

Students' perception on service quality and satisfaction towards on-campus accommodation

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Abstract

Although universities are embarking on massive construction of new hostels to address the accommodation crisis, the extent to which students are satisfied with the services offered at on-campus accommodation remains blurred. The main purpose of this study was to examine the students' perception of the service quality and satisfaction towards on-campus accommodation. This study was motivated by the growing number of students not residing in the university accommodation and the lack of empirical evidence in establishing student's expectations of service quality and satisfaction at the University of Free State (UFS) hostels. This study used a descriptive cross-sectional research design. Using a non-probability convenience sampling technique, a sample of 284 on-campus students was selected and analysed using Pearson correlations, regressions, and t-tests. The results show that the student's perception of service quality and satisfaction at UFS hostel is relatively good, and that gender influences such perception. Considering increased competition from local residential owners, UFS should maintain and continue improving service delivery at hostels to satisfy, attract and retain students. This study contributes to research by empirically confirming students' satisfaction with service quality as defined by the SERVQUAL model.

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1. Introduction

1.1. Background

The post-independence era in South Africa resulted in the proliferation of universities and a subsequent increase in student enrolment (Gumede, 2020). However, alongside such high enrolments, on-campus accommodation remains a challenge across universities in South Africa (Kigotho, 2023). This is evidenced by a significant number of students who stay off campus. Unlike off-campus accommodation, on-campus provides security, intellectual stimulation, inspiration and mutual composition (Paltridge, 2010; Ning & Chen, 2016). Ordinarily, students prefer to stay in campus accommodation. However, when forced to select whether to stay on or off campus, students consider, amongst other factors, service quality (Najiba, 2015). Indeed, the presence of facilities such as accommodation and the provision of good service quality thereof have been identified as indicators of students' performance (Bashir & Mattoo, 2012; Azam, 2018). However, universities have been accused of focusing more on expanding hostel accommodation at the expense of providing service quality. Similarly, private accommodation providers are blamed for putting more attention on profit maximisation to the detriment of service quality (Najib & Tabassi, 2015).

This relegation of service quality has become a growing concern for students on campus accommodation at UFS. There is a discord between student expectations and the quality of service offered by accommodation providers. Perhaps it emanates from the different understandings, interpretations and applications of service quality. Other authors define service quality differently (Simkus, 2012; Erasmus, 2013; Juan de Ona, Rocio, Eboli & Mazzulla, 2015; Naidoo, 2016). In this study, service quality refers to providing efficient, quick and friendly service, building strong relationships with students, handling complaints quickly and responding to students' issues on time, leading to student satisfaction. Furthermore, the study further defines service quality in terms of the SERVQUAL model dimensions: tangibility, assurance, reliability, responsiveness and empathy (Parasuraman, Zeithaml & Berry, 1988; Aboubakr & Bayoumy, 2022). Adopting a service quality system by accommodation providers is likely to improve their competitive edge. However, research on the students' perception of the service quality at hostel accommodation in South Africa is limited. Specifically, scant information is available on students' perceptions of the service quality at UFS hostel accommodation. Results from such an investigation are likely to improve UFS's quality of service at its hostels and, hence, improve the level of student

satisfaction. In particular, the study is expected to assist UFS in attracting and maintaining high numbers of students amid rising competition with other universities and private accommodation providers. As such, this study examined the students' perception of the service quality at UFS hostel accommodation.

1.2 Problem Statement

The attraction and retention of students on campus accommodation is largely attributed to the ability of universities to provide good service quality. However, attaining such strategies depends on the extent to which universities know and understand the nature and type of service quality students require. Regrettably, the literature has not revealed any studies that investigated the students' perception of service quality using the SERVQUAL model at UFS hostels. The absence of such studies could be attributed to the high number of off-campus students as well as increased cases of students boycotting university meals and amenities. Accordingly, this study examines students' perception of service quality in UFS hostels in South Africa.

1.3. Research Objectives.

The primary objective is to investigate the students' perception of service quality and satisfaction with on-campus accommodation. The following are the study's secondary objectives:

1. To determine the impact of the SERVQUAL model dimensions on students' satisfaction levels with on-campus accommodation.
2. To determine whether there is a gender difference in students' perception of service quality towards on-campus accommodation.

2. Literature Review

The SERVQUAL Model, according to Parasuraman et al. (1988), underpins the current study as a theoretical framework.

2.1 SERVQUAL Model

Due to the limitations of the Nordic Model, the SERVQUAL Model was introduced by Parasuraman, Zeithaml and Berry (1985,1988). The SERVQUAL Model was developed to assess the gap between expected and perceived service levels in service quality. Parasuraman,

Zeithaml and Berry (1985) developed the most extensively reported service quality dimensions. In later stages, they were reduced to serve as a basis of the SERVQUAL Model (Parasuraman et al., 1988; Durvasula, Lyonski & Mehta, 2006). The study is also based on Gaps model, precisely Gap 5, that denotes the difference between customer (students) expectations and their perceptions of service delivered (Parasuraman et al., 1988, Mwangoso, Kazungu, & Kiwia, 2015). Figure 1 below illustrates the condensed version of the SERVQUAL Model used in this study.

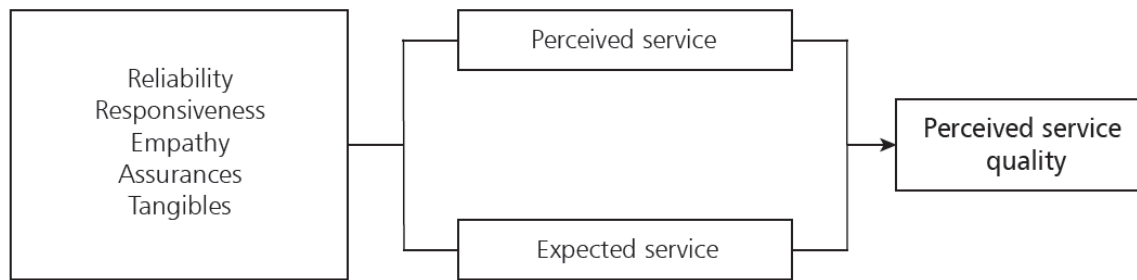


Figure 1: SERVQUAL Model

Source: (Parasuraman et al, 1988)

The SERVQUAL model dimensions are operationalised and discussed below:

(i) *Tangibles*: The outward appearance of the services facilities, communication tools, physical facilities, equipment, appearance of personnel and up-to-date equipment in the environment.

Service providers use this dimension to convey image and signal quality. As articulated by Zeithaml and Bitner (2003), service providers use this dimension to increase their image. Some of the studies, such as those by Jeyalakshmi and Meenakumari (2016), have shown that housing satisfaction is associated with the characteristics and personalities of the residents. Kassim (2015) alludes that the perceived quality and physical comfort contribute to the satisfaction of residents, hence a positive perception of the service by the residents. This study investigated the impact of tangibility on the students' satisfaction level with campus accommodation.

(ii) *Assurance*: Courtesy knowledge, ability of employees to inspire trust and confidence to customer in terms of facilities appearance and customer security (Wong & Chan, 2023).

Students should trust the service providers and feel safe and confident in the process. Zeithaml and Bitner (2003) define assurance as the employees' knowledge and courtesy and the service provider's ability to inspire trust and confidence to clients. For this study, assurance is, among others, acceptable behaviour of the UFS's hostel staff, the good relationship of students with the hostel staff, transparency and fairness of room allocation and lastly, their safety at the hostel.

(iii) *Empathy*: Caring, individualised attention the organisation provides to clients (Wong & Chan, 2023).

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Zeithaml and Bitner (2003) confirm that empathy relates to the care and individualised attention the organisation provides to its customers. In the study context, empathy would be related to special attention provided to the students by UFS' hostel staff, including understanding the students' main concerns, needs and ensuring good communication and that all requests are addressed as expected.

(iv) *Reliability*: The ability to perform certain tasks accurately and frequently (Wong & Chan, 2023).

The promised services that are mentioned should constantly and accurately be performed in the hostels (Jeyalakshmi & Meenakumari, 2016). Zeithaml and Bitner (2003) confirm that reliability is the ability to perform the promised service consistently and accurately or deliver on its promises. The relationship between housing management and students greatly influences students' perception of housing facilities (Price et al., 2003). Given that experiences influence students' success on the university campus, the management has a duty to support initiatives designed to help students succeed (Miranda, 2011). In the context of this research, reliability can be referred to as appropriate services that ought to be delivered on time by UFS's hostels to students, the enthusiasm of hostel staff to assist students and delivering student services effectively and avoiding mistakes in service delivery to students.

(v) *Responsiveness*: Focuses on the promptness and attentiveness given to customers' requests, questions or complaints, the willingness of the service provider to help students and provide prompt service (Lin, Fan, Zhang & Lau, 2019).

Responsiveness as the ability to provide prompt and timely service to customers. This dimension advocates for timeliness and promptness in providing a service (Zeithaml & Bitner, 2003, Lin et al, 2019). According to Zeithaml and Bitner (2003), it is, therefore, critical that the company considers responsiveness from the customer's perspective rather than the company's. Responsiveness in the context of this study could relate to the management ensuring the convenience of students' access to required hostel facilities by ensuring their timely availability and the ability and willingness of the management to address hostel accommodation-related complaints pleasantly and effectively.

2.2 Service Quality and Student Satisfaction

One of the key components of sustainability in higher education is the residential satisfaction of university hostels, as investigated by Putri and Anggraini (2018). This study examined the calibre of services provided by the hostels at Andalas University in Indonesia. Results indicated that tangible assurance and responsiveness need to be improved based on the results of the importance-performance analysis. Similarly, earlier studies found a connection between student loyalty and high-quality service in developed country higher education institutions.

Borishade et al. (2021) investigated the relationship between student loyalty, satisfaction and quality service in higher education from the perspective of Nigeria. The results showed a strong correlation between student loyalty and service excellence. In line with the previous studies mentioned, Sibai, Bay, and dela Rosa (2021) used the SERVQUAL model to assess the satisfaction and service quality among pharmacy students at one of the private medical institutions in Saudi Arabia. According to the findings, there was a negative GAP in the responsiveness, empathy and tangibility aspects of service quality, indicating that the services were not regarded as good as they could have been. Karatepe (2011) conducted an international literature review and examined the role of customer satisfaction as a mediator between the effects of the service environment, interaction quality, reliability, empathy and the like on customer loyalty. The findings showed that the influence of the service environment, interaction quality, empathy and reliability on loyalty was mediated by customer satisfaction. The findings also showed that the effects of reliability and empathy on customer satisfaction were modulated by gender (Karatepe, 2011). Furthermore, Mokhlis (2012) used the SERVQUAL model to evaluate the relationship between quality perceptions

and satisfaction and the impact of gender in predicting service quality perceptions. The study's overall findings were consistent with the premise that gender impacts how people perceive the quality of services and how much weight is given to different aspects of service quality. Additionally, the study showed that tangibles, responsiveness and reliability were important aspects of service quality that determined how satisfied both male and female consumers were.

Based on the above discussion, the following hypotheses were developed:

H₁: There is a significant and positive relationship between tangibility and student satisfaction.

H₂: There is a significant and positive relationship between assurance and student satisfaction.

H₃: There is a significant and positive relationship between empathy and student satisfaction.

H₄: There is a significant and positive relationship between reliability and student satisfaction.

H₅: There is a significant and positive relationship between responsiveness and student satisfaction.

2.3 Gender, Service Quality Perceptions and Satisfaction

Gender is widely acknowledged as one of the few demographic factors that satisfies the fundamental prerequisites for successfully implementing segmentation strategies (Arasli, Saydam, & Kilic, 2020). Gender segments are easily recognised, accessible and profitable in size. Gender differences in service quality assessment are still drawing much attention from service quality marketing researchers (Ansary, Jayashree & Malarvizhi, 2014, Kincl & Strach, 2018, Sahli, 2018). Despite this, contradictory findings have been found in earlier studies that examined the impact of gender on consumers' views of the quality of the services they receive. For instance, Raddar & Han (2011) and Radder and Han (2009) found no positive significant relationship between gender and service quality perception on campus housing. Similarly, in Malaysia higher education, findings revealed inadequate evidence for the gender difference impact on service quality (Ansary et al, 2014).

In contrast, Snipes, Thomson and Oswald (2006) discovered that male clients were more likely than female clients to score the fairness and quality of service higher for a particular set of services. Spathis, Petridou, and Glaveli (2004) discovered in their study that male Greek

bank customers felt better about the quality of the services they got than their female counterparts. Furthermore, other instances in the marketing literature suggest that female consumers typically assign a lower value to service quality when comparing the experiences of the two genders (Juwaheer, 2011, Kincl & Strach, 2018). Comparing service gap ratings between respondents' ages and genders is one possible use for SERVQUAL (Parasuraman, et al., 1988). Research on gender differences is still showing inconclusive findings, despite the possibility that it is important for segmentation (Babin & Boles, 1998 Ansary et al, 2014, Gabbianelli & Pencarelli, 2023)

Based on the above discussion, the following hypothesis was developed:

H₆: There is a significant and positive relationship between gender differences and students' perceptions of service quality and satisfaction.

The literature review section discussed the importance of customer satisfaction and service quality in various circumstances, especially in higher education institutions. Extant literature reveals that the SERVQUAL model has demonstrated its efficacy in evaluating customer perceptions and expectations, leading to its widespread use in evaluating service quality studies.

3. Research Methodology

This section discusses the research methodology applied in the study. Firstly, the research paradigm and research design method that the study followed were discussed. Also, the population and sampling techniques were discussed. This section further addresses the data collection procedures and statistical techniques used for analysis.

3.1 Research Philosophy, Research Method and Design.

The study follows a positivist paradigm. Based on the study's purpose, a positivist paradigm was used to help the researchers explore, collect and analyse quantitative data to fulfil verifiable results, supporting the concepts of objectivity, measurability and methodical and hypothesis-driven nature. Due to the defining nature of the paradigm, researchers commenced by developing concise empirical hypotheses (Park, Konge & Artino, 2020) and were able to draw universal conclusions based on statistical results that make generalisations possible (Junjie & Yingxin, 2022).

Extant studies point out that there are common research methods that can be used by researchers, namely, quantitative, qualitative, and mixed approach (Ghauri, Grønhaug & Strange, 2020). Each approach has unique attributes and applications (Sileyew, 2019). The study used a quantitative method since the researchers collected quantitative data to help understand the impact of SERVQUAL model dimensions on how university students perceive the service quality towards on-campus accommodation. Also, the approach helps to explain the correlations, forecasting and extrapolating results to larger populations. The study used a causal research design (Rezigalla, 2020). This design helped researchers to test the cause-and-effect relationship between SERVQUAL dimensions and service quality perceptions of university students.

3.2 Population, Sample and Sampling Method

According to Bell, Bryman and Harley (2022), a group of subjects with specific features the researchers are keen to study and understand is termed population. All registered students in the UFS Bloemfontein campus in the 2023 academic year constituted the study population. The total registration was 29,560. The study targeted students from all faculties dwelling or having ever lived in an on-campus accommodation.

The study used a non-probability sampling technique (Bell et al., 2022) (convenience sampling). Convenience sampling is preferred in this study because of its cost and time-saving effect. Using the Raosoft online sample size calculator with a margin of error of 5% accepted for this study, a 95% confidence level and 50% response distribution were inserted to the population of 29 560. With this information, the Raosoft sample size calculator recommended 380 students as a sample. Furthermore, the researchers used primary data in this study (Ajayi, 2017). Therefore, using a reliable, primary source, the data collected were of much higher quality and authenticity (Taherdoost, 2021). The data for this study were collected using self-completed questionnaires. The data collection instrument was divided into three sections; the first section focused on the participant's demographic profile. The second section measured student perceptions of service quality using the SERVQUAL model dimensions. The construct items were adopted from Naidoo (2014), Minh, Ha, Anh and Matsui (2015) and Li, Asimiran and Suyitno (2018). The last section addressed the questions that measured student satisfaction towards on-campus accommodation and were adopted from Hefer and Cant (2014). A 5-point Likert scale ranging from (1) Strongly disagree, (2) Disagree, (3) Neutral, (4) Agree and (5) Strongly agree was used.

3.4 Data Analysis Reliability and Validity

The Statistical Package for Social Sciences (IBM-SPSS version 26) was used to analyse the data collected, which was first captured in Excel. Furthermore, the researchers ran descriptive statistics on the participants' demographic profiles, such as mean and standard deviation, to assess the captured data. The Pearson correlation was used to assess the correlation among study variables as part of inferential statistics. Lastly, the hypotheses that were developed were tested using regression analysis and an independent t-test.

Reliability in research pertains to the consistency of measuring a particular construct (Mazur & Kubai, 2019). For a construct to be deemed reliable, it should meet Cronbach's Alpha coefficient threshold of approximately 0,7 or higher. On the other hand, to enhance the instrument's face validity, the researchers sent the questionnaire to experts in the department to validate and proofread. For content validity, the research questions were aligned with the questionnaire constructs.

3.5 Ethical Considerations

Prior to collecting data, the researcher applied to the UFS Ethics Committee and received ethical clearance approval with reference *UFS-HSD2023/0612/3*.

4. Results and Discussion

This section focuses on the presentation of the study's empirical findings. Study results included demographic profiles of the participants, descriptive statistics, factor analysis, reliability of the constructs, correlations, t-test and regression analysis based on the study variables.

As portrayed in section 3.2, the sample size of this study comprised 380 students studying at the University of the Free State who lived or once lived in campus accommodation. However, due to other unforeseen constraints during data collection, only 300 questionnaires were successfully distributed, and 284 questionnaires returned were usable. This gives a response rate of 94.7% in this study.

4.1 Demographic Profile

Regarding the gender of the respondents. The results portrayed that 67% of the respondents in this study were female, while 33% were male. The findings reveal that most of the respondents were female, 67%, which is consistent with existing studies such as Thondhlana and Belluigi (2017) that were conducted in Ireland at the Queens University Belfast. Table 1 shows the descriptive statistics in terms of the mean and standard deviation.

Table 1: Descriptive Statistics

Variable: Tangibility	Mean	Standard deviation
T1	4.33	1.243
T2	4.61	1.173
T3	3.99	1.415
T4	4.13	1.409
Variable: Reliability		
R1	4.46	1.071
R2	4.36	1.078
R3	4.06	1.185
R4	4.16	1.151
R5	4.07	1.224
Variable: Responsiveness		
RE3.1	4.63	0.992
RE3.2	4.36	1.046
RE3.3	4.07	1.124
RE3.4	3.98	1.208
RE3.5	4.38	1.333
Variable: Assurance		
AS4.1	4.35	1.417
AS4.2	4.52	1.245
AS4.3	4.66	1.089
AS4.4	4.88	1.154
Variable: Empathy		
E5.1	4.49	1.114
E5.2	4.26	1.113

E5.3	3.92	1.203
E5.4	3.94	1.283
E5.5	4.15	1.192
E5.6	4.26	1.247
Variable: Satisfaction		
S1	4.38	1.219
S2	4.48	1.169
S3	4.44	1.218
S4	4.71	1.293
S5	4.52	1.291

Source: Own compilation

Table 1 indicates that the variable *tangibility* had the highest mean value of 4.61, which shows that students agree that on-campus accommodations are fitted with appropriate furniture for studying. The lowest mean value of 3.99 shows that participants are neutral to slightly agree that the entertainment facilities are reliable at on-campus residences.

Most respondents indicated a positive perception about the quality of the services on campus accommodation regarding *reliability*. The highest mean value, 4.46, shows that participants agree that hostel staff are willing to solve student problems. Even though the students were neutral about whether on-campus accommodation staff performed services right for the first-time students, The highest mean value, 4.63, indicates that the participants agree that in terms of *responsiveness*, hostel staff are willing and not too busy to help students.

Overall, the participants agree in terms of *assurance* that they feel safe and protected during their stay at the hostel premises. This is supported by the lowest and highest mean values of 4.35 and 4.88, respectively. The highest mean value, 4.49, shows that participants agree that the on-campus accommodation staff cares about students in terms of empathy. The lowest mean value, 3.93, shows that students were neutral on whether the hostel staff give them personal attention and are always aware of their interests.

Lastly, the variable *satisfaction*, with the highest mean value of 4.71 and lowest mean value of 4.38, indicates the participants are happy with the accommodation facilities service quality on-campus accommodation.

4.1 Assessment of Measurement Model

Table 2: Sampling Adequacy and Sample Adequacy Tests

KMO	Kaiser-Meyer-Olkin Measure of Sampling Adequacy	0.931
Bartlett's Test of Sphericity	Approx. Chi-Square	4843,946
	Df	378
	Sig.	<0.001

Source: Own compilation

According to Shrestha (2021), the Kaiser-Meyer Olkin (KMO) test and Bartlett's test of Sphericity measures the sampling adequacy of the data. This is displayed in Table 2. The findings indicate that the KMO value is 0.931 (Sig <0.001), which is adequate and shows that the data are suitable for factor analysis. The value is above the threshold of 0.6, as suggested by Effendi, Matore, Khairani and Adnan (2019).

Table 3: Rotated Component Matrix Results, Reliability Analysis

Construct	Construct items	Factor Loadings	Cronbach's Alpha
Reliability (R)	R2.1	0,676	0.883
	R2.2	0,722	
	R2.3	0,713	
	R2.4	0,654	
	R2.5	0,695	
Responsiveness (RE)	RE3.1	0,633	0.832
	RE3.2	0,643	
	RE3.3	0,704	
	RE3.4	0,642	
	RE3.5	0,408	
Empathy (E)	E5.1	0,550	0.884
	E5.2	0,713	
	E5.3	0,771	
	E5.4	0,786	
	E5.5	0,673	
Satisfaction (S)	S1	0,655	0.880
	S2	0,748	
	S3	0,684	

	S4	0,548	
	S5	0,736	
Tangibility (T)	T1.1	0,572	0.734
	T1.3	0,552	
	T1.4	0,754	
	T1.6	0,604	
Assurance (AS)	AS.1	0,463	0.755
	AS.2	0,614	
	AS.3	0,694	
	AS.4	0,628	

Source: Own compilation

The researchers can understand the level of precision for the factor loadings by generating a rotated component matrix that reveals the structures of the construct and factor loadings, as illustrated in Table 3. According to Hair, Black, Babin and Anderson (2019) each item should load above the threshold of 0.5 and a minimum of three items loading above the threshold. According to the results, all items are loaded above the threshold.

According to Hair et al. (2019), the threshold of Cronbach's alpha is 0.7 or above. Researchers base their decision on the reliability of a construct. The results in Table 3 indicate that Cronbach's alpha values range from 0.734 to 0.883 for all six constructs: tangibility, reliability, responsiveness, empathy, assurance and satisfaction. All constructs were measured using 4 or 5 items. The results show that the six constructs of the study are reliable.

Scale	Tangibility	Reliability	Responsiveness	Assurance	Empathy	Satisfaction
Tangibility	1					
Reliability	.547**	1				
Responsiveness	.566**	.715**	1			
Assurance	.650**	.547**	.602**	1		
Empathy	.495**	.595**	.622**	.623**	1	
Satisfaction	.604**	.555**	.547**	.652**	.662**	1

Table 4: Correlations Analysis

Source: Own compilation

Saunders Lewis and Thornhill (2019) point out that the purpose of correlation analysis is to determine the direction and degree of a relationship among study variables. The findings of

the correlation among the study variables reveal that all the variables are strongly positively related. The correlation is significant at the 0.01 level for a 2-tailed.

Table 5: Regression Analysis and Coefficients

Hypotheses	R ²	β	t-statistic	p-value	Decision
H ₁ : Tangibility → Student Satisfaction (SS)	0,364	0,603	12,699	0.001*	H ₁ Supported
H ₂ : Assurance → SS	0,311	0,625	13,46	0.001*	H ₂ Supported
H ₃ : Empathy → SS	0,40	0,63	13,78	0.001*	H ₃ Supported
H ₄ : Reliability → SS	0,391	0,55	11,62	0.001*	H ₄ Supported
H ₅ : Responsiveness → SS	0,310	0,56	11,28	0.001*	H ₅ Supported

Source: Own compilation

Table 5 shows the regression analysis outcome and coefficient. **H₁**: The findings showed an R² value of 0.364, which indicated that 36.4% of the variance in student satisfaction was predicted by Tangibility; this was further proven by the $\beta = 0.603$; $p < 0.001$, which shows that there is a significant and positive relationship between tangibility and student satisfaction. Therefore, the H₁ is supported, and the findings are consistent with extant literature (Sibai, Bay & Dela-Rosa, 2021). These results indicate that the participants are more likely to be satisfied with accommodation if it is well-maintained, clean, and has a modern, inviting outlook and design.

H₂: The results showed an R² value of 0.311, which indicated that 31.1% of the variance in student satisfaction was predicted by assurance; this was further proven by the ($\beta = 0.625$; $p < 0.001$), which shows that there is a significant and positive relationship between assurance and student satisfaction. The result shows that participants that are assured that their amenities are safe and protected during their stay are more likely to be satisfied. Therefore, H₂ is supported. The findings are consistent with prior studies (Bungatang & Reynel, 2021; Sibai, et al, 2021).

H₃: The study's findings showed a statistically significant positive relationship between empathy and student satisfaction. Empathy means the readiness of the on-campus residence staff to pay attention, comprehend and perhaps experience the participants' emotions and offer customised help. The results indicated an R² value of 0.40, which indicated that 40% of the variance in student satisfaction was predicted by empathy, and this was further proven by

the ($\beta = 0.630$; $p < 0.001$). The findings concur with Maurry, Elms and Curran (2019) and Bahadur, Aziz and Zulfiqar (2018) studies. Therefore, H_3 is supported.

H₄: The findings showed an R^2 value of 0.391, which indicated that 39.1% of the variance in student satisfaction was predicted by reliability; this was further proven by the ($\beta = 0.55$; $p < 0.001$), which shows that there is a significant and positive relationship between reliability and student satisfaction. Therefore, H_4 is supported, and the findings concur with the extant literature (Bhuian, 2021).

H₅: The results showed an R^2 value of 0.310, which indicated that 31% of the variance in student satisfaction was predicted by responsiveness; this was further proven by the ($\beta = 0.56$; $p < 0.001$), which shows that there is a significant and positive relationship between responsiveness and student satisfaction. Therefore, H_5 is supported. The findings confirm Lin et al. (2023) and Murray et al.'s (2019) research.

Overall, the above findings depict that service quality dimensions, tangibility, assurance, empathy, reliability and responsiveness, are critical in determining student satisfaction with campus accommodation (Weerasinghee & Fernando, 2017).

H₆: To determine whether there is a difference between males and females' perceptions of service quality towards on-campus accommodations, an independent t-test was done as shown in Table 6 below:

Table 6: Independent Samples Test

Gender	Mean Score		t	Df	Sig. 2-tailed	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
	Male	Female						Lower	Upper
SQ	4,3989	4,1562	2,488	279	0,013	0,242	0,097	0,050	0,434

Source: Own compilation

The research results show a statistically significant difference between the male and female groups. Therefore, H_6 is supported. Furthermore, as per average mean scores between the two genders, it is revealed that males perceived a higher level of service quality perception than females do. This is consistent with research by Snipes Thomson and Oswald (2006), Spathis et al (2004), and Mokhlis (2012), which showed that male clients were more likely than female clients to rank the quality of the services as high.

5. Managerial Implications

The results have some practical implications for university management in formulating policies and procedures regarding on-campus accommodation (Bungatang & Reynel, 2021). The study empirically proved the impact of the SERVQUAL model dimensions on students' satisfaction towards on-campus accommodation. Therefore, the study provides evidence to inform policy decisions and interventions focused on maintaining and improving the service quality delivery of the hostels (Gabbianelli, & Pencarelli, 2023). The success of the UFS hostel accommodation depends on the ability to attract and retain students. As a result, closely monitoring the students' perception of the service quality is important (Sahli, 2018). This will involve empowering the staff to resolve accommodation-related issues. Furthermore, refresher or training workshops should be periodically conducted. This should be supplemented by getting feedback through surveys and online reviews on the students' perception of on-campus accommodation services to improve the offerings.

The study findings indicated that gender differences influence the perception of service quality and satisfaction of students living in on campus accommodation. This implies that the university residence or hostel management should ensure that gender-related matters are addressed amicably (Wong, & Chan, 2023). Also, procedures and policies that promote, provide and enhance inclusiveness and fair treatment of students should be implemented and maintained.

6 Conclusions, Limitations and Future Research

The findings and discussion section addressed the student's perception of service quality and satisfaction according to their lived experience with on-campus accommodation. These perceptions are mapped against extant studies in service quality and satisfaction. The results concur with other studies (Snipes et al, 2006; Kincl, & Štrach, 2018, Bungatang & Reynel,

2021; Sibai, Bay & Dela-Rosa, 2021). The findings attest the SERVQUAL model dimensions, namely tangibility, assurance, responsiveness, reliability, and empathy, which are statistically and significantly related to the student's satisfaction. Furthermore, the study gives insights and contributes to the existing body of knowledge by empirically confirming that gender difference influences students' perception and satisfaction with campus accommodation for universities. Overall, the students' perception of service quality, as conceptualised by Parasuraman et al. (1988) and satisfaction is good. This calls for UFS hostel management to maintain and continually improve hostel service delivery to satisfy, attract and retain students.

6.1 Limitations and Future Research

Although the findings contribute by giving insights into the role of SERVQUAL model dimensions on student satisfaction and the role of gender differences, future studies can focus on adding other relevant variables not included in this study. New insight between the relevant constructs might be revealed. The study focused on one higher education institution with a limited sample size of students at the UFS; therefore, the findings cannot be generalised. However, similar research can focus on all higher education institutions in South Africa or Africa.

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