

# Green Hospitality Practices and Customer Satisfaction: A Study of Hotels in the Upper West Region of Ghana

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## ABSTRACT

As sustainability becomes a key concern in the global hospitality industry, hotels are increasingly adopting eco-friendly measures. This study investigates the relationship between green hospitality practices and customer satisfaction in hotels within the Upper West Region of Ghana. This study employed a quantitative research approach. The target population for this study consisted of hotel guests and staff members from hotels located in the Upper West Region of Ghana. Simple random and convenience sampling techniques were used to select hotel staff and guests, respectively. Structured questionnaires to collect data from 109 hotel customers and 70 staff members. Descriptive statistics and regression analysis were conducted to assess the relationship between green practices and customer satisfaction. Findings indicated that hotels in the Upper West Region are gradually embracing environmentally sustainable practices, particularly those that are practical, affordable, and immediately beneficial. The study revealed that customers have strongly positive perceptions and behavioural intentions toward green hotels. The study found a positive and statistically significant relationship between green practices and customer satisfaction ( $t = 2.059$ ,  $p = 0.042 < 0.05$ ). The study recommended that hotel managers should institutionalise clear sustainability policies that prioritise energy efficiency, waste reduction, and water conservation. Regular audits should be conducted to ensure compliance with green standards.

**Keywords:** Green practices, customer satisfaction, behaviour, hotels

## INTRODUCTION

The hospitality industry has become a vital pillar of global economic growth and tourism development, largely due to its extensive reliance on human resources (Thommandru et al., 2023; Nakipova et al., 2021). According to Nakipova et al. (2021), the hospitality industry plays a crucial role in creating employment opportunities and making significant contributions to national and global GDP. Statista Research Department (2025) reported that the travel and tourism industry generated an impressive \$11.1 trillion in global GDP in 2025, underscoring its importance as a major driver of economic prosperity and job creation worldwide. Despite these economic benefits, the hospitality industry, particularly hotels, has been identified as a major contributor to environmental degradation.

Hotels often consume vast amounts of energy and water while generating significant quantities of waste, posing serious environmental challenges (Okumus et al., 2020; Mensah, 2016). Therefore, green hospitality practices (GHP) are being integrated into hotel operations globally to minimise environmental degradation and promote sustainable development (Amicarelli et al., 2022). GHP has emerged as a viable and sustainable alternative, aiming to reduce the industry's ecological footprint while maintaining operational efficiency (Tran, 2025). GHP emphasises the adoption of environmentally responsible practices, including the use of energy-efficient lighting systems, the implementation of water conservation techniques, and the establishment of waste recycling programs (Tran, 2025). As highlighted by Prakash et al. (2023), these initiatives are increasingly being adopted by hotels worldwide, indicating a growing recognition of the need to align profitability with ecological responsibility and balance economic growth with environmental sustainability.

Despite the global trend toward sustainability, Ghana's hotel industry has been slow in adopting green practices. Studies conducted in Accra indicate a growing interest in green initiatives; however, there is limited research on the extent of green hospitality adoption in less urbanised regions, such as the Upper West Region (Mensah, 2016). Meanwhile, customer expectations are evolving, with many travellers now preferring eco-friendly accommodations (Aksu et al., 2022). This study aims to:

1. Determine the extent of green hospitality practice adoption in hotels in the Upper West Region.
2. Establish the relationship between green practice adoption and customer satisfaction.

## LITERATURE REVIEW

### Resource-Based View (RBV) Theory

The study was guided by RBV theory, which has been widely applied to studies on green initiatives in businesses (Lee, Abdul Wahid, & Goh, 2012; Kim & Lee, 2012). RBV highlights the crucial role of green practices in optimising resource usage to boost long-term profits and maintain a competitive edge. According to RBV, a company's resources are the key drivers of its competitive advantage and sustained success (Paulraj, 2019). The theory explains how environmentally friendly practices can yield economic benefits (Garay & Font, 2012).

In the hotel industry, unique resources and capabilities for environmental protection can form the basis of a strategic approach that enhances competitiveness and often results in positive financial outcomes. By recognising existing green values embedded in a hotel's environmental standards, managers can gain valuable insights to develop effective green practices (Banerjee et al., 2013; Bansal, 2013; Berkhout & Rowlands, 2017).

The application of RBV theory enables hotels to leverage their environmental resources and capabilities, gaining a competitive edge and improving financial performance. The RBV theory suggests that hotels can create sustainable competitive advantages by developing and leveraging their unique environmental resources and capabilities, such as energy-efficient systems, sustainable supply chains, and eco-friendly practices.

### Green practices in the hotel industry

A green hotel is an environmentally friendly establishment that efficiently utilises energy, water and materials while maintaining high service quality (Safaeva et al., 2020; Faust, 2018). Such hotels or accommodations prioritise environmental sustainability by minimising their impact on the surrounding environment (Faust, 2018). Key characteristics of a green hotel include the use of non-toxic cleaning products by the housekeeping team, bedding and mattresses made from 100% organic cotton, and a commitment to a pollution-free environment. Green practices vary among hotels, all of which demonstrate different environmental responsibilities that hotels assume. For instance, the InterContinental Hotels Group has developed its Green Engage System to measure energy, waste, and water use in hotels and recommends "Green Solutions" to help hotels achieve greater sustainability (IHG, 2015).

Hilton proposes an evolving strategy to achieve sustainability by identifying key impact areas (e.g., energy, carbon, waste, and water); establishing policies, partnerships, and programs to deliver improved efficiency; and measuring and reporting on progress (Hilton, 2015). Similarly, Marriott is implementing energy and environmental action plans to reduce water, waste, and energy consumption in its hotels (Marriott, 2015). Furthermore, Teng et al. (2017) developed seven categories of energy conservation and carbon reduction indicators for the hotel industry, including energy, water, waste, purchasing, building, communication, participation, and top management commitment.

Green practices in the hospitality industry extend beyond basic initiatives such as linen and towel reuse programs (Çavusoglu et al., 2020). They also encompass more advanced and comprehensive strategies, including energy efficiency measures, water conservation efforts, and the adoption of green building designs

(Çavusoglu et al., 2020). Effective green hospitality requires active engagement, awareness, and participation from both management and guests.

### **Benefits of going green for hotels**

A green hotel is an eco-friendly establishment that follows environmentally sound programs/practices (Merli et al., 2019). According to Agarwal and Kasliwal (2017), green hotels are eco-friendly and operate in a way that reduces waste, conserves energy and promotes environmental health. Hotels are adopting green practices not only to protect the natural environment, but also to reap the financial benefits of “going green” (Tan, 2023). Hotels can save a considerable amount of money through implementing recycling at their facilities, such as segregating bottles, cans, newspapers and cardboard (Moreo, 2018).

Implementing green practices enhances a business's positive image (Ristova, 2020). Zhang et al. (2020) emphasised that the public perceives green hotels as more socially responsible and therefore holds them in high regard. A hotel's image is intangible yet priceless, and having a positive image can, in turn, create competitive advantages for hotels (Ristova, 2020). In fact, many hotels use the label “green hotel” as a marketing tactic to differentiate themselves from competitors and attract guests. Teng et al. (2017) also suggest that green advertising/marketing leads to good business results.

### **Customer satisfaction in green hotels**

Customer satisfaction refers to the level of acceptance from customers in relation to their expectations (Moreo, 2018). If a customer feels satisfied with the value of a product or service, they are most likely to become a long-time customer. Customer satisfaction refers to the emotional response of customers, ranging from liking to disappointment, that arises when they compare the performance (results) of a product with their expectations (Thai & Nguyen, 2022). Satisfied customers are essential to the company, and they are a crucial factor in the company's sustainability, as satisfied customers can increase the company's competitiveness (Supriadi et al., 2017). Customers who are satisfied with a product or service tend to repurchase or reuse a similar one (Supriadi et al., 2017). Thus, satisfaction is a key factor in customers' repurchase intentions, which may affect the company's sales volume.

According to Gupta et al. (2023), when guests experience service success, their satisfaction is higher for green (vs non-green) hotels, and customer satisfaction is enhanced when green hotels engage in green initiatives for public-serving motives (e.g., assisting with community development) rather than for self-serving motives (e.g., increasing hotel profits). When green practices are perceived favourably by guests, they contribute only weakly to increased satisfaction; however, if these practices are perceived unfavourably by guests, they result in strong dissatisfaction (Yusof et al., 2017). Green practices are an essential part of the service at hotels (Yu et al., 2017), and if guests perceive a lack of them, they will feel dissatisfied (Yu et al., 2017).

### **Influence of green practices on customer satisfaction and behaviour**

Green practices have increasingly become a key factor influencing customer satisfaction and behaviour in the accommodation sector (D'Acunto et al., 2020). As sustainability gains prominence, hotels that adopt environmentally responsible practices are seeing measurable effects on guest perceptions and loyalty. Mustapha and Naibbi (2017) found that the implementation of green initiatives, eco-certification, and effective communication of these environmental efforts are strongly linked to higher levels of customer satisfaction and loyalty. Guests are not only more likely to feel satisfied with their stay but also more willing to pay premium prices and recommend such hotels to others.

Similarly, Ettinger et al. (2018) observed that green practices are among the most frequently mentioned topics in online customer reviews, often discussed in conjunction with supplier relations. Their study concluded that the integration of green practices significantly shapes customer satisfaction and behavioural responses toward hotels. D'Acunto (2020) also noted that guests tend to express more positive emotions and assign higher ratings in their reviews when they perceive the presence of green initiatives, even though only a small proportion of reviews explicitly highlight such practices.

Moreover, Li et al. (2015) emphasised that guest awareness plays a crucial role in shaping their responses to green initiatives. When guests can easily recognise a hotel's environmental efforts, they tend to react positively; however, a lack of communication or visibility regarding these practices may lead to inconvenience or misunderstanding during their stay. Supporting this, Wang et al. (2018) revealed that adopting green practices enhances customer retention, indicating that sustainability initiatives can foster long-term loyalty. These studies underscore that the successful implementation and communication of green practices not only support environmental sustainability but also serve as a strategic approach to improving customer satisfaction and behaviour in the hospitality industry.

## **METHODOLOGY**

### **Research Approach**

This study employed a quantitative research approach, using structured questionnaires to collect numerical data from hotel customers and staff. A quantitative approach was adopted because it enables the objective measurement of green practice adoption, facilitates statistical analysis of customer satisfaction levels, and yields generalizable findings applicable to the broader hospitality sector.

### **Research design**

A descriptive survey design was employed for this study. A descriptive survey research design is a quantitative research method used to collect data from a sample of individuals through the use of structured questionnaires or surveys. Descriptive surveys allow researchers to systematically collect, analyse and interpret data in response to specific variables of interest (Aquino et al., 2018).

### **Population**

The target population for this study consisted of hotel guests and staff members from hotels located in the Upper West Region of Ghana. These participants were selected because they represent the key stakeholders directly involved in or affected by the implementation of green hospitality practices. Hotel staff play a crucial role in the adoption and execution of environmentally sustainable initiatives, as they are responsible for integrating green practices into daily operations and service delivery. On the other hand, hotel guests are essential in evaluating the effectiveness and visibility of these practices, as their perceptions, satisfaction, and behavioural responses provide valuable insights into how green initiatives influence customer experiences.

### **Sampling Technique and Sampling Size**

The study adopted a multi-stage sampling technique to ensure that participants were selected in a comprehensive and representative manner from hotels across the Upper West Region of Ghana. In the first stage, stratified sampling was used to categorise hotels into three distinct strata based on their classification: luxury hotels, mid-range hotels, and budget hotels. Following the stratification, systematic random sampling was employed to select the specific hotels for inclusion in the study. Using a list of registered hotels provided by the Ghana Tourism Authority, every fifth hotel on the list was selected, ensuring an unbiased and evenly distributed representation across the region.

For participant selection within the chosen hotels, convenience sampling was used to recruit hotel guests. This approach was suitable as it enabled the inclusion of customers who were readily available and willing to participate in the survey during their stay. In contrast, simple random sampling was used to select hotel staff, ensuring that every staff member, regardless of position or department, had an equal chance of being chosen.

A total of 179 respondents participated in the study. This comprised 109 hotel guests and 70 hotel staff members, including both managers and employees. This sample size provided a balanced representation of perspectives from both the service providers and recipients within the hospitality industry of the Upper West Region.

## Data collection instrument

Data for the study were collected using structured questionnaires administered to both hotel customers and staff. The questionnaire consisted primarily of closed-ended questions, designed to obtain quantifiable responses that could be systematically analysed. To measure participants' attitudes and perceptions, a five-point Likert scale was employed, ranging from 5 (Strongly Agree) to 1 (Strongly Disagree). This scaling technique enabled the researcher to capture the intensity of respondents' opinions and assess the degree of agreement or disagreement with various statements related to green hospitality practices and customer satisfaction. The use of a structured format ensured consistency in responses and facilitated reliable statistical analysis.

## Data Analysis

The collected data were analysed using descriptive and inferential statistical techniques. Descriptive statistics, including means, frequencies, and percentages, were used to summarise and present the demographic characteristics of respondents and their general responses to the survey items. Additionally, regression analysis was used to investigate the relationship between green practices and customer satisfaction.

## RESULTS AND DISCUSSION

### Demographic Characteristics of Participants

The demographic information of the respondents is summarised and presented in Tables 1 and 2, which respectively display the characteristics of the hotel staff and hotel guests who participated in the study.

Table 1: Demographic characteristics of hotel staff (n=70)

Categories	Variables	Frequency	Percentage
Gender	Female	35	50%
	Male	35	50%
Age (Years)	20 - 29	36	51%
	30 - 39	24	34%
	40 - 49	6	9%
	50 - 59	4	6%
	60 - 69	0	0%
	Above 70	0	0%
Educational level	No Formal Education	0	0%
	Primary School	0	0%
	JHS	1	1%
	SHS	15	21%
	1st Degree	36	51%



Years in the Hospitality Industry	Master's Degree	17	24%
	PhD	1	1%
	0 – 5 years	46	66%
	6 – 10 years	16	23%
	11 – 15 years	6	9%
	16 – 20 years	1	1%
	21 – 25 years	1	1%
	26 – 30 years	0	0%
	31 – 35 years	0	0%

The data presented in Table 1 revealed that the gender distribution among the hotel staff was evenly balanced, with 35 males (50%) and 35 females (50%) participating in the study. In terms of age distribution, the majority of staff participants, 36 (51%), were within the 20–29 years age group, indicating a relatively young workforce. This was followed by 24 (34%) within the 30–39 years category, 6 (9%) between 40–49 years, and 4 (6%) aged 60–69 years. Notably, there were no participants aged 70 years or above. These results suggest that most hotel employees in the region are young adults, which may reflect the labour-intensive nature of the hospitality industry that often attracts younger individuals.

Regarding educational background, the findings showed that 36 (51%) of the hotel staff held a first degree, while 17 (24%) possessed a Master’s degree. Additionally, 15 (21%) were Senior High School (SHS) graduates, with only 1 (1%) holding a PhD, and another 1 (1%) being a Junior High School (JHS) leaver. This indicates that a significant proportion of staff members were well-educated, with more than half having attained tertiary-level qualifications.

In terms of work experience in the hospitality industry, the data showed that the majority, 46 (66%), had worked for 0–5 years, followed by 16 (23%) with 6–10 years of experience, 6 (9%) with 11–15 years, 1 (1%) with 16–20 years, and another 1 (1%) with 21–25 years of experience. This finding suggests that most of the staff participants were relatively new to the industry.

Table 2: Demographic characteristics of hotel guests (n=109)

Categories	Variables	Frequency	Percentage
Gender	Male	73	67.0%
	Female	36	33.0%
Age category (years)	20 - 29	25	22.9%
	30 - 39	30	27.5%
	40 - 49	33	30.3%
	50 - 59	19	17.4%
	60 - 69	2	1.8%

	Above 70	0	0.0%
Educational level	No Formal Education	0	0.0%
	Primary School	0	0.0%
	JHS	0	0.0%
	SHS	2	1.8%
	1st Degree	64	58.7%
	Master's Degree	39	35.8%
	PhD	4	3.7%
Employment Status	Public sector	58	53.2%
	Private sector	40	36.7%
	Unemployed	11	10.1%
Category of Guest	Tourist	13	11.9%
	Family	26	23.9%
	Business Traveler	53	48.6%
	Leisure Traveler	17	15.6%
Years of visiting the hotel	0 – 5 years	41	37.6%
	6 – 10 years	40	36.7%
	11 – 15 years	15	13.8%
	16 – 20 years	7	6.4%
	21 – 25 years	2	1.8%
	26 – 30 years	3	2.8%
	31 years and above	1	0.9%

The data presented in Table 2 indicate that the majority of hotel guests were male, accounting for 73 (67%), while 36 (33%) were female. This suggests that male guests constituted a larger proportion of hotel patrons in the Upper West Region during the study period. In terms of age distribution, most customer participants, 33 (30.3%), fell within the 40–49 years age group. This was followed by 30 (27.5%) in the 30–39 years category, 25 (22.9%) in the 20–29 years group, 19 (17.4%) between 50–59 years, and 2 (1.8%) aged 60–69 years. The data therefore show that the majority of hotel guests were in their middle age, particularly between 40 and 49 years, which may reflect the active working population that frequently travels for business or official purposes.

Regarding educational background, the findings revealed that 64 (58.7%) of the hotel guests were first-degree holders, 39 (35.8%) held Master's degrees, 4 (3.7%) had PhDs, and 2 (1.8%) were Senior High School (SHS) graduates. This suggests that most hotel guests were highly educated individuals, likely professionals or business travellers.

Concerning employment status, 58 (53.2%) of the participants were employed in the public sector, 40 (36.7%) in the private sector, while 11 (10.1%) were unemployed. This distribution suggests that a substantial number of hotel guests were public sector employees, likely travelling for official assignments or conferences.

In terms of guest category, 53 (48.6%) were identified as business travellers, 26 (23.9%) were family guests, 17 (15.6%) were leisure travellers, and 13 (11.9%) were tourists. This further supports the notion that business travel represents the dominant purpose of hotel patronage in the region.

Regarding the number of years guests had been involved in the hospitality industry as customers, 41 (37.6%) indicated 0–5 years, 40 (36.7%) reported 6–10 years, 15 (13.8%) had 11–15 years, 7 (6.4%) had 16–20 years, 2 (1.8%) had 21–25 years, 3 (2.8%) had 26–30 years, and 1 (1%) had 31 years or more of experience as hotel guests. This indicates that the majority of participants had relatively recent exposure to the hospitality industry, with most being guests for 0–5 years.

### Green practices adopted by the Hotels

To assess the extent to which hotels in the Upper West Region adopted green practices, the mean and standard deviation were used, with a significant mean level set at 3.0. The results are summarised in Table 3.

Table 2: Responses on green practices adopted by the hotels

Green practices	Mean	Std. Dev.	$\alpha$	AVE
Towel Reuse	3.89	0.81	0.874	0.611
Energy-Efficient Lighting (e.g., LED bulbs, efficient appliances)	3.77	0.86		
Electricity Controlled Key Card	3.55	0.97		
Water Conservation (including Rain Harvesting)	3.55	0.97		
Solar/Wind Generated Electricity	3.21	1.04		
Solid Waste Recycling	2.98	1.01		
Natural Ventilation and Lighting	2.52	1.12		
Tree Planting and Lawn Maintenance	2.45	1.13		
Waste Water Recycling	1.12	1.16		

Note: Agreed: > 3.0, Disagreed: <3.0

The result showed that towel reuse ( $M = 3.89$ ,  $SD = 0.81$ ) and energy-efficient lighting ( $M = 3.77$ ,  $SD = 0.86$ ) were the most widely implemented practices among hotels in the Upper West Region. These are relatively simple and cost-effective measures that yield visible environmental and economic benefits. Additionally, electricity-controlled key cards ( $M = 3.55$ ,  $SD = 0.97$ ) and water conservation practices, including rainwater harvesting ( $M = 3.55$ ,  $SD = 0.97$ ), were relatively common, reflecting an increasing awareness of resource efficiency in hotel management. Conversely, practices such as wastewater recycling ( $M = 1.12$ ,  $SD = 1.16$ ), tree planting and lawn maintenance ( $M = 2.45$ ,  $SD = 1.13$ ), and natural ventilation and lighting ( $M = 2.52$ ,  $SD = 1.12$ ) were less frequently adopted. The results suggest that hotels in the Upper West Region are gradually embracing environmentally sustainable practices, particularly those that are practical, affordable, and immediately beneficial.



The results further showed that the overall internal consistency of the green practices construct was high, as shown by a Cronbach's Alpha of 0.874. This suggests that the items measuring green practices were reliable and internally consistent. The Average Variance Extracted (AVE) of 0.611 also demonstrates strong convergent validity, confirming that the indicators collectively explain a substantial portion of the variance in the underlying construct.

### Consumer Satisfaction and Behaviour

This section addresses consumer satisfaction and behaviour towards the hotel's green practices. The satisfaction and behaviour were measured with Means and standard deviations, and the significant mean level was fixed at 3.0. Table 3 presents the results.

Table 3: Responses on consumer satisfaction and behaviour

Consumer satisfaction	Mean	Std. Dev.	$\alpha$	AVE
I prefer to patronise hotels that demonstrate environmental responsibility.	4.35	0.66	0.88	0.64
I intend to stay at green hotels again in the future.	4.31	0.68		
I would recommend green hotels to friends and family.	4.26	0.72		
I enjoy the atmosphere and aesthetic design of green hotels.	4.24	0.70		
I am satisfied with the quality of service provided by green hotels.	4.21	0.73		
I feel healthier and more comfortable staying in eco-friendly hotels.	4.18	0.77		
I feel that staying in a green hotel provides good value for money.	3.96	0.88		
Green hotels meet my expectations for comfort and cleanliness.	3.10	0.81		
I am willing to pay slightly higher rates for environmentally responsible hotels.	2.89	0.95		

Note: Agreed: > 3.0, Disagreed: <3.0

The result indicated that customers have strongly positive perceptions and behavioural intentions toward green hotels. The highest mean score was recorded for the statement "*I prefer to patronise hotels that demonstrate environmental responsibility*" (Mean = 4.35, SD = 0.66), suggesting that environmental responsibility plays a pivotal role in influencing customer choice. Closely following are "*I intend to stay at green hotels again in the future*" (Mean = 4.31, SD = 0.68) and "*I would recommend green hotels to friends and family*" (Mean = 4.26, SD = 0.72), indicating strong loyalty and advocacy intentions among guests.

Statements relating to comfort and perceived value also scored moderately high, showing satisfaction with the overall experience and atmosphere of green hotels. However, the lowest mean score, "*I am willing to pay slightly higher rates for environmentally responsible hotels*" (Mean = 2.89, SD = 0.95), highlights that price remains a critical factor, even for environmentally conscious guests.

The Cronbach's Alpha value of 0.88 confirms the reliability of the measurement instrument. In contrast, the AVE value of 0.64 indicates acceptable convergent validity, suggesting that the items effectively measure the construct of consumer satisfaction and behaviour toward green hotels.

## Relationship between Hotel Adoption of Green Practices and Customer Satisfaction

The findings presented in Tables 4 and 5 show the model summary and regression coefficient of the relationship between hotel adoption of green practices and consumer satisfaction.

Table 4: Model Summary

Model	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Std. Error of the Estimate
1	.204	.042	.033	.817

The model summary in Table 5 shows that the correlation coefficient ( $R$ ) = 0.204, indicating a positive but weak relationship between hotels' adoption of green practices and customer satisfaction. The coefficient of determination ( $R^2 = 0.042$ ) indicates that approximately 4.2% of the variance in customer satisfaction can be attributed to the adoption of green practices. This means that while green practices have a significant effect, other factors beyond environmental initiatives may also influence customer satisfaction in the hotel industry.

Table 5: Regression coefficient

Model	Unstandardized Coefficients (B)		Standardized Coefficients		
	B	Std. Error	(Beta)	T	
Constant	3.053	0.451		6.771	0.000
Green practices	0.276	0.134	0.204	2.059	0.042

Dependent Variable: Customer Satisfaction

The regression coefficients indicate that the adoption of green practices has a significant predictive value for customer satisfaction ( $\beta = 0.204$ ,  $t = 2.059$ ,  $p = 0.042$ ). The positive unstandardized coefficient ( $B = 0.276$ ) indicates that a one-unit increase in green practice adoption results in a 0.276-unit increase in customer satisfaction, while holding all other variables constant. The significance level ( $p < 0.05$ ) confirms that the relationship is statistically significant, suggesting that hotels that integrate sustainable practices tend to record higher levels of customer satisfaction.

## DISCUSSION OF RESULTS

The results suggest that hotels in the Upper West Region are gradually embracing environmentally sustainable practices, particularly those that are practical, affordable, and immediately beneficial to their operations. This finding agrees with Faust (2018), who noted that the adoption of green practices in developing regions often begins with cost-effective and easily implementable strategies that deliver short-term economic and environmental benefits. Similarly, Teng et al. (2017) found that hotels primarily adopt green practices to enhance operational efficiency, improve their brand image, and attract environmentally conscious customers. The finding further aligns with Çavuşoğlu et al. (2020), who emphasised that the successful integration of sustainability initiatives within the hospitality industry depends on aligning environmental responsibility with business profitability and customer satisfaction.

According to the study, customers have strongly positive perceptions and behavioural intentions toward green hotels. This finding agrees with Thai and Nguyen (2022), who reported that customers are generally satisfied with companies that demonstrate a strong commitment to sustainability and environmental stewardship. Similarly, Supriadi et al. (2017) revealed that customers who are satisfied with a hotel's green initiatives are more likely to develop loyalty and engage in positive word-of-mouth promotion. Gupta et al. (2023) also emphasised that customer satisfaction is a key determinant of repeat patronage in eco-friendly hotels, as sustainability enhances both emotional and experiential value for guests.

Furthermore, the study found a statistically significant and positive relationship between sustainable practices and consumer satisfaction. Hotels that adopt green practices tend to record higher levels of customer satisfaction. This finding corroborates Mustapha and Naibbi (2017), who found that the implementation of green initiatives and eco-certification significantly influences consumer satisfaction and behaviour. Likewise, Wang et al. (2018) found that adopting environmentally friendly practices enhances customer retention, suggesting that sustainability initiatives play a crucial role in shaping customers' long-term loyalty and overall satisfaction within the hospitality sector.

## **CONCLUSION AND RECOMMENDATIONS**

Hotels are among the most resource-intensive service industries, consuming large quantities of energy and water while generating substantial amounts of waste. These activities pose significant environmental challenges, underscoring the need for sustainable operational practices. The results of this study revealed that hotels in the Upper West Region are gradually embracing environmentally sustainable practices, particularly those that are practical, affordable, and yield immediate benefits to their operations. This gradual adoption reflects growing awareness of the importance of environmental stewardship within the hospitality sector.

The findings further indicated that customers hold strongly positive perceptions and behavioural intentions toward green hotels. Guests tend to associate eco-friendly practices with improved quality of service, comfort, and overall satisfaction. This suggests that green initiatives not only contribute to environmental protection but also enhance customer loyalty and competitiveness within the hospitality market.

The study confirmed a statistically significant and positive relationship between the adoption of sustainable practices and customer satisfaction. Hotels that implement green practices tend to experience higher levels of customer approval and repeat patronage. The study recommended that hotel managers should institutionalise clear sustainability policies that prioritise energy efficiency, waste reduction, and water conservation. Regular audits should be conducted to ensure compliance with green standards. Additionally, Continuous staff education on sustainable practices can enhance implementation effectiveness and foster a culture of environmental responsibility within hotel operations.

## **LIMITATIONS**

The study was limited geographically to one region, which may restrict the generalisation of findings to other parts of Ghana or different hospitality contexts. Moreover, the use of only structured questionnaires may be subject to response bias or social desirability effects, particularly on questions related to environmental awareness and sustainability attitudes.

## **Future Research**

Future studies could explore the long-term economic benefits of sustainability initiatives in hotels and compare the adoption of green practices across different regions in Ghana to provide a broader national perspective.

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