



# Exploring the Influence of Ecotourism Attitudes and Involvement on Behavioral Intentions

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**Abstract.** This study explores the relationships among eco-tourists' attitudes, involvement, and behavioral intentions. Based on a review of relevant literature, two conceptual models were developed to examine the role of involvement: Model A investigates involvement as a mediating variable, while Model B examines it as a moderating variable. A structured questionnaire was administered, yielding 271 valid responses. Structural equation modeling (SEM) was employed to test the hypothesized relationships. The results of Model A show that attitudes significantly influence both involvement and behavioral intentions, but involvement does not significantly affect behavioral intentions, indicating no mediating effect. In contrast, Model B reveals a significant interaction effect between attitude and involvement on behavioral intention, suggesting that involvement plays a moderating role. The overall model fit indices for both models meet recommended thresholds, supporting the robustness of the proposed models. These findings provide empirical support for the importance of tourist involvement in strengthening the relationship between ecotourism attitudes and behavioral intentions. Practical implications are discussed for ecotourism planners, marketers, and policymakers aiming to promote environmentally responsible travel behaviors through deeper engagement strategies.

**Keywords:** Attitude, Behavioral Intention, Ecotourism, Involvement, Mediation, Moderation.

## 1. INTRODUCTION

In response to the global emphasis on sustainable tourism, ecotourism has emerged as a key form of travel that integrates environmental preservation with local economic development (Parks et al., 2009). According to the International Union for Conservation of Nature (IUCN) and the United Nations World Tourism Organization (UNWTO), ecotourism is defined as responsible travel to natural areas that conserves the environment, sustains the well-being of local people, and involves interpretation and education (Agrawal & Baranwal, 2012). Taiwan, with its rich biodiversity and diverse natural landscapes—including forests, wetlands, coastlines, and offshore islands—possesses significant potential for ecotourism development (Lee, 2007).

In recent years, both governmental agencies and civil society organizations in Taiwan have actively promoted ecotourism initiatives that integrate ecological conservation, community development, and environmental education. These efforts aim to enhance public awareness of ecosystem value and to encourage participation in more sustainable tourism practices (Lin & Hemmington, 1997). Despite progress in infrastructure and programming, a key challenge remains: do tourists genuinely internalize ecological values and translate them into long-term behavioral intentions? Without effective psychological engagement, ecotourism risks becoming a superficial or performative activity, falling short of its sustainability goals.

In tourism behavior research, “attitude” and “involvement” are widely recognized as two core psychological constructs in explaining behavioral intention (Fujii & Gärling, 2003). Attitude reflects an individual's overall evaluation—favorable or unfavorable—of a given behavior, and is often a strong predictor of one's likelihood to act (Cheung & Fok, 2014). In contrast, involvement denotes the degree of personal relevance or psychological connection an individual perceives toward an activity (Havitz & Dimanche, 1999). Higher involvement typically corresponds to increased motivation to seek information, engage in deliberative decision-making, and persist in goal-directed behavior (Aghdaie et al., 2014).

Importantly, the level of involvement may significantly condition how attitude is translated into behavioral intention. Highly involved tourists are more likely to align their values with concrete actions, while those with low involvement may fail to act despite holding favorable attitudes (Briggs, 1987). Hence, exploring the interaction among these three variables—attitude, involvement, and behavioral intention—offers critical insights into the psychological mechanism of sustainable tourism behavior. Building on this premise, the present study empirically investigates how eco-tourists' attitudes and involvement jointly influence their behavioral intentions, and further analyzes whether involvement functions as a mediator or moderator in this process.

## 2. LITERATURE REVIEW

### 2.1. Involvement and Behavioral Intention in Ecotourism

The concept of involvement originated in the field of social psychology and was first introduced by Sherif and Cantril (1947) to describe the degree to which individuals perceive an issue or object as personally relevant.

Krugman (1965) later applied the concept to consumer behavior research, suggesting that individuals' psychological responses and level of attention vary depending on their degree of involvement with a stimulus. Zaichkowsky (1985) further defined involvement as “the personal relevance and importance an individual perceives in a particular product, activity, or issue,” emphasizing that this relevance stems from one's inherent needs, values, and interests. In her subsequent work, Zaichkowsky (1994) highlighted that individuals are more likely to engage with objects, products, or advertisements—and to make consumption decisions—when these align with their personal needs and values.

In the context of ecotourism, involvement can be understood as the psychological investment and personal identification that tourists exhibit toward natural experiences, environmental conservation, and the principles of sustainable tourism. McIntyre (1989) noted that tourists with higher levels of involvement tend to demonstrate stronger learning motivation, greater willingness to seek information, and more proactive trip-planning behaviors. Kyle et al. (2004) also argued that highly involved eco-tourists are more likely to express a deeper interest in, and a heightened sense of responsibility for, the natural environment, sustainability issues, and local culture. In a study of Taiwan's ecotourism destinations, Lee (2011) found that highly involved tourists were more likely to form emotional connections to the destination and a stronger commitment to sustainable conservation, which in turn significantly increased their intentions to engage in environmentally responsible behaviors. Similarly, Lin and Lee (2020) suggested that positive leisure experiences, coupled with high involvement, enhance tourists' sense of place attachment, thereby fostering their willingness to engage in conservation-supportive behaviors. Cheng et al. (2013) further proposed that involvement not only directly influences behavioral intention but also exerts indirect effects through other psychological variables, such as emotional attachment and environmental attitudes. Accordingly, highly involved eco-tourists tend to exhibit greater sensitivity to environmental issues and are more inclined to adopt sustainable behavioral practices (Diamantis, 1998). Thus, involvement is not only a key antecedent of tourist behavior but also a vital psychological mechanism that explains how eco-tourists form and act on their behavioral intentions.

## 2.2. Ecotourism Attitude and Behavioral Intention

Attitude refers to an individual's overall evaluative tendency—positive or negative—toward a particular object, situation, or behavior. According to Ajzen (2001), attitude plays a critical role in predicting behavior and serves as a key psychological antecedent in the decision-making process. The formation of attitudes is influenced by a range of factors, including past experiences, cultural values, social influences, and personal motivations. Attitude is widely recognized as a primary predictor of behavioral intention, as it not only determines whether an individual is willing to engage in a specific action but also affects the strength and persistence of that action over time.

In the context of ecotourism, tourists' attitudes toward ecological conservation, sustainable tourism, and the natural environment are critical determinants of both actual and intended behaviors (Lee & Moscardo, 2005). Tourists with positive and consistent ecological attitudes are more likely to engage in environmentally supportive behaviors, such as reducing waste, supporting local economies, participating in educational ecotours, or revisiting ecotourism destinations (Cornelissen et al., 2006). In a study of wetland tourists, Lee (2009) found that attitude not only had a direct effect on tourists' intentions to act in environmentally responsible ways but also interacted with other factors such as involvement and environmental knowledge. The results indicated that tourists with stronger pro-environmental attitudes were more inclined to practice resource conservation and adopt low-impact tourism behaviors. Similarly, Kiatkawsin and Han (2017) demonstrated that attitude has a significantly positive influence on tourists' intentions to engage in sustainable tourism behaviors. Their findings suggest that individuals with favorable attitudes toward sustainability issues are more likely to actively participate in responsible tourism and express a willingness to bear the associated costs of sustainable development. Cheng et al. (2013) also observed that when tourists hold positive attitudes toward a destination's conservation values and environmental policies, their intentions to support and engage in pro-ecological behaviors are strengthened. As such, ecological attitudes enhance behavioral intentions and actual practices by fostering a greater sense of personal care and environmental responsibility (Cornelissen et al., 2006). For policymakers and tourism operators aiming to enhance the outcomes and quality of ecotourism, strengthening tourists' environmental attitudes may contribute to the development of more stable and positive behavioral patterns (Kim & Ko, 2011).

## 2.3. Ecotourism Attitude and Behavioral Intention

The relationship among attitude, involvement, and behavioral intention is complex and context-dependent. Some studies suggest that attitude precedes involvement, with involvement mediating the link between attitude and behavior. Lavine et al. (2000) and Spielmann & Ricard (2013) argued that favorable attitudes increase individuals' cognitive engagement with an issue, thereby intensifying involvement and strengthening behavioral commitment. In ecotourism, environmentally conscious tourists may seek out more information and engage more deeply with sustainable practices, leading to a stronger intention to act (Wang, 2014). Alternatively, involvement may serve as a moderator, amplifying or diminishing the strength of the attitude–intention relationship

(Davidson & Jaccard, 1979). Orbell (2004) suggested that only individuals with high involvement are likely to translate positive attitudes into real action. In contrast, low-involvement tourists, despite holding supportive views, may not engage in sustainability behaviors due to limited motivation or insufficient cognitive processing.

Given these dual perspectives, involvement may function as either a mediating or moderating variable in the attitude–behavioral intention nexus. Clarifying its role is essential for understanding the psychological pathways underlying ecotourism participation. Therefore, this study explores both possibilities and aims to identify the most appropriate conceptual model for explaining eco-tourist behavior in the Taiwanese context.

### 3. EMPIRICAL ANALYSIS

#### 3.1. Research Hypotheses and Conceptual Models

Based on the literature review, this study explores the relationships among eco-tourists' involvement, attitude, and behavioral intention. Two conceptual models are proposed to examine these relationships: Model A considers involvement as a mediating variable, and Model B treats involvement as a moderating variable. The proposed relationships are illustrated in Figure 1 and Figure 2. Accordingly, the following hypotheses are formulated:

*H<sub>1</sub>: (Model A): Eco-tourists' attitude has a significant positive effect on behavioral intention.*

*H<sub>2</sub>: (Model A): Eco-tourists' attitude has a significant positive effect on involvement.*

*H<sub>3</sub>: (Model A): Eco-tourists' involvement has a significant positive effect on behavioral intention.*

*H<sub>4</sub>: (Model B): Eco-tourists' attitude has a significant positive effect on behavioral intention.*

*H<sub>5</sub>: (Model B): Eco-tourists' involvement has a significant positive effect on behavioral intention.*

*H<sub>6</sub>: (Model B): Eco-tourists' involvement significantly moderates the relationship between attitude and behavioral intention.*

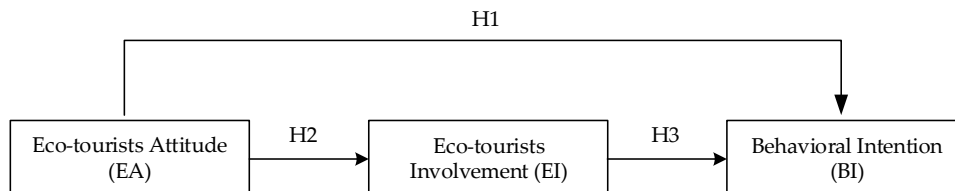


Figure 1: Model A: Involvement as a mediating variable.

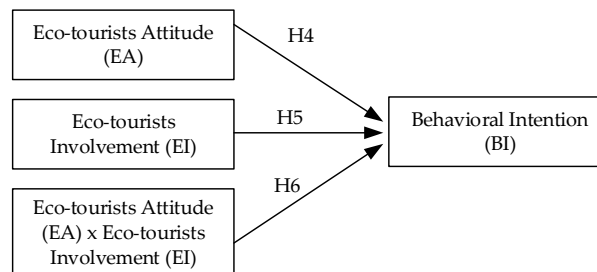


Figure 2: Model B: Involvement as a moderating variable

#### 3.2. Questionnaire Design

The questionnaire used in this study consists of three main sections: tourism involvement, ecotourism attitude, and behavioral intention, along with demographic information. The scales for involvement, attitude, and behavioral intention are summarized in Table 1. All items were measured using a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree), with higher scores indicating greater agreement with the statement. In the demographic section, respondents were asked to provide information regarding their gender, age, marital status, educational attainment, and monthly income, to support further statistical analyses.

**Table 1:** Scales for Eco-tourists' Involvement, Attitude, and Behavioral Intention.

Construct / Variable	Measuring Items
Eco-tourists' Involvement (EI)	EI1: Ecotourism is an activity that interests me.
	EI2: I actively seek out information about ecotourism.
	EI3: Ecotourism is closely related to my personal values.
	EI4: Ecotourism plays an important role in my life.
	EI5: Compared to other types of travel, I pay more attention to ecotourism.
	EI6: I often think about issues related to ecotourism.
	EI7: I participate in discussions or communities related to ecotourism.
	EI8: To me, ecotourism is not just a leisure activity, but a meaningful one.
Eco-tourists' Attitude (EA)	EA1: I believe ecotourism has a positive impact on environmental protection.
	EA2: I think participating in ecotourism helps promote ecological conservation.
	EA3: Ecotourism aligns with my ideals of sustainable tourism.
	EA4: I believe ecotourism provides a valuable travel experience.
	EA5: Ecotourism enhances tourists' awareness of the natural environment.
	EA6: Ecotourism is an activity worth my time and money.
	EA7: I am willing to support policies and activities that promote ecotourism.
	EA8: I feel uncomfortable when I think about environmentally harmful tourism behaviors.
Behavioral Intention (BI)	BI1: I intend to participate in ecotourism again in the future.
	BI2: I would recommend ecotourism to others.
	BI3: I am willing to support ecotourism activities that require more time or cost.
	BI4: I will prioritize travel options that follow eco-friendly principles.

### 3.3. Sample Size and Composition

A total of 300 questionnaires were distributed, of which 271 were valid and 29 were excluded due to incomplete or inconsistent responses. According to the demographic data collected, 140 respondents were male (51.7%) and 131 were female (48.3%). The age group 40–49 accounted for the largest proportion (101 individuals, 37.3%), followed by the 30–39 age group (68 individuals, 25.1%). Regarding marital status, 165 respondents were married (60.9%) and 106 were unmarried (39.1%). In terms of educational background, the majority held a college degree (147 respondents, 54.2%).

### 3.4. Reliability and Validity of the Measurement Model

To evaluate the reliability and validity of the measurement model, Cronbach's  $\alpha$  coefficients were first calculated to assess the internal consistency of each construct. Table 2 presents the results for factor loadings, Cronbach's  $\alpha$ , composite reliability (CR), and average variance extracted (AVE) across the three main constructs: involvement, attitude, and behavioral intention. The Cronbach's  $\alpha$  values for involvement (0.897), attitude (0.903), and behavioral intention (0.897) all exceeded the recommended threshold of 0.70 (Bagozzi & Yi, 1998), indicating satisfactory internal reliability. Composite reliability (CR) values were also acceptable, with 0.918 for involvement, 0.923 for attitude, and 0.929 for behavioral intention—each surpassing the 0.60 criterion recommended by Chin et al. (1997), thereby confirming composite reliability. Convergent validity was evaluated using AVE. The AVE values were 0.585 (involvement), 0.602 (attitude), and 0.765 (behavioral intention), all of which exceeded the benchmark value of 0.50 (Bagozzi & Yi, 1998), supporting the convergent validity of the constructs. Additionally, all standardized factor loadings were above 0.60, further supporting the construct validity of the measurement model.

**Table 2:** Results for factor loading, reliability, and validity.

Constructs	Items	Factor Loading	Cronbach's $\alpha$	CR	AVE
Eco-tourists Involvement (EI)	EI1	0.736	0.897	0.918	0.585
	EI2	0.664			
	EI3	0.760			
	EI4	0.822			
	EI5	0.824			
	EI6	0.757			
	EI7	0.775			
	EI8	0.771			
Eco-tourists Attitude (EA)	EA1	0.790	0.903	0.923	0.602
	EA2	0.818			
	EA3	0.820			
	EA4	0.791			
	EA5	0.805			
	EA6	0.823			
	EA7	0.637			
	EA8	0.703			
Behavioral intention (BI)	BI1	0.869	0.897	0.929	0.765
	BI2	0.881			
	BI3	0.845			
	BI4	0.903			

**Note:** CR: Composite reliability; AVE: Average variance extracted.

### 3.5. Correlation Analysis

Table 3 presents the means, standard deviations, and correlation coefficients among the three constructs: eco-tourists' involvement (EI), eco-tourists' attitude (EA), and behavioral intention (BI). The results indicate that EI is significantly and positively correlated with both EA and BI.

**Table 3:** Correlations between variables.

Variable	Mean	Standard Deviation	1	2	3
1. EI	3.861	0.542	1.000		
2. EA	4.063	0.533	0.698 ***	1.000	
3. BI	3.755	0.616	0.822 ***	0.598 ***	1.000

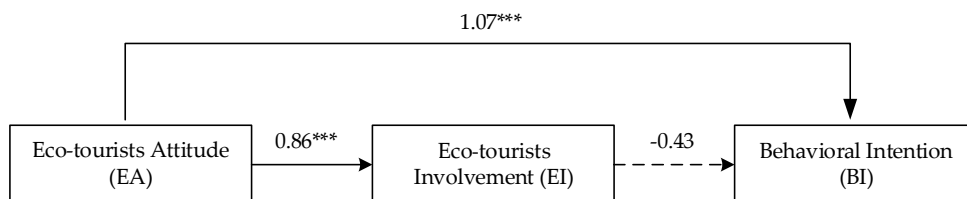
Note: \*\*\* $p < 0.01$ .

### 3.6. Structural Model and Hypothesis Testing

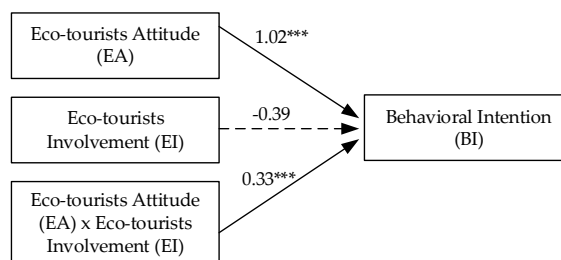
Based on the proposed research framework, this study employed the maximum likelihood (ML) estimation method within structural equation modeling (SEM) to examine the causal relationships among the three latent constructs across two model structures. A total of six hypotheses were tested. The results, as shown in Figures 3 and 4 and Table 4, illustrate the strength and direction of the relationships among the constructs. The SEM results reveal two distinct patterns across the two models. In Model A, where eco-tourists' involvement (EI) is hypothesized as a mediating variable, the analysis indicates that attitude (EA) significantly and positively influences both involvement and behavioral intention (BI). However, the direct effect of involvement on behavioral intention is not statistically significant, suggesting that involvement does not mediate the relationship between attitude and behavioral intention. In contrast, Model B conceptualizes involvement as a moderating variable. The results again show a significant positive effect of attitude on behavioral intention, while the direct effect of involvement remains non-significant. However, the interaction term ( $EA \times EI$ ) shows a significant positive effect on behavioral intention, indicating that involvement moderates the relationship between attitude and behavioral intention. This implies that higher levels of involvement strengthen the effect of attitude on behavioral intention.

To assess model fit, several fit indices were examined for both models, all of which exceeded recommended thresholds, indicating excellent model fit. For Model A, the goodness-of-fit index (GFI) and adjusted goodness-of-fit index (AGFI) were both 0.99, the standardized root mean square residual (SRMR) was 0.02, the normed fit index (NFI) was 0.99, and the comparative fit index (CFI) was 0.99. Similarly, for Model B, the GFI was 0.99, the AGFI was 0.96, the SRMR was 0.02, the NFI was 0.98, and the CFI was 0.99. These results provide strong empirical support for the adequacy of both the measurement and structural models, confirming the validity and stability of the proposed frameworks.

In summary, the hypothesis testing results indicate that H1, H2, H4, and H6 are supported, whereas H3 and H5 are not. The findings reveal that while attitude consistently influences behavioral intention, involvement does not mediate this relationship but instead plays a moderating role. This highlights the importance of involvement as a contextual amplifier of attitudinal influence rather than a direct driver of behavioral outcomes in ecotourism settings.



**Figure 3:** Path analysis of Model A.



**Figure 4:** Path analysis of Model B.



**Table 4:** Path analysis results and hypothesis verification.

Hypothesis	Hypothesized Path	Path coefficient	Results
H1	EA→BI	1.07 ***	Supported
H2	EA→EI	0.86 ***	Supported
H3	EI→BI	-0.43	Not Supported
H4	EA→BI	1.02 ***	Supported
H5	EI→BI	-0.39	Not Supported
H6	EA × EI→BI	0.33 ***	Supported

Note: \*\*\*  $p < 0.01$ .

## 4. CONCLUSIONS AND IMPLICATIONS

### 4.1. Conclusions

This study aimed to explore the relationships among eco-tourists' attitudes, involvement, and behavioral intentions by testing two structural models: Model A, in which involvement acts as a mediating variable, and Model B, in which involvement functions as a moderating variable. Based on data from 271 valid responses and structural equation modeling (SEM), the study yielded the following key conclusions:

First, eco-tourists' attitudes toward sustainability and ecological conservation had a significant positive impact on their behavioral intentions in both Model A and Model B, supporting H1 and H4. This confirms prior research suggesting that attitude is a key psychological determinant of pro-environmental behavior (Ajzen, 2001; Kiatkawsin & Han, 2017). Second, in Model A, attitude significantly influenced involvement (H2 supported), but involvement did not significantly predict behavioral intention (H3 not supported). Thus, involvement does not play a mediating role in this model. Third, in Model B, while involvement alone did not significantly influence behavioral intention (H5 not supported), the interaction term (attitude × involvement) had a significant positive effect (H6 supported). This indicates that involvement plays a moderating role, strengthening the relationship between attitude and behavioral intention. Overall, the findings suggest that although involvement does not directly mediate behavior, it enhances the effect of attitude on behavioral intention when modeled as a moderator.

This study found that the influence of ecotourism opinion leaders stems not only from their social networks and professional expertise but also from their underlying personality traits. Based on the results of the cluster analysis, opinion leaders were categorized into three primary groups: Steady Performers, Thoughtful Stabilizers, and Empathetic Thinkers. Each group exhibits distinct characteristics, suggesting that differentiated marketing strategies should be developed accordingly. For example, when targeting the Steady Performer group, promotional efforts could emphasize the practicality and efficiency of ecotourism, appealing to individuals who prioritize functionality and organization. In contrast, when targeting the Empathetic Thinker group, it would be more effective to highlight the innovative aspects and emotional value of ecotourism, aiming to foster emotional resonance and investment in environmental protection.

Moreover, the study revealed that opinion leaders characterized by high levels of creativity and empathy are more actively involved in promoting sustainable tourism, particularly among individuals with higher education and income levels. Specifically, leaders with strong creative thinking abilities and collaboration skills are more effective in shaping consumer attitudes and behaviors, thereby contributing significantly to the broader adoption of ecotourism practices. While this study sheds light on the personality-driven segmentation of ecotourism opinion leaders, it is not without limitations. Future research could adopt a longitudinal design to explore how these personality clusters evolve over time. Cross-cultural studies are also encouraged to examine whether similar trait clusters appear in different geographic or cultural settings. In addition, integrating behavioral indicators—such as social media engagement metrics or actual travel behaviors—could provide a more comprehensive model of influence in sustainable tourism.

### 4.2. Managerial and Policy Implications

The findings offer practical implications for ecotourism stakeholders:

**Enhancing Positive Attitudes:** Since attitude is a strong predictor of behavioral intention, ecotourism operators and policymakers should focus on cultivating eco-tourists' positive perceptions of sustainability, ecological responsibility, and the value of ecotourism experiences. Educational campaigns, interpretation services, and participatory programs can be effective strategies.

**1. Activating Involvement as a Motivational Lever:** Though involvement does not independently influence behavior, it amplifies the effect of attitude on intention. Operators should design immersive and meaningful experiences that enhance personal relevance, such as hands-on conservation activities, guided environmental tours, and storytelling aligned with visitors' values.

**2. Segmenting and Targeting High-Involvement Tourists:** Marketing and policy efforts can be tailored to attract high-involvement eco-tourists, who are more likely to engage in pro-environmental actions. Personalized communication strategies and loyalty programs may further strengthen their behavioral commitment.

**3. Encouraging Return Visits and Advocacy:** As behavioral intention includes willingness to revisit and promote ecotourism to others, fostering strong emotional and cognitive ties can transform tourists into long-term advocates for sustainable tourism practice.

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