

GREEN PRACTICES AMONG HOMESTAY OPERATORS IN SELANGOR, MALAYSIA

Yusnita Yusof¹, Myzatul Aini Ma'asor @ Mansor², Hawa Husna Ab. Ghani²

¹Faculty of Business and Management, Universiti Sultan Zainal Abidin

²Faculty of Applied Social Sciences, Universiti Sultan Zainal Abidin

Corresponding author: yusnitayusof@unisza.edu.my

Received date: 27/10/2021 | Accepted date: 23/11/2021 | Published date: 29/12/2021

DOI: <https://doi.org/10.51200/bimpeagajtsd.v10i1.3620>

ABSTRACT

Homestays are a form of community-based tourism that offers local experiences of village lifestyle to travellers. In addition, it is a human-oriented services industry. An increase in tourist arrivals (both domestic and international visitors) to Malaysia has seen a yearly increase in the number of accommodations available, especially environmentally friendly ones. However, being environmentally friendly is a challenge for the tourism industry, especially with regard to the accommodation sector. Previous studies have also found several factors that complicate green practices among homestay operators. Among them are lack of green information and knowledge, lack of professional advice, the uncertainty of outcomes, lack of verifiers, lack of resources such as workforce and equipment, lack of support from owners and management, high maintenance cost, managerial attitudes, employee support, customer attitudes, and quality of service. Therefore, this study aims to examine the effect of environmental knowledge towards green practices among homestay operators in Selangor, Malaysia. In this study, 147 homestay operators were selected using simple random sampling among 16 homestays in Selangor, Malaysia, registered with the Ministry of Tourism and Culture, Malaysia. The analysis of this study used SPSS software for descriptive and inferential tests such as T-Test and ANOVA Test and AMOS software to build Structural Equation Modelling (SEM). The T-Test and ANOVA Test show that there are not many differences in the green practices implemented among homestay operators based on age, gender, and education level. In addition, the findings also indicate that environmental knowledge has a positive and significant relationship with green practices among homestay operators. This result means that the green practices are not different based on the demographic factor as long as they have sufficient environmental knowledge. This research will significantly impact hospitality management through environmental knowledge and help academicians identify new indicators that contribute to green practices in homestays in Malaysia.

Keywords: Environmental Knowledge, Green Practices, Homestay, Malaysia

1.0 INTRODUCTION

The environment is one of the critical elements in the tourism sector. Without the beauty of the environment, tourists will be unlikely to be attracted to visit a destination. However, the state of our environment is also influenced by how humans treat their surroundings. Today's current trend among our society is to find a "Green holiday" or a holiday that emphasizes green practices. Thus, a study on the green practices employed by homestay operators will benefit the homestay industry in Malaysia. In addition, the employers will also get a unique attraction in promoting their homestay. According to Jameson & Brownell (2012),

entrepreneurs of tourism products are adopting green practices will be classified as brand uniqueness for their tourism products. The community is more willing and more interested in supporting entrepreneurs who apply green practices in their services.

Being "green" is a significant challenge for the tourism industry, especially in accommodation (Jones, Hillier, & Comfort, 2014; Eldemerdash & Mohamed, 2013). According to Han (2015), Han & Yoon (2015), and Chen & Tung (2014), in recent times, demand from consumers for eco-friendly accommodation has increased. Sucheran (2013) and Zengeni, Zengeni & Muzambi (2013) listed being environmentally friendly as the challenge for the tourism industry. In addition, previous researchers have identified several barriers to implementing green practices in the hotel and accommodation industry, such as lack of green information and knowledge, lack of professional advice, the uncertainty of outcomes, lack of verifiers, lack of resources such as workforce and equipment, lack of support from owners and management, high maintenance cost, managerial attitudes, employee support, customer attitudes, and quality of service (Jamaludin & Yusof, 2016; Yusof & Jamaludin, 2014; Chan, 2008).

Based on an interview with a Tourism Director in Malaysia, Malaysia is considered not ready to implement green practices in accommodation due to the customer attitude, lack of knowledge, and low enforcement of rules. It is also believed that some accommodation managers still operate in an outdated manner and do not fully recognize or fully appreciate the demands and environmental values associated with their business (Butler, 2008). Furthermore, the commitment of the hospitality industry in Malaysia towards environmental issues and the implementation of environmentally friendly practices is unknown (Siti-Nabiha, George, Wahid, Amran, Abustan & Mahadi, 2011).

Homestay is defined as accommodation offered in a person's residence, where the homestay operator also lives and shares the place with incoming guests. In addition, they also provide food and beverages similar to the Bed & Breakfast concept (Nor Ashikin & Kalsom, 2015). Since the activities offered in the homestay industry use natural resources, this will lead to harming the ecosystem in the area if the operators do not follow the prescribed green practices. Therefore, homestay operators need to implement green practices in their homestays. Various studies have been conducted that discuss the factors that influence individual green practices or pro-environmental attitudes. However, such studies that place a focus on the homestay industry are still lacking. In addition, the responsible parties have carried out various environmental education and awareness campaigns through, among others, reading materials and social media platforms. Still, the rate of pollution is increasing day by day. The noble effort is like pouring salt into seawater — the outcomes are not satisfactory even though millions of ringgit have been invested for the campaign. The level of public awareness on the importance of caring for the environment is still low and disappointing even. This lack of understanding has caused a lot of environmental damage and disrupted our ecosystem. Therefore, this study will expand on previous studies and examine the relationship between environmental awareness and the level of green practices among homestay operators in Selangor, Malaysia.

The objectives of this study are as follows:

1. To identify the different green practices among homestay operators according to demographic factors.
2. To measure the relationship between environmental knowledge toward green practices among homestay operators.

2.0 LITERATURE REVIEW

Homestay is a community-based industry that offers tourists a natural experience in the local rural lifestyle (Ismail, Hanafiah, Aminuddin, & Mustafa, 2016). Visitors who participate in homestay programs will experience the peacefulness of the countryside and enjoy the deliciousness and diversity of traditional food in Malaysia. The Ministry of Tourism Malaysia has introduced several new initiatives to increase the awareness of operators and tourists on the importance of environmental conservation. Among these efforts include launching the 1 Malaysia Green, 1 Malaysia Clean (1MG1MC) campaign. This awareness campaign highlights the importance of maintaining cleanliness in tourist places through gotong-royong activities. Homestay operators are encouraged to explain the concept of the 1MG1MC campaign to tourists and encourage gotong-royong activities involving tourists to clean up the area at homestays and nearby tourism products (Ministry of Tourism Malaysia, 2011). In addition, the Plant a Tree (PAT) program launched in 2011 encourages every tourist who visits homestays to plant saplings during the visit. The PAT program is an effort towards nature conservation. Operators are encouraged to charge a reasonable fee to tourists for each tree planted. This program encourages repeated tourist arrivals to look at the growth of their crops preserved by the homestay operators (Ministry of Tourism Malaysia, 2011).

Environmental changes and the effects that occur due to daily human activities are significant issues affecting the ecological system. Entrepreneurs in this economic sector have begun to focus on green practices that minimize resource consumption, reduce waste, and eliminate environmental pollution. Moreover, the hospitality and accommodation sector is one of the sectors in the tourism industry that contributes significantly to environmental issues, especially during production and through day-to-day operations, involving the consumption of resources such as water and energy (Abdou, Hassan, & Dief, 2020; Zengeni, Zengeni, & Muzambi, 2013).

Previous studies have shown three core components of green practices - energy management, waste management, and water conservation (Amaral et al., 2020). Due to energy consumption in homestays and other accommodations requiring high costs, energy management is the most important practice to control electricity consumption in hotels without compromising customer satisfaction (Kannan & Kannan, 2016; Mendes & Santos, 2014). Water is used for bathing, hygiene requirements, cleaning, laundry, cooking, drinking, and gardening in the accommodation sector (Tirado, Nilsson, Deyà-Tortella, & García, 2019; Alonso-Almeida, 2012). However, according to Bohdanowicz (2006), accommodation operators only monitor water expenditure as a whole without paying attention to each part of consumption due to a lack of adequate monitoring and reporting. Moreover, this waste management weakness produces greenhouse gases (GHG) (Rahman, Rahman, Rahman, & Hasan, 2021; Rüd & Marth, 2012). Therefore, water conservation is also an effective practice to preserve the environment. Meanwhile, garbage heaps from the tourism industry, especially the accommodation sector, are considered to negatively affect the environment (Mensah, 2020; Radwan, Jones, & Minoli, 2012). According to Amaral et al. (2020) and Wang (2012), waste management is recognized as a green practice that promotes environmental quality, image formation, organizational reputation, and cost-efficiency in the accommodation sector.

Environmental knowledge implies knowledge of environmental problems and possible solutions (Liobikiene & Poškus, 2019; Erhabor & Don, 2016; Zsóka, Szerényi, Széchy, & Kocsis, 2013). A study conducted by Bashirun & Noranee (2020), Liobikiene & Poškus (2019), Safari, Salehzadeh, Panalhi & Abolghasemian (2018) showed that environmental knowledge and awareness influence the green behavior of individuals. These findings mean that as environmental knowledge and awareness increase within an organization, green behavior also increases. Their study also found that individual attitudes, environmental commitment, and green practice commitment influence their green behavior. In addition, A survey conducted by

Wihardjo, Hartati, Nurani & Suharwanta (2017) also confirmed that individuals' knowledge of the environment would influence their actions towards the environment.

Based on the previous research, the conceptual framework model for this study consists of independent variables represented by environmental awareness and dependent variables represented by green practices, as illustrated in Figure 1. This conceptual framework anticipates the level of green practice of homestay entrepreneurs when influenced by their environmental knowledge.



Figure 1: Conceptual Framework

Thus this research was conducted to answer the hypothesis as stated:

1. H1a: Differences in green practices based on gender
2. H1b: Differences in green practices based on age
3. H1c: Differences in green practices based on the education level
4. H2: Environmental knowledge has a significant relationship with the green practices of homestay operators.

3.0 METHODOLOGY

Two types of approaches are usually used in research: quantitative and qualitative. However, this study used a quantitative research design. The quantitative approach is associated with the numerical data gathered and analyzed using statistical tests. The measurement data in quantitative research prioritizes the validity and reliability to test the theory, build the facts and examine the relationship between such variables. Thus, this survey research used a structured questionnaire. The researcher obtained the latest homestay statistics from the industrial development division, Ministry of Tourism and Culture Malaysia, for the data collection process. Then, the researcher made homestay selection and sample selection using sample determination by Krejcie and Morgan (1970). Based on the table, the number of samples required is 210; however, after data collection was carried out, only 147 samples from 210 samples could be further analyzed. This selected sample was out of 454 operators from 16 homestays in Selangor, which are registered with the Ministry of Tourism and Culture Malaysia. The samples were determined using a simple random sampling method. The justification for homestay operators in Selangor being chosen was because based on statistics released by the Industrial Development Unit, Ministry of Tourism and Culture Malaysia, until March 2018, Selangor recorded the most number of rooms provided to guests in Peninsular Malaysia, at 724 as shown in Table 1.

Table 1: Homestay Programs in Malaysia until March 2018

No	State	No. of Homestays	No. of Operators	No. of Rooms
1	Perlis	3	56	64

2	Kedah	16	345	442
3	Pulau Pinang	11	234	264
4	Perak	11	305	409
5	Selangor	16	454	724
6	Melaka	9	137	217
7	Negeri Sembilan	13	288	435
8	Johor	24	497	663
9	Kelantan	8	152	182
10	Terengganu	10	185	187
11	Pahang	16	323	450
12	Sarawak	41	594	859
13	Sabah	25	345	611
14	Labuan	3	79	97
	Total	206	3,994	5,604

The questions were divided into three parts: Part A consists of questions pertaining to demographics, Part B consists of environmental knowledge questions, and Part C contains questions regarding green practices, adapted from Moreo (2008) and Yusof (2017). Questions in Part B and C were measured using a 10-point Interval Scale response format, where the endpoints were labeled as 1= "strongly disagree" and 10= "strongly agree." This study used SPSS software to analyze descriptive statistics and inferential statistics such as through the T-Test and ANOVA Test; meanwhile, AMOS software was used to conduct factor analysis and test the relationship between environmental knowledge and green practices.

In this study, researchers have used Structural Equation Modeling (SEM) to find out the relationship that exists between the variables. SEM is a procedure used to build models for studies involving social systems or actions to understand and explain the relationships between elements in a system (Lu et al., 2007). SEM is the second-generation statistical analysis method and was built to analyze the relationships between variables within a model (Awang, 2015, Nunkoo & Ramkissoon, 2012). Henseler (2012) also states that SEM can build a model of variables, assess measurement errors accurately and allow researchers to evaluate the relationships that exist between variables.

4.0 FINDINGS

The results of this study are discussed based on the study objectives, i.e., to identify the level of green practices among homestay operators according to demographic factors. Descriptive analysis for this study was carried out using SPSS version 21.0 software.

Table 2: Summary of Homestay Operator Profile

Characteristics	Frequency (n:147)	Percentage %
Gender		
Male	76	51.7
Female	71	48.3
Age		
21 - 30 years old	5	3.4
31 - 40 years old	5	3.4
41 - 50 years old	23	15.6
51 - 60 years old	57	38.8
61 - 70 years old	53	36.1
70 and above	4	2.7
Education		
Primary School	30	20.4
SRP/PMR	19	12.9
SPM	87	59.2
STPM	2	1.4
Diploma	7	4.8
Degree	1	0.7
Others	1	0.7

Based on Table 2, the questionnaire was distributed to 147 respondents; 76 of them were male operators (51.7%), while the remaining 71 were female operators (48.3%). In terms of age, most homestay operators were aged 51 years and above (114 respondents or 77.6%). Meanwhile, 33 respondents, or 22.4% of homestay operators, were aged 50 years and below.

The highest level of education of homestay operators owns a Bachelor's Degree by one person or 0.7% of the total respondents. Of the operators, 87 respondents, or 59.2%, completed their education at the Sijil Pelajaran Malaysia (SPM) level, while two respondents, or 1.4%, completed up to the Sijil Tinggi Pengajian Malaysia (STPM) level. In addition, 49 operators, or 33.3%, completed school at the primary school and SRP/PMR levels.

5.0 INFERENCE ANALYSIS

H1: There is a significant difference in homestay operators' level of green practices according to demographic factors.

Inference analysis in this study used two tests, namely T-Test and ANOVA Test. Both tests were used to identify the differences between the green practices of operators based on the demographic factors of the respondents. In this study, a T-Test was used to analyze the gender of the respondents. In contrast, the ANOVA Test analyzed demographic factors such as marital status, age, and educational status.

H1a: Differences in green practices based on gender

The T-Test was used because gender has only two means, namely male and female. Table 3 shows no statistically significant difference ($t = 1.016$, $sig = 0.404$) between males and females. Since the p-value is greater than the significance level (0.05), these findings indicate no statistically significant difference in green practices between male and female operators.

Therefore, H1a, green practices have a significant difference based on the gender of homestay operators, is rejected.

Table 3: Differences in green practices and gender

Variables		N	Min	SP	t	df	Sig(2-tailed)
Green Practices	Men	76	8.639	.742	1.016	145	0.404
	Women	71	8.514	.757			
			1	57			

H1b: Differences in green practices based on age

A one-way ANOVA Test was conducted to test the difference in the level of green practices based on the age of the respondents. Table 4 shows that the value of $F = 2.024$ and the value of $Sig = 0.079$. Since the p-value is greater than the significance level (0.05), these findings indicate no statistical difference between green practices and age. This result means that there is no difference in green practices between respondents of different ages. Therefore, H1b, green practices are significantly different based on the age of homestay operators, is rejected.

Table 4: Differences in green practices according to age

Factor	Source	Total Square	DK	Min Square	F	Sig.
Age	Between Group	5.497	5	1.099	2.024	.079
	In Group	76.568	14	.543		
	Total	82.065	14			
			6			

H1c: Differences in green practices based on the education level

Subsequent ANOVA analysis involved the educational background of the respondents. Table 5 shows that the F value = 0.934 and the value of $Sig = 0.461$. The p-value is above the significance level of 0.05, indicating no statistically significant difference between green practices and educational standards. This finding means that there is no difference in the level of green practices among respondents who have an educational background of up to primary school, SRP/PMR, SPM, STPM, diploma, or a Bachelor's Degree. Therefore, H1c; green practices are significantly different based on homestay operators' education level, is rejected.

Table 5: Differences in green practices according to educational background

Factor	Source	Total Square	DK	Min Square	F	Sig.
Education	Between Group	2.630	5	.526	.934	.461
	In Group	79.435	14	.563		
	Total	82.065	14			
			6			

H2: There is a significant relationship between environmental knowledge and green practices of homestay operators.

Since this study deals with constructs measured using the items indicator, the best analysis method is Structural Equation Modelling. SEM can combine quantitative data and the expected effects of many relationships into a single model. In this study, the researcher used AMOS software because it has advantages in terms of the graphic representation in the model. It was created to produce a model to effectively analyze the relationship between a construct with many complex indicators (Awang, 2012).

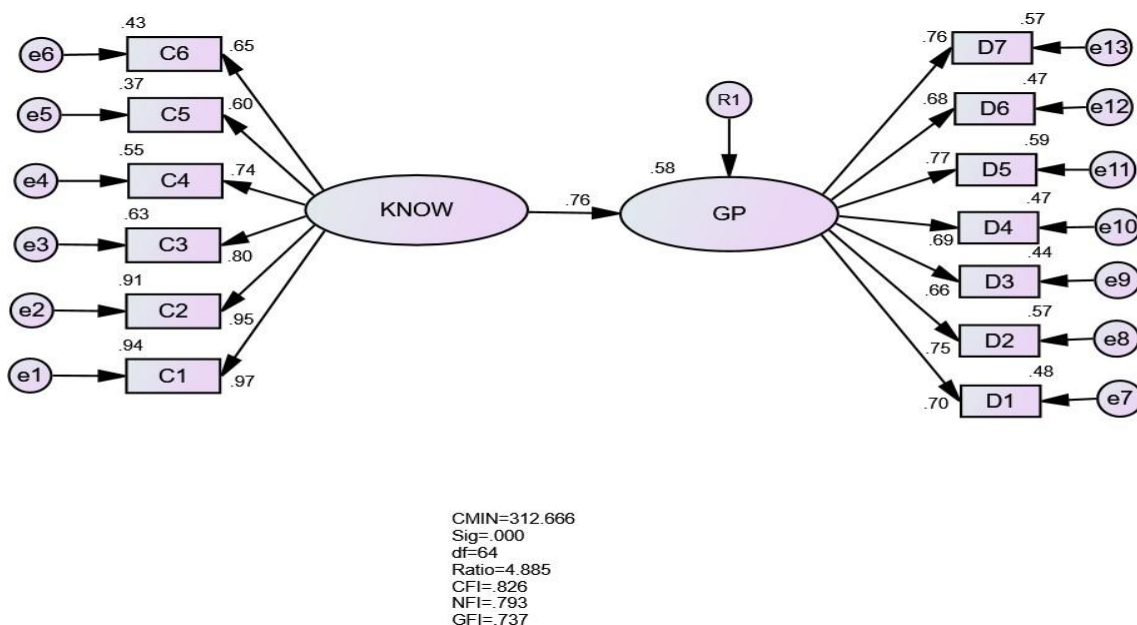


Figure 2: Structured Equation Model Analysis

Figure 2 shows the value of R^2 for the overall model is 0.58. This model shows that 58 percent of practices of green homestay operators are influenced by environmental knowledge. In addition, the model shows good fitness indexes since the values meet the required level, and all the items have a high factor loading (above the required 0.6). Table 5 shows that environmental knowledge has a significant relationship with green practices. Therefore, H2, environmental knowledge has a significant relationship with the green practices of homestay operators, is fail to reject.

Table 6: Regression Weights

			Estimate	S.E.	C.R.	P	Result
Green Practices	<---	Environmental Knowledge	.557	.060	9.236	0.000** *	Significant at 0.001

*** P < 0.001

6.0 DISCUSSION

Through the T-Test and ANOVA analysis, it was found that green practices are not affected by every factor, namely gender, age, and level of education. However, the findings of this study contradict the findings of Braun (2010), which indicated that business entrepreneurs among women have a higher tendency to implement green practices than men. Another survey by Tsai, Wu & Wang (2014), Han, Hsu, Lee & Sheu (2011), and Laroche, Bergeron & Barbaro-Forleo (2001) found that female respondents were more willing to spend their money on green products. The study by Dipietro, Cao & Partlow (2013) also stated that female respondents are more likely to buy environmentally friendly products, prefer to receive information about green products or services, and prioritize businesses that apply green practices.

Agag (2019) stated that younger users showed greater willingness to pay more for hotels that practice towel reuse programs compared to older users. In addition, Sukhu & Scharff (2018) found that respondents with a higher education level were more likely to carry out green practices. This is because their higher knowledge has influenced their views regarding finding environmentally friendly products or implementing green practices in daily life.

Based on the analysis conducted, environmental knowledge has a significant relationship with the green practices of homestay operators. The findings of this study are in line with the results of previous studies that state that the higher their environmental knowledge, the better their attitudes towards green practices (Jaiswal & Kant, 2018; Chan et al., 2014; Goh & Wahid, 2014; Zsóka et al., 2013; Vicente-Molina, Fernandez-Sainz & Izagirre-Olaizola, 2013).

However, a study conducted by Mei, Ling & Piew (2012), and Aman, Aaron & Hussein(2012) has shown that environmental knowledge does not predict green consumer practices but has a significant relationship and influences consumers' purchasing intentions. These findings contradict the survey by Kumar, Manrai & Manrai (2017), who found that knowledge of the environment positively and significantly affects green consumer practices. Still, the relationship between environmental knowledge and buying intentions is very low and not significant. Other studies show no significant relationship between environmental knowledge and green practices (Yin, Wu, Du & Chen, 2010; Vazifehdoust, Taleghani, Esmaeilpour & Nazari, 2013). Meanwhile, Hassan, Noordin & Sulaiman (2010) asserted that environmental knowledge negatively influences consumer green practice attitudes.

There are three reasons why environmental knowledge as an indicator of green practices is different for each study context. First, individuals are less knowledgeable about the environment, causing them to be less inclined to green practices. Second, individuals have inaccurate knowledge of the environment, unknowingly choosing a green service. Third, their environmental knowledge is based on personal references (self - understanding) or objective (factual) (Vicente-Molina et al., 2013; Kennedy, Beckley, McFarlane & Nadeau, 2009).

7.0 CONCLUSION

Nowadays, tourists are more likely to choose products and services that offer a green element, and they make it a must to travel while conserving the environment. Therefore, operators need to identify and realize the importance of green practices for their homestay. Thus, this study can bring about understanding among operators and players in the homestay industry to improve their knowledge of green practices. This research has proved that high environmental knowledge will affect the green practices of operators.

In addition, researchers found that an individual's behavior towards the environment cannot co-occur because their consciousness is influenced by several other factors, such as cost-savings, convenience, and environmental factors. For example, illegal disposal and open burning of garbage are easier to carry out than proper waste disposal (i.e., segregating and packing trash to be disposed of at a landfill), leading to air pollution and poor waste management. Although individuals are aware of the effects of their actions, they tend to ignore these due to convenience factors.

Green practices are often associated with high costs and burdensome operators, but previous studies have emphasized that some operating costs can be reduced. Green practices also add value to the reputation of the homestay service, showing how businesses carry out their corporate social responsibility and improve environmental conditions.

To encourage these green efforts, the government should provide incentives, subsidies, or various environmental programs to motivate homestay operators to implement green practices in their operations. An incentive to operators is a good form of assistance as the homestay industry consists of small and medium-scale services. The Malaysian government needs to introduce a certificate of recognition for operators who implement green practices in their homestay services. Such recognition can upgrade the status or branding of a homestay.

8.0 LIMITATIONS AND FUTURE RECOMMENDATIONS

This study used a small sample size and was only conducted in homestays located in Selangor. The findings of this study do not reflect the situation and green practices in the context of homestay operators in Malaysia as a whole. Future studies need to be implemented among homestay visitors and authorities involved in the homestay industry to get a more comprehensive and in-depth view. The findings of the studies from various parties will help homestay management build strategies and improve their services in green practices. In addition, future studies can also identify the barriers and the motivation of homestay operators to implement green practices in their homestay services.

Moreover, the demographic factors used in this study are limited. Thus, future studies need to diversify the demographic characteristics of respondents so that green practices among entrepreneurs can be better understood in depth. In addition, for future studies, demographic factors among homestay visitors can also be used by operators to design a green practice program for their homestay.

ACKNOWLEDGEMENT

This study was funded by Universiti Sultan Zainal Abidin under Grant No: UniSZA/2018/DPU/05 Code Project R0034-R005.

REFERENCES

- Abdou, A. H., Hassan, T. H., & Dief, M. M. El. (2020). A description of green hotel practices and their role in achieving sustainable development. *Sustainability*, 12(22), 1–21. <https://doi.org/10.3390/su12229624>
- Agag, G. (2019). Understanding the determinants of guests' behaviour to use green P2P accommodation. *International Journal of Contemporary Hospitality Management*, 31(9), 3417-3446.
- Alonso-Almeida, M. del M. (2012). Water and waste management in the Moroccan tourism industry: The case of three women entrepreneurs. *Women's Studies International Forum*, 35, 343–353.
- Al-Shourah, A. A. (2007). The relationship between environmental management practices (EMP) and hotel performance: EMP Drivers and The Moderating Role of Perceived Benefits. Unpublished doctoral dissertation, Universiti Sains Malaysia.
- Aman, A.L., Harun, A. and Hussein, Z. (2012), The influence of environmental knowledge and concern on green purchase intention the role of attitude as a mediating variable, *British Journal of Arts and Social Sciences*, 7(2), 145-167.
- Amaral, R. E. C., Brito, J., Buckman, M., Drake, E., Ilatova, E., Rice, P., Abraham, Y. S. (2020). Waste management and operational energy for sustainable buildings: A review. *Sustainability (Switzerland)*, 12, 1–21. <https://doi.org/10.3390/su12135337>
- Awang, Z. (2012). Structural equation modeling using AMOS graphic. Shah Alam: Uitm Press.
- Awang, Z. (2015). SEM made simple: A gentle approach to learning Structural Equation Modeling. MPWS Rich Publication.
- Bashirun, S. N., & Noranee, S. (2020). Influence of Environmental Knowledge and Attitude on Employee Green Behaviour. *International Journal of Academic Research in Business and*

Social Sciences, 10(6), 937–946. <https://doi.org/10.6007/ijarbss/v10-i6/7463>

- Bohdanowicz, P. (2006). Responsible resource management in hotels: Attitudes, indicators, tools and strategies. Royal Institute of Technology. Retrieved from <http://kth.diva-portal.org/smash/record.jsf?pid=diva2:10873>
- Braun, P. (2010). Going green: women entrepreneurs and the environment. *International Journal of Gender and Entrepreneurship*, 2(3), 245-259.
- Butler, J. (2008). The compelling "Hard Case" for "Green" hotel development. *Cornell Hospitality Quarterly*, 49(3), 234–244. <http://doi.org/10.1177/1938965508322174>
- Chan, E.S.W. (2008). Barriers to EMS in the hotel industry. *International Journal of Hospitality Management*, 27, 187-196
- Chan, E. S., Hon, A. H., Chan, W., & Okumus, F. (2014). What drives employees' intentions to implement green practices in hotels? The role of knowledge, awareness, concern and ecological behaviour. *International Journal of Hospitality Management*, 40, 20-28.
- Chen, M. F., & Tung, P. J. (2014). Developing an extended theory of planned behavior model to predict consumers' intention to visit green hotels. *International Journal of Hospitality Management*, 36, 221–230. <http://doi.org/10.1016/j.ijhm.2013.09.006>
- DiPietro, R. B., Cao, Y., & Partlow, C. (2013). Green practices in upscale foodservice operations. *International Journal of Contemporary Hospitality Management*, 25(5), 779-796.
- Doody, H. (2009). What are the barriers to implementing environmental practices in the Irish hospitality industry?: A literature review. Shannon College of Hotel Management.
- Eldemerdash, J. M., & Mohamed, L. M. (2013). Exploring obstacles of employing environmental practices: The case of Egyptian green hotels. *Journal of Human Resources in Hospitality & Tourism*, 12(3), 243–258.
- Erhabor, N. I., & Don, J. U. (2016). Impact of environmental education on the knowledge and attitude of students towards the environment. *International Journal of Environmental and Science Education*, 11(12), 5367–5375. <https://doi.org/10.25073/0866-773x/68>
- GhulamRabbany, M., Afrin, S., Rahman, A., Islam, F., & Hoque, F. (2013). Environmental effects of tourism. *American Journal of Environment, Energy and Power Research*, 1(7), 117-130
- Goh, Y., & Wahid, N.A. (2014). A Review on Green Purchase Behaviour Trend of Malaysian Consumers. *Asian Social Science*, 11, 103-110.
- Han, H., Hsu, L.T.J., Lee, J.S. & 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(2), 345-355.
- Han, H. (2015). Travelers' pro-environmental behavior in a green lodging context: Converging Value-Belief-Norm Theory and the Theory of Planned Behavior. *Tourism Management*, 47, 164–177.
- Han, H., & Yoon, H. J. (2015). Hotel customers' environmentally responsible behavioral intention: Impact of key constructs on decision in green consumerism. *International*

Journal of Hospitality Management, 45, 22–33

- Hassan, A.A., Noordin, T.A. & Sulaiman, S. (2010). The status on the level of environmental awareness in the concept of sustainable development amongst secondary schoolstudents, *Procedia - Social and Behavioral Sciences*, 2(2), 1276-1280.
- Henseler, J. (2012). Why generalized structured component analysis is not universally preferable to structural equation modeling. *Journal of the Academy of Marketing Science*, 40(3), 402-413.
- Ismail, M. N. I., Hanafiah, M. H., Aminuddin, N., & Mustafa, N. (2016). Community-based Homestay Service Quality, Visitor Satisfaction, and Behavioral Intention. *Procedia - Social and Behavioral Sciences*, 222, 398–405. <https://doi.org/10.1016/j.sbspro.2016.05.192>
- Jaiswal, D., & Kant, R. (2018). Green Purchasing Behavior: A Conceptual Framework and Empirical Investigation of Indian Consumers. *Journal of Retailing and Consumer Services*, 41, 60–69.
- Jamaludin, M., & Yusof, Z. B. (2016). Barriers of Adopting Environmental Management Practices in the Micro and Small Island Chalets Operation. *Environment-Behaviour Proceedings Journal*, 1(1), 171-177. <https://doi.org/10.21834/e-bpj.v1i1.213>
- Jameson, D. A., & Brownell, J. (2012). Telling your hotel's "green" story: developing an effective communication strategy to convey environmental values. *Cornell Hospitality Tools*, 3(2), 6-17.
- Jones, P., Hillier, D., & Comfort, D. (2014). Sustainability in the global hotel industry. *International Journal of Contemporary Hospitality Management*, 26(1), 5–17.
- Kannan, S., & Kannan, S. (2016). The energy management strategies for the hotel industry in Papua New Guinea. *Asian Journal of Business Management*, 04(03), 111–116.
- Kennedy, E.H., Beckley, T.M., McFarlane, B.L. & Nadeau, S. (2009). Why we don't 'walk the talk': understanding the environmental values/behaviour gap in Canada, *Human Ecology Review*, 16(2), 151-160.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30, 607-610.
- Kumar, B., Manrai, A.K. and Manrai, L.A. (2017). Purchasing behaviour for environmentally sustainable products: a conceptual framework and empirical study, *Journal of Retailing and Consumer Services*, 34, 1-9.
- Laroche, M., Bergeron, J., & Barbaro-Forleo, G. (2001). Targeting consumers who are willing to pay more for environmentally friendly products. *Journal of Consumer Marketing*, 18(6), 503–520.
- Liobikiene, G., & Poškus, M. S. (2019). The importance of environmental knowledge for private and public sphere pro-environmental behavior: Modifying the Value-Belief-Norm theory. *Sustainability (Switzerland)*, 11, 1–19. <https://doi.org/10.3390/su10023324>
- Lu, C. S., Lai, K. H., & Cheng, T. E. (2007). Application of structural equation modeling to evaluate the intention of shippers to use Internet services in liner shipping. *European Journal of Operational Research*, 180(2), 845-867.
- Mei, O.J., Ling, K.C., & Piew, T.H. (2012). The Antecedents of Green Purchase Intention among

- Malaysian Consumers. *Asian Social Science*, 8, 248-263.
- Mendes, J. P., & Santos, S. (2014). Energy management in four and five star hotels in Algarve (Portugal). *Turizam International Scientific Journal*, 18(3), 95–112.
- Mensah, I. (2020). Waste management practices of small hotels in Accra: An application of the waste management hierarchy model. *Journal of Global Business Insights*, 5(1), 33–46.
- Ministry of Tourism Malaysia. (2011). *Pengalaman homestay Malaysia*. Kuala Lumpur. Kementerian Pelancongan Malaysia.
- Moreo, A. (2008). Green consumption in the hotel industry: An examination on consumer attitudes. University of Delaware. Retrieved from <http://search.proquest.com/docview/304632853>
- Nezakati, H., Moghadas, S., Aziz, Y. A., Amidi, A., Sohrabinezhadtalemi, R., & Jusoh, Y. Y. (2015). Effect of behavioral intention toward choosing green hotels in Malaysia – Preliminary study. *Procedia - Social and Behavioral Sciences*, 172, 57–62. <http://doi.org/10.1016/j.sbspro.2015.01.335>
- Nor Ashikin & Kalsom (2015). Program Homestay dan Pembangunan Komuniti di Malaysia dlm Program Homestay Dan Pembangunan Komuniti Luar Bandar di Malaysia. Kedah: Penerbit Universiti Utara Malaysia.
- Nunkoo, R., & Ramkissoon, H. (2012). Structural equation modeling and regression analysis in tourism research. *Current Issues in Tourism*, 15(8), 777–802.
- Radwan, H. R. I., Jones, E., & Minoli, D. (2012). Solid waste management in small hotels: A comparison of green and non-green small hotels in Wales. *Journal of Sustainable Tourism*, 20(4), 533–550.
- Rahman, M. M., Rahman, S. M., Rahman, M. S., & Hasan, A. (2021). Greenhouse Gas Emissions from Solid Waste Management in Saudi Arabia — Analysis of Growth Dynamics and Mitigation Opportunities. *Applied Sciences*, 11, 1–21.
- Rüd, S., & Marth, R. (2012). Achieving sustainable wastewater and organic solid waste management taking advantage of the clean development mechanism. In W. L. Filho (Ed.), *Climate change and the sustainable use of water resources* (pp. 101–125). Berlin: Springer-Verlag.
- Sadeghian, M. M. (2019). Negative environmental impacts of tourism, a brief review. *Journal of Novel Applied Sciences*, 8(3), 71-76,
- Safari, A., Salehzadeh, R., Panahi, R., & Abolghasemian, S. (2018). Multiple pathways linking environmental knowledge and awareness to employees' green behavior. *Corporate Governance*, 18(1), 81-103.
- Siti-Nabiha, A. K., George, R. A., Abdul Wahid, N., Amran, A., Abustan, I., & Mahadi, R. (2011). A field survey of environmental initiatives at selected resorts in Malaysia. *World Applied Sciences Journal*, 12(Special Issue of Tourism & Hospitality), 56–63.
- Styles, D., Schönberger, H., & Martos, J. L. G. (2013). *Best environmental management practice in the tourism sector*. Spain: European Union.
- Sucheran, R. (2013). *Environmental management in the hotel and lodge sector in KwaZulu-*

- Natal, South Africa. University of KwaZulu-Natal. Retrieved from http://researchspace.ukzn.ac.za/bitstream/handle/10413/9419/Sucheran_Reshma_2013.pdf?sequence=1&isAllowed=y
- Sukhu, A., & Scharff, R. (2018). Will' doing right lead to 'doing well'? An examination of green behavior. *Journal of Consumer Marketing*, 35(2), 169-182.
- Tirado, D., Nilsson, W., Deyà-Tortella, B., & García, C. (2019). Implementation of water-saving measures in hotels in Mallorca. *Sustainability (Switzerland)*, 11(23), 1–13. <https://doi.org/10.3390/su11236880>
- Tsai, Y. H., Wu, C. T., & Wang, T. M. (2014). Attitude towards green hotel by hoteliers and travel agency managers in Taiwan. *Asia Pacific Journal of Tourism Research*, 19(9), 1091-1109.
- Vazifehdoust, H., Taleghani, M., Esmailpour, F. & Nazari, K. (2013). Purchasing green to become greener: factors influence consumers' green purchasing behavior, *Management Science Letters*, 3(9), 2489-2500.
- Vicente-Molina, M.A., Fernandez-Sa'inz, A. and Izagirre-Olaizola, J. (2013). Environmental knowledge and other variables affecting pro-environmental behaviour: comparison of university students from emerging and advanced countries, *Journal of Cleaner Production*, 61, 130-138.
- Wang, R. (2012). Investigations of important and effective effects of green practices in restaurants. *Procedia -Social and Behavioral Sciences*, 40, 94–98.
- Wihardjo, S. D., Hartati, S., Nurani, Y., & Sujarwanta, A. (2017). The effects of green schooling knowledge level and intensity of parental guidance on the environmental awareness of the early age student. *Educational Research and Reviews*, 12(5), 251-257.
- Yin, S., Wu, L., Du, L. and Chen, M. (2010). Consumers' purchase intention of organic food in China, *Journal of the Science of Food and Agriculture*, 90(8), 1361-1367.
- Yusof, Y. (2017). Customer Satisfaction with Green Initiatives in Malaysian Hotels. Universiti Sultan Zainal Abidin.
- Yusof, Z. B., & Jamaludin, M. (2014). Barriers of Malaysian green hotels and resorts. *Procedia - Social and Behavioral Sciences*, 153, 501–509. <https://doi.org/10.1016/j.sbspro.2014.10.083>
- Zengeni, N., Zengeni, D. M. F., & Muzambi, S. (2013). Hoteliers' perceptions of the impacts of green tourism on hotel operating costs in Zimbabwe: The case of selected Harare hotels. *Australian Journal of Business and Management Research*, 2(11), 64–73.
- Zsóka, Á., Szerényi, Z. M., Széchy, A., & Kocsis, T. (2013). Greening due to environmental education? Environmental knowledge, attitudes, consumer behavior, and everyday pro-environmental activities of Hungarian high school and university students. *Journal of Cleaner Production*, 48, 126–138. Retrieved from <http://www.elsevier.com/authorisrigt>