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Why pay more for sustainable services? The case of ecotourism

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Abstract

This study draws on dual-processing theory and post-materialism assumptions to uncover the role of attitudinal and materialistic values in determining the degree to which consumers are willing to pay premium prices for sustainable tourism services. Findings from a large-scale survey of Swedish potential ecotourists reveal that, while attitude and environmental beliefs relate positively to willingness to pay premium (WTPP) for ecotourism, materialistic values exert a negative effect. In line with the theory of affect heuristics, study results further suggest that by giving rise to the intensity of feelings toward the offering, ecotourism interest alters the interplay of affective and evaluative antecedents, so that greater interest amplifies the influence of affective attitude and materialistic values on WTPP while simultaneously attenuating the effect of environmental beliefs.

Keywords**:** ecotourism, willingness to pay premium, affective attitude, materialism, environmental beliefs.

1. Introduction

With the growing recognition of environmentalist movements, finite resources and high environmental costs, marketers are being increasingly urged to re-evaluate their practices and implement more environmentally sustainable approaches. Service firms in particular can gain competitive advantages by demonstrating environmental concerns and contribute to conservation causes (Kotler, 2011). Ecotourism, defined as "travelling to relatively undisturbed or uncontaminated areas with the specific objective of studying, admiring and enjoying the scenery and its wild plants and animals, as well as any existing cultural manifestations (both past and present) found in these areas" (Orams, 1995, p. 4), is one of the fastest-growing tourism sectors globally and therefore constitutes a viable sustainable service study setting (Hultman, Kazeminia, & Ghasemi, 2015). In the environmentalism context, consumer materialism is often regarded a dark-side variable and a consistent premise in research on factors preventing transition from environmental awareness to a more sustainable consumer behavior (Kilbourne & Pickett, 2008).

Research traditionally measures willingness to pay (WTP) for public offerings, such as ecotourism, using contingent valuation methods, which assume that individual decisions follow rational rules. As such, ecotourists' WTP decisions would reflect economic preferences for personal and non-personal benefits they obtain from consumption or preservation of the tourism offering itself (Reynisdottira, Song, & Agrusa, 2008). Behavioral economics research doubts the contingent valuation method though, given its systematic biases and low sensitivity to scope.

Specifically, Kahneman, Ritov, Schkade, Sherman, and Varian (1999) explain that WTP evaluations are rather a function of affective attitude—that is, the feelings or moral satisfaction expected to be drawn from the action. Studies building on dual-processing theory

(e.g., Chaiken, 1980) advance the role of cognitive and emotional antecedents by suggesting that the amount a person would be willing to pay for a public offering such as ecotourism derives not only from beliefs about the benefits of preserving the environment but also from the feelings he or she would expect to experience from the action (Hsee & Rottenstreich, 2004; Kahneman et al., 1999). Social-psychological models add to current findings by considering the effect of value orientation on forming pro-environmental behavior (Ajzen, 1991; Dittmar, Long, & Bond, 2007; Podoshen & Andrzejewski, 2012), though the value's emotional influence has only recently been subjected to empirical research, and thus many aspects remain unexplored.

This study aims to add to the sustainable service literature by shedding light on the role of attitudes and materialistic values on the willingness to pay premium prices (WTPP) for sustainable services—specifically, ecotourism offerings. The study draws from dual-processing theory by investigating how affective and cognitive aspects of materialism play out in the formation of attitudes and WTPP decisions.

As such, the research makes several contributions to theory and practice. Specifically, the study aims not only to validate previous findings on the effect of affective attitude and environmental beliefs on WTPP for public and sustainable offerings but also to contribute to the literature by uncovering the cognitive and affective effects of materialistic values. The proposed framework (Fig. 1) examines how emotional intensity towards the sustainable offering (operationalized as the expressed interest in ecotourism attractions) influences the role of materialistic values, as well as the interplay of experiential and rational thinking, over the course of WTPP decisions. Moving forward, section 2 reviews the literature and develops hypotheses. Section 3 discusses the study's sample, measures, and analytical techniques. Section 4 presents the findings. Finally, section 5 concludes with implications, limitations, and opportunities for future research.

- Fig. 1 here -

2. Conceptual framework

2.1. Attitude toward ecotourism: A dual-processing approach

According to dual-process models (Chaiken & Maheswaran, 1994), two major processing systems account for the formation of human attitudes: rational and experiential. Applied to the current context, when rational evaluations occur, individuals develop attitudes based on their environmental beliefs—beliefs that are shaped by associating a behavior with certain attributes or consequences (Ajzen, 1991). In contrast, experiential processes form attitudes based on affective and heuristic cues (Chaiken & Maheswaran, 1994). If the feelings anticipated from a certain behavior are pleasant, the individual forms a favorable attitude and becomes motivated to potential pay price premiums to reproduce that feeling. While the cognitive belief-based evaluations depend on rational cost-benefit evaluations, feeling-based evaluations indicate the sign and strength of an individual's feelings about the decision stimulus or action.

The two systems work together over the course of a decision; however, they may influence each individual decision differently depending on the individual characteristics and decision task (Slovic, Finucane, Peters, & MacGregor, 2002). Behavioral economics researchers suggest that WTP for public goods are essentially affective and thus derived more from the expected feelings from the action than from the rational cost-benefit analysis of the offer (Kahneman et al., 1999). Two explanations are possible: first, environmentally friendly consumption tends to be driven by intrinsic motives, so compared with other forms of consumption intended to satisfy extrinsic motives, they are more likely to be decided on using an experiential feeling–based system. Second, individuals lack knowledge about the true value of an environmental product (e.g., how much they value less carbon emissions or the

number of whales in the ocean); therefore, they tend to consult their feelings over the decision-making course as compensation for the objective information (Kahneman, 2003; Peters, 2006).

Gregory, Lichtenstein, and MacGregor (1993) explain that people's beliefs about an environmental item lack monetary representation, and when asked to evaluate an offering, they respond depending on the context and available cues. Ajzen and Driver (1992) argue that though feelings are the dominant indicator of WTP for added tourism fees, beliefs still have a significant effect. Similarly, Meneses (2010) finds that affect is a more important factor than cognition in the formation of attitudes toward environmental issues.

The current study examines both environmental beliefs and affective attitude's roles in forming WTPP. Affective attitude, in the current context, is in part an outcome of cognitive operations (anticipated emotions). The research model therefore incorporates the direct effect of beliefs on emotional attitude. Environmental beliefs are conceptualized on the basis of the new ecological paradigm (Dunlap, Van Liere, Mertig, & Jones, 2000), which measures "broad beliefs about the [fragile] biosphere and the [adverse] effect of human action on it" (Stern, Dietz, & Guagnano, 1995, p. 85) and is one of the most widely used conceptualizations when evaluating environmental beliefs (Royne, Levy, & Martinez, 2011). Thus, the first set of hypotheses for the model is as follows:

H1. Affective attitude is positively related to WTPP for sustainable offerings.

H2. Environmental beliefs are positively related to WTPP for sustainable offerings.

H3. Environmental beliefs are positively related to affective attitude.

2.2. Moderating role of ecotourism interest

Affective heuristics theorists (Finucane, Alhakami, Slovic, & Johnson, 2000; Slovic et al., 2002) argue that when people like an object, they tend to act on the basis of affects and

judge the object's benefits as high, thus forming consistent positive feelings about the activities that affect those objects. For example, someone who likes marine wildlife is more likely to positively evaluate actions that protect the wildlife (Kahneman et al., 1999). Accordingly, Irwin (1994) reports that WTP rankings for different environmental attractions do not differ substantially from attractiveness rankings. Similarly, Perkins and Grace (2009) reveal that tourists' greater intention to engage in ecotourism, as well as their actual behavior, is a consequence of their ecotourism interests and explicit preferences for such attractions. Visitors' feelings about a national park are also indicative of their cognitive evaluations of the place and intentions to perform place-related protective behaviors (Halpenny, 2010).

On this basis, interest in environmentally friendly consumption likely influences the interplay of affective and cognitive evaluations, whereby higher interest gives rise to the intensity of affect toward such offerings, which in turn makes affective evaluations predominant in predicting WTPP. Hsee and Rottenstreich (2004) also demonstrate that insensitivity to scope (as a sign for affective judgment) in WTP evaluations varies depending on whether the individual is induced to rely on feelings or cognitions, with greater insensitivity in the case of feeling-based judgments. Thus:

H4. Ecotourism interest moderates the effects of affective attitude and environmental beliefs on WTPP, such that during higher levels of ecotourism interest, (a) the positive effect of affective attitude is strengthened while (b) the positive effect of environmental beliefs is attenuated.

2.3. Value orientation: Materialism

Value is an "enduring belief that a mode of conduct or end-state of existence is personally or socially preferable to an opposite or converse mode of conduct or end-state of existence" (Kahle & Xie, 2008, p. 575). Allen and Ng (1999) suggest that values influence

customer choices directly or indirectly depending on product benefits and the kind of reasoning used to evaluate those benefits (rational vs. affective). Specifically, indirect influence (through beliefs and attitudes) occurs on choices when individuals concentrate on an offering's utilitarian benefits and thus make a systematic piecemeal judgment. Conversely, values affect choice more directly when consumers make an affective judgment and their decision is grounded on evaluation of a product's hedonic and symbolic benefits (Allen & Ng, 1999).

Materialism is a value structure through which individuals consume an offering not solely for its instrumental benefit but also for the happiness and enhanced identity they can achieve through its acquisition (Kilbourne & Pickett, 2008). Materialists attach significant importance to the acquisition of possessions in the belief that acquiring more is the key to happiness (Richins, 1994). Theoretical argumentations on the relationship between value orientation and environmentalism (Inglehart, 1981; Inglehart & Abramson, 1994) predict a negative effect on materialism. Inglehart's (1981) theory of post-materialism presumes that post-materialists and materialists possess divergent attitudes toward environmental issues, such that materialists have less favorable environmental beliefs and attitudes and are less environmentally supportive (Davis, 2000).

Recent empirical findings lend support to such postulations by showing a negative relationship between materialism and environmentally friendly beliefs (Hultman et al. 2015; Kilbourne & Pickett, 2008) and ethics (Bergman, Westerman, Bergman, & Westerman, 2014), though a knowledge gap exists on how materialism influences the affective processes of WTP for environmentally friendly offerings. The current model incorporates the direct (affective) and indirect (belief-mediated) influences of materialistic values on WTPP for eco-friendly consumption to achieve a more comprehensive account of materialism's behavioral consequences. Likely, materialistic values' negative affective effect on WTPP also becomes

stronger as a result of greater interest in the offering (i.e., greater intensity of affects toward the stimuli) (Dittmar & Bond, 2010; Podoshen & Andrzejewski, 2012; Rose, 2007). Thus:

H5. Materialism is negatively related to environmental beliefs.

H6. Materialism is negatively related to WTPP for ecotourism offerings.

H7. Ecotourism interest moderates the effects of materialism of WTPP, such that the negative relationship is strengthened when ecotourism interest is high.

3. Method

3.1. Sample and data collection

The study sample, comprised of 2,000 Swedish citizens with potential interest in ecotourism, came from an official Swedish consumer database provider (www.par.se). Questionnaires and self-addressed pre-paid envelopes were distributed to the sample and followed up with a reminder three weeks later. From the initial 725 responses, 104 questionnaires were excluded from further analysis because of missing and/or abnormal data (e.g., extreme outliers), yielding an effective sample of 621 (31%). The respondents were fairly equally distributed in terms of gender, with male respondents (55.6%) being slightly over-represented.

Most respondents were between 45 and 64 years of age (54.2%), followed by respondents under 45 (23.1%) and over 65 (22.7%). They had visited 16 foreign countries on average (SD = 11.2). The respondent profiles match the demographic distribution provided by the database provider and the expected profiles of typical ecotourists (Meric & Hunt, 1998). Early and late respondents' responses were compared using t-tests, with no significant differences between groups detected (Armstrong & Overton, 1977). Thus, non-response bias does not appear to pose a problem in the study.

3.2. Measures

Following a thorough review of the pertinent literature, a questionnaire draft was developed on the basis of established scales. Five academic tourism experts evaluated the content validity of the selected measures before the constructs were further tested through additional interviews with respondents and a small pre-test (n = 30) to ensure effective semantic design and instrument format.

All study constructs were measured with multi-item scales. Specifically, materialism was captured with three items adapted from Richins (1994). The four-item scale measuring environmental beliefs was based on Dunlap et al.'s (2000) New Environmental Paradigm scale. Affective attitude toward ecotourism was operationalized with five items adapted from Lam and Hsu (2006). WTPP comprised four items modified from Bang, Ellinger, Hadjimarcou, and Traichal (2000), and ecotourism interest consisted of five items adapted from Juric, Cornwell, and Damien's (2002) ecotourism interest scale. All questionnaire items appear in the Appendix along with response formats and reliability (alpha) scores (ranging from 0.79 to 0.94).

4. Analysis and results

4.1. Measure validation

To assess the construct validity of the scales, a measurement model was estimated using confirmatory factor analysis. The measurement model's chi-square statistic is significant ($\chi^2_{(179)} = 401.30$, $p < .01$), as expected, because of its sensitivity to sample size. The other fit indexes (normed fit index [NFI] = 0.97, non-normed fit index [NNFI] = 0.98, comparative fit index [CFI] = 0.97, and root mean square error of approximation [RMSEA] = 0.045) suggest good model fit.

The factor loadings of the items on their posited indicators are all high and significant ($\beta \geq 0.63$; $t \geq 14.28$), indicating convergent validity. The composite reliabilities (≥ 0.73) and average variances extracted (AVE) (≥ 0.52) are above the recommended thresholds (Bagozzi & Yi, 1988), and the AVE square roots exceed the correlations of all construct pairs, suggesting adequate discriminant validity (Fornell & Larcker, 1981). Table 1 provides a summary of the descriptive statistics and intercorrelations among the study constructs. In addition to procedural remedies, such as assuring anonymity of respondents, explaining that there were no right or wrong answers, using different scale formats, and counterbalancing the order of some criteria and predictor variables, common method bias was tested through a variation of Harman's test. A single latent factor reflected by all the study's manifest items was estimated (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). The model statistics show extremely poor fit ($\chi^2_{(404)} = 9341.82$, $p < .01$; NFI = 0.50; NNFI = 0.48; CFI = 0.46; RMSEA = 0.168), so method bias is likely not a major issue.

-Table 1 here -

4.2. Hypothesis testing

A full-information structural model pertaining to the hypothesized direct links was estimated to test the study hypotheses. The results suggest good model fit ($\chi^2_{(99)} = 229.18$, $p < .01$; NFI = 0.97; NNFI = 0.98; CFI = 0.98; RMSEA = 0.046). Table 2 shows the standardized parameter estimates, t-values, and directional significance levels for the hypothesized paths, all of which are significant ($p < .05$) and in the anticipated directions. Specifically, in line with H1, favorable attitudes toward ecotourism are positively related to WTPP ($\beta = 0.35$, $t = 7.79$). In support of H2, environmental beliefs are also positively related to WTPP ($\beta = 0.31$, $t = 6.13$). Consistent with H3, environmental beliefs are positively related to favorable ecotourism attitudes ($\beta = 0.18$, $t = 3.45$). Furthermore, high levels of materialism are

negatively associated with environmental beliefs ($\beta = -.12$, $t = -2.69$) and WTPP ($\beta = .18$, $t = 3.45$), in support of H5 and H6, respectively. The structural model accounts for 28% of the explained variance in WTPP for ecotourism.

The conditioning role of ecotourism interest was assessed using sub-group analysis, in which the data were divided into similarly sized high and low ecotourism interest groups using a median split approach. Subsequently, two structural models were estimated: one in which the three moderated paths were constrained to be equal and one in which all parameter estimates were permitted to vary freely. For the low- versus high-interest groups, the unconstrained model yields $\chi^2_{(99)} = 220.13$, while the constrained model yields $\chi^2_{(102)} = 234.66$. The significant $\Delta\chi^2_{(3)} = 14.53$ ($p < .01$) between the two models provides support for the conditioning effect of ecotourism interest on the moderated paths (Table 3).

-Tables 2 and 3 here -

The results specifically reveal that the attitude–WTPP link is stronger ($\beta = 0.39$, $t = 5.71$) in the high-interest group than in the low-interest group ($\beta = 0.23$, $t = 3.54$), as anticipated in H4a. Furthermore, environmental beliefs are related more strongly to WTPP when interest in ecotourism is low ($\beta = 0.42$, $t = 5.35$) rather than high ($\beta = 0.16$, $t = 2.31$), in support of H4b. Finally, consistent with H7, materialism relates more strongly to WTPP when interest is high ($\beta = -0.23$, $t = -3.39$), whereas the association is not significant in the low-interest group ($\beta = -0.02$, $t = -0.28$).

Following Baron and Kenny (1986), two additional structural models were tested to investigate the possible mediating role of environmental beliefs. First, a non-mediated model with materialism as a direct precursor to affective attitude yielded significant results for the materialism–affective attitude link ($\beta = -0.11$, $t = -2.03$). The second model included environmental beliefs as an additional predictor of affective attitude. The results of the

mediated model show that environmental beliefs are significantly related to affective attitude ($\beta = 0.17$, $t = 3.24$) while the influence of materialism declines to insignificance ($\beta = –0.08$, $t = –1.71$), suggesting that environmental beliefs fully mediate the materialism–affective attitude link.

5. Discussion

The results indicate that WTPP for environmentally friendly offerings is influenced not only by the belief that human behaviors are endangering the environment but also by tourists' feelings about preservation behaviors, thus confirming prior research propositions (e.g., Stern, Dietz, & Kalof, 1993). The study results further show that emotion considerably explains variance in WTPP for ecotourism in line with previous findings (e.g., Kahneman et al., 1999; Kals, Schumacher, & Montada, 1999), suggesting that a purely cognitive approach is inadequate to comprehend WTPP decisions in sustainable services such as ecotourism.

While affective and cognitive components act collaboratively in forming WTP judgments for ecotourism, interest in ecotourism attractions moderates their effects. Specifically, greater interest in ecotourism attractions appears to distort the balance of emotion and cognition in favor of affects, as positive evaluations of ecotourism attractions apparently strengthen the influence of affective attitude on WTPP while strongly attenuating the effect of environmental beliefs. These findings concur with Smith, Haugtvedt, and Petty's (1994) observation that higher affect intensity decreases the role of cognitive analysis (environmental beliefs in this context) in the final decision. Conversely, less-intense affective bonds to the object magnify the role of beliefs and rational thinking in the WTPP decision. The current findings thus also argue for including additional potential moderating factors, such as attitude accessibility, attitude importance, perceived efficacy, and individual differences in need for cognition and self-monitoring.

Consistent with the moderating hypothesis, the results indicate a stronger negative effect of materialistic values on WTPP for the group with a greater interest in ecotourism. The affective–cognitive model assumes that decreased access to the rational system increases the influence of all affective processing systems. Thus, higher affective loads due to a greater interest in ecotourism attractions may negate logical reasoning and boost the negative affective influence of materialistic values on WTPP. These results may seem counterintuitive because "liking" the prospect of ecotourism (a positive-affective state) generates a more negative feeling and decreases the intention to take preserving action. The phenomenon might be rooted in materialists' more extensive sensation-seeking behaviors and tendencies toward impulsive purchases (Rose, 2007).

The current findings should benefit ecotourism marketers because they provide grounds for designing programs geared toward promoting ecotourism. The results indicate that marketers should actively search for ways to increase emotional ties to attractions among potential tourists. Furthermore, the literature proposes that when people have direct experiences with an object, their evaluations of that object are more affectively based than when they have only indirect experience (Kals et al., 1999). If so, facilitating a greater experience with the natural environment during the visit to an ecotourism destination might improve pro-environmental attitudes and, consequently, WTPP.

The study results further encourage marketers to devise strategies to increase pro-environmental beliefs among consumers because these likely precede WTPP for sustainable tourism in the long run. According to this study's model, if the goal of environmental policy is to change environmentally harmful consumption behaviors into pro-environmental behaviors, the policies should focus on reducing materialistic values. Such focus indeed requires a long-term expansive approach because materialism is a global phenomenon that has been institutionalized in many societies.

Finally, the conclusions of this study are subject to certain limitations, such as cross-sectional research design and limited geographic context, thus offering directions for future research. In addition, considering that the study captures only a limited image of affective influences, a more detailed assessment of the effect of emotions—especially anticipatory emotions—on WTPP for sustainable service alternatives is warranted. This study investigated potential tourists' WTPP for ecotourism offerings. In light of this limitation, investigating actual behavior as a more concrete indicator of future behavior would be worthwhile.

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Fig. 1. Conceptual model.

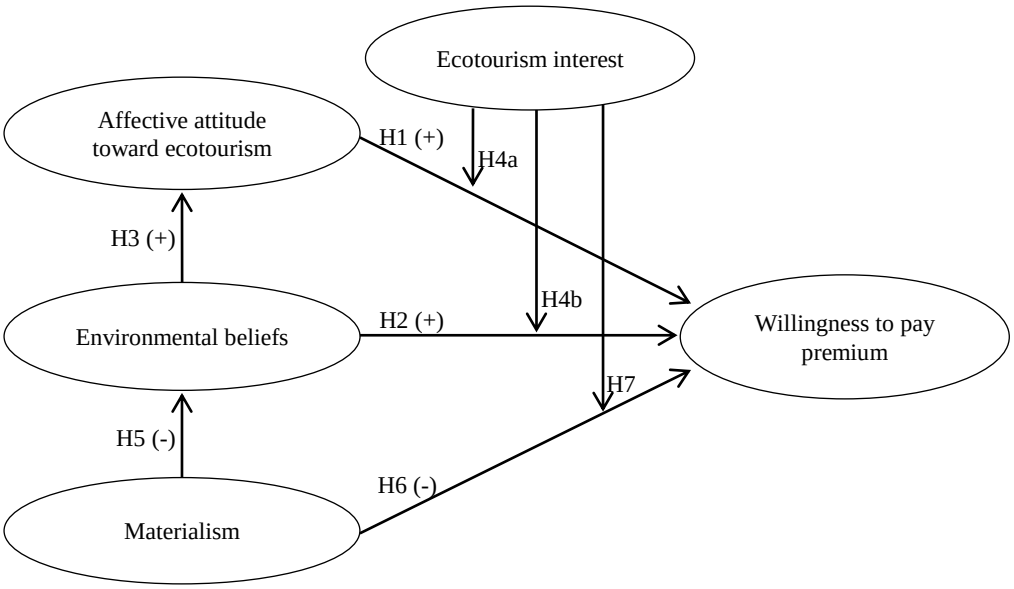

Table 1

Measurement statistics and inter-construct correlations. [a]

	Mean	SD	1	2	3	4	5
1. Materialism	2.65	1.39	1				
2. Environmental beliefs	5.00	1.28	-.12	1			
3. Affective attitude	5.18	1.13	-.11	.16	1		
4. WTPP	4.76	1.38	-.18	.33	.41	1	
5. Ecotourism interest	4.16	1.42	-.10	.16	.27	.43	1
Composite reliability			.75	.73	.89	.87	.83
AVE			.62	.52	.77	.77	.60
Square root of AVE			.78	.72	.87	.88	.77

[a] correlations above and below ±.11 are significant at $p < .05$

Table 2
Structural model results.

Path	Expected sign	β	t
Affective attitude → WTPP	+	.35	7.79**
Environmental beliefs → WTPP	+	.31	6.13**
Materialism → WTPP	-	-.12	-2.69**
Environmental beliefs → Affective attitude	+	.18	3.45**
Materialism → Environmental beliefs	-	-.13	-2.35*

Fit Indices: $\chi^2_{(99\ d.f.)}$ = 229.18**; NFI = 0.97; NNFI = 0.98; CFI = 0.98; RMSEA = 0.046

*p < .05; **p < .01.

Table 3
Split group moderator test with ecotourism interest as moderating variable.

Main effect	Low interest group	High interest group
Affective attitude → WTPP	β = .23 t = 3.54**	β = .39 t = 5.71**
Environmental beliefs → WTPP	β = .42 t = 5.35**	β = .16 t = 2.31*
Materialism → WTPP	β = -.02 t = -.28	β = -.23 t = -3.39**
$\Delta\chi^2$ (3 d.f.) = 14.53**		

*p < .05; **p < .01.

Appendix. Measures

Materialism (7-point Likert-type scale anchored by "strongly disagree" and "strongly agree"; α = 0.82)

1. My life would be better if I owned certain things I don't have.
2. I'd be happier if I could afford to buy more things.
3. It sometimes bothers me quite a bit that I can't afford to buy all the things I'd like.

Environmental beliefs (7-point Likert-type scale anchored by "strongly disagree" and "strongly agree"; α = .79)

1. When humans interfere with nature, it often produces disastrous consequences.
2. Humans are severely abusing the environment.
3. Plants and animals have as much right as humans to exist.
4. The balance of nature is very delicate and easily upset.

Affective attitude toward ecotourism (7-point semantic differential scale; α = .94)

All things considered, I think visiting an ecotourism destination would be...

1. Enjoyable/Unenjoyable
2. Favorable/Unfavorable
3. Fun/Boring
4. Pleasant/Unpleasant
5. Positive/Negative

WTPP (7-point scale anchored by "not at all willing" and "very willing"; α = .93)

1. How willing would you be to go on a more expensive holiday in order to reduce pollution?
2. How willing would you be to pay more for your holiday if you knew the added cost paid for a better environment?
3. How willing would you be to pay more for your holiday today in exchange for possibly better tourism experiences in the future?
4. How willing would you be to pay more for ecotourism as opposed to 'regular' tourism?

Ecotourism interest (7-point scale anchored by "not at all important" and "very important"; α = .88)

Which of the following attributes do you consider important when you go on holiday?

1. Wilderness and undisturbed nature
2. Tropical forests and indigenous bush
3. National parks
4. World heritage status areas
5. Learning about nature