How Green Marketing Influences Customers’ Green Behavioral Intentions in the Context of Hot-Spring Hotels

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Abstract
This study explores the mediating effects of green innovation, green image, and green perceived value on the relationship between green marketing and green behavioral intention to understand the impact of green marketing on customers’ green behavioral intentions in the context of hot-spring hotels. Additionally, the moderating effect of destination trust on the relationships among green innovation, green image, green perceived value, and the green behavioral intention was also explored. A total of 300 valid responses were collected from hot-spring hotel customers in Jiaoxi, Taiwan. Structural equation modeling was used to analyze the data. The results revealed the following: (1) green image and green perceived value mediate the relationship between green marketing and behavioral intention, among which green perceived value showed a stronger mediating effect; (2) green innovation does not mediate the relationship between green marketing and behavioral intention, implying that the degree of green innovation services provided by hot-spring hotels does not provide customers with a memorable experience; (3) the effects of green innovation, green image, and green perceived value on green behavioral intention were moderated by destination trust, indicating that hot-spring hotel operators need to pay attention to customers’ perception of destination trust. On the whole, customers’ trust in tourist areas and their recognition of the green marketing activities of hot-spring hotels seem to have green consumption value, which positively impacts customers’ green behavioral intentions, thereby bringing economic benefits to hot-spring hotels.

Key Words: green marketing; green innovation; green image; green perceived value; destination trust; green behavioral intention

JEL Classification: M31, Z32, Z33


1. Introduction
Ongoing ecological destruction has prompted growing environmental awareness (Sinnappan & Rahman, 2011). For example, climate change, smog, and natural resource depletion have become global concerns (Ahmed et al., 2021). Consequently, sustainable development and green growth have greatly interested many industries (Mehta & Sharma, 2019). As the hot-spring tourism industry depends on the natural resource of geothermal water, strengthening environmental protection while increasing opportunities for growth is particularly important for this sector (Mi et al., 2019). In order to achieve these goals, all stakeholders, from the national to the corporate level, should be actively involved in environmental management issues to achieve sustainable use of hot-springs resources (Lee & King, 2009). Hot-spring hotels must therefore integrate green issues and implement green marketing activities to formulate management policies to enhance customers’ consumption intentions (Yu, 2015).

Green marketing has been widely researched, including the relationships between green marketing and green innovation (Wu & Chen, 2014) and green image and green perceived value (Lee, 2009). Merli et al. (2019) explored how guests’ perception of green hotel practices influences their hotel experience. Bashir et al. (2019) contributed to developing an extended theory of planned behavior to understand the indicators of green consumer behavior. However, only a few studies have examined the mediating roles of green innovation, green image, and green perceived value in the relationship between green marketing and customers’ green behavioral intentions in a holistic manner. An understanding of these mediating variables could help hospitality managers implement green marketing practices in a more effective way. Therefore, this study uses the Stimulus-Organism-Response (S-O-R) model (Mehrabian & Russell, 1974) as the theoretical basis for investigating how mediating variables, such as green innovation, green image, and green perceived value, influence the effect of green marketing on green behavioral intentions.

In the tourism literature, destination trust is defined as the reliability and credibility of the critical elements related to destinations perceived by tourists. This construct is linked to many key travel decisions, including tourist satisfaction, intention to revisit, commitment, and loyalty (Liu et al., 2019), and is affected by external factors such as news reports (Abubakar & Ilkan, 2016; Xie et al., 2014). The influence of trust in hot-spring destinations on the relationships among green innovation, green image, green perceived value, and green behavioral intention is worth exploring.

We selected as our research object the hot-spring hotels in Jiaoxi Township in Ilan County, Taiwan. The opening of the Hsuehshan Tunnel and National Freeway No. 5 in 2006 greatly increased the number of tourists in Ilan, bringing new business opportunities. We aimed to investigate whether the implementation of green marketing activities in hot-spring hotels and the trust of consumers in Jiaoxi moderate the relationships among consumers’ green innovation, green image, and green perceived value and thereby influence their green behavioral intentions. It is hoped that the results of this study provide the hot-spring tourism industry with reference in the incorporation of green concepts to aid in sustainable development.

2. Literature Review

2.1 Theoretical Background

Lin (2013) proposed that consumer behavioral thinking is divided into three stages: input, processing, and output. Consumer behaviors and decisions are influenced by both internal and external factors. Internal factors, such as motives, personality traits, and lifestyle, can be considered micro factors. External factors, such as culture, reference group, and context, represent macro factors. Figure 1 presents
the framework proposed by Lin (2013) as applied to the context of this study: in the input stage, consumers are influenced by green marketing; in the processing stage, consumers are influenced by micro factors (green innovation, green image, and green perceived value) and a macro factor (destination trust); in the output stage, consumers formulate green behavioral intentions.

Figure 1. Framework of consumer behavioral thinking.

The S-O-R model proposed by Mehrabian & Russell (1974) is well-suited to marketing contexts as it can be used to explain the consumption process (Donovan & Rosster, 1982). It has also been applied to the hospitality industry (Chang, 2016; Haobin et al., 2021). We regarded the implementation of green marketing in hot-spring hotels as the stimulus (S), green innovation, green image, and green perceived value as the organism (O), and green behavioral intentions as the response (R). Consumers perceive the green innovation, green image, and green perceived value of hot-spring hotels and perform internal judgments and interpretation of this stimuli, the results of which are reflected in their green behavioral intentions. This study further investigated whether destination trust moderates the influences of green innovation, green image, and green perceived value on green behavioral intentions. This is equivalent to believing that when consumers have the need, they begin to pay attention to and collect relevant information and evaluate any feasible options, which in turn influences their purchase and behavioral intentions. Thus, another focus of this study was to clarify whether destination trust moderates the relationships among the aforementioned variables.

2.2 Definition of Variables

The ultimate goal of green marketing in hot-spring hotels is to cut down on damage to the environment, reduce the waste of resources, and protect the natural environment. We believe that green marketing allows firms to influence consumer perceptions of their products or services with regard to preventing environmental pollution. We referred to the work of Schoell (1993) in our definition of green marketing as the marketing plans developed and executed by firms to enhance consumer perception of the firm’s efforts to protect the environment.

Via effective management and innovative models, hot-spring hotels can reduce resource consumption, manage the discharge of recycled wastewater, use local raw materials, and enhance their market competitiveness. We referred to work of Wong (2012) in our definition of green innovation as that which can help firms develop new market opportunities and enhance their competitive advantages.

The green image of hot-spring hotels can satisfy consumers who care about protecting the environment. Firms can seek to enhance their own green image and perform market segmentation to bring in economic benefits. We referred to the work of Chen (2010) in our definition of green image as
the image that is presented by firms to consumers through their commitment and attention to protecting the environment.

When consumers go to a hot-spring hotel, they may have green expectations. If the consumers perceive that the hotel cares for the environment, they will perceive value in its environmentally-friendly approach. We referred to the work of Chen & Chang (2012) in our definition of green perceived value as the degree to which consumers perceive that green products and services can satisfy their green expectations and needs via sustainable development. Mainieri & Barnett (1997) stated that green purchase behavior involves selecting products and services that cause less pollution to the environment. We referred to the work of Chan & Lau (2002) in our definition of green behavioral intention as the willingness of consumers to purchase green products and services to help protect the environment.

2.3 Research Hypothesis

With the rise of environmental awareness, many firms are attaching importance to environmentally-friendly concepts in their marketing strategies (Oyewole, 2001). Marketing has also shifted to a focus on innovative activities (Hurley & Hult, 1998). In this era of green consumption, companies are combining environmental factors with marketing strategies to strengthen their competitive edge and increase profits. Therefore, green innovation goes hand in hand with green marketing (Tjahjadi et al., 2020). Ho et al. (2021) suggested that green innovation is essential to green marketing strategies. This includes concepts such as energy saving, green product design, and waste recycling. Green marketing methods implemented by hot-spring hotels, such as providing green bonuses or discounts and applying innovative methods to the design of hotel surroundings, can help achieve the goal of sustainability while meeting the needs of consumers. We therefore proposed Hypothesis 1:

H1: Green marketing positively influences green innovation.

Shrivastava (1995) believed that firms can incorporate environmentally-friendly concepts into the packaging designs of their products and thereby express their commitment to environmental protection, differentiate their products from those of their competitors, and implement green marketing. Ottman (1993) proposed that when green marketing is used to promote a product, the quality, functions, price, and convenience of the product must all meet consumer needs while the impact of the product on the environment is minimized. This establishes the quality of the product and creates a good brand image. Hsieh et al. (2004) pointed out that a good brand image will increase customers’ confidence in the brand and help them distinguish the company from its competitors. As proposed by Merli et al. (2019), customer perception of green practices is a significant contributor to the hotel green image, which influences guest loyalty. Therefore, the green marketing methods implemented by hot-spring hotels, such as advertising or concrete action, will help consumers believe that the hotels are committed to protecting the environment, which enhances their green image. We therefore proposed Hypothesis 2:

H2: Green marketing positively influences green image.
coal, and gas consumption. This will help consumers perceive that they are committed to the protecting 
the environment. We therefore proposed Hypothesis 3:

\( H3: \) Green innovation positively influences green image.

Panesar & Markeset (2008) indicated that as innovation evolves with time, it becomes innovation 
in service. Consumers will evaluate the level of green innovative services in companies to formulate their 
purchase behavior and intentions (Horn & Salvendy, 2006). Consequently, innovative green services help 
hotels fulfill their social responsibility, reduce the impact of their services on the environment, and meet 
customers’ needs for environmentally friendly services, thereby enhancing customer loyalty as well as 
organizational reputation and performance (Tuan, 2021). Innovation is therefore a continuous activity. 
When hot-spring hotels design their environments and overall services using eco-friendly materials and 
to minimize resource processing and pollution, consumers feel that their consumption is less likely to 
harm the environment. We therefore proposed Hypothesis 4:

\( H4: \) Green innovation positively influences green behavioral intention.

Kamins & Marks (1991) indicated that consumers have greater purchase intentions towards 
products that are familiar to them and have good brand image. When a firm advocating environmental 
protection has a good green brand image, consumers will develop trust in them. This means consumers 
will believe in the brand and see its products as safe, reliable, and trustworthy. This will also imperceptibly 
influence the purchase behavior and intentions of consumers. Arseculeratne & Yazdanifard (2014) argued 
that green products can promote a positive brand image for the company as well as increase its 
attractiveness and recognition among consumers. Thus, hotel marketers should confirm the prominence 
and authorisations of their green programmes and develop their green branding to improve consumers’ 
patronage intentions (Nimri et al., 2020). When the green image of hot-spring hotels is trusted by 
consumers, the purchase behavior of consumers will be influenced. We therefore proposed Hypothesis 
5:

\( H5: \) Green image positively influences green behavioral intention.

Teas & Agarwal (2000) referred to perceived value as the overall evaluation that consumers have 
of a product or service after weighing what they pay against what they gain. Thus, green marketing 
generates more perceived value to tourists. It has been observed that green perceived value positively 
influences consumers’ trust, purchase behavior and intentions (Chen & Chang, 2012), and their 
impression of green image (Lin et al., 2017). Amin & Tarun (2019) suggested that organizations, 
managers, policy-makers and hotel owners should increase perceived value regarding green hotels to 
increase customers’ intention to visit. Hot-spring hotels implementing green marketing that can meet 
consumer expectations through environmentally-friendly services could increase their perceived value. 
We therefore formulated Hypothesis 6:

\( H6: \) Green marketing positively influences green perceived value.

Green hotel customers tend to rate hotels based on emotional and social value. Numerous studies 
have demonstrated that green hotels can meet the needs of green customers and that environmental 
values can affect the cognitive and emotional image of hotels (Salem et al., 2022). Many researchers have 
confirmed that environmental concerns, awareness, or values facilitate the intention to purchase eco-
friendly products and services (Riva et al., 2022). Communication of activities related to social 
responsibility offers consumers information about the organization’s value, which may help to create a 
positive image of the organization in the consumer’s mind (Yadav et al., 2016). In hot-spring hotels, when 
customers perceive increased value in multiple green innovations, their impression of the hotel’s green 
image improves. We therefore formulated Hypothesis 7:

\( H7: \) Green perceived value positively influences green image.

Perceived value is the overall evaluation that consumers make of a product or service. A positive 
relationship exists between perceived value and purchase intention (Grewal et al., 1998); that is, when 
customers perceive higher value, their purchase intention becomes greater (Parasuraman & Grewal, 
2000). Green perceived value impacts the trust and satisfaction of consumers in green products, so it is
believed to influence the green behavioral intentions of consumers (Chen & Chang, 2012). Thus, perceived value should be a useful predictor of consumer purchase intentions, and consumers of green hotels with higher perceived value should show a higher willingness to stay in green hotels (Teng et al., 2018). When hot-spring hotels offer green services, whether consumers perceive green value influences their behavioral intention. We therefore proposed Hypothesis 8:

H8: Green perceived value positively influences green behavioral intention.

Trust is the faith that consumers have in the honesty and reliability of salespeople and their ability to provide services that benefit consumers in the long term (Crosby et al., 1990). Anderson & Narus (1990) explained trust within the context of marriages is the belief that partners will not display adverse behaviors or perceive imagery to further their own personal interests. Trust is an exchange of deep faith and honesty with partners. Extant works in the hospitality literature establish the importance of trust for enhancing behavioral loyalty to hotels (Gupta et al., 2019). Thus, when the trust of consumers in a travel destination is combined with the innovative actions of hot-spring hotels, green behavioral intentions are enhanced. We therefore proposed the following hypothesis:

H9a: Destination trust moderates the influence of green innovation on green behavioral intention.

Anderson & Weitz (1992) indicated that trust is a psychological feeling and belief that consumers have that a firm will keep its promises and provide high quality products or services to meet consumer needs. Jalilvand et al. (2012) discovered that electronic word-of-mouth exerts a significant impact on the image and trust of a destination and influences purchase behavioral intention. Butt et al. (2016) demonstrated that consumers’ environmental concern indirectly affects green trust through attitude and brand image. Chang et al. (2019) found evidence that businesses engaged in social welfare activities improve their business image among consumers and engender positive attitudes toward the purchasing of their products or services. Thus, when the trust of consumers in a travel destination is combined with the positive green image of hot-spring hotels, green behavioral intentions are enhanced. We therefore proposed the following hypothesis:

H9b: Destination trust moderates the influence of green image on green behavioral intention.

In their work on medical destinations, Abubakar & Ilkan (2016) found that destination trust played a significant role in marketing and acted as an important element in building relationships between customers and businesses. Online word-of-mouth was shown to positively influence customers’ destination trust and travel intentions. Sukhu & Scharff (2018) claimed that in the hote industry in particular, trust in green practices is critical, as consumers realize that green marketing may be motivated by savings or public image, rather than real environmental concerns. Therefore, when customers trust
the overall service provided by the destination’s service staff and feel that they are trustworthy and reliable, it will strengthen the influence of green perceived value on green behavioral intention, and vice versa. Thus, this study proposes the following hypothesis.

H9c: Destination trust moderates the influence of green perceived value on green behavioral intention.

A summary of the above hypotheses and this study’s framework is shown in Figure 2.

3. Methodology

Figure 3 displays the Green Hotel Mark issued by the Environmental Protection Administration (EPA) of the Executive Yuan in Taiwan. The EPA referred to the Green Coin program promoted in Japan in its development of the Green Hotel Promotion Plan, which encourages customers to bring their own toiletries, use of the same sheets and towels during extended stays, and other eco-friendly measures. Hotels offer consumers lower room rates, dining coupons, product discounts, tourism packages, or discounts on visits to tourist attractions in exchange for green actions or sponsor green promotion events using the money saved by these measures, thereby encouraging participation. Details of the plan are available at the following website: https://greenliving.epa.gov.tw/GreenLife/walksing2013/Action.aspx.

Figure 3. Green Hotel Mark

Source: own elaboration

Hot-spring hotel customers in Jiaoxi, Yilan were recruited as participants for this study. The participants were recruited from hot-spring hotels participating in the Green Hotel Promotion Plan in Jiaoxi. The ten selected hotels are listed in Table 1. The questionnaires were placed in the guest rooms of ten hotels and the customers were asked to complete them at the end of their stay. They were offered a small gift as a token of appreciation for their participation.

The questionnaire used a seven-point Likert scale, ranging from “(1) strongly agree to (7) strongly disagree”. The questionnaire was split into seven parts, as shown in Table 1. The first part collected demographic information, while the second to sixth parts presented questions on green marketing (Rahbar & Wahid, 2011), green innovation (Chen et al., 2006), green image (Chen, 2010), green perceived value (Chen & Chang, 2012), and destination trust (Abubakar & Ilkan, 2016; Xie et al., 2014). The seventh part collected data on green behavioral intention (Chan & Lau, 2002).

Table 1. Selected hot-spring hotels participating in Green Hotel Promotion Plan.

<table>
<thead>
<tr>
<th>Name of hot-spring hotel</th>
<th>Website</th>
</tr>
</thead>
</table>


7. Mei jia Mei Hot-Spring Hotel  http://www.meihotel.com


Source: own elaboration

4. Results

4.1 Demographics Profile

Among the survey respondents, 132 (44%) were male and 168 (56%) were female. It was observed that 209 (70%) respondents were aged between 25 and 44, forming the majority; 149 (49%) respondents had a monthly income ranging from 700 USD to 1,000 USD, forming the majority; and 167 (56%) respondents visited with family or relatives, forming the majority.

Measurement Model Validation

The initial measurement model was modified according to the Modification Index. As shown in Table 2, the $\chi^2$/df value was less than 5; the NFI, IFI, GFI, AGFI, and CFI values were all greater than 0.8; and the value of RMSEA was less than 0.08, indicating that the measurement indicators of each variable were within the acceptable range (Bagozzi & Yi, 1988). Additionally, the Cronbach’s $\alpha$ of all the variables used in this study was above 0.7, the CR value was greater than 0.6, and the AVE value lies between 0.49 and 0.59, indicating that the variables considered in this study had good consistency with the latent variables.

Table 2. Reliability and convergent validity of the constructs.

<table>
<thead>
<tr>
<th>Questionnaire item</th>
<th>Factor loading</th>
<th>Cronbach’s $\alpha$</th>
<th>CR</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Green marketing</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. This hot-spring hotel has set up environmental notices to promote green practices (such as saving water, recycling paper, saving electricity, etc.), which is a good green marketing practice.</td>
<td>0.58</td>
<td></td>
<td></td>
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<tr>
<td>2. This hot-spring hotel offers green marketing discounts (for example, if hotel supplies are not used, you can get an accommodation discount), which is a good green marketing practice.</td>
<td>0.74</td>
<td></td>
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<tr>
<td>3. This hot-spring hotel’s eco-friendly marketing caught my attention. This is a good green marketing method (proactive participation in the Environmental Protection Administration’s “Green Hotel” campaign).</td>
<td>0.74</td>
<td></td>
<td></td>
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<tr>
<td>4. This hot-spring hotel encourages customers to take public transportation and provides shuttle services, which is a good green marketing strategy.</td>
<td>0.77</td>
<td></td>
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<tr>
<td>5. This hot-spring hotel has the Green Mark, meaning that food and beverages, accommodation, decorations, and building materials were chosen as they pollute the environment less. This is a good green marketing strategy.</td>
<td>0.71</td>
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<tr>
<td>6. This hot-spring hotel maximizes its surrounding facilities, such as using local organic ingredients for food and beverages and including the natural landscape in its eco-tourism itineraries, which is a good green marketing strategy.</td>
<td>0.66</td>
<td></td>
<td></td>
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<tr>
<td>Green innovation</td>
<td>0.77</td>
<td>0.81</td>
<td>0.59</td>
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<tr>
<td>1. I think that the overall design of this hot-spring hotel and its services aim to minimize environmental pollution.</td>
<td>0.86</td>
<td></td>
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<tr>
<td>2. I think that the services and environmental design of this hot-spring hotel aim to reduce energy and resource usage.</td>
<td>0.67</td>
<td></td>
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<tr>
<td>3. I think that the services and overall environmental design of this hot-spring hotel mostly use environmentally friendly materials.</td>
<td>0.75</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Green image</td>
<td>0.82</td>
<td>0.84</td>
<td>0.58</td>
<td></td>
</tr>
<tr>
<td>1. In general, this hot-spring hotel is professional and environmentally conscious.</td>
<td>0.61</td>
<td></td>
<td></td>
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<tr>
<td>2. In general, this hot-spring hotel has good environmental conservation performance.</td>
<td>0.67</td>
<td></td>
<td></td>
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<tr>
<td>3. In general, this hot-spring hotel is committed to the environment.</td>
<td>0.82</td>
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<td></td>
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<tr>
<td>4. In general, this hot-spring hotel is trustworthy and cares about the environment.</td>
<td>0.90</td>
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<tr>
<td>Green perceived value</td>
<td>0.81</td>
<td>0.81</td>
<td>0.52</td>
<td></td>
</tr>
<tr>
<td>1. The environmental friendliness of this hot-spring hotel makes me feel that it has value.</td>
<td>0.77</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. This hot-spring hotel is just as environmentally friendly as I expected.</td>
<td>0.72</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>3. I chose to spend money at this hot-spring hotel because of its devotion to environmental conservation.</td>
<td>0.79</td>
<td></td>
<td></td>
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<tr>
<td>4. I chose to spend money at this hot-spring hotel because it is more environmentally friendly than other hot-spring hotels.</td>
<td>0.60</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Destination trust</td>
<td>0.80</td>
<td>0.84</td>
<td>0.52</td>
<td></td>
</tr>
<tr>
<td>1. The hot-spring tourist destination area in Jiaoxi meets my expectations.</td>
<td>0.40</td>
<td></td>
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<tr>
<td>2. I think it is very safe to visit the Jiaoxi hot-spring area.</td>
<td>0.73</td>
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<tr>
<td>3. I think the Jiaoxi hot-spring area is a trustworthy place to visit.</td>
<td>0.79</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. The performance of businesses and hotels in the Jiaoxi hot-spring area met my expectations.</td>
<td>0.84</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. I think businesses and hotels in the Jiaoxi hot-spring area will honor their service promises to customers.</td>
<td>0.75</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Green behavioral intention</td>
<td>0.75</td>
<td>0.83</td>
<td>0.57</td>
<td></td>
</tr>
<tr>
<td>1. In the future, I will consider spending money at this eco-friendly hot-spring hotel.</td>
<td>0.82</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. In the future, I will choose to spend money at this hot-spring hotel because of its effective environmental pollution management.</td>
<td>0.89</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. In the future, I will consider buying environmentally friendly services and products from hot-spring hotels.</td>
<td>0.70</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. In the future, I will consider spending money at this hot-spring hotel because of environmental and ecological issues.</td>
<td>0.54</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

Note. CR: Composite Reliability; AVE: Average Variance Extracted; N=300; χ2/df =2.739; NFI=0.80; IFI=0.87; GFI=0.84, AGFI=0.81; CFI=0.86, RMSEA=0.07; ***p<0.001.

Source: Own research

4.2 Structural Model Validation

The overall model fit indices mostly met the standard values, as shown in Figure 3. The hypotheses of this study were supported, except for H1. The results indicated that green marketing affected green image and green perceived value (H2 and H6 were supported). Green innovation and green perceived value affected green image (H3 and H7 were supported). Green innovation, green image, and green perceived value affected green behavioral intention (H4, H5 and H8 were supported).
Additionally, green marketing affected green behavioral intention through the mediating effect of green image and green perceived value.

Figure 4. Results of structural equation modeling.

χ²/df = 4.09; NFI = 0.97; IFI = 0.98; GFI = 0.99, AGFI = 0.92; CFI = 0.98; ***p < 0.001.

Source: Own research

Furthermore, as shown in Tables 3, 4, and 5, the indirect effect of green marketing on green image was observed to be 0.159 (0.062*0.188+0.47*0.314), the indirect effect of green innovation on green behavioral intention through green image was 0.057 (0.188*0.304), the indirect effect of green perceived value on green behavioral intention through green image was 0.096 (0.188*0.304), and the indirect effect of green marketing on green behavioral intention was 0.27 (0.062*0.194+0.456*0.304+0.470*0.263). Consequently, the effect of green perceived value on green behavioral intention is 0.358 (0.314*0.304+0.263) performing greater total effects than the mediating variables of green innovation and green image.

Table 3. Standardized direct effect

<table>
<thead>
<tr>
<th>Variable</th>
<th>Green marketing</th>
<th>Green innovation</th>
<th>Green image</th>
<th>Green perceived value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green innovation</td>
<td>0.062</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Green image</td>
<td>0.298***</td>
<td>0.188***</td>
<td>---</td>
<td>0.314***</td>
</tr>
<tr>
<td>Green perceived value</td>
<td>0.470***</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Green behavioral</td>
<td>---</td>
<td>0.194***</td>
<td>0.304***</td>
<td>0.263 ***</td>
</tr>
<tr>
<td>intention</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Notes: ***p<0.001.

Source: Own research

Table 4. Standardized indirect effect

<table>
<thead>
<tr>
<th>Variable</th>
<th>Green marketing</th>
<th>Green innovation</th>
<th>Green image</th>
<th>Green perceived value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green innovation</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Green image</td>
<td>0.159**</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>
4.3 Analysis of the Moderating Role of Destination Trust

Multiple group analysis was conducted to examine the moderating role of destination trust in the proposed hypotheses (i.e., H4, H5, and H8). Thus, this study uses K-means to classify the samples into high trust clusters and low trust clusters, as shown in Table 6. As a result, based on the acceptable model fit, the model comparison between high and low destination trust groups was significant at an alpha level of .05. This result indicated that the relationships among the variables in the model significantly differed across the two destination trust groups. The results showed that destination trust moderated the relationships among green innovation, green image, green perceived value, and green behavioral intention (H9a, H9b, and H9c were supported). This implied that when customers perceived high destination trust, it positively enhanced the relationship of green innovation, green image, green perceived value, and green behavioral intention. Moreover, when customers perceived low destination trust, the relationship of green innovation, green image, and green perceived value with green behavioral intentions was reduced. It was worth mentioning that when customers perceived low destination trust, the influence of green innovation and green behavioral intentions were more significant. The moderating effect of low trust on green innovation (β=0.32) was greater than the moderating effect of high trust (β=0.13). It can be inferred from the above findings that this was a condition of cognitive dissonance. Festinger (1957) believed that cognitive dissonance was the inconsistency between behavior and attitude. When individuals undertook conflicting decisions, new ideas emerge mentally which conflicted with their previous beliefs. Thus, they looked for more information or ways to support their ideas or beliefs to balance out the dissonance. Hence, consumers may not exhibit a high level of trust in the hot-spring hotel due to the abundance of information. However, as they enjoyed the hotel’s innovative services and design, they might develop positive feelings about it, such that their perceptions will change to reduce cognitive dissonance, and their subsequent behavioral intentions might improve.

Table 6. A comparison between high trust clusters and low trust clusters.

<table>
<thead>
<tr>
<th>Destination trust group</th>
<th>Independent variable</th>
<th>Green innovation</th>
<th>Green image</th>
<th>Green perceived value</th>
</tr>
</thead>
<tbody>
<tr>
<td>High trust cluster</td>
<td>N</td>
<td>P</td>
<td>F</td>
<td>0.131*</td>
</tr>
<tr>
<td></td>
<td>174</td>
<td>58%</td>
<td>5.48</td>
<td></td>
</tr>
</tbody>
</table>
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5. Conclusions and Discussion

Taiwan’s abundant natural hot springs have contributed to tourism development with both positive and negative impacts on the natural environment (Mi et al., 2019). This study aims to understand the impact of green marketing on customers’ green behavioral intentions in the context of hot-spring hotels. The aim was to generate a reference for hotel operators for the sustainable development of hot-spring hotels. In general, offering eco-discounts and discounted accommodations can raise customers’ awareness and perceived value of the hotel’s green image, as they display their commitment to the environment and its protection. It is also possible to implement green innovations based on the surrounding environment and design management principles so that customers are convinced of the hotel’s environmental commitment, thereby positively promoting its green image. When customers trust the hot-spring hotel’s green image, it influences their decision to help the ecological environment, which will also influence their purchase behavior will be positively influenced.

First, the direct effect of green marketing on green innovation, green image, and green perceived value was investigated. The results show that green marketing significantly influences green image (β=0.298, p <0.001). Therefore, this study suggests that hot-spring hotel operators base their green marketing activities around the establishment of a green image. They can make short clips to promote their hotels or create official fan groups on social media. Sukhu & Scharff (2018) suggested that consumers need to trust that hotels have adopted green practices for ethical reasons to become loyal customers. Hence, it is imperative that marketers convey that their businesses believe in protecting the environment. In addition, because the customers easily observe the behavior of frontline employees, positive changes in employees’ attitudes will show customers that the company is truly an environmentally-friendly institution. Thus, a positive brand image may be established. Organizations can invest in promoting positive images, for example, through advertising on social media channels (Okumus et al., 2019).

Furthermore, green marketing significantly influences green perceived value (β=0.470, p <0.001). Therefore, this study suggests that in their marketing strategies, hot-spring operators provide services and products with more value than their competitors. They can promote their environmental friendliness to customers through their food and beverages, accommodations, and decorations. In addition, hotels can use innovative technologies in their operation, such as an energy management system that monitors heating, air conditioning, and lighting facilities and operates according to demand, thereby avoiding the waste of resources. Through green innovation strategies, hotels can save energy, reduce operating costs, and market themselves to customers by promoting their green image. When the service provided by hot-spring hotels meets customers’ expectations, brand image is evaluated based on what is given and what is received. Hotels can use this to build on their image of environmental friendliness and commitment. Because implementing corporate social responsibility (CSR) is helpful for companies to mitigate the negative environmental impacts of business activities (Bikefe et al., 2020), Metzker et al. (2021) suggested that by implementing CSR, companies can build their prestige, improve the satisfaction and loyalty of stakeholders, and thus increase the company’s value. Nevertheless, researchers investigating customer perception found that some practices in green hotels (i.e., non-replacement of towels or bed sheets in rooms until guests request it) decrease the feelings of pleasure and excitement associated with staying in a hotel, thus creating hedonic risks for green hotels (Agag & Colmekcioglu, 2020). Therefore, it is
important for companies to understand the needs of their target customers when conducting green marketing to enhance customer perceived value.

Sustainable innovation can be seen as a core feature of recent hotel management procedures and has been largely valued by academics and hotel managers (Nilashi et al., 2021). Thus, analyzing a company’s environmental approach is critical because companies may be major contributors to environmental mitigation because of their potential for innovation, technical and commercial expertise, and the scope of their operations (Aragon-Correa et al., 2015). Sustainable practices in a hotel refer to product availing strategies based on demand. Due to the increasing demand for green products, hotels continuously innovate their production patterns by adopting business models that focus on green practices to gain a competitive advantage (Astawa et al., 2021). Nevertheless, the results obtained in this study show that green marketing does not have a significant effect on green innovation ($\beta=0.062$). Therefore, this study suggests that when implementing green marketing strategies, its content should be evaluated from a holistic perspective of environmental protection. Innovation design could also be expanded, for example, by providing designated shuttle services and encouraging customers to take public transportation. Bicycles can also be provided for customers to rent. These innovations would enable customers to experience the hotel as convenient, considerate, and environmentally-friendly.

Finally, this study finds that compared to high destination trust, the effect of green innovation was observed to be greater on green behavioral intentions when customers exhibited low destination trust. This was hypothesized to be an asymmetric effect (Suzuki et al., 2001). Therefore, in addition to having a good reputation and ensuring customer loyalty, hot-spring hotels gain more economic benefits when their customers are satisfied with the overall services provided, feel that the hotel cares for the environment, feel at ease during their stay and feel that the hotel is trustworthy. Liu et al. (2019) argued that destination managers should maintain and strengthen all aspects of visitor trust (i.e., trust in authorities, trust in other visitors, trust in staff, trust in residents, and trust in agents) in order to achieve long-term trust. Pereira-Moliner et al. (2021) proposed that in addition to eco-savings, hotels can seek to differentiate themselves through their sustainability practices, offering higher quality services that generate new experiences. This will aid in creating a good image for tourism companies and enhance consumer trust. In the social media era, Yu et al. (2017) suggested that user-generated reviews provide rich and trustworthy information that significantly impacts travelers’ decisions. Therefore, the marketers of hot-spring hotels need to draw on social media strategies to strengthen customers’ trust in hot-spring hotels and enhance their desire to visit.

6. Limitations for Future Studies

This study was based on the visitors who stayed at hot-spring hotels in Jiaoxi, Taiwan. It does not represent all hot-spring hotel operators in the area. Therefore, to increase the study’s reliability, follow-up studies should include hot-spring operators from other regions and conduct further research accordingly. Additionally, this study suggests that many other factors influence visitors’ behavioral intentions, such as brand awareness. Therefore, future studies can examine these variables such that hot-spring hotel operators can better understand their consumers’ demands.

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