

Environmental values and the so-called ‘true’ ecotourist

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Key words: environmental values, biospheric values, ecotourism, ecotourist.

Acknowledgements:

We would like to thank the anonymous reviewers whose valuable comments and suggestions have helped to improve the quality of this article.

Original submission date: 10 March 2011

Revised submission dates: 30 October 2011, 29 February 2012

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ABSTRACT

Scientific understanding about the motivations and behavior of so-called ‘true’ ecotourists remains incomplete. This study examined the relationship between core values and tourists’ interest in tourism where nature is the focus of the experience, as well as their commitment to environmental conservation and protection. The empirical basis for this research involved a survey of 258 tourists holidaying on the Gold Coast in Australia. This study found that biospheric or biocentric values, focusing on the intrinsic worth of nature, are strongly associated with particular interest in ecotourism, tourism specific pro-environmental attitudes, and commitment to environmental protection. Conversely, egoistic values, concerned primarily with self-interest, are associated with less interest in nature tourism, greater interest in hedonistic type tourism activities, and less consumer support for environmental conservation and protection. The authors discuss evidence for the particular importance of values based research in developing a theoretically grounded model of demand for ecotourism type experiences.

Key words: environmental values, biospheric values, ecotourism, ecotourist.

INTRODUCTION

Ecotourism has been described as environmentally and socially responsible tourism, where nature is appreciated as the focus of the experience, and environmental learning is a primary goal for the tourist (Ecotourism Australia, 2008). Ecotourism, by any definition, is often reported to be one of the fastest growing sectors of a global tourism industry, generating billions of dollars annually, and expanding supposedly in line with a purported 'greening' of the consumer (Blangy & Mehta, 2006; Ezebilo, Mattsson, & Afolami, 2010). Traditionally, ecotourists have been identified simply by their participation in ecotourism. However, Sharpley (2006) has argued that ecotourism participants should not necessarily be defined as ecotourists, as previous research has identified a more complex heterogeneity of motivations within this market. Such heterogeneity could be due to a mixing of so-called 'true' ecotourists with the occasional consumer of ecotourism who is simply looking for a novel experience, or as a means for acquiring social status (i.e. ego-tourism) (Duffy, 2002; Munt, 1994; Wheeler, 2005). Therefore, 'true' ecotourists might be more usefully conceptualized as consumers with a particular interest in experiencing and learning about nature directly in relatively unspoilt settings, and with a personal commitment to the protection and conservation of natural (and cultural) environments (Eagles, 2002; Page & Dowling, 2002; Sharpley, 2006). Nevertheless, scientific understanding of the psychology of the ecotourist, if they do indeed exist as distinct from mainstream tourists, remains incomplete, including establishment of clear evidence for an assumed pro-environmental orientation (Singh, Slotkin, & Vamosi, 2007). One of the reasons for this may be that the focus of research into ecotourism has tended to concentrate more heavily on the nature of supply (Sharpley, 2006). Although Sharpley suggests that environmental and prosocial values are unlikely to

dominate among ecotourists, he and others (e.g. Dolnicar & Leisch, 2008) nevertheless believe that a thorough investigation of the motivation of the ecotourist is necessary for developing a deeper insight into the demand side of the equation. Such insight might be provided by research that uses established social psychological theories of motivation for behaviour (such as values theory) combined with concepts from environmental philosophy.

Examination of core values is especially valuable in this type of research given the relative stability of people's values systems, their generalizability across contexts and situations, and past evidence that values are important predictors of consumer behavior, including travel and tourism (Ajzen, 2001; Blamey & Braithwaite, 1997; Pitts & Woodside, 1983, 1986; Stern, Dietz, & Guagnano, 1998). Core values are also known to be particularly relevant for predicting behavior incorporating an altruistic or ethical element (Schwartz, 1992, 2007; Rokeach, 1973), which could be argued as salient in the context of environmentally sensitive nature-based tourism such as ecotourism. Indeed, Sharpley (2006) argues that "assessing tourists' environmental values or green credentials is essential for a complete understanding of the ecotourist" (p. 14). In view of this, the present exploratory study aims to link established psychological models of environmentally relevant core values with tourist interests and their commitment to environmental protection and conservation.

The psychology of values

The theory of values defines core values as desirable trans-situational goal strivings, of varying importance, that act as overarching and *guiding principles* for behavior in people's lives (Rokeach, 1973; Schwartz, 1996, 2007). Core values, and values

systems, are central to a person's sense of self, and are fundamental to the concept of morals and ethics, including environmental ethics. The construct of core values is then quite different from beliefs and attitudes in terms of this embodiment of a 'guiding principle' or standard for behavior. Moreover, both beliefs and attitudes have been found to be considerably less stable than values in predicting behavior across different contexts, including pro-environmental behaviour (Dietz, Fitzgerald, & Schwom, 2005; Rokeach, 1973). In contrast, core values, as central to an individual's self-concept, are associated with much more consistent behavioral outcomes, particularly involving behavior which incorporates an ethical element (Rokeach, 1973; Schwartz, 1992, 1996, 2007).

According to Schwartz's values theory, there are ten distinct values types which appear to be consistent and clearly recognisable across cultures, namely: *power, achievement, hedonism, stimulation, self-direction, universalism, benevolence, tradition, conformity* and *security* (e.g. Schwartz, 1992, 2007; Schwartz & Boehnke, 2004). When Schwartz examined relationships among the different values, four higher order values types or values clusters emerged based on the particular relationships between individual values types, namely: self-transcendence, self-enhancement, openness to change, and conservatism.

The self-transcendence values cluster includes the so-called universalism values, concerned with issues beyond mere self-interest, for example: *equality, social justice, a world at peace, protecting the environment, respecting the earth, and unity with nature*. Conversely, the self-enhancement values cluster includes power and achievement values which are focused primarily on self-interest, for example: being

socially *influential*, having *authority*, and *wealth and material possessions*. The openness to change values cluster consists of self-direction and stimulation values types, including wanting a *varied life*, *an exciting life*, and being *curious*. In contrast, the conservatism values cluster consists of conformity and security values types including the importance of *family security*, *self-discipline*, and *honouring parents and elders*.

Values theorists such as Rokeach and Schwartz have demonstrated that the most relevant core values for altruistic choices and behavior are the *self-transcendent* and the *self-enhancement* values types, representing opposite sets of value priorities. The self-transcendent values are associated with *more* altruistic choices and behavioral tendencies, and the self-enhancement values are associated with *less* altruistic choice and behavior (Schwartz, 1996; Schwartz & Boehnke, 2004). Furthermore, *value systems*, consisting of the set of *relative priorities* assigned to different values and values types, are more predictive of human attitudes and behavior than single values alone (Schwartz, 1996). Schwartz argued that this is because individuals will hold some values types as being more important than others, and thus when values are in conflict, it is the priority assigned to particular values and values types within the person's values system that defines their individual attitudinal and behavioral profile. In other words, higher priority values are more likely to predict behavior than lower priority values (Schwartz, 1992, 1996). Stern, Dietz and colleagues (1995, 1998) extended Schwartz's theory of values in order to examine their usefulness in a pro-environmental context.

Environmentally relevant values

Investigation of the psychology of pro-environmental altruism has confirmed that the higher order values particularly relevant for pro-environmental choices, attitudes and behavior belong to the self-transcendent values cluster that reflects altruism, while the self-enhancement values cluster, indicative of egoism, are associated with less altruistic tendencies (see for example Stern & Dietz, 1995; Stern, Dietz & Guagnano, 1998). In the context of environmental issues, Stern and colleagues identified two important values sub-types within the self-transcendent values cluster, one concerned with the wellbeing of nature for its own sake (nature sub-type), and one concerned with the wellbeing of humanity as a whole (altruistic sub-type). They termed the nature sub-type, *biospheric* values, and the altruistic sub-type, *socio-altruistic* values. They also termed the self-enhancement values type *egoistic* values (Stern & Dietz, 1995; Stern et al., 1998). Furthermore, both Schwartz's theory of values and Stern et al.'s extension, a theory of environmentally relevant values, maintain that self-transcendent values and self-enhancement values are opposing values types, and thus have negative relationships with each other (Dietz et al., 2005; Stern et al., 1998). In accordance with values theory, therefore, these two higher order values types predict opposite patterns of relationships with environmentally relevant criterion variables such as pro-environmental behavior and choice (Dietz et al., 2005; Stern et al., 1998).

Some previous studies in environmental psychology have reported that all altruistic type values, including both the biospheric and socio-altruistic values, are associated with pro-environmental attitudes and behaviour, largely as a result of these having been tested primarily as a single altruism variable (see, for example, Schultz et al.,

2005; Stern et al., 1995). However, several researchers have argued from a philosophical perspective that the biospheric and socio-altruistic value orientations are theoretically *distinct* from each other (e.g. Capra, 1996; Roszak, 1995; Milfont, Duckitt, & Cameron, 2006; Schultz, 2001; Stern et al., 1998), and Steg, Dreijerink and Abrahamse (2005) found some evidence to support this view. The biospheric value orientation is considered to be more analogous to an ecocentric or biospheric view of the value of nature that recognises the importance of the wellbeing of nature for its own sake. Whereas, a socio-altruistic value orientation seems to be more analogous to an anthropocentric view of nature which assigns more importance to the wellbeing of humankind, and nature's value is primarily understood in terms of its benefit to human beings. The ecocentric view of nature is thought to be a better predictor of pro-environmental behavior and attitudes than the anthropocentric view (Dietz et al., 2005; Schultz et al., 2005). While there has been limited evidence for an empirical distinction between the socio-altruistic and biospheric orientations, Stern et al. (1998) argue that the latter may emerge as distinct (from a socio-altruistic value orientation) in different populations, one of which might be those who care more about the natural environment. Such populations could include consumers who are particularly interested in authentic ecotourism type experiences, the so-called 'true' ecotourist.

Evidence for an environmental orientation in ecotourists

Over the past decade some investigation of psychological motivators of tourists who engage in different forms of ecotourism and other nature-based experiences has been undertaken. For example, a few researchers have examined associations between tourist choices and the following: broad social values; self-reported moral obligation

for protection of the environment; pro-environmental beliefs and concerns; and general pro-environmental attitudes (e.g. Blamey & Braithwaite, 1997; Dolnicar & Leisch, 2008; Fairweather, Maslin & Simmons, 2005; Higham & Carr, 2002; Luo & Deng, 2008; Zografos & Allcroft, 2007). The results of these studies provide some tentative evidence for a stronger pro-environmental orientation in ecotourists when compared to mainstream or mass tourists. More recently, Perkins and Grace (2009) found that tourists who were asked about their particular interest in different holiday types, including their reasons for these choices, expressed motivations for selecting ecotourism related holidays that were fundamentally different from the motivations for interest in more mainstream holidays. For example, those who selected beach holidays or luxury resort holidays reported having fun, relaxing, or being pampered as key motivations, all reasons which could be viewed as somewhat self-focused in nature (Perkins & Grace, 2009). In contrast, respondents who were more interested in ecotourism or wildlife watching and photography holidays tended to see these experiences as opportunities to be immersed in unspoilt nature, to learn more about nature, and to express mindfulness of environmental protection and sustainability (Perkins & Grace, 2009). Such motivations seem to incorporate some transcendence of self towards interest in the natural environment that seems to be valued for its own sake rather than being simply a background or context for play. These results suggest further evidence of a stronger pro-environmental orientation among those particularly interested in ecotourism type experiences.

It might be reasonable to assume then that people who place higher value on the natural environment for its own sake (i.e. reflecting stronger biospheric values) feel closer to nature and, in turn, may have a greater desire for contact with nature and be

more interested in ecotourism type experiences. Moreover, tourists with stronger biospheric values may also express greater support for environmental responsibility in tourism, including feeling less entitlement to consume resources simply for enjoyment without considering personal impact on environments. The foregoing propositions lead to the first two hypotheses of this research:

H1: Tourists with stronger biospheric values will have more interest in ecotourism type experiences and less interest in hedonistic type activities.

H2: Tourists with stronger biospheric values will also express greater levels of support for environmentally responsible tourism.

Egoistic values, in contrast, have been found to be consistently associated with weaker environmental beliefs and attitudes, less pro-environmental behaviour, and less willingness to pay to protect the environment (Schultz et al. 2005; Stern et al., 1998). It might then be assumed that tourists with relatively stronger egoistic values are less interested in ecotourism type experiences and more interested in hedonistic type activities such as shopping, nightlife, and gaming. It could also be expected that egoistic values are associated with a greater sense of entitlement, less consideration of personal impact on environments when making travel decisions, and less support for environmentally responsible tourism practices. This leads to the third and fourth hypotheses of this study:

H3: Tourists with stronger egoistic values will show less interest in ecotourism type experiences, and greater interest in hedonistic pursuits.

H4: Tourists with stronger egoistic values will also express less support for environmentally responsible tourism, and greater sense of entitlement to consume resources simply for enjoyment without considering personal impacts on environments.

As discussed previously, general environmental beliefs have been used in tourism as surrogates for environmental values in order to identify an environmentally responsible tourist market segment. However, environmental philosophers have long argued that a genuine pro-environmental or ecological worldview is not just a set of broad based beliefs, but is instead a more profound concept in which the world is seen as a fundamentally inter-connected, intrinsically valuable network of life which includes human beings (e.g. Capra, 1996; Johnson, 1991; Leopold, 1949/ 1987; Naess, 1989). Such a worldview necessarily incorporates strongly held views of how one, as a human member of that interdependent network, ought to behave to preserve and protect nature, and is a worldview where the question of ethics and *values* is a crucial and defining characteristic (Capra, 1996; Johnson, 1991). Moreover, beliefs and attitudes are less central to self-concept and thus worldview than values, are dependent on values and values systems, and are less consistent predictors of choice and behavior across contexts, especially when an ethical component is evident (see Rokeach, 1973). If this argument is accepted, it seems reasonable to propose that core values, in particular the *biospheric* values, would be better predictors of particular interest in ecotourism and support for environmentally responsible tourism than beliefs. This leads to the fifth hypothesis of this research:

H5: Biospheric values will be a more important predictor of both general interest in ecotourism types experiences and tourists' support for environmentally responsible tourism practices than pro-environmental beliefs.

METHOD

Sampling frame

The Gold Coast region in Queensland, Australia, was chosen as the location for the field study, given its reputation as a major international tourist destination and the rich diversity of attractions that the region provides. Many of these attractions include tourism products that focus on natural environmental assets.

The population of interest consisted of adult tourists, and two popular Gold Coast tourist attractions were selected as the data collection points. The first location was Seaworld, a marine wildlife theme park, located near the beach, up-market shopping precincts, restaurants, luxury hotels and resorts. Given this locale it was assumed that Seaworld might be likely to attract mainstream tourists, where visitors experience wildlife in a captive manner rather than in a natural setting. The second location, O'Reilly's Rainforest Retreat is in the World Heritage listed Lamington National Park and has advanced ecotourism accreditation status. Advanced ecotourism accreditation status is awarded to those venues which have achieved best practice in areas such as ecological sustainability, natural area focus and experience, opportunities for understanding and appreciating nature, contribution to conservation, working with local communities, sensitivity towards different cultures especially indigenous culture, client satisfaction, and responsible marketing practices (Ecotourism Australia, 2008). Because of the associated assurances concerning environmental sustainability forming part of accreditation, it was assumed that this venue would be likely to attract visitors with higher levels of interest in nature and concern for nature conservation. Selecting a tourist sample from both a mainstream venue and an accredited ecotourism venue was undertaken to maximise, as far as possible, diversity in the

overall sample in terms of orientation towards, and interest in, the natural environment. Details of the measurement instrument, data collection method, and resulting sample follows.

Survey instrument

For all measures in the survey instrument, a 7-point Likert scale format was used to maximise consistency of variability across different measures including those traditionally employing this format for research purposes.

Measuring interest in ecotourism: The Ecotourism Interest (EI) scale developed and validated by Juric, Cornwell and Mather (2002), was designed to better identify potential ecotourists as distinct from occasional trippers to ecotourism destinations, and was included in the field instrument as a measure of general interest in ecotourism type experiences. The EI, consisting of 7 items (wilderness and undisturbed nature; national parks; world heritage status areas; tropical forests and indigenous bush; lakes and streams), was randomly interspersed with 8 additional items pertaining to more mainstream type tourist interests (shopping; sun and surf; exciting nightlife; wine/ food tasting; historical sites/ museums). Respondents were asked to rate the importance of each of the 15 activities when choosing a holiday, trip or attraction on a scale from 1 (not at all important) to 7 (extremely important).

Measuring environmental values: The Brief Inventory of Values (BIV) developed by Stern et al. (1998) for survey based values research was used to measure environmentally relevant values as predictors of criterion variables such as consumer behavior and willingness to make sacrifices to protect the environment. For hypothesis testing purposes in this research, the three items from the BIV: “*a world at peace, free of war and conflict*”; “*social justice, correcting injustice care for the*

weak” and “*equality, equal opportunity for all*”, were used to measure socio-altruistic values sub-type, and the three items: “*protecting the environment, preserving nature*”; “*unity with nature, fitting into nature*”; and “*respecting the earth, harmony with other species*” were used to measure the biospheric values sub-type. The three items from the BIV: “*influential, having an impact on people and events*”; “*authority, the right to lead or command*”; and “*wealth, material possessions, money*” were used to measure the egoistic values type. Values types representative of openness to change and conservatism, part of the BIV, are generally not found to be associated with pro-environmental altruism, but were administered in the full instrument in order to obtain valid centred scores for the three environmentally relevant values types (see below). Respondents were asked to indicate how important each of these values is “as a guiding principle in your life”; on a scale from 1 (not at all important) to 7 (extremely important) with 0 marked if the respondent was actually opposed to the particular value (see Stern et al.,1998). Each of the value item scores was centered for every respondent according to the recommendations of Schwartz (1992). Centred scores for each value item reflect that value’s relative importance or *priority* with respect to all the other values. Positive scores indicate those values that are *more* important than other values in the set, and negative scores indicate those values that are *less* important. These priority scores were then amalgamated for the three value items within each environmentally relevant values type: biospheric, socio-altruistic, and egoistic, yielding three composite scores. The magnitude of composite scores determined the overall importance assigned to each of the values types within a respondent’s values system.

Measuring environmental beliefs: The New Ecological Paradigm (NEP) developed by Dunlap, Van Liere, Mertig and Jones (2000), in its present and earlier form, is a

15-item scale used extensively to measure broad environmental beliefs (Lundmark, 2007; Schultz & Zelezny, 1998; Stern et al., 1998). Respondents were asked to respond to each of the items in the NEP on a 7-point Likert type scale, ranging from 1 (strongly disagree) to 7 (strongly agree). Some of the items of the NEP were negatively worded and were reflected (i.e. reverse scored) before totals were calculated. Total scores could range from the lowest possible score of 15 (15 x 1) to the highest possible score of 105 (15 x 7), with higher scores on the NEP being indicative of stronger pro-environmental beliefs.

Measuring tourist support for environmentally responsible tourism:

A number of items were included to assess respondents' attitudes towards voluntary control of behavior and resource consumption within tourism settings, and consideration of personal impact on natural and cultural environments when making travel choices. These included a number of behavioral intention type items as indicators of actual behavior (Ajzen, 2001). In addition, two items were also included to measure how respondents' viewed the importance of green accreditation systems for tourism products, and their willingness to purchase green accredited tourism products over those that were not accredited. A general definition of "green accreditation" was presented in the survey instrument explaining what it means and some of the key performance criteria on which organisations are judged for accreditation purposes. This detail was presented so that respondents more clearly understood the issue to which they are expressing their agreement or disagreement. All items were specifically generated for the purposes of this research. Respondents were asked to indicate their levels of agreement with each of these items on a Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree).

Demographic information: The following demographic information was sought in the survey instrument: age, gender, education, employment status, and country of birth.

Data collection method: Convenience sampling was used as a practical *in situ* approach for collecting data at both Seaworld and O'Reilly's in order to minimise inconvenience and disruption to the experiences of patrons, and thus their satisfaction levels. Some judgement was involved in approaching tourists in regard to consideration of gender balance, and those willing to participate completed the survey within close proximity to the researcher. Approximately 30% of all tourists who were approached agreed to participate by completing the 15-minute survey instrument, yielding a final sample of 258 useable questionnaires.

Statistical analysis: To determine relationships between environmentally relevant core values and the tourism specific criterion variables, and thus test the hypotheses of this research, bivariate correlations and multiple regression analyses were considered appropriate for this exploratory study. Any differences in sample sizes reported in the results are due to missing values.

Demographic characteristics of the tourist field samples

Two hundred and fifty-eight tourists completed the survey in full, including 166 day visitors to Seaworld, and 58 day visitors and 34 overnight visitors to O'Reilly's Rainforest Retreat. The sample comprised 42% males and 58% females, with approximately 73% domestic and 27% international tourists across the two sites. Ages of the respondents ranged from 18 to 75 years, with the average age being 41

years. There were no significant differences between the two samples (i.e. Seaworld versus O'Reilly's) on the basis of age, gender, employment status, or proportion of international versus domestic tourists. However, there were more visitors to O'Reilly's with a university education (48%) than at Seaworld (30%). This difference in educational profile between visitors to the two tourism sites is consistent with previous reports of a tendency for ecotourists to be university educated (see Fennell, 2003; Page & Dowling, 2002). There were also more retirees (14.3%) sampled at the O'Reilly's, particularly among the overnight visitors, than at Seaworld (3.7%), which is consistent with the observation that many of the tourists at Seaworld had young families with them.

RESULTS

Confirming diversity of interest in ecotourism experiences between samples

Prior to hypothesis testing, it was considered important to empirically verify the diversity of interest in ecotourism that was expected by sampling across two different types of venues. As expected, tourists who were sampled at the accredited ecotourism venue expressed significantly higher levels of general interest in ecotourism type activities, as measured by scores on the EI, ($M = 5.32, SD = 1.21$) than tourists sampled at the mainstream venue ($M = 4.68, SD = 1.37$) $t(252) = 3.74, p = .000$, thus confirming the validity of the sampling rationale. The results of hypothesis testing are presented in regard to the association of environmentally relevant values and tourism interests and attitudes, then in regard to the relative contribution of values versus beliefs as predictors of general interest in ecotourism and tourist support for environmentally responsible tourism.

Values and tourist interests

As expected, tourists with stronger nature-specific biospheric values were significantly *more* interested in ecotourism type experiences (EI), supporting hypothesis 1 (see Table 1). Interestingly, stronger biospheric values were also related to more interest in historical sites and museums, and learning about other cultures.

--- Table 1 here ---

Also consistent with values theory, tourists with stronger biospheric values were *less* interested in more hedonistic activities such as shopping and exciting nightlife.

There were *no* associations between biospheric values and tourist interest in sun and surf, wine and food tasting, or power boating and four-wheel driving. It may be that

sun and surf activities, while being nature based, are differentiated in the tourist's mind from ecotourism activities because nature is simply the context for these activities rather than being the focus of the experience.

There was also a significant negative relationship between socio-altruistic values (i.e. general altruism) and interest in an exciting nightlife (refer Table 1), which is again consistent with values theory and the theoretical incompatibility between altruism and the importance of more hedonistic pursuits. However, there was no clear relationship between socio-altruistic values and either general interest in ecotourism activities or interest in any of the other tourism activities (see Table 1).

In contrast to the effect of biospheric values on tourism interests, relatively stronger egoistic values were associated with significantly *less* interest in ecotourism activities and historical sites and museums, and *more* interest in shopping and exciting nightlife, confirming hypothesis 3 (see Table 1). There were no relationships between egoistic values and interest in sun and surf, wine and food tasting, power boating or four-wheel driving.

Values and tourist attitudes

Based on the findings presented in Table 2, tourists with stronger biospheric values were more likely to agree that considering one's personal impact on nature and other cultures was important in making travel choices. These tourists also supported green accreditation systems for tourism, and were more likely to say they would choose green accredited products and services over those that are not.

--- Table 2 here ---

Conversely those who placed relatively more importance on egoistic values were less likely to think they should consider their personal impact when making travel choices, and reported less support for green accreditation systems for tourism products and services. There was little or no association between socio-altruistic values and tourism related attitudes (see Table 2). These results are consistent with values theory and also provide evidence in support of hypotheses 1, 2, 3 and 4.

Values versus beliefs and interest in ecotourism

In accordance with theory, nature specific biospheric values were significantly associated with higher scores on the NEP $r = .48, p = .000$. Both biospheric values and NEP scores were also significantly related to greater interest in ecotourism type experiences ($r = .47$ and $r = .31$ respectively, $p = .000$). Moreover, these associations were also somewhat evident in relation to actual behavior. For example, overnight visitors to the ecotourism venue (O'Reilly's) had significantly stronger biospheric values ($F(2, 255) = 3.11, p < .05$) and stronger pro-environmental beliefs $F(2, 251) = 5.34, p < .01$, than tourists visiting the mainstream venue, Seaworld.

Multiple regression analysis was used to determine the relative contribution of values with respect to beliefs in predicting tourist interest in ecotourism (i.e. hypothesis 5). As expected, biospheric values and environmental beliefs were found to be significant predictors of general interest in ecotourism (EI), together accounting for 23% of the variance in that interest $F(2, 243) = 35.93, p = .000$. However, the most *important* predictor of interest in ecotourism, and making the only significant unique contribution, was the strength of biospheric values, evidenced by the magnitude and significance of standardized Beta ($\beta = .41, p < .001$). Environmental beliefs (NEP)

made *no* significant unique contribution to interest in ecotourism ($\beta = .12, p >.05$).

These results support hypothesis 5.

Values versus beliefs and support for environmentally responsible tourism

The strongest relationships between values and tourist attitudes were in relation to support for appropriate ‘green’ accreditations systems for tourism products and services, and consideration of personal impact on environments when making travel decisions (refer Table 2). These were considered to be reasonable indicators of tourist commitment to environmentally responsible tourism. Multiple regression analyses were used to determine the respective contributions of values versus beliefs for each of the criterion variables.

---Table 3 here---

As expected, biospheric values and environmental beliefs were found to be significant predictors of support for green accreditation systems for tourism as well as intention to purchase accredited products, accounting for variously 30% and 25% of the variance in that support, and each predictor made a unique contribution to tourists’ opinions on the importance of such systems and also tourists’ intention to purchase green accredited products (see Table 3). However, the strength of tourists’ biospheric values was again the most *important* predictor for each of these criterion variables (refer magnitude of Beta values β in Table 3). Environmental beliefs and biospheric values were also significant predictors of willingness to consider personal impact on the earth and other cultures when making travel decisions, together accounting for 11% of the variance (see Table 3). Biospheric values again emerged as the most *important*, and only significant, unique contributor to such consideration of personal

impact in travel choices ($\beta = .28$). Scores on the NEP made *no* significant unique contribution ($\beta = .08$). These results collectively provide further evidence in support of hypothesis 5.

DISCUSSION

Environmental values and interest in ecotourism

In this research, tourists with stronger nature-specific biospheric values were significantly *more* interested in ecotourism type experiences and less interested in the more hedonistic pursuits of shopping, gambling, and nightlife, than those with weaker biospheric values. Tourists with stronger biospheric values were also more interested in learning about other cultures and historical sites and museums, supporting previous arguments for a relationship between interest in ecotourism and interest in historical and cultural aspects of destinations (see Fennell, 2003; Page & Dowling, 2002; Weaver, 2006). Moreover, stronger biospheric values were associated with more support for environmentally responsible tourism including: belief in the importance of green accreditation systems for tourism; greater willingness to preferentially purchase appropriately accredited products and services; and greater willingness to consider personal impact on nature and other cultures when making travel decisions. However, socio-altruistic values (i.e. general altruism) were largely not associated with either interest in ecotourism or with support for environmentally sensitive tourism behaviour.

In contrast, tourists with relatively stronger egoistic values were significantly *less* interested in ecotourism related experiences, and more interested in the hedonistic pursuits of shopping and exciting nightlife. Egoistic values were also associated with *less* environmentally sensitive attitudes including a greater sense of personal entitlement in using resources for enjoyment purposes during tourism experiences, and less willingness to curb personal freedoms or to consider personal impact on nature and cultures when making travel decisions.

The special significance of the biospheric values and lack of salience of the socio-altruistic values for pro-environmental criterion variables, including environmentally relevant tourism choices, in this research is inconsistent with previous arguments that all altruistic values are significantly associated with pro-environmental altruism (e.g. Schultz et al., 2005). However, combining biospheric values and socio-altruistic values as a single altruism values type, a technique used in several past studies, may have masked the differential effects of these two values sub-types for environmentally relevant criteria. The present findings of a distinction between the importance of biospheric and socio-altruistic values for environmentally relevant issues, by analysing the effects of these two values types separately, are similar to those reported by Steg et al. (2005).

Core values versus beliefs in psychological profiling

Established theoretical models in psychology predict that core values are better predictors of behavior and choices across a range of contexts than beliefs (or attitudes), especially when there is an inherent ethical component involved. Ecotourism implicitly or explicitly features a commitment to environmental sustainability, thus incorporating at least some ethical element. In this study, a biospheric value orientation in tourists was a more important predictor of interest in ecotourism type experiences and support for environmentally responsible tourism than environmental beliefs, empirically confirming in this context the greater efficacy of values over beliefs for pro-environmental profiling.

Differences between ‘true’ ecotourists and mainstream tourists

The findings of this current research provide some evidence of psychological differences between tourists who are more interested in ecotourism type experiences and those who are more interested in mainstream tourism activities, as proposed previously by some ecotourism researchers (see Juric et al., 2002; Weaver, 2006). Tourists more interested in ecotourism were differentiated from those who preferred hedonistic pursuits on the basis of their value orientation and also their support for responsible and sustainable tourism. To some extent there were similar differences in psychological profile evident between ecotourists and mainstream tourists, as defined by behavior alone, in that there was a trend for visitors to O’Reilly’s Rainforest Retreat (ecotourism venue) to have stronger biospheric values, stronger pro-environmental beliefs, and weaker egoistic values than visitors to Seaworld (mainstream venue). These findings collectively support the validity of values theory, and particularly the theory of environmentally relevant values, for predicting pro-environmental choices and behaviours in a tourism context. Furthermore, these preliminary results also strengthen the argument that the particular importance of biospheric values over general altruistic values for environmentally relevant issues is not just a philosophical and theoretical one but is empirically grounded as well.

Contrary to Sharpley’s (2006) proposition of no distinction between the ‘true’ ecotourist and the mainstream tourist, evidence from this study implies such a distinction may exist on the basis of their respective value systems. Nevertheless, given that environmental values influence a wide range of pro-environmental behaviour not confined to tourism, Sharpley’s suggestion that the term ‘ecotourist’

may be no longer meaningful or appropriate seems reasonable. Instead these tourists may be better termed environmentally aware and responsible consumers.

CONCLUSION

The biospheric value orientation and the egoistic orientation seem to represent the psychology of fundamentally different types of consumers, and could predict discrete market segments in terms of tourism choices, preferences, and attitudes. Current findings suggest that for tourists who have a biospheric orientation there is less focus on self alone and more interest in nature for its own sake, as well as more preparedness to consider the wider impact of one's actions and choices on nature and other cultures. Consideration of one's personal impact and support for green accreditation for tourism products and services appear to represent reasonable indicators of tourist commitment to responsible and environmentally sensitive tourism. Such tourist commitment is relevant for all forms of sustainable tourism, not just ecotourism, and if these preliminary results can be replicated it may mean that tourists with strong biospheric values represent part of a potentially wider market segment of "responsible travellers". Page and Dowling (2002) argued that such a new breed of traveller is characterised by both greater environmental sensitivity and awareness and also greater desire for nature experiences and environmental knowledge.

Some implications of these present findings include improving the ability of tourism providers to identify and attract a market segment which may be not only willing to pay more for tourism experiences with appropriate environmental sustainability credentials and assurance, but also to incur much greater restrictions on personal freedoms, thus potentially reducing human visitation impact on sensitive areas which has been an ongoing and major concern for the tourism industry. This means that the carrying capacity of destinations, particularly sensitive area destinations, could be

managed more responsibly through targeted marketing aimed at these types of consumers.

Furthermore, the focus in this research on the demand rather than the supply side of ecotourism contributes more detail to an evolving picture of ecotourism as a system involving not just the management of the supply of nature (as a product), but also of demand, with the emergence of the responsible tourist for whom environmental ethical considerations are strong motivators for choice. Future investigations that seek to predict the consumption of ecotourism and other types of environmentally and culturally sensitive tourism may find psychological profiling such as the application of values theory worthwhile, as definitions of the ecotourist based solely on visitation alone (i.e. participation) are clearly inadequate.

Limitations

The sampling frame used for this project was restricted to tourists in the Gold Coast region and this is an acknowledged limitation of the research because the sample may not be indicative of the general tourist population. However, the Gold Coast region is an iconic Australian destination for domestic and international tourists, and therefore it was considered to be reasonably representative of the broader tourism domain. An additional limitation of this research was the use of non-probability convenience sampling that may compromise the generalizability of these results. However, this approach was negotiated with venue management representatives to ensure minimum disruption and inconvenience to tourists' experiences, and therefore satisfaction levels. This concession was considered a reasonable one to maximise the chance of genuine engagement by tourists in the field research. Further empirical studies across

a range of different contexts are necessary to confirm the relationships found between values and tourists' interests, attitudes and behavior.

Future research

Because core values have a powerful emotional or affective component (i.e. people generally feel very strongly about their deeply held values), it would be useful to determine the contribution that emotions, specifically caring about nature, make to pro-environmental altruism and consumer interest in nature-based tourism, including ecotourism. Such research will contribute to a more complete and robust profile of the environmentally aware and responsible traveller. Moreover, some evidence has been presented of the effects that direct experiences in the natural environment have on people's feelings towards nature and environmental values, and thus a series of experiments investigating the influences of ecotourism and other types of nature-based leisure experiences on participants' environmental orientation would be useful. This may help to build a body of evidence that ecotourism type experiences could provide a unique and social education opportunity beyond the context of the industry, a concept largely unexplored.

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TABLE 1
VALUES AND GENERAL INTEREST IN ECOTOURISM (EI) AS COMPARED WITH
OTHER TOURISM ACTIVITIES

Variable	Biospheric values	Socio-altruistic values	Egoistic values
Ecotourism experiences (EI)	.47***	.16*	- .37***
Sun and surf	- .06	- .03	.00
Shopping	- .24 ***	- .06	.17**
Gambling	- .13*	- .04	.13*
Exciting nightlife	- .17**	- .21**	.24***
Power boating/4-wheel driving	- .02	- .13*	.09
Wine and food tasting	- .01	.13*	- .01
Historical sites and museums	.23***	.12	- .21**
Learning about other cultures	.22***	.15*	- .29***

* $p < .05$, ** $p < .01$, *** $p < .001$

TABLE 2
RELATIONSHIPS BETWEEN ENVIRONMENTAL VALUE ORIENTATION AND
TOURISTS' ATTITUDES

Attitudes	Biospheric values	Socio-altruistic values	Egoistic values
As a tourist I believe that I am entitled to travel anywhere and anyhow I choose as I have paid for the personal experience. (C)	- .18**	- .15*	.19**
As a tourist I feel I am entitled to use as much water/ power/ resources during my visit as I think fit for my own enjoyment. (C)	- .21**	- .09	.23***
I prefer leisure activities and tourism experiences where I can just have fun, relax, and spend money on doing what I like how I like. (C)	- .16**	- .12	.17**
I support closure to the public of some national parks and wilderness areas to protect the environment from harm due to human activity.	.20**	.13*	- .19**
As a tourist it is very important to me that tourism products, services and venues are part of a "green" accreditation system.	.52***	.22***	- .40***
I would choose a tourism product or service which adopts a "green" accreditation over one that does not if the choice is available.	.47***	.15*	- .39***
I believe I should definitely consider my impact on earth and other cultures when I make my travel choices.	.32***	.17**	- .28***

* $p < .05$ ** $p < .01$ *** $p < .001$

Note: (C) = Consumptive type attitudes

TABLE 3
IMPORTANCE OF BIOSPHERIC VALUES VERSUS BELIEFS (NEP) FOR PREDICTING
TOURIST SUPPORT FOR ENVIRONMENTAL PROTECTION AND CONSERVATION IN
TOURISM.

<i>Predictor</i>	Importance of “green” accreditation			Preferentially choose “green”			Consider impact in travel decisions		
	B	SE B	β	B	SE B	β	B	SE B	β
Biospheric Values	0.82	0.12	.43***	0.80	0.13	.38***	0.68	0.16	.28***
NEP	0.02	0.01	.20**	0.02	0.01	.18**	0.01	0.01	.08 ^{ns}
R^2	.30			.25			.11		
F	53.86***			40.61***			14.91***		

Note: Tolerance and VIF were well within acceptable limits. β = Beta, representing the importance and significance of each predictor’s unique contribution to the regression model. ** $p < .01$ *** $p < .001$

Importance of “green” accreditation = *Important that tourism products, services and venues are part of a “green” accreditation system.* Preferentially choose “green” = *Would choose a tourism product or service which adopts “green” accreditation system over one that does not if choice available.* Consider impact in travel decisions = *Should definitely consider personal impact on earth and other cultures when making travel choices.*