3. TO EVALUATE THE GAPS BETWEEN SERVICE QUALITY AND CUSTOMER SATISFACTION AT DUT SPORTS CLUBS.

In the theoretical summary of the study, the researcher alluded that service quality was a determinant of customer satisfaction, and customer satisfaction was a measure of service quality. Hence, these two constructs were inter-related as the measurement of one (service quality) determined the success rate or desired effect of the other (customer satisfaction). In order to evaluate the gaps between service quality and customer satisfaction at the DUT Sports Clubs, GAP analysis was applied using the mean score of expectations and actual experiences across the service quality dimensions. The results of the GAP analysis revealed that expectations exceeded actual experiences across all service quality dimensions. The overall gap scores for each service quality dimension show that Tangible was 0.10, Reliability was 0.04, Responsiveness was 0.06, Assurance was 0.01, and Empathy was 0.01. Tangibles had the largest gap of -0.10 whilst the Assurance, Responsiveness, Empathy, and Reliability had relatively small gaps. This analysis revealed that sports club members at the DUT Sports Department received lower service quality required to satisfy their needs. Hence, the average gap between service quality (service quality) and customer

satisfaction (actual experiences) across all service quality dimensions was -0.05. Therefore, the third research objective was achieved.

5.5. LIMITATIONS

The study provided useful insights that could influence the degree of service quality at the DUT Sports Department. While every effort had been made to ensure that the study results are valid and credible so that practical conclusions and recommendations could be drawn, some challenges still remain.

1. The study focused on DUT Sports Club members on the Durban and Midlands Campuses and relied on one method of data collection, namely, quantitative.
2. Although this was a census study the study results are based on a response rate of 322 of the total population of 700 sports club members. However, although this may be a limitation comparatively speaking, the sample size remains statistically significant and yielded a response rate of 46%.

5.6. RECOMMENDATIONS

In accordance with the findings of this study, to improve customer satisfaction and service quality and close gaps identified across service quality dimensions, the following recommendations are suggested:

1. Customer satisfaction is the responsibility of all employees within the DUT Sports Department. Hence, employees should possess the necessary skills and competencies to achieve customer satisfaction. Therefore, it is important that employees receive the necessary skills training to address any shortfalls in efficient customer service. Regular monitoring of customer satisfaction should be encouraged.
2. In order to attract elite sportspersons from other universities in South Africa to DUT and enhance the image of DUT Sport, it is imperative that the DUT Sports Department invests in upgrading sports facilities that are both aesthetically pleasing and satisfy the demands of high-performance programmes. High-performance programmes are aimed at developing and conditioning athletes, through the use of “state-of-the-art

equipment”, to compete at the highest levels. An engagement with DUT Management, Corporate Affairs, and the Finance Department is recommended to brainstorm proposals for sports facility upgrades. The upgrade of sports facilities also potentially serves as an avenue for third-stream income for the sports department by hiring out high-quality facilities to local and national sports federations.

3. It is imperative that employees embrace the concept of reliability in order to achieve customer satisfaction and enhance service quality. The literature points to reliability as being the most important determinant of perceptions of service quality. This may entail providing services that were promised, being committed to attending to and solving sports club members’ problems and committing to delivering services timeously. The DUT Sports Department can also prioritise handling sports club members’ complaints in a professional manner. The members’ best interests should always be considered when dealing with issues.

4. The DUT Sports Department should conduct regular service quality assessments to evaluate customer satisfaction levels. This practice will enable the department to identify areas of concern and to implement remedial measures.

5. The acquisition of knowledge on how sports club members feel about service quality in sport will assist the DUT Sports Department implement strategies to enhance the sports product at DUT.

5.7. SCOPE FOR FUTURE STUDY

It is suggested that another study be conducted using both qualitative and quantitative methods across all UOT’s in South Africa that will explore service delivery and its effects on customer satisfaction at the DUT Sports Department.

Moreover, further study should involve a broader base of respondents, including external users of DUT’s sports facilities, with the aim of providing a more extensive evaluation of the service quality levels of the Sports Department. These current external uses of sports facilities comprise various sporting clubs and sports federations that hire DUT’s sports facilities for leagues and tournaments. The involvement of a

broader base population would provide a significantly stronger foundation for making better inferences regarding quality service delivery.

5.8. CONCLUSION

This study highlights the expectations and perceptions of service quality at the Durban University of Technology Sports Department. Issues relating to the delivery of service quality and the gaps in service quality were discussed. The study findings indicate that whilst levels of service quality at the DUT Sports Department were of an acceptable standard due to a significant agreement across all service quality dimension statements, marginal GAPS between expected and perceived service delivery were detected. As a result, the study identified areas where customer satisfaction could be enhanced by improving service quality. A set of recommendations was formulated as a result.

The recommendations mentioned in this study outline some potential actions that the administration of the DUT Sports Department could possibly take to increase customer satisfaction. Employees should receive the necessary skills training to address any shortfalls in customer service efficiency. In order to attract elite sportspersons from other universities in South Africa to DUT and enhance the image of DUT Sport, it is imperative that the DUT Sports Department invests in upgrading sports facilities that are both aesthetically pleasing and satisfy the demands of high-performance programmes. Providing superior service quality that leads to customer satisfaction can give the DUT Sports Department a competitive advantage. The acquisition of knowledge on how sports club members feel about service quality in sport will assist the DUT Sports Department to implement strategies to enhance the sports product at DUT.

It is anticipated that this study will have a beneficial effect on the provision of high-quality services, helping the administration of the DUT Sports Department to increase customer satisfaction. The researcher, therefore, concludes that although findings indicate that the service gaps are relatively small and that sports club members are satisfied with the current state of service quality at the DUT Sports Department, the

recommendations made are aimed at closing these existing gaps and increasing the level of service quality.

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APPENDICES

5.1. ANNEXURE 1: COVERING LETTER



Faculty of Management Sciences

Department of Marketing and Retail Management

29 September 2019

I, Indresain Pather, am conducting a Research study titled "Service quality of the Sports Department at Durban University of Technology" for my Master's in Management Sciences (Marketing) at the Durban University of Technology.

I would appreciate your co-operation in completing a questionnaire. The completion of the questionnaire should not take you longer than 20 minutes. Please be assured that your identity will remain anonymous, and your response will remain confidential.

Participation in this research is strictly voluntary and you may withdraw from the study at any time without giving any reasons. If you have any questions or issues regarding the study that requires clarity and you would like to talk to someone other than the researcher, you may contact my supervisor in the Department of Marketing and Retail Management, 7th floor, B Block, M.L. Sultan Campus at 031 3735391.

Yours sincerely

Indresain Pather

Student

Contact Details: 031 373 2385 / 0837785334

Patherir@dut.ac.za

Prof. S. Penceliah

Supervisor / Promoter

Contact Details: 031 3735391

Dr. Elvis Madondo

Co-Supervisor/Co-Promoter

Contact Details: 0633508280

5.2. ANNEXURE 2: LETTER OF INFORMATION



LETTER OF INFORMATION

Title of the Research Study: Service quality of the Sports Department at Durban University of Technology

Principal Investigator/s/researcher: Indresain Pather

Co-Investigator/s/supervisor/s: Prof S. Penceliah

Brief Introduction and Purpose of the Study: The purpose of this study is to assess service quality of the Sports Department at Durban University of Technology.

Outline of the Procedures: The researcher will utilise various DUT Sports Clubs' committees to hand out questionnaires to respondents. The questionnaire will require no more than 20 minutes to complete. Participation by respondents is voluntary and respondents are expected answer the questionnaire truthfully and honestly. Once completed, the questionnaires will be collected from the respondents.

Risks or Discomforts to the Participant: No foreseeable risks or discomforts will be associated with this study.

Benefits: The researcher will benefit through obtaining a Master's in Management Sciences (Marketing). Key findings of this study will be made available to the DUT repository where the dissertation can be accessed. The DUT Department of Sport Administration will benefit by improving on and maintaining good Service Quality and Customer Satisfaction of Sports Club Members.

Reason/s why the Participant May Be Withdrawn from the Study: Participation in this study is voluntary and there will be no consequences for the respondents should they chose to withdraw from the study.

Remuneration: There will be no remuneration for respondents

Costs of the Study: No costs will be incurred by respondents to participate in this study

Research-related Injury: There are no risks or discomfort associated with this study hence no research-related injuries are envisaged.

Persons to Contact in the Event of Any Problems or Queries: (Supervisor and details) please contact the researcher (031 3732385.), my supervisor (031 373 5391) or the Institutional Research Ethics administrator on 031 373 2900. Complaints can be reported to the DVC: RIE, Prof S Moyo at dvcrie@dut.ac.za

General:

Potential participants will be assured that participation is voluntary and the approximate number of participants to be included should be disclosed. A copy of the information letter will be issued to participants.

5.3. ANNEXURE 3: CONSENT



CONSENT

Statement of Agreement to Participate in the Research Study:

I hereby confirm that I have been informed by the researcher, Indresain Pather, about the nature, conduct, benefits, and risks of this study - Research Ethics Clearance Number: IREC 137/20.

I have also received, read, and understood the above written information (Participant Letter of Information) regarding the study.

I am aware that the results of the study, including personal details regarding my sex, age, date of birth, initials and diagnosis will be anonymously processed into a study report.

In view of the requirements of research, I agree that the data collected during this study can be processed in a computerised system by the researcher.

I may, at any stage, without prejudice, withdraw my consent and participation in the study.

I have had sufficient opportunity to ask questions and (of my own free will) declare myself prepared to participate in the study.

I understand that significant new findings developed during the course of this research which may relate to my participation will be made available to me.

Full Name of Participant

Date

Time

Signature / Right
Thumbprint

I, Indresain Pather herewith confirm that the above participant has been fully informed about the nature, conduct and risks of the above study.

Indresain Rama Pather

04/11/22

Full Name of Researcher

Date

Signature

Full Name of Witness (If applicable) Date

Signature

Full Name of Legal Guardian (If applicable) Date

Signature

Please note the following:

Research details must be provided in a clear, simple, and culturally appropriate manner and prospective participants should be helped to arrive at an informed decision by use of appropriate language (grade 10 level - use Flesch Reading Ease Scores on Microsoft Word), selecting of a non-threatening environment for interaction and the availability of peer counseling (Department of Health, 2004)

If the potential participant is unable to read/illiterate, then a right thumb print is required and an impartial witness, who is literate and knows the participant e.g., parent, sibling, friend, pastor, etc. should verify in writing, duly signed that informed verbal consent was obtained (Department of Health, 2004).

If anyone makes a mistake completing this document e.g., wrong date or spelling mistake a new document must be completed. The incomplete original document must be kept in the participant file and not thrown away and copies thereof must be issued to the participant.

References:

Department of Health: 2004. *Ethics in Health Research: Principles, Structures and Processes* <http://www.doh.gov.za/docs/factsheets/guidelines/ethnics/>

Department of Health. 2006. *South African Good Clinical Practice Guidelines*. 2nd Ed. Available at: http://www.nhrec.org.za/?page_id=14

5.4. ANNEXURE 4: QUESTIONNAIRE

QUESTIONNAIRE

Service quality of the Sports Department at Durban University of Technology

Thank you for agreeing to participate in this study. The questions in this questionnaire pertain to Service quality of the Sports department at the Durban University of Technology. This questionnaire consists of two (2) sections – A and B. The questionnaire should take you no more than 15 minutes to complete.

SECTION A:

			How do you rate the service level you EXPECT?								How do you rate the service you ACTUALLY RECEIVE?						
			Strongly Disagree				Strongly Agree				Strongly Disagree				Strongly Agree		
Tangibles	1	The Sports Facilities has modern looking equipment	1	2	3	4	5	6	7		1	2	3	4	5	6	7
	2	Sports Facilities are visually appealing	1	2	3	4	5	6	7		1	2	3	4	5	6	7
	3	Sport Administration Employees are neat in appearance	1	2	3	4	5	6	7		1	2	3	4	5	6	7
	4	Sport Equipment is visually appealing	1	2	3	4	5	6	7		1	2	3	4	5	6	7
Reliability	5	Staff commits to delivering services timeously	1	2	3	4	5	6	7		1	2	3	4	5	6	7
	6	Sport Administration Staff are committed to solving members' problems	1	2	3	4	5	6	7		1	2	3	4	5	6	7
	7	Staff get things right on the first attempt	1	2	3	4	5	6	7		1	2	3	4	5	6	7
	8	Staff provides services at the time they promise to do so	1	2	3	4	5	6	7		1	2	3	4	5	6	7
Responsiveness	9	Staff will insist on error-free records	1	2	3	4	5	6	7		1	2	3	4	5	6	7
	10	Staff will inform members exactly when services will be performed	1	2	3	4	5	6	7		1	2	3	4	5	6	7
	11	Staff delivers prompt service	1	2	3	4	5	6	7		1	2	3	4	5	6	7
	12	Staff always willing to assist members	1	2	3	4	5	6	7		1	2	3	4	5	6	7
Assurance	13	Staff make time to attend to members' requests	1	2	3	4	5	6	7		1	2	3	4	5	6	7
	14	Behaviour of staff instils confidence in members	1	2	3	4	5	6	7		1	2	3	4	5	6	7
	15	Members feel safe when dealing with staff	1	2	3	4	5	6	7		1	2	3	4	5	6	7
	16	Staff are polite	1	2	3	4	5	6	7		1	2	3	4	5	6	7

Empathy	17	Staff are competent enough to answer questions	1	2	3	4	5	6	7		1	2	3	4	5	6	7
	18	Staff offers members individual attention	1	2	3	4	5	6	7		1	2	3	4	5	6	7
	19	Sports Facility operating hours are convenient for members	1	2	3	4	5	6	7		1	2	3	4	5	6	7
	20	Staff have members' best interests at heart	1	2	3	4	5	6	7		1	2	3	4	5	6	7
	21	Staff understands the specific needs of their members	1	2	3	4	5	6	7		1	2	3	4	5	6	7
	22	Sports Facilities provide a social opportunity for members	1	2	3	4	5	6	7		1	2	3	4	5	6	7

SECTION B: CLASSIFICATION DATA

Please tick the appropriate box

1. Please indicate your level of study:

First Year	Second Year	Third Year	Post Grad. Student

2. Staff or Student

Staff	Student

3. Please indicate whether you reside at a DUT residence:

Yes	No

4. Indicate your Gender:

Male	Female

5. Indicate your Race Group:

African	Indian	Coloured	White

6. Indicate you Age:

18 - 20	21 - 23	24 +

5.5. ANNEXURE 5: GATEKEEPERS LETTER



*Directorate for Research and Postgraduate Support
Durban University of
Technology Tromso Annexe,
Steve Biko Campus
P.O. Box 1334, Durban 4000
Tel.: 031-
3732576/7
Fax: 031-
3732946*

3 June 2021

Mr. Indresain Rama Pather
c/o Department of Marketing and Retail Management
Faculty of Management Sciences
Durban University of Technology

Dear Mr. Pather

PERMISSION TO CONDUCT RESEARCH AT THE DUT

Your email correspondence in respect of the above refers. I am pleased to inform you that the Institutional Research and Innovation Committee (IRIC) has granted **Gatekeeper Permission** for you to conduct your research “Service quality of the Sports department at a University of Technology” at the Durban University of Technology. **Kindly note that this letter must be issued to the IREC for approval before you commence data collection.**

The DUT may impose any other condition it deems appropriate in the circumstances having regard to nature and extent of access to and use of information requested.

We would be grateful if a summary of your key research findings would be submitted to the IRIC on completion of your studies.

Kindest regards.
Yours sincerely

DR LINDA ZIKHONA LINGANISO

DIRECTOR: RESEARCH AND POSTGRADUATE SUPPORT DIRECTORAT

5.6. ANNEXURE 6: PROOF OF EDITING

Sury Bisetty Academic Editing Services

CIPC No. 2021/360666/07



The pen is mightier than the sword

To whom it may concern

I edited the thesis titled Service quality of the sports department at the Durban University of Technology by Indresain R. Pather, student number 1915250, submitted in fulfillment of the requirements for the Degree of Master of Management Sciences: Marketing in the Faculty of Management Sciences at the Durban University of Technology.

Sury Bisetty

Professional Language and Technical

Editor 28 October 2022

CONTACT DETAILS

Email: surybisetty11@gmail.com

Cell no: 0844932878

Tel.: 031 7622 766

MEMBER OF:

Professional Editor's Guild (BIS002)

South African Council of Educators (222277)

SAMEA (761237008553)

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Complete writing, editing master class.

ELSEVIER – Editor's guide to reviewing articles

Disclaimer: Please note, I provided language and technical editing as per discussion with the client. The content and structure of the paper were not amended in any way. The edited work described here may not be identical to that submitted. The author, at his/her sole discretion, has the prerogative to accept, delete, or change amendments/suggestions made by the editor before submission.

NB – in keeping with POPIA regulations all work related to this thesis will be deleted 3 months after completion.

5.7. TURN-IT-IN REPORT

Service quality of the sports department at
the Durban University of Technology

ORIGINALITY REPORT

14%

SIMILARITY INDEX

8%

INTERNET SOURCES

6%

PBLICATIONS

8%

STUDENT PAPERS

5.8. IREC APPROVAL



14 June 2021
Mr. I R Pather
1 Melrose Drive
Brindhaven
Verulam
4339

Dear Mr. Pather

Service quality of the Sports department at the Durban University of Technology
Ethics Clearance number IREC 137/20

The Institutional Research Ethics Committee acknowledges receipt of your gatekeeper permission letter.
Please note that FULL APPROVAL is granted to your research proposal. You may proceed with data collection.

Any adverse events [serious or minor] which occur in connection with this study and/or which may alter its ethical consideration must be reported to the IREC according to the IREC Standard Operating Procedures (SOP's).

Please note that any deviations from the approved proposal require the approval of the IREC as outlined in the IREC SOP's.

Yours Sincerely

Prof J K Adam
Chairperson: IREC

