Recommending green hotels to travel agencies' customers

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1. Introduction

This research note examines travel agency salespeople's environmentally-friendly behavior (i.e., recommending environmentally-friendly hotels to travel agency's customers) in a business-to-consumer context. In tourism and hospitality industries, the impact of hotels on the environment has attracted the attention of scholars (Chan & Wong, 2006; Chen & Peng, 2012; Han, Hsu, & Sheu, 2010; Kim & Han, 2010). Scholars have generally agreed that consumers' understanding of the importance of environmental issues is an important factor that can affect their behavior (Chen & Peng, 2012; Nisbet, Zelenski, & Murphy 2009; Ong & Musa, 2012). Nevertheless, the current tourism literature has mainly focused on tourists' own environmentally-friendly behavior. The influence of tourism service providers is still under-explored. In particular, travel agency salespeople may have an influential role, especially when customers search for and evaluate tourism product information (Fu, Richards, Hughes, & Jones, 2010).

Up to date, the factors that contribute to salespeople's environmentally-friendly behaviors still need further investigation. To narrow the gaps in the tourism literature, this study analyzes how salespeople's environmental concern's influences on their environmentally-friendly behavior, which is to recommend green hotels to potential customers. Moreover, the moderating effect of green hotel knowledge will be investigated. A green hotel is an environmentally-friendly lodging property that follows ecologically sound programs / practices (Han et al., 2010 cited in Chen & Peng, 2012).

2. Research Framework and Hypotheses

Figure 1 shows this research's proposed framework. The first relationship that will be examined is the impact of environmental concern on salespeople's environmentally-friendly behavior. According to Dunlap and Jones (2002, p.485),

environmental concern refers to “the degree to which people are aware of problems regarding the environment and support efforts to solve them and/or indicate a willingness to contribute personally to their solution.” Environmental concern was widely used by scholars who studied environmental issues (e.g., Hawcroft & Milfont, 2010; Thapa, Graefe, & Meyers, 2006) and in tourism studies (e.g., Luo & Deng, 2008; Ong & Musa, 2012). For environmentally-friendly behavior, Kollmuss and Agyeman’s (2002, p.240) define it is “behavior that consciously seeks to minimize the negative impact of one’s actions on natural and build world.” In this current study, environmentally-friendly behavior refers to salespeople’s act of recommending green hotels to their customers, such as encouraging customers to stay at green hotels when traveling. Nisbet et al. (2009) and Ong and Musa (2012) hypothesized and confirmed environmental concern’s influence on tourists’ own environmentally-friendly behavior in the context of scuba diving and conservation behavior. Derived from the discussion above, the following hypothesis will be examined:

H1: Salespeople’s environmental concern has a positive influence on their recommendation of green hotels to customers.

The second hypothesis that will be examined in this research is green hotel knowledge’s moderating effect on the relationship between environmental concern and environmentally-friendly behavior. Thøgersen and Ölander (2003) suggest relevant knowledge is essential for an individual to behave in an environmentally-friendly manner. In the context of this current study, green hotel knowledge is defined as general knowledge of facts, concepts, and relationships concerning the impact of hotels on the natural environment (Chen & Peng, 2012). Wong and Yeh’s (2009) research confirmed that tourists’ knowledge can significantly moderate tourists’ decision-making processes. Chen and Peng (2012) further confirmed green hotel knowledge can moderate lodgers’ green hotel staying behavior.

Although this variable's moderating effect has been examined before; nevertheless, this research aims to further investigate how it moderates salespeople's selling behavior. Based on the above-mentioned literature, this study examines the following hypothesis:

H2: Environmental concern has a stronger positive relationship with environmentally-friendly behavior for salespeople with higher green hotel knowledge versus salespeople with lower green hotel knowledge.

*Figure 1

3. Methodology

Business students were recruited to gather data from respondents working for travel agencies in Taiwan between November and December 2013. Agencies in Taipei City, Taichung City, and Kaohsiung City that had environmentally-friendly hotels in their product range were considered eligible to participate in the study. To verify the status of the hotels, the researchers determined whether these hotels had eco-labels or ecologically sound programs/practices (e.g., participating in Taiwan's Green Mark scheme or had similar practices). Email surveys were used to collect data from salespeople who agreed to participate. The survey was completed by 118 salespeople. The response rate was 23.6%. Table 1 shows participants demographic information.

*Table 1

Measurement scales were designed to examine the target question: "What are the determinants of a travel agency salesperson's environmentally-friendly behavior, which is to recommend green hotels to travel agency's customers?" The participants completed a survey that evaluated their environmental concern (Ong & Musa, 2012), environmentally-friendly behavior (Yüksel & Yüksel, 2007), and green hotel knowledge (Chen & Peng, 2012) by asking them to rate their answers on a

seven-point Likert-type scale. Multiple items were used to measure each of the variables in the model (Table 2). For data input, four items from the NEP scale were reverse coded (Kang, Stein, Heo, & Lee, 2012).

*Table 2

4. Data Analysis

SPSS AMOS 20 was used to analyze the data. Following Anderson and Gerbing's (1988) two-step approach, a measurement model was first estimated using confirmatory factor analysis. The high factor loadings, composite reliability, and average variances extracted (AVE) for each construct were used together to confirm the reliability, convergent validity, and discriminant validity of the instrument. Bootstrapping was used for robustness check. The results gathered after using structural equation modeling showed a good fit between the data and the main model ($\chi 2$=17.56, df=8, p<0.001, RMSEA=0.08, CFI=0.976, NFI=0.957). On the basis of the statistical results, H1 is supported (β=2.35, p<0.001). Environmental concern will affect environmentally-friendly behavior positively.

To test the hypothesized moderating effects of market orientation, a multi-group invariance analysis was performed (Jurowski & Wan, 2004), and the procedure recommended by Bell and Menguc (2002) was followed. These methods allowed participants to be divided into high (N=59) and low green hotel knowledge groups (N=59). The structural path coefficient indicated that there was a positive relationship between environmental concern and environmentally-friendly behavior in the high green hotel knowledge group (β=1.14, p<0.05). In the low green hotel knowledge group, the structural path coefficient revealed that environmental concern will not affect environmentally-friendly behavior (β=6.15, p>0.01). Based on the above, H2 is supported.

*Figure 2

5. Discussion

Previous tourism and hospitality studies that examined the consumption of environmentally-friendly products mainly focused on tourists' environmental concerns and their behavior. This current study extends existing literature by confirming travel agency salespeople's environmental concern will positively affect their environmentally-friendly behavior, which is to recommend environmentally-friendly hotels to agency's customers when they search for hotel information and try to evaluate the features of different hotels. This finding contributes to the tourism literature because salespeople can affect their customers' tourism product purchase behavior as they introduce products that are unfamiliar to customers, identify customers' needs, and explain product features to customers. This research is one of the first to test and confirm environmental concern's influences on travel agency salespeople's environmentally-friendly behavior.

Other than environmental concern's effect on environmentally-friendly behavior, this current research also examines salespeople's green hotel knowledge's moderating effect on the relationship between environmental concern and environmentally-friendly behavior. The result shows this relationship will be stronger when salespeople have high green hotel knowledge. Scholars have found product knowledge can moderate consumers' consumption behavior; nevertheless, this current study confirms product knowledge can also moderate salespeople's behavior when they communicate with potential customers. It also confirms environmentally-friendly behavior requires relevant knowledge. This current research is the first to examine green knowledge's ability to moderate travel agency salespeople's behavior.

If policy-makers and managers want to promote green hotels, this current research

has some implications. For travel agencies, green products are still a niche market with growth potentials; therefore, it is an opportunity to differentiate themselves from their competitors. Because of the unique nature of green hotels, travel agency managers should ensure that all their salespeople are briefed about the products they are about to sell. Sales managers can use the opportunity to observe their salespeople. Salespeople who are knowledgeable about green hotels and have expressed concerns for the natural environment might be more suitable to promote these products.

Additionally, they could ask the human resource department to profile sales staff based on their environmental concern and green hotel knowledge through research. For policy-makers who want to balance between economic development and preservation of the natural environment, promoting green tourism products through travel agency can be a possible method. Policy-makers can improve salespeople's green product knowledge through providing relevant training courses or include on-going environmental issues within existing courses.

6. Limitations, Future Studies, and Conclusion

Although this study makes a significant contribution, it also has limitations. First, it did not examine whether salespeople's recommendation can affect customers' hotel selection decision. Future studies may want to investigate the scenarios when salespeople recommend green hotels to customers. Second, future studies may want to examine whether this research's framework is applicable to environmentally-friendly airlines and cruise lines. Third, whether salespeople's demographic backgrounds will affect their environmentally-friendly behavior can be further investigated.

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Table 1- Characteristics of the participants and companies (N=118)

Demographic traits		%
Gender	Male	39
	Female	61
Respondent's working experience	Less than 1 year	5
	Between 1-5 years	19
	Between 6-10 years	31
	Between 11-20 years	27
	More than 21 years	18
Respondent's age	Between 21-30 years old	17
	Between 31-40 years old	30
	Between 41-50 years old	33
	Between 51-60 years old	20

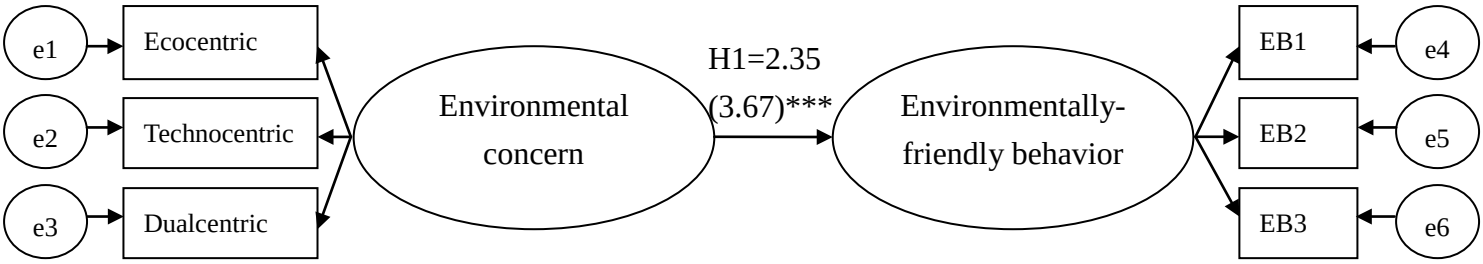
Table 2 Descriptive analysis of the measures

Variable	Measurement items*	Mean	SD	α	AVE	CR
Green Hotel Knowledge	**Green hotel knowledge (GHK)** GHK1: Compared to average person, I am familiar with hotels' environmental policies. GHK2: Compared to my friends, I am familiar with hotels' green programs. GHK3: Compared to people who travel a lot, I am familiar with hotels' green labels.	5.19	0.95	0.84	.65	.85
Environmental Concern	**Environmental Concern (EC)**				.52	.76
	Ecocentric (E)	5.18	1.19	0.83		
	E1: When humans interfere with nature it often produces disastrous consequences.					
	E2: Humans are severely abusing the environment.					
	E3: Despite our special abilities human are still subject to the laws of nature.					
	E4: The balance of nature is very delicate and easily upset.					
	E5: If things continue on their present course, we will soon experience a major ecological disaster.					
	Technocentric (T)	4.68	0.84	0.69		
	T1: Human ingenuity will ensure that we do not make the earth unlivable.[r]					
	T2: The balance between nature is strong enough to cope with the impacts of modern industrial nations.[r]					
	T3: The so-called "ecological crisis" facing humankind has been greatly exaggerated.[r]					

	T4: Humans will eventually learn enough about how nature works to be able to control it.[r]	5.01	1.03	0.93		
	Dualcentric (D)					
	D1: Humans have the right to modify the natural environment to suit their needs.[r]					
	D2: Plants and animals have as much right as humans to exist.					
	D3: Humans are meant to rule over the rest of nature.[r]					
Environmentally-friendly behavior	**Environmentally-friendly behavior (EB)**	5.21	1.06	0.93	.82	.93
	EB1: I recommend green hotels to my customers.					
	EB2: I say positive things about green hotels to my customers.					
	EB3: I encourage my customers to stay at green hotels when traveling.					

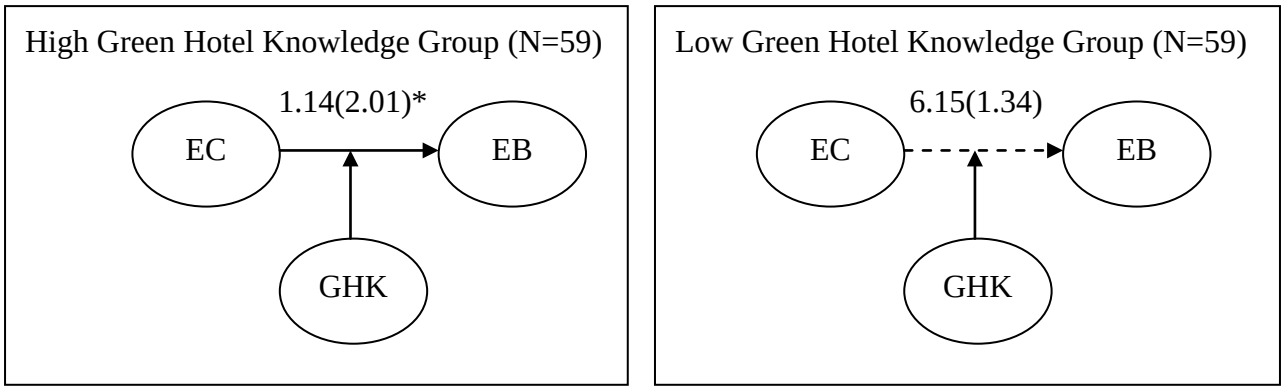
* This paper used a seven-point Likert-type scale when designing the questions

Figure 1. Research Framework- Main Model (N=118)



Number on path: standardized parameter estimation, Number in parentheses: T-Value.
Remark: *Significant at $p< 0.05$; **Significant at $p<0.01$; ***Significant at $p<0.001$.
Model fit: χ^2/ df=2.196, $p<0.001$, RMSEA=0.08, CFI=0.976, NFI=0.957

Figure 2. Green Hotel Knowledge's Moderating Effect (H2)



Number on path: standardized parameter estimation, Number in parentheses: T-Value.
Remark: *Significant at $p< 0.05$; **Significant at $p<0.01$; ***Significant at $p<0.001$.
Model fit: χ^2/ df=1.729, p<0.001, RMSEA=0.079, CFI=0.967, NFI=0.928

EC= Environmental concern; EB= Environmentally-friendly behavior;
GHK= Green hotel knowledge

The threshold that separates the two groups was 5.19.