



Assessing the Factors Influencing Generation Z's Intention to Choose Green Tourism Destinations in Hanoi: An S-O-R Model Approach

Nguyen Thi Van Anh (Assoc Prof. PhD.)

University of Labour and Social Affairs.

ORCID iD: <https://orcid.org/0009-0008-4703-2014>

Email: nguyenvananh83@ulsa.edu.vn

Nguyen Thi Huong (PhD.)

University of Labour and Social Affairs.

ORCID iD: <https://orcid.org/0009-0008-5672-3626>

Email: huongnt181@ulsa.edu.vn

Lai Van Tuan

University of Labour and Social Affairs.

Email: lvtuan1201@gmail.com

Tran Tuan Anh

University of Labour and Social Affairs.

Email: tta127155@gmail.com

Kieu Dinh Bang

University of Labour and Social Affairs.

Email: kdinhbang290605@gmail.com

Abstract

This study employs the Stimulus-Organism-Response (S-O-R) model to examine the factors influencing Generation Z's intention to choose green tourism destinations in Hanoi. The proposed research model investigates the effects of external stimuli, including social media influence and green destination image, on internal psychological states, namely attitudes toward green tourism, environmental awareness, and subjective norms, which subsequently shape the intention to choose green tourism destinations. The findings indicate that the external stimulus factors were positively perceived, with social media content and green destination image playing particularly important roles. The internal psychological factors also received a high level of agreement, as reflected in respondents' environmental awareness, positive attitudes toward green tourism destinations, and subjective norms influenced by family members, friends, online communities, and especially individuals with prior travel experience. In addition, Generation Z demonstrated a strong intention to choose green tourism destinations, reflecting a growing willingness to engage in environmentally sustainable travel. Based on these findings, the study proposes several managerial implications to enhance communication

strategies, strengthen the image of green tourism destinations, and develop green tourism products that better align with the characteristics and preferences of Generation Z in Hanoi.

Keywords:

Stimulus-Organism-Response (S-O-R) model; intention; choice; green tourism destinations; Generation Z; Hanoi.

1. Introduction

Climate change and natural resource depletion have become increasingly pressing global challenges, making sustainable socio-economic development an inevitable trend across various sectors, including tourism. In Vietnam, particularly in Hanoi, this orientation has been emphasized in recent policies aimed at promoting green and sustainable tourism development. At the same time, Generation Z, a cohort of young travelers characterized by strong environmental awareness and high engagement with social media, has emerged as an increasingly important consumer segment in the tourism industry. However, the factors influencing Generation Z's intention to choose green tourism destinations have not yet been systematically examined.

This study is grounded in the Stimulus-Organism-Response (S-O-R) framework proposed by Mehrabian and Russell (1974), which posits that individual behavior is shaped through a psychological process comprising three stages. Specifically, external environmental stimuli (Stimulus) influence individuals' internal cognitive and affective states (Organism), which subsequently lead to behavioral responses (Response).

The S-O-R framework provides a useful theoretical approach for explaining the psychological mechanisms underlying tourists' decision-making by illustrating how environmental stimuli are transformed into internal cognitive and affective states, which subsequently lead to destination choice behavior. Therefore, this study, entitled "*Assessing the Factors Influencing Generation Z's Intention to Choose Green Tourism Destinations in Hanoi: An S-O-R Model Approach*," aims to identify and evaluate the factors influencing tourists' behavioral intentions, ranging from external stimuli to internal psychological states. The findings provide a scientific basis for promoting the development of green tourism in Hanoi.

2. Theoretical Background and Research Framework

2.1. Theoretical Background

A tourism destination is an integrated system comprising tourism resources, services, visitor experiences, and multiple stakeholders, where tourists stay and consume tourism products (Buhalis, 2000). A destination is not merely a geographical location but also a socio-economic ecosystem that encompasses tourism resources (natural and cultural), infrastructure and services, the local community, and the destination's image and identity.

Green tourism is an approach to tourism development that promotes sustainability by balancing environmental protection, economic benefits, and social values (UNWTO, 2005). A green tourism destination is not a distinct type of tourism destination but rather a guiding principle applicable to all tourism activities. It aims to minimize negative environmental impacts, enhance benefits for local communities, and ensure long-term sustainability.

A green tourism destination is a destination that is developed and managed in accordance with the principles of sustainable development, with the objectives of minimizing environmental impacts, conserving natural resources, and maximizing benefits for local

communities. It integrates tourism resources, services, and governance based on sustainability criteria to achieve environmental, economic, and social effectiveness (GSTC, 2019).

The intention to choose a green tourism destination refers to tourists' decision-making process in prioritizing destinations that are environmentally friendly and developed in accordance with sustainability principles. This intention is influenced by psychological factors, including attitudes, subjective norms, and perceived behavioral control, as proposed by the Theory of Planned Behavior (TPB) (Ajzen, 1991). It is also shaped by practical considerations such as travel costs, accessibility, and the perceived image of green tourism destinations (Ibnou-Laaroussi et al., 2020; Kotler et al., 2017).

According to Dimock (2019), Generation Z refers to individuals born approximately between 1997 and 2012 and is widely recognized as the generation of digital natives, having grown up with the Internet and social media. Generation Z is characterized by a high level of environmental awareness and is strongly influenced by digital technologies and personal experiences. Their intention to choose green tourism destinations is conditional, depending on factors such as travel costs, convenience, and the perceived authenticity of information about green destinations (Dimock, 2019; GSTC, 2019).

2.2. Stimulus-Organism-Response (S-O-R) Model

The Stimulus-Organism-Response (S-O-R) model, developed by Mehrabian and Russell (1974), is one of the most influential theoretical frameworks in contemporary consumer behavior research. According to this model, external environmental stimuli (Stimulus) do not directly influence an individual's behavior; instead, their effects are mediated through the individual's internal psychological states (Organism), which subsequently lead to specific behavioral responses (Response). In other words, consumer behavior is the outcome of a process involving the cognitive and emotional processing of environmental stimuli, whereby individuals perceive external influences, develop perceptions and attitudes, and ultimately make behavioral decisions. This framework provides a more comprehensive explanation of the consumer's psychological "black box", a limitation of many traditional behavioral models.

Accordingly, the S-O-R model comprises three core components:

- ***Stimulus (S)***: External environmental factors that act as stimuli, such as information, pricing, advertising, market trends, and social influences.
- ***Organism (O)***: Individuals' internal psychological states, including cognition, emotions, evaluations, and attitudes.
- ***Response (R)***: Behavioral outcomes, such as behavioral intentions, purchase decisions, and actual behavior.

The S-O-R model has been widely extended and applied to examine how factors such as price, product quality, marketing communication, and social influence shape consumers' perceptions and behaviors. Studies by Eroglu et al. (2001) and Jacoby (2002) emphasize that stimuli from the consumer environment, particularly in the context of digitalization and social media, can significantly influence consumers' value perceptions and attitudes before being translated into purchase intentions and actual behavior.

2.3. Factors Influencing the Intention to Choose Green Tourism Destinations in Hanoi: An S-O-R Framework

In this study, the research framework is based on the Stimulus-Organism-Response (S-O-R) approach, which suggests that Generation Z's intention to choose green tourism

destinations in Hanoi is formed through a sequential process in which external environmental stimuli influence internal psychological states, ultimately leading to behavioral responses.

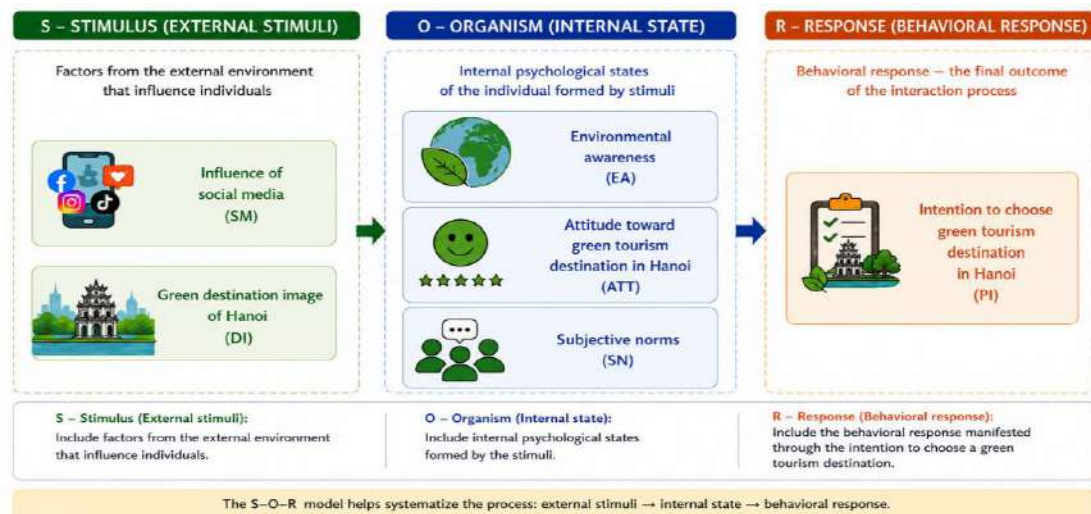


Figure 1. Proposed S-O-R Framework of Factors Influencing Generation Z's Intention to Choose Green Tourism Destinations in Hanoi
Source: Authors' compilation.

The Stimulus (S) component comprises social media influence (SM) and green destination image (DI), which affect individuals' internal psychological states (Organism, O), including environmental awareness (EA), attitudes toward green destinations (ATT), and subjective norms (SN). These internal states subsequently lead to the final Response (R), namely the intention to choose green tourism destinations (PI). The proposed model clearly illustrates the stimulus–cognition–behavior mechanism underlying Generation Z's intention to choose green tourism destinations.

3. Literature Review

Stimulus (S): Social Media Influence and Green Destination Image

In the Stimulus-Organism-Response (S-O-R) model, external environmental stimuli serve as the initiating factors that trigger individuals' cognitive and behavioral processes. In the context of green tourism, previous studies have identified social media influence (SM) and green destination image (DI) as two key external stimuli that shape tourists' perceptions and behavioral intentions.

First, social media has been recognized as a powerful communication channel influencing tourism behavior, particularly among younger generations. Wang et al. (2020) found that tourism-related information shared on social media can shape individuals' perceptions of sustainable tourism and encourage their intention to choose environmentally friendly destinations. Similarly, Leung et al. (2013) argued that user-generated content (UGC) plays a significant role in shaping tourists' perceptions and influencing their travel decisions.

In addition, green destination image is considered one of the most important external stimuli in sustainable tourism. Ibnou-Laaroussi et al. (2020) and Chen and Peng (2012) both argued that a positive green destination image has a significant influence on tourists' perceptions and evaluations, thereby increasing their intention to choose such destinations. In the Vietnamese context, Pham Trung Luong (2015) also emphasized the importance of natural

landscapes, tourism resources, and the level of environmental conservation in shaping a destination's image.

Organism (O): Environmental Awareness, Attitudes Toward Green Tourism Destinations, and Subjective Norms

In the Stimulus-Organism-Response (S-O-R) model, the Organism (O) represents individuals' internal psychological and cognitive states, serving as a mediating mechanism between external stimuli and behavioral responses. One of the key components of the Organism is environmental awareness (EA). Previous studies have shown that individuals with a higher level of environmental awareness are more likely to engage in sustainable consumption behaviors. Juvan and Dolnicar (2014) found that positive environmental awareness can encourage green tourism behavior, although a gap may still exist between environmental awareness and actual behavior.

In addition, attitudes toward green tourism destinations (ATT) represent individuals' affective and cognitive evaluations, reflecting the extent to which they favor or support green tourism destinations. Numerous studies have demonstrated the important role of attitudes in shaping green tourism behavior. Han et al. (2010) and related studies found that positive attitudes toward green tourism can be developed through environmental awareness and a favorable destination image, which subsequently influence tourists' destination choice behavior.

Furthermore, subjective norms (SN) refer to the perceived social pressure exerted by individuals or groups that are important to a person. Previous studies have shown that subjective norms significantly influence environmentally responsible behavior. Han et al. (2010) demonstrated that social influence can encourage pro-environmental behavior by shaping individuals' perceptions and behavioral intentions.

Response (R): Intention to Choose Green Tourism Destinations

In the Stimulus-Organism-Response (S-O-R) model, the Response (R) represents the outcome of individuals' psychological processing and is typically manifested as behavioral intentions or actual behavior. In the context of green tourism, the intention to choose green tourism destinations (PI) is considered the primary behavioral response. Numerous empirical studies have shown that this intention is directly influenced by internal psychological states, particularly attitudes and environmental awareness. Han et al. (2010) identified attitudes as a strong predictor of the intention to choose green tourism. Likewise, Lam and Hsu (2006) emphasized the important role of psychological factors in predicting tourists' destination choice intentions.

In addition, environmental awareness is widely recognized as a fundamental factor driving pro-environmental behavioral intentions (Juvan & Dolnicar, 2014). This suggests that the intention to choose green tourism destinations does not develop in isolation but rather results from the combined influence of individuals' internal cognitive and attitudinal factors.

Research Gap

Research Gap. Although green tourism has received considerable scholarly attention, several theoretical and empirical gaps remain. First, previous studies have generally examined the Stimulus (S), Organism (O), and Response (R) components separately rather than integrating them into a comprehensive Stimulus-Organism-Response (S-O-R) framework. Second, the combined roles of social media influence and green destination image as external stimuli within a single analytical model have not been sufficiently explored. Third, empirical

studies investigating the intention to choose green tourism destinations in Hanoi, particularly among Generation Z, remain limited. Therefore, this study addresses these gaps by applying the S-O-R framework to systematically examine the relationships among external stimuli, internal psychological states, and behavioral responses in the context of Generation Z's intention to choose green tourism destinations in Hanoi.

4. Research Methodology

Data Collection Method

Based on the Stimulus-Organism-Response (S-O-R) theoretical framework and a review of previous studies on green tourism destination choice behavior, particularly among Generation Z, this study identified and systematically categorized the research variables into three main components: Stimulus (S), Organism (O), and Response (R). Based on this framework, a research model was developed to provide the foundation for designing the measurement scales and the survey questionnaire.

Based on the structure of the Stimulus-Organism-Response (S-O-R) model, the survey questionnaire was designed with groups of observed variables corresponding to each component of the framework to measure the effects of external stimuli on individuals' internal psychological states and their intention to choose green tourism destinations among Generation Z in Hanoi. All observed variables were measured using a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree).

Prior to the main survey, a pilot study was conducted with 10 Generation Z respondents in Hanoi who had previously visited green tourism destinations to assess the clarity, relevance, and comprehensibility of the measurement scales. The pilot results indicated that all observed variables were well understood and considered appropriate for the proposed research model.

Based on the validated questionnaire, the main survey was conducted using Google Forms and targeted Generation Z individuals in Hanoi who had previously visited or intended to choose green tourism destinations. The survey was administered online through the following questionnaire link: <https://forms.gle/4LrLmYEaJdnHsup6>

A total of 269 questionnaires were collected. However, to ensure consistency with the research objective of examining Generation Z's intention to choose green tourism destinations in Hanoi from the Stimulus-Organism-Response (S-O-R) perspective, only 248 valid responses from participants who had previously visited or intended to choose green tourism destinations in Hanoi were retained for the final analysis. Responses from individuals who had never heard of or had no intention of choosing green tourism destinations in Hanoi were excluded, as they were not relevant to the objective of measuring the factors influencing behavioral intention. The proposed research model comprised six constructs with a total of 25 observed variables, including social media influence (SM), green destination image (DI), environmental awareness (EA), attitudes toward green tourism destinations (ATT), subjective norms (SN), and the intention to choose green tourism destinations (PI). According to Hair et al. (2014), the minimum sample size for quantitative research should be at least five observations per observed variable to ensure the reliability of statistical analyses. With 25 observed variables, the required minimum sample size was 125 observations. Therefore, the final sample of 248 valid responses exceeded this requirement and was considered adequate for descriptive statistical analysis and the evaluation of the proposed research model.

Data Processing Method

During the data analysis process, the factors in the S-O-R model were aggregated, processed, and presented through tables, charts, and figures using Microsoft Excel software. The observed variables belonging to the three components of Stimulus (S), Organism (O), and Response (R) were measured using a five-point Likert scale. Therefore, the level of influence of each factor was evaluated based on the mean values of the corresponding measurement scales.

Accordingly, the study determines the level of influence of the stimulus factors (S), internal states (O), and behavioral responses (R) based on the mean values obtained for each group of variables. These influence levels are then classified according to specific value ranges.

The value intervals were calculated as follows:

$$\text{Interval value} = (\text{Maximum} - \text{Minimum}) / n = (5 - 1) / 5 = 0.8$$

The corresponding evaluation levels were determined as follows:

1.00–1.80: Strongly disagree

1.81–2.60: Disagree

2.61–3.40: Neutral

3.41–4.20: Agree

4.21–5.00: Strongly agree

This approach enables a more intuitive assessment of the influence levels of each group of factors in the S-O-R model, thereby providing a clearer reflection of the role of environmental stimuli, internal psychological states, and Generation Z's behavioral intentions in choosing green tourism destinations in Hanoi.

5. Research Results

5.1. Overview of Green Tourism Destinations in Hanoi

As the political, economic, and cultural center of Vietnam, Hanoi possesses diverse and valuable tourism resources, ranging from forest ecosystems, mountains, and lakes to traditional craft villages, ancient villages, and historical relic sites (Huong Le, 2012). The diversity of these resources has contributed to the formation of a diversified system of green tourism destinations, with each destination being developed based on the exploitation of different resource advantages while sharing the common goal of balancing tourism economic development, natural environmental conservation, and the preservation of indigenous cultural values. Therefore, Hanoi's green tourism destinations are not only diverse in terms of types but also rich in experiential values, target visitors, and exploitation approaches.

Within Hanoi, ecological tourism destinations such as Ba Vi National Park, Thien Son - Suoi Nga, and others possess rich forest, mountainous, and aquatic ecosystems, creating favorable conditions for organizing experiential activities such as trekking, camping, biodiversity exploration, environmental education, and several associated recreational activities (Thu Vu, 2025).

Unlike ecological tourism, community-based tourism focuses on exploiting indigenous cultural values, community lifestyles, traditional handicrafts, and both tangible and intangible cultural heritage (Goodwin, 2011). In practice, destinations such as Bat Trang Ceramic Village and Duong Lam Ancient Village not only preserve traditional cultural values but also provide opportunities for visitors to participate in experiencing traditional handicraft production, exploring ancient village architecture, enjoying local cuisine, and interacting with local residents.

In addition, Hanoi has favorable conditions for developing agricultural tourism in suburban areas such as Ba Vi, Soc Son, Dong Anh, and Gia Lam. By allowing visitors to directly participate in production activities, harvesting, and learning about agricultural cultivation processes, this type of tourism not only contributes to diversifying income sources for farmers but also enhances visitors' awareness of clean agricultural production and sustainable consumption (Barbieri, 2012).

These tourism experiences not only serve as behavioral stimuli (Stimulus - S) but also influence tourists' perceptions and attitudes (Organism - O), thereby shaping their intention to choose green tourism destinations (Response - R) within the S-O-R model. The survey results regarding the green tourism destinations that Generation Z respondents have previously experienced are presented in Figure 1.

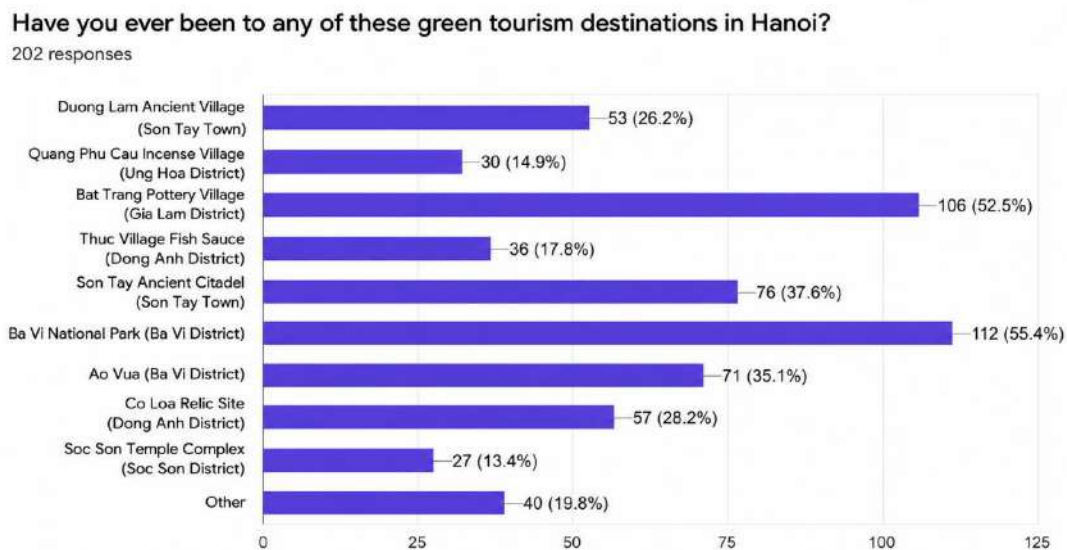


Figure 1. Green Tourism Destinations Previously Experienced by Generation Z Respondents

Source: Survey results

Among the 269 Generation Z respondents in Hanoi participating in the survey, 202 respondents had visited green tourism destinations at least once, accounting for 75.1%. The survey results indicate that Ba Vi National Park was the most preferred destination, with 112 respondents having visited (55.4%), followed by Bat Trang Ceramic Village with 106 respondents (52.5%). These were the only two destinations with an experience rate exceeding 50%, indicating that Generation Z tends to prioritize destinations with well-established tourism brands, developed infrastructure, service systems, and relatively convenient accessibility from central Hanoi. These two destinations have also built strong destination images and received extensive media coverage in recent years through experiential videos by influencers, user-generated content (UGC), and digital communication channels on social media platforms. This reflects the influence of social media and destination image on destination choice behavior, while also highlighting Generation Z's strong preference for authentic travel experiences.

In addition, Ao Vua (35.1%), Thien Son - Suoi Nga Ecotourism Area (37.6%), Co Loa Historical Site (28.2%), and Duong Lam Ancient Village (26.2%) are destinations with certain levels of recognition within Hanoi's tourism system. However, their levels of awareness and accessibility remain significantly lower compared with the two leading destinations. Meanwhile, Dao Thuc Water Puppet Village (17.8%), Quang Phu Cau Incense Village (14.9%),

and Thien Phu Lam (13.4%) represented the group with the lowest experience rates. This suggests that although these destinations possess distinctive natural or indigenous cultural values, their brand recognition, promotional scale, and accessibility to visitors remain limited.

Overall, the survey results indicate that, in addition to resource advantages, the development of destination image and the effective exploitation of digital communication channels, particularly social media, are important factors contributing to enhancing awareness, attracting visitors, and improving the competitiveness of green tourism destinations in Hanoi.

5.2. Results of Analyzing S-O-R Factors Affecting the Intention to Choose Green Tourism Destinations in Hanoi

5.2.1. Survey Respondents

In the study on factors influencing Generation Z's intention to choose green tourism destinations in Hanoi, the authors collected 269 valid questionnaires. The sample descriptive results indicate that females accounted for the majority of respondents, representing 65.1%, while males accounted for 33.8% and other gender identities represented only 1.1%. Regarding age distribution, the 18-22 age group accounted for the highest proportion (85.9%), followed by respondents aged 23-25 (6.3%), 14-18 (4.1%), and 26-29 (3.7%). These results reflect that the research participants were primarily Generation Z individuals who are currently in the learning and educational stage.

Table 1. Description of Survey Respondents

Criteria	Characteristic	Number of Respondents	Percentage (%)
Gender	Female	175	65.1
	Male	91	33.8
	Other	3	1.1
Age	14 - 18	11	4.1
	18 - 22	231	85.9
	23 - 25	17	6.3
	26 - 29	10	3.7
Income (of 248 respondents who have experienced and intend to choose green tourism destinations)	Below 5 million VND	84	33.9
	5–10 million VND	55	22.2
	10–20 million VND	36	14.5
	20–30 million VND	35	14.1
	Above 30 million VND	38	15.3

Source: Survey results

Among the 248 respondents who had experienced or intended to visit Ba Vi, income levels were relatively diverse. The group with an income below 5 million VND accounted for the largest proportion (33.9%), followed by those earning 5–10 million VND (22.2%), above 30 million VND (15.3%), 10–20 million VND (14.5%), and 20–30 million VND (14.1%). Overall, the survey sample demonstrates diversity in terms of income levels, making it suitable for analyzing young people's green tourism destination choice behavior.

5.2.2. Analysis of S-O-R Factors

5.2.2.1. Stimulus (S) Factors

Table 2. Social Media Influence (SM)

	Item Code	Mean (M)	Interpretation Threshold	Standard Deviation (SD)
When searching for green tourism destinations, I often search for information on social media, websites, etc.	SM1	4.109	Agree	0.848
User reviews and shares on social media make me more interested in green tourism destinations.	SM2	4.06	Agree	0.881
Reviews and recommendations from influencers/KOLs increase my likelihood of choosing green tourism.	SM3	3.819	Agree	0.902
Short videos featuring green travel experiences make me want to try them as well.	SM4	4.044	Agree	0.830

Source: Calculated from survey results

The results of the social media (SM) scale indicate that the mean values ranged from 3.819 to 4.109, all falling within the “Agree” level, reflecting the positive influence of social media on Generation Z’s awareness and information-seeking behavior regarding green tourism, although the level of influence was not completely consistent across items. Among these factors, SM1 recorded the highest mean value ($M = 4.109$), indicating that social media is considered a reliable information source for Generation Z. This was followed by SM2 ($M = 4.060$) and SM4 ($M = 4.044$), which reflect the role of user reviews, user-generated content, and the influence of short videos. SM3 had the lowest mean value ($M = 3.819$; $SD = 0.902$), suggesting that KOLs/influencers are gradually losing their influence among Generation Z and are perceived as less trustworthy compared with other factors. Overall, social media has a positive impact, particularly through visually engaging, emotionally appealing, and experiential content.

Table 3. Green Tourism Destination Image (DI)

	Item Code	Mean (M)	Interpretation Threshold	Standard Deviation (SD)
Green tourism destinations have beautiful landscapes and fresh air.	DI1	4.435	Strongly agree	0.729
Green tourism destinations provide recreational activities and nature-based experiences.	DI2	4.391	Strongly agree	0.705

Green tourism destinations have environmentally friendly accommodation facilities.	DI3	4.347	Strongly agree	0.709
Green tourism destinations provide spaces suitable for relaxation and leisure.	DI4	4.359	Strongly agree	0.710
Green tourism destinations are associated with an image of environmental protection.	DI5	4.371	Strongly agree	0.715

Source: Calculated from survey results

The results of the Destination Image (DI) scale show that the mean values ranged from 4.347 to 4.435, corresponding to the “Strongly Agree” level, reflecting highly positive evaluations of green tourism destination images. Among these factors, DI1 recorded the highest mean value ($M = 4.435$), indicating that landscapes and fresh air are the most prominent attributes of green tourism destinations. DI2 ($M = 4.391$) demonstrates strong appreciation for nature-based experiential activities. DI4 ($M = 4.359$) and DI5 ($M = 4.371$) reflect positive perceptions regarding the ability of green tourism destinations to provide relaxation, energy restoration, and sustainable development. Meanwhile, DI3 had the lowest mean value ($M = 4.347$), indicating a relatively lower level of agreement regarding the environmental friendliness of accommodation facilities. Overall, destination image was evaluated positively, with landscapes and nature-based experiences being the most prominent attributes.

5.2.2.2. Organism (O) Factors

Table 4. Environmental Awareness (EA)

	Item Code	Mean (M)	Interpretation Threshold	Standard Deviation (SD)
I know that green tourism is environmentally friendly.	EA1	4.359	Strongly agree	0.759
I am aware that green tourism contributes to sustainable tourism development.	EA2	4.367	Strongly agree	0.748
I believe that choosing green tourism destinations is necessary to reduce negative impacts on the environment.	EA3	4.29	Strongly agree	0.803
I am aware of environmentally friendly tourism behaviors, such as not littering, saving water, and saving electricity.	EA4	4.258	Strongly agree	0.755

Source: Calculated from survey results

The results of the Environmental Awareness (EA) scale show that the mean values ranged from 4.258 to 4.367, corresponding to the “Strongly Agree” level, reflecting positive environmental awareness toward green tourism. Among these factors, EA2 recorded the highest mean value ($M = 4.367$), indicating that respondents had a clear awareness of the sustainability of the green tourism model. EA1 ($M = 4.359$) demonstrates positive perceptions of green tourism. EA3 ($M = 4.290$; $SD = 0.803$) further reflects respondents’ awareness of the role of green tourism in reducing environmental impacts, although the level of awareness was not completely consistent among respondents. EA4 ($M = 4.258$) had the lowest mean value but still indicates a certain level of understanding regarding green criteria. Overall, environmental awareness was evaluated positively; however, it tends to be more general conceptual awareness rather than specific behavioral awareness.

Table 5. Attitude toward Green Tourism (ATT)

	Item Code	Mean (M)	Interpretation Threshold	Standard Deviation (SD)
Green tourism is an interesting form of tourism.	ATT1	4.427	Strongly agree	0.717
Green tourism provides many health and psychological benefits.	ATT2	4.448	Strongly agree	0.737
I feel positive when thinking about participating in green tourism.	ATT3	4.444	Strongly agree	0.651
Green tourism is consistent with my personal values.	ATT4	4.331	Strongly agree	0.774

Source: Calculated from survey results

The results of the Attitude toward Green Tourism (ATT) scale show that the mean values ranged from 4.331 to 4.448, all corresponding to the “Strongly Agree” level, reflecting extremely positive attitudes toward green tourism among Generation Z. Among these factors, ATT2 recorded the highest mean value ($M = 4.448$), indicating that health and mental well-being benefits are prioritized by respondents. Similarly, ATT3 ($M = 4.444$; $SD = 0.619$) shows that positive emotions are also an important factor with a high level of agreement. ATT1 ($M = 4.216$) reflects positive evaluations of the attractiveness of green tourism. Although ATT4 had the lowest mean value ($M = 4.331$), it indicates that a considerable proportion of Generation Z still considers green lifestyles as a core personal value. Overall, attitudes toward green tourism in Ba Vi are highly positive, with emotional factors and experiential values playing a dominant role.

Table 6. Subjective Norms (SN)

	Item Code	Mean (M)	Interpretation Threshold	Standard Deviation (SD)
People close to me tend to choose environmentally friendly tourism destinations.	SN1	4.129	Agree	0.773
I often refer to other people's comments about green tourism.	SN2	4.23	Strongly agree	0.775
The opinions of my friends and family influence my decision to choose green tourism destinations.	SN3	4.069	Agree	0.865
I often choose green tourism destinations based on recommendations from people who have experienced them.	SN4	4.198	Agree	0.764

Source: Calculated from survey results

The results of the Subjective Norms (SN) scale show that the mean values ranged from 4.069 to 4.230, corresponding to the levels of “Agree” to “Strongly Agree”. Among these factors, SN2 recorded the highest mean value ($M = 4.230$), followed by SN4 ($M = 4.198$), indicating that social opinions and recommendations from people with prior experience have the strongest influence. SN1 ($M = 4.129$) demonstrates that the attitudes and behaviors of close people also have a certain influence, while SN3 had the lowest mean value ($M = 4.068$), suggesting that the influence of friends and family is positive but weaker than the influence of actual experience. Overall, subjective norms have a clear impact on behavioral intention.

5.2.2.3. Response (R) Factor

Table 7. Intention to Choose Green Tourism Destinations (PI)

	Item Code	Mean (M)	Interpretation Threshold	Standard Deviation (SD)
I prefer green tourism destinations over conventional destinations when suitable conditions are available.	PI1	4.081	Agree	0.854
I plan to explore and book a trip to a green tourism destination in the near future.	PI2	3.992	Agree	0.889
I intend to choose green tourism destinations for my upcoming trips.	PI3	4.04	Agree	0.914

I will recommend green tourism destinations to my friends and family.	PI4	4.121	Agree	0.862
---	-----	-------	-------	-------

Source: Calculated from survey results

The results of the Behavioral Intention (PI) scale show that the mean values of the observed variables ranged from 3.992 to 4.121, all corresponding to the “Agree” level, reflecting a relatively positive but not completely consistent intention among Generation Z to choose green tourism. Among these factors, PI4 recorded the highest mean value ($M = 4.121$; $SD = 0.862$), indicating that respondents were willing to recommend green tourism destinations to others. PI1 ($M = 4.081$; $SD = 0.854$) and PI3 ($M = 4.040$; $SD = 0.914$) demonstrate the tendency to choose and prioritize green tourism in future trips. PI2 had the lowest mean value ($M = 3.992$; $SD = 0.889$), suggesting that specific plans to book trips remain unclear and vary among respondents. Overall, Generation Z's behavioral intention toward green tourism is positive; however, it has not yet translated into strong commitment toward specific actions.

6. Discussion

6.1. Discussion of Research Findings

6.1.1. Stimulus (S) Factors

The research findings indicate that external stimuli have a significant impact on the process of forming Generation Z's perceptions and behavioral orientations toward green tourism. First, social media is an influential communication channel in disseminating information and generating interest in green tourism. In particular, visually appealing and experience-based content, such as short videos, has strong potential for spreading information and enhancing the attractiveness of destinations in Generation Z's perceptions. This advantage should be further promoted through investment in digital content, strengthening experiential communication, and leveraging the diffusion effects of user communities. However, the influence of KOLs/influencers is no longer as prominent as before; meanwhile, KOCs and user-generated content (UGC) tend to be more highly valued by Generation Z. This highlights the need to develop appropriate collaboration strategies, prioritizing authentic content associated with real experiences rather than purely promotional activities.

Regarding destination image, the results reflect a highly positive attitude, particularly toward factors related to landscapes and experiential values. If effectively exploited and developed in an appropriate direction, these aspects can become core competitive advantages, contributing to the establishment of a green tourism image of Hanoi in tourists' minds. In addition, several aspects related to experiential services and accommodation–relaxation needs are also emphasized by Generation Z, indicating the need for more comprehensive investment to enhance the overall quality of tourism experiences. Overall, the Stimulus (S) factors should be oriented toward strengthening experiential value, authenticity, and consistency in destination image.

6.1.2. Organism (O) Factors

The factors representing the internal psychological states of Generation Z generally demonstrate highly positive trends, indicating that external environmental stimuli have been effectively received and transformed. Overall, environmental awareness has been relatively well established, particularly in terms of general understanding of the role of green tourism and sustainable development. However, this level of awareness remains largely conceptual rather

than deeply associated with specific behaviors, suggesting the need to strengthen communication activities with clearer behavioral orientations, enabling young people to better understand and experience green tourism in a more practical manner.

Meanwhile, attitude toward green tourism is the most prominent factor, demonstrating Generation Z's strong agreement and positive attitudes toward green tourism destinations. This finding indicates that green tourism in Hanoi is not only perceived as a reasonable choice but also as a source of enjoyable and meaningful experiences. This provides an important foundation that should be further promoted by enhancing emotionally engaging experiences, strengthening connections with nature and local communities, and increasing the spiritual value of green tourism.

Subjective norms also demonstrate a positive influence, particularly through opinions and recommendations from people with prior experience. This highlights the important role of word-of-mouth and community-based evaluations in promoting behavioral intentions. However, the influence has not yet reached its full potential, indicating the need for solutions that encourage experience sharing, community building, and social interaction surrounding green tourism.

6.1.3. Response (R) Factors

Overall, the intention to choose green tourism destinations is positively evaluated, reflecting Generation Z's increasing interest and willingness to select green tourism experiences in the future. Particularly, for a large proportion of Generation Z, as sharing experiences, expressing personal identity, and showcasing lifestyles on social media have become increasingly common, these factors should be effectively leveraged in green destination development strategies. However, the level of commitment toward specific actions, such as planning itineraries or booking trips, remains relatively unclear, indicating the existence of a gap between intention and actual behavior. This implies that enhancing awareness and attitudes alone is insufficient; additional determinants, including transparent information, accessibility, reasonable costs, and promotional programs, are required to facilitate the transformation of intentions into actual behaviors.

6.2. Managerial Implications

Based on the research findings within the S-O-R framework, promoting Generation Z's intention to choose green tourism in Hanoi requires tourism businesses and local authorities to implement integrated solutions that enhance the effects of external stimuli (S), strengthen internal psychological states (O), and ultimately facilitate behavioral intentions (R).

(1) Strengthening Digital Communication Strategies toward Authentic Experiences (Stimulus – S)

Tourism businesses should focus on developing social media communication content that is visual, authentic, and emotionally engaging. They should emphasize real-life exploration experiences, including practical perspectives, detailed itineraries, and budget information, or create distinctive trends with strong potential for diffusion. At the same time, priority should be given to user-generated content (UGC) and authentic reviews, as these sources are perceived as more credible and verifiable than traditional advertising.

In addition, collaboration with KOLs/influencers or KOCs should be strategically selected, prioritizing individuals whose experiential styles are authentic and aligned with green tourism orientations rather than relying on purely promotional content.

(2) Developing and Positioning a Green Destination Image (Stimulus – S)

Tourism businesses and local authorities should closely collaborate in maintaining and strengthening the image of widely recognized green tourism destinations while proactively developing and positioning the brand identity of destinations with lower levels of awareness. The focus should be placed on highlighting the distinctive values of green tourism, including nature conservation, sustainable development, and engagement with local communities. This process should not be limited to communication activities but should be consistently reflected throughout the entire service experience, from tourism product design and visitor activities to accommodation and relaxation services.

At the same time, issues such as insufficient transparency of information (greenwashing), relatively high costs, and limited supporting services are psychological barriers affecting Generation Z's adoption of green tourism. Improving these factors is essential to enhancing the overall quality of experiences and increasing destination competitiveness.

(3) Enhancing Environmental Awareness through Behavioral Guidance (Organism – O)

Tourism businesses should shift from general awareness-oriented communication approaches toward designing specific behavioral interventions, in which tourists are not only provided with information but also facilitated to adopt green behaviors in an easy and natural manner. This can be implemented through the following approaches:

- Applying nudging strategies to gently influence and guide tourist behaviors, such as designing waste separation systems as default options, reducing the provision of single-use plastic products, or integrating environmentally friendly choices into service delivery processes.
- Designing appropriate communication content, such as reality television programs incorporating environmental education elements, short videos promoting ecological protection activities, and content encouraging the preservation of local cultural values.

The specification of green behaviors not only enhances environmental awareness but also helps Generation Z transform from “knowing” to “doing”. At the same time, it creates favorable conditions for green behaviors to be adopted naturally and voluntarily rather than being perceived as imposed requirements, thereby contributing to the formation of sustainable habits in the long term.

(4) Developing Emotional Experiences and Personal Value Expression (Organism – O)

The research findings indicate that, for Generation Z, experiential activities should be designed with a focus on enhancing interactivity, emotional engagement, personalization, and opportunities for self-expression. Specifically, tourism businesses can develop tourism products oriented toward immersive experiences with nature, creating feelings of relaxation and connection with the natural environment. Activities such as trekking, ecosystem exploration, forest landscape discovery, or immersion in local lifestyles and cultures can contribute to enhancing emotional value. Green tourism should be closely associated with sustainable lifestyles, enabling tourists to perceive that choosing green tourism is not merely a trip but also a means of expressing personal values and demonstrating responsibility toward the environment.

(5) Leveraging Social Diffusion Effects and Social Influence (Organism → Response)

The research findings demonstrate that opinions from the community and individuals with prior practical experiences significantly influence behavioral intentions. Therefore, tourism businesses should implement solutions to encourage Generation Z's habit of sharing

experiences on social media, such as providing distinctive souvenirs, offering group-based incentive packages, or introducing referral programs for visitors who recommend destinations to others. Furthermore, building green tourism communities (both online and offline) is essential to enhancing interactions among individuals with shared interests and concerns.

Increasing interaction and disseminating authentic experiences can contribute to strengthening trust and encouraging potential tourists' intentions to choose green tourism destinations.

(6) Reducing the Intention–Behavior Gap in Green Tourism Adoption (Response – R)

Although tourists' intention to participate in green tourism is relatively positive, translating this intention into specific behaviors still faces various practical barriers. Therefore, tourism businesses should implement supportive solutions aimed at reducing obstacles throughout the decision-making process.

First, businesses should provide comprehensive, transparent, and easily accessible information regarding itineraries, costs, and accompanying services, enabling tourists to make well-informed evaluations. At the same time, developing flexible tourism packages that meet the diverse needs of different customer segments can increase the likelihood of destination choice. In addition, promotional programs such as discounts, bundled packages, or early-booking incentives should be appropriately implemented to encourage behavioral actions. Finally, simplifying service booking procedures and enhancing convenience throughout the tourism experience will contribute to narrowing the gap between intention and actual behavior, thereby encouraging tourists to make decisions in favor of green tourism destinations.

7. Conclusion

This study clarifies the mechanism through which external stimuli and internal psychological states influence Generation Z's intention to choose green tourism destinations in Hanoi based on the S-O-R framework. The analytical results indicate that both social media and destination image have positive effects, while internal factors, including attitude, environmental awareness, and subjective norms, play important roles in shaping young tourists' destination choice intentions. However, the magnitude of influence among these factors is not consistent, suggesting the need for effective coordination between communication activities, experience design, and awareness enhancement to strengthen the attractiveness of green tourism. The findings of this study not only contribute to enriching the theoretical foundation but also provide meaningful practical implications for the sustainable development of green tourism.

References

- Barbieri, C. (2012). *Assessing the sustainability of agritourism in the US: A comparison between agritourism and other farm entrepreneurial ventures*. *Journal of Sustainable Tourism*, 21(2), 252–270. <https://doi.org/10.1080/09669582.2012.685174>
- Buhalis, D. (2000). *Marketing the competitive destination of the future*. *Tourism Management*, 21(1), 97–116. [https://doi.org/10.1016/S0261-5177\(99\)00095-3](https://doi.org/10.1016/S0261-5177(99)00095-3)
- Chen, A., & Peng, N. (2012). *Green hotel knowledge and tourists' staying behavior*. *Annals of Tourism Research*, 39(4), 2211–2219. <https://doi.org/10.1016/j.annals.2012.07.003>
- Dimock, M. (2019). *Defining generations: Where Millennials end and Generation Z begins*. Pew Research Center.

- <https://www.pewresearch.org/fact-tank/2019/01/17/where-millennials-end-and-generation-z-begins>
- GSTC. (2019). *GSTC Destination Criteria*. Global Sustainable Tourism Council.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2014). *Multivariate data analysis* (7th ed.). Pearson Education Limited.
- Han, H., Hsu, L. T., & Sheu, C. (2010). *Application of the theory of planned behavior to green hotel choice*. *Tourism Management*, 31(3), 325–334.
- Huong Le. (2012). *Hanoi strives to become an attractive tourism destination in the region*. *Vietnam National Authority of Tourism*. <https://vietnamtourism.gov.vn/post/10612>
- Ibnou-Laaroussi, S., Rjoub, H., & Wong, W. K. (2020). *Sustainability of green tourism among international tourists and its influence on the achievement of green environment: Evidence from North Cyprus*. *Sustainability*, 12(14), 5698. <https://doi.org/10.3390/su12145698>
- Juvan, E., & Dolnicar, S. (2014). *The attitude–behaviour gap in sustainable tourism*. *Annals of Tourism Research*, 48, 76–95. <https://doi.org/10.1016/j.annals.2014.05.012>
- Kotler, P., Bowen, J. T., & Makens, J. C. (2017). *Marketing for hospitality and tourism* (7th ed.). Pearson.
- Lam, T., & Hsu, C. H. C. (2006). *Predicting behavioral intention of choosing a travel destination*. *Tourism Management*, 27(4), 589–599. <https://doi.org/10.1016/j.tourman.2005.02.003>
- Leung, D., Law, R., van Hoof, H., & Buhalis, D. (2013). *Social media in tourism and hospitality: A literature review*. *Journal of Travel & Tourism Marketing*, 30(1–2), 3–22. <https://doi.org/10.1080/10548408.2013.750919>
- Mehrabian, A., & Russell, J. A. (1974). *An approach to environmental psychology*. MIT Press.
- Nguyen Dinh Thanh, & Nguyen Thi Thuy Vinh. (2021). *Factors Affecting Green Tourism Choice Behavior in Vietnam*. *International Journal of Economics and Management*, (142).
- Pham Trung Luong. (2015). *Developing Ecotourism in Vietnam under the Context of Climate Change*. Paper presented at the Conference on Environment and Sustainable Development in the Context of Climate Change, Hanoi, Vietnam.
- Thu Vu. (2024). *Ba Vi diversifies tourism products toward green and high-quality tourism*. *VOV Online Newspaper*. <https://vov.vn/du-lich/ba-vi-da-dang-san-pham-huong-toi-du-lich-xanh-du-lich-chat-luong-cau-post1204086.vov>
- Tran Thi Thu Thuy, et al. (2025). *Bridging human behavior and environmental norms: A cross-disciplinary approach to sustainable tourism in Vietnam*. *Sustainability*, 17(10), 4496.
- UNWTO. (2005). *Making tourism more sustainable: A guide for policy makers*. Madrid: UNWTO.
- Wang, S., Wang, J., Li, J., & Yang, F. (2020). *Do motivations contribute to local residents' engagement in pro-environmental behaviors? Resident-destination relationship and social media*. *Sustainability*, 12(3), 1–15. <https://doi.org/10.3390/su12030895>