Green Hotels: Exploring the Drivers of Customer Approach Behaviors for Green Consumption

Heesup Han 1, Che Chen 1, Linda Heejung Lho 1, Hyeran Kim 1 and Jongsik Yu 2,*

1 College of Hospitality and Tourism Management, Sejong University, 98 Gunja-Dong, Gwangjin-Gu, Seoul 143–747, Korea; heesup.han@gmail.com (H.H.); cecencan@naver.com (C.C.);
heeelho@gmail.com (L.H.L.); stekiran@gmail.com (H.K.)
2 College of Business Division of Tourism and Hotel Management, Cheongju University, 298 Daesung-ro, Cheongwon-gu, Cheongju-si 28503, Chungcheongbuk-do, Korea
* Correspondence: andyjs.yu@gmail.com

Received: 1 October 2020; Accepted: 28 October 2020; Published: 3 November 2020

Abstract: This research developed an integrated theoretical framework encompassing green image congruence, care for the environmental consequences, eco-conscious behaviors, sense of moral obligation, and perceived environmental corporate social responsibility (CSR) in order to explain customer approach behaviors for green hotels. Previous researches discussed about environmental behavior and consumer behavior. However, customer environmentally responsible approach decision formation and consumption activities are an insufficiently explored topic. This study implemented quantitative research methodological. The findings of this study showed the correlation of research constructs are significant and such relationships contribute to boosting of customer approach behaviors. Sense of obligation to take green actions as a mediator maximized the effect of other research variables on approach behaviors. In addition, a prominent role of the sense of moral obligation to take green actions in determining approach behaviors was uncovered. Perceived environmental CSR played a vital moderating role within the proposed conceptual framework. The outcomes of this research can help hotel operators and academics better comprehend customer pro-environmental decision-making process and behaviors.

Keywords: approach behaviors for green hotels; green image congruence; environmental CSR; environmentally conscious behaviors; sense of obligation to take green actions; green consumption

1. Introduction

Sustainable tourism has become increasingly important as a pro-social/pro-environmental behavior and as a subject of hospitality and tourism research [1–4]. Indeed, many studies are pertinent to consumer behavior and environmental issues with considerable emphasis on the hospitality and tourism sector [2,5,6]. Particularly, hotels are considered a major contributors of environmental deteriorations through water contamination, emissions of greenhouse gases, soil pollution, and food waste generation among various hospitality and tourism sectors [7–9]. For example, according to [10], hotels produce 28.97k tons waste per year in UK, including 9% total food waste from the industry. These environmental pollution issues are undeniable in that the hotel industry has been growing faster than ever over the past few decades. Given this, the term “greening” is attracting substantial attention within the hotel context [9,11]. A green hotel is an environmentally responsible lodging property that actively reduces its effect on the natural environment [4,11,12].

Circular economy approach plays an important role in sustainable tourism, which requires symbiotic relationships between tourists, hotels and other relevant departments [13,14]. For example, the hotel has to encourage customers to re-use hotel amenities, such as towels and slippers. Eliciting
guests’ positive eco-friendly intentions and approach behaviors for a firm is therefore a crucial goal for every green hotel company [15]. Uncovering diverse factors that drive such approach decisions and behaviors for environmentally responsible products is becoming an essential requisite for the successful operations of green hotels. Researchers in the existing environmental/consumer behavior literature assert that such factors as care for ecological consequences and a sense of moral obligation are of great importance in generating patrons’ good behaviors for eco-friendly products [16–20]. In addition, the existing studies indicate that image congruence [21–23] and eco-conscious behaviors in everyday life [24–26] are crucial triggers of approach intentions/decisions for environmentally friendly products/services.

The role of these constructs has been often investigated in the contexts of a broad range of consumer eco-friendly behaviors [9,12,22,23]. Nevertheless, despite academics’ increasing consensus on the importance of care for environmental consequences, sense of moral obligation, image congruence, and eco-conscious behaviors, an empirical effort that uncovers the possible intricate associations among these constructs has been hardly made. In addition, research centering on the integrative approach for the explication of customer approach behavior generation process for green products is not plentiful to date, particularly in the hospitality industry. Moreover, existing studies on environmental behavior have pointed out the importance of “perceived environmental corporate social responsibility” (CSR) and its influence on the customer’s behavior in the pro-environment decision-making process [27–29]. However, customer perceived environmental CSR and its possible influence have been scarcely examined in the green hotel context. Researchers in consumer behavior frequently consider that perceived environmental CSR contains a moderating nature [30,31]. However, the possible moderating role of this variable in the formation of approach green consumption behaviors among hotel guests has been barely examined.

In order to improve these gaps, the present research was developed. This study’s objectives are accordingly to come up with a theoretical model explaining the convoluted process of generating customer approach behaviors for green hotel products. Specifically, the present study aimed (1) to look into the relationships among green image congruence, care for environmental consequences of using hotels, environmentally conscious behaviors, and sense of moral obligation in forming approach behaviors, (2) to examine the moderating effect of perceived environmental CSR, and (3) to unearth the mediating influence of sense of obligation to take green actions. The subsequent section is the literature review. Then the methodology and results sections follow. Finally, the discussion and implication section are provided.

2. Literature Review

2.1. Green Image Congruence

Owing to the prominent nature of hospitality and tourism products, the importance of image congruence in elucidating patrons’ behaviors has been stressed by many academics [23,32,33]. Image congruence is a matching concept, which forms based on a personal comparison between a patron’s self-image and a specific product image [21,34]. Social self-image and ideal social self-image are two key aspects of self-image [35]. Likewise, social image congruence encompasses social self-image congruence and ideal social self-image congruence [34,36]. While social self-image accordance refers to comparison across social self-image and a product image, ideal social self-image accordance matches ideal social self-image and product image [32,34,36]. Social self-image is how a guest perceives other customers see him/her, while the ideal social self-image is how a guest would like other customers to see him/her [21]. Green image congruence includes both green social self-image congruence and green optimal social self-image congruence. In the present research, green image congruence thus indicates a matching concept generated based on comparing a guest’s social/ideal social self-image and a green hotel product image. As stated in [21], image congruence is a vital originator of moral norm and traveler approach intentions for airline products. Their findings were consistent with [32]’s
earlier findings which indicated that a matching social/ideal social self-image and a firm’s image is essential in generating customer positive post-purchase intentions/behaviors.

**Hypothesis 1 (H1).** Green image congruence has a positive effect on a sense of obligation to take green actions.

**Hypothesis 2 (H2).** Green image congruence has a positive effect on approach behaviors for green hotels.

2.2. Care for Environmental Consequences of Using Hotels

When a company cares for environmental consequences and has concern about environmental deteriorations, the firm institutes diverse eco-friendly programs and practices a variety of conservation activities (e.g., utilizing renewable materials, preserving natural resources, using regional products, saving water/energy, reducing solid wastes, minimizing chemical material use, and bioenergy use as an alternative to fossil fuels) [4,9,37]. Likewise, when a patron cares for environmental consequences and concern about ecological issues, the patron pro-actively engages in various responsible behaviors for environmental protection in consumption situations (e.g., energy/water/resources saving, reduced use of disposable products, green product purchasing, garbage sorting, towel reuse, and public transportation use) [3,9,15,38]. Among environmental consumer behavior researchers, there is a general consensus that a patron’s care for environmental consequences of using conventional products is of importance in illuminating his/her pro-environmental intention generation process and behaviors [12,18,19].

The term “care for environmental consequences” indicates an individuals’ level of concern regarding the adverse effect of their ecologically unfriendly utilizing behaviors on the environment and its harmful consequences [11,18,19,38]. In the current consumer behavior literature, care for environmental consequences is alternatively called problem awareness, environmental concern, or awareness of adverse consequences [39]. A considerable amount of the literature indicates that customers who strongly care for environmental deteriorations are more likely to prefer environmentally responsible purchase activities and to strongly feel obliged to take such actions [5,17,20]. In other words, these individuals with high environmental concerns often make eco-friendly product choices and consume products/services in an environmentally responsible way [40,41]. In addition, these customers often have a healthy level of personal moral norm to practice such green consumption activities [5,11].

**Hypothesis 3 (H3).** Care for environmental consequences of using hotels positively affects sense of obligation to take green actions.

**Hypothesis 4 (H4).** Care for environmental consequences of using hotels positively affects approach behaviors for green hotels.

2.3. Environmentally Conscious Behaviors

In the extant theories/models with pro-social motives, norm activation theory [18] and value-belief-norm model [20] have been frequently employed and applied to explicate individuals’ pro-environmental consumption/attitude. However, the effectiveness and comprehensiveness of such theories/models have been questioned [17,19]. Han [24] indicated that for the increase of the sufficiency of a theoretical framework with pro-social motives, which are designed for explaining customer pro-environmental behaviors, integrating the concept of environmentally conscious behaviors in everyday life into the framework is an essential process. According to [24,25], environmentally conscious behaviors indicate personal eco-friendly behaviors that they engage in their daily routine.

Suppose a patron uses a recycling center or recycles some of his/her household waste, reduces his/her use of electricity/water, and he/she chooses a product that won’t cause any pollution, the patron’s behavior is eco-friendly and environmentally conscious in his/her daily life [25,26]. These environmentally conscious natures in everyday life can be interpreted as a habitual dimension of individuals green consumption decision-making process and behaviors [24]. Empirical evidence exists
that supports the vital role of this habitual factor in eliciting moral norm in the formation of approach decisions for green products. Lalot et al. [42] demonstrated the criticality of habitual dimension in process of generating individuals’ approach intention to act green. More recently, in an empirical endeavor on developing a new theory about green purchase decision-making, [24] uncovered that environmentally conscious behaviors in daily life are a contributor to activating moral obligation and soaring green purchase behaviors for hospitality products.

**Hypothesis 5 (H5).** Environmentally conscious behaviors positively affect sense of obligation to take green actions.

2.4. Sense of Obligation to Take Green Actions

Customers’ sense of obligation to take green actions is of critical importance in explaining their environmentally conscious decision formation and behaviors [16,17,20,43]. Indeed, the feeling of being morally obliged to take green action is one of the most prevalent concepts in environmental consumer behavior literature [17,44,45]. Moral obligation to make green choices is a significant component of normative process in customers’ environmentally responsible decision formation [17,19,44]. Unlike social norms that reflect a society’s external standards, moral norms reflect internal standards (i.e., internally imposed rules) [19,46]. Schwartz and Howard [45] ascertained this concept as a “moral obligation to perform or refrain from specific actions” (p. 191). Similarly, [46] described making green choices as an individual’s moral obligation and self-regulation concerning particular pro-social or pro-environmental actions. Accordingly, feeling obliged to take green actions is used interchangeably with such terms as moral obligation, moral norm, and personal norm [19,45]. Undoubtedly, moral obligation is regarded as the essential dimension of customer eco-friendly approach decision formation and attitude toward green products within the existing literature context [16,43]. In fact, empirical evidence in these researches supports the vital role of moral obligation as direct and proximal determinant of such pro-environmental decision and behaviors.

**Hypothesis 6 (H6).** Sense of obligation to take green practices positively influences approach behaviors for green hotels.

2.5. Perceived Environmental CSR

Given that an increasing number of patrons are aware of the environmental issues and that the entire society is growingly eco-conscious [12,47–49], every corporation faces stronger pressure for environmentally and socially responsible businesses/activities than ever [27,29,31,48]. Greening the company and increasing environmental CSR activities are rapidly becoming the key strategies of differentiating the company’s products from conventional ones and important constituents of the success of businesses [27,30,47,49]. Environmental CSR has also been an emerging topic in the hospitality and tourism field [31]. Indeed, due to its potential contribution to a firm’s reputation/image enhancement and new customer attraction, environmental CSR is regarded as an appealing topic for academics and entrepreneurs in hospitality and tourism [29,30].

Environmental CSR refers to a company’s dedication to the environmentally friendly evolution of a society without much loss of the company’s financial performance [31]. Any firm that actively practices environmental CSR activities does its business in a manner in line with environment protection and sustainable development [27,47]. Environmental CSR and its influence on customer behaviors have been broadly investigated in various areas [27,28]. According to recent studies, when customers perceive that a particular company actively engages in environmental CSR activities, their purchase decision formation and behaviors become positive for its products/services [28,31]. That is, customers’ decision-making-process and buying behaviors are under the influence of their perception of the company’s environmental CSR. Consistent with these studies, in the tourism
industry, [30] uncovered that a firm’s environmental CSR efforts influence the associations among cognitive, affective, and normative factors in travelers’ behavioral intention generation process.

**Hypothesis 7a (H7a).** The relationship between green image congruence and being morally obliged to take green practices is significantly affected by perceived environmental CSR.

**Hypothesis 7b (H7b).** The relationship between care for environmental consequences of using hotels and being morally obliged to take green practices is significantly affected by perceived environmental CSR.

**Hypothesis 7c (H7c).** The relationship between environmentally conscious behaviors and being morally obliged to take green practices is significantly affected by perceived environmental CSR.

2.6. Proposed Theoretical Framework

The proposed model of the present research is shown in Figure 1. A total of six variables are included in this model. Green image congruence, care for environmental consequences of using hotels, environmentally conscious behaviors, and sense of moral obligation are used as predictors of approach behaviors for green hotels. Hypotheses 1–6 are about linking the associations of these constructs. In addition, perceived environmental CSR is employed as a moderator. Hypotheses 7a–c are about the role of this moderator.

![Figure 1. The Proposed Conceptual Framework.](image)

3. Methods

3.1. Measurement Development

For the assessment of study constructs, the measurement items were implemented from the extant studies [17,19,21,26,50–52]. Respectively, four items were adopted to measure green image congruence (e.g., “The typical customer at this green hotel has an image similar to how other people see me”). Care for the environmental consequences of using hotels was measured with four items (e.g., “Humanity is severely abusing the environment”). Environmentally conscious behaviors were analyzed with three items (e.g., “When there is a choice, I always choose that product that contributes the least to pollution”). To measure sense of obligation to take green actions, a total of three items were used (e.g., “I feel an obligation to choose this green hotel because it is less harmful to the environment than...
conventional hotels”). Perceived environmental corporate social responsibility was measured with three items (e.g., “This hotel contributes to maintaining and preserving the environment”). Lastly, to evaluate approach behaviors for green hotels, three items were used (e.g., “I will make an effort to stay at this green hotel in the future”).

The developed questionnaire consists of these measurement items for research variables, study design, and demographics. The survey questions were pre-tested with hospitality academics. Referring to the pre-test results, the improvement of wording and measurement refinement were done. At last, the questionnaire was finalized after a comprehensive review by two academic experts.

3.2. Collection of Data and Sample Characteristics

To obtain the research objectives a survey methodology was used. Well-trained students served as surveyors. They conducted the survey near downtown hotels in a metropolitan city of South Korea. Only those who actually stayed at a hotel were required to answer the survey questionnaires. Participation in this survey was discretionary. Upon the respondents’ agreement of questionnaire participation, the surveyors provided the explanation about the research and its purposes. The participants filled out the survey questionnaire and returned it onsite. The survey took about nine minutes on average. A total of 250 cases were obtained from this process to use for data analysis.

Of 250 participants, a total of 135 were men (54.0%) whereas 115 were women (46.0%). Their ages ranged from 19 years old to 65 years old. The participants’ education level was asked. Most participants reported that they were college-graduates (69.1%), followed by graduate-degrees (23.7%) and high school graduates (7.2%). With respect to respondents’ household income level, roughly 19.0% reported their income between $30,001–50,000, followed by between $50,001–70,000 (17.7%), over $90,000 (17.7%), $30,000 or less (16.1%), and between $70,001–90,000 (12.9%). Regarding the number of yearly-based hotel stays, about 49.3% reported 2–5 times, followed by one time (38.7%), and 6 times or higher (12.0%).

3.3. Data Analysis

Initial data screening was conducted to detect any potential missing values. Then, outliers and data distribution were evaluated to confirm the data validity. In order to assess the proposed conceptual model, a two-step approach of [53] was employed. This approach is widely effective and reliable for structural equation modeling. Chi-square test was used for evaluating the moderating impact of perceived environmental CSR. In this study, SPSS 22 and AMOS 22 were used for the data analysis.

4. Results

4.1. Confirmatory Factor Analysis and Data Quality Testing

A confirmatory factor analysis (CFA) was conducted to develop the measurement model. The results of the CFA demonstrated the satisfactory level of the goodness-of-fit statistics ($\chi^2 = 294.103$, $df = 155$, $p < 0.001$, $\chi^2/df = 1.897$, RMSEA = 0.060, CFI = 0.964, IFI = 0.964, and TLI = 0.956). All measurement items were loaded to the associated latent factor in a significant manner ($p < 0.01$). Composite reliability was calculated. As shown in Table 1, the values (green image congruence = 0.938, care for environmental consequences of using hotels = 0.926, environmentally conscious behaviors = 0.779, sense of obligation to take green actions = 0.935, perceived environmental CSR = 0.854, and approach behaviors for green hotels = 0.828) exceeded the threshold of 0.70, suggested by [54]. This result demonstrated the internal consistency among items within a latent factor.
Average variance extracted (AVE) values were then calculated. As depicted in Table 1, the values (green image congruence = 0.790, care for environmental consequences of using hotels = 0.759, environmentally conscious behaviors = 0.548, sense of obligation to take green actions = 0.828, perceived environmental CSR = 0.661, and approach behaviors for green hotels = 0.622) were all higher than the minimum threshold of 0.50, suggested by [54]. This result demonstrated the convergent validity of the multi-item measures. Additionally, the AVE values were all above the correlations (squared) between research variable. Thus, discriminant validity was supported.

4.2. Structural Equation Modeling and Hypotheses Testing

The conducted structural equation modeling (SEM) assessed the proposed conceptual framework. The SEM results revealed that the model consisted of a satisfactory level of goodness-of-fit statistics ($\chi^2 = 229.455, df = 110, p < 0.001, \chi^2/df = 2.086, \text{RMSEA} = 0.066, \text{CFI} = 0.965, \text{IFI} = 0.964, \text{and TLI} = 0.957$). In general, our model had an acceptable level of anticipation power for approach behaviors, accounting for approximately 71.5% of the variance in the approach behaviors. Our model further clarified about 42.5% of total variance in sense of obligation to take green actions. Detailed information of the SEM findings is summarized in Table 2 and Figure 2.

The arranged influence of green image congruence was tested. The results revealed that green image congruence exerted a significant impact on sense of obligation to take green actions ($\beta = 0.464, p < 0.01$) and on approach behaviors for green hotels ($\beta = 0.138, p < 0.05$). Hypotheses 1 and 2 were supported. The hypothesized impact on concern for environmental consequences of using hotels was assessed. Our findings showed that care for environmental consequences of using hotels had a positive and meaningful effect on sense of obligation to take green actions ($\beta = 0.161, p < 0.01$) and on approach behaviors for green hotels ($\beta = 0.103, p < 0.05$). Therefore, this result supported Hypotheses 3 and 4. The empirical role of environmentally conscious behaviors was tested. The result of our research showed that environmentally conscious behaviors had a substantial influence on sense of obligation to taken green actions ($\beta = 0.169, p < 0.05$). Hence, Hypothesis 5 was supported. Lastly, Hypothesis 6 was tested. As expected, the association between sense of obligation to take green actions and approach behaviors for green hotels was positive and significant ($\beta = 0.705, p < 0.01$). Therefore, Hypothesis 6 was supported.

Table 1. The Confirmatory Factor Analysis Results and Correlations.

<table>
<thead>
<tr>
<th>Factors</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
<th>Mean</th>
<th>CR</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Green image congruence</td>
<td>1.000</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>4.591</td>
<td>0.938</td>
<td>0.790</td>
</tr>
<tr>
<td>(2) Care for environmental consequences of</td>
<td>0.371</td>
<td>1.000</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>6.158</td>
<td>0.926</td>
<td>0.759</td>
</tr>
<tr>
<td>using hotels</td>
<td>(0.138)</td>
<td>(0.101)</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(3) Environmentally conscious behaviors</td>
<td>0.424</td>
<td>0.392</td>
<td>1.000</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>5.285</td>
<td>0.779</td>
<td>0.548</td>
</tr>
<tr>
<td>(4) Sense of obligation to take green actions</td>
<td>0.569</td>
<td>0.430</td>
<td>0.412</td>
<td>1.000</td>
<td>–</td>
<td>–</td>
<td>4.895</td>
<td>0.935</td>
<td>0.828</td>
</tr>
<tr>
<td>(5) Perceived environmental CSR</td>
<td>0.491</td>
<td>0.359</td>
<td>0.296</td>
<td>0.560</td>
<td>1.000</td>
<td>–</td>
<td>4.817</td>
<td>0.854</td>
<td>0.661</td>
</tr>
<tr>
<td>(6) Approach behaviors for green hotels</td>
<td>0.565</td>
<td>0.418</td>
<td>0.285</td>
<td>0.744</td>
<td>0.552</td>
<td>1.000</td>
<td>4.876</td>
<td>0.828</td>
<td>0.622</td>
</tr>
</tbody>
</table>

Note: Goodness-of-fit statistics for the measurement model: $\chi^2 = 294.103, df = 155, p < 0.001, \chi^2/df = 1.897, \text{RMSEA} = 0.060, \text{CFI} = 0.964, \text{IFI} = 0.964, \text{and TLI} = 0.956$. a Correlations between variables, b Squared correlations. AVE: average variance extracted, CSR: corporate social responsibility.
Table 2. The Structural Equation Modeling Results.

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Paths</th>
<th>β</th>
<th>t-Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>Green image congruence → Sense of obligation to take green actions</td>
<td>0.464</td>
<td>6.707 **</td>
</tr>
<tr>
<td>H2</td>
<td>Green image congruence → Approach behaviors for green hotels</td>
<td>0.138</td>
<td>2.321 *</td>
</tr>
<tr>
<td>H3</td>
<td>Care for environmental consequences of using hotels → Sense of obligation to take green actions</td>
<td>0.161</td>
<td>2.609 **</td>
</tr>
<tr>
<td>H4</td>
<td>Care for environmental consequences of using hotels → Approach behaviors for green hotels</td>
<td>0.103</td>
<td>2.025 *</td>
</tr>
<tr>
<td>H5</td>
<td>Environmentally conscious behaviors → Sense of obligation to take green actions</td>
<td>0.169</td>
<td>2.359 *</td>
</tr>
<tr>
<td>H6</td>
<td>Sense of obligation to take green actions → Approach behaviors for green hotels</td>
<td>0.705</td>
<td>10.064 **</td>
</tr>
</tbody>
</table>

Total effect on approach behaviors for green hotels: 0.705 **
Indirect effect on approach behaviors for green hotels: 0.327 **
R² (approach behaviors for green hotels) = 0.715
R² (sense of obligation to take green actions) = 0.425

Note. Goodness-of-fit statistics for the structural model: χ² = 229.455, df = 110, p < 0.001, χ²/df = 2.086, RMSEA = 0.066, CFI = 0.965, IFI = 0.965, and TLI = 0.957, *p < 0.05 and **p < 0.01.

4.3. Indirect and Total in Influence Testing

In the present research examined the indirect influence of research constructs. Results discovered that green image congruence (β = 0.327, p < 0.01), care for environmental consequences of using hotels (β = 0.113, p < 0.05), and environmentally conscious behaviors (β = 0.119, p < 0.05) exerted a considerable indirect effect on approach behaviors for green hotels. This implies that sense of obligation to take green actions played an influential mediating role within the proposed theoretical framework.
The total effect of research constructs was evaluated next. As shown in Table 2, the sense of obligation to take green actions ($\beta = 0.705, p < 0.01$) had the most significant total influence on approach behaviors for green hotels, followed by green image congruence ($\beta = 0.465, p < 0.01$), care for environmental consequences of using hotels ($\beta = 0.217, p < 0.01$), and environmentally conscious behaviors ($\beta = 0.119, p < 0.05$).

4.4. Invariance Model Assessment and Moderating Effect Testing

A metric invariance test was performed to test the effect of perceived environmental CSR. Prior to generating the baseline model, all correspondents’ feedback was divided into two groups (high and low) of perceived environmental CSR. The grouping process was done taking the result of a K-means cluster analysis in account. While the high environmental CSR group included 157 cases, the low group included 93 cases. The baseline model comprising these high and low groups was created. As shown in Table 3, the model had a satisfactory level of goodness-of-fit statistics ($\chi^2 = 404.530, df = 232, p < 0.001$, $\chi^2/df = 1.744$, RMSEA = 0.055, CFI = 0.944, IFI = 0.944, and TLI = 0.934). Identifying the moderating effect of perceived environmental CSR, this baseline model was then compared to nested models whereby a specific path of interest is confined to be parallel between two groups.

<table>
<thead>
<tr>
<th>Linkages</th>
<th>High Group of Perceived Environmental CSR</th>
<th>Low Group of Perceived Environmental CSR</th>
<th>Baseline Model (Freely Estimated)</th>
<th>Nested Model (Equally Constrained)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GIC → SO</td>
<td>0.609</td>
<td>5.867 **</td>
<td>0.186</td>
<td>1.996 *</td>
</tr>
<tr>
<td>CEC → SO</td>
<td>0.164</td>
<td>2.046 *</td>
<td>0.120</td>
<td>1.204</td>
</tr>
<tr>
<td>ECB → SO</td>
<td>0.379</td>
<td>3.659 **</td>
<td>0.045</td>
<td>0.410</td>
</tr>
</tbody>
</table>

Chi-square difference test:
- a $\Delta \chi^2 (1) = 12.991, p < 0.01$ (H7a: Supported)
- b $\Delta \chi^2 (1) = 0.328, p > 0.05$ (H7b: Not supported)
- c $\Delta \chi^2 (1) = 4.899, p < 0.05$ (H7c: Supported)

Goodness-of-fit statistics for the baseline model: $\chi^2 = 404.530$, $df = 232, p < 0.001$, $\chi^2/df = 1.744$, RMSEA = 0.055, CFI = 0.944, IFI = 0.944, and TLI = 0.934.

While the link for the high group of perceived environmental CSR was significant, the path for the low group was not significant. Hence, although chi-square difference across groups was not significant, the group difference on the link between care for environmental consequences of using hotels and sense of obligation to take green actions should be meaningfully interpreted. GIC = green image congruence, SO = sense of obligation to take green actions, CEC = care for environmental consequences of using hotels, ECB = environmentally conscious behaviors.

As demonstrated in Table 3, the chi-square test findings proved that the relationship between green image congruence and sense of obligation to take green actions was significantly different between high and low groups of perceived environmental CSR ($\Delta \chi^2 (1) = 12.991, p < 0.05$). As a result, Hypothesis 7a was supported. In addition, the association between environmentally conscious behaviors and sense of obligation to take green actions differed significantly across two groups ($\Delta \chi^2 (1) = 4.899, p < 0.05$). This finding supported Hypothesis 7c. However, the association between care for environmental consequences and sense of obligation to take green actions was not significantly different between high and low groups ($\Delta \chi^2 (1) = 0.328, p > 0.05$). Accordingly, Hypothesis 7b was not supported. The invariance test results are exhibited in detail in Table 3 and Figure 2.

5. Discussion

The key facets of the proposed theoretical framework were green image congruence, care for environmental consequences of using hotels, environmentally conscious behaviors, and sense of moral obligation, which together build customer approach behaviors for green hotels. The competence of our model was evidently supported. The hypothesized research framework also encompassed mediation and moderation mechanisms, and therefore successfully expanded the relationships between sense of moral obligation and its direct determinants. The theoretical model developed in the present
study could play an important role as a sturdy framework in elucidating the function as fundamental proximal and distal antecedents of environmentally responsible approach practices for green products, which minimizes the environmental deteriorations. In the highly environmentally conscious global tourism marketplace, recognizing customer approach decisions/behaviors for eco-friendly products is essential for the survival and success of any hotel firm. This finding is consistent with previous research demonstrated [55].

The concept of image congruence has been popularized and used in the realm of pro-environmental behaviors [23,32,33]. The vital question is then if image congruence also includes any role in customer eco-friendly decision-making process and behaviors in the hotel context. Evidence of the present research demonstrated that this cognitive concept plays a fundamental role in increasing sense of moral obligation and approach behaviors for eco-friendly hotel products. This finding was in accordance with [23,33] assertion about the criticality of green image/image congruence in hospitality customer behaviors. Theoretically, our results had an important meaning as our study is one of the rare researches which displayed the significance of the linkages from green image congruence to moral obligation and pro-environmental behaviors for green hotel products.

Patrons’ care for environmental consequences of using hotels was an essential concept contributing to activating sense of moral obligation and approach behaviors within the hypothesized theoretical framework. This result insinuates that strengthening customer care/attention for environmental deteriorations derived from the hotel industry is of critical importance in inducing sense of moral obligation and eliciting customer pro-environmental attitudes for green hotel products. Theoretically, our findings provided the notion that when customers have high environmental care/concern about ecological problems resulting from environmentally irresponsible behaviors in a hotel product consumption situation, they can be strongly morally obligation to engage in eco-friendly consumption activities and show willingness to make approach behaviors for environmentally responsible products/services in the hotel industry.

Environmentally conscious behaviors in everyday life were demonstrated to be a significant trigger of sense of obligation to take green actions. Traditional hotels’ excessive consumption of water, food, energy, and non-recyclable product everyday leads to a massive ecological imbalance [37,56]. For the effective encouragement of hotel patrons’ eco-friendly decision formation, it is hence crucial to make them conduct environmentally conscious behaviors in their daily life. Helping the patrons recognize the seriousness of the environmental problems/issues (e.g., diverse ecological deteriorations, exhaustion of natural resources, pollution, and climate change) resulting from solid waste generation and imprudent use of natural resources at home/work via diverse awareness campaigns can be one of the effective tactics to increase such patrons’ eco-conscious behaviors in their everyday life. As our results demonstrated, this effort could eventually result in improving hotel customers’ sense of obligation to take green practices in a consumption situation.

Empirical evidence regarding the dissimilarity on moral norm activation process for green consumption choice/behaviors across high and low environmental CSR groups has scarcely been offered. In this study, perceived environmental CSR was uncovered to be the crucial moderator in the associations between green image congruence and sense of moral obligation, and between environmentally conscious behaviors and sense of moral obligation. The intensity of the association between green image congruence and sense of moral obligation was greater in the high environmental CSR group ($\beta = 0.609, p < 0.01$) than in the low group ($\beta = 0.186, p < 0.05$). Similarly, the level of the association between environmentally conscious behaviors and sense of moral obligation was greater in the high environmental CSR group ($\beta = 0.379, p < 0.01$) than in the low group ($\beta = 0.045, p > 0.05$). Hence the results show that at a similar level of green image congruence, patrons who believe that a hotel company performs high environmental CSR activities more strongly feel a sense of obligation to take green actions than those who feel a low level of CSR activities. In addition, the results of our research imply that at a similar level of environmentally conscious behaviors in daily life, customers
with a strong belief about the hotel company’s environmental CSR endeavors are more willing to feel
take green actions as compared to those with a low belief.

From the theoretical perspective, these findings inform hotel academics that taking perceived
environmental CSR into account when developing a conceptual framework encompassing moral norm
activation process is a fundamental requisite for better comprehending the role of such process in
approach behavior formation for green products/services. Moreover, from the managerial perspective,
our results offer hotel practitioners vital information that boosting customers’ belief about the hotel
company’s environmental CSR activities and efforts can be a useful method to fortify the influence of
green image congruence and environmentally conscious behaviors on sense of moral obligation for
green consumption behaviors. Hotel practitioners should therefore make diverse endeavors to let their
customers know/recognize about the hotel company’s CSR activities for the environmental preservation
through various communication channels with customers (e.g., email, television commercials, social
networking services).

Little evidence exists about the mechanism underlying the impact of green image congruence,
care for environmental consequences, and environmentally conscious behaviors on hotel customer
approach behaviors for environmentally responsible products. Throughout our research, we revealed
the mediation mechanism comprising sense of obligation to take green actions, which can provide
additional explanation for such influence. This study unearthed that sense of moral obligation as
outcomes of green image congruence, care for environmental consequences, and environmentally
conscious behaviors played as an intermediary associating these cognitive variables to customer
approach behaviors for green hotel products. The intricate mediation mechanism explored in this
research provided hospitality academics and practitioners essential information that the impact of green
image congruence, care for environmental consequences, and environmentally conscious behaviors
are maximized by the dynamic role of the sense of moral obligation.

This research contained several limitations needed to be addressed. First, although all
between-construct correlations were less than the problematic level of 0.80 [54], the results of
this research were not wholly free from multi-collinearity problem as some of correlations were
high. For future research, a stronger measurement design is suggested for the minimization of the
multi-collinearity issue. Second, some studies showed that emotional process is of importance when
explicating the formation of patrons’ environmentally responsible decision-making process [17,33].
Such emotional process was not considered in the present study. To fortify the proposed theoretical
framework, integrating emotional factors is recommended for future studies. This endeavor would
enhance the comprehensiveness and prediction power of the proposed conceptual framework for
customer green behaviors.

To conclude, ecological environment has a direct impact on human social activities. Protecting an
ecological environment is of profound significance in our lives. The development of the tourism circular
economy needs to depend on the new interaction between consumers and hotel industry, and on the
new integrations of their practices [14]. This research successfully enriched existing tourism literature,
helping hotel proprietors comprehend customers’ convoluted decision-making process for engaging in
eco-friendly purchase behaviors for a green hotel product, spending extra for it, and saying positive
things about it. For this reason, hotel practitioners should make diverse endeavors to improve/modify
the image of their hotel to be congruent with their target customers for the encouragement of their
eco-friendly hotel product/service consumption. Additionally, hotels should pay attention to their
waste management by monitoring food waste, conservation of energy, and trying to use recyclable
amenities. On policy section, policy strategy can provide a clear direction for a transition towards
the hospitality industry based circular economy [57]. For example, the South Korea Environment
Ministry carried out a project to reduce food waste by signing voluntary cooperation agreements
with different sectors. With the transparency of green finance and investment, customers and private
participants also will start to participate in green finance and green investment. In particular, green
finance can play a key role in accelerating the transition, creating fair competition among traditional
and green economy [58]. The fair competition between the traditional and green economy will lead to an eco-friendlier environment. For this reason, greening hotels can be considered a good long-term investment for hospitality businesses.

**Author Contributions:** Conceptualization, H.H. and C.C.; methodology, J.Y.; writing—original draft preparation, H.H.; writing—review and editing, L.H.L.; visualization, H.K.; supervision, J.Y. and L.H.L.; project administration, H.H. and C.C. All authors have read and agreed to the published version of the manuscript.

**Funding:** This research received no external funding.

**Conflicts of Interest:** The authors declare no conflict of interest.

**References**

15. Agag, G.; Colmekcioglu, N. Understanding guests’ behavior to visit green hotels: The role of ethical ideology and religiosity. *Int. J. Hosp. Manag.* 2020, 91, 102679. [CrossRef]


31. Han, H.; Yu, J.; Kim, W. Environmental corporate social responsibility and the strategy to boost the airline’s image and customer loyalty intentions. *J. Travel Tour. Mark.* 2019, 36, 371–383. [CrossRef]


43. Manosuthi, N.; Lee, J.; Han, H. Predicting the revision intention of volunteer tourists using the merged model between the theory of planned behavior and norm activation model. *J. Travel Tour. Mark.* 2020, 37, 510–532. [CrossRef]

44. Doran, R.; Larsen, S. The Relative Importance of Social and Personal Norms in Explaining Intentions to Choose Eco-Friendly Travel Options. *Int. J. Tour. Res.* 2015, 18, 159–166. [CrossRef]


50. Ajzen, I.; Kruglanski, A.W. Reasoned action in the service of goal pursuit. *Psychol. Rev.* 2019, 126, 774–786. [CrossRef]


52. Zeithaml, V.A.; Berry, L.L.; Parasuraman, A. The behavioral consequences of service quality. *J. Mark.* 1996, 60, 31–46. [CrossRef]


57. Falcone, P.M. Tourism-Based Circular Economy in Salento (South Italy): A SWOT-ANP Analysis. *Soc. Sci.* 2019, 8, 216. [CrossRef]

58. Falcone, P.M. Environmental regulation and green investments: The role of green finance. *Int. J. Green Econ.* 2020, 14, 159–173. [CrossRef]

**Publisher’s Note:** MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.

© 2020 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (http://creativecommons.org/licenses/by/4.0/).