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Festival attendees’ perceptions of green hotel practices

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**Introduction**

Lodging management interest and investment in green practices, or practices that reduce the environmental impact of hotel operations, is on the rise (Chia-Jung & Pei-Chun, 2014). Berezan et al. (2014) suggest lodging managers are increasing sustainable practices due to a desire to reduce carbon footprint, save money, avoid media attention or policy changes, and respond to consumers’ increased environmental consciousness. The lodging managers are interested in gaining a positive return on investments in sustainable practices, whether gains come in the form of cost savings or greater perceived customer value. Therefore, it is important for lodging managers to understand how consumers perceive and are influenced by sustainable practices.

Lodging managers can learn from the burgeoning field of research on green purchasing in other contexts, which explores a number of issues related to consumer behavior and decision-making, including why people do and do not purchase products touted as environmentally-friendly. While much of the green purchasing literature focuses on firms within the private sector (Gračan et al., 2010; Min & Galle, 2001; Sampaio et al., 2012), there is a growing body of literature on individual purchasing behavior (e.g. Hustvedt & Dickson, 2009; Oliver & Lee, 2010; Oliver & Rosen, 2010; Barber, 2010; Ward et al., 2011; Akehurst et al., 2012), including consumer decision making about green travel products (e.g. Andereck, 2009; Kang et al., 2012; Park & Boo, 2010; Walker & Hanson, 1998).

Past green consumer research has established a demand for sustainable tourism (Wehrli et al., 2011) and a distinct market for travelers who prefer sustainable practices (Weissenberg et al., 2008). Researchers established a 22% potential sustainable tourism market (Wehrli et al., 2011), and found that 95% of their respondents thought lodging companies should implement more green practices (Weissenberg et al., 2008). A common theme within the previous literature is individual differences in behavior or decision-making related to demographics, values, and lifestyle. The current manuscript contributes to this research stream.

One audience of interest for lodging managers, which has received less attention, is festival attendees. Festivals bring visitors and revenue to communities (Chirieleison & Montrone, 2013; Felsenstein & Fleischer, 2003), which can benefit hotels that are positioned to capitalize on the events. Further, festival organizers have earned criticism due to negative impacts on the physical environment (Devara et al., 2015; Gibson & Wong, 2011; Laing & Frost, 2010). Festival organizers are encouraged to consider the potential impacts of festival attendee behavior outside the festival but within the host community (Organ et al., 2015). As festival organizers increasingly look to balance the potential economic benefit of out of town visitors who attend local events with the environmental impacts beyond the
event footprint (Collins et al., 2012), it may make collaborations with greener hotels desirable, especially if festival attendees perceive value associated with green practices.

To help inform hotel and festival positioning decisions, this study builds upon prior literature on green consumer behavior and makes three contributions: 1) The paper examines the relationship between festival attendees’ demographic traits and their preferences for greener overnight lodging. 2) The paper extends the study of environmental values and environmental self-efficacy to a tourism context. 3) The paper examines whether there is a relationship between the sustainability of the festival itself and attendees’ green travel preferences.

**Background: Green lodging practices**

Previous consumer research has analyzed what environmentally friendly practices consumers preferred in green hotels (e.g. Millar & Baloglu, 2011; Chan, 2014). According to Millar and Baloglu’s study, there is little difference between business and leisure travelers’ sustainability preferences. Also according to Millar and Baloglu’s study, the green hotel attribute most preferred by consumers is green hotel certification, such as a hotel being recognized by the U.S. Green Building Council’s Leadership in Energy and Environmental Design rating system (LEED). Other environmental practices found to be of importance to guests included refillable shampoo dispensers, towel and linen reuse policies, and energy-efficient light bulbs. Despite this preliminary research on consumers’ preferences on specific green practices, this area requires additional research to more clearly understand what individual green practices consumers prefer (Millar & Baloglu, 2011).

Research has found there is a “substantial national and world wide market” demand from consumers for eco-friendly businesses (Tierney et al., 2011, p. 14). In Tierney et al.’s study, eco-friendly hotel providers implemented green practices involving recycling waste, water conservation, sustainable and local procurement practices, and using transportation with lower CO2 emissions. Previous research has found a price premium does not function as the main deterrent in selecting greener accommodations (Hopkins & Roche, 2009). Hopkins’ findings suggest there may be different, less tangible, motivators for the consumer that chooses accommodations that have implemented green practices.

Research has also found consumers demand more education on what qualifies as a green practice and information on the specific green practices of accommodations. However, many accommodations are afraid overtly marketing their green efforts will result in being labeled as “greenwashing.” or misleading consumers about the extent of the company’s efforts to minimize the environmental impact associated with operations. As a result, many accommodations have either
opted not to implement green practices or (if they are green) not share with guests the green efforts implemented at the property (Hopkins & Roche, 2009).

In spite of the perceived importance of sustainability, there remains little information on festival attendees’ appetite for sustainable tourism products (Mair & Laing, 2012). For example, what is their appetite for hotels that have implemented sustainable practices? The question is particularly relevant for festival planners who would like to seem “green” and are seeking hotel sponsors. They may be motivated to partner with hotels that have sustainable systems in place to help minimize degradation of the environment. It is also relevant for hotels that are trying to segment and position their offerings for traveling festival attendees.

To provide some insight on this question, this paper examines if demographic factors (age, income, gender, and education) of festival attendees are related to consumers’ motivations to select a hotel based on its sustainability practices. To contribute more broadly to the theory on the adoption of environmentally friendly products, the authors examine whether festival attendees’ environmental self-efficacy and environmental values are related to their motivations to select a hotel based on its sustainability practices. In addition, we include attendees of a “sustainable” festival and attendees of a festival that was not branded as sustainable. We examine differences between the samples and their motivations for lodging choices.

Hypotheses development: Aspects influencing green lodging selection

Within the tourism industry, the socio-demographic profile implications on green purchasing decisions has been investigated within the context of ecotourism products (Wearing et al., 2002), business travel (Gračan et al., 2010), airlines (Lynes & Dredge, 2006; Mair, 2011), tourism planning (Hong et al., 2003), restaurants (Schubert et al., 2010), and lodging (Mair, 2011). Mair found the purchaser of airline carbon offsets was more likely to be a younger male, although the findings were not statistically significant. In a study of green restaurant patronage, Hu et al. (2010) did not find statistically significant differences between males and females either, but did find older and more affluent customers expressed patronage intention more than their counterparts. Kvasova (2011) discovered, older, and more educated female travelers tend to exhibit more general environmentally-friendly behaviors while traveling.

Approaches to studying green decision-making and purchasing green travel related products has also included cross-cultural studies (Chan & Lau, 2002; Oliver & Lee, 2010), cultural theory (Thompson, 2000), a developing country perspective (Ali et al., 2011), cognitive social information processing approach (Zoogah, 2011), development of a consumer scorecard (Bergin-Seers & Mair, 2009), and life-cycle analysis (Tadajewski & Wagner-Tsukamoto, 2006). Many studies look at the
underlying motivations for purchase behavior using theory of planned behavior (Chan & Lau, 2002), theory of reasoned action (Coleman et al., 2011), value-belief-norm theory (Stern, 2000), exploration of antecedents (Chen, 2010), a brand loyalty perspective (Koller et al., 2011) and multi-attribute utility theory (Wang et al., 2009). For the purposes of this study, demographic constructs, environmental values, self-efficacy, and a behavioral factor - sustainable festival attendance - were used.

**Demographic factors**

Previous research has yet to agree on the role of demographics in green purchasing (do Paço et al., 2009; Roberts, 1996). Zografos and Allcroft (2007) found significant differences in hotel choice based on gender, age, and education levels. Zografos and Allcroft segmented audiences and found skeptical audiences were slightly younger and more likely to be female than male. People who were categorized as concerned were more educated and were older.

Roberts (1996) found sex, income, education, and age to be significant predictors of environmentally concerned consumer behavior (ECCB). In Roberts’ study, women scored higher than men on ECCB, age and education were positively correlated with ECCB, while income was negatively correlated. However, these variables explained only 6% of the variability in behavior, leaving the author to question if demographic characteristics are important enough for managers to take them into account. Chia-Jung and Pei-Chun (2014) provide evidence that sex, income and age have significant influences on tourists’ choice behaviors. In other studies, demographic variables like age and household income were not significant (e.g. Tierney et al., 2011; Berezan et al., 2014).

Do Paço et al. (2009) segmented Portuguese consumers into three groups: the uncommitted, the undefined, and the green activists. The activist groups were found to be aged 25 to 34 years and 45 to 54 years, educated, with professional jobs and higher incomes. They were found to have environmentally friendly purchasing behavior, but were skeptical regarding manufacturer claims about their products. Singh (2011) found that within a sample of 60-85 year olds, 85% believe in green marketing and 52% purchase green products. Additionally, Singh found older adults report the quality of green products (35%) and the convenience in buying (31%) were the most important reasons for purchasing green products; however, two-thirds of the sample of seniors (66%) noted the lack of information as a reason that would prohibit them from purchasing a green product. One-fifth (20%) of the respondents purchase green travel products. We anticipate perceptual differences between demographic segments, and aim to help resolve the conflict in the literature by testing the following hypotheses:
H1: Age is negatively related to consumers’ motivations to select a hotel based on its sustainability practices
H2: Women are more likely to be motivated by sustainable hotel practices than men
H3: Education is positively related to consumers’ motivations to select a hotel based on its sustainability practices
H4: Income is positively related to consumers’ motivations to select a hotel based on its sustainability practices

In addition to demographic variables, we anticipate other factors will influence consumers’ motivations to select a hotel based on its sustainability practices. For example, Oliver and Rosen (2010) introduced the environmental propensity framework that segments consumers based on self-efficacy and environmental values. Their framework shows that consumer environmental values and self-efficacy are useful bases for consumer segmentation in the context of green automobiles, explaining a higher portion of the variance in intentions than other variables that were previously linked to green purchase behavior (Oliver & Rosen, 2010; Oliver & Lee, 2010).

Less is known about how the constructs influence consumers’ propensity to select hotels that adopt green practices. These constructs are important to know for demand-side approaches to marketing green products in other contexts. To address this gap in the literature, we extend the study of environmental values and environmental self-efficacy to green lodging preferences.

**Environmental values**

Environmental values are enduring, individually defined moral obligations to protect the environment. Both the supply and demand sides of the tourism industry of purchasing and consumption have been shown to be affected by environmental values (Holden, 2005). Zografos and Allcroft (2007) used environmental values in their study as a base to segment potential ecotourists in Scotland. Hedlund (2011) found positive relationships between environmental values and the willingness to accept economic sacrifices to protect the environment and the intentions to buy ecologically sustainable tourism alternatives.

Mair’s (2011) study on tourists participating in carbon-offset programs found travelers that purchased offsets had positive environmental values. Barber et al. identified the market of “the Millennial male with strong environmental attitudes” as a “substantial market for ecological products” (Barber et al., 2010, p. 64). Dolnicar (2010) found environmental values, or a moral obligation to protect the environment, was a strong predictor of environmentally-friendly tourist behavior and environmental behavior at home. Ham and Han (2012) show that purchase-related loyalty, measured as intentions to visit, acceptance of price
premiums, and providing recommendations, were amplified by consumers with positive environmental values. However, Millar and Baloglu (2011) suggest values and beliefs may not be consistent with actions when traveling because people go into a different mode, and may be less concerned with the long-term impact of their decision-making. To address this conflict in the literature, we test hypothesis 5:

H5: Environmental values are positively related to consumers’ motivations to select a hotel based on its sustainability practices

Environmental self-efficacy

The term environmental self-efficacy, or the belief that one’s actions have an effect on the environment, is new to the tourism literature. The topic of general self-efficacy surfaces within the literature in discussions of tourism entrepreneurship (Hallak et al., 2012; Hallak et al., 2011), travel intentions (Hung & Petrick, 2012; Li & Buhalis, 2008), community empowerment (Ferguson, 2011; McGehee, 2012), environmental practices by small businesses (Sampaio et al., 2012), and hospitality employees (Song & Chathoth, 2010; Song & Chon, 2012). Less is known about the role of environmental self-efficacy in individual hotel choices.

In other contexts, environmental self-efficacy captures the extent to which a consumer believes the individual efforts can make a difference in the solution to a problem (e.g. Ellen et al., 1991). It has been used to examine a range of green purchasing behaviors and has contributed to the environmental segmentation of markets (Straughan & Roberts, 1999). It has also been studied as a mediator between collective orientation and green purchasing (Kim & Choi, 2005). To address the need to know the role of environmental self-efficacy in individual hotel choices, we test hypothesis 6:

H6: Environmental self-efficacy is positively related to consumers’ motivations to select a hotel based on its sustainability practices

Behavioral factor: Sustainable festival attendance

Festivals are an opportunity for local communities to feature themselves or some aspect of their culture by creating a shared experience with the public surrounding the celebration of that collective facet (Arcodia & Whitford, 2007, p. 3). Since at least the 1990s, there has been huge growth in festivals for tourism development because they can “assist in the development of an area’s uniqueness, and if strategically scheduled, extend a tourism season” (Grunwell et al., 2008, p. 2). Festivals can generate more economic activity, be less vulnerable to depressed economies, and can revamp the image of a destination (Nurse, 2002). O'Sullivan
and Jackson (2002, p. 328) identified festival tourism as the most sustainable form of tourism development because its “very nature demands a balanced approach.”

Festivals vary according to multiple factors such as location, subject matter, and size. Thus, the profile of festival attendees depends on the characteristics of the festival. For example, a growing number of festivals are branding themselves as ‘sustainable,’ (Laing & Frost, 2010; Jones, 2014; Mair & Laing, 2012). Many festivals have looked at ways to add a tourism “linkage” by incorporating local and sustainably-sourced food (Çela et al., 2007). Event coordinators and planners incorporate sustainable food and other green initiatives into their planning. The motivation for doing so reflects personal values, a desire by the event organizers to educate attendees, pursuit of a competitive advantage, and increased demand for green practices (Mair & Laing, 2012). Consumers are beginning to expect to see more sustainable practices implemented at festivals because social responsibility is becoming the “modus operandi” of businesses generally in the financially uncertain 21st century (Laing & Frost, 2010, p. 261).

In fact, green initiatives remain one of the top ten most important trends for event organizers (Smith & Rozier-Rich, 2011), thus implying the greening of festivals will continue to grow in the future. However, little is known about how the choice to attend a sustainable themed festival relates to consumer behavior outside of the festival (Getz, 2008). One stream of research argues attendance at a festival with an orientation towards sustainability can have a positive effect on festival attendees’ future behaviors (Organ et al., 2015). If so, sustainable festival attendees would be expected to have greener travel preferences than attendees at a more traditional festival. Alternatively, other researchers have argued green traveler behavior is context dependent (Dolnicar, 2015). If so, the type of festival attended may have little to no impact on green lodging preferences.

In order to gain insight on the relationship between festival type and attendee green travel preferences and help address this gap in the literature, the current study includes data collected from two different types of festivals: one traditional and one sustainable. We hypothesize that sustainable festival attendees will report a greater increase in hotel choice likelihood due to green practices.

H7: Festival attendees who attend festivals that are branded as a sustainable festival experience perceive greater value in environmentally responsible practices than attendees who attend festivals that are not branded as a sustainable festival experience.

Methods

Data for this study was taken from visitor studies at two separate community festivals – the Seafood Festival that occurred in October in Morehead City, North Carolina, and the Terra Vita Event (TVE): Tasting on the Green, which occurred in
October in Chapel Hill, North Carolina. First organized in 1986, the North Carolina Seafood Festival, the second largest festival in North Carolina, hosting an average of over 150,000 festival attendees, is held during the first week of October in the coastal community of Morehead City, North Carolina (North Carolina Seafood Festival, 2012). The festival is organized by Seafood Festival, Inc. in order to promote and support North Carolina’s seafood industry, provide education to the public about the seafood industry, market the state’s local seafood, and enhance tourism in eastern North Carolina during the off season. There is no admission fee charged to attend the festival and activities include live musical performances, cooking demonstrations, carnival rides, 150 arts and crafts and 60 food vendors, and booths from various nonprofits and educational organizations (North Carolina Seafood Festival, 2012).

The Terra Vita Event was created “out of a desire to produce a top-quality event in the Southeast, showcasing the very best in food and wine. We wanted sustainability to be a keynote, but not surpassed by the importance of superior quality” (Event, 2012). Tickets to the grand tasting event, where the survey was conducted, were $55 during the inaugural event in 2010, the year that the data were collected at both festivals. This fee allowed participants to taste an array of upscale foods, wines, beers and teas in a casual outdoor setting.

The North Carolina Seafood Festival and the Terra Vita Event, Tasting on the Green, were the festivals chosen because they represent two opposing stages of sustainable operations. The Terra Vita Event is a festival that incorporates sustainable practices throughout its operations and the NC Seafood Festival does not utilize sustainability practices as part of their mission and operations. By using data from two different festivals, the study encompasses a wider, more diverse population with varying interests regarding sustainable practices.

**Survey instruments**

The instruments used for each festival’s study were designed independently; however, two of the researchers were involved in the design of both, and common questions were included on each instrument. The common questions consisted of two key lines of inquiry. The first line of inquiry solicited respondent agreement with statements that measured environmental values (three items adapted from Oliver & Rosen, 2010; e.g. *Environmental issues are very important to me*) and environmental self-efficacy (three items adapted from Oliver and Rosen, 2010; e.g. *Since one person cannot have any effect upon pollution and natural resource problems, I think it doesn’t make any difference what I do*).

The second line of inquiry explored the likelihood that specific sustainable/green conservation programs at hotels and resorts would sway the choice of the consumer. Respondents were asked to rate whether thirteen specific
sustainable/green conservation programs would decrease, would not change, or would increase their likelihood of booking a reservation at the hotel. The thirteen sustainable/green conservation programs were adopted from previous literature (e.g. Millar & Baloglu, 2011) and reviews of current industry practices, and included: green certification; reusable items (cloth napkins, glass cups/plates); extended-use linen program; use of environmentally-friendly paper products; bulk dispensers for guest supplies and amenities; energy efficient lighting; programmable thermostats for HVAC systems; air filtration systems; reduced-flow toilets, faucets and shower heads; rainwater or gray-water capture for reuse in irrigation; biodegradable cleaning chemicals; renewable energy (solar/wind), and recycling. In addition, both surveys included questions about the respondents’ demographics.

Festival audiences, data collection and analysis

NC Seafood Festival

Respondents were invited to participation in a survey about the 2010 NC Seafood Festival three ways: 400 color inserts in courtesy bags, which were distributed at the festival, a link from the 2010 NC Seafood Festival website, and via an invitation on Facebook. Therefore, potential participants included both attendees and people who had an interest in the festival but did not attend. Respondents were asked for their feedback on the festival. A gift bag, which was donated by the Seafood Festival, was offered as a raffle prize. Each survey participant earned an entry to the raffle. Event attendees from all days of the festival had an equal chance of seeing an invitation to participate in the survey. The electronic format was selected based on a previous year’s attempt to collect data in person. Respondents were less willing to complete the measures in a paper and pencil survey, resulting in a lot of non-responses and missed items.

Terra Vita Event

Email addresses from TVE attendees were collected at the festival via an intercept protocol; attendees were informed that an online survey was going to be sent to them so that they might provide comments on the event. Solicitation for survey participation was sent out within two weeks of the Terra Vita Event. Respondents were not reminded. The 2010 TVE was the first event of its kind; it was repeated in 2011 and 2012. Data was analyzed in SPSS 18.0.
Results

Descriptive statistics

Two hundred fifty eight respondents participated in the survey. Ninety-five respondents were recruited at the food and wine festival, which was branded as a sustainable festival, and one hundred sixty three respondents were recruited at the seafood festival. The sample skewed female (66.4% of respondents) and most respondents were between the ages of 25-64 (Table 1). Further, more than half of respondents had Bachelor’s Degrees or Graduate Degrees (Table 2).

<table>
<thead>
<tr>
<th>Age range</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-24</td>
<td>19</td>
<td>7.4%</td>
</tr>
<tr>
<td>25-34</td>
<td>49</td>
<td>19.0%</td>
</tr>
<tr>
<td>35-44</td>
<td>48</td>
<td>18.6%</td>
</tr>
<tr>
<td>45-54</td>
<td>66</td>
<td>25.6%</td>
</tr>
<tr>
<td>55-64</td>
<td>58</td>
<td>22.5%</td>
</tr>
<tr>
<td>65+</td>
<td>17</td>
<td>6.6%</td>
</tr>
<tr>
<td>No response</td>
<td>1</td>
<td>0.4%</td>
</tr>
</tbody>
</table>

Table 2: Education distribution of respondents (n=258)

<table>
<thead>
<tr>
<th>Education</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School/Less</td>
<td>31</td>
<td>12.0%</td>
</tr>
<tr>
<td>Trade School</td>
<td>4</td>
<td>1.6%</td>
</tr>
<tr>
<td>Community College/Some College</td>
<td>55</td>
<td>21.3%</td>
</tr>
<tr>
<td>Bachelor’s Degree</td>
<td>71</td>
<td>27.5%</td>
</tr>
<tr>
<td>Graduate Degree</td>
<td>87</td>
<td>33.7%</td>
</tr>
<tr>
<td>No response</td>
<td>10</td>
<td>3.9%</td>
</tr>
</tbody>
</table>

Income was reported in two broad categories. Sixty-two percent of respondents reported annual household incomes of less than $100,000 per year, with 25.6% of respondents reporting annual household incomes of $100,000 or greater per year. Fourteen percent of the sample that was asked Agreed or Strongly Agreed that they (1) look at sustainable practices before they make a reservation and (2) that they will only stay at a hotel with sustainable practices in place, while 17% said it was important/very important for a hotel to have sustainable practices in place. The reported levels exceed the general 8% of the population who seek out green offerings (Oliver & Rosen, 2010).
A comparison across the two samples indicated that respondents from the food and wine festival had significantly more education (M = 4.25) than respondents from the seafood festival (M = 3.41; p < .001). In addition, respondents from the food and wine festival were significantly more likely to report higher household incomes (M = 1.49) than respondents from the seafood festival (M = 1.15; p < .001). Thus, although we collapsed the samples from both festivals, we retained the festival as a dummy coded variable in all of the regressions.

**Measure reliabilities**

The variables of interest include age, gender, education, income, and festival type and the multi-item constructs of interest are environmental values and environmental self-efficacy. Three items were averaged for each multi-item construct: “Given the option, I will purchase the more environmentally friendly product or service if the costs are comparable”; “I often worry about the effects of pollution on myself and my family”; “Environmental issues are very important to me” (environmental values; alpha = .879) and “It is worthless for the individual person to do anything about pollution” (reverse coded); “Since one person cannot have any effect upon pollution and natural resource problems, I think it doesn’t make a difference what I do” (reverse coded); “Each person’s behavior can have a positive effect on the environment” (environmental self-efficacy; alpha = .794).

Two hundred fifty eight subjects responded to all six measures. The three measures for each construct were averaged to make two separate index values that were used in the regressions to test hypotheses 5 and 6.

Festival type was coded as a dummy variable (1 = food and wine festival; 2 = seafood festival) and the others measures were single items and, thus, were not subjected to reliability tests. The single items included the dependent measures, which asked respondents to assess whether specific green lodging programs would change the likelihood the individual would stay at the hotel. Each item was anchored by 1, Definitely would decrease and 5, Definitely would increase. As noted in the description of the survey instrument, the attributes, which were selected based on the previous literature and a review of current practices at hotels at the time, included: green certification; reusable items program; extended-use linen program; use of environmentally-friendly paper products; bulk dispensers for guest supplies and amenities; energy efficient lighting; timers, motion, or light-sensitive controls for lighting; programmable thermostats for HVAC systems; air filtration system; reduced-flow toilets, faucets, shower heads; rainwater or gray-water capture for reuse in irrigation; biodegradable chemicals; renewable energy (solar/wind); recycling (paper/plastic/aluminum); and recycling used cooking oils.
**Hypotheses testing**

The dependent variables were the likelihood ratings for each of the sustainable practices in hotels. Respondents were asked to rate whether knowledge of thirteen green practices would decrease or increase the likelihood that they would stay in a hotel. The independent variables were age (H1), gender (H2), education (H3), income (H4), environmental values (H5), environmental self-efficacy (H6), and festival type (H7). The ratings for the likelihood that each green practice were regressed on the six independent variables in thirteen separate regressions.

The results (beta weights for each variable and their significance, based on t-values, as well as variance explained by each regression) are reported in Tables 3 and 4. The most variance was explained for the likelihood a respondent would be motivated/demotivated by environmentally friendly paper products (20.5% of variance explained) while the least was explained by programmable thermostats (10.4%). Variance Inflation Factors (VIF) were used to test for multicollinearity. All of the VIF were less than 2.0. Not all of the seafood festival respondents answered the items about the hotels. Therefore, the effective sample size for each dependent variable is reported in the tables.

The first hypothesis, which proposed that age is negatively related to consumers’ motivations to select a hotel based on its sustainability practices, was partially supported. Age was significantly related to the respondents’ likelihood ratings that they were motivated to use a hotel because of its air filtration system (t = -1.976, p = .05) and because of its rain water/gray water reuse programs (t = -2.170, p < .05). However, age did not have a significant relationship with green certification, reusable items, extended use linen programs, use of environmentally friendly paper products, use of bulk dispensers, use of energy efficient lighting, programmable thermostats, reduced flow plumbing, use of biodegradable cleaning supplies, use of renewable energy, or recycling as motivations for hotel stays.

The second hypothesis, which proposed that women were more likely to be motivated by sustainable hotel practices than men, and the fourth hypothesis, which suggested income would be positively related to consumers’ likelihood ratings, were not supported. Gender and income bracket did not have a significant relationship with the ratings on any of the thirteen outcome variables.

The third hypothesis, which proposed education would be positively related to consumers’ motivations to select a hotel based on its use of sustainable practices, was also not supported. In fact, the relationships for several of the outcome variables suggest less educated were more likely to be motivated to stay in a hotel because of its use of: environmentally friendly paper products (t = -2.524, p < .05); programmable thermostats (t = -2.037, p < .05); reduced flow plumbing (t = -2.598, p < .05); rain/gray water reuse (t = -2.704, p < .01); or renewable energy (t = -2.571, p < .05).
Table 3: Sustainable hotel practices

<table>
<thead>
<tr>
<th>β</th>
<th>Green certification</th>
<th>Reusable items</th>
<th>Extended use linen</th>
<th>EF paper products</th>
<th>Bulk dispensers</th>
<th>Energy efficient lighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Values</td>
<td>.026</td>
<td>-.003</td>
<td>.148</td>
<td>.119</td>
<td>.050</td>
<td>.072</td>
</tr>
<tr>
<td>Environmental Self-Efficacy</td>
<td>.278**</td>
<td>.405***</td>
<td>.217*</td>
<td>.332***</td>
<td>.247*</td>
<td>.300**</td>
</tr>
<tr>
<td>Festival</td>
<td>-.230</td>
<td>-.238</td>
<td>-.202</td>
<td>-.113</td>
<td>.067</td>
<td>-.044</td>
</tr>
<tr>
<td>Income</td>
<td>.222</td>
<td>.064</td>
<td>.245</td>
<td>.063</td>
<td>.223</td>
<td>.869</td>
</tr>
<tr>
<td>Gender</td>
<td>-.014</td>
<td>.066</td>
<td>.014</td>
<td>.129</td>
<td>.065</td>
<td>.022</td>
</tr>
<tr>
<td>Age</td>
<td>-.044</td>
<td>-.080</td>
<td>-.091</td>
<td>-.061</td>
<td>-.043</td>
<td>-.054</td>
</tr>
<tr>
<td>Education</td>
<td>-.074</td>
<td>-.099</td>
<td>-.139</td>
<td>-.154*</td>
<td>-.097</td>
<td>-.117</td>
</tr>
<tr>
<td>VIF</td>
<td>&lt; 2.0</td>
<td>&lt; 2.0</td>
<td>&lt; 2.0</td>
<td>&lt; 2.0</td>
<td>&lt; 2.0</td>
<td>&lt; 2.0</td>
</tr>
<tr>
<td>Sample</td>
<td>161</td>
<td>168</td>
<td>169</td>
<td>171</td>
<td>164</td>
<td>173</td>
</tr>
<tr>
<td>R²</td>
<td>.146 (p = .001)</td>
<td>.182 (p &lt; .001)</td>
<td>.133 (p = .001)</td>
<td>.205 (p &lt; .001)</td>
<td>.089 (p = .037)</td>
<td>.125 (p = .002)</td>
</tr>
</tbody>
</table>

Table 4: Sustainable hotel practices (cont’d.)

<table>
<thead>
<tr>
<th>β</th>
<th>Programmable thermostats</th>
<th>Air filtration system</th>
<th>Reduced flow plumbing</th>
<th>Rain/gray water reuse</th>
<th>Bio cleaning chemicals</th>
<th>Renewable energy</th>
<th>Recycling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Values</td>
<td>.072</td>
<td>.029</td>
<td>.127</td>
<td>.098</td>
<td>.118</td>
<td>.064</td>
<td>.094</td>
</tr>
<tr>
<td>Environmental Self-Efficacy</td>
<td>.182</td>
<td>.307**</td>
<td>.206</td>
<td>.298**</td>
<td>.252**</td>
<td>.257*</td>
<td>.289</td>
</tr>
<tr>
<td>Festival</td>
<td>-.305</td>
<td>-.163</td>
<td>-.210</td>
<td>-.253</td>
<td>-.272</td>
<td>-.380*</td>
<td>-.341*</td>
</tr>
<tr>
<td>Income</td>
<td>.093</td>
<td>.198</td>
<td>.114</td>
<td>.134</td>
<td>.169</td>
<td>.046</td>
<td>.046</td>
</tr>
<tr>
<td>Gender</td>
<td>-.061</td>
<td>.006</td>
<td>.042</td>
<td>.059</td>
<td>-.038</td>
<td>-.029</td>
<td>-.019</td>
</tr>
<tr>
<td>Age</td>
<td>-.025</td>
<td>-.105*</td>
<td>-.093</td>
<td>-.117*</td>
<td>-.079</td>
<td>-.071</td>
<td>-.082</td>
</tr>
<tr>
<td>Education</td>
<td>-.136*</td>
<td>-.082</td>
<td>-.193*</td>
<td>-.118**</td>
<td>-.061</td>
<td>-.168*</td>
<td>-.090</td>
</tr>
<tr>
<td>VIF</td>
<td>&lt; 2.0</td>
<td>&lt; 2.0</td>
<td>&lt;</td>
<td>&lt;</td>
<td>&lt; 2.0</td>
<td>&lt; 2.0</td>
<td>&lt; 2.0</td>
</tr>
<tr>
<td>Sample</td>
<td>169</td>
<td>168</td>
<td>170</td>
<td>169</td>
<td>166</td>
<td>171</td>
<td>174</td>
</tr>
<tr>
<td>R²</td>
<td>.104 (p = .012)</td>
<td>.156 (p &lt; .001)</td>
<td>.116 (p = .005)</td>
<td>.193 (p &lt; .001)</td>
<td>.189 (p &lt; .001)</td>
<td>.163 (p &lt; .001)</td>
<td>.199 (p &lt; .001)</td>
</tr>
</tbody>
</table>
Surprisingly, the fifth hypothesis, that environmental values would be positively related to consumers’ motivations to select a hotel based on its sustainability practices, was also not supported. There were no significant relationships between the environmental values index and any of the thirteen outcome variables. Similarly, there was little support for hypothesis seven (festival type). Festival type was significantly related to two of the thirteen sustainable hotel practices (recycling and renewable energy ps < .05), which suggests respondents who attended the sustainable branded festival were more likely to choose hotels that recycled and utilized renewable energy than respondents who attended the seafood festival, which was not branded as a sustainable festival. Festival type did not have a significant relationship with the other eleven practices.

On the other hand, the sixth hypothesis, which suggested environmental self-efficacy would be positively related to consumers’ motivations to select a hotel based on its sustainability practices, was supported for all of the dependent variables except for programmable thermostats (which was marginally significant (t = 1.956, p = .056). Environmental self-efficacy had a significant, positive relationship with: green certification (t = 2.598, p < .01); reusable items (t = 4.131, p < .001); extended use linen programs (t = 2.032, p < .05); use of environmentally friendly paper products (t = 3.817; p < .001); use of bulk dispensers (t = 2.449; p < .05); use of energy efficient lighting (t = 3.237; p < .001); air filtration systems (t = 3.315; p < .05); reduced flow plumbing (t = 1.971; p = .05); rain/gray water reuse (t = 3.198; p < .01); use of biodegradable cleaning chemicals (t = 2.655; p < .05); use of renewable energy (t = 2.803; p < .05); and recycling (t = 3.280; p < .05). A summary of the hypotheses is provided in Table 5 and the means for each of the sustainable practices are included in Table 6.

Table 5: Summary of Hypotheses

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: Age is negatively related to consumers’ motivations to select a hotel</td>
<td>Partially</td>
</tr>
<tr>
<td>based on its sustainability practices</td>
<td>supported</td>
</tr>
<tr>
<td>H2: Women are more likely to be motivated by sustainable hotel practices</td>
<td>Not supported</td>
</tr>
<tr>
<td>than men</td>
<td></td>
</tr>
<tr>
<td>H3: Education is positively related to consumers’ motivations to select a</td>
<td>Not supported</td>
</tr>
<tr>
<td>hotel based on its sustainability practices</td>
<td></td>
</tr>
<tr>
<td>H4: Income is positively related to consumers’ motivations to select a</td>
<td>Not supported</td>
</tr>
<tr>
<td>hotel based on its sustainability practices</td>
<td></td>
</tr>
<tr>
<td>H5: Environmental values are positively related to consumers’ motivations</td>
<td>Not supported</td>
</tr>
<tr>
<td>to select a hotel based on its sustainability practices</td>
<td></td>
</tr>
<tr>
<td>H6: Environmental self-efficacy is positively related to consumers’</td>
<td>Supported</td>
</tr>
<tr>
<td>motivations to select a hotel based on its sustainability practices</td>
<td></td>
</tr>
<tr>
<td>H7: Festival attendees who attend festivals that are branded as a</td>
<td>Not supported</td>
</tr>
<tr>
<td>sustainable festival experience perceive greater value in environmentally</td>
<td></td>
</tr>
<tr>
<td>responsible practices than attendees who attend festivals that are not</td>
<td></td>
</tr>
<tr>
<td>branded as sustainable</td>
<td></td>
</tr>
</tbody>
</table>
Environmental self-efficacy has a stronger relationship with whether an individual is motivated/demotivated to choose a hotel based on its sustainable practices than environmental values. Younger people reported they were more likely to be motivated/less likely to be demotivated by some of the sustainable practices in hotels than older people. People with less education are more likely to be motivated by some sustainable practices. (Note: many respondents held bachelor’s degrees, so this may reflect a difference between graduate degree holders and individuals with/pursuing bachelor’s degrees.)

Table 6: Mean responses for sustainable practices

<table>
<thead>
<tr>
<th>Sustainable Practices</th>
<th>Average response</th>
<th>s.d.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green Certification</td>
<td>3.7</td>
<td>.99</td>
</tr>
<tr>
<td>Reusable items program</td>
<td>3.7</td>
<td>1.10</td>
</tr>
<tr>
<td>Extended-use linen program</td>
<td>3.6</td>
<td>1.13</td>
</tr>
<tr>
<td>Use of environmentally-friendly paper products</td>
<td>3.8</td>
<td>1.01</td>
</tr>
<tr>
<td>Bulk dispensers for guest supplies and amenities</td>
<td>3.6</td>
<td>.99</td>
</tr>
<tr>
<td>Energy efficient lighting</td>
<td>3.9</td>
<td>1.05</td>
</tr>
<tr>
<td>Timers, motion, or light-sensitive controls for lighting</td>
<td>4.0</td>
<td>1.05</td>
</tr>
<tr>
<td>Programmable thermostats for HVAC systems</td>
<td>4.0</td>
<td>1.01</td>
</tr>
<tr>
<td>Air filtration system</td>
<td>4.0</td>
<td>1.05</td>
</tr>
<tr>
<td>Reduced-flow toilets, faucets, shower heads</td>
<td>3.6</td>
<td>1.09</td>
</tr>
<tr>
<td>Rainwater or gray-water capture for reuse in irrigation</td>
<td>4.0</td>
<td>1.05</td>
</tr>
<tr>
<td>Biodegradable chemicals</td>
<td>4.0</td>
<td>1.07</td>
</tr>
<tr>
<td>Renewable energy solar/wind</td>
<td>3.8</td>
<td>1.03</td>
</tr>
<tr>
<td>Recycling (Paper/Plastic/Aluminum)</td>
<td>4.0</td>
<td>1.05</td>
</tr>
<tr>
<td>Recycling used cooking oils</td>
<td>4.0</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Note: Please indicate the extent to which each practice would change the chances of you deciding to stay at a hotel/resort. (1 = Definitely would not increase; 5 = Definitely would increase)

Table 6 shows relatively high ratings for increased propensity to choose a hotel based on sustainable practices. Notably, consumers provided the lowest ratings to practices that might detract from their experiences, like extended-use linen program, bulk dispensers for guest supplies, and reduced flow plumbing. Washing sheets less frequently, not being able to take a “souvenir” shampoo bottle, or having lower water pressure might lower the perceived quality of the service experience. The ratings are not significantly different from each other, but present a different view of customer perceptions, since previous research suggested consumers are most likely to perceive value associated with the practices they directly observe (e.g. Millar & Baloglu, 2011). Previous research suggests consumers require a discount to give up amenities, like toiletries (Chia-Jung & Pei-Chun, 2014). The current samples placed higher value on programmable
thermostats, motion-sensitive lights, air filtration, and recycling, which may be less likely to detract from, or may add to, the experience.

Discussion

The current study found age had a negative relationship with only two factors: air filtration system and rain/gray water reuse. This might be explained by younger festival attendees being more knowledgably about indoor air pollution and gray water reuse program because the need for these two areas is still relatively new. The health implications of indoor air quality might have less value to older festival attendees because they might assume air standards are regulated and therefore are not of importance and hotels are only in recent years more actively addressing indoor air quality beyond regulation. For example, it was reported that in the American Hotel & Lodging Association’s 2010 survey, twenty-five percent of respondents offered rooms with air purifiers, more than double the number of hotels that reported offering air purifiers in the 2008 survey (Hasek, 2010).

Water conservation is also a relatively new concern in the United States. It has only been in the last decade that drought has regularly been an issue in North Carolina. Therefore, younger festival attendees might be more sensitive to water conservation in hotels compared to older attendees. The other attributes, such as linen reuse programs, have become standard practices in hotels, and therefore the lack of any relationship between the features and age might be expected.

Our study also found gender and income did not have a significant relationship with any of the thirteen outcome variables. This is consistent with previous research on the preferences for hotel guests for sustainability (Hopkins & Roche, 2009; Tierney et al., 2011). This finding supports the notion that regardless of gender, all members of the travel party would be motivated at equal levels by the adoption of green practices.

The level of education of festival attendees also did not have any relationship with any of green hotel attributes included in the survey. While this may seem somewhat contradictory to advocates of the greening of the tourism industry who believe education alone can significantly enhance tourists’ desire to stay at greener hotels, this perspective ignores the fact that the environment has been on the minds of consumers since the 1970’s (Kinnear et al., 1974). Therefore it is possible the benefit of selecting green travel products is perceived similarly by all consumers, regardless of their level of education.

While our study, similar to many previous studies on green consumerism more generally and green hotels, did not find socio-demographic factors to have a strong relationship with selecting a hotel that had implemented environmentally preferable practices, we did expect environmental values to have a positive relationship with selecting a hotel that had implemented green practices. However,
surprisingly, our results showed no significant relationship between the environmental values index and selected sustainable practices.

It is unclear why environmental values did not influence festival attendees’ preference for a hotel that had implemented sustainable practices; however, a possible explanation might be green-minded travelers are more interested in the total environmental impact of a hotel rather than the individual practices themselves. More research is needed to examine why individual environmental practices were not related to environmental values whereas previous research indicated that environmental values did have a positive relationship with selecting a green accommodation while traveling. A positive implication of the lack of difference in ratings based on environmental values is it suggests green hotel practices may increase value perceptions in audiences that extend beyond a small niche of green consumers (Berezan et al., 2014).

Our results found a positive relationship between environmental self-efficacy and all of the selected environmental practices except for programmable thermostats. This relationship can easily be explained by the reasoning that consumers are more likely to select hotels that have implemented green practices if they believe those sustainable practices can have a positive effect on the environment. Therefore, it follows that festival attendees who believe they can have positive impacts on the environment would also believe that selecting a hotel that had implemented sustainable practices would also be able to have a positive effect on the environment.

Respondents might have assumed that programmable thermostats in hotels would not have a positive effect on the environment for two reasons. The first is programmable thermostats themselves do not have any environmental benefits. It is only when they are used correctly that they can help reduce energy consumption and have a positive environmental impact. It is also possible that respondents have had a negative experience with a programmable thermostat, such as difficulty setting an unfamiliar programmable thermostat, and therefore, have a negative view of them regardless of their prospective environmental benefit.

Festival organizers are motivated to understand festival attendees’ interest in sustainability, including attendees’ desires for hotels that have implemented sustainable practices, because it may help them position their festivals and select partners. The results suggest that the festival attendees who responded to the survey were slightly more likely to make hotel choices based on their sustainable practices (14-17% influenced by green practices) than the general population (~8% influenced by green practices). These results could provide guidance and opportunities to hotel owners and operators where these festivals are held. Although branding a festival as sustainable may attract a more educated, higher income audience (similar to the visitor demographics from the Terra Vita Event examined in the current study), it does not necessarily translate to greater demand
for sustainable features at hotels. However, this may be one more reason to adopt and promote sustainable practices/features.

This study also found that environmental values were less predictive than environmental self-efficacy with regard to preferences for green practices at hotels. This suggests hotel marketing may be better enhanced by emphasizing green practices that allow guests to actively participate in environmental protection, such as offering guests the choice of locally sourced amenities, and shy away from advertising green practices that are not directly experienced by the guest, such as energy efficient central heating and cooling systems. It is also relevant to note that some green practices that have had some success in a residential setting, such as programmable thermostats, may be less appealing in a hotel setting.

While research on festivals has been conducted for several decades, exploration of how sustainable festivals connect with other sectors of the sustainable tourism industry has only begun. The current study contributes to the literature by comparing the preferences for green hotel practices of two distinct food festival populations. Clearly this research could be taken further by incorporating preferences for other elements within tourism, including other food-related experiences and other types of special events (sporting, cultural, participatory), but also transportation, attractions, and destination preferences as well. The survey instrument can be broadened to include sustainability principles beyond the environmental, and certainly additional research in a variety of international settings would be valuable to distinguish regional and national differences.

Consumer concerns about environmental practices, and sustainability issues on a broader scale, are not likely to dissipate. Therefore, each nuanced level of understanding about consumer preferences and decision-making can direct sustainability managers, product developers and marketers in a more enduring, responsible solution to tourism’s sustainability challenges.

Limitations

The results reported in the current study have several limitations. First, the generalizability of the results is limited by the fact that we used convenience samples, both festivals were in one geographic region, the data are dated, and the attendees may not represent the wider population of festival attendees. The consistency of the responses from two different types of festivals increases the generalizability of the results somewhat, but the results should be replicated using a random sample from additional consumers. The survey does not ask about non-green related attributes, like price and convenience, which have been shown to more heavily influence hotel choice in the past (e.g. Chia-Jung & Pei-Chun, 2014). Respondents may have provided responses that were biased by social desirability.
Finally, although the results were compared between respondents who attended a festival that was branded as a sustainable festival to a festival that was not, we did not measure perceptions that the festival was sustainable. Therefore, the null effect for festival type may be attributed to the fact that festival attendees may not have been exposed to or aware of the sustainable branding.

Conclusion

As lodging managers invest both financial and nonfinancial resources in green practices, it is important they understand how these investments may impact the customer experience, for better or worse, and serve to differentiate their property. The results from this study indicate that simple socio-demographic information may be insufficient in understanding preferences of guests for many green practices. Many types of customers would increase their likelihood based on green practices. These findings may indicate hotels should consider other segmentation strategies when marketing their hotels based on sustainable practices, and provide justification for including self-efficacy as a potential predictor of individual differences. The results also suggest there is a relationship between the sustainability of the festival itself and attendees’ green travel preferences. Lodging managers can build upon the findings to increase their understanding of what customers want, make more informed decisions about spending on green initiatives, and justify investments in new green products and services and their promotions. In the same way, festival organizers can identify appropriate lodging partners (Chan, 2014) to help differentiate their offerings and minimize the offsite impact of festivals.

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