

CUSTOMER LOYALTY IN BOARDING HOUSE SERVICES: FACILITIES, LOCATION, SATISFACTION

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Abstract

Maintaining customer loyalty has become an increasing concern for boarding house providers in university districts despite the rapid expansion of the student accommodation market. The relatively short duration of tenancy compared with students' academic period indicates frequent relocation before graduation. Guided by the Stimulus–Organism–Response (S–O–R) perspective, this research examines how customer satisfaction functions as the psychological mechanism connecting boarding house facilities and location with customer loyalty. A quantitative causal-associative approach was adopted, involving student tenants selected through purposive sampling. Information was obtained using structured Likert-scale survey instruments and evaluated through descriptive analysis and Partial Least Squares Structural Equation Modeling (PLS-SEM). Empirical evidence reveals that facilities and location significantly improve customer satisfaction, whereas satisfaction exerts a strong positive influence on customer loyalty. In contrast, neither facilities nor location demonstrates a significant direct effect on loyalty. Instead, customer satisfaction completely mediates both relationships, highlighting its pivotal role in transforming environmental attributes into loyal behavioral intentions. These results broaden the application of the S–O–R perspective to student accommodation services and indicate that sustainable customer loyalty depends less on physical attributes alone than on tenants' overall satisfaction with their residential experience. Accordingly, boarding house operators should integrate facility enhancement with strategic location management to create superior customer experiences and strengthen long-term tenant retention.

Keywords: boarding house services; customer loyalty; customer satisfaction; facilities; location.

INTRODUCTION

Rapid expansion of service industries has intensified competition and shifted managerial priorities from customer acquisition toward customer retention as a foundation for sustainable business performance. Residential rental services have

become one of the fastest-growing service sectors because increasing educational mobility, urbanization, and workforce migration continuously generate demand for temporary accommodation (Said et al., 2020; Alzamzami & Suryono, 2021). Unlike ownership-based housing, residential rental businesses must create satisfactory living experiences that encourage tenants to maintain long-term relationships with service providers. Consequently, customer loyalty has become a strategic resource because loyal customers reduce acquisition costs, stabilize occupancy rates, and strengthen long-term business competitiveness.

Boarding houses constitute a distinctive segment of Indonesia's residential rental industry. Besides providing affordable accommodation for students and young professionals, boarding houses contribute substantially to the development of micro, small, and medium-sized enterprises (Yusma et al., 2021; Bantun & Sari, 2023). Continuous growth in higher education enrollment has intensified demand for boarding houses located near universities, where tenants increasingly evaluate accommodation not only according to rental prices but also according to the quality of facilities, accessibility, convenience, and overall residential experience (Satria et al., 2023; Sukirno & Zainuddin, 2025). These changing customer expectations require boarding house operators to compete through service quality rather than merely expanding accommodation capacity.

Jimbaran, Bali, represents an appropriate setting for investigating this issue because it hosts several higher education institutions that attract students from different regions. Administrative records indicate that boarding house businesses expanded steadily between 2021 and 2025, increasing from 70 to 101 properties, while available rooms grew from 800 to 1,250. Annual growth rates ranging from 7.0% to 11.4% demonstrate sustained market expansion following the recovery of economic activities after the COVID-19 pandemic. Such evidence suggests that boarding house services have become an increasingly competitive residential rental market.

Despite this favorable market development, customer loyalty has remained relatively weak. Interviews with five boarding house owners reveal that students typically stay only 8–14 months, whereas undergraduate study generally lasts approximately 48 months. The substantial difference between the expected study duration and the actual tenancy period indicates frequent customer switching before graduation. Boarding house owners consistently attribute this behavior to inadequate facilities, limited accessibility, perceived imbalance between rental prices and service quality, and insufficient interaction between owners and tenants. These findings demonstrate that business expansion has not been accompanied by stronger customer retention, creating a managerial challenge because replacing existing tenants generally requires greater resources than maintaining loyal customers (Adriantantri et al., 2023).

Customer loyalty has therefore become an important issue in residential service management. Relationship marketing literature defines customer loyalty as a

customer's commitment to continue purchasing or using the same service despite the availability of competing alternatives (Kotler & Keller, 2016). Within boarding house services, loyalty is reflected by tenants' willingness to renew rental agreements, remain in the same accommodation throughout their study period, and recommend the boarding house to prospective tenants. Because boarding houses involve long-term occupancy rather than one-time transactions, loyalty develops through continuous evaluation of customers' residential experiences instead of being determined solely by initial purchase decisions.

Mehrabian & Russell (1974) Stimulus–Organism–Response (S–O–R) perspective offers a useful theoretical lens for understanding customer behavior in boarding house services. Rather than assuming that environmental conditions directly determine behavioral outcomes, the model emphasizes that external cues are first interpreted through customers' cognitive and emotional assessments before behavioral intentions emerge. Within this study, facilities and location operate as external environmental cues, customer satisfaction reflects tenants' psychological appraisal of those conditions, and customer loyalty represents the resulting behavioral outcome. Consequently, improvements in service facilities or residential accessibility are unlikely to generate lasting loyalty unless they first create satisfying living experiences for tenants.

Facilities represent one of the principal determinants of residential service quality because they influence convenience, comfort, and functional performance throughout the occupancy period (Dharma & Eliza, 2022). Previous studies generally report that adequate facilities enhance customer satisfaction and subsequently strengthen customer loyalty (Kurnianingtyas et al., 2022; Fadli & Rubiyanti, 2021; Nanang & Pasharibu, 2021). Nevertheless, empirical evidence remains inconsistent because Nurcahyo et al. (2017) found no significant relationship between facilities and customer loyalty. Similarly, location has been identified as another important determinant of customer behavior because strategic accessibility improves convenience and reduces travel costs (Tjiptono & Diana, 2020). Positive relationships between location and customer loyalty have been reported by Sulistiyo et al. (2024), Masrani & Sampeliling (2024), and Hariono & Marlina (2021), whereas Nurian (2023) observed insignificant effects. These contradictory findings indicate that facilities and location alone may not adequately explain customer loyalty.

Customer satisfaction represents the psychological outcome through which customers interpret and evaluate their service experiences before forming future behavioral intentions. Positive residential experiences encourage tenants to continue renting the same accommodation, strengthen their commitment to the provider, and stimulate favorable word-of-mouth communication (Putri & Canggi, 2025; Wardana & Suparna, 2025). Previous empirical research further indicates that satisfaction explains how service attributes are translated into enduring customer relationships, particularly

when physical conditions and accessibility improve customers' overall living (Simpong et al., 2021; Cahyono et al., 2023; Ismail et al., 2022). Nevertheless, the literature has not reached a consistent conclusion. Yum & Kim (2024) observed that positive evaluations of a service do not inevitably produce loyal behavior because customers may still reconsider their choices in response to alternative offerings or changing personal preferences. These contrasting findings imply that the process through which environmental conditions foster loyalty remains insufficiently understood, highlighting the need to examine customer satisfaction as the underlying explanatory mechanism in boarding house services.

Three research gaps emerge from the existing literature. First, previous findings regarding the direct effects of facilities and location on customer loyalty remain inconclusive. Second, earlier studies have predominantly examined hotels, restaurants, retail businesses, and tourism services, while boarding house services have received relatively limited scholarly attention despite their unique characteristics as long-term residential accommodations. Third, previous research has employed various mediating variables, including trust, perceived value, customer experience, customer engagement, and switching cost, whereas the mediating role of customer satisfaction within boarding house services has not been comprehensively examined through the Stimulus–Organism–Response perspective. These limitations indicate the need for a more integrated behavioral model capable of explaining how residential service attributes influence customer loyalty.

Building on this theoretical perspective, the present research develops a conceptual model in which facilities and location function as external service cues, customer satisfaction reflects tenants' psychological evaluation of those cues, and customer loyalty represents the resulting behavioral outcome. Rather than treating these constructs as independent factors, the proposed model explains how environmental service attributes shape loyalty through tenants' subjective residential experiences. This perspective broadens existing knowledge by demonstrating how the Stimulus–Organism–Response (S–O–R) perspective can be interpreted within the context of long-term student accommodation while offering a clearer explanation of the psychological process that connects service attributes with loyal behavior. From a practical standpoint, the proposed framework offers implications for boarding house operators seeking to strengthen tenant retention by combining physical improvements with positive residential experiences. Based on this perspective, the research investigates the direct and indirect associations among facilities, location, customer satisfaction, and customer loyalty, with particular attention given to the explanatory function of customer satisfaction within the proposed model.

RESEARCH METHOD

This research employed a causal quantitative investigation to explore how facilities and location shape customer satisfaction and, subsequently, customer loyalty within boarding house services. The analytical model was constructed from the Stimulus–Organism–Response (S–O–R) perspective, viewing environmental service attributes as the antecedents of customers' psychological evaluations that ultimately influence loyal behavioral intentions.

The research was conducted in Jimbaran Village, Badung Regency, Bali, Indonesia. The population comprised university students residing in boarding houses within the study area. Participants were recruited through purposive sampling by selecting tenants with sufficient residential experience to provide informed assessments of the investigated constructs. Information was obtained through a survey instrument designed with five response categories, ranging from strong disagreement to strong agreement. The instrument captured respondents' perceptions of four reflective constructs, namely facilities, location, customer satisfaction, and customer loyalty.

The empirical data were analyzed through Partial Least Squares Structural Equation Modeling (PLS-SEM). An initial descriptive assessment was undertaken to present the respondents' demographic profile together with the general pattern of responses across all research constructs. Instrument quality was subsequently verified by assessing indicator loadings, construct reliability, convergent validity, and discriminant validity before estimating the structural relationships. The hypothesized relationships were examined using standardized path estimates generated through the bootstrapping resampling technique. The indirect effects were further investigated to determine the extent to which customer satisfaction transmitted the influence of facilities and location to customer loyalty. By integrating measurement validation and structural estimation within a single analytical procedure, the model captured both immediate and mediated relationships, allowing a more complete explanation of customer loyalty development in boarding house accommodation.

RESULT AND DISCUSSION

Research Context and Respondent Profile

The study was conducted in Jimbaran Village, Badung Regency, Bali, Indonesia, an educational area with a high concentration of boarding houses serving university students. The presence of Udayana University, Politeknik Negeri Bali, and ITB STIKOM Bali has stimulated continuous growth in the residential rental market, resulting in increasingly intense competition among boarding house providers. Although the number of boarding houses has expanded considerably, tenant retention remains a persistent challenge because many students relocate before completing their academic programs. This setting provides an appropriate context for examining customer loyalty in boarding house services.

Table 1. Demographic Profile of the Respondents (n = 260)

Variable	Category	n	%
Gender	Male	65	25.0
	Female	195	75.0
Age	17-20 years	137	52.7
	21-25 years	118	45.4
	≥26 years	5	1.9
Monthly Allowance	IDR 1.0–1.5 million	162	62.3
	> IDR 1.5 million	98	37.7
Monthly Boarding Fee	< IDR 500,000	53	20.4
	IDR 500,000–1,000,000	96	36.9
	> IDR 1,000,000	111	42.7
University	Udayana University	143	55.0
	Politeknik Negeri Bali	86	33.1
	ITB STIKOM Bali	31	11.9

Source: Processed data, 2026

The analysis drew upon responses obtained from 260 boarding house tenants enrolled as university students in Jimbaran. Because all participants had firsthand experience with the accommodation services, they were considered capable of providing reliable evaluations of the study constructs. A summary of the participants' demographic profile is provided in Table 1.

Female students represented the largest proportion of respondents (75.0%), while participants aged 17–20 years accounted for more than half of the sample (52.7%), indicating that most respondents were in the early stage of their university studies. The majority reported a monthly allowance of IDR 1.0–1.5 million (62.3%), and the most common boarding fee ranged from IDR 500,000 to IDR 1,000,000 per month (36.9%), reflecting the dominance of the middle-income student rental segment. More than half of the respondents were enrolled at Udayana University (55.0%), followed by Politeknik Negeri Bali (33.1%) and ITB STIKOM Bali (11.9%). Overall, the respondent profile reflects the dominant characteristics of university students renting boarding houses in Jimbaran. This composition supports the suitability of the sample for exploring how facilities, location, customer satisfaction, and customer loyalty are associated within the proposed research model.

Descriptive Profile of the Study Variables

An overview of participants' evaluations was prepared for each construct investigated in the study, namely facilities, location, customer satisfaction, and customer loyalty. Average scores were used to describe respondents' assessments, with larger mean values reflecting increasingly positive evaluations of each construct. A summary of these descriptive results is provided in Table 2.

Table 2. Descriptive Summary of Study Variables

Variable	Mean	Catagory	Highest-Rated Indicator	Mean	Lowest-Rated Indicator	Mean
Facilities	4.04	High	Cleanliness of the boarding house	4.10	Professional management of facilities	3.98
Location	4.23	Very High	Location reduces transportation costs	4.32	Clean surrounding environment	4.13
Customer Satisfaction	4.02	High	Reliable service provided by the manager	4.10	Rental price meets expectations	3.92
Customer Loyalty	3.89	High	Willingness to recommend the boarding house	4.11	Intention to stay despite rental price increases	3.63

Source: Processed data, 2026

Overall, respondents reported favorable perceptions across all research variables. Location achieved the highest overall mean (4.23), indicating that students perceived boarding houses in Jimbaran as highly accessible and strategically positioned. Easy access to universities, public facilities, and transportation appears to represent the primary competitive advantage of boarding house services in the study area. In contrast, customer loyalty recorded the lowest mean (3.89), although it remained within the high category. This finding suggests that positive perceptions of boarding house services do not necessarily translate into strong long-term commitment.

Among the facility indicators, cleanliness received the highest evaluation, demonstrating that respondents regarded a clean residential environment as an essential component of service quality. Conversely, professional management of facilities obtained the lowest score, implying opportunities for improving maintenance procedures, complaint handling, and communication between property owners and tenants.

The location construct received consistently favorable evaluations, particularly regarding its ability to reduce transportation costs and provide convenient access to university campuses. Nevertheless, environmental cleanliness surrounding the boarding houses received comparatively lower ratings, suggesting that improvements to the external residential environment may further strengthen tenants' perceptions of location quality.

Regarding customer satisfaction, respondents expressed the greatest appreciation for the reliability of services provided by boarding house managers. By comparison, the indicator concerning whether rental fees matched expectations recorded the lowest mean, indicating that perceived value remains an important consideration when students evaluate their residential experience.

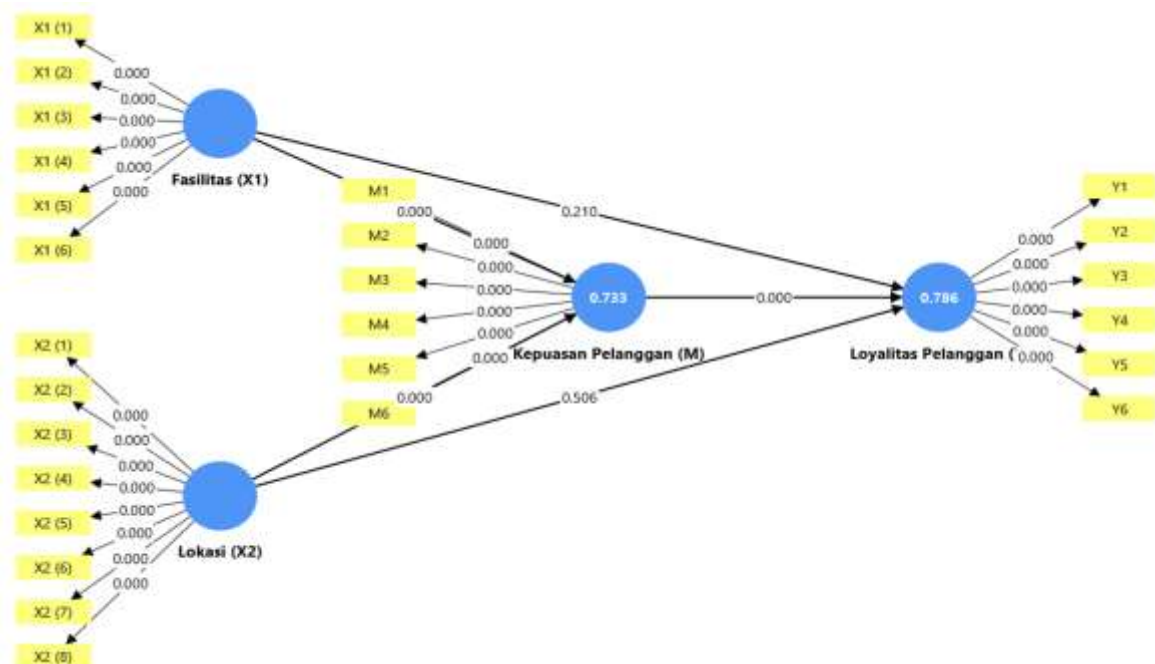
Within the customer loyalty construct, respondents showed the strongest willingness to recommend their boarding house to others, reflecting positive word-of-mouth intentions. However, the lowest rating was observed for the willingness to remain in the same boarding house following rental price increases. This result indicates that although respondents generally expressed favorable attitudes toward their accommodation, loyalty remains sensitive to price changes. Consequently, maintaining affordable pricing while continuously improving service quality may be essential for strengthening long-term customer retention.

Evaluation of the Measurement Model

Evaluation of the measurement model preceded the examination of the structural relationships among the study constructs. Figure 1 presents the final PLS algorithm output, depicting the estimated research model comprising two exogenous constructs (Facilities and Location), one mediating construct (Customer Satisfaction), and one endogenous construct (Customer Loyalty).

The structural model demonstrated a high level of explanatory performance for both endogenous constructs. Customer Satisfaction accounted for 73.3% of its observed variation ($R^2 = 0.733$), reflecting the combined contribution of Facilities and Location. Customer Loyalty showed an even greater proportion of explained variation ($R^2 = 0.786$), indicating that Facilities, Location, and Customer Satisfaction together captured 78.6% of the construct's variability. These coefficients suggest that the proposed model provides a robust representation of the relationships among the study constructs.

Figure 1. Results of the PLS-SEM Algorithm



Source: Processed data, 2026

The adequacy of the measurement model was verified by examining indicator loadings, convergent validity, discriminant validity, and construct reliability. A summary of the evaluation outcomes is provided in Table 3.

Table 3. Measurement Model Assessment Results

Construct	Loading Range	AVE	Cronbach's Alpha	Composite Reliability
Facilities	0.892–0.918	0.794	0.861	0.964
Location	0.839–0.880	0.740	0.786	0.958
Customer Satisfaction	0.864–0.920	0.734	0.728	0.959
Customer Loyalty	0.798–0.919	0.819	0.785	0.943

Source: Processed data, 2026

All indicators demonstrated strong measurement properties, with loading coefficients varying between 0.798 and 0.920, thereby exceeding the recommended minimum criterion of 0.70. Convergent validity was further supported because every construct produced an Average Variance Extracted (AVE) above 0.50, indicating that the latent variables captured a substantial proportion of the variance represented by their indicators. Reliability assessment likewise produced satisfactory results, as the Cronbach's alpha and Composite Reliability coefficients for all constructs were consistently higher than the accepted benchmark of 0.70.

Construct distinctiveness was verified by comparing cross-loadings and Heterotrait–Monotrait Ratio (HTMT) values. Each indicator demonstrated a stronger association with its designated construct than with the remaining constructs, while HTMT coefficients varied between 0.689 and 0.861, all below the accepted cut-off of 0.90. Together, these results demonstrate adequate separation among the latent constructs, indicating that each construct represents a unique conceptual domain.

Table 4. Discriminant Validity Results

Assessment	Results	Decision
Cross Loadings	Highest loading on intended construct	Accepted
AVE	0.734–0.819	Accepted
HTMT	0.689–0.861	Accepted

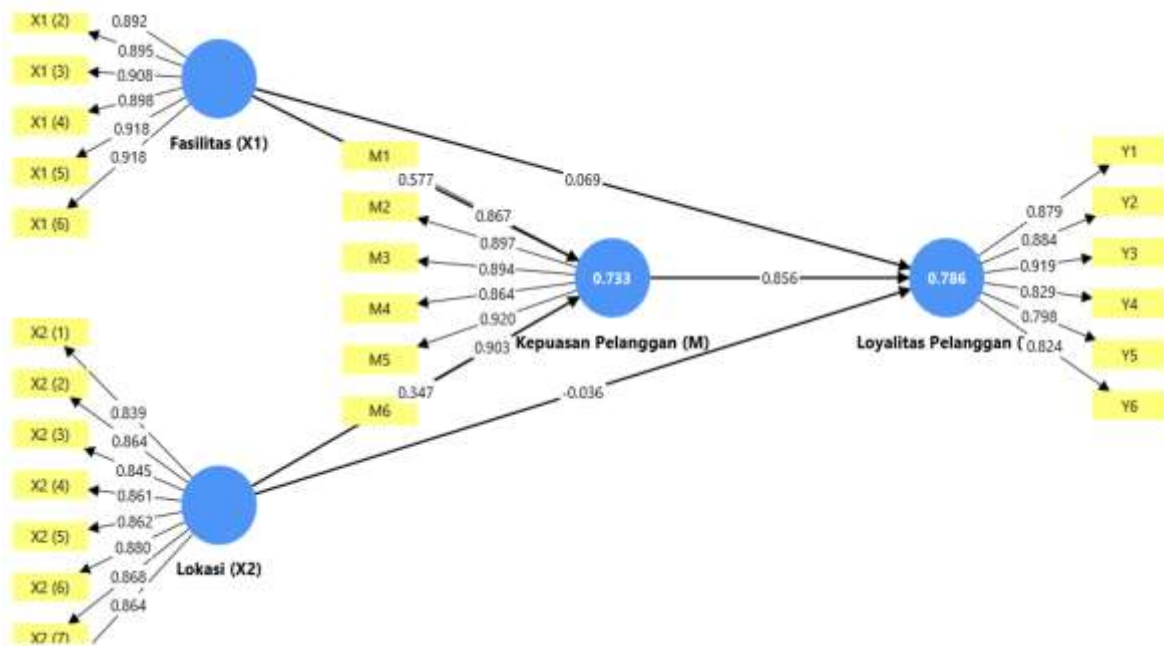
Source: Processed data, 2026

Taken together, the evaluation results indicate that the measurement model achieved an acceptable level of measurement quality. All latent constructs satisfied the established requirements for construct validity and reliability, providing a sound basis for examining the structural relationships and assessing the proposed hypotheses.

Evaluation of the Structural Model

Following confirmation of the measurement model, the structural relationships were examined to determine the explanatory performance of the conceptual framework and the interactions among the latent constructs. Figure 2 displays the outcomes generated through the bootstrapping procedure, including the standardized path estimates and their corresponding significance levels for each hypothesized relationship.

Figure 2. Bootstrapping Results of the Structural Model



Source: Processed data, 2026

The coefficient of determination revealed that the endogenous constructs were explained to a considerable extent by the variables incorporated in the research model. Facilities and Location accounted for 73.3% of the observed variation in Customer Satisfaction ($R^2 = 0.733$). Likewise, Facilities, Location, together with Customer Satisfaction, explained 78.6% of the variation in Customer Loyalty ($R^2 = 0.786$). The magnitude of these coefficients suggests that the conceptual framework provides a robust representation of customer behavior in the context of boarding house services.

Table 5. Discriminant Validity Results

Endogenous Construct	R^2	Adjusted R^2
Customer Satisfaction	0.733	0.731
Customer Loyalty	0.786	0.783

Source: Processed data, 2026

The Stone–Geisser Q^2 index was also calculated to assess the model's out-of-sample predictive performance. A Q^2 coefficient of 0.942 was obtained, indicating a high level of predictive accuracy because the value is well above the minimum acceptance criterion. This evidence suggests that the structural model is capable of generating reliable predictions for the endogenous constructs based on the explanatory variables included in the model.

Table 6. Predictive Relevance

Statistic	Value	Interpretation
Q^2	0.942	Very strong predictive relevance

Source: Processed data, 2026

Bootstrapping estimation showed positive associations from Facilities to Customer Satisfaction, from Location to Customer Satisfaction, and from Customer Satisfaction to Customer Loyalty, with all three paths reaching the required level of significance. By contrast, the direct paths connecting Facilities and Location with Customer Loyalty did not achieve statistical support. These outcomes indicate that the influence of service facilities and location on loyalty operates primarily after tenants develop favorable evaluations of their residential experience, highlighting the central role of customer satisfaction within the conceptual framework.

Overall, the structural model demonstrates satisfactory explanatory and predictive performance. The high values of R^2 and Q^2 , together with the significant indirect relationships identified through bootstrapping, indicate that the proposed framework effectively explains customer loyalty formation in boarding house services.

Structural Path Analysis

Bootstrapping estimates generated in SmartPLS were used to examine the structural relationships specified in the conceptual model. Relationships with probability values below 0.05 were interpreted as statistically supported. The estimated direct and indirect effects are summarized in Table 7.

The estimated structural paths indicate that neither Facilities nor Location showed a statistically supported direct association with Customer Loyalty ($\beta = 0.069$, $p = 0.210$; $\beta = 0.046$, $p = 0.506$). This pattern implies that improvements in the physical environment, by themselves, are unlikely to encourage sustained loyalty among student tenants. Instead, respondents appear to regard facility quality and accessibility as expected service attributes, whereas continued commitment depends on the overall residential experience.

In contrast, Facilities were positively associated with Customer Satisfaction ($\beta = 0.577$, $p < 0.001$), while Location also showed a favorable contribution to Customer Satisfaction ($\beta = 0.347$, $p < 0.001$). These estimates suggest that adequate facilities and convenient accessibility strengthen students' evaluations of their residential

environment. Customer Satisfaction, in turn, emerged as the strongest predictor of Customer Loyalty ($\beta = 0.856$, $p < 0.001$), indicating that positive residential experiences encourage tenants to maintain their tenancy and recommend the accommodation to prospective residents.

Additional path estimates confirmed that Customer Satisfaction transmitted the effects of both Facilities and Location to Customer Loyalty. The indirect contribution of Facilities remained positive and statistically supported ($\beta = 0.493$, $p < 0.001$), while Location also influenced Customer Loyalty indirectly through Customer Satisfaction ($\beta = 0.297$, $p < 0.001$). Because neither direct relationship reached statistical support, Customer Satisfaction can be interpreted as a full intermediary between environmental service attributes and tenant loyalty. This evidence suggests that improvements in facilities and accessibility strengthen loyalty only after they are translated into favorable residential evaluations, which is consistent with the behavioral process underlying the Stimulus–Organism–Response perspective.

Table 7. Structural Path Analysis Results

Hypothesis	Relationship	Path Coefficient (β)	p-value	Decision
H1	Facilities → Customer Loyalty	0.069	0.210	Not Supported
H2	Location → Customer Loyalty	0.046	0.506	Not Supported
H3	Facilities → Customer Satisfaction	0.577	<0.001	Supported
H4	Location → Customer Satisfaction	0.347	<0.001	Supported
H5	Customer Satisfaction → Customer Loyalty	0.856	<0.001	Supported
H6	Facilities → Customer Satisfaction → Customer Loyalty	0.493	<0.001	Supported
H7	Location → Customer Satisfaction → Customer Loyalty	0.297	<0.001	Supported

Source: Processed data, 2026

Mediating Effect Assessment

Evidence from the structural paths identified Customer Satisfaction as the mechanism connecting environmental service attributes with Customer Loyalty. Facilities and Location both showed positive associations with Customer Satisfaction,

which subsequently contributed to higher Customer Loyalty. In contrast, no empirical support was found for the direct links between Facilities and Customer Loyalty or between Location and Customer Loyalty.

Table 8. Mediation Analysis Results

Indirect Relationship	Indirect Effect (β)	p-value	Mediation Type
Facilities → Customer Satisfaction → Customer Loyalty	0.493	<0.001	Full mediation
Location → Customer Satisfaction → Customer Loyalty	0.297	<0.001	Full mediation

Source: Processed data, 2026

The significant indirect effects, combined with the insignificant direct effects of Facilities and Location on Customer Loyalty, indicate that Customer Satisfaction fully mediates both relationships. These findings suggest that improvements in physical facilities or strategic location alone are insufficient to strengthen customer loyalty. Instead, these service attributes first enhance tenants' satisfaction, which subsequently encourages continued patronage and positive recommendation behavior.

The observed relationships reinforce the behavioral sequence proposed by the Stimulus–Organism–Response perspective. Within this sequence, physical characteristics of boarding house services shape tenants' internal evaluations, which subsequently influence their intention to remain loyal. The absence of significant direct effects, together with the presence of significant indirect effects, indicates that favorable facilities and accessible locations strengthen loyalty only after generating positive residential experiences. Accordingly, customer satisfaction serves as the key psychological pathway through which service attributes are converted into sustained tenant commitment.

Discussion

The findings demonstrate that customer loyalty in boarding house services is primarily shaped through customer satisfaction rather than through the direct influence of physical service attributes. Although facilities and location significantly improved customer satisfaction, neither variable directly influenced customer loyalty. Instead, customer satisfaction fully mediated both relationships, indicating that tenants become loyal only after evaluating their overall residential experience positively. These findings support the Stimulus–Organism–Response (S–O–R) Theory, which proposes that environmental stimuli influence behavioral responses through an individual's internal psychological evaluation rather than through direct effects (Mehrabian & Russell, 1974). Within the present study, facilities and location function as

environmental stimuli, customer satisfaction represents the organism, and customer loyalty constitutes the behavioral response.

The significant influence of facilities on customer satisfaction highlights the importance of the residential environment in shaping students' evaluations of boarding house services. Facilities such as room conditions, cleanliness, internet access, parking areas, kitchens, and other supporting amenities contribute directly to tenants' daily comfort and convenience. Students who perceive these facilities as reliable and well maintained are more likely to report higher levels of satisfaction because the accommodation effectively supports both their academic and personal activities. This finding is consistent with previous studies suggesting that well-managed physical facilities enhance perceived service quality and customer satisfaction by creating comfortable and functional living environments (Dharma & Eliza, 2022; Kim & Lee, 2022; Simpong et al., 2021). The results further indicate that students evaluate facilities not merely as tangible resources but as components of a broader residential experience that influences their psychological assessment of service quality.

Similarly, location exerted a significant positive influence on customer satisfaction. Boarding houses located near universities, public transportation, and commercial facilities provide practical advantages by reducing commuting time and transportation costs while improving accessibility to essential services. Such convenience contributes positively to tenants' residential experiences and strengthens their overall satisfaction. These findings support previous research demonstrating that accessibility enhances customer satisfaction because it improves service convenience and perceived value (Cahyono et al., 2023; Ismail et al., 2022; Tjiptono & Diana, 2020). Interestingly, facilities produced a stronger effect on customer satisfaction than location, suggesting that students place greater emphasis on the quality of their daily living environment than on geographical accessibility alone. Since boarding house services involve long-term residence rather than short-term consumption, continuous interaction with physical facilities appears to play a more important role in shaping customer evaluations.

Despite these positive effects on satisfaction, neither facilities nor location directly influenced customer loyalty. This finding indicates that both attributes have become basic service requirements within the increasingly competitive boarding house market surrounding higher education institutions. Most boarding houses provide relatively similar facilities and occupy comparable locations, reducing their ability to differentiate one provider from another. Consequently, students no longer consider these physical attributes sufficient reasons to remain loyal. Instead, loyalty depends on how effectively those attributes generate satisfying residential experiences over time. This result helps explain inconsistent findings reported in previous studies, where some researchers identified significant direct effects of facilities and location on loyalty (Kurnianingtyas et al., 2022; Masrani &

Sampeliling, 2024), whereas others reported insignificant relationships (Nurcahyo et al., 2017; Nurian, 2023). The present study suggests that these inconsistencies may arise because customer satisfaction acts as an intervening psychological mechanism that has not always been incorporated into previous research models.

Customer satisfaction emerged as the strongest predictor of customer loyalty, confirming that satisfied tenants are more likely to renew rental agreements, recommend their boarding house to others, and maintain long-term relationships with service providers. This finding is consistent with relationship marketing theory, which emphasizes that customer loyalty develops through repeated positive experiences rather than isolated service encounters (Kotler & Keller, 2016). Similar conclusions have also been reported by Putri & Canggi (2025) and Wardana & Suparna (2025), who found that customer satisfaction strengthens customers' intention to continue using a service and encourages favorable word-of-mouth communication. Within boarding house services, loyalty therefore reflects the cumulative outcome of tenants' overall residential experiences rather than their evaluation of individual service attributes.

One of the principal contributions of this study is the confirmation that customer satisfaction fully mediates the relationships between facilities, location, and customer loyalty. Both indirect effects were statistically significant, whereas the corresponding direct effects were insignificant, indicating a pattern of full mediation. These findings imply that investments in physical facilities or strategically located properties do not automatically create loyal tenants. Instead, these environmental attributes first generate customer satisfaction, which subsequently encourages long-term behavioral commitment. This result extends previous service marketing research by demonstrating that customer satisfaction constitutes the primary psychological mechanism linking environmental service attributes with customer loyalty in boarding house services. Although earlier studies proposed alternative mediators such as customer trust, perceived value, customer experience, customer engagement, and switching costs, the present findings indicate that customer satisfaction provides the most immediate explanation for loyalty formation within long-term residential accommodation.

From a theoretical perspective, this study broadens the application of the Stimulus–Organism–Response (S–O–R) Theory by demonstrating its relevance within residential rental services. Previous applications of the framework have predominantly focused on retail, tourism, hospitality, and digital service contexts, whereas evidence from boarding house services has remained limited. The present findings confirm that environmental attributes influence customer behavior indirectly through customers' psychological evaluations, thereby reinforcing the theoretical assumption that behavioral responses emerge after internal cognitive and emotional processing. Consequently, customer satisfaction should be viewed as the principal mechanism through which service environments generate customer loyalty in long-term accommodation settings.

The findings also provide important managerial implications. Boarding house owners should recognize that investments in facilities and strategic locations alone are insufficient to ensure long-term customer retention. Greater attention should instead be directed toward maintaining facility quality, ensuring cleanliness and safety, responding promptly to maintenance requests, and creating consistently positive residential experiences. Such customer-oriented management practices strengthen customer satisfaction, which subsequently encourages contract renewal, positive recommendations, and sustainable customer loyalty. In increasingly competitive educational districts, where competing boarding houses frequently offer comparable physical characteristics, delivering superior customer experiences represents a more sustainable competitive advantage than relying solely on tangible infrastructure.

Several considerations should be taken into account when interpreting the present findings. The empirical evidence was derived from university students residing in boarding houses located in one higher education cluster, indicating that the observed behavioral patterns may differ across other residential environments or customer groups. In addition, the analytical model concentrated on facilities and location as the principal environmental attributes influencing customer behavior. Future investigations may broaden the proposed framework by incorporating variables such as perceived service performance, customer trust, switching barriers, perceived value, customer engagement, or online recommendation behavior to provide deeper insights into the processes through which customer loyalty develops across diverse residential accommodation settings.

CONCLUSION

This study demonstrates that customer satisfaction is the primary mechanism through which facilities and location influence customer loyalty in boarding house services. Although facilities and location significantly enhanced customer satisfaction, neither variable exerted a direct effect on customer loyalty. Instead, customer satisfaction fully mediated both relationships, indicating that tenants develop loyalty only after forming positive evaluations of their residential experiences. These findings extend the Stimulus–Organism–Response (S–O–R) Theory by confirming that environmental attributes shape behavioral intentions through customers' psychological responses rather than through direct environmental effects. Consequently, customer satisfaction represents the critical pathway linking service attributes with long-term customer loyalty in student accommodation services.

The findings provide practical guidance for boarding house owners operating in increasingly competitive educational districts. Investments in physical facilities and strategic locations should be complemented by consistent service quality, effective facility management, and positive residential experiences that strengthen customer satisfaction. Such an integrated approach is more likely to encourage contract renewal,

positive word-of-mouth communication, and sustainable customer retention. Future studies are encouraged to examine additional determinants of customer loyalty, including service quality, perceived value, customer trust, and customer engagement, while extending the investigation to different residential settings and customer segments to improve the generalizability of the proposed model.

REFERENCES

- Adriantantri, E., Indriani, S., & Suardika, I. B. (2023). Pengukuran Kepuasan Pelanggan Rumah Kost Menggunakan Service Quality. *Jurnal Mnemonic*, 6(1), 77–83.
- Alzamzami, J., & Suryono, L. J. (2021). Pelaksanaan Perjanjian Sewa Menyewa Rumah Susun Dan Akibat Hukumnya Dalam Hal Terjadi Wanprestasi. *Media Of Law And Sharia*, 2(3), 238–253.
- Bantun, S., & Sari, J. Y. (2023). Pengembangan Aplikasi Pencarian Rumah Kos Dengan Metode Scrum Dalam Rangka Digitalisasi Umkm Di Desa Popalia. *Informal Informatics J*, 8(1), 12.
- Cahyono, T., Herdinata, C., Harianto, E., & Olasode, T. (2023). Explaining The Role Of Service Quality And Customer Value On Customer Satisfaction. *Jurnal Aplikasi Manajemen*, 21(1), 128–142.
- Dharma, R., & Eliza, Y. (2022). Pengaruh Fasilitas Kerja Dan Pengembangan Karir Terhadap Kinerja Karyawan Dengan Kepuasan Kerja Sebagai Variabel Intervening Pada Pt. Bakrie Pasaman Plantations. *Journal Of Science Education And Management Business*, 1(1), 38–47.
- Fadli, M. D., & Rubiyanti, R. N. (2021). Pengaruh Harga, Promosi, Dan Kualitas Pelayanan Terhadap Loyalitas Konsumen Melalui Kepuasan Pelanggan Pada E-Commerce Shopee. *E-Proceeding Of Management*, 8(5), 1–17.
- Hariono, R., & Marlina, M. A. E. (2021). Pengaruh Harga, Lokasi, Dan Kualitas Layanan Terhadap Loyalitas Pelanggan Dengan Kepuasan Pelanggan Sebagai Variabel Mediator Pada Star Motor Carwash. *Jurnal Manajemen Dan Start-Up Bisnis*, 6(2), 1–10.
- Ismail, T. A. T., Zahari, M. S. M., Hanafiah, M. H., & Balasubramanian, K. (2022). Customer Brand Personality, Dining Experience, And Satisfaction At Luxury Hotel Restaurants. *Journal Of Tourism And Services*, 13(24), 26–42.
- Kotler, P., & Keller, K. L. (2016). *Marketing Management (15th Ed.)*. Pearson.
- Kurnianingtyas, C. D., Katriilya, T., & Bawono, B. (2022). The Influence Of Service Quality And Facilities On Customer Satisfaction And Loyalty Of Blue Residence's Boarding Room, West Jakarta. *Indonesian Journal Of Industrial Engineering & Management*, 3(3), 2745–9063.
- Masrani, M. N., & Sampeliling, A. (2024). Pengaruh Kualitas Layanan Dan Harga Serta Lokasi Terhadap Loyalitas Konsumen. *Kinerja: Jurnal Ekonomi Dan Manajemen*, 21(1), 81–85.
- Mehrabian, A., & Russell, J. A. (1974). *An Approach To Environmental Psychology*. Mit Press.
- Nanang, N., & Pasharibu, Y. (2021). Brand Image, Lokasi, Dan Fasilitas Sport Club Gym Terhadap Loyalitas Pelanggan. *Jurnal Penelitian Dan Pengembangan Sains Dan Humaniora*, 5(1), 125–132.

- Nurchahyo, R., Fitriyani, A., & Hudda, I. N. (2017). The Influence Of Facility And Service Quality Towards Customer Satisfaction And Its Impact On Customer Loyalty In Borobudur Hotel In Jakarta. *Binus Business Review*, 8(1), 23–29.
- Nurian, R. M. (2023). *Pengaruh Lokasi Toko Suasana Toko Dan Kualitas Pelayanan Terhadap Loyalitas Pelanggan Pada Toko Gunasalma Kawali Ciamis* [Doctoral Dissertation]. Uin Sunan Gunung Djati Bandung.
- Putri, S. M. Z., & Canggi, C. (2025). Kepuasan Pelanggan Sebagai Variabel Mediasi Pengaruh Customer Experience, Label Halal Dan Brand Image Terhadap Loyalitas Pelanggan Produk Skincare Avoskin. *Syarikat: Jurnal Rumpun Ekonomi Syariah*, 8(1), 1–15.
- Said, S., Badina, T., & Syahidah, S. (2020). Pengaruh Kualitas Pelayanan Terhadap Loyalitas Muzakki Melalui Kepuasan Muzakki Sebagai Variabel Intervening Pada Badan Amil Zakat Nasional (Baznas) Kota Serang. *Syar Iqtishadi: Journal Of Islamic Economics, Finance And Banking*, 4(1), 1–13.
- Satria, W. D., Elsandi, R. T., & Yuningsih, Y. (2023). Factors In Selecting Rental Housing Based On Itera Student Preferences. *International Journal Of Architecture And Urbanism*, 7(1), 26–33.
- Simpong, D. B., Othman, N. A., Razak, N. F. A., Yusof, M. F. M., & Hashim, H. (2021). *The Effect Of Facility Aesthetics On Guest Satisfaction: The Case Of Three Star Hotel In Kelantan*. In *International Conference On Business And Technology* (Pp. 1035-1047). Cham: Springer International Publishing.
- Sukirno, B., & Zainuddin, M. Z. (2025). Pengaruh Harga, Fasilitas, Lingkungan, Dan Jarak Tempuh Terhadap Keputusan Mahasiswa Universitas Sulawesi Tenggara Dalam Memilih Rumah Kos. *Sultra Journal Of Economic And Business*, 6(1), 425–437.
- Sulistiyo, T. D., Nurbaeti, N., Mariati, S., Mumin, A. T., & Muhandiansyah, D. (2024). Pengaruh Lokasi Strategis Dan Kualitas Pelayanan Terhadap Loyalitas Pelanggan Melalui Kepuasan Pelanggan Pada Reddoorz Near Cbd Ciledug, Kota Tangerang, Provinsi Banten. *Jurnal Bisnis Hospitaliti*, 13(1), 1–11.
- Tjiptono, F., & Diana, A. (2020). *Pemasaran*. Andi.
- Wardana, G. D., & Suparna, G. (2025). The Role Of Customer Satisfaction In Mediating Service Quality And Price Perception Towards Electronic Word Of Mouth Beauty Salon In South Badung Regency. *International Research Journal Of Economics And Management Studies Ijrjems*, 4(7).
- Yum, K., & Kim, J. (2024). The Influence Of Perceived Value, Customer Satisfaction, And Trust On Loyalty In Entertainment Platforms. *Applied Sciences*, 14(13), 5763.
- Yusma, D., Merlina, N., & Nurajijah, N. (2021). Sistem Informasi Pencarian Rumah Kost Berbasis Web. *Inti Nusa Mandiri*, 15(2), 127–134.