Sustainable Tourism: The Moderating Effect of Tourists’ Educational Background in the Relationship Between Green Practices and Customer Satisfaction

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Abstract

The tourism industry is one of the largest and fastest growing economic sectors in the world and has contributed to world economic growth. Since the tourism industry is among those directly related to the environment, green tourism has an important role in the environment management system, especially practices that have the ability to reduce negative impacts onto the environment. Green initiatives are considered part of the programs adopted in many parts of the tourism sector. This article examines the influence of green practices and a green image towards customer satisfaction and customer loyalty. To test the theoretical framework, some 385 data were analysed using Structural Equation Modeling (SEM). Results revealed that green practices have stronger effects on customer satisfaction compared to a green image. The moderation test indicated that tourists’ educational background moderates the relationship between green practices and customer satisfaction, where the effect among tourists with a high education level is higher compared to those with a lower education level. Further analysis showed that green practices and a green image lead to customer loyalty indirectly through customer satisfaction. The results present many implications towards theory and practice as far as the tourism industry is concerned.

Keywords: Green Practices; Green Image; Customer Satisfaction; Customer Loyalty; Malaysia.

1. Introduction

Over the past six decades, the tourism industry has been one of the largest and fastest growing economic sectors in the world, contributing to world economic growth [1, 2]. Tourism ranks third after fuels and chemicals for the worldwide export category and has been at the top of the export sector in many developing countries [2]. However, the tourism industry is directly related to the environment. The increase of tourists and poor management gives way to negative impacts onto nature, communities, cultures and societies through pollution, waste generation and land degradation [3-6]. Currently, society is becoming more concerned about environmental issues, such as global warming, ozone depletion and habitat destruction. A majority of people nowadays realise that the decision to purchase goods and services will directly affect the environment. There is an increasing number of customers who now take into consideration various environmental issues when purchasing goods, and have started looking for alternatives such as environmentally friendly products, even if it means having to pay more for these products [7].

2. Literature Review and Hypothesis Development

Numerous theories have been put forth identifying the relationship between residents and tourists. Recently, the social exchange theory has been recognised as the most utilised model [8, 9], and focuses on different perceptions of residents towards tourism development. Other known theories include the integrative theory of cross-cultural adaptation [10, 11], social distance theory, intimacy theory, social representation theory and the contact-hypothesis theory. However, all these theories are not applicable on green initiatives.

The emerging awareness of this problem has triggered alternative tourism such as natural tourism, green tourism, ecotourism and rural tourism. Other terms used along with green tourism include “environmental friendly”, “environmentally sensitive”, “ecologically compatible” and “ecologically sound” [12, 5, 13]. Green tourism has an important role in the environment management system, especially practices that are able to reduce negative impacts to the environment [14, 15].

2.1. Green Practices and Green Image

Green initiatives or environmental initiatives are considered as a part of programs adopted in many parts of the tourism sector [16]. This is supported by [17] and [18] who indicated that environmental initiatives include environmentally friendly activities or practices that influence customer intention [19] in choosing a green hotel, customer satisfaction [20], customer loyalty [21] and return intentions [22].

The terms such as green, environmental or eco-marketing practices are used as a new approach in the marketing field. This approach is used not only to adjust or strengthen the existing approach, but also to provide a different perspective or point of view, while at the same time addressing the gap to reduce the negative impact on the ecology [23]. Environmental management is an essential element in sustainable tourism and is often related to the environmental management system, formed by activities being undertaken to protect, enhance or reduce impacts onto the environment. Environmental management is a broad term,
covering issues such as environmental impact (aesthetic, cultural, ecological and social), sustainability, resource management and pollution [24]. Meanwhile, environmental management practices are important elements in an environmental management system, used to reduce the impact caused by an organisation onto the environment and make the operations more sustainable [25, 26] while also increasing the number of environmental pro-active customer [27].

Additionally, green initiatives through green image, energy and resource management is believed to be able to give benefit to the hotel industry [28]. The concept of an organisation’s image has attracted increasing attention from both academia and the industry, because it is believed to play an important role in a customer’s decision-making process [29] and behaviour [30]. Furthermore, a company’s image plays a vital role in differentiating it with other companies [31]. In [32] specified that a green brand image is a subsection of the overall image. Image gives an impact to customer behaviour in buying or consuming good and services [33]. Image also creates the first impression among customers, thus an attractive image can drive positive word of mouth from the previous customers as well as attract new customers [34]. However, in [35] defined a green environment as being quite similar with a green image concept, as it refers to the green physical facility, including interior and exterior architecture and also ambience. This concept is believed to be a successful method that can attract and retain more guests [36]. Based on terminology, environmental management practices and green image are considered as part of green initiatives [37]. Previously, in [38] classified image into two dimensions, namely holistic and attributes. Holistic refer to the picturing of the phenomena, as a whole in individual’s mental, while attributes refer to the facilities and physical environment that influence the phenomena. These two dimensions of image were also highlighted by [39] who categorised a holistic image as the perception of hotel guests towards the atmosphere, reputation, external appearance and layout of a hotel, while customers’ perceptions towards location, physical amenities, internal design, price, quality of products and services provided and staff performance were classified under image attribute. The research hypothesis for this research are:

H1: Green Practice has significant effect on Customer Satisfaction
H2: Green Practice has significant effect on Customer Loyalty
H3: Green Image has significant effect on Customer Satisfaction
H4: Green Image has significant effect on Customer Loyalty
H5: Customer Satisfaction has significant effect on Customer Loyalty

2.2. Customer Satisfaction

Customer satisfaction has been a popular topic in academic research, especially in marketing research since the initial study by [40] on customer effort, expectations and satisfaction. To ensure customer satisfaction is achieved, it is important to recognize and anticipate customer needs [41]. This statement was agreed to by [42-44] who stated that customer satisfaction is related to the needs and expectations of the customers towards several factors, such as previous personal experience, familiarity with the products, or what the company has promised and the price of the goods or service. Customers are satisfied if they have positive feelings resulting from receiving beyond what was expected, including the purchase decision [45-47]. Meanwhile, green customer satisfaction refers to the realization by the customer that a product or service offered related to the environmental protection has met their desires and needs, resulting in them feeling satisfied [48]. Thus, the main objective of this paper is to determine the effects of green initiatives on customer satisfaction and customer loyalty. Apart from that, a critical review on this conceptual model is carried out, to see how it can be conceptualized and then implemented in green tourism. This paper puts forth customer satisfaction and customer loyalty as the consequence of environmental management practices and green image. There has been much research from many various fields that explored and investigated customer satisfaction and customer loyalty, but there is still limited research focusing on green and environmental issues [27, 48], especially in Malaysia.

Furthermore, there is paucity in research conducted on environmental management practices in hotel organisations [14, 26, 16, 31] that influence customer satisfaction [23, 49] and hotel guests’ attitudes [50]. Besides that, in [19] revealed that little research related to customer satisfaction as a mediator has been conducted in hotels that apply green practices.

H5: Customer Satisfaction has a significant effect on Customer Satisfaction

2.3. Customer Loyalty

The concept of customer loyalty is important in marketing research and real life because they reflect how successful the organisation has been in delivering value to their customer, while at the same time affecting the organisation’s performance and long-term relationship between customers and the company [51-54]. In [55] noticed that customer loyalty reflects the strength of the relationship between an individual’s attitude towards product, brand, service, store or vendor and repeat patronage. Loyalty is formed as a result of customer satisfaction with the quality of services, performance, comfort and familiarity of the hotel [52, 55].

Since the cost of attracting new customers is higher than the cost of retaining existing ones, in order to be successful, managers must concentrate on retaining existing customers by implementing effective policies of customer satisfaction and loyalty [41]. According to [51, 55-59], customer loyalty consists of both attitudinal and behavioral commitment to the relationship, such as being price insensitive, giving positive word of mouth and repeat patronage. Attitudinal loyalty is closely related to the power of psychology and attitudes towards products or services offered at the green hotels. Customers who have high attitudinal loyalty will endure and resist attempts in contrary directions. It is likely to influence behavior among customers such as repeat patronage and repurchase. A loyal customer not only engages in repeated patronage, but also delivers information to others, willing to be part of the business, thus able to contribute in increasing hotel revenue [60, 61, 56]. In [62] defined green behavioral intention as a probability of an individual to visit a green hotel, give positive word of mouth towards the green initiatives and being willing to pay for the premium services and products offered. However, according to [63], sometimes consumers who are pro-environment do not necessarily behave reflecting a green outlook or buy environmentally friendly based products.

Most hotels are faced with the challenge of meeting customers’ expectations to ensure repeat patronage, which is the bedrock of any business [64]. Although several factors have been reported as relevant for gaining customer loyalty, customer satisfaction is highly recognized for its fundamental role [65]. According to [66], the success of the tourism industry, especially in the hotel sector, depends on customer satisfaction. Moreover, an emotional link to customer loyalty is one of the key strengths of any green product [67]. According to [48], green customer loyalty is the willingness to keep repurchasing products and services offered, repeatedly staying at a particular accommodation which are concern on environmental issues and recommending to others.
3. Methodology

3.1. Measurement

The questionnaire for this study is divided into three parts. Part A consists of questions regarding the respondent’s profile. Part B consists of questions regarding the environmental management practices and these questions were adapted from the study done by [69-70]. Meanwhile, Part C consists of questions regarding green image that were adapted and modified from [39]. Part D contains questions regarding customer satisfaction. This instrument consists of 14 items and was adapted from the study by [71]. In Section E, this study employed instruments modified by [72, 71] to measure the construct of customer loyalty. All responses for Sections B, C, D and E were measured using a 10-Point Interval Scale (rating) with 1 = “strongly disagree” and 10 = “strongly agree” at the end points.

The questionnaire was refined by three experts from the tourism area for content validity and face validity. Once verified, a pilot study was carried out using 100 randomly selected respondents. The procedure for Exploratory Factor Analysis (EFA) was then carried out. The EFA results revealed that the Green Practice construct has four dimensions, while the Green Image, Customer Satisfaction and Customer Loyalty constructs all have two dimensions each. All constructs have a Cronbach’s alpha value of above 0.70.

3.2. Sampling and Data Collection

Residents living in three of Malaysia’s tourism destinations (Kelantan, Terengganu, and Pahang) comprised the population for this study. Either one of the probability sampling is utilised to meet the assumption of parametric method as Covariance based Structural Equation Modeling (CB-SEM). The stratified sampling strategy was used, where a self-administered questionnaire was distributed to 550 residents (between February and April 2018), who were approached near three key tourist attractions and asked to participate in the survey. A total of 421 questionnaires were returned – of these, 385 questionnaires were deemed usable for further analysis. Thus, the response rate for this study is 91.44% (385/421 samples), indicating that above 90% of respondents are showing interest in this research. 36 questionnaires were excluded from further analysis due to incomplete and inconsistent answers. Out of 349 respondents, 48% were men. The average age of the prospective respondents was about 31-39 years. Most of them were Muslim (83%) followed Christians (9%) and Buddhists (7%). From the total, 79% were Malays, 9.2% Chinese, and 2.5% Indians, while 9.3% were from other ethnic groups.

The AMOS 21.0 was utilised to perform a confirmatory factor analysis (CFA) and structural equation modeling (SEM). The CFA was undertaken to examine the construct reliability and validity, whereas SEM was used to test the causal effects in a model (i.e. each path from the formulated hypotheses). The analysis for testing mediation (i.e., customer satisfaction) was conducted using a bootstrap approach which is recognised as the best practice in a model comprised mediator construct. Moreover, multi-group CFA using AMOS 21.0 was undertaken to determine the moderating effects of educational qualification on the relationship between green initiatives and customer satisfaction.

4. Results and Discussion

The Confirmatory Factor Analysis (CFA) procedure that was undertaken using IBM-SPSS-AMOS 21.0 was carried out to validate all constructs for reliability (composite reliability and construct reliability) and validity (construct validity, convergent validity, and discriminant validity) in order to establish a measurement model [9, 72-75]. The results of the CFA are presented in Figure 2. The fitness index values demonstrated have achieved the required level, indicating that the data at hand are compatible with the proposed research model. Both reliability and validity were assessed with composite reliability (CR) and average variance extracted (AVE). The AVE values for all constructs (Table 1) surpassed the required 0.50 [76] recommendations to establish convergent validity. In addition, the discriminant validity was established using the Fornell and Larcker approach, where the square root of each AVE was compared with all construct correlations in a model. The discriminant validity demonstrates adequate discriminant when all construct correlation values are lower than the square root of each AVE as depicted in Table 2. Such evidence provides overall support for construct reliability and validity as well as suitability for the structural equation modeling.

<table>
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<th>Table 1: Construct reliability and validity</th>
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<td>Construct</td>
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<td>Green Practice</td>
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<td>Green Image</td>
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<td>Customer Satisfaction</td>
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<td>Customer Loyalty</td>
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<th>Table 2: Discriminant validity Index Summary</th>
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<tr>
<td>Construct</td>
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<tr>
<td>------------------------------------------------</td>
</tr>
<tr>
<td>Green Practice</td>
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<td>Green Image</td>
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The SEM was undertaken to determine the causal effects in a model associated with the research model. The structural model tested the effects of green practice on customer satisfaction and their support towards customer loyalty. Three out of five paths were significantly different from zero, where green image and green practice had influence on customer satisfaction and the customer satisfaction had influence on customer loyalty, supporting the three hypotheses. Specifically, the significant effects from green image and green practice suggest that differing personality can yield divergent satisfaction regarding green tourism, and eventually support for customer loyalty. As shown in Table 3 customer satisfaction was a strong predictor towards customer loyalty. In short, green practice and green image can explain 91% ($R^2$) of the variance in the customer satisfaction construct regarding green tourism and 71% of the total variance in the customer loyalty construct.
4.1. Moderating Effects of Educational Background

In the last stage of analysis, an identical multi-group analysis was undertaken to examine the moderating effects of tourists’ educational background in the relationship between green practice and customer satisfaction. For this purpose, the respondents were split into two groups based on their educational background (i.e., high and low level of education). The heterogeneity test was executed for each group in AMOS 21.0. The heterogeneity result was obtained by the application of constrained and unconstrained models in the path of interest. The results are absolutely significant when the value of Chi-square difference is above 3.84 as recommended by [77]. The results indicate that tourists’ educational background moderates the relationship between green practice and customer satisfaction. The results reveal that the effects among those with high education is higher than those with low education. In addition, the type of moderation for this relationship can be examined by inspecting the significant effects in all groups. As shown in Table 4, the partial moderation is identified for this model.

Table 4: Results showing educational background having partial moderation

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<th>Chi-Square Difference</th>
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<tr>
<td>High Education</td>
<td>15.21</td>
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<td>Low Education</td>
<td>11.01</td>
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5. Conclusion

The empirical findings from this study revealed that green practice and green image have significant effects on customer satisfaction and that customer satisfaction has an impact on customer loyalty. Despite results indicating that green practice and green image were not positively related to customer loyalty where green tourism is concerned, the relationship between green practice and green image towards customer satisfaction was positively significant. As evidenced in prior literature, [36, 29, 78] found similar results in determining the relationship between green practice, green image and customer loyalty regarding green tourism.

In terms of the green practice in explaining tourist satisfaction, it makes intuitive sense that those who embrace the tourism industry would distinguish the impact of tourism in the country in a positive manner. Given the fresh excitement of green tourism in Malaysia, according to [78, 9], this likely reflects the tourists seeing the benefit of tourism, and enjoying as well as appreciating the environment. In [79] inferred that green practice is largely responsible for contributing to the positive impact on tourist satisfaction, as also highlighted in the current research. The relationship between green image and customer satisfaction towards green tourism was also found to be positive. This finding is similar to the previous works by [80-82] that indicated green image as being the best predictor within the current model, where
it could actually demonstrate the relationship with tourist satisfaction. Tourists who have had experience travelling to different destinations and countries get better satisfaction because the uniqueness of these places are not available elsewhere. In tourism, the relationship between customer satisfaction and customer loyalty was not uncommon. Most of the empirical studies showing this relationship was significantly positive, which explains that tourist had more positive perspective on green tourism. Based on this, the applied researchers can better understand the level of tourist satisfaction towards green tourism. While green practice and green image do not have significant effects on customer loyalty, this is an unprecedented finding within the model and has never before been explored. These results were in conflict with past studies [83-85] that mostly revealed that brand image had a major impact on satisfaction [86]. The reason of this contradiction might be due to the distinction industries such as banking, insurance, transportation, entrepreneurship, and so on. In addition, customers from different cultural backgrounds may be concerned about certain different perspectives only in determining whether they are satisfied [87, 88].

Educational background is a significant moderator in the relationship between green practice and customer satisfaction when discussing green tourism. Among education groups, those with a higher level of education were more positive in considering green practice and customer satisfaction. In [89] stated that people who are more educated may be intrinsically motivated to be concerned about sustainability. In this regard, it stands to reason that highly educated tourists are likely to be more involved within the tourism services.

5.1. Theoretical and managerial implications

This research extends and validates the customer loyalty model by adding green image as an exogenous construct concerning green tourism. In doing so, the effect of green image contributes to a high percentage of total variance explained within the customer satisfaction and customer loyalty constructs. This model has the ability to assess customer loyalty towards green tourism. Additionally, a recent theory, the social exchange theory, can be undertaken for sustainable tourism, as suggested by [90, 8]. In this essence, our model considers numerous domains within green practice and green image to explain green tourism. Our work provides greater knowledge and understanding of the relationship between sustainability and tourists within destinations that have conventionally addressed economic changes and personality differences between countries. Furthermore, the moderating effect of educational qualification explains how far such relationships impact customer satisfaction within a destination, eventually having the potential to contribute to the nation’s tourism industry. The results of this study could create awareness for marketing organizations to better understand the importance of sustainability in the tourism industry. Consideration of educational qualification, green practice, and green image for sustainability tourism and its relationship with tourist is needed, to make a tourism destination competitive in terms of green tourism. As explained in the beginning of the current research, the Malaysian government has taken affirmative action to promote tourism development in the country implementing several programs (i.e. conferences, training sessions and campaigns) throughout the country in an effort to grab the attention of tourists and enhance economic contributions. By conducting this research project, the necessary authorities would be able to identify the key elements that influence tourist satisfaction. They could then prepare and increase sustainable practices for tourists to obtain a positive position as far as the green tourism is concerned.

5.2. Limitations and future research

As with any research, there were several limitations to this study. This study was undertaken using samples from three states in the country. That said, results generated from this study should be considered with caution, so as to not imply to be representative of all destinations in the country. Similar work should be conducted throughout the country (involving all states in Malaysia) to increase the reliability and external validity. Only then can a more reliable comparison between states be made. In [91] contended, tourist perception can be divergent.

Additional work should be undertaken to modify the existing research model with the inclusion of any potential construct such as cultural differences that not only focus on tourist satisfaction but could also involve the local residents. Satisfaction and loyalty differences can take the shape of residents’ perception concerning green tourism. Such distinctions may serve to explain more precisely about the relationship between tourists and residents concerning green tourism. Future research should also be undertaken to examine how local residents and tourists can be exposed to the green tourism industry. Such measures could also extend the existing research model, producing more comprehensive results. Lastly, while educational qualification served as a significant moderator between green practice and customer satisfaction of green tourism, personality and gender may also be relevant as moderator variables for future research. These two potential variables may explain resident satisfaction in sustainable tourism.

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