Tourist environmental attitude and behavior:
Antecedents, moderators, and outcomes

INTRODUCTION

While tourism provides significant benefits for many countries, its rapid development in the last decades has had detrimental effects on the biophysical environment (Budeanu, 2007). The roots of these negative effects can be found at both the providers and receivers of tourism services: while tourism providers (e.g., hotels) have been accused of destroying the environment 'silently', due to the excessive use of energy, water, material, and other resources, tourists themselves are responsible for littering the environment, creating unnecessary waste disposal, and showing little respect for flora and fauna (Chan & Lam, 2002). Although there is sufficient body of research on the eco-friendly behavior of providers of tourism services, studies specifically focusing on the environmental behavior of tourists are still lacking behind (Kim, 2012). Hence, the aim of this study is to identify the antecedents, moderators, and outcomes of tourist green attitude and behavior. We have four research questions: (a) What is the role of deontological status, law obedience, and political action in shaping tourists' eco-friendly attitudes? (b) What is the connection between tourist eco-friendly attitudes and environmental behavior? (c) What is the contribution of this environmental behavior to satisfaction derived by tourists? (d) What is the moderating role of socio-demographic traits on the link between deontological status, law obedience, and political action on the one hand and eco-friendly tourist attitudes on the other?

GREEN TOURIST LITERATURE

The literature on tourism pro-environmental behavior has taken many and different directions, which can be grouped into five main streams. The first stream focuses on the *nature and types of green tourism*, where three distinct categories have been examined, namely: (a) environmentally friendly tourism (i.e., tourism associated with visitors who attempt to minimize their ecological footprint) (Dolnicar et al., 2008); (b) nature-based tourism (i.e., tourism that takes place in relatively undisturbed natural settings) (Goodwin, 1996); and (c) eco-tourism (i.e., tourism that focuses on natural areas, is learning oriented, and sustainable in its operations) (Wurzinger & Johansson, 2006). The second stream investigated *drivers of tourist environmental concern* from two different angles: the first refers to individuals' value orientations, with some studies (e.g., Hedlund, 2011) showing a positive association with environmental concerns; the second examined the role of nature-based experiences in forming environmental concerns, with the findings of studies (e.g., Wurzinger & Johansson, 2006) converging on the fact that compared to mass tourists, green tourists are characterized by a greater interest in the environment, more engagement in outdoor activities, and wider involvement in ecological organizations. The third stream of research focused on *eco-friendly intentions and predispositions*. For instance, Aipanjiguly et al. (2003) reported a strong relationship between boaters' subjective norms and their behavioral intentions to follow speed zones, while Han et al. (2010) found that intentions to visit a green hotel, engagement in a positive word-of-mouth behavior, and paying more for the green hotel are positively associated with the hotel's overall image, which, in turn, is affected by attitude toward green issues. Another study by Fielding et al. (2008) revealed that intentions to engage in green activism are also determined by the environmental group membership and self-identity of individuals. *Tourist environmental attitudes and behavior* provided another line of research, with some studies suggesting that visitors with positive green attitudes are more likely to engage in green behaviors than those who are indifferent toward the natural environment. Specifically, tourist environmental attitudes were found to have a significant positive effect on: (a) preferences for ecologically responsible hotels (Manaktola & Jauhari, 2007); (b) willingness to pay more for green hotels (Han et al., 2011); and (c) selection of eco-friendly transportation at the destination countries (Cao & Mokhtarian, 2005). Finally, few studies have addressed the role of *socio-demographic factors* in shaping pro-environmental attitudes/behavior among tourists. For example, the study of Fairweather et al. (2005) showed that tourists with bio-centric values had a higher level of education but a lower level of income than tourists with ambivalent values, while there was no significant difference between these two groups in terms of age and gender.

MODEL AND HYPOTHESES

Appendix 1 shows our conceptual model, which posits that the deontological status, law obedience, and political action of a tourist will positively affect his/her eco-friendly attitudes. The latter will subsequently shape his/her eco-friendly behavior, which in turn will influence satisfaction. Four socio-demographic features (i.e., gender, age, education, and income) were assumed to have a moderating role on the link between driving forces and eco-friendly attitudes.

Main hypotheses. *Deontological status* refers to an ethical philosophy that sets distinct moral rules based on which a certain action is judged as intrinsically right or wrong, regardless of its consequences (Brennan & Lo, 2002). Within the context of ecological issues, deontological principles advocate the intrinsic, inviolable value of all entities on the planet, which humans have a moral duty to protect (García-Rosell & Moisander, 2008). Tourists who adopt a deontological perspective tend to show a greater maturity, understanding, and responsibility toward preserving the environment, because they inherently believe that this is the correct thing to do (Sparks & Merenski, 2000). *Law obedience* is the extent to which an individual respects the laws, rules, and regulations. In many countries there is a growing body of legislation regulating the behavior of both firms (e.g., using dangerous substances) and individuals (e.g., littering the beaches) with regard to protecting the environment (Gaski, 1999). A law obedient tourist, apart from conforming to environmental laws, is expected to develop pro-environmental dispositions and initiatives, such as having a favorable stance for organizations that have policies, processes, and products/services that conform to environmental standards (and contemn those that do the opposite) (Barr, 2007). *Political action* is an individual's desire to be involved in various socio-political issues, such as participating in pressure groups, lobbying political representatives, and boycotting non-responsible companies (Braithwaite, 1997). Tourists who are politically active are expected to develop this type of attitude, because protecting the environment is a socio-political issue of major public concern that involves values, power, and cooperation between various stakeholder groups (Hampel et al., 1996). Based on the above, we may hypothesize that "*an eco-friendly tourism attitude is more likely to be developed in the case of tourists who are: (a) more deontological; (b) more law obedient; and (c) more politically active" (H₁).* Although a pro-environmental attitude incurs inconveniences, additional costs, and lower levels of product performance, individuals having such an attitude are more likely to engage in an eco-friendly behavior (Kalafatis et al., 1999; Laroche et al., 2001). In fact, many studies (e.g., Kilbourne & Pickett, 2008) have empirically proved a positive relationship between environmental attitudes and behavior. Within the context of tourism, individuals acting in an environmentally friendly manner in their homes are also likely to carry their sustainable behavior with them while visiting other places (Dolnicar et al., 2008). We may posit therefore that "*the more positive the eco-friendly attitude of the tourist, the more likely s/he will engage in a pro-environmental behavior" (H₂).* According to Ottman et al. (2006), there are various benefits derived from the adoption of eco-friendly behavior, such as health, safety, and status. Hence, performing a pro-environmental behavior may activate a positive disposition held by an individual, increasing in this way his/her satisfaction (Thogersen & Crompton, 2009). Notably, a recent study has shown that many consumers increasingly opt for a less wasteful life and show a strong interest in green consumption because they derive more personal satisfaction from it (Flatters & Willmott, 2009). Thus, we may posit that "*the more environmental friendly the behavior of the tourist, the greater the satisfaction derived from it"(H₃).*

Moderation hypotheses. *Gender* has often been regarded as a key socio-demographic variable influencing consumer green attitudes. As opposed to men, females tend to exhibit higher levels of concern for the natural environment, participate more frequently in green activities, and are more likely to make green purchasing decisions (Laroche et al., 2001). This is because females are more responsible, obedient, and passive, while males are more self-reliant, rebellious, and aggressive. With regard to tourists, various studies (e.g., Kim, 2012) found that females demonstrated a stronger attitude toward green issues compared to their male counterparts. Therefore, we can argue that "*the effect of deontological status, law obedience,*

and political action on eco-friendly attitudes will be stronger among female than male tourists" (H₄). The *age* group has also been widely used as a strong criterion to explain differences in environmental attitudes. Specifically, a number of studies (e.g., Roberts, 1996) found that compared to younger individuals, older people tend to be more ecologically conscious and engage more frequently in eco-friendly initiatives. The moderating role of age was also examined in green tourism research, with the majority of studies (e.g., Han et al., 2009) concluding that older tourists have a stronger intention to adopt pro-environmental behaviors. These allow us to hypothesize that the "*the effect of deontological status, law obedience, and political action on eco-friendly attitudes will be stronger among older than younger tourists" (H₆).* With regard to *education level,* most of previous research consistently reported that better educated people tend to be more environmentally friendly compared to less educated ones, mainly because through education, individuals acquire those principles, values, and knowledge that are necessary to appreciate the benefits accrued from environmental friendliness (Hampel et al., 1996). Within the context of tourism research, it was also found that tourists with higher levels of education tend to show more sensitivity to ecological issues than those who are less educated (Fairweather et al., 2005). Thus, we may argue that "*the effect of deontological status, law obedience, and political action on eco-friendly attitudes will be stronger among highly educated than poorly educated tourists" (H₆).* An individual's *income* group was also the object of some studies examining consumer pro-environmental behavior, with most of them (e.g., Scott & Willits, 1994) reporting that people with higher income are more conscious about the natural environment. This is because individuals with a higher financial status have more opportunities to solve their basic needs and consequently get a luxury of focusing on the satisfaction of 'higher' needs. In a tourism setting, the majority of studies (e.g., Eagles & Cascagnette, 1995) indicated that more affluent individuals are more likely to be environmental conscious. We may therefore posit that "*the effect of deontological status, law obedience, and political action on eco-friendly attitudes will be stronger among more affluent than less affluent tourists" (H₇).*

RESEARCH METHODOLOGY

Our study took place among tourists aged 15 and above, who visited Cyprus during summer 2011. A total of 550 tourists were randomly approached, using specific quotas with regard to nationality, age, and gender. Of those, only 234 were willing to participate, resulting in a response rate of 42.5%. Participants in the study represented 32 countries, with the majority coming from Britain (41.5%) and Russia (27.4%). Scale development for the constructs used in the study was based on prior research published in reputable journals: Chan et al. (2008) for deontological status, Gaski (1999) for law obedience, Bohlen et al. (1993) for political action, Choi & Sirakaya (2005) for tourism environmental attitude, Kaiser and Wilson (2004) for tourism environmental behavior, and Chen (2010) for tourism satisfaction. The research instrument was a questionnaire included questions containing lists of pre-coded items for each of the operationalized constructs, which were measured on a seven-point Likert scale (1=strongly disagree to 7=strongly agree). The questionnaire was developed in English and was also translated into three other languages, namely Russian, German, and French, in order to achieve reliable results in the interviews with non-English-speaking tourists. Before launching the full-scale study, all questionnaire versions were pre-tested with tourists from different nationalities, revealing no problems. Data were gathered through personal interviews with foreign tourists conducted at central locations over a six-week period. The statements operationalizing the various constructs were read out by interviewers to the participants, who expressed their opinion by choosing one of the seven alternative options (strongly disagree to strongly agree) written on a special card shown to them. Each of the completed questionnaires was carefully edited, with some of them removed because of incomplete and/or inconsistent answers.

ANALYSIS, FINDINGS, AND DISCUSSION

Purification and measurement. We run SEM analysis using the EQS program. To assess the validity and reliability of the scales used in the conceptual model, a measurement model was estimated (see **Appendix 2**). We have employed confirmatory factor analysis, whereby each item

was restricted to load on its a priori specified factor, while the underlying factors were allowed to correlate (Anderson & Gerbing, 1988). In addition, using the ERLS procedure, we estimated the model. Although the chi-square statistic was found to be significant ($\chi^2_{(89)}$=252.91, p<.00), all alternative fit indices were found within the commonly accepted critical levels. Convergent validity was satisfactory, since the t-value for each item was significant and greater than 6.0, all standard errors of the estimated coefficients were low, and the average variance extracted for each construct was equal to or above the threshold of .50 (Hair *et al.*, 2010). Discriminant validity was also evident, due to the fact that the confidence interval (plus/minus two standard errors) around the correlation estimate for each pair of constructs examined never included 1.0 (Anderson & Gerbing, 1988). All factors had composite reliability and Cronbach's alpha values equal to or greater than .70, implying a reliable measurement (Bagozzi & Yi, 1988). To secure the non-existence of common method bias, a confirmatory factor analysis was estimated, in which all indicators included in the model were restricted to load on a single factor (Podsakoff & Organ, 1986). The fit indices obtained indicated a poor model fit, indicating the absence of bias.

Main effects. The hypothesized links between the constructs were tested by estimating the structural model, revealing an excellent model fit, as demonstrated by the ratio of chi-square by the degrees of freedom (χ^2/df = 3.59) and the results of all alternative fit indices (NFI = .92, NNFI = .92, CFI = .94, RMSEA= .09). The standardized path coefficients, together with the corresponding t-values of the structural model are presented in **Appendix 3**. Notably, all main hypotheses were accepted, with all associations between constructs being significant and in the right direction. With regard to H_{1a}, deontological status was found to be conducive to the formation of eco-friendly attitudes by tourists (β= .14, t= 1.89, p= .06), which is in line with earlier studies (e.g., Sparks & Merenski, 2000) in the general environmental literature showing that deontological people are more mature and responsible for protecting the environment. The effect of law obedience on eco-friendly attitudes (i.e., H_{1b}) was also confirmed (β= .40, t= 4.85, p= .00), giving support to the view that the higher the conformance of a tourist to the laws the greater the possibility for this tourist to be more sensitive and caring about green issues (Leonidou et al., 2010). The third hypothesis (H_{1c}), linking tourist political action with eco-friendly attitudes, was also supported (β= .30, t= 3.35, p= .00), probably, because environmental protection is an issue of major concern in many societies and ranks high in the agendas of people who are involved in political matters (Owen & Videras, 2006). In accord with H_2, a tourist eco-friendly attitude was found to be a significant predictor of eco-friendly behavior (β= .43, t= 5.19, p= .00). The study also confirmed H_3, which hypothesized that a tourist eco-friendly behavior is positively associated with satisfaction levels (β= .56, t= 6.26, p= .00). This gives credibility to Chen's (2010) argument that fulfilling an individual's desire and action to protect the environment creates a special type of satisfaction ('green satisfaction'), which is over and above that derived from the good performance of green products.

Moderating effects. To examine the moderating effects of tourist demographic characteristics on the link between each of the three drivers and tourist eco-friendly attitudes, we employed the split-group approach (see **Appendix 4**). Our results indicate that *tourist gender* has a significant effect on the link between law obedience and eco-friendly attitudes ($\Delta\chi^2_{(1)}$=4.21, p<.05) (i.e., H_{4b}), as well as the link between political action and eco-friendly attitudes ($\Delta\chi^2_{(1)}$=5.64, p< .05) (i.e., H_{4c}). In both cases, the effect was stronger in the case of female than male tourists, confirming that, because women are more responsible, sensitive, and soft in their approach compared to men, they are more likely to be favorably pre-disposed toward the environment. However, tourist gender did not have any impact on the association between deontological status and eco-friendly attitude ($\Delta\chi^2_{(1)}$=.07, p>.10), thus H_{4a} is rejected. The *age of tourist* was also found to moderate the link between deontological status and eco-friendly attitudes ($\Delta\chi^2_{(1)}$=2.81, p<.10), as well as between law obedience and eco-friendly attitudes ($\Delta\chi^2_{(1)}$=2.94, p<.10). In accord with our hypotheses H_{5a} and H_{5b}, the association between these drivers and eco-friendly attitude was becoming more evident in the case of older tourists, which can be explained by their more conservative and caring nature, coupled with their better

experiential knowledge regarding the negative consequences of ecological disasters. Contrary to H_{5c}, no moderation effect caused by tourism age was observed with regard to the association between political action and eco-friendly attitude ($\Delta\chi^2_{(1)}$=.35, p>.10). The moderating effect of *tourist education level* was evident in the case of the link between deontological status and eco-friendly attitudes ($\Delta\chi^2_{(1)}$=4.14, p<.05) and between political action and eco-friendly attitudes ($\Delta\chi^2_{(1)}$=5.94, p<.05), indicating support for H_{6a} and H_{6c} respectively. This effect was found to be more profound among more educated tourists, which is consistent with earlier findings showing that, through education, individuals develop more appreciation, understanding, and sensitivity to green issues. However, non-significant moderating effects were observed with regard to the association between law obedience and eco-friendly attitudes ($\Delta\chi^2_{(1)}$=.83, p>= .10). Finally, with regard to the moderating role of *tourist income*, hypotheses H_{7b} and H_{7c}, referring to the links between law obedience and eco-friendly attitudes and between political action and eco-friendly attitudes respectively, were confirmed, since such links were stronger in the case of more affluent than less affluent tourists ($\Delta\chi^2_{(1)}$= 2.97, $p < .10$ and $\Delta\chi^2_{(1)}$ = 3.08, $p < .10$ respectively). This supports previous findings which demonstrate that eco-friendliness increases with the rise of an individual's income. Hypothesis H_{7a}, which links deontological status with eco-friendly attitude, was not confirmed ($\Delta\chi^2_{(1)}$= .22, p>.10).

Control effects. Since there are indications that eco-friendliness is treated differently across countries (Swarbrooke & Horner, 1999), we have used tourist nationality as a control variable for eco-friendly behavior and revealed that indeed there are such differences ($\beta = .13$, $t = 1.75$, $p = .08$). Our findings are in harmony with those of other researchers (for instance, Hjalager (1999) found that German tourists regard green issues more highly compared to other nationalities in selecting foreign country destinations). A closer look at our results shows that tourists from Western European countries (e.g., British) were behaving in a more environmentally friendly way compared to their Eastern European (e.g., Russian) counterparts.

CONCLUSIONS AND IMPLICATIONS

Our study has shown that the possession of pro-environmental attitudes among tourists is critical in shaping their eco-friendly behavior. However, these attitudes and behaviors do not exist in a vacuum, but are affected by specific background forces, namely the deontological, law obedient, and politically active status of the tourist. The role of most of these attributes in developing positive eco-friendly attitudes was more evident in the case of tourists who are: females, older in age, highly educated, and high income earners. A tourist behaving in an eco-friendly manner was also found to be more satisfied with his/her behavior. The study has also revealed that the tourist's environmental behavior tends to differ according to nationality. This study makes four contributions: (a) it sheds light on the factors that act at the background of forming green attitudes/behaviors, rather then focusing solely on the often studied attitude-behavior link; (b) it shows that the possession of an eco-friendly attitude/behavior positively affects the tourist's psychological stance through enhancing his/her satisfaction; (c) it underscores the neglected role of socio-demographic traits in moderating the effect of antecedent factors on green attitudes; and (d) it elevates the importance of nationality in influencing tourist green responsible behaviors.

Our study has several implications. Firstly, marketing managers should investigate more the background characteristics (i.e., deontological status, law obedience, political action) of their target tourism sources and try to adjust their company offerings according to whether or not tourists have an eco-friendly attitude/behavior. It is also important to carefully segment tourists based on their socio-demographic traits and pay particular attention to females, older, educated, and affluent individuals, because they are more sensitive to green issues. Different nationalities of tourists should also be taken into consideration, which necessitates an adjustment of marketing strategies. Government agencies should also try, through proper educational, communication, and other programs, to communicate the eco-friendly nature of their countries as a tourism destination. Before doing this, however, it is crucial to take measures toward protecting the bio-physical environment, such as re-enforcing environmental legislation, establishing certain green standards for tourism-related firms, and adopting sound sustainability practices.

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Appendix 1: The Conceptual Model
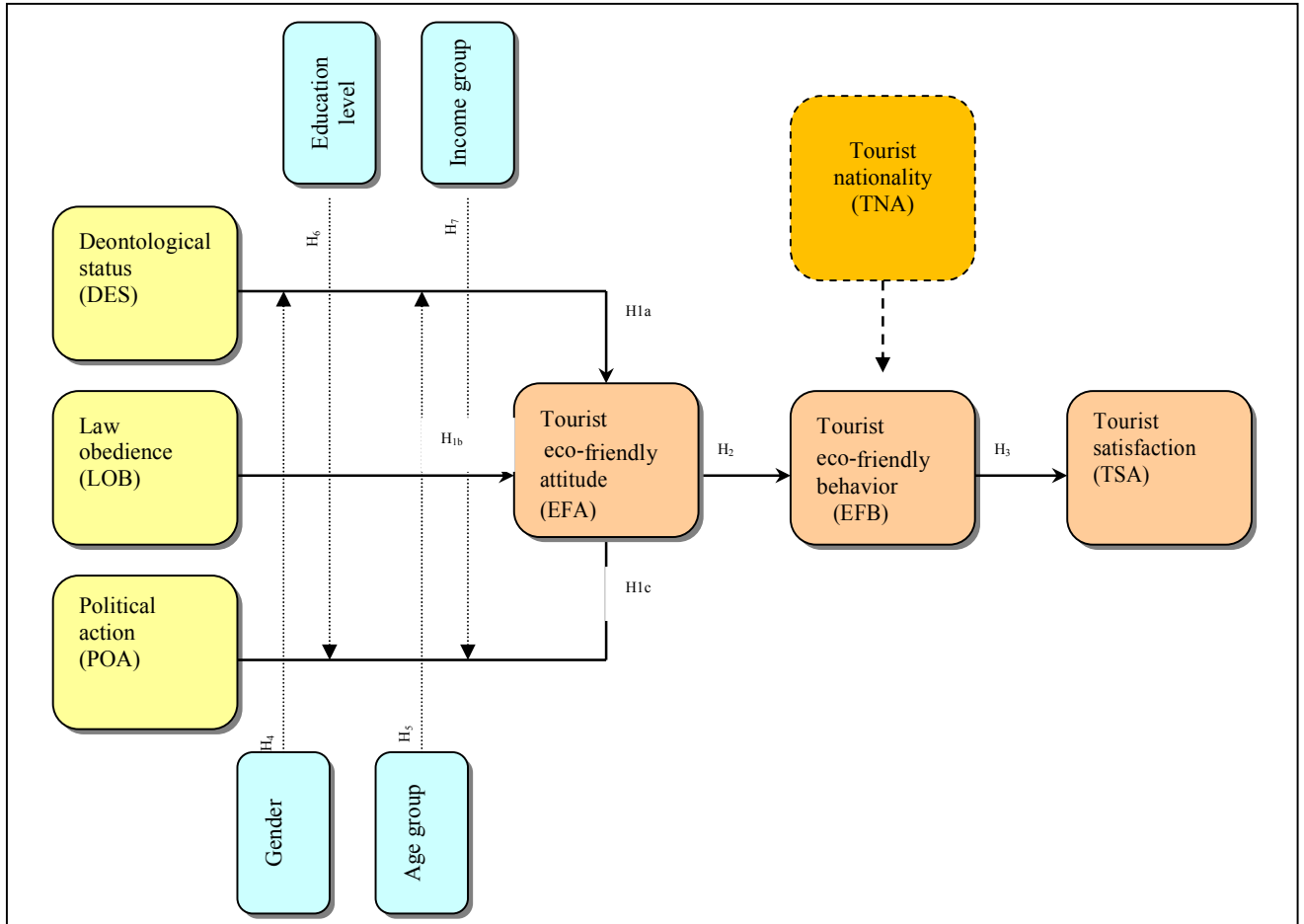
Appendix 2: Results of the Measurement Model

Factor	Standardized Loadings[a]
Deontological status (DES) (α= .79)	
DES1-I am interested in conserving the natural resources	.67[b]
DES2-I reduce unnecessary waste	.79 (9.13)
DES3-I try to create and provide a better living environment for future generations	.85 (9.65)
DES4-I am concerned about the environment for my future personal convenience	.72 (8.52)
Law obedience (LOB) (α=.83)	
LOB1-I try to avoid committing briberies in my transactions	.69[b]
LOB2-I show respect to the laws and especially those for the environment	.87 (10.05)
LOB3-I abide the safety law for the protection of the environment	.79 (9.42)
LOB4-I try to avoid companies that use misleading environmental practices	.60 (7.35)
Political action (POA) (α= .76)	
POA1-I often intervene with the media in order to combat environmental degradation	.57[b]
POA2-I support environmental pressure groups in order to combat environmental degradation	.71 (6.43)
POA3-I lobby political representatives to support green issues	.70 (6.37)
POA4-I boycott companies that are not environmentally responsible	. 60 (5.81)
Tourist eco-friendly attitude (EFA) (α= .74)	
EFA1-Tourism must protect the environment now and for the future	.83[b]
EFA2-The diversity of nature must be valued and protected by tourism	.87 (13.76)
EFA3-I think that tourism should strengthen efforts for environmental conservation	.78 (11.84)
EFA4-Tourism needs to be developed in harmony with natural the environment	.71 (10.46)
EFA5-Proper tourism development requires that wildlife and natural habitats be protected at all times	.60 (8.537)
EFA6-Tourism development must promote positive environmental ethics among all parties that have a stake in tourism	.55 (7.59)
EFA7-Regulatory environmental standards are needed to reduce the negative impacts of tourism development	.55 (7.66)
EFA8-I believe that tourism must improve the environment for future generations	.55 (7.67)
EFA9-I believe that the quality of the environment is deteriorating because of tourism	-[c]
EFA10-As a tourist, I would be willing to reduce my consumption to help/protect the environment	-[c]
Tourist eco-friendly behavior (EFB) (α= .86)	
EFB1-During my visit to foreign countries as a tourist, I often talk with friends about problems related to the environment	.76[b]
EFB2-In the past, I have pointed out to someone his or her non-ecological behavior in visiting foreign countries as a tourist	.62 (8.20)
EFB3-When I visit foreign countries as a tourist, I avoid buying goods with unnecessary packaging material	.78 (10.47)
EFB4-I sometimes contribute financially to environmental organizations, when I visit foreign countries as a tourist	.63 (8.31)
EFB5-When I visit foreign countries, I buy/read magazines and listen/watch news which focus on environmental issues	.64 (8.55)
EFB6-During my visit to foreign countries as a tourist, I buy environmentally friendly products, whenever possible	.76 (10.17)
EFB7-When I visit foreign countries as a tourist, I buy organic food, whenever possible	-[c]
EFB8-When I visit foreign countries as a tourist, I use products made from recycled	.65 (8.59)
EFB9-I reduce and recycle waste, whenever possible, during my visits to foreign countries as a tourist	.64 (8.47)
EFB10-As a tourist, I always like to visit environmentally friendly countries	-[c]
Tourist green satisfaction (TSA) (α= .82)	
TSA1-I am satisfied with my decision to choose environmentally friendly destinations for my tourist vacations	.71[b]
TSA2-I think I do the right thing by deciding to give priority to ecologically friendly countries as my tourist destinations	.86 (10.94)
TSA3-There is a big probability to carry on visiting countries as a tourist who cares about the protection of the environment	.85 (10.82)
TSA4-My general experience as a tourist in countries that have environmental friendly policies is positive	.75 (9.66)
TSA5-I feel very happy because of taking actions that preserve the environment of the countries that I visited as a tourist	.50 (6.42)
TSA6-Overall, I am satisfied with my environmental behavior in foreign countries, which I visited as a tourist	.52 (6.65)

[a]*t*-values from the non-standardised solution are in parentheses; [b]Item fixed to set the scale; [c] item deleted

Fit statistics:
Chi-square (χ^2)= 252.91; p = .000; df = 89; Ratio Chi-square to d.f. (χ^2/df)= 2.84; Normed Fit Index (NFI)= .92; Non-Normed Fit Index (NNFI)= .94; Comparative Fit Index (CFI)= .95; Root Mean Squared Error of Approximation (RMSEA)= .09.

Appendix 3: Results of the Structural Model

H	Hypothesized association	Standardized estimate	*t*-value	*p*-value	Status
Main effects					
H_{1a}	Deontological status→ Eco-friendly tourist attitude	.14	1.89	.06	Accepted
H_{1b}	Law obedience→ Eco-friendly tourist attitude	.40	4.85	.00	Accepted
H_{1c}	Political action→ Eco-friendly tourist attitude	.30	3.35	.00	Accepted
H_2	Eco-friendly tourist attitude→ Eco-friendly tourist behavior	.43	5.19	.00	Accepted
H_3	Eco-friendly tourist behavior→ Tourist green satisfaction	.56	6.26	.00	Accepted
Control effects					
	Tourist Nationality→ Eco-friendly tourist behavior	.13	1.75	.08	Accepted

Goodness-of-Fit Statistics: Chi-square (χ^2)= 1724.72; *df* = 480; Ratio Chi-square to d.f. (χ^2/df)= 3.59; Normed Fit Index (NFI)= .92; Non-Normed Fit Index (NNFI)= .92; Comparative Fit Index (CFI)= .94; Root Mean Squared Error of Approximation (RMSEA)= .09.

Appendix 4: Results of Individual Moderating Effects

Tourist Gender

Main effect	Hypothesized moderating effect	Male (n₁=103)	Female (n₂=131)	$\Delta\chi^2$ ($\Delta df = 1$)
DES→EFA	H$_{4a}$: Effect is stronger among female than male tourists	β = .25 t = 2.16**	β = .09 t = 1.01	.07 ($p > .10$)
LOB→EFA	H$_{4b}$: Effect is stronger among female than male tourists	β = .33 t = 2.96***	β = .47 t = 4.31***	4.21 ($p < .05$)
POA→EFA	H$_{4c}$: Effect is stronger among female than male tourists	β = .21 t = 2.05**	β = .39 t = 2.58***	5.64 ($p < .05$)

Tourist age group

Main effect	Hypothesized moderating effect	Younger (n₁=115)	Older (n₂=119)	$\Delta\chi^2$ ($\Delta df = 1$)
DES→EFA	H$_{5a}$: Effect is stronger among older than younger tourists	β = .11 t = 1.12	β = .23 t = 2.29**	2.81 ($p < .10$)
LOB→EFA	H$_{5b}$: Effect is stronger among older than younger tourists	β = .32 t = 2.87***	β = .55 t = 4.75***	2.94 ($p < .10$)
POA→EFA	H$_{5c}$: Effect is stronger among older than younger tourists	β = .28 t = 2.45**	β = .32 t = 2.59***	.35 ($p > .10$)

Tourist education level

Main effect	Hypothesized moderating effect	Low educated (n₁=96)	High educated (n₂=138)	$\Delta\chi^2$ ($\Delta df = 1$)
DES→EFA	H$_{6a}$ Effect is stronger among high educated than low educated tourists	β = .04 t = .47	β = .30 t = 2.23**	4.14 ($p < .05$)
LOB→EFA	H$_{6b}$: Effect is stronger among high educated than low educated tourists	β = .38 t = 3.16***	β = .53 t = 4.85***	.83 ($p > .10$)
POA→EFA	H$_{6c}$: Effect is stronger among high educated than low educated tourists	β = .27 t = 1.81**	β = .29 t = 2.73***	5.94 ($p < .05$)

Tourist income group

Main effect	Hypothesized moderating effect	Less affluent (n₁=132)	More affluent (n₂=102)	$\Delta\chi^2$ ($\Delta df = 1$)
DES→EFA	H$_{7a}$: Effect is stronger among more affluent than less affluent tourists	β = .02 t = .20	β = .38 t = 2.81***	.22 ($p > .10$)
LOB→EFA	H$_{7b}$: Effect is stronger among more affluent than less affluent tourists	β = .28 t = 2.30**	β = .39 t = 3.43***	2.97 ($p < .10$)
POA→EFA	H$_{7b}$: Effect is stronger among more affluent than less affluent tourists	β = .28 t = 2.27**	β = .35 t = 2.93***	3.08 ($p < .10$)

***$p < .01$; **$p < .05$; *$p < .10$.