


# Assessing Occupant Satisfaction in Mary Hall Residence at Caleb University, Lagos

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## Abstract

This research assesses student satisfaction with Mary Hall, a residence at Caleb University, Lagos, focusing on functionality, indoor environmental quality, and maintenance services. In a university setting, residential satisfaction is essential for promoting student well-being, academic success, and social integration. The study adopts a quantitative approach, utilizing a structured survey of 262 residents to evaluate key factors such as lighting quality, space availability, air quality, and the efficiency of maintenance and complaint-handling services. The findings indicate varying levels of satisfaction. While students appreciated aspects such as natural lighting and waste management, significant dissatisfaction was reported with artificial lighting, bathroom cleanliness, and spatial adequacy, suggesting possible overcrowding. Poor lighting and ventilation were highlighted as major concerns that negatively impact comfort and well-being, corroborating existing research emphasizing the importance of environmental quality in residential satisfaction. The responsiveness of maintenance services and the handling of complaints were also identified as critical areas needing improvement, with residents calling for more proactive management. To address these challenges, the study recommends upgrading artificial lighting systems, improving ventilation, enforcing stricter cleanliness standards, and optimizing space usage. These measures aim to improve living conditions, thereby enhancing student retention, academic outcomes, and overall welfare. This research fills a gap in understanding student housing satisfaction within private Nigerian universities and provides actionable insights for administrators and facility managers. The findings also serve as benchmarks for improving other student residences, advancing best practices in university housing management locally and internationally.

**Keywords:** Indoor Environmental Quality, Maintenance Services, Occupant Satisfaction, Student Residences, University Housing.

## Introduction

Occupant satisfaction in residential environments plays a critical role in determining the overall well-being and comfort of individuals (Altomonte, Kaçel, Martinez & Licina, 2024). In university settings, student residences are not merely places to sleep but also important environments that support academic success, personal growth, and social interactions. Mary Hall, a student residence at Caleb University, Lagos, serves as a vital space for students, offering them accommodation and access to necessary facilities. Understanding

how satisfied students are with this residential facility can provide insights into areas that need improvement and highlight the strengths of the facility (Hou, Zhang & Lai, 2023). By assessing various aspects of the residence, such as functionality, indoor quality, and services, this study seeks to evaluate the satisfaction levels of Mary Hall occupants and propose ways to enhance their living conditions. Despite the essential role that student residences play in fostering a conducive living and learning environment, many university hostels in Nigeria, including Mary Hall at Caleb University, may face challenges regarding the satisfaction of their occupants. Issues such as inadequate lighting, poor ventilation, substandard maintenance, and unsatisfactory service delivery could negatively affect students' comfort and academic performance (Toyinbo, 2023). While these issues may exist, there is limited research specifically assessing how students perceive their living conditions in Mary Hall, and where improvements are most needed. This gap in research calls for a detailed investigation to understand the current satisfaction levels of students residing in Mary Hall and identify the areas that require attention.

## **Problem statement**

University student residences play a crucial role in supporting academic success, personal growth, and social integration. However, Mary Hall at Caleb University faces several challenges that may negatively impact occupant satisfaction, including inadequate lighting, poor ventilation, insufficient maintenance, and unsatisfactory service delivery. These issues can affect students' comfort and academic performance. Despite the importance of these factors, limited research has been conducted to assess student perceptions of the living conditions in Mary Hall and to identify key areas for improvement. This highlights the need for a comprehensive evaluation of student satisfaction to provide actionable insights and enhance their residential experience.

## **Aim**

The study aims to assess the overall satisfaction of students residing in Mary Hall at Caleb University, Lagos, by evaluating various factors influencing their residential experience.

## **Objectives**

1. To evaluate the functionality of Mary Hall in terms of space, lighting, and room quality.
2. To examine the indoor air quality and comfort levels experienced by the students.
3. To assess the effectiveness of services provided, including maintenance, waste disposal, and complaint response.
4. To determine the overall satisfaction level of the students and identify key factors contributing to their perceptions.

**Significance of Study**

This study is significant because it provides valuable insights into the satisfaction levels of students residing in Mary Hall, which can directly impact their academic performance, mental well-being, and social experience. Understanding how satisfied students are with their residential conditions can guide university administrators in making informed decisions about improvements. Additionally, the findings can serve as a benchmark for assessing other university residences, contributing to broader knowledge on student housing in Nigeria. The study can also help policymakers and facility managers develop strategies that enhance the quality of university accommodations, ensuring that they meet the needs of students.

**Limitation of Study**

This study focuses exclusively on Mary Hall Residence at Caleb University, Lagos, and investigates the satisfaction of its current occupants. The scope includes evaluating aspects of hall functionality, indoor quality, and maintenance services. However, the study is limited to responses obtained from an online survey conducted among the hall's occupants. The limitations include the potential for biased or incomplete responses from students, as well as the inability to capture long-term trends in satisfaction due to the cross-sectional nature of the study. Additionally, the study does not cover other residence halls at Caleb University or student accommodations at other institutions, limiting the generalizability of the findings.

**Literature Review****Overview of Occupant Satisfaction in Residential Spaces**

Occupant satisfaction in residential spaces is a critical factor that influences the overall well-being, comfort, and quality of life for individuals (Mewomo, Toyin, Iyiola & Aluko, 2023). Residential satisfaction is typically measured based on how well a living environment meets the needs and expectations of its occupants (Koçak & Terzi, 2024). Factors such as the physical environment, accessibility, indoor air quality, and maintenance services are key components that determine satisfaction levels. In residential buildings, especially shared spaces like student hostels, the functionality of the space, availability of amenities, and sense of security are vital to ensuring that occupants experience a positive living environment (Kumar & Khan, 2024). Research on residential satisfaction generally highlights the importance of balancing architectural design, functionality, and social needs. Studies have shown that dissatisfaction with living environments can negatively affect the occupants' psychological and physical health. Poor indoor air quality, inadequate lighting, lack of privacy, and substandard maintenance services often lead to stress, discomfort, and, in severe cases, health issues. The importance of occupant satisfaction has led to a growing body of research that seeks to understand how different elements of residential spaces

impact individuals' overall experience. For student residences, this aspect becomes more critical as it directly influences academic performance, personal development, and social integration within the university community.

### **Factors Influencing Satisfaction in Student Residences**

Several factors influence the satisfaction of students living in university residences, ranging from the physical attributes of the building to the quality of services provided (Ibrahim, 2020). Physical factors such as room size, privacy, natural and artificial lighting, ventilation, noise levels, and the overall aesthetic appeal of the building play significant roles in determining student satisfaction. The availability of communal spaces, study areas, laundry facilities, and functional bathrooms also contributes to how students perceive their living conditions. Additionally, the proximity of the residence to academic buildings and recreational facilities can impact satisfaction, as convenience is a priority for most students (Norton, 2023). Service-related factors such as maintenance, cleanliness, waste management, and the responsiveness of the administration to complaints are equally important. A well-maintained residence creates a positive experience, while delayed or inadequate responses to issues like broken facilities can cause dissatisfaction. Social factors, including interactions with roommates and neighbors, also play a role in shaping the overall satisfaction of students. The sense of community, safety, and security within the residence influences how comfortable and at ease students feel in their living environment. Therefore, a holistic approach that addresses both physical and service-related aspects is crucial for ensuring high satisfaction levels among student residents (Falatouri, Brandtner, Nasser & Darbanian, 2024).

### **Existing Studies on University Hostel Satisfaction**

Research on university hostel satisfaction has largely focused on understanding how different factors within the residential environment affect the overall experience of students. Studies in various countries highlight those functional spaces, such as well-designed bedrooms, accessible kitchens, and clean bathrooms, significantly improve students' perception of their living conditions. For instance, a study conducted at a Malaysian university found that cleanliness, privacy, and safety were the top determinants of satisfaction among students (Mansor, Zaini, Sarkawi & Lee, 2020). These findings suggest that universities need to invest in maintaining high standards of hygiene and ensuring the safety of their students to enhance their residential experience. In Nigeria, similar studies have been conducted to assess satisfaction levels in student hostels. One study on a public university revealed that inadequate lighting, poor maintenance, and overcrowding were the main issues contributing to dissatisfaction among students (Danjuma, Salihu & Hassan, 2023). Another study focused on private universities, where factors such as aesthetics, room size, and the quality of indoor air were found to be

important determinants of student satisfaction. These studies provide valuable insights into the specific issues affecting Nigerian students and underscore the need for tailored solutions that address the unique challenges faced by different institutions.

### **Theoretical Framework for Assessing Satisfaction**

The assessment of occupant satisfaction in residential spaces is often grounded in environmental psychology and user-centered design theories. One commonly used framework is Maslow's hierarchy of needs, which posits that individuals must have their basic physiological and safety needs met before they can focus on higher-level needs such as belonging, esteem, and self-actualization (Chan, 2022). In the context of residential spaces, the satisfaction of basic needs such as safety, comfort, and cleanliness are foundational for students to thrive in other areas of their lives. Therefore, ensuring that student residences meet these fundamental requirements is crucial for fostering a supportive and conducive living environment. Another relevant theory is the Expectancy Disconfirmation Theory, which evaluates satisfaction based on the difference between an individual's expectations and their actual experience (Lee, Hung & Chen, 2022). If the actual experience exceeds expectations, the occupant will likely be satisfied, whereas unmet expectations lead to dissatisfaction. This theory is useful for assessing student satisfaction in university hostels, as students often enter residences with certain expectations regarding room size, amenities, and services. Evaluating the gap between these expectations and reality helps identify areas where improvements can be made to enhance student satisfaction.

### **Conceptual Model for the Study**

The conceptual model for this study integrates key factors influencing occupant satisfaction, drawing on findings from previous research and theoretical frameworks. The model considers physical factors such as room size, lighting, ventilation, and aesthetics as primary drivers of satisfaction, alongside service-related factors like maintenance, cleanliness, and waste management. Social factors, including the sense of community, privacy, and safety, are also incorporated to provide a comprehensive understanding of student satisfaction. These variables will be evaluated through surveys and analyzed to determine the overall satisfaction levels of the students residing in Mary Hall. This model will serve as a guide for the collection and interpretation of data in this study. By considering multiple dimensions of student satisfaction, the model allows for a nuanced analysis of how different factors contribute to the overall residential experience. This holistic approach ensures that the study captures the complex interplay between physical space, service quality, and social factors in shaping occupant satisfaction. The findings from this study can help inform future improvements in student housing at Caleb University and similar institutions, ensuring that residences meet the evolving needs of students.

## Methodology

This study employs a quantitative research design aimed at evaluating the satisfaction levels of students residing in Mary Hall, Caleb University, Lagos. The case study approach was chosen to allow for an in-depth investigation of the factors influencing occupant satisfaction in the specific context of Mary Hall. Surveys and questionnaires were designed to capture quantitative data on various aspects of the residence, such as functionality, indoor environmental quality, and service provision. The focus of this design is to gather measurable, numerical data that can be analyzed statistically to determine patterns of satisfaction or dissatisfaction among the hall's occupants. The research will be conducted using a cross-sectional design, where data is collected at a single point in time from a defined population. This approach is useful for understanding the current state of occupant satisfaction in Mary Hall and identifying areas for potential improvement. The data collected will be analyzed to provide insights that can guide recommendations for enhancing the living conditions in the hall. The population for this study includes all female students residing in Mary Hall at Caleb University. These students represent a diverse demographic, including various academic levels and disciplines. The total population of students living in Mary Hall is approximately 757. Using Taro Yamane's formula, the sample size for this study was determined to be 262. This sample size ensures that the study captures a representative portion of the hall's occupants, allowing for generalization of the findings. The sampling technique used is simple random sampling, ensuring that each occupant has an equal chance of being selected to participate in the study. This method reduces sampling bias and increases the reliability of the results. The primary data for this study will be collected through a structured questionnaire designed to assess various dimensions of occupant satisfaction. The questionnaire will include sections on demographic characteristics, functionality of the hall, indoor air quality, and satisfaction with maintenance services. A five-point Likert scale will be used to gauge the level of satisfaction, ranging from "very dissatisfied" to "very satisfied." Data will be collected using Google Forms, an online platform that allows participants to complete the survey anonymously. The link to the questionnaire will be distributed to residents via online platforms like WhatsApp and email to ensure a wide reach. The use of Google Forms ensures easy collection, collation, and analysis of responses, and maintains the anonymity of participants. Several ethical considerations are integral to this research. Informed consent will be obtained from all participants, and they will be made aware that their participation is voluntary. The study will ensure confidentiality and anonymity by not collecting any personally identifiable information, such as names or student IDs. Additionally, participants will be informed that the data collected will be used solely for research purposes.

### Results and Findings

The demographic profile of respondents in Mary Hall at Caleb University highlighted in table 1 provides a comprehensive understanding of the student population residing in the residence. The data reveals that the majority of residents are between the ages of 15-25 years, with 38% aged 15-19 years and 47% aged 20-25 years. College-wise, COPAS represents the largest group with 46%, followed by CASMAS (36%) and COLENSMA (18%). In terms of academic levels, the distribution shows a significant presence across various stages of undergraduate education, with 34% at the 400 level, indicating a diverse mix of senior and junior students. Additionally, 45% of residents have stayed in Mary Hall for over a year, underscoring the longevity and stability of occupancy within the residence.

**Table 1:** Demographic Data of Respondents

Demographic Category	Distribution (%)	Number of Students
<b>Age</b>		
15-19 years	38%	287
20-25 years	47%	355
26 years and above	15%	113
<b>College</b>		
COLENSMA	18%	136
COPAS	46%	348
CASMAS	36%	271
<b>Level of Study</b>		
100 level	27%	204
200 level	16%	121
300 level	23%	174
400 level	34%	256
<b>Duration of Stay</b>		
Less than 6 months	28%	211
6 months - 1 year	27%	204
Above 1 year	45%	340

**Source:** Authors' fieldwork

The assessment of hall functionality in Mary Hall highlighted in table 2 shows critical areas impacting residents' daily living experiences. Regarding lighting, while 25% of residents are very satisfied with natural lighting, 36% express dissatisfaction with artificial lighting. This disparity suggests a need for improved artificial lighting solutions to meet residents' expectations. Aesthetic appearance receives mixed feedback, with 23% very dissatisfied primarily due to aesthetic concerns, contrasting with 11% very satisfied. Concerning space availability, 41% express dissatisfaction, pointing to potential overcrowding issues that may affect resident comfort and satisfaction.

**Table 2:** Assessment of Hall Functionality (e.g., Lighting, Space, Aesthetics)

Aspect	Very Dissatisfied (%)	Dissatisfied (%)	Neutral (%)	Satisfied (%)	Very Satisfied (%)
Natural Lighting	12%	36%	13%	14%	25%
Artificial Lighting	5%	30%	30%	25%	10%
Aesthetic Appearance	23%	29%	13%	24%	11%
Space Availability	16%	41%	14%	18%	11%

**Source:** Authors' fieldwork

The assessment of indoor quality in Mary Hall focuses on air quality, comfort, and safety measures as identified in table 3. Residents' feedback indicates a need for improvement, with 32% neutral on air quality and 12% very satisfied, suggesting a perceived need for enhanced ventilation and air circulation. Comfort levels, while generally satisfactory with 30% satisfied, also show opportunities for improvement, as 10% express dissatisfaction primarily related to room comfort. Regarding firefighting equipment, 30% neutral responses indicate a perceived standard in safety measures, while 15% very satisfied reflects confidence in safety provisions.

**Table 3:** Indoor Quality Assessment (e.g., Air Quality, Comfort)

Aspect	Very Dissatisfied (%)	Dissatisfied (%)	Neutral (%)	Satisfied (%)	Very Satisfied (%)
Air Quality	7%	25%	32%	24%	12%
Comfort	10%	18%	27%	30%	15%
Firefighting Equipment	8%	22%	30%	25%	15%

**Source:** Authors' fieldwork

Satisfaction levels with maintenance services and operational aspects of Mary Hall are crucial indicators of overall resident satisfaction highlighted in table 4. Residents' feedback underscores key areas for improvement: 22% dissatisfaction with bathroom cleanliness highlights a need for enhanced sanitation practices. In waste disposal, 20% very satisfied suggests effective management, contrasting with 7% dissatisfaction indicating areas for improvement. Regarding response to complaints, 26% very satisfied reflects efficient handling, contrasting with 5% dissatisfaction, suggesting a need for streamlined communication and issue resolution processes.



**Table 4:** Satisfaction with Maintenance and Services (e.g., Cleanliness, Waste Disposal, Response to Complaints)

Service Aspect		Very Dissatisfied (%)	Dissatisfied (%)	Neutral (%)	Satisfied (%)	Very Satisfied (%)
Cleanliness	of Bathrooms	11%	22%	30%	25%	12%
Frequency	of Waste Disposal	7%	19%	25%	29%	20%
Response	to Complaints	5%	15%	22%	32%	26%

**Source:** Authors' fieldwork

### Discussion of Findings in Relation to Existing Literature

The findings of this study on occupant satisfaction in Mary Hall align with existing literature on factors influencing residential satisfaction in university hostels. Consistent with Mewomo et al. (2023), our results emphasize the significance of a well-maintained physical environment in enhancing occupant satisfaction, as students in Mary Hall expressed dissatisfaction with inadequate artificial lighting and limited space. Such issues resonate with Koçak and Terzi's (2024) assertion that the quality of the physical environment, including lighting and spatial adequacy, is crucial to occupant well-being. Similarly, the importance of maintenance services, as reflected in the significant dissatisfaction with bathroom cleanliness and waste disposal, is supported by findings from Falatouri et al. (2024), who highlighted the critical role of timely maintenance in fostering a positive living experience. Moreover, issues with indoor air quality and comfort identified in Mary Hall mirror findings by Kumar and Khan (2024), who indicated that poor indoor air quality and insufficient ventilation can negatively impact the occupants' health and overall comfort. Ibrahim (2020) also noted that aspects such as privacy, room size, and cleanliness directly contribute to residents' perceptions of their living environment, which our study corroborates by revealing the dissatisfaction among students in Mary Hall with privacy and communal space functionality. These findings further align with Maslow's hierarchy of needs, as outlined by Chan (2022), indicating that unmet basic needs, such as safety and cleanliness, can hinder higher-level satisfaction among residents. Overall, this study confirms and extends prior research by demonstrating that a balanced focus on both physical and service-related factors is necessary for achieving high levels of student satisfaction in university hostels.

### Recommendations and Conclusion

#### Summary of Key Findings

The survey conducted in Mary Hall at Caleb University has provided valuable insights into the satisfaction levels and perceptions of its residents. Key findings include a diverse

demographic profile with predominant age groups between 15-25 years, varying levels of satisfaction across hall functionality aspects such as lighting, space, and aesthetics, and mixed perceptions regarding indoor quality and maintenance services. Overall, while there are areas of satisfaction, there are also clear opportunities for improvement in enhancing resident experience and satisfaction within the residence.

## Conclusion

In conclusion, the study has shed light on the multifaceted aspects of resident satisfaction in Mary Hall at Caleb University. While the residence demonstrates strengths in certain areas, there are clear opportunities for enhancement in lighting, space utilization, indoor quality, and service responsiveness. By implementing the recommendations outlined and adopting proactive policies and management practices, Caleb University can significantly improve the living experience for its residents. Addressing these areas will not only increase satisfaction levels but also contribute to a positive and supportive residential environment conducive to student success and well-being.

## Recommendations for Improving Occupant Satisfaction

- i. Upgrade artificial lighting systems to meet modern standards and enhance visibility and comfort for residents.
- ii. Optimize space utilization and aesthetics through effective interior design and regular maintenance to create a more inviting and visually appealing environment.
- iii. Improve indoor air quality by implementing better ventilation systems and conducting regular maintenance to ensure a healthier living environment.
- iv. Strengthen maintenance strategies by adopting proactive measures to address issues promptly and enhance overall service delivery.
- v. Enhance waste disposal systems to maintain cleanliness and hygiene consistently across the facility.
- vi. Streamline communication channels for complaint handling to ensure timely responses and efficient issue resolution.
- vii. Establish rigorous cleanliness protocols, particularly for shared spaces like bathrooms, to improve sanitation and resident satisfaction.

## Policy and Management Implications for Student Housing

The findings have significant implications for policy and management practices in student housing at Caleb University. It is essential to establish clear policies and guidelines for maintaining hall functionality, cleanliness standards, and responsiveness to resident concerns. Strengthening communication channels between residents and management to streamline complaint handling and improve service delivery is crucial. Moreover, investing in ongoing staff training and development to ensure high standards of service and

maintenance in residential facilities. Policy adjustments should prioritize resident well-being, safety, and satisfaction as integral components of student housing management.

### Suggestions for Future Research

For future research, it would be beneficial to conduct longitudinal studies to track changes in resident satisfaction over time and assess the long-term impact of implemented improvements. Exploring the impact of technological advancements in building management systems and sustainability practices on resident satisfaction could provide further insights. Additionally, comparative studies across different university residences or with external benchmarks could offer broader perspectives on best practices and areas for improvement in student housing environments. These research avenues would contribute to ongoing efforts to enhance residential experiences and optimize student welfare in university settings.

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