

Impact of Sustainability Practices on Customer Loyalty in Hotels And Resorts: A Study With Special Reference to ooty

Dr. Kalaiarasi V¹, Dr. Gunasundari K², Dr. Ashok Kumar R³, Dr Ramya K⁴

^{1,2} Associate Professor, Department of Management Sciences, PSG College of Arts & Science, Coimbatore - 641 014.

^{3,4} Assistant Professor, Department of Management Sciences, PSG College of Arts & Science, Coimbatore - 641 014.

Abstract:

This study investigates the influence of sustainability and service quality on customer loyalty within the resort industry of Ooty, Tamil Nadu. As an ecologically sensitive hill station facing significant tourism-driven resource pressure, Ooty provides a critical context for examining whether environmental responsibility enhances long-term guest retention. Adopting a descriptive research design, data were collected from 219 resort guests and analyzed using non-parametric tests, correlation. This size allows for adequate data collection to analyze customer perceptions, behaviours, and loyalty patterns effectively. This study employed snowball and convenience sampling, both of which are non-probability sampling techniques.

The findings reveal that while service quality is rated exceptionally high sustainability awareness and attitude serve as more significant predictors of guest outcomes. Correlation analysis confirms a strong positive relationship between customer satisfaction and loyalty. Specifically, sustainability awareness emerged as a stronger predictor than traditional service quality, although individual sustainable practices were not statistically significant on their own.

Despite high levels of satisfaction, guest loyalty remains moderate, with a notable resistance to paying price premiums for eco-friendly services. The study concludes that for resorts in eco-sensitive zones, long-term loyalty is driven by the synergistic integration of operational excellence and transparent sustainability communication.

Keywords: Sustainability, Service Quality, Customer Loyalty, SERVQUAL, Resort Management, Ooty, Sustainable Tourism, Customer Satisfaction.

1. INTRODUCTION TO THE STUDY

Sustainable development has become a central theme in global discussions as societies, businesses, and governments grapple with the challenges of environmental degradation, climate change, and growing populations. At its core, sustainable development refers to progress that satisfies the needs of the present without compromising the ability of future generations to meet their own needs. This concept is often explained through three interconnected pillars—economic growth, environmental protection, and social equity—each of which must work in balance for true sustainability to be achieved. It is not merely about conserving resources but about rethinking how growth and development are approached, ensuring that advancements in technology, infrastructure, and industry also safeguard ecological systems and uplift communities. In today's world, where the consequences of unsustainable practices are

increasingly visible in the form of rising global temperatures, biodiversity loss, and resource scarcity, sustainable development is no longer a choice but a necessity for long-term survival and prosperity.

In the context of the hospitality industry, and especially within resorts, sustainable development plays a particularly vital role. Resorts are often located in ecologically sensitive areas such as beaches, forests, mountains, or wildlife zones, which means their operations directly impact the natural environment. For this reason, adopting sustainable practices becomes essential to protect the very landscapes and cultural settings that attract visitors in the first place. This involves strategies such as using renewable sources of energy, implementing water conservation techniques, designing eco-friendly infrastructure, reducing waste through recycling and composting, and sourcing materials and food locally to support surrounding

communities. Beyond environmental benefits, sustainability in resorts also enhances guest experiences, as travelers increasingly seek authentic, responsible, and meaningful stays that align with their values. By integrating these principles, resorts not only secure their own long-term success but also act as stewards of the environment and partners in community development, making them powerful contributors to the broader goals of sustainable development.

The selection of a research topic is never accidental; it often arises from a combination of personal passion, academic curiosity, and real-world relevance. In my case, the decision to study *sustainability and service quality in the hospitality sector* - with a specific emphasis on resorts in Ooty - stems from a longstanding interest in environmental issues and a belief that business practices should align with ecological responsibility. Growing up at a time when climate change, biodiversity loss, and unsustainable consumption patterns dominate global discourse, I developed a strong awareness of the need for responsible action at both individual and institutional levels. Tourism, though often promoted as a development tool, is a double-edged sword. On one hand, it generates employment, income, and cultural exchange; on the other, it poses severe threats to fragile ecosystems through overconsumption of resources, waste generation, and ecological degradation.

The genesis of this study can be traced to two interlinked developments that shaped both my academic interests and my personal orientation towards research.

The first development emerged from my academic engagement with services marketing, where foundational concepts such as customer satisfaction, loyalty, and service quality captured my attention. In particular, the SERVQUAL framework provided a systematic lens through which service delivery and customer perceptions could be analysed. This framework highlighted how gaps between expectations and actual service performance significantly influence consumer attitudes and behaviours. While studying this literature, however, I recognized that another dimension—sustainability—was often treated separately. Despite the increasing global importance of sustainability,

few studies integrated it directly with service quality in explaining customer loyalty, particularly within the hospitality sector. This gap presented itself as an opportunity to extend existing theoretical models by incorporating sustainability into the conversation.

The second development stemmed from my personal exposure to sustainable tourism discourses. During my own travels and interactions with hospitality professionals, I observed a growing awareness among tourists, especially younger and environmentally conscious groups, regarding the ecological footprint of their choices. Tourists frequently voiced concerns about how their accommodation decisions affected the local environment, while hoteliers simultaneously acknowledged the rising pressure to implement eco-friendly practices. At the same time, there was an undercurrent of uncertainty from the business side: many hoteliers worried about the balance between profitability and sustainability, questioning whether eco-friendly practices would genuinely resonate with customers or remain peripheral to decision-making. This dichotomy - between consumer expectations for sustainability and the business concern for economic viability - prompted a central research question: Does sustainability truly matter for customer loyalty, and how does it compare with the traditional driver of loyalty, service quality?

The decision to focus this study on Ooty emerged as a natural extension of these reflections. Ooty, one of India's most renowned hill stations, offers a context where environmental concerns and tourism pressures intersect visibly. The region receives heavy tourist inflows year-round, which contributes significantly to its economy but simultaneously places immense pressure on its ecological resources. Resorts, as prominent players within Ooty's hospitality sector, not only shape tourist experiences but also exert considerable influence on the region's environmental footprint.

1.1. Contribution to Sustainability Studies

Sustainability has evolved from a normative ideal into an operational priority within business and tourism scholarship, yet empirical work that tests sustainability's direct impact on core marketing outcomes—such as loyalty—remains limited in many geographic contexts. This study advances sustainability research in the following ways:

1.1.1. Empirical integration of sustainability into consumer-behaviour models. Rather than treating sustainability as a peripheral attribute, this study operationalizes it as a multi-dimensional antecedent to loyalty (environmental practices, community engagement, and economic sustainability/local sourcing). This allows the research to test whether and how each sustainability dimension uniquely contributes to loyalty, thereby refining theoretical models of green consumer behaviour.

1.1.2. Contextual evidence from an emerging-market, destination-sensitive setting. Much sustainability research has been concentrated in developed-country contexts; empirical findings from India, and specifically from hill-station resorts, will contribute valuable cross-contextual evidence. This helps test the external validity of sustainability–loyalty relationships across different socio-economic and ecological conditions.

1.1.3. Methodological contribution to measurement. By employing detailed sustainability indicators (rather than single-item proxies), the study provides a replicable measurement approach that other researchers can adopt or refine. This strengthens the empirical rigor in sustainability research within hospitality.

1.1.4. Policy and managerial relevance. Demonstrating a measurable link between sustainability practices and loyalty offers evidence-based justification for resource allocation to environmental programs and community initiatives. This contributes to the literature on corporate social responsibility as a strategic tool, not merely a compliance exercise.

1.2. Service Quality in Resorts

Service quality has long been regarded as one of the most decisive factors in determining the competitiveness of businesses within the hospitality industry. In resorts, where guests expect not merely accommodation but holistic experiences, the quality-of-service delivery becomes a central driver of both satisfaction and loyalty. In resort settings, service quality manifests in several interconnected dimensions:

1.2.1. Tangibles: The appearance and functionality of physical facilities, equipment, décor, staff uniforms, and other visible aspects that influence

first impressions. For instance, the aesthetic appeal of resort lobbies, guest rooms, recreational facilities, and wellness centres communicates a standard of professionalism and care that directly shapes customer perceptions.

1.2.2. Reliability: The ability of the resort to consistently deliver what has been promised. This includes ensuring reservations are honoured, amenities function properly, and services are delivered accurately and dependably. Guests who experience reliability develop a sense of trust, which is critical for repeat visits.

1.2.3. Responsiveness: The willingness and readiness of employees to assist customers promptly. In the hospitality industry, where guest needs can be immediate and diverse, timely service provision significantly contributes to overall satisfaction.

1.2.4. Assurance: The competence, courtesy, and credibility of resort staff. Employees' ability to demonstrate knowledge, inspire confidence, and instill a sense of safety forms an essential component of perceived service quality.

1.2.5. Empathy: The personalized care and individual attention provided to guests. Resorts that successfully tailor services to the unique preferences of each guest—whether through dietary accommodations, customized leisure activities, or attentive communication—generate deeper emotional connections and stronger loyalty.

2. REVIEW OF LITERATURE

Soni, G., Hussain, S., & Kareem, S., (2024), Environment Friendly Practices Adopted in Hotels and their Impact on Customer Satisfaction: Findings indicate that green initiatives enhance customer satisfaction and foster loyalty, with employee training playing a significant role in implementing these practices.

Rana, V., Raina, A., & Bathla, G., (2023), The Effect of Sustainable Practices on Customer Attitude: A Study of Sustainable Hospitality Operations: This study investigates the impact of sustainable hospitality practices on consumer satisfaction, loyalty, and destination choice. With increasing economic, social, and environmental responsibilities, hotels are urged to adopt eco-friendly measures to ensure long-term viability. The

research highlights that green initiatives enhance customer happiness, strengthen loyalty, and increase willingness to pay a premium for sustainable services.

Abdou, A. H., Hassan, T. H., et al (2022), the Nexus between Environmentally Sustainable Practices, Green Satisfaction, and Customer Citizenship Behavior in Eco-Friendly Hotels: Social Exchange Theory Perspective: Using structural equation modeling with bootstrapping, the research finds that Environmentally Sustainable Practices significantly enhance both Green Satisfaction and Customer Citizenship Behaviour, while Green Satisfaction also positively influences Customer Citizenship Behaviour.

Sangpikul, A. (2022), Understanding Resort Service Quality through Customer Complaints: The research categorizes complaints into key service areas—guest rooms, front desk, food & beverage, resort facilities, and wellness services—and maps them to the SERVQUAL dimensions. The study demonstrates how analyzing customer feedback provides actionable insights for improving service quality and enhancing guest satisfaction in resorts.

Ramamoorthi, D., & Udaya Kumar, (2019), A Study on Impact of Tourism and Sustainable Measures in Ooty, the Nilgiris: It examines how uncontrolled tourism can create competition for local resources. Using sources from international, national, and regional research, the study identifies the challenges posed by mass tourism and proposes sustainable nature-based tourism measures to mitigate negative impacts and promote environmentally responsible tourism practices in Ooty.

Islam, M. F., Zhang, J et al., (2020), Assessing the adoption of sustainability practices in tourism industry: Insights from a developing country: The study provides practical guidance for managers to enhance sustainability, contributing to socio-economic and environmental development, and highlights the mediating role of sustainability practices in achieving competitive advantage in environmentally sensitive tourist destinations.

Olya, H., Altinay, L et al (2020), Hotels' Sustainability Practices and Guests' Familiarity, Attitudes and Behaviours: Using structural equation modeling and fuzzy-set Qualitative Comparative Analysis, the findings indicate that social and

environmental practices positively affect both satisfaction and loyalty, while the economic dimension and familiarity alone do not significantly impact loyalty, though they enhance satisfaction.

Omar, M. K., Shamsul Azman, N. S et al., (2020), Chalet and Resort Guests Expectation and Perception of the Quality Factors Using SERVQUAL Dimension: Findings reveal that guest expectations exceeded actual experiences in service, facilities, and environment, highlighting a gap in satisfaction. The study emphasizes the need for lodging providers to improve service quality and facilities to meet global standards and offers practical guidance for chalet and resort managers to enhance customer satisfaction and promote the destination effectively.

Kulkajonplun, K et al., (2016), The Development of a Sustainable Resort and Indicators: Using the Global Reporting Initiative framework, the research proposes a sustainable development concept tailored to resorts, integrating economic, environmental, and social factors.

Jain, M., & Nuangjamnong, C (2024), Exploring the Influence of Green Marketing on Green Customer Loyalty for Eco-friendly Resorts in Phuket Island: The research finds that green marketing significantly enhances customer satisfaction and, along with customer trust, positively influences green customer loyalty, while acknowledging limitations related to geographic focus and reliance on quantitative methods.

Yusof, Y., Awang, Z et al (n.d.), the influence of green practices by non-green hotels on customer satisfaction and loyalty in the hotel and tourism industry: The research finds that implementing green practices significantly enhances both customer satisfaction and loyalty, with satisfaction also serving as a mediator between green practices and loyalty.

Jaatinen, E., (2022), The effect of corporate sustainability on relationship marketing in tourism industry: the influence of customer perceptions of corporate sustainability on customer loyalty: The research finds that while personal traits such as age, gender, income, and support for sustainable business influence Customer Perceptions of Corporate Sustainability, only certain traits affect customer expectations. The study highlights the importance of

corporate sustainability in fostering long-term customer relationships and offers insights for tourism companies seeking to enhance loyalty through sustainable practices.

Abirami, B et al., (2024), Nurturing harmony: Harnessing niche tourism for sustainable development with special reference to Nilgiris district: The research explores how niche tourism supports the Sustainable Development Goals (SDGs) by enhancing community well-being, fostering sustainable livelihoods, and contributing to environmental preservation. The findings demonstrate that niche tourism can be a strategic driver of sustainable development while identifying challenges and strategies for maximizing its positive impact.

Papallou, E et al., (2024), Emerging Sustainability Trends in Tourist Facilities: A Comparative Assessment of Multiple Hotels and Resorts: The study highlights the importance of collaboration among local authorities, businesses, and stakeholders to achieve sustainable development goals in the hospitality sector. Findings provide actionable insights for policymakers and hotel managers to enhance environmental performance, social responsibility, and overall sustainability in tourism facilities.

Songkrohpanit, P et al., (2024), Guidelines for Customer Loyalty and Sustainable Development in Five-Star Resorts: The research emphasizes enhancing competitiveness, aligning tourism development with sustainable economic growth, and promoting quality services consistent with Sustainable Development Goal 8. Yu, J., Zhang, X., & Kim, H.-S., (2023), Using Online Customer Reviews to Understand Customers' Experience and Satisfaction with Integrated Resorts: The research identifies four key dimensions—"Amenities," "Entertainment," "Tourist," and "Atmosphere" that shape customer perception. The findings reveal that environment, staff service, and food service significantly influence satisfaction, providing practical insights for resort operators and a comprehensive approach to understanding customer experience beyond traditional methods.

Yosuf, N., Rahman, S., & Iranmanesh, M., (2015), The Environmental Practice of Resorts and Tourist Loyalty: The Role of Environmental Knowledge,

Concern, and Behaviour: This study analyses data using partial least squares, the research finds that resorts' environmental practices significantly enhance loyalty among tourists with higher environmental concern and eco-friendly behaviors, while environmental knowledge shows no moderating effect.

Gupta, V., Sharma, S., & Sinha, S. K., (2023), How Sustainable Practices Influence Guests' Willingness to Pay a Price Premium in Fiji: The research finds that implementing sustainable practices significantly enhances guests' intentions to return, with many willing to pay more for eco-friendly services.

Olya, H et al., (2021), Hotels' Sustainability Practices and Guests' Familiarity, Attitudes and Behaviours: The research finds that social and environmental practices strongly enhance guest satisfaction and loyalty, while economic practices and familiarity have a lesser effect on loyalty but still contribute to satisfaction.

Verma, V. K., & Chandra, B., (2017), Sustainability and Customers' Hotel Choice Behaviour: A Choice-Based Conjoint Analysis Approach: The research finds that sustainability is a key factor in hotel selection, with green scaping strongly associated with eco-friendly practices. The study provides valuable insights into how sustainability shapes consumer preferences in the hospitality and tourism sector.

2.1. RESEARCH GAP

Although extensive research has been conducted in the hospitality and tourism sector, there remains a noticeable gap regarding the combined effect of sustainability and service quality on customer loyalty in resorts. Most prior studies have examined these factors independently—either focusing on sustainability practices, such as energy conservation, waste management, and eco-friendly initiatives, or on service quality dimensions like staff responsiveness, reliability, and guest satisfaction. However, few studies have explored how these two crucial factors interact and influence guest loyalty when considered together. This gap is particularly significant in regions like Ooty, where eco-sensitive environments and high tourist influx demand a careful balance between providing exceptional service and implementing sustainable practices.

Understanding the comparative impact of sustainability and service quality is essential because it helps resort managers allocate resources effectively, prioritize initiatives, and develop strategies that resonate with today's eco-conscious travelers. By addressing this research gap, the present study aims to provide empirical evidence on which factor—sustainability or service quality—plays a more dominant role in fostering customer loyalty, or whether a combined approach offers the most significant advantage. This analysis will not only contribute to academic knowledge but also provide actionable insights for the hospitality industry, guiding resorts toward sustainable growth while maintaining high standards of guest satisfaction.

3. SCOPE OF THE STUDY

The scope of this study is expansive and multifaceted, covering several key dimensions that will provide a thorough analysis of the factors that influence customer loyalty in Ooty's resort sector. Geographically, the focus is placed on Ooty, a prominent hill station in Tamil Nadu that attracts a large number of tourists due to its natural beauty, pleasant climate, and cultural appeal. This location is significant for understanding how customers perceive and choose resorts, especially as it increasingly becomes a popular destination for both leisure and eco-tourism. The study aims to analyse customer preferences and decision-making processes with respect to sustainability and service quality within the specific context of Ooty's resorts. The study explores the comparative impact of two major components—sustainability and service quality—on customer loyalty. Sustainability practices, including eco-friendly initiatives such as waste management, energy efficiency, use of renewable resources, and other green certifications, are examined alongside traditional service quality attributes like reliability, responsiveness, assurance, empathy, and tangibility. Each of these factors plays a vital role in shaping guest experiences and their likelihood of returning to a resort. Additionally, the study will consider the varying reasons for travel—whether for leisure, business, or eco-tourism—ensuring that all customer segments are well represented. From a managerial perspective, the insights gathered from this study will be invaluable for resort managers and policymakers aiming to

refine their strategies for enhancing customer loyalty.

4. OBJECTIVES OF THE STUDY

- To analyse the impact of Sustainability Practices and Service Quality on customer satisfaction in resorts.
- To assess the influence of Sustainability Practices and Service Quality factors on customer loyalty in resorts.
- To compare the relative impact of Customer Satisfaction on Customer Loyalty.

5. STATEMENT OF THE PROBLEM

Customer behaviour in Ooty hotels shows a rising preference for environmentally responsible practices. Tourists are increasingly aware of the environmental impact of their travel and actively seek hotels that implement energy-efficient systems, waste management, and eco-friendly amenities. Service quality—such as staff behaviour, cleanliness, and responsiveness—has traditionally been the main driver of customer loyalty, there is uncertainty about the relative influence of sustainability practices. Hotels face the challenge of understanding whether guests prioritize eco-friendly initiatives or conventional service aspects when deciding to return, recommend, or pay a premium. Research gap in the Ooty hotel industry in service quality and sustainability in isolation, with limited research comparing their impact on customer loyalty in Ooty specifically. This lack of comparative analysis creates a gap in knowledge, preventing hotel managers from making informed strategic decisions on resource allocation, marketing, and service improvements aimed at enhancing customer retention.

6. RESEARCH METHODOLOGY

6.1 Research design

The research design adopted for this study is descriptive research. A research design outlines the framework and methodology for helps systematically examine customer perceptions and behaviours regarding sustainability and service quality in Ooty hotels, enabling an accurate assessment of their impact on customer loyalty. Infinite populations are encountered in theoretical or conceptual contexts where the population size is so

large that studying every individual is not feasible so the sample size for this study consists of 219 respondents, selected to represent the population of tourists visiting hotels in Ooty. This size allows for adequate data collection to analyze customer perceptions, behaviours, and loyalty patterns effectively. This study employed snowball and convenience sampling, both of which are non-probability sampling techniques.

6.2. Hypotheses of the study

H1: Employment status has a positive significant impact on purpose of stay in hotel industry

H2: Employment status has a positive significant impact on frequency of stay in hotel industry.

H3: Customer satisfaction has a positive significant impact on customer loyalty on resort guests.

6.3. Statistical tools used in this study

The study will utilize several statistical tools to analyze the data and test the hypotheses. Descriptive statistics will be used to summarize the dataset and provide an overview of the influence of sustainability on customer loyalty in hotel industry with special reference to ooty. Simple Percentage Analysis will examine the Frequency Distribution like age, gender Employment Status, Frequency of Stay and Purpose. Normality and Reliability Test to indicate that the distribution of most variables related to sustainability, service quality, and customer experience deviates from perfect normality. The reliability analysis using Cronbach’s Alpha was conducted to assess the internal consistency of the constructs measured in the study. chi-square test and correlation to find the relationship between the variables and

7. DATA ANALYSIS AND INTERPRETATION

7.1. Simple Percentage Analysis: Influence of Sustainability on Customer Loyalty in Hotel Industry

Table 1. Demographic statistics of the respondents (N=219)

Frequency Distribution	Particular	No. of Respondents	Percentage
Age	20-30	39	17.8
	31-40	69	31.5
	41-50	79	36.1
	51-60	30	13.7
	60 and above	2	0.9
	Total	219	100
Gender	Female	95	43.4
	Male	124	56.6
	Transgender	0	0
	Total	219	100
Employment Status	Student	29	13.2
	Full-time employee	119	54.3
	Self-employed or entrepreneur	51	23.3
	Retired	10	4.6
	Unemployed	10	4.6
	Total	219	100
Frequency of Stay	Rarely (Once a year or less)	42	19.2
	Occasionally (2-4 times a year)	61	27.9
	Frequently (More than 4 times a year)	85	38.8
	Very frequently (Monthly or more)	31	14.1
	Total	219	100
Purpose	Leisure/Vacation	144	65.7
	Business	53	24.3
	Events/Functions	22	10
	Total	219	100

The study provides a detailed analysis Frequency Distribution in influence of sustainability on

customer loyalty in hotel industry. Most of the respondents are aged 41–50 years, accounting for

36.1% of the sample, indicating that middle-aged tourists form the largest segment of visitors. The majority of the respondents are male, making up 56.6% of the participants, suggesting a slightly higher engagement of men in hotel visits. The highlighted the respondents are full-time employees (54.3%), showing that working professionals are the main segment of tourists. The most of the

respondents stay frequently, more than 4 times a year, comprising 38.8% of the sample, highlighting a significant proportion of repeat visitors and the majority of the respondents visit Ooty hotels for leisure or vacation (65.7%), indicating that recreational tourism is the primary driver of hotel occupancy.

7.2. NORMALITY/RELIABILITY ANALYSIS:

Table 2. Normality Test - Descriptive Statistics

	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
Sustainability awareness	219	-.518	.164	-.287	.327
Sustainability preference	219	-.430	.164	-.601	.327
Sustainability responsibility	219	-1.446	.164	1.891	.327
Sustainability inquiry	219	-.321	.164	-.745	.327
Energy efficiency	219	-.735	.164	.091	.327
Water conservation	219	-1.025	.164	.576	.327
Waste reduction	219	-.888	.164	.362	.327
Eco-friendly products	219	-1.275	.164	1.467	.327
Local sourcing	219	-.881	.164	.151	.327
Resort recommendation	219	-.703	.164	-.334	.327
Staff friendliness	219	-1.451	.164	1.603	.327
Room comfort	219	-1.909	.164	3.024	.327
Personalised services	219	-1.477	.164	1.585	.327
Hassle-free processes	219	-1.931	.164	3.599	.327
Impact on satisfaction	219	-.885	.164	.839	.327
Enhancement of value	219	-.906	.164	.481	.327
Balance in satisfaction	219	-.418	.164	-.810	.327
Resort choice	219	-.874	.164	.592	.327
Resort preference	219	-.934	.164	.570	.327
Willingness to pay premium	219	-.079	.164	-.981	.327
Valid N (listwise)	219				

The descriptive statistics for the 219 respondents indicate that the distribution of most variables related to sustainability, service quality, and customer experience deviates from perfect normality. Skewness values show that several variables, particularly Room comfort (-1.909), Hassle-free processes (-1.931), Staff friendliness (-1.451), and Personalised services (-1.477), are strongly negatively skewed, suggesting that responses are clustered toward higher ratings.

Similarly, kurtosis values for variables such as Room comfort (3.024) and Hassle-free processes (3.599) are substantially positive, indicating peaked distributions with heavy tails, while others, like Sustainability awareness (-0.287) and Resort recommendation (-0.334), are closer to normal. Overall, the results suggest that respondents generally gave favourable ratings across most items, with several variables showing marked departures from normality, which is to be considered when choosing appropriate statistical analyses.

7.3. RELIABILITY TEST:

Table 3 – Reliability Test

Factor	Number of items	Cronbach's Alpha
Sustainable Practices	10	.934
Service Quality	4	.948
Customer Satisfaction	3	.814
Customer Loyalty	3	.850

The reliability analysis using Cronbach's Alpha was conducted to assess the internal consistency of the constructs measured in the study. The results indicate that all scales demonstrate excellent reliability. Specifically, the Sustainable Practices construct, with 10 items, has a Cronbach's alpha of 0.934, suggesting very high internal consistency. The Service Quality scale (4 items) shows an alpha

of 0.948, also indicating excellent reliability. Customer Satisfaction (3 items) and Customer Loyalty (3 items) have alphas of 0.814 and 0.850, respectively, reflecting good reliability. Overall, these results confirm that the measurement instruments used in the study are consistent and reliable for assessing respondents' perceptions and experiences.

7.3.1. Chi-Square Test to find the relationship between Employment status and Purpose of stay.

Table 3 Chi-square test 1 Employment status * Purpose of stay Crosstabulation

Count		Purpose of stay			Total
		Leisure/Vacation	Business	Events/Functions	
Employment status	Student	24	0	5	29
	Full-time employee	77	36	6	119
	Self-employed or entrepreneur	29	16	6	51
	Retired	4	2	4	10
	Unemployed	10	0	0	10
Total		144	54	21	219

Table 4 Chi-Square Tests 1

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	32.040 ^a	8	.000
Likelihood Ratio	38.176	8	.000
Linear-by-Linear Association	.506	1	.477
N of Valid Cases	219		

a. 6 cells (40.0%) have expected count less than 5. The minimum expected count is .96.

The chi-square analysis shows a significant association between employment status and purpose of stay ($\chi^2 = 32.040$, $df = 8$, $p < 0.001$), indicating that the purpose for which customers choose resorts varies according to their employment category. Students and unemployed respondents primarily visit for leisure, while full-time employees and entrepreneurs are more likely to stay for business in

addition to leisure, and retirees show a mixed pattern, including events and functions. Although some cells had small expected counts, the strong significance suggests that employment status meaningfully shapes the purpose of stay. Therefore, the null hypothesis is rejected and the alternate hypothesis is accepted, confirming that employment status is significantly associated with the purpose of stay.

7.3.2. Chi-Square Test to find the relationship between Employment status and Frequency of Stay.

Table 5 Chi-square 2 Employment status * Frequency of stay Crosstabulation

Count		Frequency of stay				Total
		Rarely (Once a year or less)	Occasionally (2-4 times a year)	Frequently (More than 4 times a year)	Very frequently (Monthly or more)	
Employment status	Student	11	11	6	1	29
	Full-time employee	14	38	48	19	119
	Self-employed or entrepreneur	10	7	25	9	51
	Retired	3	1	4	2	10
	Unemployed	4	4	2	0	10
Total		42	61	85	31	219

Table 6. Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	28.231 ^a	12	.005
Likelihood Ratio	30.959	12	.002
Linear-by-Linear Association	.175	1	.676
N of Valid Cases	219		

a. 9 cells (45.0%) have expected count less than 5. The minimum expected count is 1.42.

The chi-square results indicate a significant relationship between employment status and frequency of resort stays ($\chi^2 = 28.231$, $df = 12$, $p = 0.005$). Full-time employees and self-employed individuals show higher frequencies of stay, with many reporting frequent or very frequent visits, while students and unemployed respondents are more concentrated in the “rarely” and

“occasionally” categories. Retired individuals are few in number but distributed across all categories. Although some cells had low expected counts, the results suggest that customers’ employment status meaningfully influences how often they stay at resorts. Therefore, the null hypothesis is rejected and the alternate hypothesis is accepted, confirming that employment status significantly affects the frequency of resort visits.

7.4. CORRELATION:

The relationship between Customer Satisfaction and Customer Loyalty

Table 7. Correlations

		Customer Satisfaction	Customer Loyalty
Spearman's rho	Customer Satisfaction	Correlation Coefficient	1.000
		Sig. (2-tailed)	.000
		N	219
	Customer Loyalty	Correlation Coefficient	.715**
		Sig. (2-tailed)	.000
		N	219

** . Correlation is significant at the 0.01 level (2-tailed).

The Spearman’s correlation analysis examined the relationship between customer satisfaction and customer loyalty among 219 resort guests. The results revealed a strong positive correlation ($\rho = 0.715$, $p < 0.01$), indicating that higher levels of customer satisfaction are associated with higher

levels of customer loyalty. This relationship is statistically significant, suggesting that satisfied guests are considerably more likely to exhibit loyalty toward the resort. These findings highlight the importance of ensuring high customer satisfaction as a key driver of repeat patronage and long-term loyalty.

8. SUGGESTIONS

Based on the interpretation and findings of the present study, the following suggestions are proposed to enhance both managerial practices in resorts and future research directions:

Strengthening the Dual Emphasis on Service Quality and Sustainability in Resorts should integrate high service standards with eco-friendly practices such as waste management and renewable energy, while also focusing on staff training and personalized guest care.

Adopting Targeted Market Segmentation Strategies in Since younger travellers showed lower sustainability awareness while working professionals stayed more frequently, resorts should design tailored eco-packages and certifications to appeal to different customer groups.

Integrating Sustainability into Loyalty Programs are Loyalty schemes can include rewards for eco-friendly behaviors like reduced linen use or participation in green initiatives, thereby promoting both guest attachment and environmental responsibility.

Policy Support and Collaborative Initiatives in Policymakers and local authorities should encourage the hospitality sector to adopt sustainability practices through supportive mechanisms such as tax incentives, eco-certification schemes, and public recognition awards. Furthermore, collaborative models with local communities—such as sourcing local produce or promoting cultural heritage—can enhance authenticity, strengthen community relations, and position resorts as socially responsible businesses.

9. SCOPE FOR FUTURE RESEARCH

The study provides valuable insights into the relationship between service quality, sustainability, and customer loyalty in Ooty, future research could expand the scope geographically to include comparisons across varied destinations such as urban centers, coastal resorts, and hill stations.

10. CONCLUSION

The study emphasizes the growing importance of integrating both service quality and sustainability in the resort sector, particularly in destinations such as

Ooty where tourism plays a vital role. Resorts have traditionally depended on service quality—such as staff friendliness, room comfort, and hassle-free services—to drive customer satisfaction. However, the findings indicate that in the current context, sustainability has become equally significant in shaping customer perceptions and building long-term loyalty. Practices like waste reduction, energy efficiency, water conservation, and the use of eco-friendly products are no longer optional but are increasingly expected by guests who are aware of global environmental concerns.

The research also provided valuable insights into customer demographics, including age, gender, and employment status, as well as their purpose and frequency of stay. Middle-aged working professionals formed the largest visitor segment, while leisure tourism emerged as the primary purpose of stay. The study further showed that satisfaction and loyalty are closely linked, with service quality being the key driver of satisfaction and sustainability awareness playing a stronger role in fostering loyalty. This distinction highlights the need for resorts to balance short-term service excellence with long-term sustainability commitments.

In addition, the study examined customer awareness and attitudes towards sustainability and specific sustainable practices. While respondents expressed strong support for eco-friendly measures, their willingness to pay a premium for such initiatives was moderate, suggesting that cost remains a barrier. This indicates that while customers value sustainability, resorts must carefully design their pricing and communication strategies to highlight the added value of sustainable operations without alienating cost-sensitive travellers.

The study contributes to understanding how service quality and sustainability interact to influence customer behaviour in the hospitality sector. It underscores the need for resorts to innovate by embedding sustainability into their core services, aligning with evolving customer expectations, and differentiating themselves in a competitive market. At the same time, policymakers and local authorities can support these efforts through incentives, certifications, and partnerships with local communities. By combining excellent service

delivery with visible sustainable practices, resorts can achieve repeat patronage, positive recommendations, and a sustainable competitive advantage in the long run.

References

1. Abdou, A. H., Hassan, T. H., Salem, A. E., Albakhit, A. I., Almahayitah, M. Y., & Salama, W. (2022). The nexus between environmentally sustainable practices, green satisfaction, and customer citizenship behavior in eco-friendly hotels: Social Exchange Theory perspective. *Sustainability*, 14(19), Article 12791. <https://www.mdpi.com/2071-1050/14/19/12791>
2. Abirami, B., Rajan, M., & Antony, A. (2024). Nurturing harmony: Harnessing niche tourism for sustainable development with special reference to Nilgiris district. *Innovating the Future: Sustainable Strategies and Practices in Tourism*, 1–12. https://www.researchgate.net/profile/Meghna-Rajan/publication/381030664_Nurturing_Harmony_Harnessing_Niche_Tourism_for_Sustainable_Development_with_Special_Reference_to_Nilgiris_District/links/665a04cfbc86444c721fce9d/Nurturing-Harmony-Harnessing-Niche-Tourism-for-Sustainable-Development-with-Special-Reference-to-Nilgiris-District.pdf
3. Gupta, V., Sharma, S., & Sinha, S. K. (2023). How sustainable practices influence guests' willingness to pay a price premium in Fiji. *Worldwide Hospitality and Tourism Themes*, 15(3), 269–278. <https://www.emerald.com/insight/content/doi/10.1108/whatt-01-2023-008/full/html>
4. Islam, M. F., Zhang, J., & Hasan, N. (2019). Assessing the adoption of sustainability practices in tourism industry: Insights from a developing country. *The Bottom Line*, 33(1), 94-115. <https://www.emerald.com/insight/content/doi/10.1108/BL-09-2019-0113/full/html>
5. Jaatinen, E. (2022). The effect of corporate sustainability on relationship marketing in the tourism industry: The influence of customer perceptions of corporate sustainability on customer loyalty. Lappeenranta-Lahti University of Technology LUT. [Master's thesis]. <https://lutpub.lut.fi/handle/10024/164380>
6. Jain, M., & Nuangjamnong, C. (2024). Exploring the influence of green marketing on green customer loyalty for eco-friendly resorts in Phuket Island. AU Hybrid International Conference 2024 on "Entrepreneurship & Sustainability in the Digital Era," 4(1), 406-432. https://www.researchgate.net/profile/Chompu-Nuangjamnong/publication/383165339_Exploring-the-Influence-of-Green-Marketing-on-Green-Customer-Loyalty-for-Eco-friendly-resorts-in-Phuket-Island/links/66bf5850311cbb09493f3a11/Exploring-the-Influence-of-Green-Marketing-on-Green-Customer-Loyalty-for-Eco-friendly-resorts-in-Phuket-Island.pdf
7. Kulkajonplun, K., Angkasith, V., & Rithmanee, D. (2016). The development of a sustainable resort and indicators. *Procedia CIRP*, 40, 191-196. <https://search.proquest.com/openview/0b27e5cc6aa7bfb9985a47d8686f2823/1?pq-origsite=gscholar&cbl=466419>
8. Olya, H., Altinay, L., Farmaki, A., Kenebayeva, A., & Gursoy, D. (2021). Hotels' sustainability practices and guests' familiarity, attitudes and behaviours. *Journal of Sustainable Tourism*, 29(7), 1063-1081. <https://www.taylorfrancis.com/chapters/edit/10.4324/9781003256274-3/hotels-sustainability-practices-guests-familiarity-attitudes-behaviours-hossein-olya-levent-altinay-anna-farmaki-ainur-kenebayeva-dogan-gursoy>
9. Omar, M. K., Azman, N. S., Jusoh, R., Zakaria, A., & Kang, E. (2020). Determining quality factors contributing to chalet and resort guest lodging satisfaction using SERVQUAL dimension analysis. *Journal of Environmental Management and Tourism*, 11(6), 1537-1549.
10. Papallou, E., Katafygiotou, M., & Dimopoulos, T. (2024). Emerging sustainability trends in tourist facilities: A comparative assessment of multiple hotels and resorts. *Sustainability*, 16(9), Article 3536. <https://www.mdpi.com/2071-1050/16/9/3536>
11. Ramamoorthi, D., & Udaya Kumar. (2019). A study on impact of tourism and sustainable measures in Ooty, the Nilgiris. *IOSR Journal of Business and Management*, 21(4, Series V), 34-41. https://iosrjournals.org/iosr-jbm/papers/Vol21-issue4/Series-E2104053441.pdf?utm_source=chatgpt.com
12. Rana, V., Raina, A., & Bathla, G. (2023). The effect of sustainable practices on customer attitude: A study of sustainable hospitality operations. *Emirati Journal of Business, Economics, & Social Studies*, 2(1), 4-13. <https://emiratesscholar.com/directory/index.php/ejbess/article/view/24>
13. Sangpikul, A. (2022). Understanding resort service quality through customer complaints. *Anatolia: An International Journal of Tourism and Hospitality Research*, 33(1), 143-156.

- <https://www.tandfonline.com/doi/abs/10.1080/13032917.2021.1925937>
14. Songkrohpanit, P., Tipayatikumporn, U.-u., & Sottiwan, T. (2024). Guidelines for customer loyalty and sustainable development in five-star resorts. Proceedings of the 8th National Conference on Sustainable Tourism Development, 388–399. SSRU Graduate Studies Journal.<http://www.journalgrad.ssrु.ac.th/index.php/8thconference/article/view/4553>
 15. Soni, G., Hussain, S., & Kareem, S. (2022). Environment Friendly Practices Adopted in Hotels and Their Impact on Customer Satisfaction: A Critical Review of the Literature and Research Implications for the Hospitality Industry. *Atna: Journal of Tourism Studies*, 17(1), 115-142. <https://journals.christuniversity.in/index.php/atna/article/view/3095>
 16. Verma, V. K., & Chandra, B. (2018). Sustainability and customers' hotel choice behaviour: A choice-based conjoint analysis approach. *Environment, Development and Sustainability*, 20(3),1347–1363.<https://link.springer.com/article/10.1007/s10668-017-9944-6>
 17. Yu, J., Zhang, X., & Kim, H.-S. (2023). Using online customer reviews to understand customers' experience and satisfaction with integrated resorts. *Sustainability*, 15(17), Article 13049. <https://www.mdpi.com/2071-1050/15/17/13049>
 18. Yusof, N., Rahman, S., & Iranmanesh, M. (2015). The environmental practice of resorts and tourist loyalty: The role of environmental knowledge, concern, and behaviour. *Anatolia: An International Journal of Tourism and Hospitality Research*, 27(2), 214–226. <https://www.tandfonline.com/doi/abs/10.1080/13032917.2015.1090463>
 19. Yusof, Y., Awang, Z., Jusoff, K., & Ibrahim, Y. (2017). The influence of green practices by non-green hotels on customer satisfaction and loyalty in the hotel and tourism industry. *International Journal of Green Economics*, 11(1), 1-14. <https://www.inderscienceonline.com/doi/abs/10.1504/IJGE.2017.082716>