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## “Greening” The Journey of exploration: Examining Sustainable Tourism in Central Vietnam Through the Perceptions and Behavioral Responses of Modern-Day Tourists

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### Abstract

*In this study, the author integrated the Theory of Planned Behavior (TPB) and the Value-Belief-Norm (VBN) theory of green consumer behavior to collect and analyze data. The research findings indicate that all hypotheses were supported with high statistical significance ( $P < 0.001$ ), reflecting the model's strong fit with the actual data. Three factors were found to influence Attitude toward Green Tourism: Personal Contribution to Environmental Protection ( $\beta = 0.411$ ), Environmental Mindfulness ( $\beta = 0.311$ ), and Environmental Knowledge ( $\beta = 0.309$ ). Among these, personal contribution exerted the strongest effect, suggesting that daily pro-environmental actions play a crucial role in shaping a positive attitude toward sustainable tourism. Moreover, AGT had a very strong impact on the Intention to Participate in Green Tourism ( $\beta = 0.729$ ), emphasizing attitude as a fundamental driver of behavioral intention. This intention further significantly influenced Sustainable Tourism Behavior ( $\beta = 0.711$ ), confirming the mediating role of intention in transforming attitude into actual behavior. These findings reinforce the theoretical assumptions of both TPB and VBN, highlighting the importance of awareness and individual actions in promoting green tourism.*

**Keywords:** *Greening, Sustainable Tourism, New Generation Travelers.*

### Introduction

In the current context, as humanity faces pressing issues such as climate change, resource depletion, and severe ecosystem disruption, the tourism industry is not only one of the key economic sectors but also one that is both heavily impacted by and contributes significantly to environmental pollution. Presently, tourism accounts for approximately 8% of global carbon emissions, primarily from transportation, accommodation, and recreational activities (UNWTO (2022)). In response to these challenges, concepts such as “sustainable tourism” and “greening the journey” have become increasingly popular and are emerging as key development trends in many countries, particularly those with abundant natural tourism resources and economies that prioritize tourism such as Vietnam.

In Vietnam, one of the countries with the strongest recovery after the COVID-19 pandemic, the number of domestic tourists reached over 101 million, far exceeding the Ministry’s target of 85 million (Vietnam National Administration of Tourism (2024)). Particularly, Central Vietnam home to provinces such as Thua Thien Hue, Da Nang, Quang Nam, and Quang Ngai boasts

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numerous cultural heritage sites and valuable natural resources. However, despite its great potential, tourism development in this region is facing challenges such as environmental pollution and climate change, the overexploitation of natural resources, and the imbalance between ecosystem preservation and economic growth. A recent study revealed that over 60% of tourists in Central Vietnam do not separate waste, and only about 25% use eco-friendly accommodation services (Cuong, D. M, 2025).

At the same time, tourists from the newer generations (Gen Z and late Gen Y), born from the late 1990s onward, are becoming a significant segment in Vietnam’s tourism market. These travelers are increasingly recognized by researchers as being more environmentally conscious than previous generations (Khattak et al., 2021). They also show concern for social justice and ethical consumption behavior (PwC (2023)). However, there remains a considerable gap between the awareness of green tourism and the actual behavior of these groups an issue that requires further in-depth research to fully understand. Currently, 76% of Gen Z travelers in Vietnam state that sustainable tourism is very important, yet only around 34% actually choose environmentally friendly modes of transport or accommodations with minimal environmental impact.

Although sustainable tourism awareness and behavior have been examined in Vietnam, most existing studies focus on tourists in general or on major destinations. Few have conducted in-depth analyses of the underlying causes of the awareness–behavior gap among the new generation of travelers in the specific context of Central Vietnam—a region distinguished by its rich natural and cultural tourism potential yet highly vulnerable to environmental change. Moreover, the integration of behavioral theories, such as the Theory of Planned Behavior (TPB) and the Value–Belief–Norm (VBN) framework, to explain green travel behaviors in this group remains underexplored.

Addressing this research gap, the study “Greening the Journey: Sustainable Tourism in Central Vietnam through the Awareness and Actions of Contemporary Travelers” seeks to clarify the factors influencing awareness, attitudes, and behaviors among this tourist segment, while proposing policy implications to promote sustainable tourism development in the region.

## **Theoretical Framework and Research Hypotheses**

### ***Theoretical Framework***

In the current context, the concept of “greening” is becoming increasingly prevalent, especially in the field of tourism. “Greening” is now understood as a process of integrating and implementing policies aimed at minimizing the negative impacts of activities that directly affect the environment, while also contributing to economic restructuring by promoting the efficient use of natural resources and supporting the development of sustainable tourism (UNEP (2011)).

At the same time, sustainable tourism is considered one of the key models being pursued by many destinations. Sustainable tourism is defined as a form of tourism that fully considers current and future economic, cultural, and social impacts, aiming to minimize costs while optimizing positive activities and reducing negative impacts on the environment. This form of tourism also emphasizes the respect for local cultural heritage and generates long-term economic value without depleting any natural resources (WTO (2005)).

Based on the concepts of greening and sustainable tourism, we can recognize the significant relationship between the two. “Greening” is regarded as an important strategy for sustainable

tourism development. It also encourages consumers to change their behavior by promoting the use of environmentally friendly products, reducing carbon emissions, and enhancing environmental education for domestic tourists (Gössling & Hall (2006)).

Research on greening and sustainable tourism mainly focuses on behavioral issues and intentions of individuals in general, and domestic tourists in particular. The Theory of Planned Behavior (TPB) has been widely used to examine human consumption behavior (Ajzen (1988)). This theory is often applied in studies on consumer behavior. According to TPB, attitude toward behavior, subjective norms, and perceived behavioral control significantly influence an individual’s intention, which in turn directly affects their behavior (Dharmmesta, 1998). Moreover, TPB posits that a person's behavior can generally be predicted by their internal intention, which is shaped by their attitudes and subjective norms (Ajzen (2020)).

Therefore, in this study, environmental mindfulness, environmental knowledge, and personal contribution to environmental protection represent the subjective norm factor in Ajzen’s TPB model (1988), as these variables reflect individual tourists’ attitudes toward environmental protection and their progression toward sustainable tourism in the future.

To ensure the robustness of the research, the author also incorporates the Value-Belief-Norm (VBN) theory of green consumer behavior. This theory addresses personal factors (including mindfulness, knowledge, and environmental actions), as well as socio-demographic variables, values, beliefs, and norms (Stern et al., (1990)). According to this theory, green behavior is more likely to occur when a sequence of variables—such as personal values, environmental beliefs, and individual norms—are present. Moreover, both TPB (Ajzen (1988)) and VBN (Stern et al., (1990)) share a common foundation in subjective norms, underscoring the significant role of individual factors in influencing green tourism behavior and supporting the future development of sustainable tourism.

<b>Author – Year</b>	<b>Country/Context</b>	<b>Research Objectives</b>	<b>Method</b>	<b>Key results</b>	<b>Related Research Gaps</b>
Gössling & Hall (2006)	Global	Analyzing the environmental impact of tourism and proposing a sustainable management model	Document analysis, general research	Tourism puts great pressure on the environment; Need a mitigation strategy	There is no focus on individual tourist behavior, especially in a specific region such as Central Vietnam
Becken & Simmons (2002)	New Zealand	Identifying the role of visitors in mitigating environmental	Quantitative Survey	Visitors can contribute to reducing their environmental	There is no research applied to

		impact		impact through a choice of vehicles and services	the context of Vietnam and the new generation of tourists
Koens et al. (2018)	Europe	Research on the phenomenon of tourism overload and its consequences for local communities	Case studies, interviews	Overtourism degrades the quality of life and the environment	Failure to deeply analyze the gap between sustainable cognition and behavior
UNWTO (2022)	Global	Assessment of carbon emissions from tourism activities	Global Statistics Report	Tourism accounts for about 8% of total carbon emissions	No mention of a specific visitor generation or region
PwC (2023)	Global	Survey of Consumer Consciousness and Ethics of Gen Z & Gen Y	Online Surveys	Gen Z is highly aware of the environment and social justice	Not focusing on the context of sustainable tourism in Vietnam
Doan Manh Cuong (2025)	Vietnam – Central Vietnam	Survey on garbage sorting behavior and use of green accommodation services	Quantitative survey at the destination	Only 25% of travellers choose eco-friendly accommodation	The cause of the cognitive-behavioral gap has not been explained, and the TPB/VBN theoretical model has not

					been applied
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Table 1. Selected Studies on Sustainable Tourism

Source: Proposed by the author

Based on these theoretical foundations, along with expert interviews with professionals experienced in sustainable tourism, the author proposes the following research model:

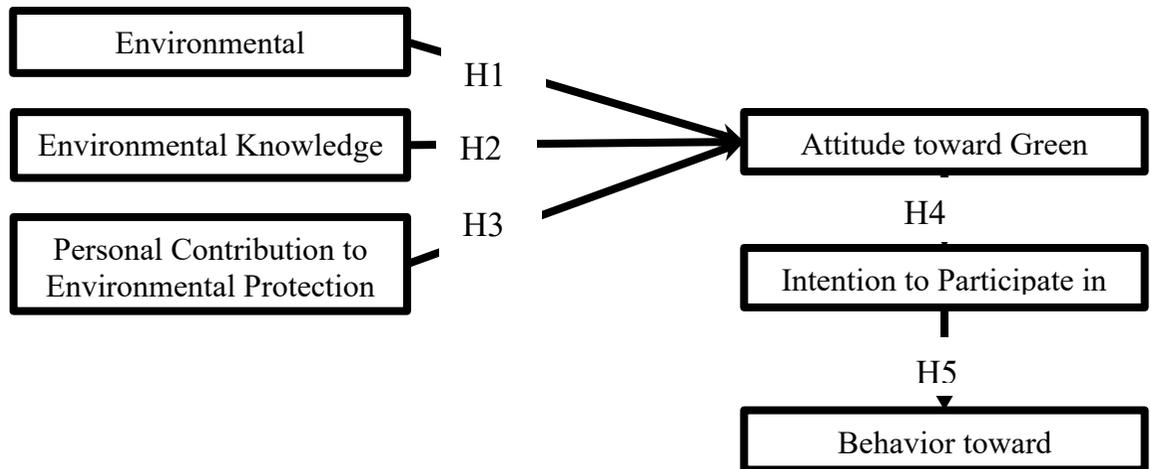


Figure 1: Proposed Research Model

Source: Proposed by the author

Based on the theoretical foundations and the proposed research model, the author proposes the following hypotheses:

**H1:** Environmental mindfulness has a positive impact on attitudes toward green tourism.

Environmental mindfulness is the degree to which an individual is mindful of the impact of humans on nature and the surrounding environment. People with high environmental awareness tend to develop positive attitudes towards sustainable consumption behaviors, including green tourism choices. Research by Barbaro & Pickett (2016) shows that environmental mindfulness is closely related to ecological behavior and pro-environmental attitudes. From this, it can be inferred that the presence of environmental mindfulness will increase the level of individual support for ecologically responsible tourism.

**H2:** Environmental knowledge has a positive impact on attitudes toward green tourism.

Environmental literacy – including knowledge of causes, consequences and solutions to environmental protection – is considered an important premise in shaping people’s perceptions and attitudes towards sustainable behaviours. When individuals are more aware of environmental issues associated with tourism activities, they tend to support solutions to reduce negative impacts. Research by Frick et al. (2004) and Lee (2009) both confirm that the higher the level of environmental literacy, the more positive attitudes towards green consumer

**H3:** Personal contribution to environmental protection has a positive impact on attitudes toward green tourism.

Perceptions of one's ability to contribute to environmental protection – also known as personal behavioral competence – play an important role in shaping positive attitudes toward green behavior. When individuals believe that their actions can create positive change, they tend to develop a favorable attitude toward environmentally responsible activities, including green tourism. This view is supported by Tabernero & Hernández (2011) who found that self-efficacy for environmental protection is positively related to behavioral attitudes. Similarly, Vermeir & Verbeke (2006) also found that self-efficacy significantly influences sustainable consumer attitudes.

**H4:** Attitudes toward green tourism have a positive impact on the intention to engage in green tourism.

Attitude is one of the important predictors of behavioral intention, according to the Theory of Planned Behavior (TPB) developed by Ajzen (1991). In the tourism context, when an individual evaluates green tourism positively – seeing it as a beneficial choice for the environment, the community, and the individual – then there is a high probability that they will intend to participate in this type of tourism. Many studies, including Han et al. (2010) and Kim & Han (2010), confirm the positive relationship between attitude and intention in choosing green tourism consumption.

**H5:** The intention to engage in green tourism has a positive impact on sustainable tourism behavior.

Behavioral intention is considered a direct mediator leading to actual behavior. In the tourism field, tourists who have a clear intention to practice green tourism often transform that intention into specific actions such as choosing eco-destinations, limiting waste, using environmentally friendly services. Empirical studies such as Juvan and Dolnicar (2014) or Paul et al. (2016) have shown that behavioral intention is a reliable predictor of sustainable tourism behavior.

## Research Methods

In this study, the author employs a combination of two primary research methods: qualitative and quantitative approaches.

For the qualitative method, the author synthesizes concepts and theoretical foundations from previous studies and conducts expert interviews to identify appropriate factors for the research model in the current Vietnamese context. For the quantitative method, this approach is used to test the proposed hypotheses. All variables in the model are measured using a 5-point Likert scale, applied to all observed components. The Likert scale is structured as follows, from lowest to highest agreement: (1) Strongly disagree, (2) Disagree, (3) Neutral, (4) Agree, (5) Strongly agree. Before conducting the official survey, a pilot test was carried out with a small group of 30 tourists currently experiencing tourism services in Central Vietnam. This aimed to assess the clarity and contextual relevance of the questionnaire. The author then revised the preliminary version of the questionnaire based on the feedback collected during the pilot test.

The official questionnaire was administered directly to 310 tourists in provinces across Central Vietnam. After cleaning the data, 305 valid responses were retained for analysis. Five

questionnaires were excluded due to a lack of transparency and accuracy.

The 305 valid questionnaires were analyzed as follows: Data analysis was conducted using SmartPLS version 4.1.0.0, employing the PLS-SEM (Partial Least Squares Structural Equation Modeling) approach. The analysis process included the following main steps: (1) Evaluating the measurement model through factor loading coefficients, (2) Analyzing composite reliability, convergent validity, and discriminant validity. Subsequently, the structural model was tested by analyzing path coefficients,  $R^2$ ,  $Q^2$ ,  $f^2$  values, and assessing statistical significance using Bootstrapping with 5,000 subsamples.

Based on the collected data, the author conducted a demographic analysis as follows: A total of 305 participants from the new generation of tourists responded to the survey. The statistics show that:

**Age:** The majority of respondents were between 20 and 30 years old, accounting for approximately 71.8%, which aligns well with the study's focus on younger generations (Gen Z and Millennials). Those under 20 made up 12.5%, and those over 30 accounted for 15.7%.

**Educational level:** Most respondents held college or university degrees, with 61.3% being current students or graduates, and 25.9% holding postgraduate degrees. Only 12.8% had a high school education, indicating a relatively high awareness level among the sample favorable for adopting green tourism behavior.

**Travel frequency:** Over 50% of respondents traveled 2–5 times per year, with 14.1% traveling more than 5 times annually. This reflects a frequent travel pattern among the younger generation an important factor influencing sustainable tourism behavior and responsibility. **Awareness of green tourism:** About 68.5% agreed or strongly agreed that they understood the concept of sustainable tourism and the importance of minimizing environmental impacts. **Green behaviors:** Several common green actions were reported, including: 56.7% bringing personal water bottles, 47.2% choosing environmentally friendly accommodations, and 42.3% minimizing the use of single-use plastics while traveling. These figures suggest that the new generation is gradually transforming their awareness into tangible actions, although the level of implementation varies across different behavior types.

In general, the descriptive data indicates that the target sample is appropriate for the study's objectives and reflects a positive shift in awareness and behavioral trends toward green tourism in Central Vietnam.

## **Findings**

### **Research Results**

To ensure the reliability of the coefficients in the model, the factor loading coefficients should reach a threshold of 0.700 or higher to guarantee that the observed variables explain at least 50% of the variance of the independent variables on the dependent variable (Hair et al., 2013).

In addition, composite reliability similar to Cronbach's alpha is a coefficient that ranges from 0 to 1 (negative values indicate data errors). The closer the value is to 0, the lower the reliability of the variables in the model. A composite reliability value between 0.6 and 0.7 is acceptable for exploratory research, while the optimal range is from 0.7 to 0.9 (Nunnally & Bernstein, 1994). A value above 0.95 may suggest redundancy among variables in the model.

Moreover, the Average Variance Extracted (AVE) coefficient should be 0.5 or higher (Hock & [posthumanism.co.uk](http://posthumanism.co.uk)

Scale	Factor Loading	CA	CR	AVE
Environmental Mindfulness (CNMT)	0.727 – 0.812	0.845	0.89	0.617
Environmental Knowledge (KTMT)	0.766 – 0.891	0.868	0.91	0.717
Personal Contribution to Environmental Protection (DGCN)	0.815 – 0.868	0.865	0.908	0.712
Attitude toward Green Tourism (TDDL)	0.826 – 0.911	0.89	0.924	0.753
Intention to Participate in Green Tourism (YDTG)	0.791 – 0.883	0.796	0.866	0.619
Behavior toward sustainable (HVDL)	0.721 - 0.821	0.767	0.852	0.590

Source: Author’s analysis and compilation

Based on the analysis results, it can be observed that the factor loadings of all variables in the model are above 0.700, and the Cronbach's alpha coefficients also fall within a high reliability range, from 0.767 to 0.890. Additionally, the AVE (Average Variance Extracted) values of all constructs exceed the threshold of 0.5, ensuring the adequacy of the variables in the analysis process.

Furthermore, the author also employed the HTMT (Heterotrait–Monotrait ratio of correlations) index to assess discriminant validity among the constructs in the research model during the PLS-SEM analysis. This index provides insights into the degree of correlation between constructs of different types compared to those of the same type within the research model (Henseler et al., 2015).

	CNMT	DGCN	HVDL	KTMT	TDDL	YDTG
CNMT						
DGCN	<b>0.293</b>					
HVDL	<b>0.345</b>	<b>0.584</b>				
KTMT	<b>0.219</b>	<b>0.417</b>	<b>0.316</b>			
TDDL	<b>0.540</b>	<b>0.680</b>	<b>0.629</b>	<b>0.577</b>		
YDTG	<b>0.358</b>	<b>0.620</b>	<b>0.889</b>	<b>0.448</b>	<b>0.836</b>	

Table 2: HTMT Ratios (Heterotrait-Monotrait Ratios)

Source: Author’s analysis and compilation

Based on the HTMT analysis, it can be seen that most of the HTMT values for all constructs in the model are below 0.9, indicating that discriminant validity among the constructs is adequately ensured.

### Evaluation of the Structural Model

	CNMT	DGCN	HVDL	KTMT	TDDL	YDTG
CNMT					1.079	
DGCN					1.199	
HVDL						

<b>KTMT</b>					1.165	
<b>TDDL</b>						1.000
<b>YDTG</b>			1.000			

Table 3: Evaluating Multicollinearity

*Source: Author's analysis and compilation*

According to Hair et al. (2021), the structural model is evaluated through indicators such as multicollinearity (Inner VIF), coefficient of determination ( $R^2$ ), effect size ( $f^2$ ), predictive relevance ( $Q^2$ ), and mediation effects. Among these, the Inner VIF analysis helps assess the independence among variables and ensures that no excessive internal correlation exists. The Inner VIF results show that all values are below the recommended threshold of 3.3, with the lowest value being for CNMT (1.079) and the highest for DGCN (1.199). This indicates that the independent variables in the model exhibit relatively low intercorrelation and do not suffer from multicollinearity issues.

	<b>R<sup>2</sup></b>	<b>R<sup>2</sup> correction</b>	<b>Q<sup>2</sup></b>
<b>HVDL</b>	0.506	0.505	0.22
<b>TDDL</b>	0.553	0.549	0.533
<b>YDTG</b>	0.531	0.53	0.325

Table 4: Coefficient of Determination, Predictive Power, and Model Fit

*Source: Author's analysis and compilation*

Based on the  $R^2$  analysis results, it can be observed that the model demonstrates a good level of explanatory power for the mediating and dependent variables. Specifically, the  $R^2$  value for the dependent variable "sustainable tourism behavior" (HVDL) is 0.506, indicating that 50.06% of the variance in this behavior can be explained by the mediating variable "intention to participate in green tourism" (YDTG). The  $R^2$  value for the intention variable is 0.553, meaning that 55.31% of its variance is explained by the attitude toward green tourism (TDDL). For the first mediating variable attitude toward green tourism the  $R^2$  value is 0.533, indicating that the independent variables, namely Environmental Mindfulness (CNMT), Environmental Knowledge (KTMT), and Personal Contribution to Environmental Protection (DGCN), together explain 53.30% of its variance.

Currently, the  $Q^2$  coefficient is encouraged by researchers such as Wold (1982), Henseler et al. (2013), and Hair et al. (2016) to be used in model evaluations. Hair et al. (2019) proposed the following interpretation levels for  $Q^2$  in relation to a model's predictive relevance: ( $0 < Q^2 < 0.25$ ): low predictive relevance, ( $0.25 \leq Q^2 \leq 0.5$ ): medium predictive relevance, ( $Q^2 > 0.5$ ): high predictive relevance.

Based on these criteria, the  $Q^2$  value for the first mediating variable (TDDL) is 0.533, indicating high predictive relevance. The  $Q^2$  value for the second mediating variable (YDTG) is 0.325, indicating medium predictive relevance. Lastly, the  $Q^2$  value for the dependent variable (HVDL) is 0.22, which reflects low predictive relevance, but still falls within the acceptable range, thereby ensuring the validity of the analytical process.

	CNMT	DGCN	HVDL	KTMT	TDDL	YDTG
CNMT					0.200	
DGCN					0.315	
HVDL						
KTMT					0.184	
TDDL						1.134
YDTG			1.025			

Table 5: Effect Size Coefficients ( $f^2$ )

Source: Author's analysis and compilation

To assess the extent of the influence of variables in the model, the author uses the Effect Size coefficient  $f^2$ . Cohen (1988) developed and proposed a reference table to evaluate the importance and influence level of variables in a model, specifically as follows: ( $f^2 < 0.02$ : negligible or no effect), ( $0.02 \leq f^2 < 0.15$ : small effect), ( $0.15 \leq f^2 < 0.35$ : medium effect), and ( $f^2 \geq 0.35$ : large effect).

Based on these thresholds and the analysis results, it can be observed that Environmental Mindfulness (CNMT), Environmental Knowledge (KTMT), and Personal Contribution to Environmental Protection (DGCN) have a medium level of influence on Attitude Toward Green Tourism (TDDL), with  $f^2$  values of 0.200, 0.184, and 0.315, respectively.

Meanwhile, Attitude Toward Green Tourism has a relatively large impact on the Intention to Participate in Green Tourism (YDTG), with an  $f^2$  of 1.134. Finally, the Intention to Participate in Green Tourism also has a very large effect on Behavior, with an  $f^2$  of 1.025.

### Testing of Research Hypotheses

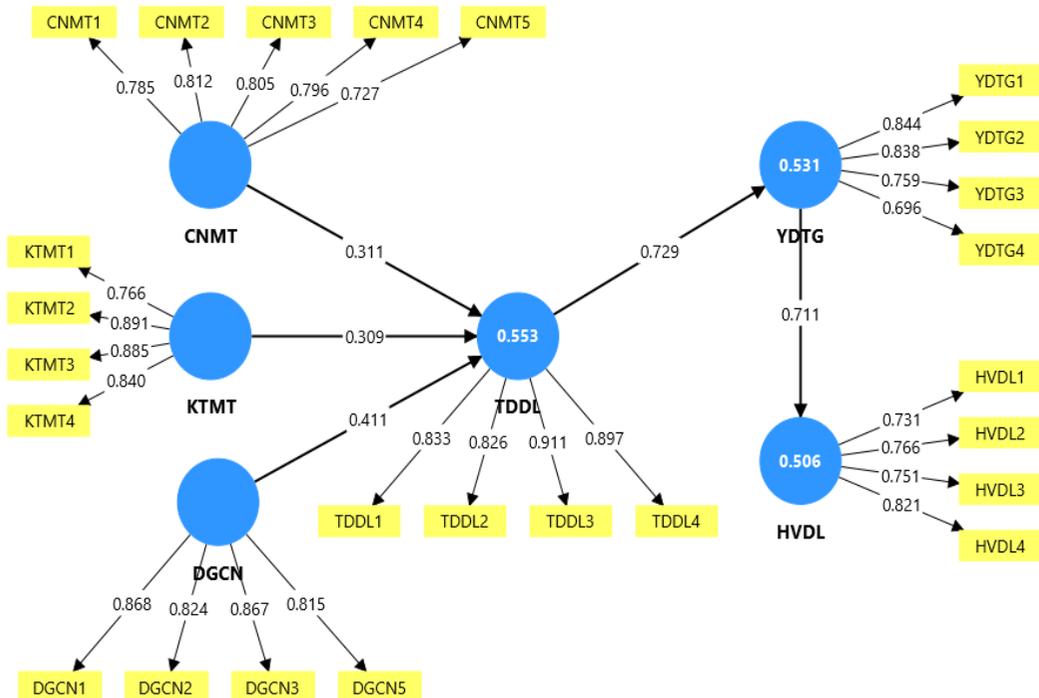


Figure 2: Results of Structural Model Analysis

Source: Author's analysis and compilation

Path Relationship	$\beta$ (O)	T - statistics	P values	Conclusion
CNMT -> TDDL	0.311	6.4190	0,000	Accepted
DGCN -> TDDL	0.411	7.2690	0,000	Accepted
KTMT -> TDDL	0.309	5.6010	0,000	Accepted
TDDL -> YDTG	0.729	24.517	0.000	Accepted
YDTG -> HVDL	0.711	15.330	0,000	Accepted

Table 6: Testing Path Coefficients and Indirect Effects

Source: Author's analysis and compilation

The results of the Structural Equation Modeling (SEM) analysis indicate that all relationships in the proposed research model are statistically significant at a very high level ( $P < 0.001$ ), demonstrating the model's strong fit with the empirical data and confirming that all proposed hypotheses are supported. The strength of the relationships among the variables is represented by the standardized path coefficients ( $\beta$ ), T-values, and P-values, as detailed below:

First, Attitude Toward Green Tourism (TDDL) is influenced by three main factors: Environmental Mindfulness (CNMT), Personal Contribution to Environmental Protection (DGCN), and Environmental Knowledge (KTMT). Among these, DGCN has the strongest influence on TDDL with a path coefficient of  $\beta = 0.411$  ( $T = 7.269$ ), indicating that individuals who frequently engage in environmental protection activities (such as recycling, conserving energy, reducing plastic use, etc.) are more likely to form a positive attitude toward green tourism. Next is CNMT, with  $\beta = 0.311$  ( $T = 6.419$ ), reflecting that individuals who are mindful, attentive, and aware of human impacts on the environment tend to value and support sustainable tourism practices. Although KTMT has a slightly lower influence, it is still notable ( $\beta = 0.309$ ,  $T = 5.601$ ), suggesting that having a clear understanding of environmental issues (such as climate change and biodiversity loss) contributes to shaping a positive attitude toward responsible travel behaviors.

Second, Attitude Toward Green Tourism (TDDL) has a very strong influence on the Intention to Participate in Green Tourism (YDTG), with a coefficient of  $\beta = 0.729$  ( $T = 24.517$ ) the strongest relationship in the entire model. This finding aligns well with the Theory of Planned Behavior (TPB), which posits that attitude is a fundamental precursor to behavioral intention. In other words, individuals with positive evaluations of green tourism's benefits (such as environmental protection, healthy experiences, and social responsibility) are more likely to develop strong motivation and commitment to engage in sustainable tourism activities.

Finally, the Intention to Participate in Green Tourism (YDTG) significantly affects Sustainable Tourism Behavior (HVDL), with a coefficient of  $\beta = 0.711$  ( $T = 15.330$ ). This indicates that when individuals have a clear and strong intention to adopt green behaviors, they are more likely to translate that intention into actual actions. This relationship reinforces findings from previous studies, highlighting intention as a crucial mediating factor that bridges attitude and actual behavior, especially in socially responsible domains such as sustainable tourism.

## Discussion of the Results

The results of the Structural Equation Modeling (SEM) analysis show that all hypotheses in the research model are supported with high statistical significance ( $P < 0.001$ ), indicating that the model has a good fit with the empirical data. The standardized path coefficients ( $\beta$ ) reflect the strength of the relationships between variables, thereby clarifying the mechanism through which sustainable tourism behavior is formed from cognitive, attitudinal, and intentional factors.

First, the variable Attitude Toward Green Tourism (TDDL) is directly influenced by three factors: Personal Contribution to Environmental Protection (DGCN), Environmental Mindfulness (CNMT), and Environmental Knowledge (KTMT). Among these, DGCN is the strongest predictor of TDDL, with a coefficient of  $\beta = 0.411$  and  $T = 7.269$ . This suggests that individuals who routinely engage in pro-environmental behaviors such as waste separation, reducing plastic use, and conserving water and electricity tend to hold value systems aligned with sustainable tourism, thereby forming positive attitudes toward this form of travel. This result aligns with Han et al. (2011), who found that individual environmental behaviors are strong indicators of favorable attitudes toward eco-friendly tourism products.

Next, Environmental Mindfulness (CNMT) has a significant impact on TDDL ( $\beta = 0.311$ ;  $T = 6.419$ ). Mindfulness reflects an individual's awareness and recognition of human impacts on natural ecosystems. Those with high levels of environmental mindfulness tend to appreciate the values of green tourism, viewing it as a way to balance consumption and reduce ecological footprints. This view is consistent with the findings of Barbaro and Pickett (2016), who argue that mindfulness fosters ecological empathy, which in turn promotes positive attitudes toward environmental protection behaviors.

Environmental Knowledge (KTMT) also affects attitudes toward green tourism, with a coefficient of  $\beta = 0.309$  ( $T = 5.601$ ). Although its impact is slightly weaker than the other two factors, KTMT plays a crucial role by providing the cognitive foundation for individuals to understand the urgency and severity of environmental issues. This supports the findings of Zsóka et al. (2013), who emphasized that environmental knowledge is a primary component that helps translate concern into concrete actions especially in the context of tourism, which is increasingly affected by climate change.

Second, Attitude Toward Green Tourism (TDDL) has a very strong relationship with the Intention to Participate in Green Tourism (YDTG), with a coefficient of  $\beta = 0.729$  ( $T = 24.517$ ). This is the strongest relationship in the entire model and plays a crucial role in explaining green consumption behavior. This result is fully consistent with the Theory of Planned Behavior (TPB) by Ajzen (1991), in which attitude is the central factor leading to behavioral intention. Individuals who hold a positive attitude toward green tourism perceiving it as beneficial for society, health, and the environment are more likely to intend to engage in such experiences. Similarly, Lee and Jan (2015) also found that attitude is the strongest predictor of intention to engage in sustainable tourism, particularly among well-educated travelers.

Finally, the Intention to Participate in Green Tourism (YDTG) significantly influences Sustainable Tourism Behavior (HVDL), with a coefficient of  $\beta = 0.711$  ( $T = 15.330$ ). This result reinforces the role of intention as a key mediating variable in the TPB model. The more clearly and strongly an individual intends to perform green behaviors such as choosing eco-friendly hotels, not littering, or using sustainable transportation the more likely they are to translate these intentions into actual behavior. This conclusion is supported by Moser (2015), who noted that in domains of consumption tied to ethical and social responsibility, intention serves as a critical bridge that transforms awareness into real-life actions.

## Conclusion and Managerial Implications

The research findings indicate that the model examining factors influencing sustainable tourism behavior is both effective and highly reliable especially in the context of a new generation of travelers who increasingly value environmental responsibility during their journeys.

Based on these findings, several key managerial implications are proposed to promote the “greening” of tourism in the Central Vietnam region, while also leveraging the awareness and behavior of next-generation travelers:

### ***Prioritize the activation of individual contributions to environmental protection ( $\beta = 0.411$ ; $T = 7.269$ )***

This factor exerts the strongest influence on attitudes toward green tourism. Tourism businesses and governing bodies should design tourism products that incorporate tangible pro-environmental behaviors, such as waste separation at accommodation facilities, minimizing single-use plastics, or participating in marine conservation activities.

Recognition and reward mechanisms—such as issuing a “Green Tourist” certificate or offering reward points for eco-friendly behaviors—can be adopted to reinforce personal values aligned with sustainable tourism.

### ***Enhance experiences linked to environmental mindfulness ( $\beta = 0.311$ ; $T = 6.419$ )***

Tourism programs should integrate activities that make visitors more aware of the environmental impact of human actions—for example, guided tours of mangrove forests or “a day as a green fisherman” featuring sustainable fishing practices.

Storytelling and immersive role-playing experiences can be leveraged to foster ecological empathy, thereby strengthening positive attitudes toward green tourism.

### ***Improve environmental knowledge ( $\beta = 0.309$ ; $T = 5.601$ )***

Although its impact is relatively lower than the two factors above, environmental knowledge remains a crucial foundation enabling individuals to grasp the urgency of ecological issues.

Destinations could incorporate visual information boards, augmented reality (AR) applications, or interactive tours with environmental experts to help visitors understand the connection between tourism activities and climate change.

### ***Capitalize on the strong link between attitudes and green tourism intention ( $\beta = 0.729$ ; $T = 24.517$ )***

Given that this is the strongest relationship in the model, communication strategies should first aim to cultivate positive attitudes before calling for action.

Marketing campaigns should emphasize both the personal and societal benefits of green tourism—improving health, contributing to cultural and natural heritage preservation, and enhancing one’s image as a responsible traveler.

### ***Convert intentions into actual behavior ( $\beta = 0.711$ ; $T = 15.330$ )***

As intention serves as a critical bridge to behavior, barriers to action should be minimized—for instance, by offering affordable eco-friendly accommodation and transportation options, as well as convenient booking processes.

Public commitment initiatives can also be introduced to increase follow-through, such as having travelers sign a “Zero Waste Travel” pledge before their trip.

In summary, tourism managers in Central Vietnam should adopt a staged approach—enhancing environmental knowledge and mindfulness, encouraging individual contributions, cultivating positive attitudes, strengthening intentions, and removing barriers to action—to systematically foster sustainable tourism behavior. This evidence-based strategy, grounded in empirical SEM results, ensures both scientific rigor and practical applicability in aligning tourist behavior with the principles of sustainability.

## **6. Solution to “Green” the journey of discovery: Sustainable tourism in the Central region in the perception and actions of tourists in the modern era**

Repositioning sustainable tourism promotion strategies: Tourism authorities in Central Vietnam should revise their communication strategies to emphasize social responsibility, sustainability, and green experiences values that align with the lifestyles of Gen Z and Millennials. Instead of relying on traditional marketing methods, authorities should leverage digital platforms such as TikTok, Instagram, and eco-conscious KOLs (Key Opinion Leaders) to spread these messages effectively.

Designing tourism products aligned with green behaviors: Tour operators should create interactive tour packages that allow visitors to directly engage in conservation activities such as beach cleanups, planting mangrove forests, or using recycled materials. This approach not only enhances the travel experience but also activates sustainable “behavioral intention” among participants.

Integrating environmental education into the travel experience: Businesses and destinations should embed environmental education into tour programs using visual tools, gamification, or storytelling methods. These techniques help increase environmental mindfulness and foster positive attitudes toward green tourism.

Encouraging green actions through recognition systems: Develop systems such as “green point” rewards or personal certifications for travelers who adopt eco-friendly practices like walking instead of riding motorbikes, carrying reusable water bottles, or consuming plastic-free local products. These efforts help normalize sustainable behavior among young travelers, turning it into a new social norm.

Engaging local communities in the greening process: Empowering Central Vietnam residents to participate in green tourism not only helps preserve cultural identity and landscapes but also fosters social consensus an essential factor for new-generation travelers who highly value fairness, inclusivity, and sustainability.

In conclusion, greening the travel experience is not just a trend but should be viewed as a long-term development strategy. Properly applying these managerial implications will enable destinations in Central Vietnam to preserve natural resources while sustainably attracting and satisfying the next generation of travelers.

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