

Impact of green practices on ecological conscious consumer behaviour: An empirical investigation of hotels in Sri Lanka

Shanika Lakmali PERERA¹, Jayanetti Koralalage Don Dhanu Thamasha JAYANETTI², Kottahachchi Arachchige Tharusha Oshadee RANADEWA³, Indunil SENEVIRATNE⁴, Balasooriya Arachchige Kanchana Shiromi PERERA⁵

¹ shanilakmaliperera@gmail.com • Department of Building Economics, Faculty of Architecture, University of Moratuwa, Colombo, Sri Lanka

² jayanettijkddt.21@uom.lk • Department of Building Economics, Faculty of Architecture, University of Moratuwa, Colombo, Sri Lanka.

³ tharushar@uom.lk • Department of Building Economics, Faculty of Architecture, University of Moratuwa, Colombo, Sri Lanka

⁴ isenevi@uom.lk • Department of Building Economics, Faculty of Architecture, University of Moratuwa, Colombo, Sri Lanka

⁵ kanchana@uom.lk • Department of Building Economics, Faculty of Architecture, University of Moratuwa, Colombo, Sri Lanka

* Corresponding author

Received: May 2023 • Final Acceptance: January 2024

Abstract

The rising attention towards ecologically conscious consumer behavior (ECCB) emphasises the need for implementing green practices to reduce environmental challenges and attract environmentally conscious consumers. Therefore, the adoption of green practices is imperative for the success of the hotel industry. As Sri Lanka's economy is largely supported by tourism, many hotels initiate green practices. However, there is a lack of evidence in research regarding ECCB on green practices of hotels in Sri Lanka. Therefore, this study aimed to investigate the impact of green practices on ECCB and propose strategies to improve the ECCB in the Sri Lankan context. Thus, a comprehensive literature review followed by a mixed approach occupying the case study strategy and survey strategy were adopted. Under the case study strategy, 15 semi-structured interviews among hotel employees, document reviews, and non-participant observations were used within three cases and its stakeholders. A questionnaire survey was carried out among 117 hotel customers. Descriptive frequency analysis and content analysis were used to analyse the data. The findings revealed that seven green initiatives were well accepted and positively impacted ECCB. Study recommends promoting the value of going green, providing education, and enlightening customers on benefits, to uplift ECCB. The study makes substantial contributions to both theoretical knowledge and practical implications within the industry by filling a research gap and providing insights into how consumers perceive and respond to green practices. The study opens areas for future research on investigating policy

Keywords

Customer satisfaction, ECCB, Green practices, Green hotels, Sri Lanka.

1. Introduction

The tourism industry has experienced rapid growth and has become a significant contributor to the global economy (Tahiri et al., 2021). In Sri Lanka, the hotel industry plays a vital role in the country's economy, contributing to foreign exchange earnings and GDP (Bandara et al., 2020; World Travel and Tourism Council, 2018). However, the hotel sector's impact on the environment is substantial (Rahman et al., 2012). To address this, the adoption of green practices in hotels has become essential worldwide (Khatter et al., 2021). Implementing these practices helps reduce environmental damage, operating expenses, waste generation, and energy consumption while promoting a healthy environment for guests (Jiang & Kim, 2015; Graci & Kuehnelt, 2011; Rahman et al., 2012; Manaktola & Jauhari, 2007; Kim & Ha, 2022). Embracing green practices in the hotel industry can lead to various positive impacts (Khatter et al., 2021).

Evidently, ecologically conscious consumer behaviour (ECCB) is getting progressive attention in marketing and consumer behaviour literature (Taufique et al., 2016; Vlaeminck et al., 2014). Hence, the impact of green practices on the ECCB is increasingly emerging throughout the world (Patwary et al., 2020). Research highlighted that customers encountered both positive experiences (Salem et al., 2022; Hays & Ozretic-Dosen, 2014; Jeong & Jang, 2010; Jiang & Kim, 2015) and negative experiences (Han & Chan, 2013; Kasim, 2004; Patwary et al., 2020) in hotels. Therefore, the implementation of green practices in hotels will have a direct influence on ECCB with the services provided by the hotels. According to Abdou et al. (2022), people are becoming increasingly aware about the environmental impacts caused by business activities. Therefore, satisfying the customers through proper implementation of green practices is an emerging issue of the hotels. Few studies, such as Robinot and Gianneloni (2010); Yusnita et al. (2016) and Li et al. (2017), attempted to investigate the correlations between ECCB and green practices in the global context.

According to Latif et al. (2020), customer satisfaction is country specific. However, there is a lack of research to analyse the relationship between green practices and ECCB in the Sri Lankan hotels. Therefore, this paper aims to investigate the impact of green practices of the hotels on ECCB in Sri Lanka and to propose strategies to enhance ECCB through green practices. In achieving the aim, key research questions were developed as;

- RQ1. What are the green practices implemented in Sri Lankan hotels?
- RQ2. How these green practices implemented in Sri Lankan hotels impact on ECCB?
- RQ3. What are the suitable strategies to enhance the ECCB of hotel consumers?

Finding answers to these research questions provide the apparatus to investigate the impact as well the strategies to enhance ECCB, which clearly aligns with the research aim.

The study is significant in two aspects. Initially from a theoretical perspective, the study adds to the body of knowledge on ECCB in Sri Lankan Green hotels by identifying factors that affect ECCB pertaining to green practices in Sri Lankan hotels. As a contribution to the industry, the study attempts to identify factors that affect ECCB in Sri Lankan green hotels and to suggest strategies to improve ECCB. The paper begins with an introduction to the research. Literature review critically analyses the theoretical background of the research and methodology illustrates and justifies the research method adopted for the study. Data analysis and discussion of the findings present the overall outcome of the study based on the empirical findings. Finally, conclusion summarises the study findings and emphasises the opportunities for future studies.

2. Literature review

With the world moving more in to green, more hotels are beginning to welcome green practices given growing interest and awareness on sustainable practices (Yang et al., 2023). In the new global economy, environmentally friendly practices have become a critical issue for firms. The increasing

attention given to the benefits of those policies has prompted research on the environmentally viable options in businesses that encourage employees to engage in environmental activities (Pham et al., 2023). Going green was considered as having negative impact on profitability in the past, however now the business is realizing environmental well-being can provide positive economical outcomes as well (Sheth et al., 2011). The attention and the concern for environment and sustainable hotel practices in the tourist industry show a growth over the past 20 years, with regards to drivers, benefits, and the degree of implementation (Molina-Azorín, 2009). Even though going green is considered fruitful, there are several challenges in the process as well and organisations need to keep on investing and strategizing (Adrita et al., 2023). The drive of the hotels to go green was not only initiated by the industry itself, however the increasing customer trends towards sustainable choices has created a highly positive impact as well (Fernández-Robin et al., 2023).

2.1. Ecologically conscious consumer behaviour

The growing attention of global warming has alarmed the people to be more environmentally responsible. Lately, with increased attention on environmental concerns, consumers are shifting towards more eco-friendly choices and moving away from conventional purchases (Akehurst et al., 2012). If a consumer is environmentally conscious, they are likely to contemplate the repercussions of their purchasing choices. Follows and Jobber (2000) illustrated this with the example of an individual who is mindful of the environmental impact of generated waste and is possibly interested in the eco-friendliness of product packaging. If a consumer determines that the environmental consequences are significant, this may lead to the preference for environmentally friendly products in their purchases (Brochado et al., 2017). Hence, unlike in the past, customer awareness of green movements and ECCB has now led organisations to

consider shifting green (Yarimoglu & Gunay, 2019; Ahn et al., 2019). The way customers perceive a hotel's environmentally friendly practices directly influences the positive image of the hotel's commitment to sustainability. Simultaneously, this positive green image significantly contributes to customers' intentions to support and choose certified hotels (Leaniz et al., 2018). ECCB is getting progressive attention in marketing and consumer behavior literature (Lin & Hsu, 2013; Vlaeminck et al., 2014). According to Roberts (1996), ECCB can be defined as the behaviour of those who purchase products and services which they perceive to have a positive (or less negative) impact on the environment. Hence, in an environmentally friendly market, customers are aware of the impact of their purchasing decisions (Han et al. 2011), which closely relates to environmental issues (Goncalves et al., 2016). Consumers around the world, especially in Europe, are converting as ecologically conscious consumers, being environmentally aware and having a desire for the green practices (Nekmahmud et al., 2022).

2.2. ECCB and the green concept in hotels

Consumers' increasing environmental consciousness has led to a shift towards environmentally friendly consumption behaviors (Moise et al., 2021). As a result, hotels are under pressure to adopt green practices that mitigate their impact on the natural environment (Verma & Chandra, 2018). Evidence shows that many hotels have already started incorporating green practices into their daily operations (Leaniz et al., 2018). The adoption of green practices not only garners better customer appreciation but also brings various benefits to hotels. Previous studies have highlighted the economic advantages, operational cost savings, and reduced environmental impacts associated with going green in the hotel industry (Berezan et al., 2014; Chen, 2015; Geerts, 2014; Graci & Dodds, 2008; Rahman et al., 2012; Singh et al., 2014; Tzschentke, et al., 2004). Consequently, the growing customer

attention to environmental issues and the potential benefits have motivated hotels to embrace green practices (Dodds & Holmes, 2016).

Customer satisfaction is an important consideration for hotel management, as it relates to ECCB (Li et al., 2020). Previous research has established a positive connection between green practices in hotels and ECCB (Berezan et al., 2014; Li et al., 2017; Moise, Gil-Saura, and Ruiz-Molina, 2018). The implementation of green initiatives in the hotel industry has a significant impact on ECCB, and hotels must actively participate in environmental conservation to remain competitive (Yusof et al., 2017). However, it should be noted that the outcomes of green initiatives can vary, resulting in both positive and negative effects on customer perception (Yu et al., 2017).

According to Teng et al. (2018), the main objective of green hotels is to foster customer loyalty. A global survey of over 30,000 travelers found that 79% of respondents preferred hotels with green practices (TripAdvisor, 2013). The use of renewable energy sources was found to enhance customer satisfaction (Robinot & Giannelloni, 2010). Lee et al. (2010) identified the role of customer perceptions and expectations in shaping the image of a green hotel. Baloglu and Millar (2011) noted customers' preference for environmentally friendly goods, although some may hesitate to pay extra for green accommodations (Lee et al., 2010). Jauhari and Manaktola (2007) highlighted the variations in customer perceptions and willingness to pay for green improvements. Robinot and Giannelloni (2010), however, found no significant impact of going green on customer behavior in a study conducted in France. While previous literature generally supports the positive effects of green hotel practices, there are conflicting opinions on their effectiveness.

Previous literature confirms that a robust link exists between green practices and the ECCB. This affiliation provides hotels to gain benefits and the study will attempt to analyse in depth how these green practices would have an effect on ECCB.

2.3. Existing green practices in the hotels

Green practices of hotels are visible in many formats and literature stressed that all these practices are aimed to minimise the stress and the adverse impact on natural environment embedding environmental related aspects as core pillars of operation (Acampora et al., 2022). The implementation of green practices in the hotel industry has become a pivotal aspect of hotel management strategy (Kim & Chan, 2013). Referring literature, it was noted that green practices used by hotels are grouped in under few categories. Authors such as Kasimu et al. (2012) have classified green practices into four groups: energy management, waste management, water savings and general support for green practices. In contrast, Kim et al. (2012) classified such practices into five as (1) solid waste and water in rooms, (2) energy, (3) solid waste and water in cleaning, (4) water saving options for customers and (5) biodiversity. Through examining the literature, seven major green practices were identified that are successfully followed by hotels (Han et al., 2018; Rogerson & Sims, 2012; Hsieh, 2012).

Singh et al. (2014) and Perramon et al. (2014) identified sustainable water management as a key green practice in hotels, achieved through low flow water fittings, rainwater harvesting, and recycling. Hsieh (2012) and Rogerson and Sims (2012) emphasized energy conservation as crucial. Benson (2013) suggested minimizing energy consumption with efficient equipment, renewable energy, and daylight utilization. Solid waste management involves recycling (Timothy & Teye, 2009), composting (Alexander, 2002), and refillable items (Ernst & Young, 2008). Air quality management includes filtration, open spaces, and eco-friendly cleaning (Benson, 2013). Environmental purchasing promotes recycled, local, and biodegradable products (Timothy & Teye, 2009; Ernst & Young, 2008; Hsieh, 2012). Community awareness entails environmental education for employees and customer engagement (Ernst & Young, 2008; Berezan et al.,

2014). Incorporating green practices in CSR projects benefits hotels and communities (Miller et al., 2012). Regular monitoring (Miller et al., 2012) and permit management (Lee et al., 2010; Hsieh, 2012) ensure compliance and eco-friendly practices.

However, few researchers have raised concerns over some of the practices as well. Heisterkamp (2009) emphasized the need for more tangible actions from green hotels. Wolff (2008) argued against the effectiveness of linen and towel reuse programs. Conversely, Hsieh (2012) and Berezan et al. (2014) found that customers trust energy efficiency, waste handling, air quality management, environmental purchasing, and water conservation. Overall, the literature supports the acceptance of green practices by hotel consumers, which will be empirically tested in subsequent sections.

2.4. Green Practices in Sri Lankan hotels

After the end of the separatist war in 2009, Sri Lanka became a popular tourist destination, ranking highly in various travel guides (Fernando et al., 2017; Dissanayake & Samarathunga, 2021). Despite this, eco-tourism accounted for only 1% of total tourist arrivals (Arachchi, 2014). The Ministry of Tourism declared the Year 2000 as the Year of Ecotourism to promote nature-focused, wildlife, and environmental tourism (Fernando & Shariff, 2013; Gunapala, 2014). In line with this, hotels in Sri Lanka have embraced alternative forms of sustainable tourism to promote ecotourism (Arachchi et al., 2015).

A study conducted by Wijesundara (2017) identified the use of low energy lighting, and paper-based marketing and promotional materials; purchases made from local suppliers; recruitment and hiring of local people for jobs; establishment of a green work culture; and donations for green initiatives as some of the best sustainable practices followed by Sri Lankan hotels. Similarly, Kularatne et al. (2019) added that by being environmentally responsible, the efficiency of the hotels can be enhanced. He further stated that Sri Lanka with its naturalistic conditions have a

better chance of adhering to green concepts. Arachchi et al. (2015) and Kularatne et al. (2019) highlighted that Sri Lankan hotels follow the practices stated in the Green Globe and Leadership in Energy and Environmental Design (LEED) and the practices recommended by the Green Building Council of Sri Lanka (GBCSL).

Several studies have been conducted with in Sri Lanka in the realms of environment friendly practices in hotels. Weerakoon & Arulrajah (2021) conducted a study on a district of Sri Lanka, Polonnaruwa, to assess how employee behaviour contributes to the sustainable eco-friendly hotels. In the study it analyses the significance of employee contribution in sustaining a green process. Another study investigated the additional cost undergone by the hotels to adopt green practices (Weerasekara, 2022). Moreover, a study was conducted to assess the relationship between green attributes of hotels and how that would impact the revisiting decisions of the customers (Jayasinghe & Weerasekara, 2021). Customer loyalty towards sustainable hotels in Sri Lanka were analysed using case study theory to understand the how loyal customers tend to be if the hotel is sustainable (Silva et al., 2021). A study by Madhunimasha & Pathmini, (2019) examined the impact of Green Marketing Mix strategies on customer-based brand equity in green hotels in Sri Lanka. Another study was carried among the restaurants in a town named Vavuniya in Sri Lanka to understand the how the customer purchase intentions are influenced due to green practices (Pushpanathan & Lanka, 2021). Furthermore, a study was conducted to investigate the implication of green balanced scorecard on sustainable performance in Sri Lankan hospitality industry (de Silva et al., 2021). Analysing these studies, it is proven that even though studies were conducted among areas related to green buildings and environmentally friendly practices of buildings, a clear gap is visible and yet to be addressed in the area of identifying the link between ECCB on green practices of Sri Lankan hotels. Therefore, this clearly proves that the thorough research is vital to

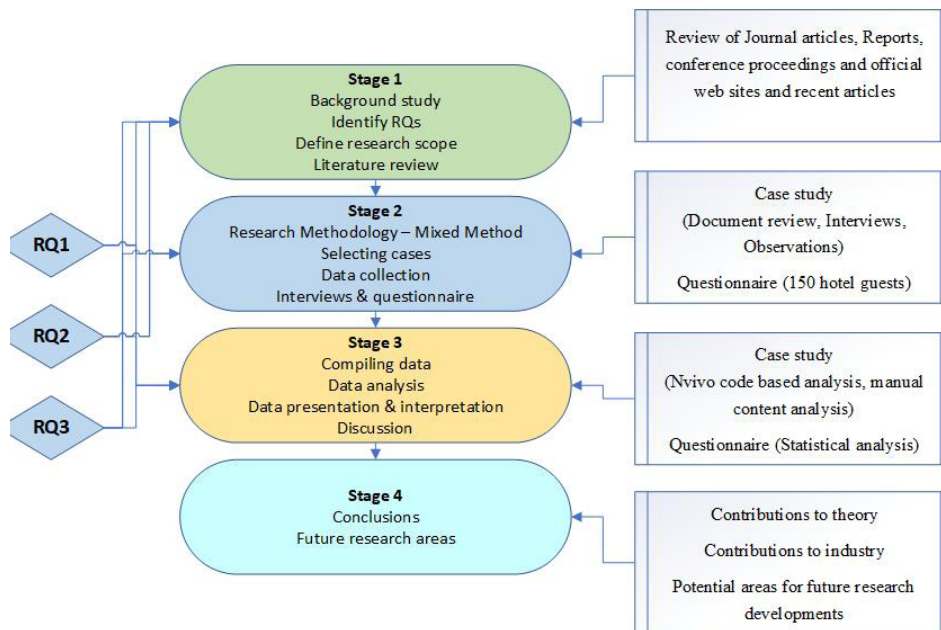


Figure 1. The research process.

investigate the impact of green practices on ECCB in Sri Lankan hotels.

3. Method

3.1. Research design and process

Creswell et al. (2007) define mixed methods research focuses on collecting, analysing, and mixing both quantitative and qualitative data in a single study or series of studies. Dawson (2002) explains that mixed research allows to investigate reasoning from a quantitative perspective. Such designs have been used to augment traditional methods for assessing and monitoring the impacts of recreation and tourism on the physical environment (Mackay 2004). Since the study is aimed at investigating the impact of green practices of Sri Lankan hotels on ECCB, the study would need a research apparatus that collects both quantitative and qualitative data. The study needs a quantitative approach to measure the impact of green practices on ECCB. This would allow the researchers to identify how many existing practices have positively influenced hotel guests (Saunders et al., 2019). This approach would certainly provide justifiable result since it allows to investigate the impact by a larger sample. On the other hand qualitative approach is used to identify the strategies to enhance ECCB. In identifying strategies authors

need a mechanism to investigate data in depth. In identifying strategies, it is essential that authors get to interview the most suitable people regarding the matter and to delve into depth and reasoning. In such manner, a qualitative approach provides the best route (Saunders et al., 2019). Since both qualitative and quantitative methods suffice the abovementioned needs of the research, study adopted the mixed method as the overall method of the research. Figure 1 provides a guide to the research process adopted in the research.

The study began with a background study and an extensive literature review to examine the theoretical background of ECCB and green practices in hotels. The literature review identified seven key areas of green practices commonly implemented in hotels. To enhance ECCB in green practices, the study utilised case studies and questionnaires, as the main research strategies. Under case studies, expert interviews, document reviews, and non-participatory observations were carried out. Prior consent was obtained from the interviewees, and they were encouraged to freely express their ideas without bias. All data collected were anonymized using codes to ensure respondent anonymity.

Table 1. Profiles of the cases.

Criteria	Hotel A	Hotel B	Hotel C
Category	Five stars	Four stars	Five stars
Location	Dambulla	Kandy	Galle
Number of Rooms	152	36	154
Age of the building	21 years	12 years	38 years
Number of Employees	350	50	260
Documents reviewed	Company records, Green certification documents, Customer feedbacks	Company records, Green certification documents, Customer feedbacks	Company records, Green certification documents, Customer feedbacks
Green rating system	LEED - Browns, Green Globe SL, Green SL, Travel Life - Gold, ISO 14001	Green Globe Travel Life	Green Globe Travel Life
Year of Certified	LEED- 2000 Green Globe- 1994 ISO 14001- 2002 Travel Life- 2016	Green Globe- 2015 Travel Life- 2017	Green Globe- 2013 Travel Life- 2016

3.2. Research strategy

Considering the scope of the study and the nature of the research questions, this research adopted two main strategies to find answers such as case studies and a questionnaire surveys as described below.

3.2.1. Case studies

Saunders et al., (2009) depict that case study help scholars to analyse phenomenon in depth to grasp the relationships. Furthermore, case studies allow critical analysis and understanding of reasoning and help to find the most suitable answer in a practical circumstance (Yin 2018). Thus, the study adopted the case study strategy to investigate the impact of green practices on ECCB in hotels in Sri Lanka and to propose strategies to enhance ECCB in the hotels in Sri Lanka. This allows researchers to discuss the how and why aspect of selecting the strategies and provides the justifications by the comments of the experts. In identifying cases hotels were selected under several criteria. The main criteria for selection were the existence of green practices within the hotel. Further, maintain a green certification during last five years were considered as another selection criterion. The number of cases were limited to three after reaching data saturation. While investigating the 4th case authors observed the data is repeating in the same pattern and no new data is emerging. This showcased data saturation where no new information or themes emerge in data collection, indicating that the researcher has comprehensively explored and understood the relevant aspects of the phenomenon under

investigation (Saunders et al., 2018). Therefore, authors limited the number of cases to three conferring to Saunders et al. (2018). Furthermore, the number of cases were limited due to the time constraints, financial constraints and the accessibility as well. In selecting the cases for the study, a thorough selection process was followed. The profiles of the selected cases are summarized in Table 1 to enable cross-case analysis.

As depicted Table 1, all the selected hotels provided a reasonable level of green practice and showcased a satisfactory level of green certification. Accordingly, the case studies conducted in this study involved semi-structured interviews with the hotel managers, non-participant observations around the hotels and a document review to collect the empirical data required for the study as described below.

3.2.1.1. Semi-structured interviews

According to Edwards and Holland (2013), semi-structured interviews allow asking questions from the interviewees using a flexible, yet structured approach. Semi structured interviews provide the ability to investigate data in-depth, seek justifications and to understand the reasoning behind a phenomenon. This also allows the experts to reflect on their own responses to questions and to develop more accurate and comprehensive answers (Kallio et al., 2016). In this study authors needed to collect data on how the existing practices have an impact on customers, what their responses have been, and to craft strategies to enhance their satisfaction levels. This needed a flexible, and an elaborative mechanism, thus, semi-structured interviews were used in the study to review the current green practices, impact of those practices on customers' satisfaction and strategies to improve the green practices in the hotels. As the initial step of the interview, a comprehensive interview guide was prepared with the data identified from literature. In forming the interview questions authors used the data gathered from the literature review. A pilot interview was conducted with an expert in the industry who possessed both practical

and academic knowledge on the subject to make sure the interview questions are well aligned with the scope of the research. The key strategies identified from literature were presented to the hotel management staff and they were validated. Further, new strategies were suggested during the empirical data collection.

The interviews were audio recorded with full permission of the experts and transcribed into textual data prior to analysis using Nvivo. Average interviews extended between one and half hours to two hours. In conducting the interviews experts were provided with the freedom to select the place thus most of the interviews were conducted at their office premises. However, authors assured that while the interviews are being conducted no other party was involved and experts were given the freedom to express their honest opinion. Furthermore, authors assured that all the collected data are anonymized and treated confidential to gain more realistic information. Table 2 depicts the profiles of the hotel employees interviewed selected through purposive sampling.

Yin (2014) explained the selection criteria rely on the limitations of convenience, judgment, time, and cost. Kothari (2004) clarified that purposive sampling allows researcher to select respondents for the survey intentionally. Thus, considering the nature of the study nonprobability purposive sampling method was adopted to select informants as the study requires to harness evidence specifically related to green practices and customer satisfaction (Dolores & C. Tongco, 2006). Purposive sampling allowed researchers to select the most suitable, educated and experienced experts in the area of green practices in the hotel sector. Fifteen professionals with each one having minimum or more than five years of experience in the hotel sector were interviewed to get an in-depth understanding on the research phenomenon conforming to the sample size suggested by Mason (2010). In selecting the experts, authors assured to select executive or above management level employees who had direct

Table 2. Profiles of the interviewees.

Case	Interviewee code	Designation	Work Experience (Years)	Involvement in Green-related job role
A	A1	Learning and Development Manager	25	✓
	A2	Human Resource Manager	05	✓
	A3	Maintenance Engineer	09	✓
	A4	Assistant Engineer	12	✓
	A5	Facilities Manager	10	✓
B	B1	Group Maintenance Executive	20	✓
	B2	Maintenance Supervisor	05	✓
	B3	Facilities Manager	10	✓
	B4	Assistant Engineer	08	✓
	B5	Human Resource Manager	05	✓
C	C1	Chief Engineer	06	✓
	C2	Maintenance Supervisor	05	✓
	C3	Assistant Engineer	05	✓
	C4	Engineer	10	✓
	C5	Facilities Manager	14	✓

contact and interest with hotels green practices and who worked in a related role.

3.2.1.2. Non- participant observations and document review

Nonparticipant observation in research provide the ability to observe and grasp the “real-life” scenarios pertinent to a phenomenon (Mulhall 2003). To carry out an in-depth investigation on the green practices currently being implemented in the hotels in Sri Lanka, non-participant observations on the hotels and a document review were conducted. The researchers visited the premises of all three hotels and attended the progress review meetings with the top management of the hotels as observers. This allowed authors to gain a more realistic perspective on existing green practices, its current status, and the efforts made by the hotel management to enhance the satisfaction levels of hotel customers. The data collection further included a document review which entailed investigating green certificates and supporting documents submitted for the renewal of the certificates, company records and customer feedback reports as mentioned in Table 1, to identify the green practices currently being implemented at the hotels and how well they are being received by hotel guests.

Code-based content analysis was used to analyse the data using Nvivo12 to reduce the time taken to analyse the data. According to Hsieh and Shan-

non (2005), content analysis is one of the main strategies for evaluating and coding text information in a qualitative approach. Text information can be gathered from interviews, surveys, findings, focus groups and printed media in the form of verbal, digital or written format (Kondracki, Wellman, & Amundson, 2002). Content analysis provides text for subjective interpretation by systematic coding and patterns (Hsieh & Shannon, 2005). In addition, manual content analysis was also carried out for documents reviewed and observations recorded.

3.2.2. Questionnaire survey with the customers

As stated by Check and Schutt (2012) and Yin (2015), questionnaires are common data collection methods in case study research which allow for comprehensive and in-depth data collection. Moreover, questionnaire survey provides validity and reliability to the research findings (Taherdoost, 2016). To investigate the satisfaction level and impacts hotel users have on the existing green practices, authors needed to examine how hotel customers respond to existing green practices. Moreover, authors needed a considerable number of the hotel customers' response for reliability and validation. Thus to determine the customer satisfaction level on the green practices, a questionnaire was distributed among the customers of green hotels. In selecting the guests, authors screen them through several basic aspects such as how many stays they plan to spend at the hotel, whether they have any basic knowledge on green practices in hotels and their preference over green practices in hotels compared to a conventional hotel. Therefore, sample were selected from guests who stayed more than two nights at the hotel and who knew about green practices and showed clear interest. Then through the consent and the assistance of the hotel management, researchers selected a sample of 150 hotel guests. The questionnaire distributed online, and the number of completed questionnaires returned was 117 accounting to 78% response rate.

In developing the questionnaire fol-

lowing approach was adopted. Initially authors identified the existing green practices in the selected hotels. In this process as mentioned in Section 2, authors identified existing green practices through a comprehensive literature review. Subsequently these literature findings were investigated with in the hotels for their existence and they were empirically tested. Moreover, additional practices were also identified through the data gathered from the hotels. This finalized list of green practices were used as the final list in developing the questionnaire. In the questionnaire the authors questioned the hotel guests under the following key areas to check their satisfaction level. As an example, under Water conservation green practices, guests were questioned on their satisfaction level from 1-5, on a Likert scale. Likewise, authors grouped the identified green practices under seven key areas such as: Water conservation, Energy conservation, Solid waste management, Air quality, Environmental purchasing, Community awareness and Maintenance of permits. Those green practices were then used to develop the questionnaire to gain the perspective of the hotel consumers. The respondents were given a five-point Likert scale to mark their responses to each question, using 5 for highly satisfied and 1 for highly dissatisfied. The ECCB level of each green practice was determined by calculating the mean values of each practice (Albaum, 1997; Miller, Mayer, & Baloglu, 2012).

As the questionnaire survey was conducted online, the gathered data were in the digital format. According to Rudestan and Newton (2007), the collection of data in the digital form is convenient in quantitative research. In order to analyse and interpret the quantitative data from questionnaires, descriptive frequency analysis was used. Mean values were calculated to interpret the satisfaction level based on the 5-point Likert scale. The degree of satisfaction was determined by the set of mean values as shown below (Othman et al., 2011).

- MV 0.5 - 1.5: Highly Dissatisfied
- MV 1.5 - 2.5: Dissatisfied
- MV 2.5 - 3.5: Moderately Satisfied
- MV 3.5 - 4.5: Satisfied

MV 4.5 - 5.5: Highly Satisfied

The mean value(MV) ranges were identified with the respective satisfaction level. Additionally, The analysed data were presented using bar charts for each green practice along with the mean value that can be assigned for it based on the questionnaire findings in section 4.

4. Research findings and analysis

This section clearly outlines the key findings of the data collection. The findings were discussed under three main sections i.e., Existing green practices in Sri Lankan hotels, ECCB on existing green practices and strategies to enhance ECCB as discussed below in line with answering the research questions.

4.1. Existing green practices in Sri Lankan hotels

Green practices currently followed in hotels were identified by interviewing the hotel management, making non-participant observations, and conducting a document review. The questions on green practices were grouped under seven areas, identified through the comprehensive literature review. Table 3 presents the summary of the green practices that being implemented in all three hotels.

As evidenced in Table 3, most of the green initiatives identified through the literature were being satisfactorily practiced in all three hotels. All the respondents showcased interest in implementing green practices in their respective hotels. Environmental purchasing, community awareness, and maintenance of permits were visible in all the hotels. Even though water conservation is crucial for a hotel, a rainwater harvesting system is installed only in Hotel B. A3 indicated that a rainwater harvesting system was not installed in Hotel A emphasising the inadequate space and negative impressions on overall design through rainwater harvesting system. However, B3 contradicted the idea of A3 by stating that, the design team managed to blend it with the existing architecture of the buildings as the rainwater harvesting system was considered essential in Hotel B. The use of energy efficient sen-

Table 3. Summary of the green practices implemented in three hotels.

GREEN PRACTICE	A	B	C	GREEN PRACTICE	A	B	C
Water Conservation				Air Quality			
Using low flow water fittings	✓	✓	✓	Using air filtration	✓	✓	✓
Using water saving devices	✓	✓	✓	Maintaining a smoke free environment	✓	✓	✓
Rainwater harvesting	✗	✓	✗	Designing more open spaces	✓	✓	✗
Using recycled water for gardening/ toilet flushing	✓	✓	✓	Using bicycles/ public transport to reduce air pollution in the premises	✓	✗	✗
Reusing towel and linen to reduce water consumption	✓	✓	✓	Maintaining the surroundings with green plants/ decorations	✓	✓	✓
Using grey water for landscaping	✓	✓	✓	Environmental Purchasing			
Energy Conservation				Providing organic food	✓	✓	✓
Implementing measures to reduce energy consumption	✓	✓	✓	Using recycled eco-friendly packaging such as takeout boxes and bags	✓	✓	✓
Using energy-saving equipment	✓	✓	✓	Purchasing locally grown food	✓	✓	✓
Using occupancy sensors and timers	✓	✗	✓	Purchasing green products	✓	✓	✓
Using renewable energy sources	✓	✓	✓	Community Awareness			
Using key cards to turn on/off the electricity supply in the hotel rooms	✓	✓	✓	Conducting awareness programs on green practices for the customers	✓	✓	✓
Using digital thermostats in hotel rooms	✓	✓	✓	Training employees on eco-friendly practices	✓	✓	✓
Using a building management system (BMS) to control heating, ventilation, and air conditioning (HVAC) and electricity supply	✓	✓	✓	Conducting environmental educational programmes for the local community	✓	✓	✓
Using reminder cards to alert customers to turn off lights	✓	✓	✓	Obtaining feedback from the customers on the green practices	✓	✓	✓
Solid Waste Management				Conducting CSR projects	✓	✓	✓
Using a waste management strategy (3R, 4R, 7R, etc.)	✓	✓	✓	Using in-room TVs to inform the customers about the hotel environmental policies	✓	✓	✓
Use recycling bins to separate waste	✓	✓	✓	Maintenance of Permits			
Composting waste	✓	✓	✓	Compliance with the legislation	✓	✓	✓
Using refillable dispensers for shampoos, conditioners, and soaps	✗	✗	✗	Obtaining green certification from the government or green organisations	✓	✓	✓
Supplying cosmetics/ amenities made from natural ingredients	✗	✗	✗	Adhering to laws and regulations (building codes/ incentives)	✓	✓	✓
				Displaying certificates showing the authorisation of eco-friendly practices	✓	✓	✓

sors was observed only in two hotels, A and C. The interviewees, A3, C4 and C5, commented that even though the initial cost of the sensors was high, the state-of-the-art technology used in them have made them energy efficient and user friendly.

In two of the three hotels, bicycles and common vehicles were not used. According to hotel management, customers are not eager to use bicycles and common vehicles as it compromises the comfort level. The hotels were unable to implement green practices such as the use of refillable dispensers for shampoos, conditioners, and soaps and supply of cosmetics/ amenities made from natural ingredients. According to B2, these hotels are unable to implement the two green practices as they are bound to adhere to certain hygiene standards that do not allow reusing of products or equipment. C2 and C5 however do not agree with B2 on the point of maintaining quality and hygiene but stated that the high cost of 100% natural products is another factor that hinders the use of cosmetics made from natural ingredients. The results indicated the green practices that require improvements. However, all the respondents indicated

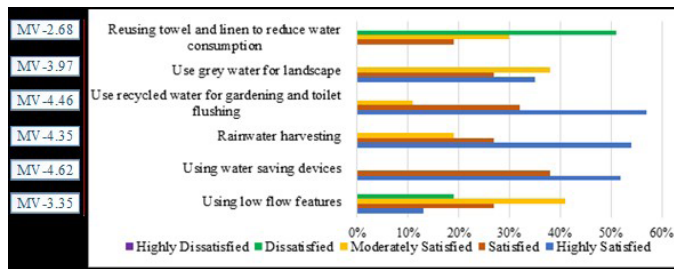


Figure 2. ECCB on sustainable management of water.

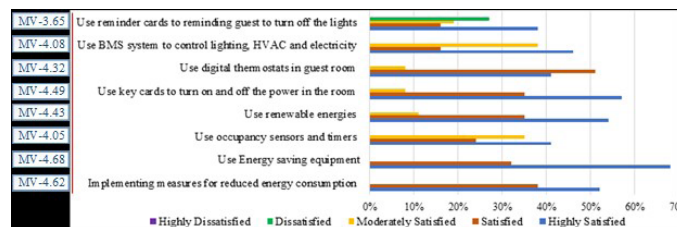


Figure 3. ECCB on energy conservation.

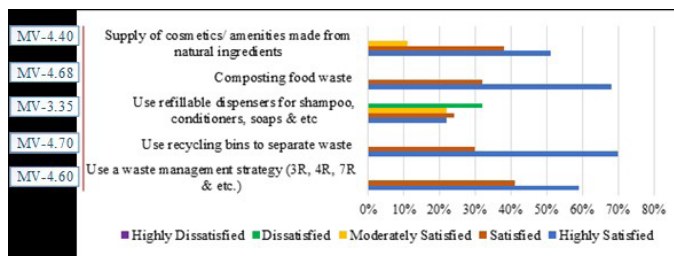


Figure 4. ECCB on solid waste management.

that the implementation of green practices is mainly influenced by ECCB and the views of the hotel guests.

4.2. Impact of green practices on ECCB

To analyse the impact of ECCB on green practices, 150 questionnaires were distributed among the customers of all three case study hotels to determine their satisfaction levels with regard to seven green practices identified from the literature. The following section provide a detailed analysis of each of these key areas below.

4.2.1. ECCB on sustainable management of water

Water conservation and sustainable water management except rainwater harvesting were observed in all of all three cases. Figure 1 indicates the customer satisfaction levels on sustainable water management at the hotels.

According to Figure 1, 57% of the customers surveyed were highly satisfied with the use of recycled wa-

ter for gardening and toilet flushing. The customers indicated that they are willing to use recycled water unless it compromises hygiene standards. More than 50% of the customers were highly satisfied with rainwater harvesting and the use of water saving devices. As mentioned already, only one of the hotels employed rainwater harvesting. Almost 51% of the customers were dissatisfied with the reuse of towels and linen to reduce water consumption, whose mean value of 2.68 was the lowest among the six green practices coming under sustainable management of water. However, 49% of the customers showed willingness to reuse linen as long as hygiene is maintained. This showed a split result among customers. On the same subject, hotel management is in the view that they did not provide new linen unless otherwise requested by the guests within the same stay. In this section the highest satisfaction level was recorded on the use of water saving devices with a mean value of 4.62.

4.2.2. ECCB on energy conservation

Hotels are energy intensive buildings that incur high cost for energy. Figure 2 shows customer satisfaction levels on energy conserving green practices.

The mean values received by seven of the eight green initiatives were above four. A vast majority of customers were satisfied with most of the energy conservation practices followed in the hotels. However, they had differing views on the use of reminder cards to alert customers to turn off their room lights and 27% of them were not enthusiastic on that practice. However, 37% of the customers were highly satisfied with it. The use of energy saving equipment with the highest mean value (4.68) was the most preferred energy saving practice with almost 70% of the customers were being highly satisfied with that practice.

4.2.3. ECCB on solid waste management

Figure 3 presents the analysis of the customer satisfaction levels on solid waste management practices implemented in three hotels.

More than 50% of the customers

were highly satisfied with all of the green practices associated with solid waste management except the use of refillable dispensers for shampoos, conditioners, and soaps with which approximately 32% of the customers have been dissatisfied (Figure 3). The percentage of customers (70%) who were highly satisfied with the use of recycled bins to separate waste was the highest among the percentage of customers who had expressed a high satisfaction. Guests showed similar satisfaction for composting waste as well. Approximately 50% of the customers have indicated a high level of satisfaction with the supply of cosmetics and amenities made from natural ingredients. The mean values obtained by all of the green practices except refilling of products exceeded four.

4.2.4. ECCB on ensuring air quality

Figure 4 presents the analysis of the satisfaction levels of customers on ensuring air quality in three hotels.

More than 50% of the surveyed customers indicated that they are highly satisfied with each of the green practices coming under air quality. All of the green practices in this category except the use of bicycles or public transport to reduce air pollution within the premises have been considered highly satisfying by more than 45% of the customers. However, 43% of the customers have been moderately satisfied with the use of bicycles or public transport to reduce air pollution within the premises. Only 19% of the customers have been highly satisfied with this practice. Both the use of air filtration and a smoke free environment have each obtained the highest mean value of 4.62, with 62% and 38% of the customers being moderately satisfied and satisfied with them, respectively. The mean values received by the green practices indicate that all of the green initiatives except the use of cycles and public transport have been favourably considered by the customers.

4.2.5. ECCB on environmental purchasing

The green practice environmental purchasing has been adopted by all three hotels. Figure 5 below presents

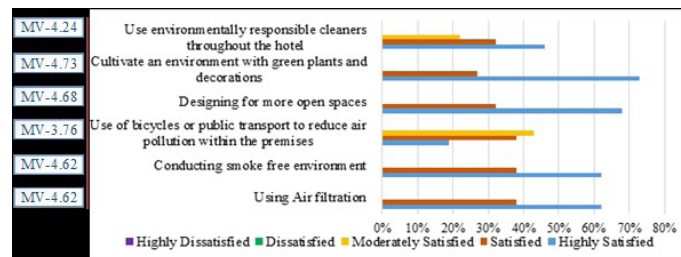


Figure 5. ECCB on ensuring air quality.



Figure 6. ECCB on environmental purchasing.

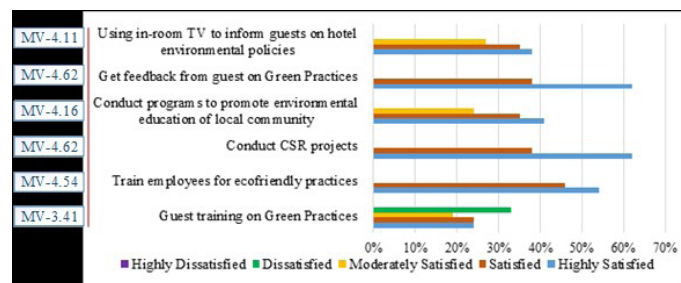


Figure 7. ECCB on community awareness.

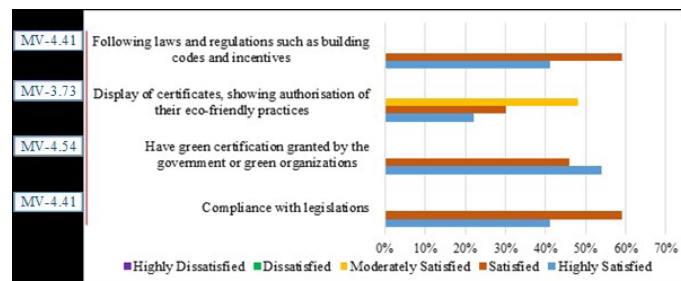


Figure 8. ECCB on the maintenance of permits.

the percentage of customers who have indicated their customer satisfaction level for each of the green practices associated with environmental purchasing.

More than 50% of the customers have expressed a high satisfaction for all of the green practices mentioned under environmental purchasing. The percentage of the customers is highest in respect of the use of recycled, eco-friendly packaging, such as takeout boxes and bags. The mean value of each of the two green practices provid-

Table 4. ECCB on green practices.

GREEN PRACTICE	Mean	GREEN PRACTICE	Mean
Water Conservation		Air Quality	
Using low flow features	3.35	Using Air filtration	4.62
Using water saving devices	4.62	Conducting smoke free environment	4.62
Rainwater harvesting	4.35	Use of bicycles or public transport to reduce air pollution within the premises	3.76
Use recycled water for gardening and toilet flushing	4.46	Designing for more open spaces	4.68
Use grey water for landscape	3.97	Cultivate an environment with green plants and decorations	4.73
Reusing towel and linen to reduce water consumption	2.68	Use environmentally responsible cleaners throughout the hotel	4.24
Energy Conservation		Environmental Purchasing	
Implementing measures for reduced energy consumption	4.62	Purchase locally grown food from locally suppliers	4.6
Use energy saving equipment	4.68	Use recycled eco-friendly packaging such as takeout boxes and bags	4.62
Use occupancy sensors and timers	4.05	Provide organic food	4.6
Use renewable energies	4.43	Purchase green products	4.54
Use key cards to turn on and off the power in the room	4.49	Community Awareness	
Use digital thermostats in guest room	4.32	Guest training on Green Practices	3.41
Use BMS system to control lighting, HVAC and electricity	4.08	Train employees for eco-friendly practices	4.54
Use reminder cards to reminding guest to turn off the lights	3.65	Conduct CSR projects	4.62
Solid Waste Management		Conduct programs to promote environmental education of local community	4.16
Use a waste management strategy (3R, 4R, 7R etc.)	4.6	Get feedback from guest on Green Practices	4.62
Use recycling bins to separate waste	4.7	Using in-room TV to inform guests on hotel environmental policies	4.11
Use refillable dispensers for shampoo, conditioners, soaps & etc.	3.35	Maintenance of Permits	
Composting food waste	4.68	Compliance with legislations	4.41
Supply of cosmetics/ amenities made from natural ingredients	4.4	Have green certification granted by the government or green organizations	4.54
		Display of certificates, showing authorisation of their eco-friendly practices	3.73
		Following laws and regulations such as building codes and incentives	4.41

ing organic food and purchasing locally grown food is 4.6. All four green practices coming under environmental purchasing have provided an acceptable level of satisfaction to more than 30% of the customers. An intriguing observation in this section is that all practices have scored mean values above 4 indicating the high level of customer satisfaction on them.

4.2.6. ECCB on community awareness

As discussed in the literature, a hotel can gain a vast range of benefits by promoting their eco-friendly practices among the community. Hence, community awareness is one of the main areas that could impact customer satisfaction and Figure 6 below presents the results of the analysis.

Over 50% of the customers have expressed a high level of satisfaction over three of the green practices associated with community awareness as visible. Almost 62% per cent of the customers have expressed a high level of satisfaction on conducting CSR projects and

obtaining feedback from customers on the green practices of the hotels. Training employees on eco-friendly practices has obtained a mean value of 4.54, and nearly 55% of the customers have expressed a high level of satisfaction with this green practice. However, 33% of the customers have expressed dissatisfaction on conducting training programmes for customers on green practices. A3 and B2 opined that customers are dissatisfied with this practice as it disturbs relaxation. A2 mentioned that customers consider such training as a nuisance.

4.2.7. ECCB on the maintenance of permits

Compliance with legislation and maintenance of permits elevate the overall reputation of hotels. Figure 7 provides the mean values obtained by the green practices associated with the maintenance of permits and the percentage of customers.

Over 50% of the customers have indicated that they are satisfied with three of the four green practices at large. Forty-one per cent of the customers have been highly satisfied with two of the practices: compliance with legislation and following of laws and regulations, such as building codes and incentives. The display of certificates indicating the authorisation of their eco-friendly practices has been considered by 48% of the customers as being moderately satisfying. All of the green practices associated with the maintenance of permits have obtained an approximate mean value of 4. Green certification granted by the government or green organizations have both obtained the highest mean value (4.54).

The analysis clearly depicts that vast majority of the green practice offered by the hotels were overwhelmingly accepted by hotel customers and they indicate they are satisfied with these practices except for several practices. The Table 4 presents a comprehensive overview of various green practices, each accompanied by a mean score reflecting their perceived satisfaction level as per the views of the hotel guests.

The practices are categorised into key areas such as Water Conservation, Air Quality, Energy Conservation, En-

vironmental Purchasing, Solid Waste Management, Community Awareness, and Maintenance of Permits. The mean scores provide a measure of how well each practice is perceived to be contributing to environmental sustainability, with higher scores indicating a more positive satisfaction among hotel customers. The analysis indicates that even though there are a few green practices that are not fully accepted by the hotel guests, overwhelming majority of green practices are well received by the hotel guests, and they were satisfied by them.

4.3. Strategies to improve ECCB on green practices

A key objective of the study was to propose strategies that will improve ECCB on green practices. These strategies were collected through interviews with the hotel managements, non-participant observations, and the document review. To do so a coding structure was used as follows.

- Top-Level Code: Strategies to improve customer satisfaction towards green goals
- Sub Codes
- Conduct training and awareness programs for employees
- Mechanism to evaluate customer satisfaction before leaving the hotel
- Conducting program to make guests feel more aware
- Promoting green concept through social media
- Compliance with standards
- Benchmarking
- Develop procedures enhancing public relationship

One of the strategies that was emphasized by the interviewees was providing education for hotel employees. C2 highlighted that, employees do not possess adequate knowledge and awareness about green practices. A1 noted the importance of knowing the benefits and value of green practices by both the customers and employees of the hotels. B1 responded that to implement and maintain green practices successfully, the employees have to be knowledgeable and informative. The idea was further strengthened by the comment of C1 as he reiterated only

if the employees had inert knowledge they would continue and sustain the practices and able to educate guests when needed. Thus, conducting training and awareness programmes was considered one of the top strategies that can be adopted to enhance customer satisfaction in hotels.

The study findings suggest that implementing an effective feedback mechanism is crucial for obtaining customer input. Feedback loops can be utilized to gather data and develop action plans to assess customer satisfaction with hotel services. Hotel management should prioritize meeting customer preferences and desires rather than focusing solely on standard amenities. Respondents emphasized the importance of educating hotel customers about the benefits and best practices related to green initiatives. A1, B1, B4 and C2 suggested conducting demonstrations, dramas, group activities, and providing information on energy-saving through green concepts. These initiatives can encourage customers to take responsibility for environmental conservation, thereby enhancing ECCB.

Promoting the existing green practices in the hotels using diverse procedures is one of the strategies suggested as it would enhance the customers' awareness on green initiatives and their tangible benefits. As stated by B2, green practices may surprise the customers, if they had no prior knowledge about such practices being implemented in the hotel. According to A1, most of the customers prefer to get information related to available green practices beforehand which will ultimately uplift their satisfaction with the practices. However, it is noted by majority of interviewees of the hotel staff that it must be done in a manner that does not disturb the guests by any mean. Further, complying and benchmarking with global standards such as LEED was suggested as a strategy by the hotel managements as customers from developed countries possess green awareness and familiarity with global standards. C2, B1 and B3 expressed that since majority of the guests are from all over the world it is imperative to highlight globally renowned stan-

dards. Procedures enhancing public relationship were the least advocated strategy as the difficulty of implementing executing such strategy. However, A2 mentioned that through the promotional campaign they attempt to elevate the relationship with the public with the modern social media platforms. On the contrary, B5 mentioned that it has no tangible outcomes.

5. Discussion

This section provides a critical discussion on the findings of the above discussed section with one-by-one comparison with the literature and the interpretation of the empirical findings as well.

5.1. Green practices in Sri Lankan hotels

The study findings indicate that all three hotels have implemented a majority of the green practices mentioned in the literature. Seven green initiatives were identified from the literature as being applicable in Sri Lanka: sustainable water management, energy conservation, solid waste management, satisfactory air quality, environmental purchasing, community awareness, and maintenance of permits. According to Perramon et al. (2014), these practices are already being implemented in top green hotels throughout the world. All three hotels selected for this study also demonstrated an interest towards executing these green practices at large.

Water conservation and waste reduction are the major aspects of environmentally responsible management in hotels (Singh et al., 2014). Even though, rainwater harvesting is suitable for a tropical country like Sri Lanka, only one of the three hotels had implemented it. According to Perramon et al. (2014), rainwater harvesting is important for hotels as the water consumption in a hotel building is higher than that in any other type of building. Similarly, the use of refilling techniques and supply of 100% natural products are imperative in hotels (Alexander, 2002; Ernst & Young, 2008). However, all three hotels were not implementing these practices as it is difficult for the hotels to comply with other standards and high cost. The hotel managements

also highlighted the difficulty of maintaining solid waste management in their hotels. Alexander (2002) stated that hotels often hesitate to implement solid waste management programmes due to poor coordination and cooperation among the management, employees, and customers. The green initiative of using bicycles and public transport was also not implemented in two of the hotels due to reluctance of the customers to relinquish their comforts. According to the managements of all three hotels, although the hotels were eager to provide such facilities, the customers are not keen about them as highlighted by Wolff (2008). The results clearly imply that hotels have executes many strategies however they are reluctant to go ahead with strategies that would create concern in the minds of the guests.

5.2. Hotel users' ECCB on the existing green practices

The data analysis indicated that customers have a favourable perception of the green practices currently followed in Sri Lankan hotels. According to Prakash et al., (2022), water conservation and waste management practices are appreciated by hotel customers and hotel managements. The study findings confirmed the literature findings as majority of the customers were satisfied with the suggested green practices. However, 51% of the customers who were interviewed were dissatisfied with the reuse of towels and linen to reduce water consumption. According to a study done by Blose et al. (2014), the attitudes of the hotel customers to this green practice will depend on how it is presented to the customers and its perception by the customers, Yu et al. (2017) highlighted that some customers, however, would not mind reusing linen to conserve water but some of the hotels also might consider the reuse of linen as a poor cleaning practice and thus would be reluctant to implement it.

Hotels have complex functional areas which require different energy levels as the day progresses (Shao et al. 2020). The ECCB on energy conservation was high, indicating that most of

the customers agreed with such practices. As indicated by Pirani and Arafat (2016), customer satisfaction can be achieved through proper solid waste management practices. Similarly, a study conducted by Zhang et al. (2017) concluded that, maintaining a satisfactory indoor air quality is a concept well accepted by hotel customers in general. The hotel customers in Sri Lanka were highly satisfied with this practice. Khan et al., (2022) and Li et al. (2017) proved that hotels positively accepted green purchasing practices, such as environmental purchasing, which was well accepted by Sri Lankan hotel customers.

Increasing the awareness on green is another practice emphasized by several scholars. Berezan et al. (2014) stated that increasing the awareness of customers about green practices can compel the hotels to reduce their carbon footprints. Research findings indicated that, Sri Lankan hotel customers accept most of the green initiatives except training of customers on green practices. Managing green permits, maintaining the stipulated standards, and showcasing the green rating of the hotel are vital for customer satisfaction on green. According to Lee et al. (2010), 83% of English holidaymakers would choose a hotel that has received a green award. Most of the activities related to maintaining green permits were accepted by the hotel customers who were interviewed.

As per the collected data green practices were appreciated by the hotel guests as portrayed in data. Giving close attention to the responses of the hotel guests and scrutinising the ideas shared by the hotel employees reveal an intriguing fact. In general, the hotel customers have accepted the green practices and showcased their willingness to integrate with them show their satisfaction as indicated by Acampora et al. (2022). However, when certain green initiatives hinder their ability to enjoy the stay or relaxation, they seem to be displeased. Furthermore, it is understandable through the results that customer satisfaction has a positive

relationship to green initiatives implemented by hotels overall.

5.3. Strategies to improve customer satisfaction on Green Practices

With the aim of enhancing customer satisfaction on green principals, several key strategies were proposed with reference to literature and the feedback received from the interviewees. One strategy accepted by the interviewees is providing knowledge on green practices to the employees of hotels. This strategy has been mentioned by Yu et al. (2017) who stated that when green knowledge of employees is insufficient, the implementation of green practices and presentation of green practices to the customers gets adversely affected. Thus, a key strategy that hotels can adopt is to ensure that their employees understand how to implement green practices and effectively interact with customers during their stay in green hotels.

Increasing customer awareness on green practices is a strategy that was suggested by the hotel managements. This idea is cited by Chen and Peng (2014), who stated that the customers have to be educated about green practices by making them available within the hotel premises or on the hotel website providing detailed information about the green practices of the hotels. On the contrary, Yarimoglu & Gunay (2019) and Ahn et al. (2019) argued that customers training could negatively affect customer satisfaction, if implemented in an unfavourable way. The study also acknowledged that communicating and promoting green practices will provide improved satisfaction for customers and bring benefits to hotel as well. This idea is clearly emphasised by the study of Mogaji et al. (2022) as well where it highlights the importance of effectively communicating the green initiatives. The customers will be satisfied when they are made aware of the green practices and the benefits. Further supporting this argument, Gao and Mattila (2014) stated that regardless of the service outcome, customer satisfaction would be higher when customers perceive that the hotel has engaged green initiatives

to help the society.

Projecting and maintaining the image of the hotel with regard to green is important to achieve customer satisfaction. Sri Lankan hotels have to maintain globally recognised standards as a strategy, which was endorsed by the interviewees as well. The literature also noted the advantages of maintaining a reputable green image and complying with global standards. Studies by Mohiuddin & Al-Amin, (2022) and Martínez (2015) highlighted that acquiring a reputable green image through environmental certifications (Green Globe Certification, Energy Star, Green Seals) help customers to trust the commitment and dedication of the companies towards becoming truly green. Thus, the companies have to adopt green concepts not just as a mere marketing tool but as a core fundament of the business. As confirmed through the research findings, improving feedback gathering will help collect honest responses, ideas, and suggestions of the customers and provide an insight into how the green activities of the hotels can be initiated to enhance the ECCB.

6. Conclusions

The study aimed to investigate the impact of green practices on ECCB in Sri Lankan hotels. Authors adopted a mixed research approach achieving the aim of the study. In this regard, three prominent hotels in Sri Lanka were studied to collect the required data for the research. Initially a comprehensive literature review was carried out and the key findings of the literature were taken as a benchmark to analyse the current level of green practices in the hotels. As per the findings, all three hotels were found to implement seven key green practices such as: Water conservation, Energy conservation, Solid waste management, Air quality, Environmental purchasing, Community awareness, and maintenance of permits to a satisfactory level.

The study assessed customer satisfaction on green practices in three hotels using a questionnaire survey among 117 hotel customers. The findings revealed that customers show-

cased a positive satisfactory level towards green initiatives such as environmental purchasing, water and energy conservation, community awareness, air quality maintenance, solid waste management, and permit maintenance. However, satisfaction was lower for linen reuse, customer training on green activities, and the use of refillable bottles due to concerns about hygiene and perceived interference with freedom and privacy. Moreover to identify strategies to enhance ECCB authors conducted interviews with hotel staff and management to identify key strategies such as educating hotel staff, improving customer feedback mechanisms, educating customers, promoting research, and benchmarking against global standards.

The contributions of the study are twofold. Initially from a theoretical perspective the study fills the knowledge gap on ECCB in green hotels in the context of Sri Lanka by identifying factors that affect ECCB pertaining to green practices. Moreover, the study presents a reliable outcome in which it presents how hotel consumers perceive each and every green practice and their underlying factors. This provides a clear idea on how consumers response to existing green practices in the Sri Lankan hotels.

Secondly, from an industry perspective the study provides insights to Sri Lankan hotel owners on how to incorporate green initiatives into their businesses and increase ECCB, which will ultimately increase the profitability of the hotels and ultimately to the environment. The developed strategies can be directly used by hotel management in reinventing how to approach the ecologically conscious customer base and winning their trust. As a practical implication, the findings on customers behavioral patterns with regards to green practices could be used as guidelines for green hotels to improve their delivery of service in satisfying clients.

7. Future research areas

The study invites for further research in few aspects. The study opens an avenue to investigate on ECCB of Sri Lankan hotel customers from a different perspective. Policy makers

and regulatory bodies could use this study as a guideline to investigate how important ECCB on economy and tourism development. This would create an impactful link between the hotel sector, authorities and consumers.

From a practical perspective considering the green hotel sector, this study opens the way to study on the barriers in implementing the identified new strategies to increase ECCB.

Future research can explore the cultural factors that shape consumer perceptions and behaviors related to green practices in hotels and investigate how cultural differences impact the effectiveness of eco-friendly initiatives and if there are variations in consumer responses across different regions. Moreover, there is a vacuum to research on validating the identified strategies on real case scenarios. Researchers can investigate the feasibility of the suggested strategies in real cases and assess the accuracy and the usability as well.

References

- Abdou, A. H., Shehata, H. S., Mahmoud, H. M. E., Albakhit, A. I., & Al-makhayitah, M. Y. (2022). The Effect of Environmentally Sustainable Practices on Customer Citizenship Behavior in Eco-Friendly Hotels: Does the Green Perceived Value Matter? *Sustainability*, 14(12), 7167. <https://doi.org/10.3390/su14127167>
- Acampora, A., Lucchetti, M. C., Merli, R., & Ali, F. (2022). The theoretical development and research methodology in green hotels research: A systematic literature review. *Journal of Hospitality and Tourism Management*, 51, 512-528.
- Adrita, U. W., & Mohiuddin, M. F. (2020). Impact of opportunity and ability to translate environmental attitude into ecologically conscious consumer behavior. *Journal of Marketing Theory and Practice*, 28(2), 173-186.
- Ahn, J., & Kwon, J. (2019). Green hotel brands in Malaysia: perceived value, cost, anticipated emotion, and revisit intention. *Current Issues in Tourism*, 23(12), 1559-1574. [doi:10.1080/13683500.2019.1646715](https://doi.org/10.1080/13683500.2019.1646715)
- Albaum, G. (1997). The Likert scale revisited. *International Journal of Market Research*, 39(02), 1-24. [doi:10.1177/147078539703900202](https://doi.org/10.1177/147078539703900202)
- Alexander, S. (2002). Green hotels: Opportunities and resources for Success. In C. Kennedy (Ed.), *Zero Waste Alliance*. Retrieved from <https://docplayer.net/14204743-Green-hotels-opportunities-and-resources-for-success.html>
- Amandeep, A. (2017). Green hotels and sustainable hotel operations in India. *International Journal of Management and Social Sciences Research*, 06(02), 13-16.
- Ankush, A., & Megha, G. (2015). Green hotels: A step towards environmental. *Global Journal For Research Analysis*, 04(03), 1-2. [doi:10.15373/2249555X](https://doi.org/10.15373/2249555X)
- Akehurst, G., Afonso, C. & Martins Gonçalves, H. (2012) Re-examining green purchase behaviour and the green consumer profile: new evidences. *Management Decision*, 50, 972- 988. [doi:10.1108/00251741211227726](https://doi.org/10.1108/00251741211227726)
- Arachchi, R. (2014). Perception of the eco tourism concepts and its practices in the hotel industry: The case in eco resorts in Sri Lanka. *Wayamba Journal of Management*, 03(02), 30-43.
- Arachchi, R.S.S.W., Khatibi, A., & Shukri, M. (2015). Comparison of Eco-Tourism Practices in Sri Lankan Eco Resorts from Customer and Supplier Viewpoint. *International Journal of Liberal Arts and Social Science* 3. 22-34.
- Bandara, S. G. D. K., Abdeen, F. N., Disaratna, V., & Perera, B. A. K. S. (2020). Employee welfare and job satisfaction in the Sri Lankan hotel industry. *International Journal of Construction Management*, 1-10. [doi:10.1080/15623599.2020.1839705](https://doi.org/10.1080/15623599.2020.1839705)
- Baloglu, S., & Millar, M. (2011). Hotel guests' preferences for green guest room attributes. *Cornell Hospitality Quarterly*, 52(3), 302-311. [doi:10.1177/1938965511409031](https://doi.org/10.1177/1938965511409031)
- Benson, J. (2013). Sustainable strategies for green hotel design. *Master's Theses and Doctoral Dissertations*, 556. <http://commons.emich.edu/theses/556>
- Berezan, O., Millar, M., & Raab, C. (2014). Sustainable hotel practices and customer satisfaction levels. *International Journal of Hospitality and Tourism Administration*, 38(03), 361-387.
- Blose, J. E., Mack, R. W., & Pitts, R. E. (2014). The Influence of Message Framing on Hotel Guests' Linen-Reuse Intentions. *Cornell Hos-*

- pitality Quarterly*, 56(2), 145–154. doi:10.1177/1938965514556480
- Brochado, A., Teiga, N., & Oliveira-Brochado, F. (2017). The ecological conscious consumer behaviour: are the activists different?. *International Journal of Consumer Studies*, 41(2), 138–146.
- Check, J., & Schutt, R. (2012). Survey research. *Research methods in education*, 159–185.
- Chen, A., & Peng, N. (2014). Recommending green hotels to travel agencies' customers. *Annals of Tourism Research*, 48, 284–289. doi:10.1016/j.annals.2014.07.003
- Chen, J. (2015). From sustainability to customer loyalty: a case of full service hotels' guest. *Journal of Retailing and Consumer Services*, 22(2015), 261–265. 10.1016/j.jretconser.2014.08.007
- Creswell, J. W., Hanson, W. E., Clark Plano, V. L., & Morales, A. (2007). *Qualitative Research Designs*, 35(2), 236–264. <https://doi.org/10.1177/0011000006287390>
- Dawson, C. (2002). *Practical research methods: a user-friendly guide to mastering research techniques and projects*. How to Books.
- de Silva, P. O., Herath, H. M. J., & Udawaththa, U. D. I. (2021). The Implication of Green Balanced Scorecard on Sustainable Performance in the Hospitality Industry. *17th International Conference on Business Management*, 203–227.
- Dissanayake, D. M. M. I., & Samarathunga, W. H. M. S. (2021). Post-war city to a tourism city: the perspectives of local stakeholders on post-war city tourism development in Jaffna, Sri Lanka. *International Journal of Tourism Cities*.
- Dodds, R., & Holmes, M., (2016). Hotel & business management is there a benefit from being green? Assessing benefits from marketing sustainability by North American hotels. *Journal of Hotel & Business Management*, 5(2), 1–9. <https://doi.org/10.4172/2169-0286.1000145>.
- Dominici, G., & Guzzo, R. (2010). Customer Satisfaction in the Hotel Industry: A Case Study from Sicily. *International Journal of Marketing Studies*, 2(2). doi:10.5539/ijms.v2n2p3
- Dominici, G., & Guzzo, R. (2010). Customer Satisfaction in the Hotel Industry: A Case Study from Sicily. *International Journal of Marketing Studies*, 2(2). doi:10.5539/ijms.v2n2p3
- Edwards, R., & Holland, J. (2013). *What is qualitative interviewing?* Bloomsbury Academic, London. <https://doi.org/10.5040/9781472545244>
- Ernst & Young's (2008). Global hospitality insights–hospitality going green. *Hotel News Resource*. <https://www.hotelnewsresource.com/article36072.html>
- Fernando, S., Bandara, J. S., & Smith, C. (2017). *Tourism in Sri Lanka. The Routledge Handbook of Tourism in Asia* In M. C. Hall & S. J. Page (Eds.), 251–264. Abingdon, Oxon, UK: Routledge.
- Fernando, S.L.J., & Shariff, N. M. (2013). Wetland ecotourism in Sri Lanka: Issues and challenges. *Geografia. International Journal of Development, Society and Environment*. 9, 99–105.
- Fernández-Robin, C., Celemin-Pedroche, M. S., Santander-Astorga, P., & Alonso-Almeida, M. D. M. (2019). Green practices in hospitality: A contingency approach. *Sustainability*, 11(13), 3737.
- Flick, U. (2018). *An introduction to qualitative research*. Sage Publications Limited.
- Follows, S.B. & Jobber, D. (2000). Environmentally responsible purchase behaviour: a test of a consumer model. *European Journal of Marketing*, 34, 723–746. doi:10.1108/03090560010322009
- Gao, Yixing & Mattila, Anna. (2014). Improving consumer satisfaction in green hotels: The roles of perceived warmth, perceived competence, and CSR motive. *International Journal of Hospitality Management*. 42. 20–31. 10.1016/j.ijhm.2014.06.003.
- Geerts, W. (2014). Environmental certification schemes: hotel managers' views and perceptions. *International Journal of Hospitality Management*, 39, 87–96. <https://doi.org/10.1016/j.ijhm.2014.02.007>
- Goncalves, O., Robinot, E., & Michel, H. (2016). Does It Pay to Be Green? The Case of French Ski Resorts. *Journal of Travel Research*, 55(7), 889–903. <https://doi.org/10.1177/0047287515601238>
- Graci, S., & Dodds, R. (2008). Why go green? The business case for environmental commitment in the Canadian hotel industry. *Anatolia*, 19(02), 251–270. <https://doi.org/10.1080/13032917>.

2008.9687072

Gunapala, A. (2014, July). Factors Affecting Customer Satisfaction Related to the Tourist Hotel Industry in Sri Lanka. *Journal of Tourism and Hospitality Management*, 2(7), 265-278. doi:10.17265/2328-2169/2014.07.001

Han, H., Hsu, L., Lee, J., & Sheu, C. (2011). Are lodging customers ready to go green? An examination of attitudes, demographics, and eco-friendly intentions. *International Journal of Hospitality Management*, 30(02), 345-355. 10.1016/j.ijhm.2010.07.008

Han, H., Lee, J.-S., Trang, H. L. T., & Kim, W. (2018). Water conservation and waste reduction management for increasing guest loyalty and green hotel practices. *International Journal of Hospitality Management*, 75, 58-66. doi:10.1016/j.ijhm.2018.03.012

Han, X., & Chan, K. (2013). Perception of green hotels among tourists in Hong Kong: An exploratory study. *Services Marketing Quarterly*, 34(4), 339-352. doi:10.1080/15332969.2013.827069

Hays, D., & Ozretic-Dosen, D. (2014). Greening hotels - building green values into hotel services. *Tourism and Hospitality Management*, 20(1), 85-102

Heisterkamp, M. (2009). Guests Expect More from Green Programs. *Hotel & Motel Management: Green Focus*: <http://www.HotelWorldNetwork.com/heisterkamp>

Hemmelskamp, J., & Brockmann, K. (1997). Environmental labels -The German 'blue angel'. *Futures*, 29(01), 67-76.

Hsieh, Y. (2012). Hotel companies environmental policies & practices: A content analysis of web pages. *International Journal of Contemporary Hospitality Management*, 24(01), 97-121. doi.org/10.1108/095961112

Jayasinghe, J. A. S. C., & Weerasekara, W. M. T. K. (2021). Impact of green attributes on revisiting intentions of tourists in sri lankan hotels : The mediating effect of overall satisfaction impact of green attributes on revisiting intentions of tourists in sri lankan hotels . *Sri Lanka Journal of Marketing*, March. <https://doi.org/10.4038/sljmuok.v7i0.47>

Jeong, E., & Jang, S. (2010). Effects of restaurant green practices: Which practices are important and effective?. *Caesars Hospitality Research Summit*.

Jiang, Y., & Kim, Y. (2015). Developing multi-dimensional green value: Extending social exchange theory to explore customers' purchase intention in green hotels - evidence from Korea. *International Journal of Contemporary Hospitality Management*, 27(02), 308-333. doi.org/10.1108/IJCHM-08-2013-0383

Kallio, H., Pietilä, A. M., Johnson, M., & Kangasniemi, M. (2016). Systematic methodological review: developing a framework for a qualitative semi-structured interview guide. *Journal of advanced nursing*, 72(12), 2954-2965.

Kasim, A. (2004). Socio-environmentally responsible hotel business: Do tourists to Penang Island, Malaysia care?. *Journal of Hospitality & Leisure Marketing*, 11(04), 5-28. doi.org/10.1300/J150v11n04_02

Khan, S. A. R., Yu, Z., Umar, M., & Tanveer, M. (2022). Green capabilities and green purchasing practices: A strategy striving towards sustainable operations. *Business Strategy and the Environment*.

Khatter, A., White, L., Pyke, J., & McGrath, M. (2021). Barriers and drivers of environmental sustainability: Australian hotels. *International Journal of Contemporary Hospitality Management*, 33(5), 1830-1849. <https://doi.org/10.1108/IJCHM-08-2020-0929>

Kim, T., & Ha, J. (2022). An investigation of customer psychological perceptions of green consciousness in a green hotel context: Applying an extended theory of planned behaviour. *International Journal of Environmental Research and Public Health*, 19(11), 6795. <https://doi.org/10.3390/ijerph19116795>

Kularatne, T., Wilson, C., Månsson, J., Hoang, V., & Lee, B. (2019). Do environmentally sustainable practices make hotels more efficient? A study of major hotels in Sri Lanka. *Tourism Management*, 71, 213-225. doi:10.1016/j.tourman.2018.09.009

Latif, K. F., Pérez, A., & Sahibzada, U. F. (2020). Corporate social responsibility (CSR) and customer loyalty in the hotel industry: A cross-country study. *International Journal of Hospitality Management*, 89, 102565. doi:10.1016/j.ijhm.2020.102565

Lee, J., Hsu, L., Han, H., & kim, Y. (2010). Understanding how con-

- sumers view green hotels: How a hotel's green image can influence behavioural intentions. *Journal of Sustainable Tourism*, 18(7), 901–914. doi.org/10.1080/09669581003777747
- Li, H., Liu, Y., Tan, C.-W. and Hu, F. (2020). Comprehending customer satisfaction with hotels: Data analysis of consumer-generated reviews, *International Journal of Contemporary Hospitality Management*, 32(5), 1713–1735. <https://doi.org/10.1108/IJCHM-06-2019-0581>
- Li, X., Yu, Y., & Jai, T.-M. (2017). The impact of green experience on customer satisfaction: evidence from TripAdvisor. *International Journal of Contemporary Hospitality Management*, 29(5), 1340–1361. doi.org/10.1108/IJCHM-07-2015-0371
- Lin, H. Y., Hsu, M. H., (2013). Using social cognitive theory to investigate green consumer behavior. *Business Strategy and the Environment*
- MacKay, R. B., & McKiernan, P. (2004). Exploring strategy context with foresight. *European Management Review*, 1, 69–77. <https://doi.org/10.1057/PALGRAVE.EMR.1500010>
- Madhunimasha, C., & Pathmini, S. (2019). *The Impact of Green Marketing Mix Strategies on Customer-Based Brand Equity in Green Hotels: Matale District in Sri Lanka*. 2008.
- Manaktola, K., & Jauhari, V. (2007). Exploring consumer attitude and behaviour towards green practices in the lodging industry in India. *International Journal of Contemporary Hospitality Management*, 19(5), 364–377. doi:http://dx.doi.org/10.1108/09596110710757534
- Martínez, P. (2015). Customer loyalty: exploring its antecedents from a green marketing perspective. *International Journal of Contemporary Hospitality Management*, 27(5), 896–917. doi:10.1108/ijchm-03-2014-0115
- Martínez García de Leaniz, P., Herrero Crespo, Á., & Gómez López, R. (2018). Customer responses to environmentally certified hotels: The moderating effect of environmental consciousness on the formation of behavioural intentions. *Journal of Sustainable Tourism*, 26(7), 1160–1177
- Mason, M. (2010). Sample size and saturation in PhD studies using qualitative interviews. *qualitative social research*, 11(3).
- Miller, M., Mayer, K., & Baloglu, S. (2012). Importance of green hotel attributes to business and leisure travellers. *Journal of Hospitality Marketing & Management*, 21(4), 395–413. dx.doi.org/10.1080/19368623.2012.624294
- Mogaji, E., Adeola, O., Adisa, I., Hinson, R. E., Mukonza, C., & Kirgiz, A. C. (2022). Green marketing in emerging economies: communication and brand perspective: an introduction. In *Green Marketing in Emerging Economies*. 1-16. Palgrave Macmillan, Cham
- Mohiuddin, M., & Al-Amin, S. (2022). Green management in SMEs of Bangladesh: Present Scenario, implementation obstacles and policy options. *American Academic Scientific Research Journal for Engineering*, 85(1), 278–286. https://asrjetsjournal.org/index.php/American_Scientific_Journal/article/view/7248%0Ahttp://asrjetsjournal.org/
- Molina-Azorín, J. F. (2009). Understanding how mixed methods research is undertaken within a specific research community: The case of business studies. *International Journal of Multiple Research Approaches*, 3(1), 47–57.
- Moise, M. S., Gil-Saura, I., Eugenia, M., Molina, M.E.R. (2021). The importance of green practices for hotel guests : does gender matter ? *Economic Research Ekonomska Istraživanja*, 34(1), 3508–3529. <https://doi.org/10.1080/1331677X.2021.1875863>
- Mulhall, A. (2003). In the field: notes on observation in qualitative research. *Journal of advanced nursing*, 41(3), 306–313.
- Nekmahmud, M., Ramkissoon, H., & Fekete-Farkas, M. (2022). Green purchase and sustainable consumption: A comparative study between European and Non-European tourists. *Tourism Management Perspectives*, 43,
- Nguyen, N. P., & Mogaji, E. (2022). A theoretical framework for the influence of green marketing communication on consumer behaviour in emerging economies. In *Green Marketing in Emerging Economies* (pp. 253–274). Palgrave Macmillan, Cham.
- Othman, A. R., Yin, T. S., Sulaiman, S., Ibrahim, M. I. M., & Razha-Rashid, M. (2011). Application of mean and

standard deviation in questionnaire surveys. *Menemui Matematik (Discovering Mathematics)*, 33(1), 11-22.

Patwary, A. K., Omar, H., & Tahir, S. (2020). The impact of perceived environmental responsibility on tourists' intention to visit green hotel: The mediating role of attitude. *Geojournal of Tourism and Geosites*, 34(1), 9-13. <https://doi.org/10.30892/GTG.34101-612>

Perramon, J., Alonso-Almeida, M. del M., Llach, J., & Bagur-Femenías, L. (2014). Green practices in restaurants: Impact on firm performance. *Operations Management Research*, 7(1-2), 2-12. doi:10.1007/s12063-014-0084-y

Pham, N. T., Chiappetta Jabbour, C. J., Vo-Thanh, T., Huynh, T. L. D., & Santos, C. (2023). Greening hotels: Does motivating hotel employees promote in-role green performance? The role of culture. *Journal of Sustainable Tourism*, 31(4), 951-970.

Pirani, S. I., & Arafat, H. A. (2016). Reduction of food waste generation in the hospitality industry. *Journal of Cleaner Production*, 132, 129-145. doi:10.1016/j.jclepro.2015.07.146

Prakash, S., Sharma, V. P., Singh, R., & Vijayvargy, L. (2022). Adopting green and sustainable practices in the hotel industry operations- an analysis of critical performance indicators for improved environmental quality. *Management of Environmental Quality*, 34(4), 1057-1076. <https://doi.org/10.1108/MEQ-03-2022-0090>

Pushpanathan, A., & Lanka, S. (2021). Green marketing practices and customer purchase intention: a study of restaurants in Vavuniya town area. *Journal of Business Management*, 4(02), 50-67.

Rahman, I., Reynolds, D., Svaren, S. (2012). How green are in North American hotels? An exploration of low-cost adoption practices. *International Journal of Hospitality Management*, 31(03), 720-727.

Roberts, J. A. (1996). Green consumers in the 1990s: Profile and implications for advertising. *Journal of Business Research*, 36(3), 217-231. [https://doi.org/10.1016/0148-2963\(95\)00150-6](https://doi.org/10.1016/0148-2963(95)00150-6)

Robinot, E., & Giannelloni, J.-L. (2010). Do hotels' 'green' attributes contribute to customer

satisfaction?. *Journal of Services Marketing*, 24(02), 157-169. <http://doi.org/10.1108/08876041011031127>

Rogerson, J., & Sims, S. (2012). The greening of urban hotels in South Africa: Evidence from Gauteng. *Urban Forum*, 23(3), 391-407. doi:10.1007/s12132-012-9160-2

Rudestam, K. E., & Newton, R. R. (2007). The method chapter: Describing your research plan. *Surviving your dissertation: A comprehensive guide to content and process*, 87-117.

Salem, I. E., Elbaz, A. M., Al-Alawi, A., Alkathiri, N. A., & Rashwan, K. A. (2022). Investigating the role of green hotel sustainable strategies to improve customer cognitive and affective image: Evidence from PLS-SEM and fsQCA. *Sustainability*, 14(6). <https://doi.org/10.3390/su14063545>

Sheth, J. N., Sethia, N. K., & Srinivas, S. (2011). Mindful consumption: A customer-centric approach to sustainability. *Journal of the academy of marketing science*, 39, 21-39.

Saufi, M. (2016). The Effectiveness of go green implementation among Society in Kota Bharu, Kelantan. *European Journal of Multidisciplinary Studies*, 01(01), 7-11.

Saunders, M., Lewis, P., & Thornhill, A. (2019). *Research Methods for Business Students*, (8th ed). UK: Pearson.

Saunders, B., Sim, J., Kingstone, T., Baker, S., Waterfield, J., Bartlam, B., Burroughs, H. & Jinks, C. (2018). Saturation in qualitative research: exploring its conceptualization and operationalization. *Quality & Quantity*, 52(4), 1893-1907.

Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research methods for business students* (5th ed.). Harlow, England: Prentice Hall.

Shao, M., Wang, X., Bu, Z., Chen, X., & Wang, Y. (2020). Prediction of energy consumption in hotel buildings via support vector machines. *Sustainable Cities and Society*, 57(102128), 1-9. doi:10.1016/j.scs.2020.102128

Silva, L., Dissanayake, P., Kumarasiri, B. and Soorige, D. (2021). Customer loyalty towards sustainable hotels: Case studies in Sri Lanka. In: Sandanayake, Y.G., Gunatilake, S. and Waidyasekara, K.G.A.S (Eds.), *Proceedings of the 9th World Construction Symposium*, 9-10

July 2021, Sri Lanka. pp. 231-243

Singh, N., Cranage, D., & Lee, S. (2014). Green strategies for hotels: estimation of recycling benefits. *International Journal of Hospitality Management*, 43, 13-22. <https://doi.org/10.1016/j.ijhm.2014.07.006>

Smith, E., & Perks, S. (2010). A perceptual study of the impact of green practice implementation on business functions. *Southern Africa Business Review*, 03(14), 1-29.

Sri Lanka Tourism development Authority [SLTDA]: Tourism industry report. 2018. [accessed 2018 Dec 1]. Retrieved from <http://www.sltlda.lk/sites/default/files/industry-report-Q2-2018.pdf>.

Suki, N. M., & Suki, N. M. (2015). Consumers' environmental behaviour towards staying at a green hotel: Moderation of green hotel knowledge. *Management of Environmental Quality: An International Journal*, 26(1), 103-117. doi.org/10.1108/MEQ-02-2014-0023

Taherdoost, H. (2016). Validity and reliability of the research instrument; how to test the validation of a questionnaire/survey in a research. *International Journal of Academic Research in Management (IJARM)*, 5(3). <https://ssrn.com/abstract=3205040>

Tahiri, A., Kovaçi, I., Lekiqi, B., & Rexhepi, A. (2021). Tourism and hotel industry: Definition, concepts and development – the case of Kosovo. *Quality - Access to Success*, 22(182), 110-115.

Taufique, K. M. R., Siwar, C., Chamhuri, N., & Sarah, F. H. (2016). Integrating general environmental knowledge and eco-label knowledge in understanding ecologically conscious consumer behaviour. *Procedia Economics and Finance*, 37, 39-45.

Teng, C.-C., Lu, A.C.C. and Huang, T.-T. (2018), Drivers of consumers' behavioural intention toward green hotels. *International Journal of Contemporary Hospitality Management*, 30(2), 1134-1151. <https://doi.org/10.1108/IJCHM-04-2017-0203>

The Green Hotels Association USA (2022). *What Are Green Hotels?* Retrieved 31 July 2022, from <http://green-hotels.com/index.php>.

Timothy, D., Teye, V. (2009). *Tourism and the Lodging Sector*. London: Routledge, <https://doi.org/10.4324/9780080942810>

org/10.4324/9780080942810

Tolba, M. (2014). Strengths and weaknesses in the assessment of sustainable tourism: a case study of the Nabq protected area in Egypt. *Sustainable tourism VI*, 187, 1-12. 10.2495/ST140121

Trip Advisor, (2013), "Trip Advisor Green Leaders™ Program highlights eco-friendly hotels to help travelers plan greener trips", available at: www.tripadvisor.com/PressCenter-i5903-cl-Press_Releases.html (accessed 24 June 2020).

Tzschentke, N., Kirk, D., & Lynch, P. (2004). Reasons for going green in serviced accommodation establishments. *International Journal of Contemporary Hospitality Management*, 16(02), 116-124. <https://doi.org/10.1108/09596110410520007>

Verma, V. K., & Chandra, B. (2016). Hotel guest's perception and choice dynamics for green hotel attribute: A mix method approach. *Indian Journal of Science and Technology*, 9(1), 1-9. <https://doi.org/10.17485/ijst/2016/v9i11/82635>

Vlaeminck, P., Jiang, T., Vranken, L., 2014. Food labeling and eco-friendly consumption: Experimental evidence from a Belgian supermarket. *Ecological Economics* 108, 180-190.

Wijesundara, N. (2018). Adoption of sustainable tourism practices by hotel operators in Deep South of Sri Lanka. *International Journal of Research in Management Science and Technology*. 5(6), 1-11.

Weerakoon, W. M. S. M. B., & Arulrajah, A. A. (2021). *Employee Green Behaviour of Selected Hotels in Polonnaruwa Area of Sri Lanka*. 11(1)

Wolff, C. (2008). Second Nature. *Lodging Hospitality*, 64(2), 24-26. doi:10.17485/ijst/2016/v9i5/77601

World Trade Organization. (2022). Why tourism?. *World Tourism Barometer*. Retrieved from: <http://www2.unwto.org/content/why-tourism>.

World Travel and Tourism Council; Travel & tourism economic impact. 2018 [accessed 2018 Dec 20]. Retrieved from <https://www.wttc.org/-/media/files/reports/economic-impact-research/countries-2018/srilanka2018.pdf>

Yang, Y., Jiang, L., & Wang, Y. (2023). Why do hotels go green? Understand-

ing TripAdvisor GreenLeaders participation. *International journal of contemporary hospitality management*, 35(5), 1670-1690.

Yarimoglu, E., & Gunay T. (2019). The extended theory of planned behaviour in Turkish customers' intentions to visit green hotels. *Business Strategy and the Environment*, 29(3), 1097-1108. <https://doi.org/10.1002/bse.2419>

Yin, R. K. (2018). *Case study research and applications* (Vol. 6). Thousand Oaks, CA: Sage.

Yin, R. K. (2015). *Qualitative research from start to finish*. Guilford publications.

Yu, Y., Liu, J., Feng, N., Song, B., & Zheng, Z. (2017). Combining sequence and Gene Ontology for protein module detection in the Weighted Network. *Journal of Theoretical Biology*,

412, 107–112. <https://doi.org/10.1016/j.jtbi.2016.10.010>

Yusnita, Y., Ibrahim, Y., & Awang, Z. (2016). The influence of a green image and customer satisfaction towards customer loyalty in the hotel industry. *International Conference on Hospitality and Tourism Management*, 04, 69-79 doi.org/10.17501/icoht.2016.4109

Yusof, N., Awang, H., & Iranmanesh, M. (2017). Determinants and outcomes of environmental practices in Malaysian construction projects. *Journal of Cleaner Production*, 156, 345–354. <https://doi.org/10.1016/J.JCLEPRO.2017.04.064>

Zhang, L., Wu, J., Liu, H., & Zhang, X. (2017). The value of going green in the hotel industry: Evidence from Beijing. *Real Estate Economics*, 48(1), [doi:10.1111/1540-6229.12225](https://doi.org/10.1111/1540-6229.12225)