Eco-labeling motorcoach operators in the North American travel tour industry: analyzing the role of tour operators

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Tourist transportation is a major contributor of emissions and environmental pollutants. Eco-labels can encourage more sustainable tourism by informing consumers’ purchasing decisions, while utilizing market forces to initiate environmental responsibility among competing firms. The Green Coach Certification pilot eco-label program was introduced to the motorcoach industry in 2009 as part of a university research program. Although the literature addresses relationships between end-user consumers and eco-labels, little research has been published on mid-supply chain actors and tourism eco-labels. Tour operators are intermediaries between end-users and motorcoach operators and are important potential consumers of eco-labeled transportation services. To understand the role of tour companies as both consumers and providers of green services and eco-labeled products, a survey was administered to North American tour operators. Results demonstrate tour operator interest in a tourism transportation eco-label; however, this interest may be secondary to traditional considerations like price, reputation for safety and service, and previous partnerships. Ninety percent of tour operators indicated that environmental practices held some importance when choosing a transportation provider; approximately 50% said they would pay between 1% and 5% more for an eco-labeled coach company. Findings have important implications for the design and implementation of eco-labeling programs for sustainable tourism and transportation.

Keywords: tour operators; bus travel; eco-labeling; green consumers; certification

Introduction

Tourism is a leading international industry, generating 30% of the world’s exports and imports according to the United Nations World Tourism Organization (2009). At this large scale, the industry contributes significantly to greenhouse gas emissions, specifically carbon dioxide. Emissions from the tourism industry result largely from travel (Scott, Peeters, & Gössling, 2010). The mass migration of people for the purpose of tourism requires the use of multi-modal transportation systems. This aspect of tourism presents a significant opportunity to reduce overall environmental impact and greenhouse gas emissions.

There are many initiatives to promote sustainable tourism; however, few have addressed eco-labeling of transportation for tourism. Only the Green Coach Certification (GCC) program directly certifies motorcoaches for tourism. In 2009, the GCC eco-label was
introduced in the North American motorcoach industry. A common mode of transportation among tourists in North America, motorcoach travel takes place in rural, suburban and urban locations, moving tourist groups where rail and airlines often cannot with fewer emissions than private car transport (Dubois & Ceron, 2006; Nathan Associates, 2008).

The GCC was developed as a collaborative project that included the University of Vermont (UVM), American Bus Association (ABA), and the United Motorcoach Association (UMA) (http://www.uvm.edu/~snrvtdc/?Page=greencoach.html). While in the pilot-study phase, surveys of motorcoach operators and tour operators across North America were conducted to gauge environmental attitudes and behaviors of companies that provide and consume motorcoach services. Findings from the motorcoach operator survey are reported in Anderson, Chase, Kestenbaum, & Mastrangelo, in press. This paper focuses on understanding the tour operator population. Together, these studies can help determine whether and how the GCC eco-label can improve sustainability efforts within the transportation and tourism industries.

Eco-labels have been established in several industries, including over 100 labels related to the tourism industry (Medina, 2005). Previous research suggests that the success of an eco-label is contingent upon the level of understanding and awareness that the consumer has of the label itself in regard to the product or service being certified (Fairweather, Maslin, & Simmons, 2005). Yet it is still undetermined whether the presence of an eco-label influences the actual behavior of consumers (Reiser & Simmons, 2005). This paper presents the results of a survey administered to tour operators, who are both providers of tours and consumers of certified transportation. The study seeks to better understand potential receptiveness to an eco-label for tourism travel and the factors that influence decisions about booking transportation with a certified company.

Background

Environmental problems and public awareness

Worldwide recognition of environmental problems has increased over the past four decades as have legislative and voluntary measures taken to protect the earth’s resources (Kennedy, Beckley, McFarlane, & Nadeau, 2009; Ryland, 2000; Vig & Kraft, 2006). Despite greater environmental awareness, human activities continue to threaten the world’s ecosystems (Millennium Ecosystem Assessment, 2009). Among the most urgent issues is climate change, fueled in part by greenhouse gas emissions, which is predicted to cause significant changes in surface temperatures, precipitation patterns, and sea level during the next several decades (Intergovernmental Panel, 2007). Science supports the view that human activity has a negative impact on the earth’s natural systems and studies reveal increasing concern among people, yet there is a lag in behavioral changes to mitigate damages (Kennedy et al., 2009). That is a notable issue among tourists and in tourism (McKercher, Prideaux, Cheung, & Law, 2010).

Eco-labels as motivators for behavioral change

One approach to reinforcing the need for environmental action is environmental labeling, or eco-labels. Eco-labels encourage behavioral change by using the momentum of a market-driven economy and providing more complete information to the purchasing public. This gives consumers a choice to spend money intentionally in ways that will help mitigate
pollution that cannot be easily regulated by previous policies (Dietz & Stern, 2002). Eco-labels also address the psychological disconnect between people and environmental problems in that they increase consumer awareness and provide the opportunity for immediate decision-making regarding environmental action. Eco-labeling programs provide valuable, more complete information to consumers about the environmental effects of their purchase decisions.

Many industries have successfully adopted certification and labeling schemes. For example, organic and fair trade labels in the food industry inform consumers about the environmental and social impacts of a product. Labeling programs in other industries include the Energy Star, LEED, and SmartWood certification programs in the home appliance, building and construction, and wood and paper products industries (Energy Star, 2012; SmartWood, 2012). Examples from sustainable tourism include green hotels (e.g. Green Key Eco-Rating Program) and restaurants that feature locally grown food (e.g. Vermont Fresh Network) (Green Key, 2012; Vermont Fresh, 2012); these are also examples of certified services. An example of a certified service related to climate change is the carbon offset company Less Emissions, Inc., that is certified by the Canada’s EcoLogo Program (EcoLogo, 2012).

**Eco-labeling for tourism travel**

According to the United States Department of Energy (2009), transportation has been the highest end-sector source of carbon dioxide since 1999. Worldwide, transportation accounts for about 13% of greenhouse gas emissions, and in the United States, more than a quarter of CO₂ emissions can be attributed to transportation activities (Intergovernmental Panel, 2007; US EPA, 2010). Reducing greenhouse gas emissions has been identified by the United States Department of Transportation (2006) strategic plan as a national priority. Many initiatives have been established to reduce carbon dioxide emissions from transportation, including the development and promotion of alternative fuels and new technology, and programs to encourage modal shifts for commuters. Further opportunities for reducing greenhouse gas emissions still exist within the transportation sector. By encouraging companies to meet higher standards, and encouraging more sustainable consumer choices, eco-labels may prove to be effective tools for moving the industry toward decreasing greenhouse gas emissions. Some success has already been seen in the United States Environmental Protection Agency (EPA) Smartway labeling program, which is designed for the freight transportation sector (Tan, 2007). Since its inception in 2004–2011, it is estimated that 50 million fewer barrels of oil have been burned because of the program (Smartway, 2012).

Tourist movement created a massive demand for transportation in the first half of this decade, responsible for what could be the largest annual “human migration in history” (Budeanu, 2005). The tourism industry, one of the largest industries in the world, continues to grow (United Nations World Tourism Organization, 2009). Additionally, travelers have a variety of choices, especially in their transportation modes. For this reason, transportation in the tourism industry presents an optimal market in which to introduce a green certification program and accompanying eco-label.

**Tourism and motorcoach travel**

While growth in the tourism sector is viewed as economically important for many regions, tourism itself can become destructive if it exceeds a threshold and begins to diminish the attractiveness of a destination. For example, traffic congestion can deter future travelers from
returning to a location (Dickinson, 2006). This makes mass tourism a powerful leverage point in the industry where change can be very effective. A popular mode of transportation in organized tourism is chartered motorcoaches.

Catering to charter groups, organized tours, airport shuttles, scheduled route passengers, and sightseeing groups, the motorcoach industry in the United States and Canada carried approximately 751 million passengers in 2007. This totaled more passenger trips than commercial air carrier services and more than Amtrak and commuter rail combined. Approximately 33,000 motorcoaches are in service in North America, with many more operating throughout the world (Nathan Associates, 2008). The average motorcoach has the potential to remove 55 vehicles from the road, with larger double-decker vehicles able to accommodate even more people. Some double-decker motorcoaches can achieve close to 500 passenger miles per US gallon (MPG) and the typical coach with a 55-seat configuration can achieve up to 375 passenger MPG. Motorcoaches in general average about 206 passenger MPG (Nathan Associates, 2008).

This addresses a key issue of reducing roadway congestion during tourist experiences (Lumsdon, Downward, & Rhoden, 2006). When compared to other modes of motorized transit, motorcoaches, on average, also emit the least carbon dioxide per passenger MPG (Nathan Associates, 2008; U.S. Department of Transportation, 2010). Motorcoach travel is an eco-friendly alternative to many other types of vehicles, especially for people interested in sustainable tourism opportunities.

**Green Coach Certification program**

A pilot certification project for motorcoach companies in North America took place from 2009 to 2011. The GCC involved a collaborative effort between UVM, ABA, and UMA. Twenty motorcoach companies volunteered to participate in the pilot certification process. Companies that met project criteria were permitted to display the GCC eco-label on certified buses (Figure 1).

The program was conducted with the recognition that the accountability of a label must be examined. Consumers show little confidence in claims made by product manufacturers themselves; therefore, credibility behind an eco-label must be established. Third party certification can add legitimacy to an eco-label (Erskine & Collins, 1997). Along with creating trust in a label, consumer recognition is also critical to the success of eco-labeling initiatives. This aspect of labeling requires time and public education efforts to ensure that

![Green Coach Certification eco-label](image_url)
the purpose of the label is understood. These aspects continually prove to be barriers to the success of many eco-label programs (Reiser & Simmons, 2005).

To address these concerns, the pilot certification was administered through a university. Standards for the pilot program were developed with the input of industry stakeholders, following the International Social and Environmental Accreditation and Labeling Alliance process (Mallet, 2007). This approach was taken to identify realistic standards that could both improve sustainability and encourage operator participation in the program. In part, the pilot certification program was designed to promote motorcoach travel relative to other less efficient travel modes. These standards are currently being revised to be incorporated into a permanent certification program.

To become certified during the Green Coach pilot phase, a company must meet at least one of the following criteria:

- Meeting or exceeding an average of 148 passenger miles per gallon per coach.
- Running an EPA 2007 or 2010 compliant engine.
- Offsetting carbon emissions by 80% through an endorsed carbon-trading program.
- Running on an alternative fuel such as a blend of biodiesel.
- Having strict, documented, and verifiable energy conservation and recycling programs.
- Incorporating other emerging environmental technologies as prescribed by GCC.

Over 100 eco-labels already exist in the tourism industry (Medina, 2005). But the proliferation of eco-labels does not guarantee their success or widespread acceptance by the consumer. Previous studies of tourist responses to eco-labels show very low rates of recognition and awareness of the labels (Fairweather et al., 2005). This reveals the importance of not only understanding the consumer of an eco-labeled product but knowing the demand for an eco-label in a particular market as well.

**Consumers of motorcoach services**

Tour operators comprise a segment of the population that consumes motorcoach services. When booking mass tour packages, tour operators choose their transportation provider; in turn, the end consumer chooses to purchase a trip designed and sold by a tour operator (Figure 2). This places tour operators in the middle of the supply chain as both a consumer and a producer of tourism services. As such, the decision to work with a motorcoach company certified with an eco-label is not often an individual choice but that of a firm.

As a mid-supply chain player in the tourism market, tour operators can greatly influence the success of an eco-labeling program. Because the tourism industry is comprised of many complex supply chains, many opportunities exist for organizations to reduce their environmental impact through an analysis of their supply chain. A framework to address the sustainability of an organization’s supply chain has been developed by Schwartz, Trapper, and Font (2008). This framework can be applied to tour operators as they attempt to reduce their impact and identify transportation as a critical service that contributes to emissions. Choosing a motorcoach company with an eco-label is a decision that can have cascading effects in both directions of the tourism supply chain.
Behavioral theory of the firm and environmental responsibility

Given tour operator placement as an intermediary in the supply chain, their role as a firm also needs to be considered. While tour operators would be the direct consumers of eco-labeled transportation, their customers – the tourists – are the ultimate consumers of this product. Tour operators will be sensitive to this consideration in their booking decisions. A firm is a coalition of individuals who collectively make decisions (Cyert & March, 1992). Firm decisions are based largely on profitability. That being said, certain environmental practices may increase company efficiency and lower operating costs (Bansal & Roth, 2000).

Previous research suggests that adopting environmentally responsible practices has been an afterthought for most firms in their production models (Zairi & Peters, 2002). However, other studies have identified a number of motivations that can lead to the adoption of corporate social and environmental responsibility. These include responding to stakeholder pressure, gaining a competitive edge, adhering to government regulation, avoiding fines and other regulatory action, and image enhancement (Dummett, 2006; Lynes & Andrachuk, 2008; Lynes & Dredge, 2006). Company leaders may also have internal ethical values that guide business decisions. This may involve an ecological consciousness that drives owners and managers to do “the right thing” (Bansal & Roth, 2000).

Eco-labeling can motivate companies to improve their environmental performance by addressing these various motivations. Companies motivated by ethical concerns can easily identify services that meet these values if these services are certified. Companies that provide eco-labeled services can also meet stakeholder and customer demand for this type of product. Alternatively, providing an eco-labeled service can enhance competitiveness. Market competitiveness has overshadowed ethical concerns as companies seek to meet standards for environmental management set by the International Standards Organization (International Standards, 2012). Pressure from competing firms that become certified with
an eco-label can cause additional firms to do the same in order to stay competitive in the market (Dewhurst & Thomas, 2003). Despite this real world evidence, studies on whether companies benefit from engaging in corporate social responsibility have yielded inconsistent results (McWilliams, Siegel, & Wright, 2006).

**Study framework**
This study examines tour operators as potential consumers and providers of green transportation services. In particular, tour operators in North America are studied in the context of a pilot certification program for motorcoaches. A number of variables are examined to better understand the role of tour operators as potential consumers of green motorcoach services. First, the importance that tour operators place on environmental transportation services is examined relative to other factors frequently considered in business decisions (e.g. safety records, previous partnerships, costs). Second, tour operator interest in, and awareness of, the pilot GCC program is determined. Third, tour operators are asked about their willingness to pay for services from environmentally responsible and eco-labeled providers as a way to gauge tour operator interest in a green certification program. Factors that may influence this stated willingness to purchase green certified transportation services are examined (e.g. company size, current environmental behaviors, type of services offered). Tour operators are also examined as potential providers of transportation services. To do this, tour operators are asked to indicate the importance of green certification as a way to improve their business (e.g. increasing business, gaining competitive advantage) relative to other external benefits (e.g. reducing dependence on oil, reducing environmental impact).

**Methods**

**Survey implementation**
To better understand decisions made by tour operators when booking motorcoach services, an Internet survey of tour operators was conducted between May and June of 2009. During the survey design process, UVM professors, graduate students, and staff members reviewed questions. The survey was pre-tested and then reviewed by five North American tour operators and staff members of the UMA and ABA for language, clarity, aesthetic appeal, and formatting. To ensure consistent display and format on a variety of computer monitors and Internet software, the survey was also sent to several contacts. A list of 228 tour operators from the ABA was used as the sampling frame. As members of this trade organization, these operators are focused on motorcoach tours and may differ from operators using alternative forms of transportation (e.g. boat and trolley tours).

The Internet survey was implemented following the guidelines of Dillman (2009). A first email was sent mid-week, mid-morning to potential respondents. During the following four weeks, follow-up emails were sent to those who had not yet responded, reminding them about the survey. Different subject lines were used to gain the attention of tour operators with different interests. Each time a deadline was provided to encourage response in a timely manner (Porter & Whitcomb, 2003). To help encourage response, tour operators in the sample were offered an opportunity to enter a prize draw for $500 cash or waived registration fees to an annual industry meeting. Previous studies do not definitively indicate that incentives increase response rates. Researchers contend that this may be due to the fact that incentives are more commonly offered in long, tedious surveys (Cook, Heath,
L. Anderson et al.

Thompson, 2000). After the fifth follow-up email, 58 responses were collected. Follow-up phone calls raised the number of responses to 72.

Non-respondent phone calls were made to 100 randomly selected tour operators. Of the 100 companies called, 93 were reached and willing to answer questions. Non-respondents were asked for an updated email contact if they were willing to take the survey but had not received it. If they were not willing to take the survey they were asked only three questions in order to assess bias and possible differences between respondents and non-respondents within the sample. Non-respondents did not differ from respondents in their responses to the three questions.

Survey questions

Survey questions were designed to learn more about tour operator company characteristics as potential consumers and providers of green certified motorcoach services. Respondents were then asked questions pertaining to considerations taken by companies when selecting transportation services. To assess awareness of, and potential demand for eco-labels, tour operators were asked to indicate whether they had heard of the GCC eco-label and whether they would be willing to pay for transportation certified with an eco-label. Tour operators were asked a number of questions about their company (e.g. size, type and length of tours offered, and types of environmental behaviors taking place at the company) as factors that might influence interest in purchasing green certified transportation. Questions were also designed to learn more about the importance of an eco-label for tour operators as a provider of green services. Specifically, tour operators were asked about the relative importance of eco-labels for competitive advantage and for environmental protection. A copy of the questionnaire used can be found on the web-based version of this paper, at www.tandfonline.com/JOST.

Results

Response rate

Of 228 potential respondents, seven had previously opted out of any surveys sent from the Survey Monkey program, yielding an effective sample of 221. With 72 completed questionnaires, the response rate for the survey was 32.5%, a value that falls within or above the average response rates of previous web-based surveys (Banerjee, 2002; Teisl, Roe, & Hicks, 2002).

Company characteristics

Ninety-three percent of respondents indicated that they book transportation with a company external to their own. Responding tour operators reported having between 0 and 275 full-time employees. The average firm size by full-time employees is 10.2. However, one company is much larger than the others. When this company is excluded, the adjusted average is 6.4 full-time employees.

The majority of respondents book multi-day, all-inclusive package tours as their most common type of business. Of companies responding, 96% book multi-day trips and 81% book all-inclusive group charters. The group size most often booked is between 31 and 50 people as reported by over 97% of tour operators.

More than three-quarters (79%) of tour operators reported recycling waste in their company. However, less than 10% calculate their carbon footprint or purchase carbon offsets.
Likewise, most tour operators (90%) do not have a formal environmental management policy. One-third of the companies incorporate a green message in their marketing materials. Of those companies that do not incorporate a green message, 54% said that they would be interested in beginning to do so. Nearly 90% of respondents engage in one or more of the aforementioned environmentally responsible behaviors.

**Tour operators as green consumers**

In order to understand the important factors that tour operators consider when choosing transportation for their packages, participants were asked what is most important to their decision. Respondents could only pick one answer. Price was reported as the most important factor (28% of respondents). Reputation of service and safety were also commonly chosen as important in decisions (26% and 24%, respectively) (Figure 3). Furthermore, when asked to rate the importance of factors considered when booking transportation (from “not at all important” to “extremely important”), about 90% of tour operators considered reliable reputations in service and safety to be extremely important. Conversely, environmental practices were not considered to be the most important factor in choosing a transportation provider by any tour operator companies. However, 90% did indicate that it held at least some level of importance, with the greatest number reporting that environmental practices were moderately important (Figure 4).

Tour operators varied in their awareness of, and interest in, transportation eco-labels. While 37% of tour operators had heard about the GCC pilot program, nearly two-thirds (63%) were not aware of the program. While willingness to pay questions have been criticized for not predicting actual behaviors (Cotte & Trudel, 2009), stated willingness to pay was used in this study as a way to gauge tour operator interest in a green certification program. About half of respondents indicated that they would be willing to pay more for transportation certified with an eco-label. Specifically, 35% indicated that they would be

![Figure 3. Most important factors for choosing transportation companies among tour operators.](image-url)
Figure 4. Importance of environmental practices in choosing a transportation provider.

Tour operators that placed greater importance on environmental practices and who gave more frequent consideration to eco-labels appeared to be willing to pay more for green certified transportation services and for the services of transportation providers that engaged in green practices (Table 1). For example, 27% of companies that place a high value on environmental practices said that they would be willing to pay more to book transportation with a green company, while none of the companies that placed no importance on environmental practices were willing to pay more for these services. Likewise, 75% and 50% of companies that always consider eco-labels would be willing to pay more for eco-labeled and environmentally responsible service providers, respectively. Tour operators that engaged in more environmentally responsible behaviors stated that they were willing to pay more for the services of transportation companies that engage in green practices (e.g. 26% of companies that engaged in two or more environmental behaviors indicated willingness to pay more for green practices, while just 11% of companies that engaged in no environmental behaviors were willing to do so).

Company size and typical trip length did not appear to be related to tour operator willingness to pay for green certification or for a transportation company that engages in green practices. However, companies that indicated that price was the most important factor in choosing a transportation provider appeared to be less likely to say that they would be willing to pay more for green or eco-labeled transportation services. Of those who listed price as the most important factor, 0% would definitely pay more for a company that engaged in green practices, while 50% would consider paying more, and 50% would not pay more. For those who did not list price as the most important factor, 20% would pay more to book with a green company, 59% would consider it, and just 21% would not pay more. Similarly, those who listed price as their first consideration were less likely to state willingness to pay for eco-labeled transportation services. Forty percent of price first respondents said they...
Table 1. Tour operator company characteristics and stated willingness to pay for environmentally responsible and eco-labeled transportation providers.

<table>
<thead>
<tr>
<th>Stated willingness to pay for “green practices”</th>
<th>Stated willingness to pay for eco-label</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes (%) No (%) Maybe (%)</td>
<td>Yes (%) No (%)</td>
</tr>
</tbody>
</table>

Typical trip length

<table>
<thead>
<tr>
<th>One day</th>
<th>Multi-day</th>
<th>Week or longer</th>
</tr>
</thead>
<tbody>
<tr>
<td>46.2</td>
<td>53.8</td>
<td>33.3</td>
</tr>
</tbody>
</table>

Number of employees

<table>
<thead>
<tr>
<th>Zero to one</th>
<th>Two to three</th>
<th>Four to seven</th>
<th>Eight or more</th>
</tr>
</thead>
<tbody>
<tr>
<td>45.0</td>
<td>53.8</td>
<td>45.5</td>
<td>60.0</td>
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</tbody>
</table>

Importance of environmental practices

<table>
<thead>
<tr>
<th>Highly</th>
<th>Slightly-moderately</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>58.6</td>
<td>52.9</td>
<td>0.0</td>
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</table>

Number of environmental behaviors

<table>
<thead>
<tr>
<th>Zero</th>
<th>One</th>
<th>Two or more</th>
</tr>
</thead>
<tbody>
<tr>
<td>22.2</td>
<td>52.9</td>
<td>65.2</td>
</tr>
</tbody>
</table>

Frequency of consideration given to eco-labels

<table>
<thead>
<tr>
<th>Always</th>
<th>Sometimes</th>
<th>Rarely</th>
<th>Never</th>
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</thead>
<tbody>
<tr>
<td>75.0</td>
<td>65.2</td>
<td>62.5</td>
<td>28.6</td>
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Importance of price

<table>
<thead>
<tr>
<th>Most important factor</th>
<th>Not most imp. factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>40.0</td>
<td>56.0</td>
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</table>

Further, there is some evidence to suggest that very small companies were more likely to choose a factor other than price as their most important consideration. Ten percent of respondents who selected price as the most important factor were from very small companies (one or fewer employees), while 36% of companies who selected another factor as most important were from companies of this small size. The length of trips offered by companies did not appear to be related to the importance of price; multi-day trips were most common among all respondents.

**Tour operators as green service providers**

Respondents were asked what would be important to them when choosing a motorcoach company that had an eco-label. Responses were given on a 5-point scale from 1 = “not at all important” to 5 = “extremely important”. Respondents gave similar ratings to the importance of increasing business (mean = 3.8, SD = 1.3), gaining competitive advantage (mean = 3.7, SD = 1.4), moving away from dependence on oil and gas (mean = 3.8,
To increase business for your company
to gain a competitive edge over other companies
to move toward independence from oil and gas
to have less impact on the environment

Figure 5. Importance of factors considered by tour operators when deciding to use a transportation company that has been certified with an eco-label.

SD = 1.2), and having less impact on the environment (mean = 3.9, SD = 1.2) in choosing an eco-labeled transportation company (Figure 5).

**Discussion and conclusions**

This study sought to better understand tour operators as consumer intermediaries – as both the direct consumers of eco-labeled transportation services and providers of certified tours. As consumers, tour operator interest in green services relative to other business factors was assessed. In addition, company awareness of, and interest in, a pilot green certification program was determined. Stated willingness to pay provided a way to consider whether there are certain characteristics of tour companies that would lead them to be more interested in green or eco-labeled services. The relative importance of business and environmental benefits was examined to better understand tour operators as potential providers of green certified transportation services.

Study findings suggest that there is interest among tour operators in eco-labeled motorcoach services and in greening the tourism and transportation industry, as 90% of tour operators indicated that environmental practices held some importance to them in choosing a transportation provider. Likewise, nearly half of respondents reported that they would be willing to pay more for transportation services that are eco-labeled or have adopted specific environmental practices. Some tour operators stated that they were willing to pay up to 10% more for environmental services. The practical implications of these findings are tempered by the limitations of this methodological approach; however, tour operator responses do indicate a receptiveness to choosing a greener option. Already, a majority of respondents incorporate, or would be interested in incorporating, a green message in their marketing materials.
Although tour operators demonstrated interest in green practices and certification, this research shows that environmental practices appear to be secondary to other business considerations when purchasing transportation services. These considerations include cost, reputation for safety and service, and previous partnerships, with cost being the most important. The latter fits with the notion that price is a primary consideration in decisions about environmental responsibility (Zairi & Peters, 2002). However, as providers of certified transportation services, tour operators rated competitive advantage and increased business – important motivations in corporate social and environmental responsibility (Dummett, 2006; Lynes & Andrachuk, 2008; Lynes & Dredge, 2006) – as equal in importance to environmental benefits (i.e. lower dependence on oil and gas, reduced environmental impact).

Findings from this study suggest that environmental services were viewed as supplementary to other business considerations, a finding that fits with research suggesting that customers choose green services over less socially conscious providers while expecting similar levels of cost and quality (Cotte & Trudel, 2009). Given the competing factors considered by tour operators when booking transportation, providing environmentally certified transportation services to tour operators at a reasonable cost could encourage adoption of eco-labels in the tourism travel industry. Anecdotal evidence suggests that GCC participant companies did not raise costs in relation to their participation in the pilot eco-label program.

Results presented here indicate that companies likely to adopt an eco-label are those that already have some level of interest and involvement in environmental issues. Future certification efforts may benefit from a targeted message that focuses on the environmental benefits of certification. Additionally, working to certify transportation companies that have a good reputation for safety and service quality, and who already have partnerships with tourism companies, could increase awareness and demand for lower impact and eco-labeled forms of transportation in the tour industry.

Previous studies have shown that consumers can significantly affect the market for an eco-labeled product or service after it has been introduced (Teisl et al., 2002). Over time, the introduction of an eco-label in the market may inform end consumers and other tour operators about the benefits of such a label, thereby increasing the demand for green certified motorcoach services. This could lead to more widespread acceptance for these additional aspects of motorcoach transportation once the label has been familiarized to the market. Of course, this is an area that would benefit from future research. While tour operator receptiveness to green services suggests a latent demand for such products among their consumers, this can only be directly known by assessing expectations of the end consumer.

Although findings from this study demonstrate receptiveness to an eco-label in this specific industry from this specific group of consumer intermediaries, these findings have implications for tourism travel beyond the motorcoach industry. Tour operators provide services for a diversity of transportation types, including boat, airplane, and train travel. The receptiveness of motorcoach tour operators to green certification suggests that others in the tourism industry may also support such efforts and further research in this area is warranted.

Notes on contributors
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