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Preliminary Study: Green Practices, Awareness and Knowledge about the Environment among Homestay Operators in Selangor, Malaysia

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***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. Thus, any increase in tourist arrivals will affect this industry and in turn, the environment. In recent years, environmental issues have become among the most significant issues of concern in the world. Since the homestay industry contributes to environmental issues, especially through daily operations which involve a lot of resources, the Tourism Ministry of Malaysia has introduced new initiatives to raise awareness among entrepreneurs regarding the importance of environmental conservation. Therefore, this study explores the reliability and validity of green practices, as well as general level of awareness and knowledge about the environment among homestay operators. This preliminary study uses quantitative methods which include a questionnaire distributed to 100 respondents comprising homestay operators in Selangor, who are registered with the Malaysian Tourism Ministry. The reliability test and exploratory factor analysis of the items in the questionnaire was carried out using SPSS software and the results are expected to be used for further analysis.**

Keywords— homestay, green practices, awareness, knowledge, Malaysia

I. INTRODUCTION

Homestays are a growing trend in in terms of rural tourism programs in Malaysia, and began in the 1970s in Kampung Cherating Lama, Pahang. A villager known as Mak Long began providing all the necessary items for accommodations including meals to form a "drifter enclave" at her home. Initially, most of the homestay villages were located by the beach (Amran, 2008). Through the 1980s, the homestay concept was expanded by receiving adolescents from Japan through student exchange programs. The Ministry of Culture, Arts and Tourism Malaysia (now known as the Ministry of Tourism Malaysia) introduced this program in 1988 as an alternative form of accommodation for tourists (Kalsom and Nor Ashikin, 2006). This program was then officially launched in 1995 by the Ministry of Culture, Arts and Tourism Malaysia in Temerloh, Pahang. The program, under the Rural Tourism Master Plan, aims to increase the involvement of rural communities in the tourism sector (Ministry of Rural and Regional Development, 2010). Lately, the homestay program is receiving more attention (Tourism Malaysia, 2010). Up until March 2018, there are 209 homestay clusters and 4025 entrepreneurs who are registered with the Ministry of Tourism Malaysia. This is illustrated in Figure I (Ministry of Tourism Malaysia, 2010b).

A homestay is a form of community-based tourism that offers a taste of local experiences to tourists (Jabil et al, 2011). Through this program, tourists will not only experience the village lifestyle but also have the chance to build close relationships with the families who welcome them into their homes and treat them as family members. They will also enjoy various exciting life experiences in the village (Ministry of Tourism Malaysia, 2011a), interact with the locals and gain experience, all the while learning the culture of rural communities. The tourists can experience the peacefulness of the village atmosphere and enjoy the diversity of local delicacies and traditional food in Malaysia. Visitors also have the opportunity to learn how to cook traditional Malaysian dishes. In addition, visitors can learn about Malay customs as well as traditional games and activities. In general, the main concepts emphasised in this tourism product are more on lifestyle travel and experience (Jabil et al, 2011). Homestays in Malaysia are almost same with the homestays in other countries. For example, in Indonesia, the homestay was built in villages or small towns, and operated by local communities. Furthermore, the homestays in Malaysia are said to have similarities with the farmstay concept practiced in Europe, North America, Australia and New Zealand (Amran & Hairul Nizam, 2003), as well as vacation farms in Canada (Amran, 2008).

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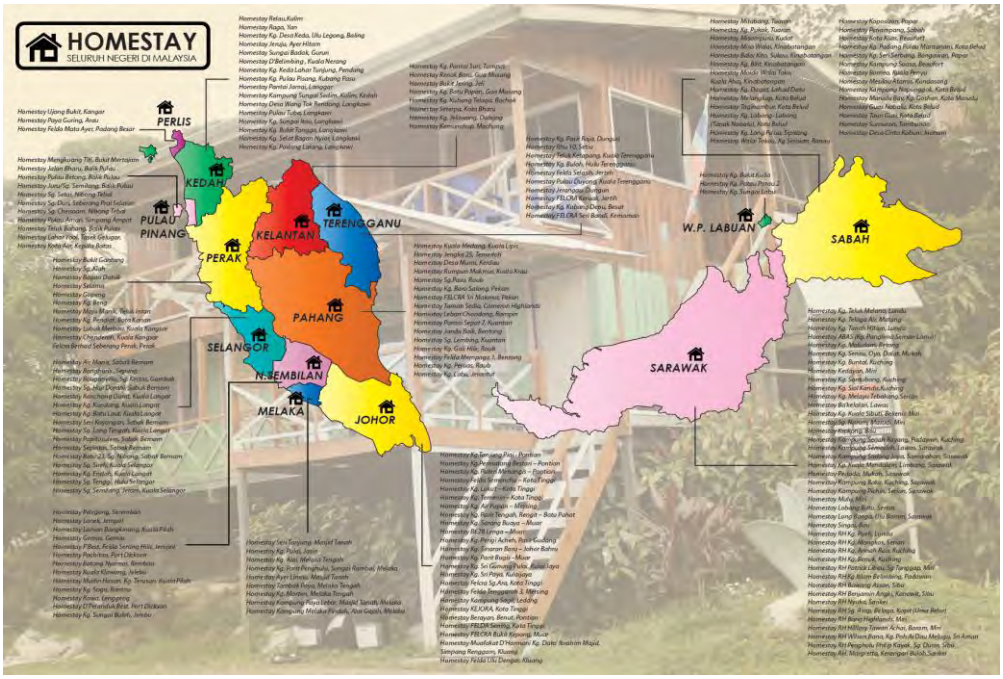

FIGURE I. LIST OF HOMESTAYS IN MALAYSIA UP UNTIL MARCH 2018

The hotel and accommodation sector is a sector in the tourism industry that contributes to environmental issues, especially during production and through day-to-day operations which involve the usage of many resources, such as water and energy (Chikita, 2012; Nezakati et al, 2015; Zengeni et al, 2013). Glover et al (2014), Pan (2009) and Lynes and Dredge (2006) point out that hotel and accommodation industries are pressed from some parties, such as customers, stakeholders and governments, to be more environmentally friendly. In this industry, it is important to minimise any negative experiences by customers, as customers usually share negative impressions faster than the positive points, which will affect the image of a particular accommodation and hinder it from attracting new customers (Bhakar & Bhakar, 2015). Due to the increase in environmental awareness and the demand for eco-friendly tourism, most countries are working to support green tourism through green practices (Ham & Han, 2013; Hassan & Nezakati, 2014). Terms like green practices, environmental management practices and eco-marketing practices are new approaches to marketing and are a value-added approach for organisations (Kim et al, 2017). This approach not only adapts or reinforces existing approaches, but also searches for different perspectives, while at the same time addressing the gap to minimise negative impacts on ecology and society (Perera & Pushpanathan, 2015).

The Ministry of Tourism Malaysia has introduced several new initiatives to raise the awareness of operators and tourists on the importance of environmental restoration. Among these efforts include the launch of the 1Malaysia Green, 1Malaysia Clean (1MG1MC) campaign. This is an awareness campaign on the importance of maintaining cleanliness in tourist spots through "*gotong-royong*". *Gotong royong* is a mutual help activity or work together to do something voluntarily. This term is similar to the 'working bee' concept in Western Countries. Homestay operators are encouraged to explain the concept of the 1MG1MC campaign to tourists and promote mutual-aid activities involving tourists to clean up the homestay and nearby tourism products (Ministry of Tourism Malaysia, 2011b).

Previous studies show that there are three core green practices - energy management, waste management and water conservation (Styles et al, 2013; Zhao, 2011). Since energy consumption in homestays and other accommodation requires high costs, energy management is an important practice to control the electricity consumption without affecting customer satisfaction (Kannan & Kannan, 2016; Mendes & Santos, 2014). In the accommodation sector, water is used for bathing, sanitation, cleaning, laundry, cooking, drinking and gardening, among others (Alonso-Almeida, 2012; Bohdanowicz, 2006). However, according to Bohdanowicz (2006), accommodation operators only monitor the overall water expenditure without paying attention to each usage due to insufficient monitoring and reporting. In addition, waste water management weaknesses tend to produce greenhouse gases (GHG) (Rüd & Marth, 2012). Therefore, the emphasis on water conservation is also an effective practice to preserve the environment. Garbage generation from the tourism industry, especially from the accommodation sector, is considered one of the negative effects on the environment (Radwan et al, 2012; Zorpas et al, 2012). According to Wang (2012) and Mensah (2006), waste management is recognised as a green practice that promotes environmental quality protection, image creation, organisational reputation, and cost efficiency in the property sector.

Radwan et al. (2012) showed seven driving factors for solid waste management - recycling and composting, awareness and education, economic motivation, marketing motivation, social motivation, legal pressure and networking. There are some past researchers who used awareness and knowledge variables in their studies. For example, studies conducted by Aminrad et al

(2013) to identify the relationship between environmental awareness, knowledge and attitude among secondary school students found that there was a significant but not very strong relationship between awareness and knowledge. Awareness of the environment has a broad meaning. It does not only imply knowledge regarding the environment but also the attitudes, values and skills needed to solve environmental problems. In addition, environmental awareness is the first step towards more responsible behaviour (Sengupta et al, 2010). Nurturing environmental awareness is deemed an important goal in the context of today's education because it is interdependent between humans and nature (Hadzigeorgiou & Skoumios, 2013). Research by the United Nations Development Program Malaysia (2008) on the factor of low awareness on environmental issues found that the causal factors include lack of education, lack of environmental knowledge, and inadequate media roles to disseminate this issue. Doody (2009) also identified some obstacles to implementing green practices in the hotel and accommodation industries, such as lack of knowledge among hoteliers or homestay operators on environmental issues and strategies, managerial attitudes, employee support, financial problems, customer attitudes, operations and the law. Knowledge of the environment is a term used to imply knowledge of environmental issues and probable ways to solve the problem (Zsóka et al, 2013). Based on previous research findings, it is clear that environmental awareness and knowledge can influence green practices among homestay entrepreneurs. In this study, green practices refer to the programs and activities employed by homestay operators to lessen negative impacts on the environment. It is therefore important to check the extent to which green practices are used in Malaysian homestays especially in Selangor, so that hoteliers can improve their practice in accordance with the established standards.

The objectives for this research are:

1. To organise environmental awareness, environmental knowledge and green practices items in a questionnaire.
2. To identify the reliability of the variables (environmental awareness, environmental knowledge and green practices).

II. METHOD

A. Sample

This pilot study involved homestay operators in Selangor, Malaysia. 100 respondents were selected for this study using simple random sampling. Data were analysed using Statistical Package for the Social Sciences (SPSS) software. Since the pilot study is the preliminary study for the whole research, thus at this stage, only two analyses were carried out, i.e. the Exploratory Factor Analysis (EFA) and reliability analysis.

III. FINDING AND DISCUSSION

B. Exploratory Factor Analysis (EFA)

The EFA is a procedure used by researchers to identify, reduce and organise a number of items in a questionnaire into specific constructs (Yong & Pearce, 2013; Pearson & Mundform, 2010; Harrington, 2009; Chua, 2009). A sample size of at least 100 is acceptable for carrying out the EFA (Anthoine, et al, 2014; Pearson & Mundform, 2010). This research has 100 samples in the pilot study, thus the number is adequate to proceed with the analysis. For this analysis, the researcher used the Principal Components Analysis (PCA), the Kaiser-Meyer-Olkin (KMO) to measure the sampling adequacy, and the Bartlett's Test to identify the significance of the construct.

C. Environmental Awareness

TABLE shows that the value of KMO for Green Practices was 0.874, while the Bartlett's Test of Sphericity returned significant results (Chi-square=1229.149, p-value < 0.000). This means that the sampling was sufficient to proceed with the factor analysis.

TABLE I. KMO AND BARTLETT'S TEST FOR ENVIRONMENTAL AWARENESS

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.874
Bartlett's Test of Sphericity	Approx. Chi-Square	1228.149
	Df	91
	Sig.	.000

TABLE II. TOTAL VARIANCE EXPLAINED

Component	***Initial Eigenvalues***			***Rotation Sums of Squared Loadings***		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.789	55.632	55.632	7.789	55.632	55.632

Note: Extraction Method is the Principal Components Analysis

As shown in TABLE, only one component was extracted with eigenvalues exceeding 1.0 and contributed a total of 55.632 per cent of change in the total variance.

TABLE shows that one component remains after the exploratory factor analysis. Since the factor loading of item 13 did not exceed 0.5, the item was removed from the analysis. Thus, the total number of items under this construct was 13. Therefore, the researcher renamed the component with a more suitable name. Based on the themes and characteristics from the previous study in which the items were combined, the researcher named Component 1 as Environmental Awareness.

TABLE III. ROTATED COMPONENT MATRIX

No.	*Item Statements*	*Component*
		1
1	I will take action to improve the environment in my homestay. *Saya akan mengambil tindakan untuk memperbaiki persekitaran di homestay.*	.798
2	I will place recycling bins around my homestay. *Saya akan meletakkan tong sampah kitar semula di sekitar homestay saya.*	.648
3	I am working hard to protect the environment. *Saya berusaha sepenuhnya untuk melindungi alam sekitar.*	.905
4	I am aware that environmental awareness is important. *Saya mendapati bahawa kesedaran terhadap alam sekitar adalah penting.*	.884
5	I know the impact of pollution on animals and plants. *Saya mengetahui kesan buruk pencemaran terhadap haiwan dan tumbuhan.*	.871
6	I am willing to contribute a small portion of my income to environmental care. *Saya sanggup menyumbang sebahagian kecil pendapatan saya untuk penjagaan alam sekitar.*	.714
7	Environmental care problems are a shared responsibility. *Masalah penjagaan alam sekitar adalah tangunggjawab bersama.*	.829
8	I am willing to sacrifice for the environment. *Saya sanggup berkorban demi menjaga alam sekitar.*	.854
9	I am willing to pay more to buy eco-friendly products. *Saya sanggup membayar lebih bagi membeli produk-produk yang mesra alam sekitar.*	.603
10	I gain more satisfaction if I can take care of the environment. *Saya rasa saya lebih berpuas hati sekiranya dapat menjaga alam sekitar.*	.835
11	I love the environment but have no time to practice related activities (such as recycling, composting, etc). *Saya sayangkan alam sekitar tetapi tidak mempunyai masa untuk mengamalkan aktiviti berkaitan (seperti kitar semula, kompos).*	.625
12	I will inform the authorities in case of environmental problems near my homestay. *Saya akan memaklumkan kepada pihak berkuasa sekiranya berlaku masalah alam sekitar berhampiran homestay ini.*	.635
13	I will inform the media in the event of an environmental problem near my homestay. *Saya akan memaklumkan kepada pihak media sekiranya berlaku masalah alam sekitar berhampiran homestay ini.*	
14	I am interested in participating in environmental protection programs. *Saya berminat untuk menyertai program perlindungan alam sekitar.*	.673

D. Environmental Knowledge

TABLE shows that the value of KMO for Environmental Knowledge was 0.883, while the Bartlett's Test of Sphericity returned significant results (Chi-square=1137.589, p-value < 0.000). This means that the sampling was sufficient to proceed with the factor analysis.

TABLE IV. KMO AND BARTLETT'S TEST FOR ENVIRONMENTAL KNOWLEDGE

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.883
Bartlett's Test of Sphericity	Approx. Chi-Square	1137.589
	df	45
	Sig.	.000

As shown in TABLE V, only one component was extracted with eigenvalues exceeding 1.0 and contributed a total of 71.010 per cent of change in the total variance.

TABLE V. TOTAL VARIANCE EXPLAINED

Component	*Initial Eigenvalues*			*Rotation Sums of Squared Loadings*		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.101	71.010	71.010	7.101	71.010	71.010

Note: Extraction Method is the Principal Components Analysis

Based on TABLE VI, according to the loading factor, all 10 items were remains into one component. The researcher renamed the component as Environmental Knowledge to reflect the items, as shown in TABLE VI:

TABLE VI. ROTATED COMPONENT MATRIX[A]

No.	*Item Statements*	*Component 1*
1	Preserving the environment is a commendable effort. *Memelihara alam sekitar adalah satu usaha murni.*	.902
2	I am aware that knowledge of the environment is very important. *Saya mendapati bahawa pengetahuan tentang alam sekitar sangat penting.*	.898
3	I feel that the surrounding pollution has affected my quality of life. *Saya merasakan pencemaran disekeliling telah menjejaskan kualiti hidup saya*	.831
4	Environmental issues have been widely regarded internationally. *Isu alam sekitar telah diberi perhatian yang meluas di peringkat antarabangsa.*	.852
5	Local governments should do something to raise ecological awareness. *Kerajaan tempatan harus melakukan sesuatu untuk meningkatkan kesedaran ekologi.*	.914
6	The government needs to spend more on environmental protection programs. *Kerajaan perlu mengeluarkan lebih banyak peruntukan bagi program perlindungan alam sekitar.*	.882
7	I pay attention to the effects products I have purchased have on the environment. *Saya memberi perhatian terhadap kesan produk yang dibeli kepada alam sekitar.*	.804
8	Non-recyclable equipment should be taxed. *Peralatan yang tidak boleh dikitar semula patut dikenakan cukai.*	.570
9	The government has to subsidise research in the technology of recycling wasted products. *Kerajaan perlu memberi subsidi kepada penyelidikan dalam teknologi mengitar semula produk terbuang.*	.885
10	Producers need to use recycled materials in their operations. *Pengeluar perlu menggunakan bahan kitar semula dalam operasi mereka.*	.834

E. Green Practices

Table VII shows that the value of KMO for Green Practices was 0.812, while the Bartlett's Test of Sphericity returned significant results (Chi-square=2910.242, p-value < 0.000). This means that the sampling was sufficient to proceed with the factor analysis.

TABLE VII. KMO AND BARTLETT'S TEST FOR GREEN PRACTICES

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.812
Bartlett's Test of Sphericity	Approx. Chi-Square	2910.242
	df	351
	Sig.	.000

As shown in Table VIII, two components were extracted with eigenvalues exceeding 1.0 and contributed a total of 59.989 per cent of change in the total variance.

TABLE VIII. TOTAL VARIANCE EXPLAINED

Component	*Initial Eigenvalues*			*Rotation Sums of Squared Loadings*		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	10.526	38.985	38.985	10.526	38.985	38.985
	5.671	21.004	59.989	5.671	21.004	59.989

Note: Extraction Method is the Principal Components Analysis

TABLE IX shows that two components remains after the exploratory factor analysis. However, in this analysis, item 24 was deleted because the item lies in both Component 1 and Component 2. Therefore, to prevent any problems in further analysis, such as Confirmatory Factor Analysis, this item was removed from the list of questions under this construct. Based on the themes and characteristics from the previous study in which the items were combined, for the green practices construct, the researcher named Component 1 and Component 2. The name of the construct maintained with the name of component 1 and component 2 is because the items in the construct are mixed in terms of their character after the exploratory factor analysis.

TABLE IX. ROTATED COMPONENT MATRIX

No.	*Item Statements*	*Component*	
		1	*2*
1	This homestay offers environmental activities for guests. *Homestay ini menggalakkan aktiviti alam sekitar untuk tetamu.*	.679	
2	I have sent waste produced at the homestay for recycling. *Saya pernah menghantar sisa homestay untuk di kitar semula.*	.620	
3	This homestay uses a thermostat that can be programmed to control the temperature in the guest rooms. *Homestay ini menggunakan thermostat yang boleh diprogramkan untuk mengawal suhu di bilik-bilik tetamu.*		.771
4	This homestay uses rechargeable hardware in the bathroom. *Homestay ini menggunakan perkakasan yang boleh diisi semula di bilik mandi.*	.529	
5	I will not throw trash into pools, drains, forests, or anywhere around my homestay. *Saya tidak akan membuang sampah ke dalam kolam, longkang, hutan, atau di mana sahaja di sekeliling homestay saya.*	.720	
6	The guest rooms in this homestay have air filtration systems installed. *Homestay ini mempunyai sistem penapisan udara di bilik tetamu.*		.902
7	This homestay provides a smoking area and a non-smoking area. *Homestay ini mempunyai kawasan merokok dan kawasan larangan merokok.*		.660
8	This homestay regularly maintains its equipment. *Homestay ini menyelenggara peralatan secara berkala.*		.589
9	This homestay offers the choice of reusing towels to guests staying more than one night. *Homestay ini menawarkan pilihan penggunaan semula tuala kepada tetamu yang menginap lebih dari satu malam*	.725	
10	This homestay offers a choice of re-use of linen (blankets) to guests staying more than one night. *Homestay ini menawarkan pilihan penggunaan semula linen (selimut) kepada tetamu yang menginap lebih dari satu malam.*	.695	
11	This homestay uses technology to save water. *Homestay ini menggunakan teknologi bagi menjimatkan air.*		.869
12	This homestay uses organic food. *Homestay ini menggunakan makanan yang ditanam secara organik.*	.659	
13	I do not use products that damage the ozone layer. *Saya tidak menggunakan produk yang merosakkan lapisan ozon.*	.665	
14	I use eco-friendly products. *Saya menggunakan produk mesra alam.*	.673	
15	I always try to reduce energy consumption in this homestay. *Saya sentiasa cuba untuk mengurangkan penggunaan tenaga di homestay ini.*	.825	
16	I always try to reduce water consumption in this homestay. *Saya sentiasa berusaha untuk mengurangkan penggunaan air di homestay ini.*	.855	
17	This homestay provides clear signs showing areas with the presence of toxic substances. *Homestay ini menyediakan tanda-tanda yang jelas untuk bahan toksik.*	.617	
18	I use the water reservoir method instead of showers in the bathroom. *Saya menggunakan kaedah takungan air berbanding dengan pancuran di bilik mandi.*	.730	
19	I use sensors to save electricity in this homestay. *Saya menggunakan sensor untuk menjimatkan tenaga elektrik di homestay ini.*		.859
20	I use energy-saving lightbulbs in all rooms. *Saya menggunakan mentol lampu penjimatan tenaga di semua bilik.*	.710	
21	I will make sure that all guests switch off electrical items when not in use. *Saya akan memastikan bahawa semua tetamu memadamkan elektrik apabila tidak digunakan.*	.752	
22	I will place a notice or verbally inform guests to save electricity. *Saya akan meletakkan notis atau memaklumkan secara lisan kepada tetamu untuk menjimatkan elektrik apabila tidak digunakan.*	.691	
23	I provide separate garbage bins for different garbage types in every corner of the homestay. *Saya menyediakan tong sampah yang boleh mengasingkan jenis sampah di setiap penjuru homestay.*		.545
24	I recycle items after guests leave the homestay. *Saya mengitar semula barangan selepas tetamu keluar dari homestay.*	.631	.549
25	I use a flushing system for effective sewage management in this homestay. *Saya menggunakan flush untuk sistem pengurusan kumbahan yang berkesan di homestay.*	.723	
26	I will process excess leftover foods to create fertiliser. *Saya akan memproses lebihan makanan untuk dibuat baja.*	.737	
27	I refrain from disposing oil, paint or chemicals into sinks or toilets. *Saya mengelakkan diri dari membuang minyak, cat atau bahan kimia ke dalam sinki atau tandas.*	.622	

F. Reliability Test

Another analysis that the researcher used for the pilot study is the reliability test. The reliability test is the extent of the suitability and reliability of the item in the latent construct in the proposed measurement model (Awang, 2014) and how far the

relationship exists between indicators in the construct (Hair et al., 2010). Internal reliability can be reviewed using the Cronbach's Alpha value (Awang, 2014). As one of the pioneer researchers who discussed reliability, Nunnally (1978) recommended that Cronbach's Alpha values of more than 0.70 are acceptable.

Table X shows the Cronbach's Alpha value for all the variables. The Cronbach's Alpha value for the awareness of environment dimension was 0.928. Meanwhile, the dimension for knowledge of environment and green practices indicated very good values of 0.946 and 0.972 respectively. This reliability analysis indicated that the three constructs involved in this study had good values for the reliability coefficient and were acceptable for further analysis.

TABLE X. RELIABILITY ANALYSIS FOR THE CONSTRUCTS AND COMPONENTS

Dimension/Variable	***No. of items***	***Cronbach's Alpha (n=100)***
Awareness	13	0.928
Knowledge	10	0.946
Green Practices	27	0.972

IV. CONCLUSION

From this preliminary study, after the exploratory factor analysis had been carried out, all the items were found to be adequate and acceptable for further analysis. The reliability test also showed that the variables have good values and are acceptable for analyses. It is hoped that further analysis will contribute to sustainable development in Malaysia especially involving homestay programs.

References

Alonso-Almeida, M.-M., Robin, C. F., Pedroche, M. S. C., & Astorga, P. S. (2016). Revisiting green practices in the hotel industry: A comparison between mature and emerging destinations. *Journal of Cleaner Production*, 1–14. http://doi.org/10.1016/j.jclepro.2016.10.010

Aminrad, Z., Zarina, S., Sayed Zakariya, B., Hadi, A. S., & Sakari, M. (2013). Relationship between awareness, knowledge and attitudes towards environmental education among secondary school students in Malaysia. *World Applied Sciences Journal*, *22*(9), 1326–1333. http://doi.org/10.5829/idosi.wasj.2013.22.09.275

Amran Hamzah, & Hairul Nizam Ismail. (2003). *Kajian penilaian kesan sosio-ekonomi program homestay di Kampung Banghuris, Sepang, Selangor*. (Laporan FRGS Vot 71538), Skudai, Johor: UTM

Amran Hamzah. (2008). Malaysia homestay from the perspective of young japanese tourist: the quest for furusato in Janet Cochrone (Ed). *Asian tourism, growth and change* (pp. 193-207). Amsterdam: Elsevier

Anthoine, E., Moret, L., Regnault, A., Sébille, V., & Hardouin, J.-B. (2014). Sample size used to validate a scale: A review of publications on newly-developed patient reported outcomes measures. *Health and Quality of Life Outcomes*, *12*(176), 1–10. http://doi.org/10.1186/s12955-014-0176-2

Awang, Z. (2014). *A handbook of SEM for academicians and practitioners. The step by step practical guides for the beginners*. Bangi: MPWS Rich Publication

Bhakar, S. S., & Bhakar, S. (2015). Customer satisfaction or service quality – Identifying mediating variable and evaluating behavioral intention model in hotel industry: An SEM approach. *Research Journal of Social Science & Management*, *5*(2), 111–124.

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

Chikita, M. (2012). *Analyzing the impact on consumer satisfaction, behavior and attitudes by using eco-friendly practices and products in Surfers Paradise/Gold Coast city hotels, Australia.* Haaga-Helia Univeristy of Applied Sciences. Retrieved from https://www.theseus.fi/bitstream/handle/10024/45528/Final_Maria_Chikita_Thesis2012.pdf?sequence=1

Chua, Y. P. (2009). *Statistik penyelidikan lanjutan: Ujian regresi, analisis faktor dan analisis SEM*. Kuala Lumpur: McGraw-Hill Malaysia.

Doody, H. (2009), "What are the barriers to implementing environmental practices in the Irish hospitality industry?", *Tourism and Hospitality Research in Ireland Conference (THRIC)*, Retrieved on 10 August 2014, from www.shannoncollege.com

Hadzigeorgiou, Y., & Skoumios, M. (2013). The development of environmental awareness through school science: Problems and possibilities. *International Journal of Environmental & Science Education*, *8*(3), 405–426. http://doi.org/10.12973/ijese.2013.212a

Hair, J. F. J., Black, W. C., Babin, B. J., & Anderson., R. E. (2010). *Multivariate Data Analysis. A global perspective*. (7th, Ed.). USA: Prentice Hall.

Ham, S., & Han, H. (2013). Role of perceived fit with hotels' green practices in the formation of customer loyalty: Impact of environmental concerns. *Asia Pacific Journal of Tourism Research*, *18*(7), 731–748. http://doi.org/10.1080/10941665.2012.695291

Harrington, D. (2009). *Confirmatory factor analysis*. New York: Oxford University Press.

Hassan, H., & Nezakati, H. (2014). Green tourism practices in Malaysia. In *Selected Issues in Hospitality and Tourism* (pp. 24–36). Serdang, Selangor: Universiti Putra Malaysia Press 43400.

Jabil Mapjabil, Siti Asma' Mohd Rosdi, Munir Shuib, & Sharmini Abdullah. (2011). Pembangunan homestay di Wilayah Utara Semenanjung Malaysia: Profil, produk dan prospek. *Malaysia Journal of Society and Space, 7*(2), 45-54.

Kalsom Kayat, & Nor Ashikin Mohd Nor. (2006). Penglibatan ahli komuniti dalam program pembangunan komuniti: Satu kajian ke atas program homestay di Kedah. *Journal of the Social Sciences and Humanities (Akademika), 67*, 77-102.

Kannan, S., & Kannan, S. (2016). The energy management strategies for the hotel industry in Papua New Guinea. *Asian Journal of Business Management*, *4*(3), 111–116.

Kim, S.-H., Lee, K., & Fairhurst, A. (2017). The review of "green" research in hospitality, 2000-2014. *International Journal of Contemporary Hospitality Management*, *29*(1), 226–247. http://doi.org/10.1108/IJCHM-11-2014-0562

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. Retrieved from http://www.dgt.uns.ac.rs/turizam/arhiva/vol_1803_1.pdf

Mensah, I. (2006). Environmental management practices among hotels in the Greater Accra Region. *Journal Hospitality Management*, *25*(3), 414–431.

Ministry of Rural and Regional Development. (2010). *Pengurusan Homestay*. Retrieved on 24 October 2010, from http://www.infra.gov.my/web/guest/pengurusan- homestay

Ministry of Tourism Malaysia. (2011a). *Homestay: An overview.* Retrieved on 24 September 2011, from http://www.go2homestay.com/ homestay-an-overview/

Ministry of Tourism Malaysia. (2011b). *Pengalaman homestay Malaysia*. Kuala Lumpur. Ministry of Tourism Malaysia.

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

Nunnally, J. C. (1978). *Psychometric Theory* (2nd ed.). New York: McGraw-Hill.

Pearson, R. H., & Mundform, D. J. (2010). Recommended sample size for conducting exploratory factor analysis on dichotomous data. *Journal of Modern Applied Statistical Methods*, *9*(2), 359–368.

Perera, L. H. N., & Pushpanathan, A. (2015). Green marketing practices and customer satisfaction: A study of hotels industry in Wennappuwa Divisional Secretariat. *Tourism, Leisure and Global Change*, *2*, TOC-13.

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. http://doi.org/10.1080/09669582.2011.621539

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. http://doi.org/10.1007/978-3-642-22266-5

Sengupta, M., Das, J., & Maji, P. K. (2010). Environmental awareness and environment related behaviour of twelfth grade students in Kolkata: Effects of stream and gender. *Anwesa*, *5*(January), 1–8.

Styles, D., Schönberger, H., & Martos, J. L. G. (2013). *Best environmental management practice in the tourism sector*. Spain: European Union. http://doi.org/10.2788/33972

Tourism Malaysia. (2010). *Laporan tahunan 2009*. Kuala Lumpur. Tourism Malaysia.

United Nations Development Programme Malaysia. (2008). *Malaysia developing a solid waste management waste management*. Kuala Lumpur.

Wang, R. (2012). Investigations of important and effective effects of green practices in restaurants. *Procedia -Social and Behavioral Sciences*, *40*, 94–98. http://doi.org/10.1016/j.sbspro.2012.03.166

Yong, A. G., & Pearce, S. (2013). A beginner's guide to factor analysis: Focusing on exploratory factor analysis. *Tutorials in Quantitative Methods for Psychology*, *9*(2), 79–94.

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.

Zhao, C. (2011). *An analysis of hotels' green activities and its influence on hotels' projected image using a mixed methodology*. Purdue University. Retrieved from http://search.proquest.com/openview/fb41b6ee72cec02886821913101a9e9d/1?pq-origsite=gscholar&cbl=18750&diss=y

Zorpas, A. A., Lasaridi, K., Voukkali, I., & Loizia, P. (2012). Solid waste from the hospitality industry in Cyprus. *WIT Transactions on Ecology and The Environment*, *166*, 41–49.

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/authorsrights.