



UNIVERSITY
OF WOLLONGONG
AUSTRALIA

University of Wollongong
Research Online

Faculty of Commerce - Papers (Archive)

Faculty of Business

2009

Beyond ecotourism: the environmentally responsible tourist in the general travel experience

Sara Dolnicar

University of Wollongong, s.dolnicar@uq.edu.au

Patrick Long

East Carolina University

Publication Details

Dolnicar, S. & Long, P. (2009). Beyond ecotourism: the environmentally responsible tourist in the general travel experience. *Tourism Analysis*, 14 (4), 503-513.

Research Online is the open access institutional repository for the University of Wollongong. For further information contact the UOW Library:
research-pubs@uow.edu.au

Beyond ecotourism: the environmentally responsible tourist in the general travel experience

Abstract

A shift of attention from the dominant product-orientation in environmentally sustainable tourism to a demand-orientation has been suggested as a way of minimising the effects of the inherent trade-offs the tourism industry faces between maximization of profits and investment in environmental sustainability. The success of such an approach depends on the existence of a class of tourists who are not only motivated to take care of the natural surroundings of the host destination, whether they are travelling in an ecotourism or general tourism context, but also represent an economically attractive market segment.

Keywords

general, travel, experience, environmentally, beyond, responsible, ecotourism, tourist

Disciplines

Business | Social and Behavioral Sciences

Publication Details

Dolnicar, S. & Long, P. (2009). Beyond ecotourism: the environmentally responsible tourist in the general travel experience. *Tourism Analysis*, 14 (4), 503-513.

Running Head: BEYOND TOURISM

Beyond Ecotourism:

The Environmentally Responsible Tourist in the General Travel Experience

Sara Dolnicar

School of Management & Marketing, University of Wollongong, Northfields Avenue,
Wollongong, New South Wales 2522, Australia

sarad@uow.edu.au

Patrick Long

North Carolina Center for Sustainable Tourism, Division of Research and Graduate
Studies, East Carolina University, Greenville, North Carolina, 27858, USA

longp@ecu.edu

Acknowledgements

This research was supported by the Australian Research Council through the Discovery Grant Scheme (DP0557769).

Note

This paper is a further improved version of the paper presented at the ttra Europe Conference in 2007.

Address correspondence to Sara Dolnicar, School of Management and Marketing, University of Wollongong, Wollongong, NSW 2522, Australia. Tel: +61 2 4221 3862, Fax: +61 2 4221 4154, email: sarad@uow.edu.au

Beyond Ecotourism:

The Environmentally Responsible Tourist in the General Travel Experience

Abstract

A shift of attention from the dominant product-orientation in environmentally sustainable tourism to a demand-orientation has been suggested as a way of minimising the effects of the inherent trade-offs the tourism industry faces between maximization of profits and investment in environmental sustainability. The success of such an approach depends on the existence of a class of tourists who are not only motivated to take care of the natural surroundings of the host destination, whether they are travelling in an ecotourism or general tourism context, but also represent an economically attractive market segment.

The aim of this study is to investigate whether there is empirical evidence for the existence of such a segment among the wider tourism population and, if so, how can it be characterised and thus marketed to. Willingness to pay is used as a criterion to define this segment, as it implicitly accounts for the trade-off that suggests environmental protection comes at a price.

Results from the empirical survey study conducted in Australia indicate that environmentally responsible tourists who are willing to pay for environmental initiatives taken on by their tour operator can be characterized by a distinct profile with respect to travel information seeking, destination preferences, travel behaviour and willingness to pay - indicating that targeting such a segment of tourists in the general tourism context represents an attractive supplementary strategy to traditional supply-sided measures of sustainable destination management.

Keywords: environmentally responsible tourists, sustainable tourism, green tourism, a priori segmentation, profiling

Introduction

The Trade-off Between Tourism Revenues and Environmental Sustainability

The environmental sustainability of tourism is a concept that has not only been widely studied by academics but has also attracted significant attention among government authorities and those business owners and managers dependent upon the condition of the destination's natural resources. The latter are acutely aware of the importance of protecting the resource upon which their profits most fundamentally depend. Yet the short term trade-off between the cost of environmental protection and profit maximization makes the implementation of pro-environmental measures at destinations a challenging task. Empirical support for this trade-off has been provided by a number of authors for different tourism settings in the past. For instance, Knowles, Macmillan, Palmer, Grabowski, and Hashimoto, (1999), who conducted a study among hotels in London and found explicit evidence of the trade-off between revenue-maximization and the implementation of measures of environmental sustainability, conclude that it is worthwhile to investigate ways of giving the tourism industry market incentives for nature protection by choosing a demand-driven approach. They state that "Even though the ideas of conservation and protection of nature and its resources are encouraged, actual practice cannot overlook the fact that the foundation of the industry is consumerism" (p. 257), and that "[...] industry's response has been [...] effective in responding to [...] environmental concerns [...] to create competitive advantage. There is no indication that these programmes are conducted for philanthropic motives." (p.

263). Getz (1994), in a longitudinal study of residents' attitudes towards environmental protection, reveals paradoxical responses. While, in two surveys, residents agreed that environmental protection is more important than tourism development, they also claimed to support the construction of more skiing facilities and development of easier access to nature reserves. This response behaviour makes evident the trade-off between revenue-maximization and nature protection. Sustainable principles of small tourism businesses in Sussex were also studied by Berry and Ladkin (1997) who reveal that the industry perceives implementation of regulations on sustainable tourism as too expensive. Also, the "willingness to be involved in developments" is only given "provided they will not absorb a great deal of time because this would not be affordable" (p. 438).

Supply-side Versus Demand-driven Measures to Improve the Environmental Sustainability of Tourism

In view of the trade-off tourism businesses face between maximizing their profit and minimizing the burden on the environment purely product-oriented approaches, such as the introduction of capacity limits at tourist sites, increased awareness- building in traveler education, or effective management of nature-based companies and destinations (which come at additional cost for tourism operators and currently represent the vast majority of sustainable destination initiatives), may not be the best possible solution to encourage the implementation of pro-environmental measures. The reason for this is that (1) such supply-sided measures (Dolnicar, 2006) usually come at an additional cost to tourism businesses (e.g. fewer tourists because of capacity restrictions, additional cost due to educational efforts, additional cost due to required infrastructure changes etc.) and (2) the assumption underlying many supply-side measures is that tourists can be reeducated, that individuals who do not take care of the environment can be somehow convinced to change their habitual behaviour

while on vacation. Consequently, demand-driven approaches (Dolnicar, 2006) should be investigated in more detail to assess whether they represent a valuable supplement to supply-sided measures. The fundamental idea underlying demand-driven measures is that tourism destinations take more responsibility for the kinds of tourists they cater for. Just like many tourism destinations target family travelers or adventure travelers, a demand-driven approach to environmentally sustainable tourism implies that tourism destinations target individuals who behave in an environmentally friendly manner and consequently do not have to be reeducated when arriving at the destination.

The potential of demand-driven approaches has already been identified by Middleton (1998), but recently a number of conceptual and empirical papers have rediscovered the demand-driven approach to sustainable tourism (Ataljevic & Doorne, 2000; Crouch et al., 2005; Dolnicar, 2004a; Dolnicar, 2006; Dolnicar, Crouch, & Long, forthcoming; Dolnicar & Leisch, forthcoming; Fairweather, Maslin, & Simmons, 2005) which essentially proposes to make use of marketing tools to attract tourists with pro-environmental behaviours rather than – in the extreme case – constrain the number of tourists who do not behave environmentally friendly or attempt to reeducate them.

While studies investigating the potential of demand-driven approaches to sustainable tourism have only recently emerged, demand-orientation has been the preferred perspective taken by research in the area of ecotourism, a specific niche segment of tourism. This body of work has led to valuable empirical insights for a range of different contexts. The limitation of past efforts to outline targeted marketing activities towards ecotourists within the tourism industry in general, however, has been the narrow focus on nature-based tourism, which is either

explicitly part of the ecotourists' definition of ecotourists (Ballantine & Eagles, 1994; Blamey, 1997; Blamey & Braithwaite, 1997; Ceballos-Lascuráin, 1991; Eagles, 1992; Khan, 2003; Kretchman & Eagles, 1990) or implicitly assumed through their operationalisation of ecotourism studies (Kerstetter, et al., 2004; Wight, 1996).

Not only have researchers in the area of ecotourism studied the demand side carefully, they have also made extensive use of one of the most fundamental strategic marketing tools for matching supply and demand in competitive markets, that being market segmentation. Yet most of the segmentation studies (for instance, Kerstetter, et al., 2004; McCool & Reilly, 1993; Palacio & McCool, 1997; Pearce & Wilson, 1995; Ryan & Huyton, 2000) did not focus on environmental protection and did not aim to develop insight into the self-motivation of tourists to protect the environment they were visiting beyond the range of nature-based tourism. A first step in this direction was made by Blamey and Braithwaite (1997) who segmented 3500 Australian citizens according to their social values. With the main emphasis being the study of attitudes, little can be directly deduced for tourism marketing. But the authors did come to the conclusion that "little is known about the profile of individuals who are [...] driving this apparently lucrative market" and "Individual operators will clearly need to complement the results of broad-based segmentation studies [...] with studies that are more specific to the particular experiences they offer," thus acknowledging the importance of understanding the market segment that is willing to protect the host country's natural resources. Kerstetter, et al., (2004) make a major contribution to the investigation of ecotourists' intentions to behave pro-environmentally, finding a segment constructed on the basis of motivational patterns that differed significantly with respect to their willingness to accept control policies not to enter wetlands or touch fauna and flora to maintain the quality of the local environment and to join the local conservation association.

Study Aim

The aim of this study is to investigate whether there is empirical evidence to suggest that a sub-segment of environmentally responsible tourists exists who represent an attractive market segment for the tourism industry beyond the narrow area of nature-based tourism. This aim extends recently published work in which researchers have provided empirical evidence for the fact that environmentally friendly tourists exist beyond the context of ecotourism, but does so in a distinctly different way than prior work by intrinsically accounting for the difficulties the tourism industry faces in balancing environmental protection and profit maximization. This is achieved by using willingness to pay as the central variable under study, an approach successfully applied by Laroche, Bergeron, and Barbaro-Forlea (2001) in the general consumer behaviour area. Should an economically attractive environmentally friendly segment emerge, the inherent trade-off of environmental sustainability and profit maximization the tourism industry continually faces could be minimized through effective target marketing aimed at these newly identified environmentally responsible tourists.

Identifying segments that are intrinsically motivated to protect the host country's natural resources is, to the authors' knowledge, a sustainable strategy which has received little mention in a tourism industry setting. It is not claimed that the dominant product-oriented paradigm of sustainable tourism is obsolete. Rather, the proposed market-driven approach would support product-oriented activities by attracting more appropriate customers for these efforts. Thus, if such segments can be identified, ecological sustainability becomes a by-product without additional product-oriented efforts from the host destination (reports on rules and rule enforcement for product-oriented measures illustrate the effort required both in time

and financial resources to assure compliance with sustainable tourism standards) and the trade-off situation host countries typically face is diminished. It would therefore no longer be necessary to “sell the natural resources for foreign currency”, sacrificing the natural resources of the destination in order to enable the tourism industry to flourish and generate continued or higher revenues for individual enterprises.

Underlying the investigation of the existence and measurability of environmentally responsible tourists is thus the potential for a paradigm shift in the area of environmentally sustainable tourism through increased use of natural market forces to protect destinations’ environments rather than emphasizing the product (supply) side (for instance, by limiting the number of tourists allowed to visit a region) and trying to impose rules on unwilling consumers (maximizing the pleasure of the experience) and unwilling industry (maximizing revenues).

Methodology

Survey Instrument and Administration

The data was collected between July and October of 2004 in cooperation with an Australian tour operator offering vacations both in Australia and overseas. The tour operator’s email list, consisting of approximately 6,000 addresses including both customers and other subscribers interested in the operator’s information distributed in the form of a regular travel newsletter, was used to invite study participants. This invitation explained the purpose of the study and provided an internet homepage link where an online survey was accessible. The main purpose of the study was to determine if a sub-segment of environmentally responsible tourists exists

who represent an attractive market segment for the tourism industry beyond the narrow area of nature-based tourism.

The questionnaire was developed after an extensive exploratory research phase during which short questionnaires and focus groups were used to extract the relevant dimensions and answer categories to be included in the study; it took study participants about 20 minutes to complete. A generous incentive was offered: from among all participants in the research project a participant's name would be drawn to win a vacation worth AU\$4000 for two travellers. Based on the earlier focus group responses, the evidence indicated that this incentive would be very effective.

The final version of the questionnaire solicited socio-demographic data, information on the respondents' vacation-planning and information-seeking behaviour, travel and destination preferences, willingness to pay for particular aspects of a trip, concern over potentially perceived risks, and a small number of questions directed at the offer of the collaborating tour operator in particular. Most of the questions were presented in binary format and participants were asked to respond by stating whether they agreed or disagreed. This format was chosen because the intermediate levels of typical rating scales were not deemed sufficiently informative for the problem at hand to compensate for the susceptibility to response styles (Baumgartner & Steenkamp, 2001), the lower time requirements of binary format, and the explicit recommendations emerging from reliability and validity-related research work on response scales by Peabody (1962) and Matell and Jacoby (1971).

Operationalisation of “Environmentally Responsible Tourists”

A typical *a priori* segmentation approach (Dolnicar, 2004b; Mazanec, 2000) was chosen to investigate the research question at hand. The Splitting Criterion used was the answer of respondents to the question about their willingness to pay a premium price for the environmental initiatives of the tour operator. This information captures the utility tourists assign to the environmental responsibility demonstrated by the tour operator they choose to travel with. The application of this criterion is atypical for studies in ecologically sustainable tourism.

A review of past ecotourism studies reveals that the major components of operationalisation contain some or all of the following criteria: having undertaken an ecotrip recently (Khan, 2003; Kretchman & Eagles, 1990), having visited pristine or remote or protected natural areas (Kerstetter, et al., 2004), and being interested in nature (Ballantine & Eagles, 1994; Blamey & Braithwaite, 1997; Wright, 1996). The willingness to pay for an item was chosen because it is believed to be a more discriminating criterion than most of those typically used, since it implicitly tests the trade-off tourists are willing to make in terms of personal expense. By comparison, criteria such as interest in learning about nature or visiting pristine environments are fairly general and do not imply a strong motivation to protect nature.

From a tourism industry perspective, the identification of a group of environmentally responsible tourists that exists beyond the context of nature-based tourism and differs significantly in as many characteristics as possible is optimal. In this case the potential economic attractiveness of these environmentally responsible tourists could not only be

evaluated but a clear marketing action plan could ultimately be developed, including how best to identify and reach environmentally responsible tourists during their information search stage.

As mentioned earlier, an *a priori* segmentation approach has been chosen with the willingness to pay for environmental initiatives offered by the tour operator as a grouping criterion. The resulting segments are compared with regard to socio-demographic and travel behaviour variables. Chi-squared tests are used for these comparisons. Bonferroni correction assures that resulting p-values from significance tests are not overestimated. This procedure is typically used in tourism research to profile subgroups of the total tourist population, such as light and heavy users, large and small spenders, or tourists at different stages of their lifecycles.

Sampling Procedure

The optimal sampling strategy of course depends on the research question under study. The aim of the present study is to determine whether a specific segment exists, that of environmentally responsible tourists, within a larger framework of general tourists. Given that the proportion of tourists willing to pay for environmental initiatives is likely to be low, a non-representative sampling strategy is required to assure that a sufficient number of respondents in the sample are considered environmentally responsible in order to conduct the statistical tests needed to profile this segment. For this reason the sampling strategy chosen was to send out an invitation to participate through a tour operator who positions himself as being an environmentally and ethically responsible company. This tour operator pledges to maximise the positive effects of tourism on the host communities including the employment

of local staff, using local suppliers and developing sustainable businesses. The operator also pledges to minimize the negative effects of tourism, such as assuring that tourism does not divert resources away from local communities or drive up the prices of local resources. The operator also provides opportunities for cultural exchange, to share and learn from the local communities and to contribute towards host community welfare by providing support for health, education or environmental protection matters (www.worldexpeditions.com).

Six hundred and forty-nine completed questionnaires were returned, leading to a response rate of 11 percent. Three main reasons contributed to the relatively low response rate despite the attractive incentive: first, not all of the emails sent could be delivered to the addresses in the database because subscribers do not necessarily update their data on a regular basis. Second, it was unclear how many of the recipients of the newsletter were highly involved customers of this product. It is likely that some recipients of the newsletter do not actually study it each time when they receive an issue. Finally, no follow-ups were sent in order to keep to a minimum any possible annoyance at the undertaking of this market research through the newsletter which might reflect negatively on the company. The relatively low response rate is, however, not of concern for the investigation of the research question as sample representivity is not required.

Four hundred and thirty-four respondents were selected for the *a priori* segmentation analysis. These tourists were selected on the basis of answering the question about their willingness to pay a premium price for environmental initiatives of the company with either yes or no only. By selecting only these tourists it is assured that an unblurred profile of the two groups can be drawn without contamination of data by respondents who are not sure

about their willingness to pay. Among these, 187 stated their willingness to pay a premium price, 247 stated their unwillingness to do so. This indicates that the sampling strategy has achieved its aim of providing a sufficiently large number of respondents who are willing to pay for environmental initiatives thus enabling comparative statistical testing of the two a priori segments. All analyses were based on comparing these self-declared environmentally responsible tourists representing 43 percent of the sample with those who indicated an unwillingness to pay a premium price (57 percent of the sample).

As mentioned earlier, it is likely that the addressees of the tour operator's newsletter are not representative of the entire Australian tourism population due to past positioning efforts by the tour operator as an environmentally responsible organisation. This explains the high proportion of respondents who express their willingness to pay a higher price for environmental practices of the company and confirms that the research design was successful in attracting sufficient representatives of each of the two a priori segments to enable the comparison originally intended.

Results

Socio-demographic Characteristics

The results show that socio-demographic information is not highly informative in regard to understanding environmentally responsible tourists. No significant differences were detected between environmentally responsible tourists and other tourists with regard to gender, age, income and hours of paid work. On the one hand, this is not a desirable finding from a managerial perspective because it makes it more difficult to identify environmentally responsible tourists during their information search stage. But the fact that environmentally

responsible tourists are not as easy to identify is probably the reason that demand-oriented approaches are so rare in the tourism industry. Thus, if an effective means of identifying environmentally responsible tourists can be found, destinations may seek to gain a competitive advantage by targeting environmentally responsible tourists in their marketing strategy.

This result is not mirrored by the empirical studied profiling ecotourists, who have been found in prior studies to be distinct with respect to some socio-demographic criteria, such as age, income and education level (e.g Ballantine & Eagles, 1994; Blamey & Braithwaite, 1997; Wight, 1996). Fairweather, et al. (2005) conclude that Biocentric tourists have lower incomes and higher education levels, but do not differ in gender. Dolnicar and Leisch's study (forthcoming) identified differences in income, gender, age and occupational group, but no differences in education. Laroche, et al. (2001) who investigated profiles of consumers who were willing to pay more for environmentally friendly products, the study most similar to the present study in the operationalisation of segments under study, conclude that differences in gender are significant, confirming our findings, but do not identify differences in age or income.

While it is not surprising that such differences were identified given that the segments under study were operationalised differently in all studies, the area of socio-demographic differences clearly warrants further investigation.

Information Search Behaviour

While socio-demographic factors do not discriminate between environmentally responsible tourists and other tourists, the information search behaviour was found to be a significant discriminator. As Bonferroni corrected Chi-squared test results indicate (see Table 1, last column; tests are Bonferroni corrected because computing a number of independent tests on the same data sets would overestimate significance, the corrected values are thus more conservative), environmentally responsible tourists make significantly more use of two of the listed information sources in the questionnaire - prior experience and the use of the Lonely Planet guidebooks. The use percentages for all information sources included in the questionnaire for both the environmentally responsible and other tourists are provided in Table 1. As can be seen, newspapers, slide show nights, and information from other travellers are also used more frequently by environmentally responsible tourists. The use of these information sources is significantly different using the uncorrected p-values, but these differences turn out to be insignificant when the conservative correction for multiple testing is applied (see last column in Table 1). These should certainly be further investigated as they could represent a strong avenue for attracting environmentally responsible tourists.

Table 1

Comparison of Information Source Use

	Other Tourists	Environmentally Responsible Tourists	P-value	Corr. p-value
Airline(s)	8.0%	4.0%	0.079	1.021
Exhibition(s)	11.2%	15.4%	0.211	2.744
Travel agents	21.4%	23.9%	0.539	7.012

Flyers/Special offers	33.2%	31.6%	0.728	9.464
Tour operators	29.9%	32.4%	0.587	7.631
Newspaper(s)	25.7%	36.0%	0.021	0.279
Slide nights	28.9%	39.3%	0.024	0.317
Prior personal experience	26.2%	42.9%	0.000	0.004
Magazine(s)	40.6%	49.0%	0.084	1.089
Word of mouth - friends & relatives	44.4%	49.4%	0.301	3.910
Lonely Planet	43.3%	57.9%	0.003	0.034
Word of mouth – other travellers	57.8%	68.4%	0.022	0.286
Internet	88.8%	91.9%	0.269	3.499

The use of information search behaviour is not a frequently investigated criterion. None of the studies profiling ecotourists included this criterion. Dolnicar and Leisch's study (forthcoming) leads to the conclusion that no difference exists between respondents with a high expressed obligation to behave in an environmentally friendly manner. Again, the differences in the operationalisation of the segments are likely to explain the different findings. Crouch, et al. (2005) identified significant differences in information search behaviour with tourists stating that maintaining an unspoilt environment matters to them. They indicated less interest in traditional sources of information, instead relying more on guidebooks. These findings are very much in line with the results from the present study.

Willingness to Pay

During the decision-making phase tourists face a number of tradeoffs which force them to decide how important certain components of a trip are to them. One indirect measure of such importance is the willingness to pay. The pattern revealed regarding the environmentally responsible tourists' willingness to pay for different components of a vacation is provided in Table 2. The groups under comparison differ significantly in their willingness to pay a price premium in half of the factors listed in the questionnaire. Between 60 and 83 percent of environmentally responsible tourists are willing to pay a higher price than other tourists for travel to remote areas, a high level of operator expertise, smaller groups, a good local network, and access to areas with visitor capacity restrictions. On the other hand, significantly lower proportions of environmentally responsible tourists – four percent or fewer – would want to spend extra money on a higher level of comfort or a high standard of accommodation.

Table 2

Comparison of Willingness to Pay a Price Premium

	Other Tourists	Environmentally Responsible Tourists	P-value	Corr. p-value
Travel to remote areas	59%	83%	0.000	0.000
High level of expertise	60%	76%	0.000	0.004
Smaller groups	58%	73%	0.001	0.013

Good local network	40%	61%	0.000	0.000
Access to areas with visitor capacity restrictions	41%	60%	0.000	0.002
Excellent reputation of the company	47%	56%	0.057	0.797
Safety/Security	54%	51%	0.592	8.289
Tour costs included	52%	49%	0.497	6.964
High hygiene / health standards / medically trained staff	44%	46%	0.714	9.996
High quality level	35%	24%	0.009	0.131
Private transportation rather than public	18%	13%	0.218	3.054
An Australian leader	11%	7%	0.159	2.226
Higher level of comfort	20%	4%	0.000	0.000
High standard of accommodation	20%	2%	0.000	0.000

Interestingly, classical marketing aspects – for instance, having an excellent reputation or being the leading [Australian] tour operator - are not directly paid for by the customer. Consequently it seems important from a marketing point of view to assure that the actual benefit (for instance, good local network) is expressed explicitly.

Although willingness to pay has not previously been investigated in the context of profiling tourists who behave in an environmentally friendly manner, a small number of studies in the context of ecotourism conclude that ecotourism has higher expenditures in general (Khan,

2003; Wight, 1996), confirming that a segment of tourists that is characterised by environmentally friendly behaviour may well represent a lucrative target segment for tourism destinations. Fairweather, et al. (2005) conclude from their empirical study of Biocentric tourists that they are willing to accept higher travel-related expenditures if this would lead to lower environmental impact.

Destination Preference

Between the information search and travel behaviour phase, the destination preference represents an important piece of information for destinations and the tourism industry in general. In the questionnaire used, respondents were asked to state whether or not they would like to visit listed destinations in the future. The percentages of environmentally responsible and other tourists who state that they prefer the destinations provided in the questionnaire are listed in Table 3.

Table 3

Destination Preferences

	Other Tourists	Environmentally Responsible Tourists	P-value	Corr. p-value
Africa	41%	48%	0.118	0.944
Antarctica / Arctic	48%	51%	0.534	4.272
Asia	65%	72%	0.101	0.808
Australia	52%	64%	0.019	0.155

Europe	48%	60%	0.011	0.091
Latin and South America	55%	73%	0.000	0.001
Middle East	15%	23%	0.028	0.221
USA	27%	16%	0.007	0.058

Given that preferred destinations represent a very obvious potential classification criterion, the interest of the respondents to travel to different continents was used to conduct a discriminant analysis. If classification of tourists based on their preferred destination functions effectively as an indicator of their level of environmental responsibility, the tourism industry would potentially be able to use self-selection as a tool to attract environmentally responsible tourists. For instance, an environmentally responsible outbound tour operator could strategically include destinations in the portfolio that attract environmentally responsible tourists and could thus benefit from being able to charge a premium price.

One significant discriminating function ($p\text{-value} < 0.003$) allows a correct classification of 61 percent of cases into environmentally responsible or other tourists, with coefficients indicating that interest in Latin and South America is the strongest predictor for being an environmentally responsible tourist, followed by travel to Australia, Europe and the Middle East. Tourists who prefer North America are less likely to be environmentally responsible tourists. This finding is supported by the frequencies given in **Error! Reference source not found.** 3, with 73 percent of environmentally responsible tourists expressing interest in Latin America as opposed to only 55 percent of other tourists. On the other hand, the USA is of

interest to only 16 percent of environmentally responsible tourists whereas 27 percent of the other tourists name it as a destination they would like to visit.

Activity Level

Further information provided by the respondents regarding their preferred tourism product included the activity level of their choice. Environmentally responsible tourists are found to be more interested in higher levels of activity during the vacation. The Pearson Chi-squared test is significant at the 99 percent significance level and indicates that more than half of the environmentally responsible tourists want to walk between four and eight hours a day during their adventure holiday. Less than 40 percent of the remaining tourists share this view, although these travellers are also expected to see themselves as adventure tourists, given their membership in the newsletter mailing list.

These findings support Eagles' (1992) and Kretchman and Eagles' (1990) results that ecotourists are more physically active.

Conclusions, Limitations and Future Work

The aim of this study was to investigate whether there is evidence of the existence of an economically attractive market segment of environmentally responsible tourists beyond the special interest niche of ecotourism. The results of the study indicate that this is, in fact, the case. Environmentally responsible tourists, operationalised by their willingness to pay for environmental initiatives taken on by the tour operator they are travelling with, demonstrate a profile that differs significantly from other tourists in areas such as travel information

seeking, destination preferences, travel behaviour and willingness to pay. Some of the characteristics revealed are of benefit to destinations or tourism businesses. For instance, willingness to pay premium prices for specific components of a trip could be used in product development and pricing strategies.

These findings indicate that targeting this segment of environmentally responsible tourists is an attractive alternative to mass tourism marketing if there is genuine interest in environmentally sustainable tourism, and if the trade-off of profit versus long-term sustainability is taken into consideration. From a managerial viewpoint, general tourism businesses committed to sustainable practices and attempting to attract an environmentally responsible clientele, but hindered by a small promotional budget, can utilise these findings to more effectively target the company's marketing efforts. By more clearly understanding information search behaviour, critical factors of willingness to pay, destination preferences, and the desired level of activity of returning and potential clients, tourism business owners and operators can be more discriminating in reaching an appropriate clientele.

Additionally, environmentally friendly consumers, much more proactive and discriminating today in their travel purchasing behaviours, are attempting to link themselves to those companies supporting sustainability and sustainable practices. Carter and Narasimhan (1998) and Mullis and Krahenbuhl (2006) identify this important linkage of environmentally conscious consumer to environmentally friendly providers. Carter and Narasimhan identify that within the environmental supply chain, synergy between a company's environmental image and reputation, and environmentally sensitive products, is important. In addition, they suggest that setting aggressive and progressive environmental goals is critical for the

company and that having top management committed to environmental issues (as indicated by a high position for the environmental and safety department in an organization chart) is important to program success and commitment. Mullis and Krahenbuhl organize their thinking around eleven categories of sustainable practices appropriate to both the consumer and the provider. These categories range from behaviours relating to energy, water, and climate to responsible purchasing and public policy. With a better understanding of who the environmentally friendly consumer is within the broad range of travel experiences, the match of consumer to provider can be both more likely and efficient but also more economically beneficial.

Given the promising findings of this preliminary study into the existence and characteristics of environmentally responsible tourists, further research into this segment should be undertaken to 1) learn more about the differences throughout the buying decision-making process which will enable maximum efficiency in targeting environmentally responsible tourists and 2) develop the most attractive product bundle for their vacation. This is essential since socio-demographics factors were found not to be strong predictors of environmentally responsible tourist behaviour. Also, the study of environmentally responsible tourists should be extended into the area of actual observable behaviour once at the destination. Furthermore, it would be highly desirable to develop a more sophisticated instrument to operationalise environmentally responsible tourists for future studies of this segment.

References

- Ataljevic, I., & Doorne, S. (2000). "Staying within the fence": Lifestyle entrepreneurship in tourism. *Journal of Sustainable Tourism*, 8(5), 378-391.
- Ballantine, J. L., & Eagles, P. F. J. (1994). Defining Canadian ecotourists. *Journal of Sustainable Tourism*, 2(1), 1-6.
- Baumgartner, H. & Steenkamp, J.-B.E.M. (2001). Response styles in marketing research: a cross-national investigation. *Journal of Marketing Research*, 38(2), 143-56.
- Berry, S., & Ladkin, A. (1997). Sustainable tourism: A regional perspective. *Tourism Management*, 18(7), 433-440.
- Blamey, R. (1997). Ecotourism: The search for an operational definition. *Journal of Sustainable Tourism*, 5(2), 109-130.
- Blamey, R., & Braithwaite, V. (1997). A social values segmentation of the potential ecotourism market. *Journal of Sustainable Tourism*, 5(1), 29-45.
- Carter, J., & Narasimhan, R. (1998). *Environmental supply chain management*. East Lansing, Michigan: Center for Advanced Purchasing Studies, Michigan State University.
- Ceballos-Lascuráin, H. (1991). Tourism, eco-tourism and protected areas. In Kusler, (ed.) *Eco-tourism and Resource Conservation*. (Vol. 1). Berne, New York: Association of State Wetland Managers, 24-30.
- Crouch, G., Devinney, T., Dolnicar, S., Huybers, T., Louviere, J. & Oppewal, H. (2005) New horses for old courses. Questioning the limitations of sustainable tourism to supply-driven measures and the nature-based contexts. *ANZMAC CD Proceedings*.
- Dolnicar, S. (2004a). Insight into sustainable tourists in Austria: Data based a priori segmentation approach. *Journal of Sustainable Tourism*, 12(3), 209-218.

- Dolnicar, S. (2004b). Beyond “commonsense segmentation” – a systematics of segmentation approaches in tourism. *Journal of Travel Research*, 42(3), 244-250.
- Dolnicar, S. (2006). Nature-conserving tourists: The need for a broader perspective. *Anatolia*, 17(2), 235-258.
- Dolnicar, S., Crouch, G.I., & Long, P. (forthcoming). Environmentally friendly tourists: What do we really know about them? *Journal of Sustainable Tourism*.
- Dolnicar, S., & Leisch, F. (forthcoming). An investigation of tourists’ patterns of obligation to protect the environment. *Journal of Travel Research*.
- Dolnicar, S., & F. Leisch (forthcoming). Selective marketing for environmentally sustainable tourism. *Tourism Management*.
- Eagles, P. (1992). The travel motivations of Canadian ecotourists. *Journal of Travel Research*, 3(2), 3-7.
- Fairweather, J. R., Maslin, C. & Simmons, D. G. (2005). Environmental values and response to ecolabels among international visitors to New Zealand. *Journal of Sustainable Tourism*, 13(1), 82-98.
- Getz, D. (1994). Residents’ attitudes towards tourism - a longitudinal study in Spey Valley, Scotland. *Tourism Management*, 15(4), 247-258.
- Kerstetter, D.L., Hou, J.S., & Lin, C.H. (2004). Profiling Taiwanese ecotourists using a behavioral approach. *Tourism Management*, 25, 491-498.
- Khan, M. (2003). ECOSERV – Ecotourists quality expectations. *Annals of Tourism Research*, 30, 109-124.

- Knowles, T., Macmillan, S., Palmer, J., Grabowski, P. & Hashimoto, A. (1999). The development of environmental initiatives in tourism: Responses from the London Hotel Sector. *International Journal of Tourism Research*, 1, 255-265.
- Kretchman, J. A., & Eagles, P. F. J. (1990) An analysis of the motives of ecotourists in comparison to the general Canadian population. *Society and Leisure*, 13(2), 499-508.
- Laroche, M., Bergeron, J., & Barbaro-Forleo, G. (2001). Targeting consumers who are willing to pay more for environmentally friendly products. *Journal of Consumer Marketing*, 18(6), 503-520.
- Matell, M.S., & Jacoby, J. (1971). Is there an optimal number of alternatives for Likert scale items? Study I: Reliability and validity. *Educational and Psychological Measurement*, 31, 657-74.
- Mazanec, J. (2000). Market segmentation. In: *Encyclopedia of Tourism*. J. Jafari (ed.) London: Routledge.
- McCool, S.F., & Reilly, T. (1993). Benefit segmentation analysis of State Park visitors setting preferences and behavior. *Journal of Park and Recreation Administration*, 11(4), 1-14.
- Middleton, V.T.C. (1998). *Sustainable tourism – a marketing perspective*. Oxford: Butterworth-Heinemann.
- Mullis, B., & Krahenbuhl, P. (2006). *Sustainable travel reader*. Sustainable Travel International, Inc.: Boulder, Colorado
- Palacio, V., & McCool, S.F. (1997). Identifying ecotourists in Belize through benefit segmentation: A preliminary analysis. *Journal of Sustainable Tourism*, 5(3), 234-244.

- Peabody, D. (1962). Two components in bipolar scales: Direction and extremeness. *Psychological Review*, 69(2), 65-73.
- Pearce, D.G., & Wilson, P.M. (1995). Wildlife-viewing tourists in New Zealand. *Journal of Travel Research*, 34(2), 19-26.
- Ryan, Ch., & Huyton, J. (2000). Who is interested in Aboriginal tourism in the Northern Territory, Australia? A cluster analysis. *Journal of Sustainable Tourism*, 8(1), 53-88.
- Wight, P. (1996). North American ecotourists: Market profile and trip characteristics. *Journal of Travel Research*, 34(4), 2-10.