



## Service quality attributes and students' loyalty in influencing housing choice in South Africa

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### Abstract

Student accommodation has been lauded as an important aspect of a student's university experience, supporting the performance of a student during their university tenure. Using the service quality model (SERVQUAL), the study investigates the impact of service quality attributes (reliability, assurance, responsiveness, empathy, and tangibility) on student loyalty to student housing. The study took a positivist and quantitative approach to address the research aim and objective. A survey questionnaire was administered online to a student population in June-July 2022 in Johannesburg, South Africa. The survey constructs were measured on a 5-point Likert scale, with 1 being strongly disagree and 5 being strongly agree. A total of 542 responses were analysed using structural equation modelling (SEM). The results showed that reliability, empathy, and tangibility positively influenced student loyalty, while assurance and responsiveness had a negative effect. For student housing managers and owners, these findings suggest the need to prioritize providing reliable service to the students, staff members who show care towards student needs, and good quality facilities. The findings also showed that assurance and responsiveness were not relevant to these respondents, which could be further investigated in future studies. For the service quality literature, these findings provided an emerging economy perspective, specifically in South Africa. Specifically, this looks at the student housing market. Future research studies can examine the rejected hypotheses from a different context such as new graduates, and senior citizens.

**Keywords:** *Student accommodation, student housing, residence, SERVQUAL, loyalty, South Africa.*

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## 1. Introduction

Student housing plays a critical role in a student's journey during their studies, thus facilitating their learning process (Eke, Aigbabo and Thwala, 2015). Student housing refers to rooms provided to students staying either within or outside university premises (South African Department of Higher Education, 2011). Such classification is further referred to as on-campus (within premises) and off-campus (outside university premises). The latter is normally provided by private residential property suppliers and managed in partnership with the institution in question. Other researchers have defined student housing as college housing, halls of residence, and campus apartments (Sawyer and Yusof, 2013; Abramson, 2010; La Roche et al., 2010; Wiens, 2010).

Besides providing a place to stay for students, student housing plays an important role in providing a conducive environment for living, learning, social, growth and development (Najib et al., 2011; Riker and Decoster, 2008). Generally, quality student housing helps students improve their well-being (Reed and Mills, 2007; Sirgy et al., 2005). There have been concerns regarding poor student housing quality (e.g., inadequate housing facilities like showers and stoves, and limited space on campus residences) in South Africa, some of which have resulted in student protests countrywide (Nhlabathi, 2021; Mzileni, 2018). As the quality of student housing influences the performance of students in their studies (Sanni-Anibire and Hassanain, 2016), students and student representative bodies (SRCs) have been raising their concerns about the state of student housing at various institutions in South Africa (Sikhwari, 2020).

Recently, students in Braamfontein, Johannesburg have protested due to, among other issues, the lack of quality accommodation for students (Sithole, 2023). The demand for accommodation also comes with other challenges, such as providing good quality dwellings, as legislated for in the 2015 Policy on the Minimum Norms and Standards for Student Housing at Public Universities (Tshazi, 2020). Some universities were found to be in contravention of the policy (such as having poor quality infrastructure, limited spaces, and inadequate communal areas), e.g. Walter Sisulu University's Phulo and KGB residences (Tshazi, 2020).

With universities seeing an increase in enrolment figures, there has been an increased demand for student accommodation, including in South Africa (Gbadegesin et al., 2021). To help address the increase in student enrolment and demand for accommodation, numerous student housing providers have entered the market, competing with tertiary institutions. An example of such a provider is SouthPoint, which has student housing properties in Johannesburg,

Tshwane, Durban, Gqeberha, and Cape Town, in locations closer to various academic institutions (Southpoint, 2023). This provides students with alternatives in the market, thus testing their preference and loyalty levels towards accommodation provided by their respective institutions (Eke et al., 2015).

Shortage of accommodation is not the only problem, but also the quality of the current and future accommodation is important for students' university experience (Mavunga, 2019; Cordes et al., 2019; Ibrahim et al., 2018). The quality of service offered by student housing is an important factor. To remain relevant and appealing to all students, institutions would need to understand the impact of the service quality attributes in shaping students' current and intended loyalty to a residence (Cordes et al., 2019; Sanni-Anibire and Hassanain, 2016), which is the primary goal of this study. Thus, this study seeks to examine the influence of service quality dimensions on student loyalty to student housing.

## **2. Literature review, hypotheses and conceptual model**

### ***2.1. Service quality dimensions and student housing***

Service quality has been defined as the gap between consumer service expectations and consumer perceptions of how well their expectations were met by the service delivered (Ali et al., 2021). This includes the gap between customer perceptions of the quality gained and their expectations of the service (Chahal and Kumari, 2012).

Students need affordable, secure, and safe housing as a basic need during their academic journey (Ghani and Suleiman, 2016). Quality is an important aspect influencing the choice of housing, which includes both the tangible (e.g., facilities) and intangible (e.g., interaction, reliability, assurance, and empathy) aspects of student housing (Mtshali, 2019; Simpeh and Akinlolu, 2018; Mhlanga, 2018). Extant research has found that students were not satisfied with student housing attributes like bedrooms, common rooms, and bathrooms in Malaysia and Nigeria (Sawyerr and Yusof, 2013; Amole, 2009). In contrast, other researchers found the opposite in different parts of the world (Najib, 2011; Schenke, 2008; Hassanain, 2008). In Norway, low housing standards were one of the main problems (including high rent, unfavourable contract terms, limited available housing and housing proximity) associated with private student housing (Thomsen and Eikemo, 2010; Brattbakk and Medby, 2004). For instance, 36% of the students in Norway reported that they had very little living space in their student housing (Statistics Norway 2006b). In Sweden, students mentioned that they were satisfied with their student housing, using housing attributes such as kitchen facilities,

cleanliness, room size, and rent, as measures of their overall satisfaction (Gong and Söderberg, 2024).

In South Africa, nearly 65% of the 287507-bed capacity provided by universities goes to NSFAS students, where they stay mainly in accredited housing and the monthly rental is standardized (DHET, 2020; University Student Housing Survey, 2019; Najib et al., 2012). In this case, the monthly rental is not a significant factor in determining residential choices for such students, but rather the quality aspects of the residence (Nimako et al., 2013; Voss, 2003). Thus, service quality has become an important aspect influencing students' choice, satisfaction and loyalty (Price et al., 2003; Najib et al., 2012). According to the service quality model suggested by Parasuraman et al (2019), the common dimensions used are reliability, assurance, tangibility, empathy, and responsiveness.

## ***2.2. Hypothesis***

The study seeks to investigate the influence of service quality dimensions on student loyalty to student housing, as hypothesized below.

### ***2.2.1. Reliability***

Parasuraman et al. (2019) define reliability as the degree to which a promised service is accurate and consistent. In student housing, security is one of the important factors measuring reliability, as perceived risks towards student housing can deter students from staying in such housing (Ngcece, 2018). This was confirmed in a study on the University of KwaZulu Natal's student accommodation where students said they could not continue staying in their rooms for fear of housebreaking and theft, and the residence's inability to provide a safe environment for the students (Ngcece, 2018). In this case, the student housing was not reliable in terms of providing students with a safe living and learning environment. For students to remain loyal to an accommodation, the latter should prove to be a reliable place to stay (Price et al., 2003; Najib et al., 2012).

### ***2.2.2. Assurance***

Parasuraman et al. (2019) defined assurance as a service provider's degree of knowledge, courtesy, and the ability to provide customers with trust and confidence in their service. This refers to the extent to which the staff personnel in an organization provide service professionally and competently (Luke and Heyns, 2020). In the student housing context, students are likely to have high service quality perceptions towards a residence whose staff

personnel provide them with individualized service, thus fulfilling their unique needs (Sebokedi, 2009). Thus, their service quality perceptions can lead to loyalty towards the housing (Price et al., 2003; Najib et al., 2012).

### **2.2.3. Responsiveness**

Responsiveness is a dimension directly linked to the performance of the staff personnel of an organization (Parasuraman et al., 2019). The concept refers to the willingness of service providers to assist and deliver quick service to clients (Mtshali, 2019; Parasuraman et al., 2019). Furthermore, the organization's personnel must be willing to offer clients information about when and what services will be provided (Stiglingh, 2010; Berry et al., 1988). In student housing, the residence staff should be willing to listen to and address student queries on space availability, types of rooms available, dwelling options (single rooms, sharing, etc.) and other related queries. This could be through different communication channels (in person, telephone, digital platforms, etc.). Such responsiveness can lead to students' willingness to continue staying in the same residence for longer because the service meets or exceeds their expectations (Najib, Yusof and Sani, 2012).

### **2.2.4. Empathy**

Empathy refers to a customized service that customers receive from an organization, through its staff personnel (Parasuraman et al., 1985). The staff personnel are expected to be caring towards customers while providing a service, which in turn influences consumer perceptions about the organization or brand (Mhlanga, 2018). Customer satisfaction plays an important role in influencing customer perceptions, thus leading toward loyalty to an organization (Grönroos, 1982). This is supported by extant literature in which customer satisfaction is deemed a predecessor of customer loyalty (patronage or word-of-mouth) and an outcome of good service quality (Bennett and Ruddle-Thiele, 2004).

The student housing sector is no different, with students (customers) having certain levels of service quality expectations when deciding on a place to stay during their studies. This is also true for students who have the choice between staying at their current or alternative residence, all based on their perception and satisfaction with their current residence (Radder and Han, 2009, p. 115). Students who are satisfied with and have a positive attitude towards a residence are likely to develop loyalty towards such a residence, based on the service quality model (Parasuraman et al., 1985).

### **2.2.5. Tangibility**

Tangibility has been defined as the level or degree of appropriateness of the physical attributes of a brand, such as facilities, equipment, staff appearance, building and so on (Parasuraman et al., 2019; 1985). This attribute focuses on the tangible aspects of a brand. Within the student housing context, tangibility refers to the quality of the building, the furniture, and the facilities (washroom, leisure, support and all other facilities). It also entails the physical appearance of the staff members, such as their dress code, presence of security personnel, cleanliness of the property, and so on. Literature has found tangible aspects of accommodation such as bathrooms, bedrooms, study rooms, kitchens, and laundry spaces as critical facilities (Simpeh and Akinlolu, 2018). Radder and Han (2011) further found that students who were satisfied with good quality tangible amenities offered by a student accommodation would likely remain loyal towards that accommodation.

Based on the discussion of the service quality attribute above, the following hypotheses were derived:

H1-5: Service quality dimensions (reliability, assurance, responsiveness, empathy and tangibility) have a positive influence on student loyalty towards student housing.

### **2.2.6. Student Loyalty**

Loyalty is an important aspect of business performance, as the concept refers to continued patronage towards a brand (Tjiptono et al., 2012) as well as leading to positive word of mouth from loyal customers (Devi and Yasa, 2021). This suggests that loyal customers are more likely to make repeat purchases of the same product or products from the same brand. From a student housing perspective, this refers to students returning to the same residence every year during their student tenure). It also suggests that loyal customers have a higher chance of speaking positively about the brand to their close allies such as friends, family, colleagues, and so on. This suggests that students can spread positive word of mouth or recommend their residence to other students. Literature on the rental housing market defines loyalty as the duration of a tenant's stay at a particular residence or property (Nhlabathi, 2021; Amole, 2009). It also refers to a tenant's willingness and voluntary act of speaking positively about a particular property (Devi and Yasa, 2021). This suggests that when students are satisfied with the quality of service they receive from their residence, they are more likely to remain loyal to the residence (Campagna, 2016; Najib et al., 2011).

### 2.3. Proposed conceptual model

As outlined in the literature review, this study utilizes the model developed by Parasuraman et al. (2019) where five dimensions were used to test their relationship with loyalty and the extent to which each dimension or dimensions displays an association with how students perceive the quality of housing stock in influencing their choice of accommodation.

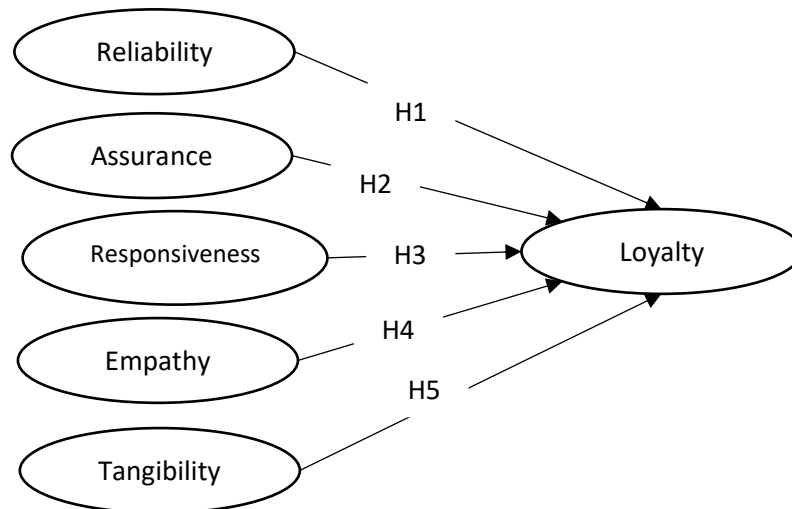


Figure 1: Proposed Conceptual Model

## 3. Research Methodology and Design Measurement

This study took a positivist research paradigm, using a quantitative design to collect data and analyse it to test hypotheses based on an existing theory (Maduku, 2015). A multi-item measurement scale adopted from extant literature was used to measure each construct in the study (Nhlabathi, 2021; Amole 2009). Each item of the study constructs was measured using a 5-point Likert scale (from 1 = strongly disagree to 5 = strongly agree).

### 3.1. Sampling and data collection

A pilot test was conducted involving 30 respondents (i.e., students in the Johannesburg area accessed through non-probability convenience sampling). Students who were not staying at any residence (e.g., those who stayed at home) during the 2022 academic year were excluded from the study. Respondents volunteered to be included in the sample through self-selection.

Using the final version of the research instrument, a total of 542 (out of 600) usable responses (i.e., 90% response rate) were collected between July-June 2022, using a 20-minute-long online survey designed on Google Forms and the link to the survey was distributed through social media platforms such as Facebook and Twitter. The sample comprised respondents accessed

through convenience sampling technique, aged 18-40, registered at any university in Johannesburg, staying within the Johannesburg area in 2022. A screening question was included asking respondents if they lived in Johannesburg and were students at one of the universities around Johannesburg. The first part of the questionnaire included screening questions, a consent form, ethical considerations and demographic information. The rest of the questionnaire covered the main constructs of the study.

### ***3.2. Data analysis***

Data analysis was conducted in two phases. The first phase was descriptive statistics, using SPSS (See Table 1). The second phase conducted a structural equation modelling (SEM), using AMOS to test the hypotheses for the study (See Table 2).

#### ***3.2.1. Common Method Analysis***

Harman's one-factor was used to assess the impact of the common method variance in the data. This technique helps in ascertaining whether a single construct accounted for most of the correlation in the relationship between predictor and outcome variables (Nhlabathi, 2021). From the analysis of all items and factors, the eigenvalue extracted was 29,253. This showed that no single factor accounted for more than 50% of the variance in the data. Based on these findings, it can be concluded that no serious problem was posed by common variance in the study.



**Table 1:** Descriptive statistics

Respondent characteristics		Frequency and percentage
Gender	Male	275 (50,7%)
	Female	264 (48,7%)
	Other	3 (0,6%)
Age	18-25	341 (62,9%)
	26-30	158 (29,2%)
	31-35	41 (7,6%)
	36-40	2 (0,4%)
Level of education	Year 1-3	311 (57,4%)
	Year 4/Advanced Diploma	119 (21,9%)
	Year 5/Honours	92 (17%)
	Master's and PhD	20 (3,7%)
Province of origin	Gauteng (GP)	260 (48%)
	Mpumalanga (MP)	58 (10,7%)
	KwaZulu Natal (KZN)	44 (8,1%)
	Free State (FS)	25 (4,6%)
	Northwest (NW)	35 (6,5%)
	Limpopo (L)	54 (10%)
	Eastern Cape (EC)	52 (9,6%)
	Western Cape (WC)	9 (1,7%)
	Northern Cape (NC)	4 (0,7%)
	Other	1 (0,2%)
Preferred residence	On-campus	147 (27%)
	Off-campus	199 (37%)
	Off-campus not accredited	196 (36%)
Preferred rent	Up to R2k	71 (13,1%)
	R2001-R2500 (USD122-153)	127 (23,4%)
	R2501-R3000 (USD153-183)	172 (31,7%)
	R3001-R3500 (USD183-214)	112 (20,7%)
	R3500+ (USD214+)	58 (10,7%)
Distance from campus	Less than 5km/5min	396 (73,1%)
	5km-15km/5min-15min	96 (17,7%)
	15km-25km/15min-25min	42 (7,7%)
	25km-35km/25min-35min	5 (0,9%)
	35km+/35min+	3 (0,6)

**Source:** Data analysis**3.2.2. Measurement model analysis**

The quality of the measurement model was determined through reliability and validity testing. When testing for the reliability of the measurement scale model, composite reliability (CR), Cronbach's alpha and the average value extracted (AVE) (Hair et al., 2020; Nasution et al.,

2020). The set thresholds used to confirm reliability are greater than 0.5 (AVE) and 0.7 (CR and Cronbach's alpha) (Hair et al., 2021). Convergent validity of the measurement instrument was also tested using standardized factor loadings (significant and above 0.708), composite reliability ( $\geq 0.7$ ) and AVE ( $>0.5$ ), with the thresholds as indicated (Hair et al., 2020).

The initial analysis showed that at least one item was deleted for each construct to improve the factor loadings, as they loaded below the 0.708 threshold, after which the model was re-run. The original number of items per construct is indicated in brackets. The results of reliability and validity testing are shown in Table 2. Based on the results, all factor loadings met the required threshold, but only H5 had a significant p-value ( $p < 0.001$ ). The CR also met the required threshold of 0.7 and above. The AVE values for all, but one (Tangibles – 0.468), constructs were above the stipulated 0.5 threshold. Besides the AVE for Tangibles being below the 0.5 threshold, literature suggested that convergent validity can be confirmed if the composite reliability for the same construct is above 0.6 (Huang et al, 2013), which is the case for Tangibles (CR=0.778).

**Table 2:** Reliability and Convergent Validity

Constructs	Items	Factor loadings	P-value	Cronbach's Alpha	CR	(AVE)	Final items
Reliability	R3	0,803		0,833	0,805	0,580	3 (5)
	R4	0,686					
	R5	0,791					
Assurance	A2	0,741		0,852	0,860	0,605	4 (5)
	A3	0,808					
	A4	0,773					
	A5	0,788					
Responsive ness	I2	0,717		0,822	0,802	0,503	4 (5)
	I3	0,698					
	I4	0,751					
	I5	0,668					
Empathy	E2	0,753		0,826	0,814	0,594	3 (4)
	E3	0,793					
	E4	0,765					
Tangibles	T1	0,670		0,836	0,778	0,468	4 (6)
	T3	0,684					
	T4	0,710					
	T5	0,671					
Loyalty	LOY1	0,858		0,889	0,854	0,597	4 (5)
	LOY2	0,835					
	LOY3	0,664					
	LOY5	0,718					

**Source:** Data analysis

Discriminant validity testing was conducted through the heterotrait- monotrait ratio of correlations (HTMT) where HTMT estimated values below 0.85 or even 0.9 confirm the discriminant validity of constructs (Henseler et al., 2015). Table 3 shows that discriminant validity was confirmed as all values were below the threshold of 0.85 or 0.9.

**Table 3:** Discriminant validity (HTMT)

	Empathy	Loyalty	Tangibles	Responsiveness	Assurance	Reliability
Empathy	<b>1</b>					
Loyalty	0.17	<b>1</b>				
Tangibles	0.19	0.29	<b>1</b>			
Responsiveness	0.81	0.14	0.83	<b>1</b>		
Assurance	0.69	0.13	0.67	0.77	<b>1</b>	
Reliability	0.67	0.23	0.51	0.50	0.62	<b>1</b>

**Source:** Data analysis

### 3.2.3. The goodness of fit testing

Extant literature suggests conducting a test of goodness of fit, to assess the structural model for fitness, using the commonly recommended guidelines as follows: Chi-squared/degrees of freedom of below 3; TLI over 0.9; RMSEA of 0.05-0.06 and CFI over 0.95 (Scherer et al., 2019; Hayes, et al., 2017). Table 4 shows the fit indices, thresholds, results, and decisions. Although Hair et al (2014) suggested a CMIN/DF cut-off value of 3, other authors suggested that a CMIN/DF value between 3 and 5 is acceptable (Danish et al., 2015), and can be used to confirm model fit in SEM.

**Table 4:** Model fitness test statistics

Fit Indicator	Threshold adapted from Hair et al. (2014: 579-580)	Initial measurement model	Final measurement model
CMIN/DF (Chi-square/degree of freedom)	Below 3 (good) From 3 to 5 (acceptable) Over 5 (bad)	4.586	3.095
RMSEA (Root Mean Square Error of Approximation)	Below 0.05 (good) From 0.06 to 0.1 (acceptable) Over 0.1 (bad)	0.081	0.062
CFI (Comparative Fit Index)	Below 0.90 (bad) Over 0.90 (good)	0.893	0.926
TLI (Tucker Lewis Index)	Below 0.80 (bad) From 0.80 to 0.90 (acceptable) Over 0.90 (good)	0.870	0.911

**Source:** Nhlabathi et al (2022)

### 3.3. Hypothesis testing

The variance inflation factors (VIF) were used to test for any threat of collinearity between exogenous variables, using the suggested threshold of 3 as the maximum value for the VIF (Nhlabathi, 2021). For this study, all VIF values were below 3, thus confirming the lack of critical issues associated with collinearity.

The standardized regression weights (factor loadings), t-values, and significance levels (p-values) were used to test the hypothesized relationships between constructs in the structural model. The results are shown in Table 5 and discussed in the next section.

**Table 5:** Standardized weights and hypotheses conclusion

			Hypotheses	Estimate	p-value	Estimate
Loyalty	<---	Reliability	H1	.137	.005	Accept
Loyalty	<---	Assurance	H2	-.063	.182	Reject
Loyalty	<---	Responsiveness	H3	-.088	.076	Reject
Loyalty	<---	Empathy	H4	.047	.326	Accept
Loyalty	<---	Tangibles	H5	.306	***	Accept

## 4. Discussion of results and conclusion

This study aimed to investigate the impact of service quality attributes on student loyalty to their student housing. The hypotheses developed based on extant literature suggested a positive relationship between service quality and student loyalty to their student housing. Based on the data analysis, it was confirmed that reliability (H1), empathy (H4) and tangibility (H5) positively influence loyalty to student housing while assurance (H2) and responsiveness (H3) have a negative impact. The outcome of H1 corroborated findings from extant literature in various industries which found a similar relationship between reliability and loyalty (Najib, et al., 2012; Price et al., 2003). This suggests that students would be loyal to student housing which they perceived as reliable. Students will be loyal to their student housing if they consistently receive the quality of service as promised.

The outcomes of H2 and H3 suggested that assurance and responsiveness were not important factors in predicting student loyalty toward student housing. The outcome H2 (assurance and loyalty) confirmed findings by Ramzi and Mohamed (2010) whose study showed a positive and significant relationship between all the other four service quality dimensions (reliability, responsiveness, tangibility, and empathy) and loyalty, except for assurance.

However, this was against the hypothesized relationship (H2) as well as the findings from previous studies which showed that students would be loyal to student housing which assured them of quality living conditions. The outcome of H3 confirmed the findings by Akpan, Amoozegar, and Begum (2022) which found responsiveness to have a negative influence on customer loyalty to a mobile network. These findings indicated that students are more concerned with getting reliable service, empathetic personnel and student housing that is in good condition, instead of prioritizing responsiveness.

The outcome of H4 suggested that student housing with staff personnel who showed high levels of care towards students is likely to create and strengthen the level of student loyalty towards the housing. For instance, security personnel who show that they put the safety of the student at the centre of their work will positively influence the loyalty decisions of students. This is in line with extant literature (Mhlanga, 2018). As for H5, the hypothesized relationship between tangibility and loyalty was confirmed, in line with findings from extant literature (Simpeh and Akinlolu, 2018). These findings suggested that students would be loyal to a residence that offered quality facilities concerning bathrooms, bedrooms, study rooms, kitchen, and laundry spaces (Simpeh and Akinlolu, 2018).

The study aims to investigate the service quality attributes that influence student loyalty to student housing in South Africa. This study explores how different aspects of service quality affect students' loyalty to their housing accommodation. The study adopts a positivist research paradigm and utilizes a quantitative research design. Data were collected through an online survey distributed via social media platforms. The questionnaire was structured with a 5-point Likert scale to measure the constructs, and a pilot test was conducted to refine the questionnaire. The final sample consisted of 542 usable responses from students in Johannesburg, South Africa. Among the housing factors examined, reliability, empathy, and tangibility notably influenced student loyalty. The findings suggested that students particularly appreciate consistent service, empathetic staff interactions, and well-maintained facilities. Conversely, attributes like assurance and responsiveness did not show significant impacts on loyalty, suggesting students prioritize tangible and empathetic factors in their housing choices. These findings emphasise the importance for housing providers to prioritize reliable service delivery, genuine student care, and high-quality physical amenities to cultivate strong student loyalty.

These findings also demonstrate the relevance of the servqual model to the student housing market, especially from an emerging market perspective. Moving forward, further research could delve into additional factors shaping housing preferences and loyalty across diverse student populations and contexts (e.g., a different market like new graduates). Ultimately, improving the quality of student housing can significantly enhance students' university experiences, contributing to their overall academic and personal growth.

The study was limited to the Johannesburg area, surveying students who stayed at a student housing without differentiating between the types of housing (e.g., on-campus, off-campus, etc.). These limitations raise potential future research to expand the scope of the study such as covering other provinces in South Africa, using additional factors (e.g., customer satisfaction as a mediator and demographics as moderators) to measure loyalty. The expansion of the research can also look at other housing markets such as new graduates.

## **5. Implications and recommendations**

The findings of the current study had implications for both management (managers, owners, developers, etc.) in the student housing sector as well as for literature on real estate marketing, specifically, the student housing market. For the management, the hypotheses that were confirmed highlight those service quality attributes that students care most about (reliability, empathy and tangibility), which play an important role during their decision-making process. When making their strategic plans, the management should always keep these service quality attributes in mind so that students can remain loyal to the residence during their studies.

From an academic perspective, the outcomes showed that the service quality attributes are also applicable to the student housing market. This has shown a different application of the servqual model, particularly from a South African student housing point of view. It would be interesting to investigate the rejected hypotheses under a different context and conditions such as newly qualified graduates, and non-student accommodation.

From the limitations of the study, future studies can be developed. Some of the main limitations include the application of the servqual model within the student housing market, only focusing on the South African market. The focus was also on the entire market in general, without splitting these into institution-owned or controlled properties, privately owned. Also, no split was made between on-campus and off-campus properties. Based on this, future studies can investigate the application of this model by focusing on other African countries, splitting the market by type of student housing, and looking at the role of demographics on loyalty. Future

studies can also focus on the broader rental housing market, including new graduates, senior citizens, etc. Furthermore, future studies can add more constructs to the model such as a mediator (customer satisfaction) and moderators (demographics of the students). In conclusion, the findings of the study suggest that the service quality model is relevant in investigating the influence of service on student loyalty toward student housing.

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