

# Evaluating Service Quality and Customer Satisfaction at the DUT Sports Department: A GAP Analysis Approach

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## ABSTRACT

Service quality is pivotal in determining customer satisfaction, especially in sports management contexts. This study investigates the gap between member expectations and actual service experiences at the DUT Sports Department. A quantitative approach was employed, surveying 322 out of 700 sports club members. The study utilized GAP analysis to assess five service quality dimensions: Tangibles, Reliability, Responsiveness, Assurance, and Empathy. Results indicated an overall average gap score of -0.05, suggesting that actual service quality fell short of member expectations. The Tangibles dimension had the largest gap (0.10), indicating a need for improvements in facility aesthetics. Assurance and Empathy dimensions showed minimal gaps (0.01 each), reflecting satisfactory service in staff behaviour and personalized attention. Based on these findings, recommendations include investing in facility upgrades to enhance visual appeal, providing ongoing staff training to improve service efficiency, and implementing regular service quality assessments to address and close gaps. These measures are anticipated to enhance member satisfaction and align service delivery with expectations.

**Keywords:** Service Quality, Customer Satisfaction, GAP Analysis, Sports Management, Tangibles, Reliability, Responsiveness, Assurance, Empathy, Facility Upgrades



## INTRODUCTION

Providing high-quality sports services is a critical component of sports programs at universities of technology (Zeithaml, Bitner, & Gremler, 2013). For effective management, understanding and enhancing perceived service quality is essential (Parasuraman, Zeithaml, & Berry, 1985). This involves recognizing and addressing deficiencies in service delivery to ensure that sports services meet the evolving needs of students and athletes (Grönroos, 1990). At universities of technology, the perceived value of sports participation must align with or exceed that of other extracurricular activities (Yoon & Uysal, 2005). If sports services fall short, they may be deemed unsatisfactory compared to alternative options (Funk & James, 2006). Therefore, the sports department must deliver high-quality services to attract and retain talented athletes, thereby enhancing the profile and competitiveness of the university's sports clubs (Conte, Caniels, & Schijns, 2016). Service quality is a vital concern for sports managers (Kwortnik & Thompson, 2009). Ensuring that services meet user expectations requires continuous feedback and adaptation (Hoffman & Bateson, 2006). Identifying weaknesses and implementing corrective measures initiates a cycle of ongoing improvement within the sports department (Lotz, 2009). By maintaining high standards, the department can better compete for top athletes and strengthen its sports programs (Pakurár *et al.*, 2019).

This study aims to evaluate service quality and customer satisfaction among sports club members at the Durban University of Technology. Utilizing the SERVQUAL model and the Gaps Model of Service Quality developed by Parasuraman, Zeithaml, and Berry (1985), this research will assess discrepancies between expected and perceived service levels. These frameworks will guide the analysis to uncover any significant service gaps and offer recommendations to bridge them (Parasuraman, Zeithaml, & Berry, 1985). By applying these theories, this study will provide valuable insights into improving service quality in university sports programs and contribute to the broader literature on service quality in higher education sports settings (Jadav & Rai, 2015; Rahman, 2019).

## LITERATURE REVIEW

### SERVICE QUALITY

Service quality has garnered significant attention and debate in the service marketing literature. According to Parasuraman, Zeithaml, and Berry (1988), service quality is defined by the gap between customers' expectations and their perceptions of service delivery. Lovelock and Wirtz (2011) describe service quality as the overall attitude or opinion that customers have about an organization and its services, reflecting their comparative assessment of good or bad service quality. Ferrell and Hartline (2012) argue that service quality gauges how well a company's products outperform its competitors or internal benchmarks. Ramya (2019) emphasizes that "service quality" combines the concepts of "service" and "quality," with "service" being any intangible action or benefit provided by one party to another. Haddad (2017) further describes service quality as a state of mind or general impression about the adequacy or superiority of an organization and its services, with consumer expectations playing a crucial role in shaping their perceptions. These definitions highlight that service quality is assessed based on how well service delivery aligns with customer expectations, thereby impacting customer satisfaction. Exploring service quality in sports contexts, including facilities and services, offers valuable insights into how service quality and customer satisfaction influence sports participants.

### CUSTOMER SATISFACTION

Customer satisfaction is a critical determinant of organizational success and a key indicator of service quality (Theresia & Bangun, 2017). It reflects how well customer expectations are met or exceeded. Al-Azzam (2015) asserts that customer satisfaction is measured by comparing expected service performance with actual experiences. When performance meets or exceeds expectations, customer satisfaction is achieved, leading to positive perceptions, increased loyalty, and repeat patronage. In the sports industry, the quality of interactions between customers and service providers significantly influences customer satisfaction. Conte, Caniels, and Schijns (2016) suggest that satisfaction arises from a service experience that surpasses expectations. In sports settings, the quality of facilities,

services, and interactions directly affects satisfaction levels and participation rates. Numerous studies demonstrate a strong correlation between service quality and customer satisfaction. High service quality often leads to higher satisfaction, while deficiencies in service quality can result in dissatisfaction. Mohammed *et al.* (2019) emphasize that customer satisfaction drives repeat business, brand loyalty, and positive word-of-mouth—key factors for organizational success. Rahman (2019) notes that while service quality and customer satisfaction are distinct constructs, they are closely related, with effective service quality management enhancing customer satisfaction and overall performance.

### **SERVQUAL MODEL**

Various models have been developed to assess service quality, including Rust and Oliver's (1994) three-component model, Grönroos's (2007) Nordic model, and the SERVQUAL model by Parasuraman, Zeithaml, and Berry (1985). Among these, the SERVQUAL model is the most widely applied tool for evaluating service quality (Chaguluka, 2018). The SERVQUAL model measures the gap between customer expectations and their perceptions of actual service delivery. It operates on the premise that service quality is determined by discrepancies between expected and perceived service. The model evaluates service quality across five dimensions:

1. **Tangibles:** The physical appearance of facilities, equipment, and personnel.
2. **Reliability:** The ability to perform the promised service dependably and accurately.
3. **Responsiveness:** The willingness to assist customers and provide prompt service.
4. **Assurance:** The competence, courtesy, and credibility of employees.
5. **Empathy:** The provision of caring, individualized attention to customers (Ganiyu, 2016).

Respondents rate their expectations and perceptions on a seven-point scale, from “strongly disagree” to “strongly agree,” for each dimension. This dual-assessment approach helps organizations identify specific areas for improvement in service quality.

### **GAPS MODEL OF SERVICE QUALITY**

The Gaps Model of Service Quality, introduced by Parasuraman, Zeithaml, and Berry (1985), provides a framework for identifying and addressing discrepancies between customer expectations and actual service delivery. The model identifies five critical gaps:

1. **Knowledge Gap:** The difference between customer expectations and management's understanding of those expectations, often due to inadequate research or communication (Polyakova & Mirza, 2016).
2. **Policy Gap:** When management's understanding of customer needs is not translated into appropriate service standards or policies (Wang & Shieh, 2016).
3. **Delivery Gap:** The difference between service quality specifications and actual service delivery, resulting from issues such as staff training or operational inefficiencies (Jadav & Rai, 2015).
4. **Communication Gap:** Discrepancies between what is promised in external communications and what is actually delivered (Zhu & Meyer, 2017).
5. **Customer Gap:** The difference between customer expectations and their perceptions of the received service, reflecting the overall effectiveness of service delivery (Parasuraman, 1988).

This study employs the SERVQUAL model and the Gaps Model to assess service quality in the Sports Department at Durban University of Technology. By applying these models, the research aims to identify specific service quality gaps and provide actionable recommendations to enhance service delivery, increase sports participation, and improve satisfaction among university students. This research also contributes to the broader academic understanding of service quality in higher education sports programs.

## RESEARCH METHODS

The research design, as articulated by Burns and Bush (2014), entails the strategic planning of conditions for data collection and analysis to optimize both economic efficiency and relevance to the study's objectives. This study adopted a cross-sectional, descriptive design employing a quantitative approach to efficiently collect and analyse data. Given the census nature of the study, data were gathered from the entire population of interest (students and staff), comprising 1,200 university sports club members—879 from the Durban campus and 321 from the Pietermaritzburg campus—based on membership records. To evaluate sports service quality, a modified version of the SERVQUAL instrument was utilized. This instrument, originally developed by Parasuraman, Zeithaml, and Berry (1985), is a validated and widely applied tool for assessing service quality across diverse sectors (Parasuraman et al., 1985). Data analysis was conducted using the Statistical Package for Social Sciences (SPSS) version 25, with results presented through numerical and graphical summaries. Descriptive statistical analysis was employed to characterize data, including distribution, central tendency, and dispersion (O'Leary, 2017; Kenton, 2019). Validity of the study was ensured through content, criterion, and construct validity, with factor analysis applied to distil data into interpretable patterns (Seyoum, 2017; Zikmund & Babin, 2007). Reliability was assessed using Cronbach's alpha to confirm the consistency of measurements across the multiple-question Likert scale surveys (Seyoum, 2017). The study was delimited to registered sports club members at the Durban and Pietermaritzburg campuses, and findings are specific to this population. The study faced limitations due to COVID-19 restrictions, which prevented participation by some members. Ethical considerations were addressed by ensuring participant anonymity and confidentiality, adhering to university protocols, and obtaining gatekeeper permission from the Director of Research and Postgraduate Support. Data access was restricted to the researcher and statistician, ensuring compliance with ethical standards throughout the research process.

## RESULTS

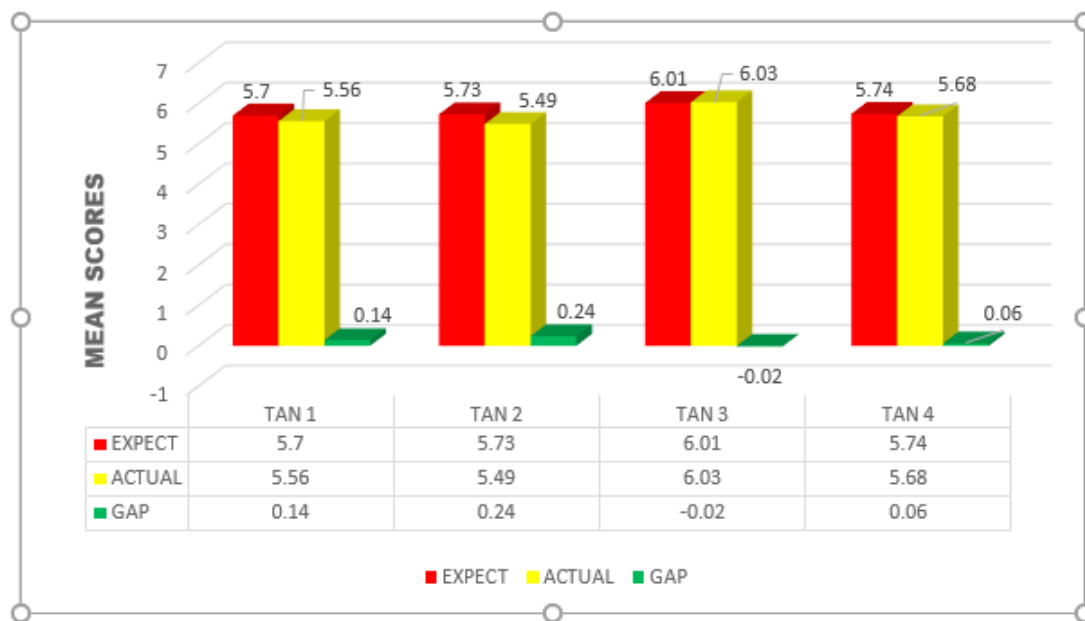
According to the gaps model proposed by Parasuraman *et al.* (1985:42), which evaluates service quality based on the difference between customer expectations and actual service delivery, this study examines 22 service quality attributes across five dimensions. The gap score for each attribute is calculated using the formula  $GAP = Expectations - Actual Experience$ .

### DIMENSION ANALYSIS WITH GAP SCORES

Here, we analyse the gap scores for each service quality dimension. Tables and figures present average scores for each attribute and the associated gap scores, which represent the difference between expectations and perceptions. This analysis covers all five service quality dimensions. The gap scores indicate how well DUT Sports Club members' perceptions align with their expectations for service quality at the DUT Sport Administration. A positive gap score ( $>0$ ) signifies that members received less than expected, while a negative gap score ( $<0$ ) suggests that members received more than anticipated.

### DIMENSION: TANGIBLES

Zeithaml *et al.* (2013:91) describe tangibles as the physical elements—such as facilities, equipment, personnel, and communication materials—that customers use to evaluate service quality. These tangible aspects help customers form their impressions of service quality through direct observation or visual representation. For DUT Sports, tangibles include the appearance of sports facilities, offices, marketing materials, staff presentation, and sports equipment. Figure 1 displays the mean scores for both expected and actual experiences related to these tangible attributes, along with their corresponding gap scores.



**FIGURE 1. TANGIBLE MEAN SCORES WITH GAP SCORES**

#### ***TAN 1: Modern-Looking Sports Equipment***

Figure 1 presents data on respondents' expectations and actual experiences regarding the modernity of sports equipment at the DUT Sports Department. The mean expectation score for TAN 1 was 5.70, while the mean actual experience score was 5.56 (on a 1 to 7 scale). The resulting mean gap score was 0.14. This small gap indicates that respondents are generally satisfied with the standard of the equipment.

#### ***TAN 2: Visual Appeal of Sports Facilities***

TAN 2 aimed to assess whether DUT Sports Department's facilities meet the respondents' expectations for visual appeal. According to Figure 1, the mean expectation score was 5.73, compared to an actual experience score of 5.49, resulting in a mean gap score of 0.24. This is the largest gap among the attributes, suggesting that respondents are somewhat dissatisfied with the visual appeal of the facilities. Improving the aesthetics of the facilities is crucial for enhancing service quality and should be addressed promptly by the DUT Sports Department.

#### ***TAN 3: Neat Appearance of Sport Administration Employees***

For TAN 3, respondents' expectations for employee appearance had a mean score of 6.01, while their actual experience score was slightly higher at 6.03, yielding a mean gap score of -0.02. This negative gap indicates high satisfaction with the neat appearance of the employees, making it the attribute with the smallest gap in the tangibles dimension.

#### ***TAN 4: Visual Appeal of Sports Equipment***

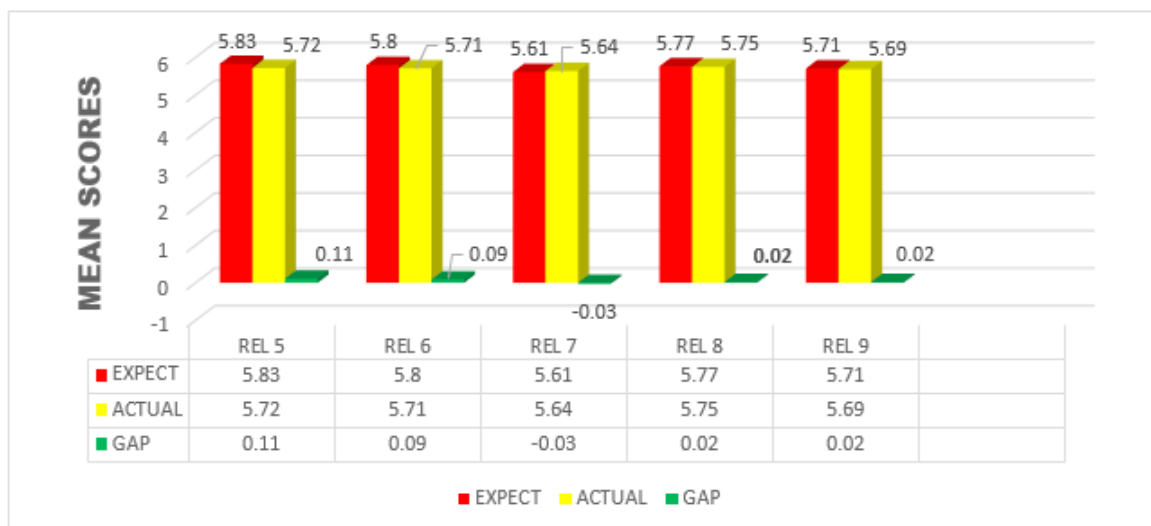
TAN 4 focused on the visual appeal of sports equipment. Figure 1 shows that the mean expectation score was 5.74, and the mean actual experience score was 5.68, resulting in a gap score of 0.06. This small gap suggests that respondents find the sports equipment visually appealing, aligning closely with their expectations.

In summary, the average mean scores for the tangible dimension were 5.80 for expectations and 5.70 for actual experiences, both surpassing the central score of 4, indicating general satisfaction. The average gap for tangibles was 0.10. However, TAN 2, concerning the visual appeal of sports facilities, exhibited the highest mean gap score of 0.24, highlighting an area requiring immediate attention from the DUT Sports Department.

### ***DIMENSION: RELIABILITY***

Zeithaml *et al.* (2013:89) define reliability as the organization's ability to deliver services that are accurate and dependable, considering it a key determinant of service quality perceptions. Reliability encompasses the ability to provide services on time, accurately, and consistently, meeting customer expectations, as described by Pakurár *et al.* (2019:265-268).

This dimension evaluates the timeliness and effectiveness of addressing and resolving customer issues. Figure 2 displays the mean scores for respondents' expectations and actual experiences, along with the mean gap scores for each reliability attribute.



**FIGURE 2. RELIABILITY MEAN SCORES WITH GAP SCORES.**

#### ***REL 5: Timely Service Delivery***

This attribute evaluates the DUT Sports Department staff's commitment to delivering services on time. The mean expectation score for REL 5 was 5.83, while the actual experience score was 5.72, resulting in a gap score of 0.11. This relatively small gap indicates that sports club members are generally satisfied with the staff's adherence to promised service timelines, despite REL 5 showing the largest gap within the reliability dimension.

#### ***REL 6: Problem-Solving Commitment***

REL 6 assesses whether the Sports Department staff are dedicated to resolving members' issues. As shown in Figure 4.5, the mean score for expectations was 5.80, compared to a mean score of 5.71 for actual experiences, resulting in a gap score of 0.09. This minor gap suggests that members are content with the staff's commitment to addressing their problems.

#### ***REL 7: First-Time Accuracy***

This attribute measures staff efficiency in resolving issues on the first attempt. Figure 2 reveals that the mean expectation score for REL 7 was 5.61, with the actual experience mean score slightly higher at 5.64, leading to a gap score of -0.03. The negative gap indicates high satisfaction with the staff's ability to get things right on the first attempt.

#### ***REL 8: Adherence to Promised Service Times***

REL 8 evaluates whether staff deliver services at the promised times. The expectation mean score was 5.77, while the actual experience mean score was 5.75, resulting in a gap score of 0.02. This minimal gap suggests that members are satisfied with the staff's punctuality in delivering services.



### REL 9: Error-Free Records

This attribute examines the staff's insistence on maintaining accurate records. The mean expectation score was 5.71, and the actual experience score was 5.69, resulting in a gap score of 0.02. The small gap indicates satisfaction with the staff's attention to error-free record-keeping.

Zeithaml et al. (2013:89) highlight reliability as a crucial determinant of service quality perception, emphasizing that organizations must deliver services consistently and accurately from the outset. Parasuraman et al. (1993:140–147) assert that reliability is essential for fulfilling customer expectations. In the context of the DUT Sports Department, reliability encompasses the timely processing of requests, efficient management of reservations, and the availability of sporting equipment. The overall average mean scores for reliability expectations and actual experiences were 5.72 and 5.68, respectively, yielding an average gap score of 0.04. This small gap indicates that the DUT Sports Department meets the reliability dimension's expectations. Both the expectation and actual experience scores exceed the study's central score of 4, demonstrating a strong alignment with the reliability service quality statements.

### RESPONSIVENESS DIMENSION

This dimension focuses on the service provider's ability to address client requests, inquiries, and complaints promptly and attentively. Lone and Rehman (2017:1–20) define responsiveness as the service provider's capability to meet client demands, while Zeithaml et al. (2013:90) emphasize the importance of quick response to service requests. The responsiveness dimension evaluates the DUT Sports Department staff's willingness to assist members, deliver prompt service, and demonstrate necessary interpersonal skills. Figure 3 illustrates the mean ratings for both expectations and actual experiences, along with the gap scores for each responsiveness attribute.

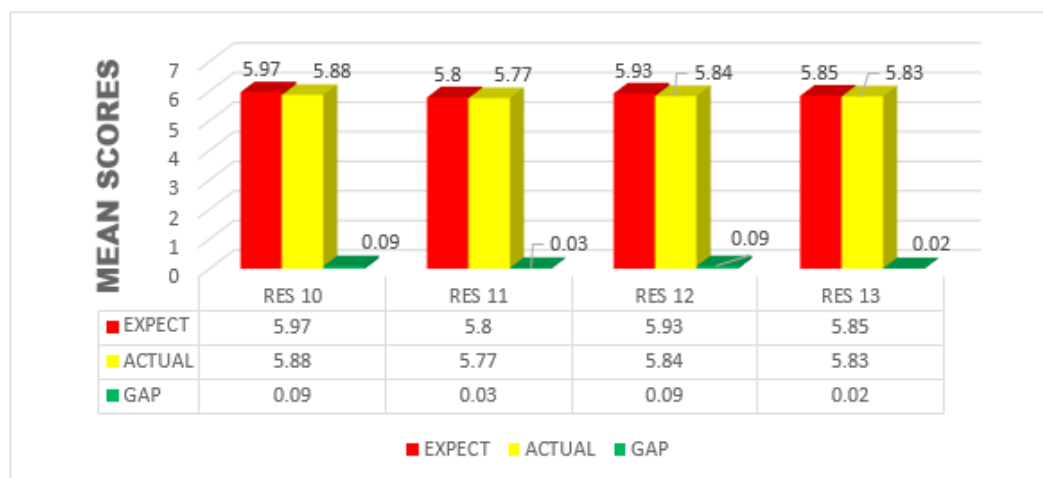


FIGURE 3: RESPONSIVENESS MEAN SCORES WITH GAP SCORES.

#### RES 10: Timely Information on Service Performance

RES 10 evaluates whether the DUT Sports Department staff accurately inform members about when services will be performed. The mean score for expectations was 5.97, while the mean score for actual experiences was 5.88. This results in a gap score of 0.09, indicating that members' expectations are largely met with minimal discrepancy.

#### RES 11: Prompt Service Delivery

This attribute assesses the timeliness of service provided by the staff. The expectation mean score was 5.80, and the actual experience mean score was 5.77, leading to a gap score of 0.03. The minimal gap demonstrates that sports club members receive timely service, aligning closely with their expectations.

### RES 12: Willingness to Assist

RES 12 examines whether staff are consistently eager to help members. The mean expectation score was 5.93, compared to an actual experience mean score of 5.84, resulting in a gap score of 0.09. This gap suggests that while staff are generally responsive, there is a slight discrepancy between expected and actual levels of assistance.

### RES 13: Attending to Requests

This attribute measures the staff's attentiveness and willingness to address members' requests. The expectation mean score was 5.85, and the actual experience mean score was 5.83, leading to a gap score of 0.02. The close scores indicate that members are satisfied with how staff manage and prioritize their requests.

The overall average mean scores for responsiveness were 5.86 for expectations and 5.80 for actual experiences, resulting in an average gap score of 0.06. All mean scores are above 4, reflecting a high level of agreement among respondents and indicating that members are generally satisfied with the responsiveness of DUT Sports Department staff.

### DIMENSION: ASSURANCE

The assurance dimension focuses on the staff's ability to inspire trust and confidence. It evaluates whether DUT Sports Department staff can instill confidence in their members through their courtesy and reliability. Assurance is defined by Pakurár *et al.* (2019:265-268) as the ability to achieve promised outcomes and maintain a dependable and courteous demeanour.

Figure 4 illustrates the mean scores for assurance expectations and actual experiences, along with the resulting gap scores. This analysis will provide insight into how well the staff at DUT Sports Department are perceived in terms of reliability and trustworthiness.

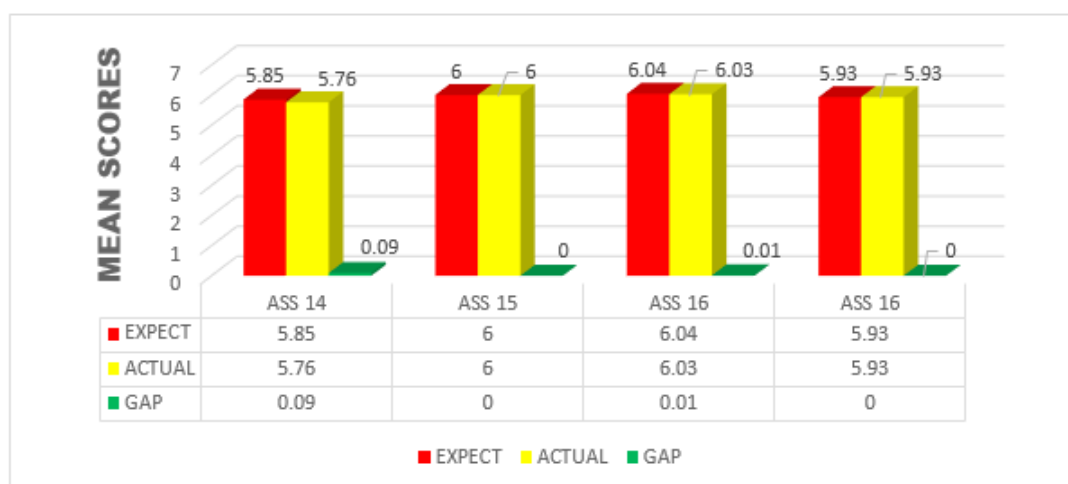


FIGURE 4: ASSURANCE MEAN SCORES WITH GAP SCORES.

### ASS 14: Staff Behaviour Instils Confidence

This attribute evaluates whether the behaviour of DUT Sports Department staff inspires confidence in members. Haense and Hofmann (2017:240-248) highlight that staff expertise and competence are key to providing assurance. According to Figure 4, the expectation mean score was 5.85, and the actual experience mean score was 5.76, resulting in a gap score of 0.09. Although this is the largest gap within the assurance dimension, it remains relatively small. This indicates that members are generally satisfied with the level of confidence instilled by staff, though efforts should be made to address this gap.



### ASS 15: Feeling Safe with Staff

The priority for DUT Sports Department is to ensure that members feel safe while using its facilities. Data from Figure 4 shows that the expectation mean score was 6.00, and the actual experience mean score was also 6.00, resulting in a gap score of 0.00. This absence of a gap suggests that members feel secure when interacting with staff, indicating that safety is well-managed.

### ASS 16: Staff Politeness

This attribute assesses the politeness of the staff. Figure 4.8 shows that the expectation mean score was 6.04, while the actual experience mean score was 6.03, leading to a gap score of 0.01. This minimal gap indicates that members are quite satisfied with the staff's politeness.

### ASS 17: Staff Competence in Answering Questions

This attribute examines whether staff are sufficiently knowledgeable to answer members' questions. Figure 4 reveals that both the expectation mean score and the actual experience mean score were 5.93, resulting in a gap score of 0.00. This suggests that members perceive staff as competent in addressing their inquiries, with no significant service gap.

The overall mean scores for assurance were 5.99 for expectations and 5.98 for actual experiences, leading to an average gap score of 0.01. This small gap indicates that members are generally satisfied with the assurance provided by staff, with all mean scores above 4 showing strong agreement with the assurance-related statements.

### DIMENSION: EMPATHY

The empathy dimension emphasizes treating each member as a unique individual and ensuring they feel valued by the organization. Zeithaml *et al.* (2013:90-91) define empathy as the ability of the organization and its employees to offer personalized attention and genuine care. The essence of empathy is to convey to members that they are important and their needs are understood.

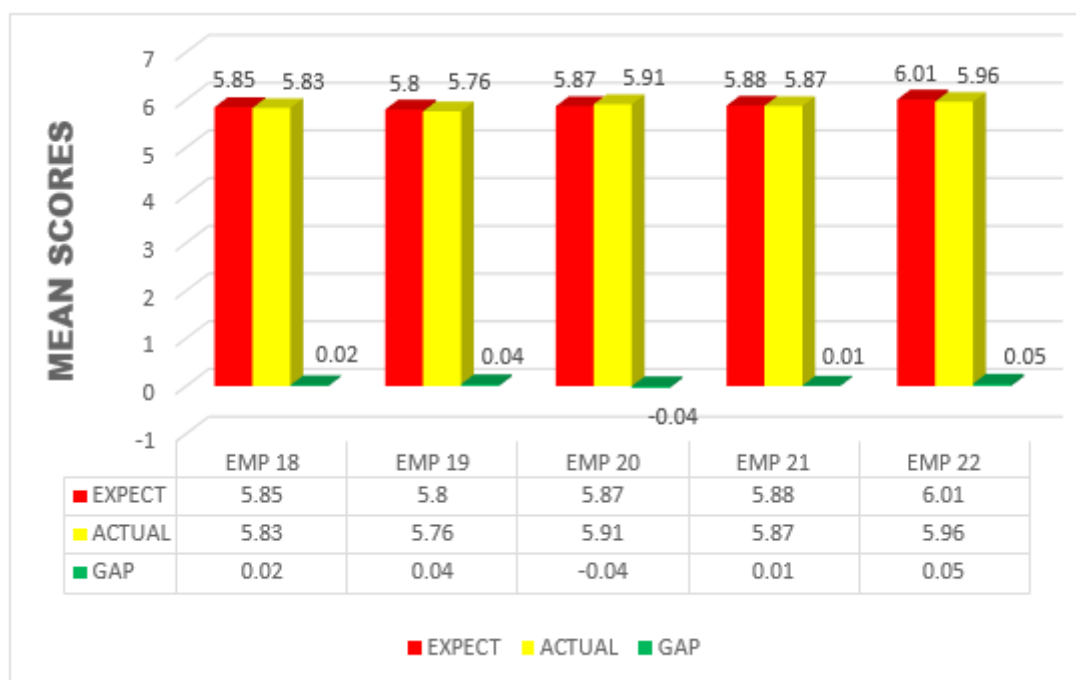


FIGURE 5: EMPATHY MEAN SCORES WITH GAP SCORES.

**EMP 18: Staff Offers Individual Attention**

This attribute assesses whether staff provide personalized attention to members. According to Figure 5, the expectation mean score was 5.85, and the actual experience mean score was 5.83, resulting in a gap score of 0.02. This small gap suggests that members are generally satisfied with the individual attention they receive from staff.

**EMP 19: Convenient Operating Hours of Sports Facilities**

This attribute evaluates whether the operating hours of sports facilities are convenient for members. As shown in Figure 5, the expectation mean score was 5.80, and the actual experience mean score was 5.76, resulting in a gap score of 0.04. Although this gap is the second largest within the empathy dimension, it remains relatively minor.

**EMP 20: Staff Have Members' Best Interests at Heart**

EMP 20 measures whether staff genuinely consider the needs and interests of members. Figure 5 shows that the mean expectation score was 5.87, while the actual experience mean score was 5.91, resulting in a negative gap score of -0.04. This is the smallest gap across all dimensions, indicating a high level of satisfaction among members regarding the staff's attentiveness to their best interests.

**EMP 21: Staff Understand Members' Specific Needs**

This attribute assesses whether staff comprehend and address the specific needs of members. Figure 5 shows that the mean expectation score was 5.88, and the actual experience mean score was 5.87, yielding a gap score of 0.01. This very small gap reflects that members are pleased with how well staff understand their specific needs.

**EMP 22: Sports Facilities Provide Social Opportunities**

EMP 22 evaluates whether the sports facilities offer opportunities for social interaction among members. Figure 5 reveals that the mean expectation score was 6.01, while the actual experience mean score was 5.96, resulting in a gap score of 0.05. This represents the largest gap within the empathy dimension, indicating that there is some room for improvement in enhancing social opportunities for members.

The overall average mean score for expectations in the empathy dimension is 5.92, and the average mean score for actual experiences is 5.91, resulting in a minimal gap score of 0.01. Both empathy and assurance dimensions exhibit the lowest gap scores in this study, suggesting a high level of satisfaction among respondents with these aspects of service quality.

**OVERALL MEAN SCORES PER DIMENSION**

Table 1 presents the mean scores for both expected and actual experiences, along with the gap scores, for each service quality dimension at the DUT Sports Department.

**TABLE 1: 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
<b>Overall</b>	<b>5.86</b>	<b>5.81</b>	<b>0.05</b>

The analysis reveals that the gaps between expectations and actual experiences are minimal across all dimensions. The average expectation score for the five service quality dimensions is 5.86, while the average actual experience score is 5.81, resulting in an average gap of 0.05. This indicates a minor discrepancy between what respondents expected and what they experienced, suggesting a high level of customer satisfaction with the DUT Sports Department's services. Among the dimensions, **Tangibles** shows the largest gap of 0.10, indicating a need for improvement in this area. In contrast, **Assurance** and **Empathy** exhibit the smallest gaps of 0.01 each, reflecting strong performance in these aspects. **Tangibles** encompasses aspects such as sports equipment, physical facilities, and staff appearance. Modern and visually appealing facilities are crucial for effective sports programs, while high-quality, up-to-date equipment enhances participation and service quality.

### Test – One-Sample T-Tests

The One-Sample T-Tests assess whether the gaps are significantly different from zero. Table 2 presents the results of the One-Sample T-Tests, which evaluate whether the observed gaps are significantly different from zero.

**TABLE 2: ONE-SAMPLE T-TEST RESULTS**

Item	t	df	Sig. (2-tailed)	N	Mean	Std. Deviation
GAP_Tan1	1.936	321	.054	322	0.1398	1.29546
GAP_Tan2	3.206	321	.001	322	0.2640	1.47731
GAP_Tan3	0.000	321	1.000	322	0.0000	1.21773
GAP_Tan4	1.301	321	.194	322	0.1056	1.45590
GAP_Rel5	0.702	321	.483	322	0.0683	1.74593
GAP_Rel6	1.648	321	.100	322	0.1242	1.35232
GAP_Rel7	0.072	321	.943	322	0.0062	1.55079
GAP_Rel8	1.388	321	.166	322	0.1273	1.64608
GAP_Rel9	-0.620	321	.536	322	-0.0528	1.52865
GAP_Res10	0.966	321	.335	322	0.0807	1.49964
GAP_Res11	0.437	321	.662	322	0.0373	1.53013
GAP_Res12	1.626	321	.105	322	0.1429	1.57613
GAP_Res13	0.455	321	.649	322	0.0342	1.34723
GAP_Ass14	1.460	321	.145	322	0.1180	1.45066
GAP_Ass15	-0.203	321	.839	322	-0.0155	1.37050
GAP_Ass16	-0.546	321	.585	322	-0.0435	1.42889
GAP_Ass17	1.051	321	.294	322	0.2112	3.60669
GAP_Emp18	0.779	321	.436	322	0.0683	1.57323
GAP_Emp19	1.172	321	.242	322	0.0932	1.42650
GAP_Emp20	0.234	321	.815	322	0.0186	1.43161
GAP_Emp21	0.623	321	.534	322	0.0466	1.34222
GAP_Emp22	0.985	321	.326	322	0.0745	1.35827

The analysis shows that the only item with a statistically significant gap is **GAP\_Tan2** (visually appealing facilities), with a p-value of 0.001. This indicates that the perceived quality of the visual appeal of the facilities is significantly below what members expect. According to Hoffman and Bateson (2006:136), tangible aspects like the visual appeal of facilities play a crucial role in shaping customer perceptions of service quality. Improving the visual appeal of facilities is vital for attracting and retaining members and enhancing overall service quality.

## Gap scores for each statement

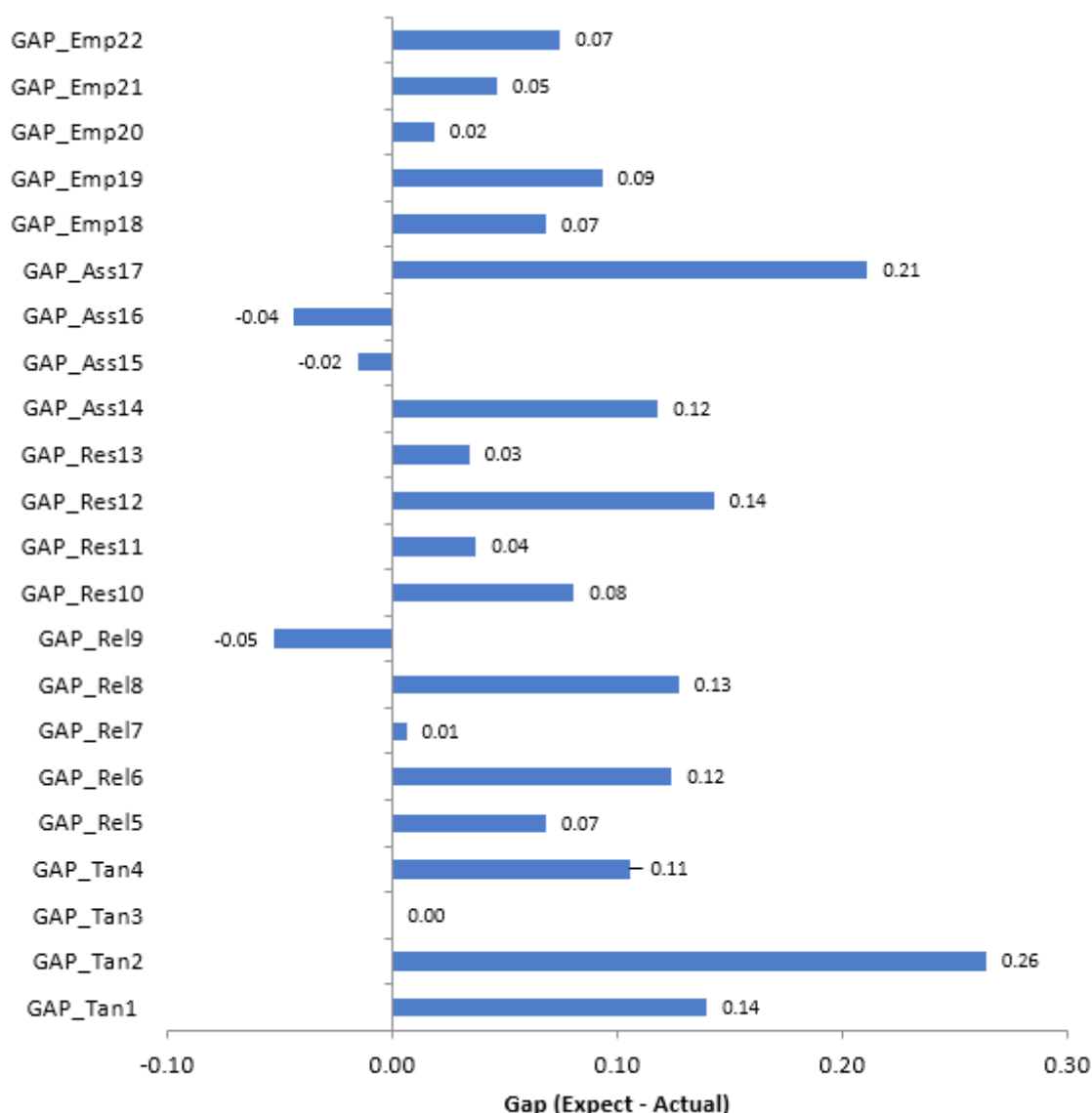


FIGURE 6: GAP SCORES PER STATEMENT

The gap analysis highlights areas where the DUT Sports Administration may need improvement, though overall gaps are generally minor. Here's a breakdown by dimension:

- Tangibles:** "Tangibles" encompass the physical elements of service such as facilities, equipment, staff appearance, and communication materials (Lotz, 2009:19). The gap scores for various attributes within this dimension were as follows: modern equipment (0.14), visually appealing facilities (0.26), staff appearance (0.00), and visually appealing equipment (0.11). The largest gap was noted for visually appealing facilities (0.26), suggesting a need for the DUT Sports Department to focus on enhancing the aesthetics of its facilities. The minimal gaps in other areas indicate general satisfaction among members.
- Reliability:** Reliability refers to the ability of an organization to deliver precise and dependable service (Zeithaml *et al.*, 2013:89). The gap scores for reliability-related attributes were: timely service (0.07), commitment to problem-solving (0.12), accuracy on the first attempt (0.01), fulfilling promises (0.13), and error-free records (-0.05). The highest gap was in fulfilling promises (0.13), while getting things right the first time had the smallest gap. These relatively small gaps reflect a high level of member satisfaction with the department's reliability.

- **Responsiveness:** Responsiveness involves the promptness and attentiveness of staff in handling requests, questions, and complaints (Lone & Rehman, 2017:1-20). The gap scores for responsiveness were: informing members of service times (0.08), prompt service (0.04), willingness to assist (0.14), and making time for members' needs (0.03). The minimal gaps indicate that members are generally satisfied with how responsive the staff is.
- **Assurance:** Assurance relates to the staff's ability to deliver on promises in a courteous and trustworthy manner (Pakurár *et al.*, 2019:265-268), with emphasis on staff knowledge and competence (Haense & Hofmann, 2017:240-248). The gap scores for assurance were: staff behavior instilling confidence (0.12), feeling safe with staff (-0.02), staff politeness (-0.04), and staff competence to answer questions (0.21). Notably, feeling safe with staff and staff politeness had the lowest gaps, indicating that these areas met or exceeded expectations. Conversely, staff competence had a higher gap, suggesting room for improvement.
- **Empathy:** Empathy refers to providing personalized attention and care (Zeithaml *et al.*, 2013:90-91). The gap scores for empathy were: individual attention (0.07), convenient operating hours (0.09), having members' best interests (0.02), understanding members' needs (0.05), and social opportunities provided (0.07). The small gaps across these attributes signify a high level of member satisfaction with the empathetic aspects of service.

In summary, the gap scores for each dimension were calculated using the formula  $GAP = Expectations - Actual Experience$ . The analysis of mean scores revealed that overall, expectations and actual experiences were closely aligned, with an average gap of 0.05 across all dimensions. The largest gap was in tangibles (0.10), while assurance and empathy had the smallest gaps (0.01 each). A One-Sample T-Test was conducted to determine if these gaps were significantly different from zero. The test revealed that only **Tangibles 2**, related to visually appealing facilities, had a significant gap ( $p = 0.001$ ). This result indicates that the quality of visual appeal in the facilities is notably below what members expect, suggesting a need for focused improvements in this area. The analysis of service quality at the DUT Sports Department highlights critical insights into the discrepancies between member expectations and actual experiences. As per the theoretical framework of this study, service quality is intrinsically linked to customer satisfaction (Parasuraman, Zeithaml, & Berry, 1988). The GAP analysis demonstrated that across all service quality dimensions, expectations generally exceeded actual experiences, with an overall mean gap of -0.05. This indicates that the DUT Sports Department is falling short of meeting the service expectations of its members. **Tangibles** emerged as the dimension with the most significant gap of -0.10, indicating that members find the physical aspects of the service, such as facilities and equipment, to be less satisfactory than anticipated. This finding aligns with earlier research suggesting that physical appearance and modernity of facilities play a crucial role in customer satisfaction in sports settings (Bitner, 1992). Specifically, the gap in visually appealing facilities (0.26) points to a notable area needing improvement, as members' expectations in this area are not being met. In contrast, **Assurance** and **Empathy** dimensions displayed minimal gaps (0.01 each), indicating that members feel generally satisfied with the confidence instilled by staff and the personalized attention they receive. This finding is consistent with the work of Pakurár *et al.* (2019), who highlight that assurance and empathy are critical for customer retention and satisfaction. **Reliability** and **Responsiveness** dimensions showed relatively small gaps, reflecting that the DUT Sports Department is performing adequately in delivering on promises and addressing member needs promptly. However, even in these areas, there is room for enhancement, especially in fulfilling service promises, which had the highest gap in reliability (0.13). The detailed analysis of gaps for individual statements revealed that while no large gaps were present, specific attributes such as the visual appeal of facilities and staff competence in assurance are areas requiring focused intervention. These findings suggest that while overall service quality is satisfactory, targeted improvements in certain areas could enhance member satisfaction further.

## RECOMMENDATIONS

Based on the gap analysis, the DUT Sports Administration should consider the following recommendations to enhance service quality and member satisfaction: (1) **Upgrade Facilities:** Invest significantly in modernising and enhancing the visual appeal of sports facilities to close the substantial gap identified in tangibles, which is essential for attracting and retaining members (Lotz, 2009). (2) **Enhance Staff Training:** Develop and implement

comprehensive training programmes to improve staff competence and performance, particularly in areas where gaps were identified, such as problem-solving and service delivery (Pakurár *et al.*, 2019). (3) **Conduct Regular Service Quality Assessments:** Schedule periodic evaluations of service quality to monitor performance, identify areas for improvement, and ensure alignment with member expectations (Kwortnik & Thompson, 2009). (4) **Improve Communication and Transparency:** Strengthen communication strategies to ensure that members are well-informed about services, updates, and facility enhancements, addressing any gaps in member awareness and expectations (Grönroos, 1990). (5) **Enhance Responsiveness:** Focus on improving staff responsiveness to member requests and complaints by ensuring prompt and attentive service, which will address the identified needs in this dimension (Lone & Rehman, 2017). (6) **Refine Service Delivery Processes:** Streamline and enhance service delivery processes to ensure accuracy, fulfilment of promises, and error-free operations, addressing any gaps in reliability (Zeithaml *et al.*, 2013). (7).

## LIMITATIONS

While this study provides valuable insights, there are some limitations:

**Scope of Data Collection:** The study focused exclusively on DUT Sports Club members from the Durban and Midlands Campuses, using quantitative data collection methods. This narrow focus may limit the generalizability of the findings to other campuses or universities (Creswell, 2014).

**Response Rate:** Although the study had a response rate of 46%, which is statistically significant, it is based on a sample size of 322 out of 700 members. The non-respondents may have different opinions, which could influence the overall results (Bryman, 2016).

## CONCLUSION

This paper provides a comprehensive examination of service quality within the DUT Sports Department, employing established frameworks such as the SERVQUAL model and the Gaps Model to identify discrepancies between member expectations and their actual experiences. The literature shows that there is a correlation between service quality and customer satisfaction. Increased service quality enhances customer satisfaction. The researchers thus assert that service quality is a determinant of customer satisfaction and customer satisfaction is a measure of service quality. The analysis reveals that while the overall service quality is generally satisfactory, specific areas, particularly those related to tangibles, show significant room for improvement. The study highlights that members have high expectations for the physical aspects of the sports facilities, including modern equipment and aesthetically pleasing environments, which are not fully met. The findings suggest that improvements in facility upgrades, staff training, and ongoing service assessments are essential to bridging these gaps. By addressing these key areas, the DUT Sports Department can enhance its service delivery, thereby increasing member satisfaction and competitive advantage. The study underscores the necessity of continuous improvement in service quality and offers a foundation for both practical enhancements and future research in sport management.

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