Green Business Practices and its impacts on Organizational Performance in Accommodation Establishments in Boracay

Chriszela R. Sabandal

Aklan State University, Philippines, sabandal.chriszela@asu.edu.ph

Abstract

This quantitative study examines the green business practices and their impact on organizational performance among accommodation establishments in Boracay. Using purposive sampling, 51 respondents from Department of Tourism (DOT)-accredited establishments in Boracay were surveyed via Google Forms. The study aimed to evaluate environmentally sustainable practices in key areas in energy, water, waste management, sustainable procurement, natural resource management, and material efficiency. The findings indicate that establishments consistently prioritize energy-saving measures, utilize water-efficient technologies, source supplies and materials locally, and engage in robust waste management strategies, such as waste segregation and proper disposal of hazardous wastes. A significant positive relationship was observed between the level of green business practices and organizational performance, particularly in terms of profitability, customer satisfaction, and environmental impact. However, no significant differences were found in green practices based on business type, size, or years of operation, except for the number of employees. A proposed toolkit, Boracay Green Guide, is recommended to guide hospitality businesses in Boracay on sustaining their green practices, which can also be adopted by both private and public organizations and establishments in the tourism and hospitality sectors. Further, a Proposed Framework for a Management Policy on Environmental Sustainability is recommended for other LGUs to be implemented through an ordinance to encourage or mandate businesses to develop sustainability policies, ensuring long-term adherence to green practices.

Keywords: Green Business Practices, Organizational performance, Accommodation Establishments in Boracay, Sustainable Tourism

Introduction

The travel and tourism sector has continued to grow, despite the challenges of the global pandemic in the past. Presently, based on the data of the UN World Tourism Barometer [20], around 790 million tourists travelled abroad in the first seven months of 2024, indicating a growing trend in tourist arrivals, with an 11% increase from 2023. This rising trend is also reflected in the growing number of tourist arrivals locally, specifically in Boracay, Philippines, where 2.15 million arrived in 2023 and a target of 2.3 million is anticipated for this year, 2024. This has resulted in generations of jobs and income for both the province and the nation as a whole.

In addition to these thriving economic conditions, there is a growing global concern about environmental degradation. In the case of Boracay, the Philippine government temporarily closed the island in 2018 for rehabilitation due to various environmental concerns, including coastal erosion, inadequate coastal infrastructure development, rapid population growth, water quality deterioration, and loss of coastal habitats [14]. If left unattended, the island's ecological viability may decline [6]. This unprecedented initiative facilitated a comprehensive rehabilitation of the island, emphasizing the restoration of its ecological condition and the implementation of sustainable tourism practices [16]. Following the rehabilitation, more and more establishments are redirecting their business operations toward environmental conservation initiatives due to pressing concerns about climate change and growing consumer demand for sustainable tourism practices [2, 19].

Despite a growing body of literature on environmental-related practices in the Philippines and abroad, studies focusing specifically on Boracay accommodation establishments' sustainable practices remain limited. Recognizing the island's significant role in the tourism industry and its unique environmental challenges, there is a pressing need to evaluate the green business practices implemented by local businesses and their impact on organizational performance both in terms of business success and environmental outcomes. This study is also in consonance with the attainment of Sustainable Development Goals (SDGs), Goal 11(Sustainable Cities and Communities), Goal 13 (Climate Action) and Goal 14 (Life below Water), and supports the university RDE themes and framework focusing on Sustainable Tourism Development and Promotion. The results will enhance the discourse on sustainable tourism in Boracay and offer insights that may influence future policies and corporate strategies within the tourism and hospitality sectors.

Methodology

This study employed a descriptive-correlational methodology to examine the connection between the adoption of green business practices and the business performance outcomes of accommodation establishments in Boracay Island. Data were gathered from 51 tourism accommodation establishments, using a survey questionnaire, as adopted from Monitoring Form for Green practices by the Department of Trade and Industry and studies of Wang et al. [22], covering energy, water, waste management, sustainable procurement, natural resource management, and material efficiency. Descriptive statistics were used to determine the level of implementation of green practices of accommodation establishments, while the Kruskal-Wallis test was utilized in inferential statistics to evaluate significant differences in the implementation of green practices according to the profiles of the

respondents, and Spearman's Rho was utilized to evaluate the significant correlation between the implementation of sustainable practices and the performance of hospitality organizations.

Results and Analysis

Business Profile of Accommodation Establishments

Table 1 shows the profile of the respondents. There were fifty-one (51) who responded and participated in this study. Each establishment is represented by one (1) supervisor or manager or an employee with knowledge about the green practices in their company. When respondents were group according to business size, there were fifteen (15) working in a medium establishment, fourteen (14) in a micro and small establishment, respectively, and eight (8) in a large establishment. When respondents were classified according to their establishment's hotel classification, there were twenty-two (22) or 43.10% from resort and hotel, respectively, five (5) or 9.8% % from mabuhay accommodation and the remaining two (2) or 3.9% were from apartment hotel/ apartel. In terms of their establishments' years in operation, thirty-one (31) or 60.8% of the establishments are operating for ten (10) years or below, seven (7) or 25.5% are operating more than fifteen (15) years in the industry, while the remaining seven (7) or 13.7% are operating for ten (10) to fifteen (15) years. As for the number of employees, thirty-three (33) or 64.7% have seventy (70) and below number of employees, nine (9) or 17.6 have around seventy-one (71) to one hundred twenty (121) employees, and more than one hundred twenty-one (121) employees, respectively.

Table 1. Business Profile of Accommodation Establishments

Category	Frequency n=30	Percentage
Business Size (Asset Size)		
Micro (up to P3,000,000.00	14	27.50
Small (P3,000,001.00-P15,000,000.00)	14	27.50
Medium (P15,000,001.00-P100,000,000.00)	15	15.00
Large (P100,000,001.00 and above)	8	8.00
Hotel Classification		
Resort	22	43.10
Hotel	22	43.10
Mabuhay Accommodation	5	9.80
Apartment Hotel/ Apartel	2	3.90
Years in Operation		
Below 10 years	31	60.80
10-15 years	7	13.70
Above 15 years	13	25.50
Number of Employees		
70 and below	33	64.7
71-120	9	17.6
121 and above	9	17.6
Total	51	100.00

Level of implementation of Green Business Practices of Hotel Establishment in terms of Energy Efficiency and Renewable Energy

Table 2 shows the variables under Energy Efficiency and Renewable Energy, mean and description. Practices on the replacement of bulbs to LED bulbs and practiced turning off lights in unoccupied workspaces/rooms (M=4.73), planting of trees and ornamentals around the building for natural shading (M=4.22), setting thermostat of air conditioning unit between 23 and 25 degrees Celsius (M=4.20), using of energy efficient appliances (inverter air con, energy efficient certified appliances, etc.) and practiced unplugging of all appliances and equipment when not in use (M =4.51), periodic maintenance check and servicing of appliances and equipment (M=4.63) are always implemented. On the other hand, green practice on construction of new buildings or renovated existing building following a green design (M =4.18) is implemented most of the time. The overall mean score for energy efficiency and renewable energy is M = 4.41, emphasizing the accommodation establishments' strong commitment to energy efficiency, which is likely driven by the need to reduce operational costs and meet consumer demand for sustainable practices. These findings align with the studies of Abdou [1], Amer et al. [4], and Julita et al. [9], emphasizing the adoption of energy conservation measures among hotel businesses due to their economic and environmental benefits.

Table 2. Level of Green Business Practices of Hotel Establishment in terms of Energy Efficiency and Renewable Energy

Category	Mean	Description
Constructed new buildings or renovated existing building following a green design (natural daylighting, natural ventilation, insulated buildings, light colored roof, etc.)	4.18	Most of the Time Implemented

Replaced incandescent light bulbs with compact fluorescent light bulbs (CFLs) and/ or light emitting diode (LED) bulbs and practiced turning off lights in unoccupied workspaces/rooms.	4.73	Always Implemented
Planted trees and ornamentals around the building for natural shading	4.22	Always Implemented
Practiced setting thermostat of air conditioning unit between 23 and 25 degrees Celsius	4.20	Always Implemented
Used energy efficient appliances (inverter air con, energy efficient certified appliances, etc.) and practiced unplugging of all appliances and equipment when not in use	4.51	Always Implemented
Practiced periodic maintenance check and servicing of appliances and equipment	4.63	Always Implemented
Mean	4.41	Always Implemented

Legend: 1.00-1.80 – Not Yet Implemented; 1.81-2.60 – Rarely Implemented; 2.61-3.40 – Sometimes Implemented; 3.41-4.20 – Most of the Time Implemented; 4.21-5.00 – Always Implemented

Level of Implementation of Green Business Practices of Hotel Establishment in terms of Water Savings and Waste Water Management

Illustrated in Table 3 is the level of implementation of green practices in terms of water savings and water management, mean and its corresponding description. Practices such as conducting regular leakage checks of pipes and fixing of leaky taps and pipes (M= 4.65), turning off of faucets when not in use (M=4.82) and replacement of faulty old equipment to water efficient equipment (M= 4.59) are always implemented by the accommodation establishments.

While installation of wastewater treatment systems (natural or mechanical, etc.) is most of the time implemented by the establishments (M=3.96). Meanwhile adoption of water efficient equipment to reduce water loss (M= 3.33) and installation of rain water harvesting system (M=3.12) are implemented sometimes. The overall mean score of the variables under the water savings and waste water management is M=4.25, indicating a consistent implementation in this area. However, the data indicating that the adoption of rainwater gathering and water-efficient devices, is inconsistent. This aligns with the discussion by Lani et al. [11], who highlight the limited practice of this initiative due to its long-term return on investment. The cost of investment required may also affect the management's decision to adopt such measures, particularly for small businesses with limited resources. On the other hand, the frequent implementation of wastewater treatment systems is likely due to regulatory mandates tied to Boracay's rehabilitation, as seen in similar cases where environmental policies drive compliance, as emphasized in the study of Sabandal & Gumban [16].

Table 3. Level of Green Business Practices of Hotel Establishment in terms of Water Savings and Waste Water Management

Category	Mean	Description
Reduced water loss by implementing good water management practices by conducting regular leakage checks of pipes and fixing of leaky taps and pipes	4.65	Always Implemented
Practiced turning off of faucets when not in use	4.82	Always Implemented
Replacing faulty old equipment to water efficient equipment.	4.59	Always Implemented
Reduced overall water consumption by installing water efficiency equipment (ultra-low flush toilets, spray nozzles, waterless urinals, faucet aerators, faucet sensors or push water tap, pressure reducing valves, low flow showerheads, etc.)	3.33	Sometimes Implemented
Installed rain water harvesting system	3.12	Sometimes Implemented
Installed wastewater treatment systems (natural or mechanical, etc.)	3.96	Most of the Time Implemented
Mean	4.25	Always Implemented

Legend: 1.00-1.80 – Not Yet Implemented; 1.81-2.60 – Rarely Implemented; 2.61-3.40 – Sometimes Implemented; 3.41-4.20 – Most of the Time Implemented; 4.21-5.00 – Always Implemented

Level of Implementation of Green Business Practices of Hotel Establishment in terms of Solid Waste Management
The table 4 shows that three out of six practices under solid waste management are always implemented by accommodation establishments in Boracay. These practices include waste segregation (M=4.96), proper disposal of hazardous waste (used bulbs, chemical containers, etc.) (M=4.88), and reducing use of plastics (packaging materials, supplies, etc.) (M=4.39). While the other remaining three practices which are implemented most of the time of accommodation establishments are practicing composting and/or vermiculture (M=3.78), upcycling of waste (M=3.51) and using of reclaimed materials (used debris and old wood for architectural components) (M=3.76). The overall mean score of the variables under solid waste management is always implemented (M=4.22).
Accommodation establishments in Boracay consistently implement solid waste management practices, as evidenced by the high overall mean for this category. This includes widespread adoption of waste segregation, hazardous waste management, and the reuse of plastics. The consistent implementation of these practices is likely influenced by both regulatory frameworks and the increasing awareness of sustainable operations in the hospitality sector. Waste segregation and hazardous waste management are particularly essential due to local and national policies that prioritize the protection of Boracay's environment, while the reuse of plastics aligns with global trends toward reducing single-use plastics in the industry [21]. These efforts demonstrate a strong commitment to reducing waste and minimizing environmental impact, which is critical in tourist destinations like Boracay, where waste management plays an important role in maintaining ecological balance.

Table 4. Level of Green Business Practices of Hotel Establishment in terms of Solid Waste Management

Category	Mean	Description
Practiced waste segregation	4.96	Always Implemented
Practiced composting and/or vermiculture	3.78	Most of the Time Implemented
Practiced upcycling of waste (develop new products of higher value from waste materials)	3.51	Most of the Time Implemented
Used reclaimed materials (used debris and old wood for architectural components)	3.76	Most of the Time Implemented
Practiced proper disposal of hazardous waste (used bulbs, chemical containers, etc.)	4.88	Always Implemented
Reduced use of plastics (packaging materials, supplies, etc.)	4.39	Always Implemented
Mean	4.22	Always Implemented

Legend: 1.00-1.80 – Not Yet Implemented; 1.81-2.60 – Rarely Implemented; 2.61-3.40 – Sometimes Implemented; 3.41-4.20 – Most of the Time Implemented; 4.21-5.00 – Always Implemented

Level of Green Business Practices of Hotel Establishment in terms of Environment Friendly Supply and Local Procurement
Table 5 shows that all of six variables in this aspect are implemented most of the time. These are buying of locally produced supplies and materials (M=4.14), replacing imported supplies and materials with locally produced ones (M=3.63), bulk buying (M=3.88), buying of chemical free supplies and materials (M=3.94), and influencing suppliers to adopt green practices (M=4.02). The overall mean score for the environmentally friendly supply and local procurement aspect is (M = 3.27), which means that accommodation establishments in Boracay implement most of the time green practices in this aspect. By purchasing from the local market and encouraging suppliers to do the same, these accommodation establishments reduce their carbon footprints, while also promoting and supporting local products and services. These findings are congruent with the results of the studies of Sumaylo [17] and Malacapay & Tababa [12], revealing that accommodation establishments are sourcing locally as part of their green practices.

Table 5. Level of Green Business Practices of Hotel Establishment in terms of Environment Friendly Supply and Local Procurement

Category	Mean	Description
Bought locally produced supplies and materials	4.14	Most of the Time Implemented
Replaced imported supplies and materials with locally produced ones	3.63	Most of the Time Implemented
Practiced bulk buying	3.88	Most of the Time Implemented
Bought chemical free supplies and materials	3.94	Most of the Time Implemented
Influenced suppliers to adopt green practices	4.02	Most of the Time Implemented

Mean	3.27	Most of the Time Implemented

Legend: 1.00-1.80 – Not Yet Implemented; 1.81-2.60 – Rarely Implemented; 2.61-3.40 – Sometimes Implemented; 3.41-4.20 – Most of the Time Implemented; 4.21-5.00 – Always Implemented

Level of Green Business Practices of Hotel Establishment in terms of Natural Resource Management

It's shown in Table 6 that protecting natural resources within the vicinity of the business by avoiding cutting of trees (M=4.37) and organizing/participating in environment protection and preservation community activities (M=4.41) are always implemented by the accommodation establishments. While practices such as conducting of river beach clean-up drive (M=4.10), tree planting activities (M=3.94) and using of indigenous tress in tree planting activities (M=3.49) are implemented most of the time. However, establishing nursery in the area (M=3.29) is rarely implemented by accommodation establishments in this area. The overall mean score of the variables under the natural resources management is M=3.93, indicating that this aspect is frequently adopted by the respondents. In the context of natural resource management, accommodation establishments in Boracay consistently implement practices aimed at avoiding tree cutting and actively participating in community activity programs. These efforts reflect a strong commitment to environmental stewardship and community engagement. Clean-up drives and tree planting initiatives are most frequently implemented, aligning with the growing emphasis on corporate social responsibility in the hospitality sector. This finding is also similar to the study of Sabandal & Gumban [16], indicating the active role of the accommodation sector in LGU programs, such as "Project Pristine" of LGU-Malay, which focuses on community activities involving tree planting and clean-up drives initiatives. The involvement of the local government unit (LGU) in community drives through projects like Project Pristine underscores the importance of partnership and cooperation between businesses and government in fostering environmental sustainability. Overall, the commitment to these natural resource management practices reflects a proactive approach to sustainability in Boracay's hospitality sector.

Table 6. Level of Green Business Practices of Hotel Establishment in terms of Natural Resource Management

Category	Mean	Description
Protected natural resources within the vicinity of the business by avoiding cutting of trees	4.37	Always Implemented
Conducted tree planting activities	3.94	Most of the Time Implemented
Conducted river/beach clean-up drive	4.10	Most of the Time Implemented
Organized and/ or participated in environment protection and preservation community activities	4.41	Always Implemented
Established nursery in the area	3.29	Sometimes Implemented
Used indigenous trees in tree planting activities	3.49	Most of the time Implemented
Mean	3.93	Most of the Time Implemented

Legend: 1.00-1.80 – Not Yet Implemented; 1.81-2.60 – Rarely Implemented; 2.61-3.40 – Sometimes Implemented; 3.41-4.20 – Most of the Time Implemented; 4.21-5.00 – Always Implemented

Level of Implementation of Green Business Practices of Hotel Establishment in terms of Material Efficiency

Table 7 shows that reduction in food-waste produced in kitchen or restaurant (M=4.25), minimizing materials for product packaging (M=4.24) and developing or adopting environment-friendly packaging materials (M=4.33) is always implemented. On the other hand, reducing raw material consumption (M=4.02), practicing paperless policy (M=4.02) and utilizing production waste in developing new products (M=3.90) are implemented most of the time. Overall, the level of material efficiency implementation in accommodation establishments is (M = 4.13), indicating a high adoption rate of green practices in this aspect. This suggests that accommodation establishments are committed to reducing the materials used in their operation; fewer materials result in less waste. As seen in the studies of Delgado et al. [7] & Rusiana [15], one of the highly adopted practices among other accommodation establishments, not just here in Boracay, is the implementation of paperless policy and zero-waste initiatives (Delgado et al [17]; & Rusiana [15]). Hence, frequent implementation of these material efficiency practices in Boracay's accommodation sector demonstrates a proactive stance in environmental stewardship, highlighting the industry's recognition of the importance of sustainable operations in mitigating ecological impacts.

Table 7. Level of Green Business Practices of Hotel Establishment in terms of Material Efficiency

Category	Mean	Description
Reduced raw material consumption in the production process	4.02	Most of the Time Implemented
Practiced paperless policy by using electronic system	4.02	Most of the Time Implemented
Reduced food-waste produced in kitchen or restaurant	4.25	Always Implemented

Minimized materials for product packaging	4.24	Always Implemented
Developed or adopted environment-friendly packaging materials	4.33	Always Implemented
Utilized production wastes in developing new products	3.90	Most of the Time Implemented
Mean	4.13	Most of the Time Implemented

Legend: 1.00-1.80 – Not Yet Implemented; 1.81-2.60 – Rarely Implemented; 2.61-3.40 – Sometimes Implemented; 3.41-4.20 – Most of the Time Implemented; 4.21-5.00 – Always Implemented

Effects of Green Business Practices in Organizational Performance in terms of Business Performance

The findings presented in Table 8 indicate that the respondents express a strong agreement regarding the enhancement of the firm's mental image among its customers due to the implementation of green practices (M=4.57). In addition, respondents strongly agree on the following effects of green practices, it preserved current customers and attracted new ones (M=4.45), and enhanced the financial position of the firm (M=4.22). Respondents agree as well that the green practices increased overall profitability (M=4.144.07). Overall, the effects of green practices in organizational performance in terms of business performance is (M=4.34) which means that the respondents strongly agree that the implementation of green practices significantly enhances organizational performance, particularly in terms of company image and customer perceptions, profitability, and the overall financial position of firms. This positive correlation between sustainability initiatives and organizational success reflects the growing recognition that eco-friendly practices not only contribute to environmental conservation but also bolster a company's reputation in the eyes of consumers. According to Julita et al. [9] and Kholijah [10], businesses that adopt sustainable practices often enjoy economic benefits through cost savings, new revenue streams, and attracting eco-conscious consumers, which can translate into increased profitability. The clear agreement among participants highlights the critical role of sustainable practices in enhancing competitive edge and ensuring lasting success in the marketplace.

Table 8. Effects of Green Business Practices in Organizational Performance in terms of Business Performance

Category	Mean	Description
The use of green practices preserved our current customers and attracted new ones	4.45	Strongly Agree
The use of green practices increased our overall profitability	4.14	Agree
The use of green practices enhanced the financial position of the firm.	4.22	Strongly Agree
The use of green practices enhanced the firm's mental image among customers	4.57	Strongly Agree
Mean	4.34	Strongly Agree

Legend: 1.00-1.80 – Strongly Disagree; 1.81-2.60 – Disagree; 2.61-3.40 – Neutral; 3.41-4.20 – Agree; 4.21-5.00 – Strongly Agree

Effects of Green Business Practices in Organizational Performance in terms of Environmental Performance

Table 9 illustrates the effects of green practices on organizational performance, specifically focusing on environmental performance, along with the mean and its description. The results indicate that the respondents exhibit strong agreement across all the variables outlined in this area. That is the use of green practices reduced the firm's overall environmental impact (m=4.31), the greening initiatives increased our energy savings (m=4.67), the increased water savings (m=4.63) and reduced the cost of firm's raw materials (m=4.33). The impact of green practices on organizational performance regarding environmental performance is significant (m = 4.49), indicating that respondents all agree that such activities have improved organizational performance in this aspect.

As a result, the use of energy-efficient appliances will help establishments consume less energy than non-energy-saving devices, and even monitoring and repair of leaks will help save as much as 40 cubic meters of water wasted annually [5]; hence, these kinds of practices can increase water and energy savings for accommodation establishments and, most importantly, reduce their environmental impact as they operate. According to the studies of Julita et al. [9] and Kholijah [10], in addition to the economic benefits of green business practices, sustainability efforts can also lead to environmental conservation, cost savings, reduced emissions and waste, and an enhanced positive image among customers.

Table 9. Effects of Green Business Practices in Organizational Performance in terms of Environmental Performance

Category	Mean	Description
The use of green practices reduced the firm's overall environmental impact	4.31	Strongly Agree
The use of green practices increased our energy savings and water savings	4.67	Strongly Agree
The use of green practices increased water savings	4.63	Strongly Agree
The use of green practices reduced the cost of firm's raw materials	4.33	Strongly Agree
Mean	4.49	Strongly Agree

Legend: 1.00-1.80 – Strongly Disagree; 1.81-2.60 – Disagree; 2.61-3.40 – Neutral; 3.41-4.20 – Agree; 4.21-5.00 – Strongly Agree

Significant Difference on the Level of Implementation of Green Business Practices when Classified According to Business Profile in terms of Business Size

The results of the Kruskal-Wallis test shown in Table 10 demonstrate that there is no significant difference in the implementation of green practices when classified by business profile concerning business size (p=0.844). This suggests that the extent to which sustainable practices are implemented is similar across accommodation establishments, irrespective of their size. The study reveals that there is no significant variation in the adoption of environmentally friendly practices across accommodation businesses of different sizes. This indicates that the implementation of environmentally friendly practices is relatively consistent across establishments of all sizes, whether they are micro, small, medium, or large. This may suggest that efforts towards environmental sustainability are gaining recognition as vital among businesses of various sizes, potentially influenced by external elements like regulatory mandates, market demands, or a collective dedication to responsible tourism. The absence of a notable difference underscores that the advocacy for sustainable practices extends beyond larger organizations with greater resources; it is equally adopted by smaller enterprises.

Table 10. Significant Difference on the Level of Implementation of Green Business Practices when Classified According to Business Profile in terms of Business Size

Variable	Chi-square	p-value (a=0.05)	Remarks
Level of Implementation of Green Business Practices Business Profile in terms of Business Size	.824	.844	Not Significant (Accept)

Significant Difference on the Level of Implementation of Green Business Practices when Classified According to Business Profile in terms of Type of Business

The Kruskal-Wallis test's findings presented in Table 11 indicate that there is no notable difference in the level of implementation of green practices when categorized by business profile based on the type of business (p=0.065). The findings indicate that there is no notable variation in the extent to which green practices are implemented across various types of accommodation businesses (e.g., hotels, resorts, etc.). This indicates that, irrespective of the particular classification of the business, the dedication to adopting environmentally friendly practices tends to be consistent throughout. This finding highlights a shared acknowledgment of the significance of sustainability, regardless of the nature of the business.

Table 11. Significant Difference on the Level of Implementation of Green Business Practices when Classified According to Business Profile in terms of Type of Business

Variable	Chi-square	p-value (a=0.05)	Remarks
Level of Implementation of Green Business Practices Business Profile in terms of Type of Business	7.219	.065	Not Significant (Accept)

Significant Difference on the Level of Implementation of Green Business Practices when Classified According to Business Profile in terms of Years in Operation

The Kruskal-Wallis test results in Table 12 indicate that there is no significant difference in the implementation level of green practices when categorized by business profile based on years in operation (p=0.127). This indicates that the degree of application of sustainable practices, when categorized by years of operation, is similar among lodging establishments. This might imply that newer businesses are equally as committed to sustainability as their more established counterparts, reflecting a broader trend within the industry toward environmental responsibility. Furthermore, all businesses would like to meet the demands of their market, and according to a recent study of Kholijah [10], tourists show a positive response to businesses practicing green initiatives.

Table 12. Significant Difference on the Level of Implementation of Green Business Practices when Classified According to Business Profile in terms of Years in Operation

Variable	Chi-square	p-value	Remarks
Level of Implementation of Green Business Practices Business Profile in terms of Years in Operation	4.121	.127	Not Significant

Significant Difference on the Level of Implementation of Green Business Practices when Classified According to Business Profile in terms of Number of Employees

The findings presented in Table 13 indicate a significant difference in the level of implementation of green practices when categorized by business profile based on the number of employees (p=0.042). The level of implementation of green practices varies among accommodation establishments when classified by the number of employees. This indicates that entities with a more extensive workforce might possess greater resources or infrastructure to facilitate the implementation and maintenance of environmentally friendly practices. Larger establishments may encounter more attention from customers and regulators, which could drive them to improve

their sustainability initiatives. This finding underscores the importance of organizational capacity in enabling the implementation of green practices, indicating that larger firms might be more equipped to adopt and sustain sustainability initiatives.

Table 13. Significant Difference on the Level of Implementation of Green Business Practices when Classified According to Business Profile in terms of Number of Employees

Variable	Chi-square	p-value	Remarks
Level of Implementation of Green Business Practices Business Profile in terms of Number of Employees	6.351	.042	Significant

Relationship between the Level of Implementation of Green Business Practices and the Organizational Performance of Accommodation Establishment

Data in Table 14 reveals that a strong positive correlation and significant relationship exists between the level of implementation of green practices and the organizational performance of accommodation establishments (r=.555, p=0.000). Therefore, the null hypothesis is rejected. This suggests that as the level of green practices increases, organizational performance also tends to improve. This finding underscores the importance of integrating green practices into business operations, as they are not only beneficial for environmental sustainability but also positively impact the overall performance of the organization, as suggested in the studies of Alhadid [3], Julita et al. [9], Kholijah [10], and Wang et al. [22].

In summary, the significant correlation revealed by Spearman's Rho highlights that accommodation establishments that prioritize and effectively implement green practices are likely to see improvements in their organizational performance metrics, reinforcing the idea that sustainability can drive business success.

Table 14. Relationship between the Level of Implementation of Green Business Practices and the Organizational Performance of Accommodation Establishment

Variable	r-value	p-value	Remarks
Level of Implementation of Green Business Practices Organizational Performance of Accommodation Establishment	.555	.000	Significant

Conclusions

This study offers significant insights into how accommodation businesses in Boracay are adopting sustainable practices, focusing on key areas such as energy efficiency, water conservation, waste management, eco-friendly supply sourcing, and material efficiency.

The findings indicate that establishments consistently prioritize energy-saving measures, utilize water-efficient technologies, source supplies and materials locally, and engage in robust waste management strategies, such as waste segregation and proper disposal of hazardous wastes. This commitment to sustainability not only reflects regulatory compliance but also highlights a growing awareness of environmental stewardship among businesses in the hospitality sector.

Moreover. the study indicates a substantial positive correlation between the extent of green practices implementation and organizational performance. The strong association suggests that enterprises implementing more extensive green policies generally have improved results regarding corporate image, customer loyalty, cost efficiency, and profitability. This suggests that sustainable practices are increasingly recognized as a strategic imperative that can drive business success while contributing to environmental conservation.

In conclusion, the findings underscore the potential for sustainable tourism in Boracay to benefit both the environment and the hospitality and tourism sectors. By embracing and enhancing green practices, accommodation establishments can not only fulfill regulatory requirements but also position themselves favorably in an environmentally conscious market. As businesses continue to integrate sustainability into their operations, they contribute to the preservation of Boracay's natural resources, ensuring the island remains a viable destination for future generations.

Conflicts of interest

The author declares that there are no conflicts of interest regarding the publication of this paper.

Acknowledgments

The author acknowledges the Aklan State University for funding this research study.

References

[1] Abdou, A. H., Hassan, T. H., Dief, E., & Moustafa, M. (2020). A description of green hotel practices and their role in achieving sustainable development. Sustainability, 12(22), 9624.

[2] Ali, M., Jony, M. A., & Shakil, A. (2017). Consumer Perception Towards Green Practice: An Empirical Study on Young Consumer from Bangladesh Perspective. Journal of Economics and Sustainable Development, 8(23), 10–18. https://iiste.org/Journals/index.php/JEDS/article/download/40358/41505

[3] Alhadid, A. Y., & As' ad, H. A. R. (2014). The Impact of green innovation on organizational performance, environmental management behavior as a moderate variable: An analytical study on Nuqul group in Jordan. International Journal of Business and Management, 9(7), 51.
[4] Amer, A. A., Mohamad, D., & Roosli, R. (2023). THE IMPACT OF GREEN ENERGY & WATER PRACTICES ON THE DEVELOPMENT OF SUSTAINABLE TOURISM: A CASE STUDY OF 5-STAR HOTELS IN HURGHADA AND MECCA. PLANNING MALAYSIA, 21. https://doi.org/10.21837/pm.v21i28.1335
[5] Antonio, M. V., Capio, R., Bacalso, M., & Ritsma, N. (2015). Promotion of Green Economic Development (ProGED) Approach. Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH.
[6] Board, J. (n.d.). Closing Boracay: The Environment. Www.Channelnewasia.Com. https://infographics.channelnewsasia.com/interactive/closing-boracay-the-environment-10181082/index.html
[7] Delgado, A., Rodriguez, R., & Staszewska, A. (2023). Tackling Food Waste in the Tourism Sector: Towards a Responsible Consumption Trend. Sustainability, 15(17), 13226. https://doi.org/10.3390/su151713226
[8] Fitzgerald, S. M., Rumrill Jr, P. D., & Schenker, J. D. (2004). Correlational designs in rehabilitation research. Journal of Vocational Rehabilitation, 20(2), 143-150.
[9] Julita, J., Basri, G. A., & Anastasia, M. (2024). Analysis of Green Hotel Implementation at Holiday Inn Jakarta Kemayoran. International Journal of Green Tourism Research and Applications, 6(1), 21–32. https://doi.org/10.31940/ijogtra.v6i1.21-32
[10] Kholijah, N. S. (2024). Analysis of Economic and Environmental Benefits of Green Business Practices in the Hospitality and Tourism Sector. Deleted Journal, 1(1), 60–74. https://doi.org/10.62569/iijb.v1i1.7
[11] Lani, N. H. M., Yusop, Z., & Syafiuddin, A. (2018). A Review of Rainwater Harvesting in Malaysia: Prospects and Challenges. Water, 10(4), 506. https://doi.org/10.3390/w10040506
[12] Malacapay, M. C., & Tababa, R. (2020). The Green Technology Practices and Investments of Sipalay City Beach-Resorts. Journal of Environmental Management and Tourism, 11(7), 1708-1718.
[13] Miksza, P., & Elpus, K. (2018). Correlational Design and Analysis. In Oxford University Press eBooks. https://doi.org/10.1093/oso/9780199391905.003.0006
[14] Rodil, N. M. (2018, May 2). Science Policy Forum Finds Environmental Degradation as the Major Problem in Boracay. Https://Www.Nast.Ph/. https://www.nast.ph/index.php/13-news-press-releases/353-science-policy-forum-finds-environment-degradation-as-the-major-problem-in-boracay?fbclid=IwAR3j7Ny7Y3UGlr5qVYyrpyMUEwUlvMKMjGKg_9wzV7I9VutpbiS3bsHdtkk
[15] Rusiana, M. G. M. (2015). Extent of Implementation of Green Practices of Deluxe Hotels in Cebu Province Philippines. Countryside Development Research Journal, 3(01), 19-27.
[16] Sabandal, C. R., & Gumban, G. G. (2024). Environmentally Conscious Tourism: Lessons from the Successful Rehabilitation of Boracay Island. Journal of Interdisciplinary Perspectives, 2(8), 1-1.
[17] Sumaylo, N. S. J. (2016). Green Practices of Accommodation and Lodging Establishments in Siquijor Province, Philippines. Journal of Educational and Human Resource Development (JEHRD), 4, 14–25. https://doi.org/10.61569/xkbqxa95
[18] Tharaka, S., & Munasinghe, A. (2022). Green Practices as Antecedents of Tourists' Perceived Value, Satisfaction and Loyalty: With Special Reference to Eco Hotels in Sri Lanka. Asian Journal of Management Studies, 2(2), 59–87. https://doi.org/10.4038/ajms.v2i2.50
[19] Tharaka, S., & Munasinghe, A. (2022). Green Practices as Antecedents of Tourists' Perceived Value, Satisfaction and Loyalty: With Special Reference to Eco Hotels in Sri Lanka. Asian Journal of Management Studies, 2(2), 59–87. https://doi.org/10.4038/ajms.v2i2.50
[20] UN Tourism World Tourism Barometer | Global Tourism Statistics. (n.d.). https://www.unwto.org/un-tourism-world-tourism-barometer-data
[21] Vinh, T. S., Thang, N. T., Van, N. T., & Herat, S. (2023). Reduction of Plastic Waste in Tourism Activities in Sam Son City, Viet Nam. International Journal of Environmental Science and Development, 14(6), 355–363. https://doi.org/10.18178/ijesd.2023.14.6.1455
[22] Wang, H., Khan, M. A. S., Anwar, F., Shahzad, F., Adu, D., & Murad, M. (2021). Green innovation practices and its impacts on environmental and organizational performance. Frontiers in Psychology, 11, 3316.