

HOW GREEN HOTEL PRACTICES STIMULATES CUSTOMER CITIZENSHIP BEHAVIOR? EXAMINING THE ROLE OF GREEN HOTEL IMAGE AND CUSTOMER SATISFACTION IN VIETNAM

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Abstract: The main purpose of this research is to propose and empirical test a conceptual model that clarifies the relationship between green hotel practices and customer citizenship behavior (CCB) with the mediating role is green hotel image and satisfaction in the perspective of customers. To test the hypothesis this research utilizes the data collected from a questionnaire survey from tourists who have visited the Moc Chau national tourist area, Son La – a mountainous province situated in the North West of Vietnam. Finally, the authors collected 212 valid questionnaires to test the hypothesis. The testing results indicated that green hotel practices positively influence customer citizenship behavior. Moreover, green hotel image and customer satisfaction contribute as the mediating effects in the relationship between green hotel practice and customer citizenship behavior. In contrast, green hotel image and customer satisfaction do not act as the serial mediation in this relationship.

Key words: customer citizenship behavior, green hotel, green practices, green hotel image, customer satisfactio

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INTRODUCTION

Recently, environmental pollution has been at an alarming level for our world, so protecting the habitat becomes the top concern. Because the environment is the living space of people and creatures. The environment provides natural materials to help people maintain life. However, global warming, deforestation and pollution (land, water, air) increased, people's awareness of "greening" the environment is not really right. According to the WHO report (2016), more than 80% of people living in urban areas suffer from air pollution with dust quality levels in the air exceeding the permitted limits of WHO. According to information from the United Nations, in 2018, more than 80% of the world's wastewater flows into the natural environment without treatment. And, in Vietnam, environmental pollution is a hot issue. So it is absolutely right for governments and environmental organizations to immediately carry out sanctions and activities to improve the environment.

The methods in turn are given such as: waste treatment, reuse of waste, use of green fuel sources instead of gas, planting forest trees. Environmental protection is not only the work of the government or professional organizations in particular, but this is the work of the whole society from individuals to all businesses and organizations. Towards nature and protecting nature for future generations becomes our living motto. In Vietnam, the change in leadership thinking, production, management, in industries and organizations that are constantly taking place. In particular, especially the hospitality industry with a series of remarkable "greening" activities. Typically, in the period of 2008-2018, Vietnam had 37 hotels of 11 provinces/cities awarded the title "ASEAN Green Hotel". The "ASEAN Green Hotel" standard has been developed by ASEAN member countries, agreed on how to, assessment process on the basis of for hotels to self-evaluate, apply and research. There will be 11 sections, including environmental management plans, green procurement, human resources management and environmental management activities. Assessment criteria include: 11 groups of criteria, 30 items, 80 specific criteria. These "green" activities contribute strongly to improving the image status of Vietnam's hospitality industry. From there, increase satisfaction in establishing the citizen behavior of customers for each green activity the hotel organizes.

There are a lot of research on this issue such as: Water conservation and waste reduction management to increasing guest loyalty and green hotel practice (Han et al., 2018b). Predicting green hotel behavioral intentions using a theory of environmental commitment and sacrifice for the environment (Rahman and Reynolds, 2016). Reward-winning attitude to customers' green hotel practice. The effect of environmental friendliness on green trust: The considerable impact of green satisfaction and the quality of feeling green (Chen et al., 2015). The relationship between green image, sensory quality, satisfaction, trust and loyalty in hotels (Assaker et al., 2020b). The authors explained that the green practice activities of the hotel are really effective, activities that indirectly affect satisfaction, loyalty and the value of guest perception (customer

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citizen behavior - CCB) through different perceptions of green hotel images or sustainable hotel practices, satisfaction level and guest's intention to return (Berezan et al., 2013). Various regulatory methods are applied to increase the efficiency of promoting green images and the oral intention of consumers in the thriving green hospitality industry (Wang et al., 2018). However, the depth of the research is still limited.

Because, green loyalty is also affected by "risks" of green awareness, green image, green trust and green satisfaction (Chrisjatmiko, 2018). So that this research aims to fill this gap by proposing and empirical testing the relationship between green hotel practices and customer citizen behavior (CCB). In addition, this research also clarifies the role of green hotel image and satisfaction in the minds of customers. Verify and unravel relationships in direct and indirect links of variables. Finally, this research is based on the theory of trust - commitment and selection of the green hotel context in Vietnam. That means the main goal of this study is to link the hotel's green activities on the environment and customer satisfaction, loyalty and sensory value (CCB). Because, green hotels are now growing strongly, are accepted by a large social class, recognized as environmental activities. The roadmap for future expansion is easily visible. To evaluate the efficiency and contribute to the literature and practice, this research attempts to answer research questions followed:

- Firstly, how does green hotel practice affect the citizen behavior of customers (CCB)?
- Secondly, how does green hotel image affect the citizen behavior of customers (CCB)?
- Thirdly, how does customer satisfaction on green hotel affect the citizen behavior of customers (CCB)?

The remaining of this paper is arranged as follow: After the introduction section is the background theories and hypothesis development. The third section is the data collection which is continued with data analysis section. This paper finishes with the conclusion and discussion section.

Background theory and hypothesis development

1. Green hotel

According to the reports of Informa Markets (Vietnam) and Outbox Consulting, green practice and environmentally friendly trends become a benchmark in investment and development of the hotel industry. The trend of "green hotels" will open a new era for the hospitality industry in Vietnam. Green Hotel is an environmentally friendly hotel and applies energy-saving measures. An accommodation facility that wants to apply sustainable measures to the system should focus on three important foundational factors: energy, water and waste. However, there are two green practice trends in Vietnam green hotels: green building and green operation (Traveler Magazine, 2020). In particular, the trend of "green hotels" offers analysis of changes in the choices, attitudes and behaviors of tourists (Millar et al., 2012) ongoing "greening" trends in the hospitality industry have changed managers' perceptions of this new trend (Yu and Liu, 2021), from which we take appropriate and effective approaches. In addition, green synchronized regulation and certification not only minimize the risk of unfair competition and increase customer trust but also motivated the hotels to seriously carry out these activities.

The green operation of the hotels is a competitive advantage, the green products provided by the hotel affect the satisfaction of customers through the main factors such as facilities, green space, many beautiful and shaded plants, fresher and cleaner hotel atmosphere (Supriadi et al., 2017). Green image of the hotel affects the customer's behavioral intention. First, the awareness of controlling the green training behavior of the hotel, environmental commitments and citizen behavior of the organization. Secondly, guests' awareness and feedback about green hotel practice methods (Lee et al., 2016) along with the impact on guest satisfaction and guest's intention to return (Berezan et al., 2013).

2. Green hotel practices and green hotel satisfaction

Research shows that green practices in the hospitality industry have a significant effect on customer satisfaction and behavior. Customer satisfaction mediates the relationship between green practice and loyalty. Hotel owners, in both green and non-green practice states, need to show concern and participate in environmental conservation in order to survive in a competitive environment (Yusof et al., 2017). In line with global trends, customers are also increasingly interested in sustainability. While customers of green organization rarely share their opinion on green practices that focus on the environment, they mentioned green restaurant practices that focus on food they have experienced. Furthermore, those who mention green practices tend to have positive reviews about the restaurant or hotel.

Highlighting green practices without ignoring common restaurant or hotel attributes increases the identity of that organizational unit (Park et al., 2020). Choi and Parsa's green restaurant framework proposes three perspectives in green restaurant practice: health, the environment and society (Choi and Parsa, 2007). This point of view is completely applicable to the hotel model. Ham and Lee (2011) outlined eight types of green practices (e.g., water saving, waste reduction and recycling, sustainable furniture, building materials or resources, sustainable food use, energy, disposable appliances, pollution and chemical mitigation, and organized green practices) to evaluate sustainable practices (Ham and Lee, 2011). Kwok et al., 2016 proposed an alternative framework for green restaurants to include green practices focusing on food, environment and management, based on health and environmental perspectives and management (Kwok et al., 2016). The governance-focused practice in this framework measures restaurant owners' efforts to train their employees (Amrutha and Geetha, 2021). The implementation of a restaurant's green practices is expected to create a competitive advantage by adding value to the company's products and services, when compared to others (Lee et al., 2010a; Han et al., 2009). Green practices can provide clients with mental benefits by satisfying their altruistic or socially conscious tendencies such as a sense to contribute to a cleaner environment (Hartmann and Apaolaza-Ibáñez, 2012).

Recognized green practices can provide ancillary benefits to customers by responding to their emotional needs for sustainability concerns and can drive positive customer attitudes (Chen, 2010). With the implementation of two aspects of green practice, focusing on food and environment, it affects customer perception of green brand image and CCB,

while the impact of real green onions in perceived quality are negligible (Namkung and Jang, 2013). The relative effect of the green practice, relative to other restaurant attributes, should be considered together with the perceived greenness of the green practice to evaluate the value of the green practice (Park et al., 2020). For casual diners, the impact of green practices with an environmental focus has been more convincing of improving a restaurant “green brand image” and CCB than initiatives of food. With regard to self-awareness, the results indicated that guests have a high sense of health and the environment responded more positively to the green practices of an entity or organization than those whose health awareness and environmental awareness are not high (Namkung and Jang, 2013).

Consumers, who use hotel services with a eco-friendly-practices sense of in India have sponsored hotels, have adopted appropriate green practices without compromising service quality (Manaktola and Jauhari, 2007). Green practices can only inspire positive customer attitudes when the customer realizes the restaurant's effort on implement them (Jeong et al., 2014). Consumers prefer using accommodations that follow these practices but they are not willing to pay extra for these services. Indian hotels have a competitive advantage over similar products if they follow green practices (Manaktola and Jauhari, 2007). Green practices don't tend to show up to customers like other marketing efforts which are difficult to determine whether these attributes are fully communicated to the customer or green attributes are created positive results. Visibility of green practices must precede any effect on customer attitudes (DiPietro et al., 2013; Namkung and Jang, 2013; Kassinis and Soteriou, 2003). The positive effects of implementing green practices on customer attitudes are based on social identity theory (Tajfel and Turner, 1986), whereby individuals tend to define themselves by using social categories and people choose or favor businesses that match their personal identities. This theory suggests that customers who identify themselves to have environmentally conscious or health conscious and may be attracted to green restaurants, which creates a positive attitude towards businesses (Chan and Hawkins, 2010). Previous studies have shown that green practices can increase customer satisfaction by satisfying their own personal values with personal value sustainability (Gao and Mattila, 2014; Gao et al., 2016; Wang et al., 2013). From these evidence, this research hypothesis that:

H1: Green hotel practices are positively related to CCB

3. Green hotel images

Green, environmentally friendly activities are increasingly applied by hotels. First, the external context is greened from form to hotel service can not only provide, improve the ability to manage successfully but can also enrich the customer experience at the hotel. Next, not only stopping at external greening activities, the practice of green human resource management is also an activity that improves performance (Pham et al., 2019). From there, managers can come up with green branding strategies for the hotel (Bashir et al., 2020). Image is a collection of beliefs, ideas and impressions that a person holds in relation to an object, according to Philip Kotler. Brand image is considered a synthesis of trust, ideas and impressions that customers hold. It will be developed over time, interaction and customer experience. Hotels with social responsibility can indirectly increase consumer loyalty to the hotel's image through green marketing (Chung and Management, 2020). After that, recycling and disposal programs are organized to give green century tourists the proactive and passive, expectations of green interactions, green certification, and positive green advertising. Feelings, feelings, perceptions, relationships, and customer brand experience behaviors positively influence experience aspects - intermediaries affecting brand image innovation and green image for brand satisfaction in the minds of customers (Nysveen et al., 2018). However, in the future it is advisable to identify the problems and consequences of the hotel brand experience (Khan and Rahman, 2017) help build a green century brand image quickly and efficiently. Thereby, the awareness of green practice activities of hotels plays an important role in building the green hotel brand image. So this research proposes that:

H2: Green hotel practices has positive impact on green hotel brand image

4. Green hotel satisfaction

Green marketing is an example of environmental management practice, intended to reduce or prevent negative impacts on the environment and is ideally directed at providing a (green) product (or service) at a price suitability, location and time, regardless of the market (González-Benito and González-Benito, 2005). Companies have adopted a green marketing strategy as 'a set of marketing tools' and elements that allows companies to serve their target market without harming the natural environment (Eneizan, 2016). Sustainability has become a business imperative, not a matter of choice (Ghosh, 2019). New strategies are needed to stay competitive in the marketplace and achieve business sustainability (Suki, 2016). Companies can tailor their strategy by using green marketing elements to target customers' environmental needs and wants (Cheema et al., 2015). The quality of life of future generations will depend on current generations' efforts to conserve the environment. Many recent studies have reported empirical evidence of the positive effects of environmental practices on business performance and corporate image (Hang et al., 2019; Mukonza and Swarts, 2020; Zubeltzu-Jaka et al., 2018). Concerning about the environment has become the main issue, companies need to integrate sustainability into their (strategic) business activities (Dwyer et al., 2009). Today's global environmental problems (e.g. environmental degradation, global warming, resource depletion, air and water pollution and habitat destruction) lead to both consumers and professional buyers that consider green alternatives in their buying behavior (Hsieh, 2012; Martínez, 2015). Therefore, society has steadily raised awareness of environmental problems, due to the high level of environmental pollution caused by mass industrial production largely (Chen, 2011).

Professional buyers are expected to purchase environmentally friendly green products to contribute to a sustainable world and also to gain a green competitive edge (Konuk et al., 2015). Although individual customer needs may be vary,

green practices can work to meet the internal needs of the customer and ultimately improve customer satisfaction (Jeong et al., 2014). Furthermore, the customer tends to rate products against a certain set of limiting attributes and the effect of some attributes is more important on customer satisfaction or dissatisfaction than on other attributes (Gwin and Gwin, 2003). Sustainable foods can satisfy customers' individual needs such as personal health and trigger positive responses (Jeong et al., 2014; Lu and Gursoy, 2017). Many studies have investigated the precursors and outcomes of customer satisfaction and customer loyalty, satisfaction is considered extremely important concept for practical and theoretical purposes (Jamal, 2004). Intent to buy back from a CCB, while basically satisfaction emphasizes a strong emotional relationship and affinity for a certain brand or product (Uncles et al., 2003; Mohd Suki, 2017) have studied product quality, company image, store image and price as the premise for satisfaction and CCB.

Green customer satisfaction is the overall satisfaction of customers' needs, goals, and desires with regard to environmental or green concerns (Chang and Fong, 2010). Knowledge about the quality of green products influences on CCB (Mayer, 2013; Suki, 2013). Satisfied customers enough buy a product or service back than dissatisfied or less satisfied customers (Gelderman et al., 2021). Many customers are willing to pay a higher price for green products, as long as this additional sacrifice is justified by sufficient additional value (Chen, 2010; Laroche et al., 2001; Ranaei Kordshouli et al., 2015). Obviously, not all customers are willing or able to pay more for green or eco-friendly products (Agyeman, 2014; Cheema et al., 2015). Professional buyers often communicate and negotiate with sales representatives (Chen, 2010).

Many studies have investigated and confirmed a positive relationship between customer satisfaction and customer behavior in industrial markets (Gountas and Gountas, 2007). From these evidence, this research hypothesis that:

H3: Green hotel practices are positively related to green hotel satisfaction

H4: Hotel satisfaction are positively related to CCB.

5. Green hotel images and customer citizenship behavior (CCB)

Develop the image and brand of a green hotel using concepts of perception, affection and overall image to promote the influence (i.e. the intention to visit again, the intention to make positive proposals for others and the willingness to pay a premium) of customer behavioral (Lee et al., 2010b). The different green attributes (from green image, practice green) in the hotel have an impact on the environmental attitude of customers to business and entertainment activities, green behavior (Millar et al., 2012). The quality of products and services significantly affects the brand image and consumer satisfaction (Nawi et al., 2019). Increases the positive impact of brand value on customer satisfaction (Moise et al., 2019). Besides, from the information and feelings about the business from the external environment also significantly affect customer citizenship behavior in providing feedback to the company ty. According to another research, the image of the business has a relationship to the citizen behavior of customers – CCB, help them make recommendations, help other consumers, and provide feedback (Kim et al., 2020). Specifically, building an image will help businesses maintain and strengthen strong relationships with customers in the future. From that, practice well green activities can improve the reputation of the company which in turns stimulate customer citizenship behavior (Van et al., 2016).

According to a research, customer satisfaction in different ways is influenced by the "green" elements of the hotel (Yu et al., 2017). Green hotel image / the hotel's environmental friendliness positively affects the perception of the hotel's products and services, increasing the satisfaction of the quality of perception of customer (Assaker et al., 2020b). The quality of the green experience is felt to significantly affect green fairness and green hotel image, thereby leading to satisfaction of the green experience in the minds of customers (Wu et al., 2016).

In particular, consumer behavior plans to expand in combination with important structures in consumer behavior (i.e. service quality, customer satisfaction, overall image and frequency of past behavior) a more comprehensive explanation of the formation of the intention to visit the green hotel of customers (Han and Kim, 2010). Since then, comments on the image of green hotels and satisfaction in the minds of customers are increasingly close relationships. CCB acts as an important intermediary for the impact on brand value, including many types (Raza et al., 2020), especially service brands provided by employees (Park, 2020). While the logic framework governs the service, the values offered by the business increase the willingness to participate in CCB to gain benefits such as customer feedback, advocacy, customer support, and tolerance in less satisfactory future services (Assiouras et al., 2019b).

The image of "green hotel" is successfully built through the implementation of corporate social responsibility (CSR) such as economic liability, liability, ethical responsibility and charitable liability of hotels (Ahn and Park, 2019). Thereby accurately seeing CSR positively affects the image of the hotel. CSR is also an important strategy to improve customer response from which trust medias the relationship between CSR and CCB, the CSR-CCB link deeper (Aljarah, 2020). Through a multi-dimensional perspective, linking studies together, the relationship between brand image and citizen behavior of customers is more visible. From these evidence, this research propose that:

H5: The image of a green hotel positively affects green hotel satisfaction in the minds of customers.

H6: The image of a green hotel positively affects customers' citizenship behavior (CCB)

RESEARCH METHOD

1. Questionnaire design

To examine the research hypothesis, this study applies the questionnaire survey to collect the data. Respondents are tourists who have visited Moc Chau NTA and stayed in the hotels here. Moreover, they are interested in and have knowledge about the green activities. The authors selected this type of respondents because they experienced already the hotel services and they can perceive to which extent that hotel has practiced and performed the green activities in the reality

which can lead them form positive behaviors towards the hotels such as CCB. The current research adapted items from previous studies and modified them to fit the new context of green hotel in Vietnam – an emerging country with some differences in comparison with other countries. All observed variables are expressed in the form of Likert-5 which range from 1 representing totally disagree to 5 representing totally agree. In which, hotel green practices include of 8 items adopted from (Yusof et al., 2017; Lee et al., 2018); hotel green image composes of 3 items applied from (Kubickova et al., 2014), green hotel satisfaction with 3 items adapted from (Assaker et al., 2020a); and tourist citizenship behavior with 3 items modified from (Kim and Kim, 2018). To assure the consistence of the questionnaire, the authors utilized the back – translation technique by specialists in English and in business management field. This method indicated that the original items in English were translated into Vietnamese and then translated back into English, the specialists in English and business management compared these versions and unified to have a draft version. This draft version was assessed and checked with 20 tourists through a pilot test. From that the authors formed the final version of the questionnaire.

2. Data collection

The main objective of this research is to evaluate the citizenship behavior of tourists who have stayed in a green hotel that means the ability of revisit and recommend the hotels to other potential tourists. So the population for this research is all the tourists who have visited Moc Chau national tourist area. Moc Chau NTA, belonging to Moc Chau district, Son La province, 180 km from Hanoi, and 120 km from Son La city, is approved by the Prime Minister on the Planning as a national tourist area in May. 11/2014. These are 2 mountainous districts located on the limestone plateau of the Northwest region with an average altitude of more than 1,000 m above sea level.

There are 12 minority ethnics live together in Moc Chau district with abundant cultures such as clothes, specialties, foods as well as house on stilts. So that Moc Chau NTA has both natural tourism resources and humanity resources which is the basement to develop sustainable tourist industry. The authors applied a simple random sampling method using questionnaires at the hotels in Moc Chau NTA. The questionnaire consisted of 14 main questions, so according to (Hair et al., 1998) the minimum sample size would be 120 questionnaires. To collect the most appropriate responses, the research team selected 12 hotels at Moc Chau NTA and 20 respondents for each hotel. The current research was deployed during one month. Finally, the result has a total of 212 valid questionnaires collected after the survey, means the rate about 88.3%. The demographics of the respondents is presented in the Table 1 as follows:

Table 1. Demographic information of respondents*
Notes: The per capita income in Vietnam (2020) is 2750 USD (General Statistics Office of Vietnam)

Factors	Component	Amount	%
Gender	Male	100	47.2
	Female	112	52.8
Age	Under 25	33	15.6
	25 – 35	77	35.8
	36 - 45	76	36.3
	Over 45	27	12.3
Yearly income* (USD)	Under 2000	18	8.5
	2000 – 3000	122	57.5
	3000 – 5000	55	25.9
	Over 5000	17	8.1
Education	High school	30	14.1
	College	48	22.6
	University	126	59.4
	Other	8	3.9

Table 2. Measurement model evaluation

Variables	AVE	CR	C α	Rho_A
Hotel green practice	0.513	0.822	0.863	0.866
Hotel green image	0.606	0.893	0.675	0.678
Satisfaction	0.679	0.864	0.764	0.772
Customer citizenship behavior	0.745	0.898	0.829	0.832

	HGP	HGI	SAT	CCI
HGP	0.863			
HGI	0.377	0.779		
SAT	0.458	0.41	0.716	
CCI	0.242	0.152	0.27	0.824

Table 3. Construct AVE correlation

Table 4. Variance inflation factors

Items	VIF	Items	VIF
HGI1	1.31	CCB1	1.71
HGI2	1.41	CCB2	2.02
HGI3	1.26	CCB3	2.09
HGP2	1.94	SAT1	1.75
HGP3	1.81	SAT2	1.45
HGP4	2.05	SAT3	1.56
HGP5	2.23	HGP1	2.12
HGP6	1.59		
HGP7	1.70		
HGP8	1.49		

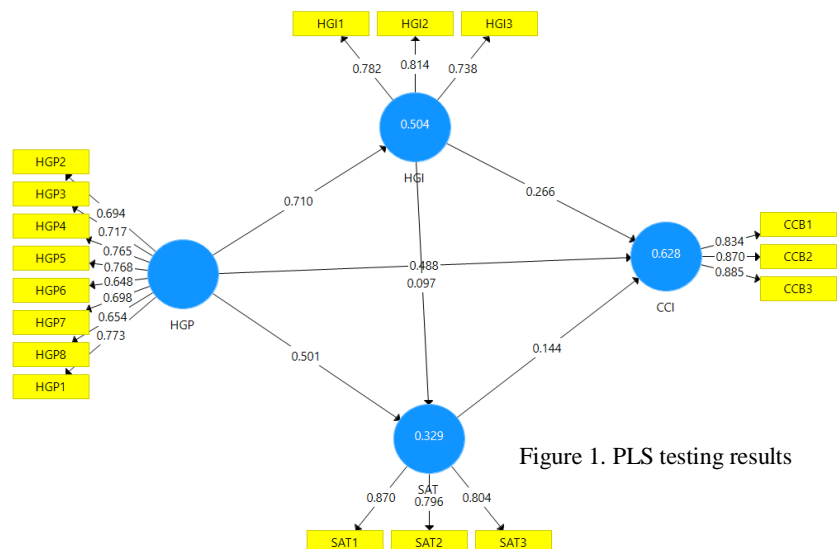


Figure 1. PLS testing results

RESULTS AND DISCUSSION

This study applied the partial least square regression (PLS-SEM) path model to test hypotheses through Smart PLS 3.0 software (Ringle et al., 2015). Compared with other empirical analytical methods, the proposed research model is the

most suitable for this research because it focuses on predicting and explaining the complex relationship between the variables in the model and consistent with the small research sample (n = 212). Furthermore, it can explain a relationship of reflective construct and formative construct. In the proposed model, there are many complex relationships not only direct but also mediation and serial mediation. Specifically, this research proposes that green hotel image and customer satisfaction as the mediating variables between green hotel practices and CCB. These two variables are also proposed as the serial moderation in the relationship between HGP and CCB.

1. Scales measurement evaluation

To evaluate the scales, the current research used Cronbach’s alpha (Cα), composite reliability (CR) and average extracted variance (AVE). In which, the minimum loading factor is 0.65 and the highest is 0.88, satisfying the cut-off value 0.5. Besides, values of Cα ranging from 0.68 to 0.87 and values of CR ranging from 0.82 to 0.90 are both greater than the level 0.7 (Bagozzi and Yi, 1988). These evidence confirm the reliability of the scales satisfying the requirements. In addition, AVE values from 0.50 to 0.69 both satisfy cut – off value of 0.5 (Fornell and Larcker, 1981), indicating that the convergence value is satisfactory (Table 2). To test discriminant validity, this research first used the AVE value of each variable in the correlation to other variables (the Fornell - Larcker criteria). Then, the analytical results showed that the square root of AVE is greater than the correlation coefficient with other variables, demonstrating that the scales ensure discriminant validity (Table 3). Because this research using self-assessment questionnaire, the authors also tested the potential multicollinearity by using variance inflation factors (VIF). As proposed by (Hair, 2009), if VIF value is more than 4 that means there exist the multicollinearity. The VIF testing results presented in Table 4 showed that VIF values of all scales are less than 2.3 that means the multicollinearity do not exist in this research.

2. Evaluation of structural model

After evaluating the scales by testing reliability, convergence, discriminant validity, and potential multicollinearity, the authors applied the PLS-SEM model to test the relationship of variables using SmartPLS software. The results of the relationships are shown in Figure 1. The results of data analysis show is seen detail in the Table 5 as follow:

Table 5. Testing results of path coefficients

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
HGP -> CCI	0.488	0.485	0.074	6.592	0.000
HGP -> HGI	0.710	0.713	0.037	19.211	0.000
HGP -> SAT	0.501	0.507	0.071	7.085	0.000
HGI -> CCI	0.266	0.266	0.065	4.094	0.000
HGI -> SAT	0.097	0.096	0.083	1.160	0.247
SAT -> CCI	0.144	0.146	0.058	2.478	0.014

The results showed that HGP has a significant effect on CCB ($\beta = 0.49$; $p < 0.001$, t-value = 6.59). In the same vein, HGP has a significant influence on HGI ($\beta = 0.71$; $p < 0.001$, t-value = 19.211), on SAT ($\beta = 0.50$; $p < 0.001$, t-value = 7.805). These evidences indicated that hypothesis H1, H2 and H3 are supported. Besides, HGI has a significant influence on CCI ($\beta = 0.27$; $p < 0.001$, t-value = 4.094), but do not have effect on customer satisfaction on SAT ($\beta = 0.09$; $p = 0.247 > 0.05$, t-value = 1.16). Moreover, SAT has positive impact on CCI ($\beta = 0.14$; $p < 0.05$, t-value = 2.48). These evidence showed that hypotheses H4 are supported. This research also tested the mediating effects and the results are showed in the Table 6.

Table 6. Testing results of specific indirect effects

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	TStatistics (O/STDEV)	P Values
HGP -> HGI -> SAT_ -> CCI	0.010	0.011	0.012	0.858	0.391
HGI -> SAT_ -> CCI	0.014	0.016	0.016	0.857	0.392
HGP -> HGI -> SAT_	0.069	0.068	0.060	1.150	0.251
HGP -> SAT_ -> CCI	0.072	0.073	0.029	2.476	0.014
HGP -> HGI -> CCI	0.189	0.190	0.049	3.869	0.000

The results showed that SAT and HGI contribute as the mediating variables in the relationship HGP and CCB with ($\beta = 0.07$; $p < 0.05$, t-value = 2.48) and ($\beta = 0.19$; $p < 0.01$, t-value = 3.87) respectively. In contrast, SAT do not act as mediating effects in the relationship between HGI and CCI ($\beta = 0.014$; $p > 0.05$, t-value = 0.857). In the same vein, HGI do not act as mediating effects in the relationship between HGP and CCI ($\beta = 0.07$; $p > 0.05$, t-value = 1.15).

Moreover, we also test the serial mediating effect of both HGI and SAT in the relationship between HGP and CCI but the results showed that HGI and SAT do not act as the serial mediation between HGP and CCI ($\beta = 0.01$; $p > 0.05$, t-value = 0.86). These results are the new contribution of the current research.

CONCLUSION

Nowadays, tourism is becoming one of the most important industries for all the countries in the world because of its “green” characteristics or “non – smoke industry” but not like that tourism has also caused some consequences for the environment because of the tourists and the people working in this industry. In the context of better living condition, human needs are more and more increasing and tourists require the green tourism. Specifically, tourists want to stay in

the green hotels, that means the hotels perform well environmental protection activities, use environmentally friendly products, and do not harm the environment. There have been many studies on green hotels, but there are few studies analyzing the relationship between green hotel practices and tourist citizenship behavior, especially in developing countries such as Vietnam. Furthermore, to our knowledge, to date, there have been no studies that have explored the mediating roles of green hotel image and tourist satisfaction in this relationship. This research aims to discover the tourists' perceptions of hotel green practice performances in the correlation with their tourist citizenship behavior. Research shows that tourists have a very strict requirement on green performance for hotels including 8 items related to all services in the hotel. This fact becomes a criterion that plays a crucial role in stimulating tourist citizenship behavior to that hotel. The results indicated that the higher level of perception of green practice performance, the higher the level of tourist citizenship behavior ($\beta = 0.49$; $p < 0.001$, t -value = 6.59). This research contributes the new knowledge to the literature in the hospitality and tourist industry. The current study also confirmed the relationship between hotel green practices in stimulating positive behavior of tourists (such as citizenship behavior) (Yusof et al., 2017; Merli et al., 2019). But this research is also complementary for previous research that concluded that hotel green practices do not have influence on tourist citizenship behavior (Assiouras et al., 2019a).

Moreover, this research also shed light on the relationship between hotel green practices and the green hotel image, as well as customer satisfaction. Results showed that hotel green practice stimulate the hotel green image with ($\beta = 0.71$; $p < 0.001$, t -value = 19.211). This evidence indicated that hotel green practice contributes as an important factor for building the hotel image. This is among the first research that has discovered this relationship. In the same vein, hotel green practice has a positive effect on customer satisfaction with the hotel ($\beta = 0.50$; $p < 0.001$, t -value = 7.805). This result confirmed the finding from the research of (Lee et al., 2010a) but this research also give more insight of other research in term of determinant factors of green hotel image (Han, 2020). Furthermore, the current research showed the mediating effect of green hotel image and customer satisfaction in the relationship between green hotel practice and tourist citizenship behavior. In which, green hotel image has a stronger effect on this relationship with ($\beta = 0.07$; $p < 0.05$, t -value = 2.48) in comparison with ($\beta = 0.19$; $p < 0.01$, t -value = 3.87) of customer satisfaction.

This result is new in the field as our knowledge, there are only some research that focused on the relationship of green hotel practice and other customer behavior such as loyalty (Robinot and Giannelloni, 2010; Merli et al., 2019; Han et al., 2018a).. This research also discovered the mediating role of green hotel image in the relationship between green hotel practice and tourist satisfaction, mediating role of tourist satisfaction in the relationship between green hotel image and tourist citizenship behavior, as well as the serial mediation of both green hotel image and tourist satisfaction in the relationship between green hotel practice and tourist citizenship behavior. But these mediating effects are not supported. Beside theoretical contribution, this research also give some practical contribution as follow.

Firstly, this research proposes that hotel managers need to understand the importance of the "green" factor by performing green practice actions in the hospitality and tourist industry. Because well performance of green hotel has a lot of advantages that has a direct effect on customer behavior, such as customer citizenship behavior. Moreover, as we all know, tourist citizenship behavior transform customer into loyalty ones and take a lot of good points to the hotel. Scholars pointed out that the cost of acquiring new customers is much higher than maintaining loyal ones (Curry and Gao, 2012). Previous research pointed out that customer citizenship behavior has some dimensions and have a lot of advantages: making recommendations and positive word-of-mouth, providing feedback to the organization, voluntarily assisting other customers with product/ service usage, display of relationship affiliation and participation in the firm's activities. So that, reach the customer citizenship behavior can be considered as among the most important policies of all the organization. Secondly, this research indicates the important role of green hotel image to customer citizenship. This research suggests to managers of hotels the necessary to build good image of hotel with customers. Moreover, customer can perceive a good image of hotel in case of the hotels perform well the green activities in the reality. Moreover, green hotel image can contribute as the mediating effect between hotel green practice and tourist citizenship behavior. So that through this relationship, managers can understand how to stimulate customer citizenship behavior in the correlation with the hotel green performance. Thirdly, this research asserted that customer satisfaction contributes as the partial mediator between hotel green practice and tourist citizenship behavior. This finding helps managers deeper understand about the mechanism of customer citizenship behavior in correlation with green practice performance.

That means, hotel green activities not only directly stimulate customer citizenship behavior and also indirect effect via the customer satisfaction. So that, managers can have appropriate strategies and marketing policies to promote customer citizenship behavior by practice well green activities which in turn stimulates customer satisfaction. Even having a lot of theoretical and practical contributions, this research also exists some limitations. Firstly, this research only collected the data from tourists who visited and stayed in hotels in Moc Chau national tourism area, which may lead to incomplete and unrepresentative Vietnamese tourists. So that, future research could expand the investigated area to have a more complete and comprehensive research sample. Secondly, this research did not indicate some of the variables that could moderate these relationships, such as gender, income, age, and education level. This limitation suggests for further research clarifying a more comprehensive understanding of the relationship between green performance and customer citizenship. Last but not least, future research could propose new variables to give a deeper knowledge to this topic, as well as other hot topics in the practice of developing countries.

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REFERENCES

- Agyeman, C.M. (2014). Consumers' buying behavior towards green products: An exploratory study. *International journal of management research and business strategy*, 3(1), 188-197.
- Ahn, T.H., & Park, B. (2019). The Effects of Corporate Social Responsibility on Company Image and Customer Citizenship Behavior: Focused on Japanese Students. *Journal of Digital Convergence*, 17(6), 185-192. <https://doi.org/10.14400/JDC.2019.17.6.185>
- Aljarah, A. (2020). The nexus between corporate social responsibility and target-based customer citizenship behavior. 28(12), 2044-2063. <https://doi.org/10.1080/09669582.2020.1789155>
- Amrutha, V., & Geetha, S. (2021). Linking organizational green training and voluntary workplace green behavior: Mediating role of green supporting climate and employees' green satisfaction. *Journal of Cleaner Production*, 290 (12), 58-76. <https://doi.org/10.1016/j.jclepro.2021.125876>
- Assaker, G., O'Connor, P., & El-Haddad, R. (2020). Examining an integrated model of green image, perceived quality, satisfaction, trust, and loyalty in upscale hotels. *Journal of Hospitality Marketing & Management*, 29(8), 934-955. <https://doi.org/10.1080/19368623.2020.1751371>
- Assiouras, I., Skourtis, G., Giannopoulos, A., Buhalis, D., & Koniordos, M. (2019). Value co-creation and customer citizenship behavior. *Annals of Tourism Research*, 78, 27-42. <https://doi.org/10.1016/j.annals.2019.102742>
- Bagozzi, R.R., & Yi, Y. (1988). On the Evaluation of Structural Equation Models. *Journal of the Academy of Marketing Science*, 16(1).
- Bashir, S., Khwaja, M.G., Rashid, Y., Turi, J.A., & Waheed, T. (2020). Green Brand Benefits and Brand Outcomes: The Mediating Role of Green Brand Image. 10(3), 31-56. <https://doi.org/10.1177/2158244020953156>
- Berezan, O., Raab, C., Yoo, M., & Love, C. (2013). Sustainable hotel practices and nationality: The impact on guest satisfaction and guest intention to return. 34, 227-233. <https://doi.org/10.1016/j.ijhm.2013.03.010>
- Chan, E.S., & Hawkins, R. (2010). Attitude towards EMSs in an international hotel: An exploratory case study. *International Journal of Hospitality Management*, 29(4), 641-651. <https://doi.org/10.1016/j.ijhm.2009.12.002>
- Chang, N.J., & Fong, C.M. (2010). Green product quality, green corporate image, green customer satisfaction, and green customer loyalty. *African journal of business management*, 4(13), 2836-2844. <https://doi.org/10.5897/AJBM.9000310>
- Cheema, S., Durrani, A.B., Khokhar, M.F., & Pasha, A.T. (2015). Influence of green marketing mix and customer fulfillment: an empirical study. *International Journal of Sciences: Basic and Applied Research*, 168-177.
- Chen, Y.S. (2010). The drivers of green brand equity: Green brand image, green satisfaction, and green trust. *Journal of Business ethics* 93: 307-319.
- Chen Y.S., Lin C.Y., & Weng C.S.J.S. (2015). The influence of environmental friendliness on green trust: The mediation effects of green satisfaction and green perceived quality, 7, 10135-10152. <https://doi.org/10.3390/su70810135>
- Chen, Y.S. (2011). Green organizational identity: sources and consequence. *Management decision*. <https://doi.org/10.1108/00251741111120761>
- Choi, G., & Parsa, H. (2007). Green practices II: Measuring restaurant managers' psychological attributes and their willingness to charge for the "Green Practices". *Journal of Foodservice Business Research*, 9(4), 41-63. https://doi.org/10.1300/J369v09n04_04
- Chrisjatmiko, K. (2018). Towards green loyalty: the influences of green perceived risk, green image, green trust and green satisfaction. *IOP Conference Series: Earth and Environmental Science*. IOP Publishing, 012085.
- Curry, N., & Gao, Y. (2012). Low-cost airlines—A new customer relationship? An analysis of service quality, service satisfaction, and customer loyalty in a low-cost setting. *Services Marketing Quarterly*, 33(2), 104-118. <https://doi.org/10.1080/15332969.2012.662457>
- DiPietro, R.B., Cao, Y., & Partlow, C. (2013). Green practices in upscale foodservice operations. *International journal of contemporary hospitality management*, 100-112. <https://doi.org/10.1108/IJCHM-May-2012-0082>
- Dwyer, R., Lamond, D., Molina-Azorin, J.F., Claver-Cortés, E., López-Gamero, M.D., & Tarí, J.J. (2009). Green management and financial performance: a literature review. *Management decision*, 1-15. <https://doi.org/10.1108/00251740910978313>
- Eneizan, B. (2016). Effects of green marketing strategy on the financial and non-financial performance of firms: A conceptual paper. *Arabian Journal of Business and Management Review*, 1-22.
- Fornell, C., & Larcker, D.F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of marketing research*, 39-50. <https://doi.org/10.1177/002224378101800104>
- Gao, Y.L., & Mattila, A.S. (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. <https://doi.org/10.1016/j.ijhm.2014.06.003>
- Gao, Y.L., Mattila, A.S., & Lee, S. (2016). A meta-analysis of behavioral intentions for environment-friendly initiatives in hospitality research. *International Journal of Hospitality Management*, 54, 107-115. <https://doi.org/10.1016/j.ijhm.2016.01.010>
- Gelderman, C.J., Schijns, J., Lambrechts, W., & Vijgen, S. (2021). Green marketing as an environmental practice: The impact on green satisfaction and green loyalty in a business-to-business context. *Business Strategy and the Environment*. <https://doi.org/10.1002/bse.2732>
- Ghosh, M. (2019). Determinants of green procurement implementation and its impact on firm performance. *Journal of Manufacturing Technology Management*, 1-18. <https://doi.org/10.1108/JMTM-06-2018-0168>
- González-Benito, J., & González-Benito, Ó. (2005). Environmental proactivity and business performance: an empirical analysis. *Omega*, 33(1), 1-15. <https://doi.org/10.1016/j.omega.2004.03.002>
- Gountas, J., & Gountas, S. (2007). Personality orientations, emotional states, customer satisfaction, and intention to repurchase. *Journal of Business Research*, 60(1), 72-75. <https://doi.org/10.1016/j.jbusres.2006.08.007>
- Gwin, C.F., & Gwin, C.R. (2003). Product attributes model: A tool for evaluating brand positioning. *Journal of marketing theory and practice*, 11(2), 30-42. <https://doi.org/10.1080/10696679.2003.11658494>
- Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E., & Tatham, R.L. (1998). *Multivariate data analysis*, 5, Prentice hall Upper Saddle River, NJ.
- Ham, S., & Lee, S. (2011). US restaurant companies' green marketing via company websites: impact on financial performance. *Tourism Economics*, 17(5), 1055-1069. <https://doi.org/10.5367/te.2011.0066>
- Han, H. (2020). Theory of green purchase behavior (TGPB): A new theory for sustainable consumption of green hotel and green restaurant products. *Business Strategy and the Environment*, 29(6), 2815-2828. <https://doi.org/10.1002/bse.2545>
- Han, H., Hsu, L.T.J., & Lee, J.S. (2009). Empirical investigation of the roles of attitudes toward green behaviors, overall image, gender, and age in hotel customers' eco-friendly decision-making process. *International Journal of Hospitality Management*, 28(4), 519-528. <https://doi.org/10.1016/j.ijhm.2009.02.004>
- Han, H., & Kim, Y., Ijohm, J. (2010). An investigation of green hotel customers' decision formation: Developing an extended model of the theory of planned behavior. 29: 659-668. <https://doi.org/10.1016/j.ijhm.2010.01.001>
- 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. <https://doi.org/10.1016/j.ijhm.2018.03.012>

- Hsieh, Y.C.J. (2012). Hotel companies' environmental policies and practices: a content analysis of their web pages. *International journal of contemporary hospitality management*. <https://doi.org/10.1108/095961112>
- Hang, M., Geyer-Klingeberg, J., & Rathgeber, A. W. (2019). It is merely a matter of time: A meta-analysis of the causality between environmental performance and financial performance. *Business Strategy and the Environment*, 28(2), 257-273. <https://doi.org/10.1002/bse.2215>
- Hartmann, P., & Apaolaza-Ibáñez, V. (2012). Consumer attitude and purchase intention toward green energy brands: The roles of psychological benefits and environmental concern. *Journal of Business Research*, 65(9), 1254-1263. <https://doi.org/10.1016/j.jbusres.2011.11.001>
- Jamal, A. (2004). Retail banking and customer behaviour: a study of self concept, satisfaction and technology usage. *The International Review of Retail, Distribution and Consumer Research*, 14(3), 357-379. <https://doi.org/10.1080/09593960410001678381>
- Jeong, E., Jang, S.S., Day, J., & Ha, S. (2014). The impact of eco-friendly practices on green image and customer attitudes: An investigation in a café setting. *International Journal of Hospitality Management*, 41, 10-20. <https://doi.org/10.1016/j.ijhm.2014.03.002>
- Kassinis, G.I., & Soteriou, A.C. (2003). Greening the service profit chain: The impact of environmental management practices. *Production and operations Management*, 12(3), 386-403. <https://doi.org/10.1111/j.1937-5956.2003.tb00210.x>
- Kim, J.J., & Kim, I. (2018). Moral imagination, parasocial brand love, and customer citizenship behavior: Travelers' relationship with sponsoring airline brands in the United States. *Sustainability*, 10(12), 4391. <https://doi.org/10.1016/j.ijhm.2020.102520>
- Konuk, F.A., Rahman, S.U., & Salo, J. (2015). Antecedents of green behavioral intentions: a cross-country study of Turkey, Finland and Pakistan. *International Journal of Consumer Studies*, 39(6), 586-596. <https://doi.org/10.1111/ijcs.12209>
- Kubickova, M., Nusair, K., & Parsa, H. (2014). Does green hotel image influence guests' behavior the case of generation y. *Journal of Services Research*, 14(2), 9-19.
- Kwok, L., Huang, Y.K., & Hu, L. (2016). Green attributes of restaurants: What really matters to consumers? *International Journal of Hospitality Management*, 55, 107-117. <https://doi.org/10.1016/j.ijhm.2016.03.002>
- Laroche, M., Bergeron, J., & Barbaro-Forleo, G. (2001). Targeting consumers who are willing to pay more for environmentally friendly products. *Journal of consumer marketing*, 1-22. <https://doi.org/10.1108/EUM0000000006155>
- Lee, J.S., Hsu, L.T., Han, H., & Kim, Y. (2010). Understanding how consumers view green hotels: how a hotel's green image can influence behavioural intentions. *Journal of Sustainable Tourism*, 18(7), 901-914.
- Lee, S., Sun, K.A., Wu, L., & Xiao, Q. (2018). A moderating role of green practices on the relationship between service quality and customer satisfaction: Chinese hotel context. *Journal of China Tourism Research*, 14(1), 42-60. <https://doi.org/10.1108/JHTT-10-2015-0038>
- Lu, L., & Gursoy, D. (2017). Does offering an organic food menu help restaurants excel in competition? An examination of diners' decision-making. *International Journal of Hospitality Management*, 63, 72-81. <https://doi.org/10.1016/j.ijhm.2017.03.004>
- 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*. <https://doi.org/10.1108/09596110710757534>
- Martínez, P. (2015). Customer loyalty: exploring its antecedents from a green marketing perspective. *International Journal of Contemporary Hospitality Management*. <https://doi.org/10.1108/IJCHM-03-2014-0115>
- Mayer, A. (2013). Education and the environment: an international study. *International Journal of Sustainable Development & World Ecology*, 20(6), 512-519. <https://doi.org/10.1080/13504509.2013.830994>
- Merli, R., Preziosi, M., Acampora, A., & Ali, F. (2019). Why should hotels go green? Insights from guests experience in green hotels. *International Journal of Hospitality Management*, 81, 169-179. <https://doi.org/10.1016/j.ijhm.2019.04.022>
- Millar, M., Mayer, K.J., Baloglu, S., & Johm, J. (2012). Importance of green hotel attributes to business and leisure travelers. 21: 395-413. <https://doi.org/10.1080/19368623.2012.624294>
- Mohd Suki, N. (2017). Green products usage: structural relationships on customer satisfaction and loyalty. *International Journal of Sustainable Development & World Ecology*, 24(1), 88-95. <https://doi.org/10.1080/13504509.2016.1169563>
- Moise, M.S., Gil-Saura, I., & Šerić, M. (2019). Influence of environmental practices on brand equity, satisfaction and word of mouth. 26, 646-657.
- Mukonza, C., & Swarts, I. (2020). The influence of green marketing strategies on business performance and corporate image in the retail sector. *Business Strategy and the Environment*, 29(3), 838-845. <https://doi.org/10.1002/bse.2401>
- Namkung, Y., & Jang, S.S. (2013). Effects of restaurant green practices on brand equity formation: Do green practices really matter? *International Journal of Hospitality Management*, 33, 85-95. <https://doi.org/10.1016/j.ijhm.2012.06.006>
- Park, E.O., Chae, B.K., Kwon, J., & Kim, W.H. (2020). The effects of green restaurant attributes on customer satisfaction using the structural topic model on online customer reviews. *Sustainability*, 12(7), 28-43. <https://doi.org/10.3390/su12072843>
- Ranaei Kordshouli, H., Ebrahimi, A., & Allahyari Bouzanjani, A. (2015). An analysis of the green response of consumers to the environmentally friendly behaviour of corporations. *Iranian Journal of Management Studies*, 8(3), 315-334. <https://doi.org/10.22059/IJMS.2015.53632>
- Ringle, C.M., Wende, S., & Becker, J.M. (2015). SmartPLS 3. *Boenningstedt: SmartPLS GmbH*.
- Robinot, E., & Giannelloni, J.L. (2010). Do hotels' "green" attributes contribute to customer satisfaction? *Journal of Services Marketing*, 68-88. <https://doi.org/10.1108/08876041011031127>
- Suki, N.M. (2013). Green awareness effects on consumers' purchasing decision: some insights from Malaysia. *International Journal of Asia-Pacific Studies*, 9(2), 21-32. <https://doi.org/10.1108/BFJ-06-2016-0295>
- Tajfel, H., & Turner, J. (1986). The Social Identity Theory of Inter-Group Behavior. 1986. *Chicago: Nelson-Hall*.
- Uncles, M.D., Dowling, G.R., & Hammond, K. (2003). Customer loyalty and customer loyalty programs. *Journal of consumer marketing*, 1-15. <https://doi.org/10.1108/07363760310483676>
- Van, N.T., Chi, T., Chi, V., & Quang, N. (2016). The relationship between customer-based corporate reputation and customer citizenship behavior: The case in Vietnam. *International Journal of Business and Management*, 11(9), 298-308. <http://dx.doi.org/10.5539/ijbm.v11n9p298>
- Wang, Y.F., Chen, S., Lee, Y.C., & Tsai, C. (2013). Developing green management standards for restaurants: An application of green supply chain management. *International Journal of Hospitality Management*, 34, 263-273. <https://doi.org/10.1016/j.ijclepro.2018.01.250>
- Yusof, Y., Awang, Z., Jusoff, K., & Ibrahim, Y. (2017). The influence of green practices by non-green hotels on customer satisfaction and loyalty in hotel and tourism industry. *International Journal of Green Economics*, 11(1), 1-14.
- Zubeltzu-Jaka, E., Erauskin-Tolosa, A., & Heras-Saizarbitoria, I. (2018). Shedding light on the determinants of eco-innovation: A meta-analytic study. *Business Strategy and the Environment*, 27(7), 1093-1103. <https://doi.org/10.1002/bse.2054>