# FACTORS DETERMINING THE CHOICE OF ECO-TOURISM DESTINATION OF HANOI RESIDENTS

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## ABSTRACT

To study the factors that determine the choice of ecotourism destination of Hanoi residents, the research team used quantitative research methods based on sample data collected from a survey of 320 people, of which 263 people had or decided to go ecotourism in the future included in the analysis. Data was cleaned and processed using SMARTPLS software. Research results show that, among the 6 factors taken into consideration, "Ecotourism Motivation" (DC) has the strongest impact on the decision to choose an ecotourism destination of Hanoi people with a high impact of 0.355; Next is the factor "Ecotourism knowledge" (KTDL) with an impact level of 0.280 and finally the factor "Reference group" with an impact level of 0.218. Based on the analysis results, the research team proposed some discussions to promote the decision to choose an ecotourism destination for people in general and Hanoi residents in particular.

**Keywords:** Ecotourism, factors, choice determining, Hanoi city

## 1. Raising the issues

Ecotourism is a form of tourism based on nature, associated with local cultural identity and community participation for sustainable development. From that, it can be understood that ecotourism is a type of tourism connected with nature, including exploring and studying nature and local landscapes; and learning and studying the culture of the indigenous community. Ecotourism resources are the natural values embodied in a specific ecosystem and indigenous cultural values exist and develop inseparable from that natural ecosystem.(vietnambooking.com, 2023)

Ecotourism areas are a form of tourism that contributes significantly to the overall development of the tourism industry in Vietnam. In recent years, people have become more aware of

protecting nature. People seem to love nature more, so they often look for tours close to nature. That is why the form of ecotourism was born. (Dinh Thuy Dung, 2022)

Along with that, Vietnam has many potential factors, creating conditions for the development of ecotourism. It is the national cultural identity and rich and valuable natural resources. This is an extremely favorable condition for the development of ecotourism. However, to sustainably develop this type of tourism, there needs to be empirical research on the psychology and behavior of tourists. Recognizing the importance of the problem, the research team decided to research *"Factors determining the choice of ecotourism destinations of people in Hanoi city"* to consider the factors that determine the choice of ecotourism destinations of Hanoi residents, promote tourists to choose ecotourism destinations, contributing to the development of this new type of tourism. The study answers the questions: (1) What are the factors that determine the choice of ecotourism destination of Hanoi residents? (2) How influential are the factors that determine the choice of ecotourism destination for Hanoi residents? Therefore, the research team offered some discussions to attract tourists to choose ecotourism destinations.

## 2. Theoretical basis, research overview, and research model proposal

### 2.1. Theoretical basis

### Ecotourism destination

According to  UN-WTO, " Tourism destination is the geographical area in which tourists stay for at least one night, including tourism products, services provided, tourist attraction resources, administrative boundaries to manage and have an image identity to determine competitiveness in the market".(UNWTO, 2005)

According to the General Department of Tourism (2013), "Ecotourism destinations are places with unique natural tourism resources, high biodiversity, often located in nature reserves, capable of exploiting the needs of tourists for sightseeing, research and learning and raising awareness about the natural environment".

### Choosing an ecotourism destination

At the macro level, destination choice is the process of choosing a destination from competing alternatives. (Woodside & Lysonki, 1989); Um & Crompton (1990) consider that tourism destination selection is the stage of choosing a destination from a set of destinations that suits the needs of tourists. Choosing an ecotourism destination is the final decision of the tourist to choose an ecotourism destination that suits the tourist's demand and needs. (Tuyet, T.T & Manh, N.V)

### *Theory of Reasoned Action (TRA)*

Fishbein &Ajzen (1975) proposed the theory of reasoned action (TRA) model to explain and predict behavioral intention in cases of product adoption. This theory states that *"intention"* is the best predictor of final behavior, and that intention is simultaneously determined by attitudes and subjective norms.

*(1) Attitude:* This is an emotional state that shows an individual's behavior through gestures, speech, facial expressions, expressions images, and things related to the product.

*(2) Subjective norms.* Behavioral intention is influenced by the attitudes of related people toward using the product, and the motivation of people to use the product is influenced by the behaviors and desires of related people.

### *Theory of Planned Behaviour (TPB)*

Ajzen's (1991) TPB theory holds that people perform a certain behavior if they believe that the behavior will yield valuable results. TPB theory includes a set of relationships between attitudes, subjective norms, perceived control, and behavioral intentions. This theory adds a third factor compared to the TRA model, which is the perceived behavior control.

(3) Perceived behavior control. Is an individual's perception of how easy or difficult it is to perform the behavior (related to the availability of necessary resources, knowledge, and opportunities to apply).

### *Model of tourism consumer behavior of Engel, Kollat & Blackwell (1968)*

According to the author, the process of individual tourism consumption decision-making includes 8 stages: (i) Needs to be satisfied; (ii) Tourism needs should be prioritized; (iii) The extent to which time, money, and effort are involved in the decision process; (iv) Information search; (v) Evaluation and selection; (v) Selection decision; (vii) The act of buying and consuming; (viii) Post-Consumption Attitudes.

### *2.2. Research overview*

Many empirical studies have shown factors affecting tourists' decisions to choose tourist destinations in general and ecotourism in particular. Research on tourists' general choice of tourist destinations is very diverse and complex. Research by Haider & Ewing (1990); Morey et al., (1991); and Hsu et al., (2009) point out factors that influence the choice of tourist destination including price, size and accommodation services, and activities at the destination. Eymann & Ronning (1992), Lim (1999), and Morley (1994) pointed out that factors affecting tourists'

choice of destination include travel motivation (motivation about relaxation, understanding culture, goods…), and income of tourists. Correia & Pimpao (2008) Point out the characteristics and characteristics of the destination including cuisine, social environment, accessibility, relaxing atmosphere, safety, weather, scenery, shopping, activities at night, sports equipment, accommodation services, and entertainment services affect tourists' choice of destination. Besides, Chen & Tsai (2007) point out the main factors affecting tourists' choice of tourist destination including the source of information (from friends, people around...; word of mouth, and through mass media); Tourist reviews of tourist destinations (destination image, price...); Travel motivation (explore, experience a different feeling compared to everyday life...). In Vietnam, some studies also point out factors that influence the decision to choose an ecotourism destination. Research on factors affecting tourists' decision to choose a destination in Ho Chi Minh City, Hiep, N.X (2016) using a combination of qualitative and quantitative research methods, data is collected in the range of period October 2015 - February 2016 with 615 domestic and international tourists visiting Ho Chi Minh City. Research results show that factors affecting tourists' decision to choose a destination in Ho Chi Minh City include: Tourism motivation, destination image, and source of destination information. Which, destination information has a strong influence on tourism motivation, and tourist motivation has a strong influence on destination image. Using quantitative analysis to determine the factors affecting European tourists' decision to choose Can Tho destination, research by Thu, H.M et al., (2018) shows that there are 5 factors. Influencing European tourists' decision to choose Can Tho destination are Travel motivation, tourist attitude, destination image, marketing and communication strategy, and tourism environment. The article by Thuy, V.T.B, et al., (2020) evaluates the factors affecting the decision to choose a tourist destination for international tourists through the use of the model. The influencing factors include Internal motivation; Feeling about the destination; Attitude; Reference group; Travel expenses; and Time to travel. The detected qualitative factors include age, occupation, and income, thereby proposing solutions for destination management and tourism service business in Hanoi.

Based on the factors affecting the choice of tourist destination of tourists, many empirical studies have delved into the study of the factors affecting the decision to choose an ecotourism destination. Hai, P.H (2019) Research factors affecting the behavior of choosing ecotourism destinations in Ben Tre province. The study aims to test the relationship between attitude, subjective norms, and behavioral control affecting the intention and behavior of tourists to choose a destination. Using the linear structural analysis (SEM) method with a survey sample of 169 domestic tourists choosing an ecotourism destination in Ben Tre province, the research results show that all 3 factors of attitude and standard and behavioral control have a positive impact on the intention to choose a destination of tourists. Besides, the research results also prove that controlling behavior and intention have a positive impact on tourists' destination

choice behavior. The study also proposes solutions to attract tourists to ecotourism destinations in Ben Tre province, limitations, and future research directions. Research of Tuyet, T.T &Manh, N.V (2023)Identify factors that influence tourists' decisions to choose an eco-tourism destination through data collected from reports on ecotourism business situation in national parks with 850 respondents. Research results show that 7 factors influence tourists' decision to choose an ecotourism destination: Destination image, customer outreach activities, reference groups, and tourism barriers. ecotourism, attitude towards eco-destination, knowledge about eco-tourism, and motivation for choosing an eco-destination. Since then, several suggestions have been given to attract tourists to ecotourism destinations in the future. *Research by Tri, P.Q & Thu, T.T (2021) on factors affecting the decision to choose a community-based rural tourism destination in the North Central region through a survey data set of 281 tourists in Quang Binh and Nghe An provinces in August 2019. Estimated results show that tourists' decision to choose a destination depends on six groups of factors, including (1) Motivation to socialize and relax; (2) Motivation to explore; (3) The price of tourismcountryside; (4) Information sources of rural tourism; (5) Typical products of rural tourism; (6) Environmental management of rural tourism.* Research by Nhung, N.T.T et al., (2015) analyzes the factors affecting service quality in ecotourism. The influence criteria were measured and tested through Cronbach Alpha's reliability coefficient method and exploratory factor analysis method. Data were collected in 2014 with a sample size of 252 tourists who had experiences at Ba Vi National Park. The results of ordinal regression analysis show that excluding the factor of transportation, there are 06 groups of factors affecting service quality including ecological landscape; empathy; responsiveness; communication assurance; management capabilities; and safety. Which "ecological landscape" is the factor with the strongest impact, This factor includes differences compared to tourist areas in the region; diverse landscape; and the landscape retains its natural features. In addition, the study shows that there is no difference between male and female tourists in terms of satisfaction with the service quality of Ba Vi National Park.

### 2.3. Propose models, hypotheses, and research scales

Based on a theoretical review, an overview of relevant studies and the characteristics of ecotourism destinations. The research team proposed a research model with the following factors included in the model: *"Attitude toward ecotourism destination", "Reference group", "Ecotourism destination image", "Ecotourism knowledge", "Trip cost", "Ecotourism Motivation"* (Hình 1).

**Model and research hypotheses**

**Figure 1. Proposed research model**
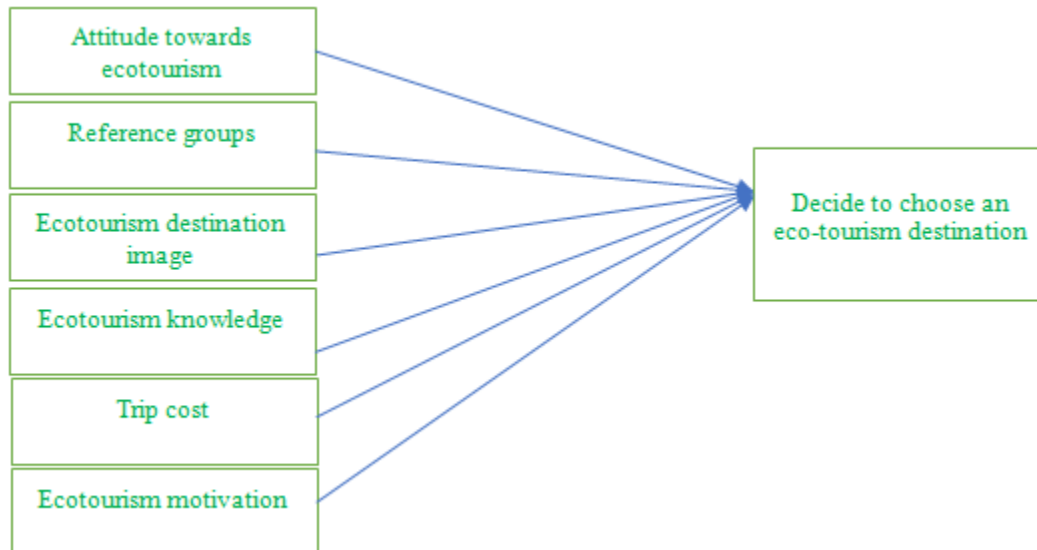


*Source: Proposal of the research team*

**Research hypotheses**

*Hypothesis H1:*Attitude toward ecotourism destination has a positively correlated impact on the decision to choose an eco-tourism destination of Hanoi residents.

*Hypothesis H2:* Reference groups have a positively correlated impact on the decision to choose an ecotourism destination for Hanoi residents.

*Hypothesis H3:*The image of ecotourism destinations has a positive impact on the decision to choose an eco-tourism destination of people in Hanoi.

*Hypothesis H4:*Ecotourism knowledge has a positive impact on the decision to choose an ecotourism destination of people in Hanoi.

*Hypothesis H5:*Trip cost has a negative correlation effect on the decision to choose an ecotourism destination of Hanoi residents.

*Hypothesis H6:*Ecotourism motivation has a positively correlated impact on the decision to choose an ecotourism destination of Hanoi residents.

*The research scale is specified in Table 1.*

**Table 1. Variables and scales of factors in the model**

| No. | Code | Observed variables | References |
|---|---|---|---|
| **I** | **TD** | **Attitude towards ecotourism destination** | Nhung, N.T.T et al., (2015); Thu, H.M et al., (2018); Lankford Samuel V & Dennis R Howard (1994); Mutinda, R., & Mayaka, M. (2012); Tuyet, T.T & Manh, N.V (2023) |
| 1 | TD1 | Interesting ecotourism destination | |
| 2 | TD2 | Ecotourism brings many benefits | |
| 3 | TD3 | Ecotourism destinations bring comfort and ease | |
| 4 | TD4 | I am fascinated when it comes to ecotourism destinations | |
| **II** | **NTK** | **Reference groups** | Tuyet, T.T & Manh, N.V (2023); Thuy, V.T.B et al., (2020); Jalilvand, M.R, Samiei.N, Dini.B, Manzari.P.Y (2012) |
| 6 | NTK1 | I often refer to comments from people around me about ecotourism destinations | |
| 7 | NTK2 | I often choose ecotourism destinations based on the advice of people who have experienced it | |
| 8 | NTK3 | If there is bad feedback about an ecotourism destination, I won't go again | |
| 9 | NTK4 | I often look for information on social networks, magazines, websites... when choosing ecotourism destinations | |
| **III** | **HA** | **Ecotourism destination image** | Thu, H.M et al., (2018); Hiep, N.X (2016); Tuyet, T.T & Manh, N.V (2023); Correia, A., & Pimpao, A. (2008); Obenour, W., Groves, D., & Lengfelder, J. (2006) |
| 10 | HA1 | Ecotourism destinations have many attractive destinations | |
| 11 | HA2 | Ecotourism destinations have a clean environment | |
| 12 | HA3 | Ecotourism destinations have environmentally friendly accommodations (tents, camps, etc.) | |
| 13 | HA4 | The ecotourism destination has many amusement parks associated with nature | |
| **IV** | **KT** | **Ecotourism knowledge** | Tuyet, T.T & Manh, N.V (2023); Jauhari, V., & Manaktola, K. (2007) |
| 14 | KT1 | I know that ecotourism is environmentally friendly | |
| 15 | KT2 | I know that ecotourism contributes to sustainable tourism development | |
| 16 | KT3 | I understand that ecotourism improves people's physical and mental health | |
| 17 | KT4 | I know ecotourism contributes to environmental protection | |
| **V** | **CP** | **Ecotourism trip cost** | Tri, P.Q & Thu, T.T (2021); Thuy, V.T.B et al., (2020) |
| 18 | CP1 | The cost of an eco-tour is consistent with the benefits it brings | |

| 19 | CP2 | The cost of the eco-tour is reasonable with the quality of service | |
|----|-----|----|----|
| 20 | CP3 | The cost of an eco-tour is appropriate to the experience you receive | |
| 21 | CP4 | Ecotourism trip costs are suitable for your income level | |
| **VI** | **DC** | **Ecotourism motivation** | Hiep, N.X (2016); Thu, H.M et al., (2018); Tuyet, T.T & Manh, N.V (2023); Hanqin, Z. Q., Lam, T., (1999); Uysal, M., McDonald, C. D., & Martin, B. S. (1994) |
| 22 | DC1 | Ecotourism to escape from daily life and work | |
| 23 | DC2 | Ecotourism to learn about local lifestyles, customs and practices | |
| 24 | DC3 | Ecotourism to raise awareness of environmental protection and ecosystems | |
| 25 | DC4 | Ecotourism to accumulate skills and life experiences | |
| **VII** | **QD** | **Decide to choose an eco-tourism destination** | |
| 26 | QD1 | I choose ecotourism destinations based on personal preferences | Tuyet, T.T & Manh, N.V (2023); Decrop Alain (2006) |
| 27 | QD2 | I choose an ecotourism destination based on the benefits it brings | |
| 28 | QD3 | I choose an ecotourism destination based on the opinions of people around me | |
| 29 | QD4 | I choose ecotourism destinations according to the quality of the destination | |

*Source: Synthesis and proposal of the research team*

## 3. Research methodology

### 3.1. The method of data collection

To examine *"factors determining the choice of eco-tourism destination of Hanoi residents"*, The research team used two research methods including desk research (reviewing documents published in the media) and a sociological survey (collecting answer sheets from targeted subjects). arrive). The data will be compiled and analyzed using Excel and SMARTPLS software.

Using the desk-based research method, the research team reviewed documents on ecotourism destinations, and articles related to the factors that determine the choice of tourist destinations in general and ecotourism in particular are published in the media, considering the characteristics of tourists and people in Hanoi. From there, the research team developed a survey form to conduct a sociological investigation of the factors that determine the choice of ecotourism destinations of Hanoi residents.

Regarding sociological investigation methods, the research team conducted preliminary surveys and discussed with people who were interested and had gone to ecotourism destinations. Discuss the use of a preliminary set of scales with the factors that determine the choice of ecotourism destination of Hanoi residents. Discussion members are free to give their opinions on aspects related to ecotourism destinations. The preliminary study sample size was 10 people. Preliminary research results are used to complete the research questionnaire and research model. After completing the survey, the research team sent and collected the survey using the link on Google Form: https://forms.gle/du44Hygxv8uEdaCK9with respondents being Hanoi residents.

The data collection method conducted by the research team is based on convenience sampling and the "snowball" method - the method of finding the next subject based on the suggestion or introduction of the interviewed subject) to ensure sufficient sample size as required. The number of survey questionnaires collected was 320, of which the number of people who had ever gone and intended to choose an ecotourism destination was 263, so the number of valid votes included in the quantitative analysis was 263.

### 3.2. Data processing methods

A quantitative research method was conducted to process data collected from the survey of visitors who are residents of Hanoi city on the factors determining the choice of ecotourism destinations. SMARTPLS software is used to test hypotheses and evaluate the impact of factors.

### Step 1: Evaluation of the measurement model

Evaluation of the measurement model is based on considering the values of the quality of the observed variables (outer loadings), the reliability of the scale (Cronbach's Alpha), the convergence, and the discriminant validity.

### Step 2: Structural Model Evaluation

After evaluating the measurement model to meet the requirements, evaluate the structural model through impact relationships, path coefficients, overall coefficients determining R squared, and impact coefficient f squared.

## 4. Research results

### 4.1. Description of survey participants

The subjects of the survey are residents of Hanoi city. The total number of votes collected was 320 votes, of which 137 people were male (42.8%), 172 people were female (53.8%) and 11

people did not want to be specific (3.4%), which shows that the female gender has tended to pay more attention to ecotourism.

Regarding age, 82 survey participants were under 22 years old (25.6%); 128 people are between the ages of 22 and under 30 years old (40%); 88 people are aged 30 - under 40 years old (27.5%); 16 people are between the ages of 40 and under 50 years old (5%) and 6 people are 50 years old or older (1.9%).

When asked about whether they had ever been to eco-tourism sites, 203 respondents had ever gone (63.4%), and 117 people had never gone (36.6%). Of the 117 people who have never been to ecotourism sites, 60 people said that they plan to go in the near future (51.3%) and 57 people have not yet planned to go to ecotourism (48.7%).

**4.2. Testing results**

**4.2.1. Results of assessing the quality of observed variables in the measurement model**

**4.2.1.1. Testing the quality of observed variables**

The quality of observed variables is assessed through the outer loadings. The quality of the observed variables that determine the choice of ecotourism destinations of people in Hanoi is shown in Table 2.

**Table 2. The outer loadings of factors determining the choice of eco-tourism destination of Hanoi residents**

|        | CP    | DC    | HADD  | KTDL  | NTK | QD | TDDD |
|--------|-------|-------|-------|-------|-----|-----|------|
| CP1    | 0.918 |       |       |       |     |     |      |
| CP2    | 0.866 |       |       |       |     |     |      |
| CP3    | 0.888 |       |       |       |     |     |      |
| CP4    | 0.888 |       |       |       |     |     |      |
| DC1    |       | 0.828 |       |       |     |     |      |
| DC2    |       | 0.848 |       |       |     |     |      |
| DC3    |       | 0.887 |       |       |     |     |      |
| DC4    |       | 0.872 |       |       |     |     |      |
| HADD1  |       |       | 0.857 |       |     |     |      |
| HADD2  |       |       | 0.881 |       |     |     |      |
| HADD3  |       |       | 0.870 |       |     |     |      |
| HADD4  |       |       | 0.865 |       |     |     |      |
| KTDL1  |       |       |       | 0.893 |     |     |      |
| KTDL2  |       |       |       | 0.888 |     |     |      |
| KTDL3  |       |       |       | 0.860 |     |     |      |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| KTDL4 | | | | 0.827 | | | |
| NTK1 | | | | | 0.818 | | |
| NTK2 | | | | | 0.848 | | |
| NTK3 | | | | | 0.808 | | |
| NTK4 | | | | | 0.856 | | |
| QD1 | | | | | | 0.886 | |
| QD2 | | | | | | 0.850 | |
| QD3 | | | | | | 0.781 | |
| QD4 | | | | | | 0.885 | |
| TDDD1 | | | | | | | 0.907 |
| TDDD2 | | | | | | | 0.895 |
| TDDD3 | | | | | | | 0.872 |
| TDDD4 | | | | | | | 0.826 |

*Source: Testing results of the research team*

The results from Table 2 show that the outer loadings of all total variable correlation coefficients of the variables that determine the choice of ecological destination of Hanoi residents are > 0.7 (Hair & et al. al, 2016) showing that the observed variables are significant.

### 4.2.1.2. Testing the reliability of the scale

Evaluate the reliability of the scale of factors determining the choice of ecotourism destinations of Hanoi residents on PLS-SEM through two main indices: Cronbach's Alpha and Composite Reliability (CR).

**Table 3. Reliability coefficient (Cronbach's Alpha) and composite reliability of factors determining the choice of ecotourism destination of Hanoi residents**

| | Cronbach's alpha | Composite reliability (rho_a) | Composite reliability (rho_c) | Average variance extracted (AVE) |
|---|---|---|---|---|
| CP | 0.913 | 0.919 | 0.938 | 0.792 |
| DC | 0.882 | 0.884 | 0.919 | 0.738 |
| HADD | 0.891 | 0.891 | 0.924 | 0.753 |
| KTDL | 0.891 | 0.897 | 0.924 | 0.753 |
| NTK | 0.852 | 0.855 | 0.900 | 0.693 |
| QD | 0.873 | 0.877 | 0.913 | 0.725 |
| TDDD | 0.899 | 0.909 | 0.929 | 0.766 |

*Source: Testing results of the research team*

According to Table 3, after analyzing the reliability test by Cronbach's Alpha coefficient of the factor, the results are: Trip cost (CP) reached 0.913; Ecotourism motivation (DC) reached 0.882; Ecotourism destination image (HADD) reached 0.891; Ecotourism knowledge (KTDL) reached 0.802; The reference group (NTK) reached 0.852; Attitude towards ecological destinations (TTDD) reached 0.899; The decision to choose an ecotourism destination (QD) reached 0.873. Thus, all the scales satisfy the condition > 0.7 (DeVellis, 2012) and do not violate any rule to exclude variables, so no variables are excluded and are acceptable in terms of reliability.

The Composite Reliability (CR) of all observed variables is also > 0.7 (Bagozzi & Yi, 1988). Therefore, the scale is reliable, has analytical significance, and is used in subsequent factor analysis.

### 4.2.1.3. The Convergence

According to the data analysis results in Table 3, the average variance index extracted AVE (Average Variance Extracted) of the factors: Trip cost (CP) reached 0.792; Ecotourism motivation (DC) reached 0.738; Ecotourism destination image (HADD) reached 0.753; Ecotourism knowledge (KTDL) reached 0.753; The reference group (NTK) reached 0.693; Attitudes towards ecotourism destination (TTDD) reached 0.766; Decision to choose ecotourism destination (QD) reached 0.725.

Thus, the average variance extracted index AVE (Average Variance Extracted) of all variables is > 0.5 (Hock & Ringle, 2010), which shows that the model satisfies the convergence conditions.

### 4.2.1.4. The Discriminant Validity

The results in Table 4 on the Fornell-Larcker criterion of the research model on factors determining the choice of ecotourism destinations of Hanoi residents show the following factors: Trip cost (CP); Ecotourism motivation (DC); Ecotourism destination image (HADD); Ecotourism knowledge (KTDL); Reference group (NTK); Attitude towards ecotourism destination (TTDD); The ecotourism destination (QD) choice decision is discriminatory because all diagonal AVE square roots are higher than their off-diagonal values. Therefore, in terms of discriminant validity, the two criteria including the cross-loading coefficient and Fornell and Larcker's criteria have met the conditions.

**Table 4. Fornell-Larcker criteria of the model to study the factors that determine the choice of ecotourism destination of Hanoi residents**

|  | CP | DC | HADD | KTDL | NTK | QD | TDDD |
|---|---|---|---|---|---|---|---|
| CP | 0.890 |  |  |  |  |  |  |

| DC | 0.848 | 0.859 | | | | | |
|---|---|---|---|---|---|---|---|
| HADD | 0.789 | 0.830 | 0.868 | | | | |
| KTDL | 0.815 | 0.846 | 0.849 | 0.868 | | | |
| NTK | 0.727 | 0.740 | 0.757 | 0.739 | 0.833 | | |
| QD | 0.765 | 0.833 | 0.789 | 0.822 | 0.762 | 0.851 | |
| TDDD | 0.806 | 0.804 | 0.827 | 0.794 | 0.761 | 0.761 | 0.875 |

*Source: Testing results of the research team*

### 4.2.1.5. $f^2$ function value

The function value $f^2$ represents the influence of the structure (factor) when removed from the model. The $f^2$ values correspond to 0.02, 0.15, and 0.35, corresponding to small, medium, and large impact values (Cohen. J, 1988) of the exogenous variable. If effect size < 0.02, it is considered to have no impact.

**Table 6. Value summary table $f^2$**

| | CP | DC | HADD | KTDL | NTK | QD | TDDD |
|---|---|---|---|---|---|---|---|
| CP | | | | | | 0.000 | |
| DC | | | | | | 0.101 | |
| HADD | | | | | | 0.003 | |
| KTDL | | | | | | 0.067 | |
| NTK | | | | | | 0.071 | |
| QD | | | | | | | |
| TDDD | | | | | | 0.001 | |

*Source: Testing results of the research team*

In this model, in table 6 we see that there are links between DC (0.101); KTDL (0.067); NTK (0.071) "has" an influence on the decision to choose an ecotourism destination of Hanoi residents, **$f^2$>0,02** seems to have a small impact. Factors such asCP (0,000); HADD (0,003); TDDD(0.001)have**$f^2$<0,02** considered to not influence the decision to choose an ecotourism destination of Hanoi residents.

### 4.2.2. Results of assessing the level of impact using structural models

### 4.2.2.1. Evaluate impact relationships

The relationship and level of influence of the determining factors on the choice of ecotourism destination of Hanoi residents on SMARTPLS is shown in Figure 2.

**Figure 2. Determining factors in choosing ecotourism destinations of Hanoi residents**
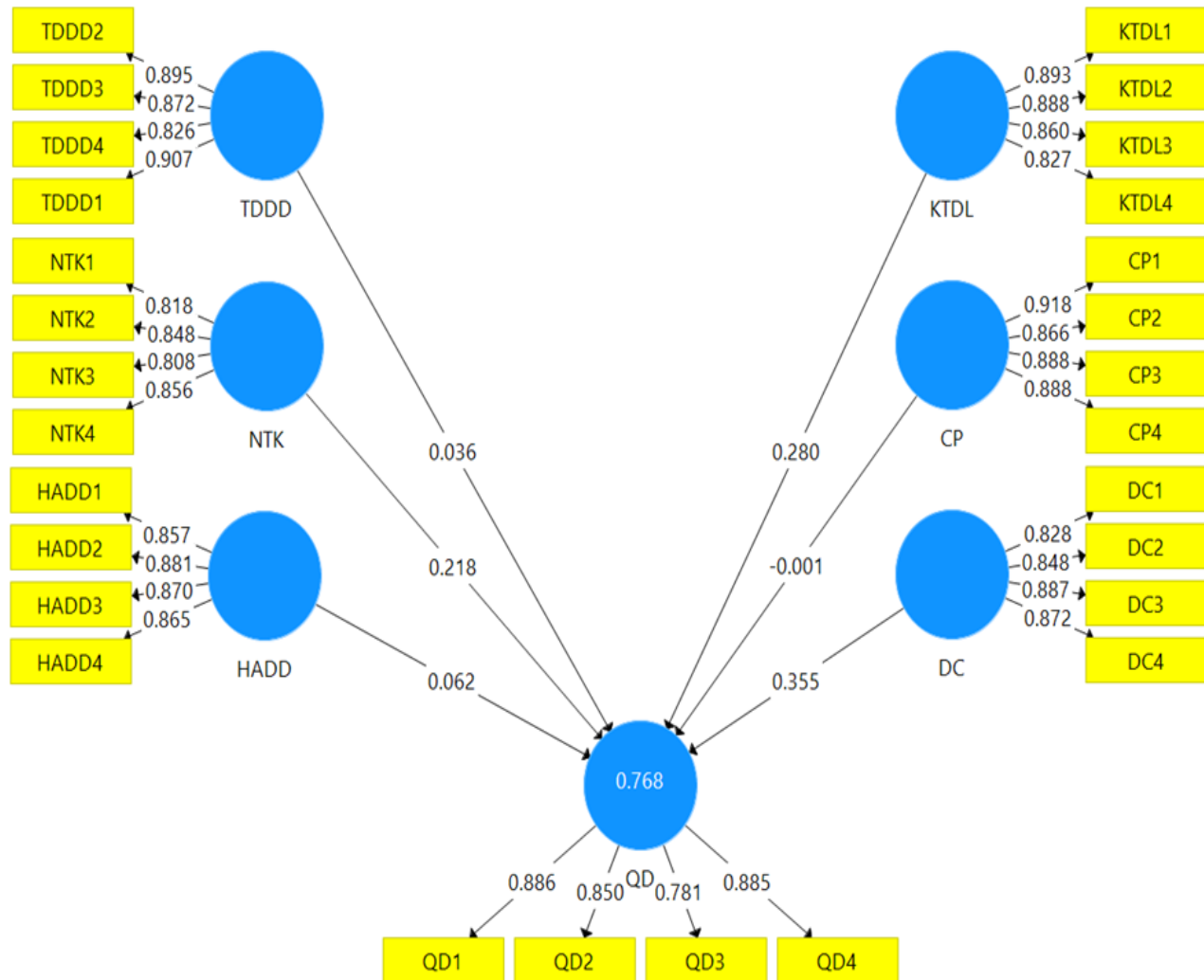


*Source: SMARTPLS test results of the research team*

The results of the Bootstrap analysis to evaluate the impact relationships are shown in Figure 2. Accordingly, the factors *"Ecotourism motivation"*, *"Ecotourism knowledge", and "Reference groups"* have P Values <0.05, This reflects that these factors are statistically significant enough to show a relationship that influences the decision to choose an ecotourism destination of Hanoi residents. Factors *"Trip cost"*, *"Ecotourism destination image", and "Attitude towards ecotourism destination"* have P Values > 0.05, This reflects that these factors are not statistically significant enough to show a relationship with a positive influence on the decision to choose an ecotourism destination of Hanoi residents.

**Table 7. Structural model path coefficient (Path Coefficient)**

| | Original Sample (O) | Sample Mean (M) | Standard Deviation (STDEV) | T Statistics (\|O/STDEV\|) | P Values |
|---|---|---|---|---|---|
| **CP => QD** | -0.001 | 0.003 | 0.083 | 0.009 | **0.993** |
| **DC => QD** | 0.355 | 0.359 | 0.105 | 3.394 | **0.001** |
| **HADD => QD** | 0.062 | 0.061 | 0.081 | 0.769 | **0.442** |
| **KTDL => QD** | 0.280 | 0.271 | 0.088 | 3.163 | **0.002** |
| **NTK => QD** | 0.218 | 0.216 | 0.050 | 4.324 | **0.000** |
| **TDDD => QD** | 0.036 | 0.039 | 0.065 | 0.560 | **0.576** |

*Source: SMARTPLS test results of the research team*

The test results in Table 7 show that with 95% confidence, *"Ecotourism motivation"* (DC) has the strongest impact on the decision to choose an eco-tourism destination of the people in Hanoi with the level of impact0.355; next comes the factor *"Ecotourism knowledge"* (KTDL)with an impact level of 0.280 and finally the factor *"Reference groups"* with an impact level of 0.218.

### 4.2.2.2. Evaluate the overall coefficient of determination $R^2$

The results of the PLS Algorithm analysis for the value $R^2$reflect the explanatory level of the independent variable for the dependent variable. The **$R^2$**measures the overall coefficient of determination (R-square value), which is an index to measure the degree of model fit of the data (the model's explanatory power). According to Hair et al (2010), R-square values are suggested at 0.75, 0.50, or 0.25.

**Table 8. Explanation coefficient of the independent variable for the dependent variable (R Square)**

| | R-square | R-square adjusted |
|---|---|---|
| QD | 0.768 | 0.763 |

*Source: Testing results of the research team*

The results from Table 7 show that $R^2$ equal to 0.768 and $R^2$ adjusted by 0.763 are appropriate in this case study, so the independent variables in the model explain 76.8% *"Decision to choose an ecotourism destination of Hanoi city residents"*.

### 4.2.2.3.Evaluating theReliability Index (SRMR)

Standardized Root Mean Square Residual Index (SRMR): This index indicates the suitability of the research model. According to Hu and Bentler (1999), the SRMR index must reach a value of

less than 0.08 or 0.1. In addition, Henseler et al. (2014) also suggested that the SRMR index is the goodness of fit index of the PLS-SEM model that can be used to avoid parameter bias in the model.

**Table 9. The Standardized Root Mean Square Residual (SRMR)**

|  | Saturated model | Estimated model |
|---|---|---|
| SRMR | 0.050 | 0.050 |

*Source: Testing results of the research team*

According to the SRMR research results in Table 8 of the research model, it is 0.050 < 0.1. Therefore, this model is suitable for data analysis.

**5. Some exchanges and discussions**

Of the 6 factors taken into consideration, with a significance level of 5%, 3 factors show an impact on the *"Decision to choose an ecotourism destination of Hanoi residents"*. In which, *"Ecotourism motivation"* (DC) has the strongest impact on the decision to choose an ecotourism destination of people in Hanoi with an impact of 0.355 showing that when tourism motivation increases by 1 unit will promote the choice of ecotourism destination 0.355 units; Next is the factor *"Ecotourism knowledge"* (KTDL) with an impact of 0.280, showing that when knowledge about ecotourism increases by 1 unit, the decision to choose ecotourism destination increases to 0.280 unit and finally the factor *"Reference group"* has an impact of 0.218 when the reference group increases the influence by 1 unit, the decision to choose an ecotourism destination increases by 0.218 units.

From the survey results and testing the influence of factors in the model on the decision to choose an ecotourism destination of Hanoi residents, the research team proposes some suggestions as follows:

***Ecotourism motivation*** has the strongest impact on the decision to choose an ecotourism destination for Hanoi residents. Today, most people in Hanoi will choose ecological destinations close to nature and environmentally friendly to stay away from the stressful daily life and have the opportunity to experience new things, especially the traditions and cultural identities of indigenous people. Therefore, ecotourism destinations need to deeply exploit the needs and travel motivations of tourists to see what is the motive for coming to ecotourism destinations. For example, if their motive is to relieve pressure and stress, ecotourism destinations can respond by creating more novelties in space, and entertainment services... their motive is If they are to learn about the culture of indigenous people, ecological destinations need to focus on promoting and

building cultural identity through traditional activities of the region for tourists to experience... to attract tourists choosing ecological destinations.

***Ecotourism knowledge***has a positive impact on the decision to choose an ecotourism destination. Therefore, in addition to service quality as well as upgrading infrastructure, quality, and destination image, ecotourism destinations also need to create websites, and communication plans, and promote ecotourism knowledge. The importance of ecotourism to the environment and the sustainable development of the tourism industry in general. In addition, tips and knowledge you need to know when traveling ecotourism are also topics that tourists may be interested in. As people's knowledge about ecotourism increases, the level of decision to choose an ecotourism destination also increases.

***Reference groups*** also play a role in positively influencing the decision to choose an ecotourism destination. Therefore, ecotourism destinations need to promote communication and marketing activities to promote the destination image. At the same time, focus on in-depth research on the awareness, beliefs, and tastes of tourists towards the tourism industry in general as well as eco-tourism destinations in particular.

The research results also show that***"Trip cost", "Ecotourism destination image" and "Attitude towards ecotourism destination"*** are not statistically significant enough to show a relationship with a positive influence on the decision to choose an ecotourism destination of Hanoi residents. In terms of the factor ***"Trip cost"***, ecotourism destinations should promote the quality of services and destinations to create tourist attraction instead of focusing on low costs and ignoring quality. However, the surveyed object of the study is the people of Hanoi city, so the opinion on the trip cost factor may not be the same with other subjects. Therefore, to be objective, ecotourism destinations need to actively research and deeply analyze visitors to be able to strike a harmonious balance between quality and cost factors. In terms of the factor***"Ecotourism destination image"***, Although not statistically significant enough to affect tourists who are residents of Hanoi, the ecotourism destination image has an important meaning in approaching visitors. The more the destination image is strengthened, the easier it is to reach a variety of tourists, so ecotourism destinations need to promote their existing advantages and continue to improve and improve in terms of ecotourismimages to create a first impression with visitors.

**Conclusion**

The study points out the factors that determine the choice of ecotourism destination of Hanoi residents. Through the survey results, the data is analyzed by the research method combining qualitative and quantitative, the research team determines the influencing factors and the degree of influence on the decision to choose the eco-tourism destination of Hanoi residents. The results

are consistent with previous experimental studies. At the same time, the article also contributes and offers several exchanges and discussions to attract tourists to choose ecotourism destinations - a potential type of tourism of the tourism industry in general, thereby directing the tourism industry to the type of tourism that visitors can be close to nature, friendly with the environment. The research paper is the basis for articles related to the factors determining the choice of ecotourism destinations of Vietnamese people as well as international tourists.

## REFERENCES

Ajzen & Fishbein (1975), *Belief, attitude, intention and behavior: An introduction to theory and research*, Addison- Wesley, Reading, MA

Ajzen, I. (1991), The theory of Planned Behavior, Organizational Behavior and human decision processes, 50, 179-211.

Bagozzi, R. and Yi, Y (1988). *On the Evaluation of Structural Equation Models*. Journal of the Academy of Marketing Sciences, 16, 74-94.   http://dx.doi.org/10.1007/BF02723327

Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences (2nd ed.).* Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.

Correai, A., & Pimpao, A. (2008). *Decision-making processes of Portuguese tourists traveling to South America and Africa*. Tourism and Hospitality Research, 2(4), 330 – 373.

Corria, A., & Pimpao, A. (2008). Decision-making processes of Portuguese tourists traveling to South America and Africa. *Tourism and Hospitality Research, 2*(4), 330 - 373.

Chen, & Tsai. (2007). How destination image and evaluative factors affect behavioral intentions. *Tourism Management, 28*(4), 1115 - 1122.

Decrop Alain (2006), Vacation decision making, Cabi, Wallingford, UK.

Devellis, R. (2012). *Scale Development Theory and Applications. Sage Publications,*      New York.

Dung, D.T (2022). *What is ecotourism? The famous eco-tourism areas?* https://luatduonggia.vn/du-lich-sinh-thai-la-gi-cac-khu-du-lich-sinh-thai-noi-tieng/

Engel, Kollat & Blackwell (1968), *Tourism consumer behavior model,* https://designwebtravel.com/hanh-vi-tieu-dung-cua-khach-du-lich.html, accessed July 15, 2022

Eymann, A., & Ronning, G. (1992). *Discrete choice analysis of foreign travel demand, In H. J. Vosgerau.* : European integration in the world economy, Studies in international economics and institutions, Berlin: Springer.

Garson, G.D (2016). *Partial Least Squares: Regression and Structural Equation Models.* Statistical Associates Publishers, Asheboro

Hai, P.H (2019). *Factors affecting the behavior of domestic tourists choosing ecotourism destinations in Ben Tre province.* Journal of Science Tra Vinh University, No. 33, March 2019.

Haider, W., & Ewing, G. O. (1990). A model of tourist choices of hypothetical Caribbean destinations. *Leisure Sciences, 12*, 33 - 47.

Hair, J. F., Anderson, R. E., Babin, B. J., & Black, W. C. (2010). *Multivariate data analysis: A global perspective.* Pearson Education, London.

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2016). *A primer on Partial Least Squares Structural Equation Modeling (PLS-SEM) (1st ed.).* Thousand Oaks, CA: Sage publications.

Hanqin, Z. Q., Lam, T., (1999). *An analysis of mainland Chinese visitors' motivations to visit Hong Kong.* Tourism Management, 20, 587-594.

Henseler, J., et al (2014). *Common Beliefs and Reality about Partial Least Squares: Comments on Rönkkö & Evermann (2013).* Organizational Research Methods 17 (2): 182-209.

Hiep, N.X (2016). *Factors affecting tourists' decision to choose a destination: the case of a destination in Ho Chi Minh City.* Journal of Economic Development, 27(9), 53-72.

Hoang, T.P (2020). *Factors affecting the sustainable eco-tourism development in Ca Mau province.* Scientific Journal of Can Tho University, Volume 56, No. 2D(2020):185-194

Hock, C., Ringle, C.M., & Sarstedt, M (2010). *Management of multi-purpose stadiums: Importance and performance measurement of service interfaces.* International Journal of Services Technology and Management, 14(2-3)

Hong, S., Kim, J., Jang, H., Lee, S. (2006). *The roles of categorization, affective image and constraints on destination choice: An application of the NMNL model.* Tourism Management, 27(5), 750-761.

Hsu, Tsai, & Wu. (2009b). The preference analysis for tourist choice of destination: A case study of Taiwan. *Touism Management, 30*, 288 - 297.

Hu, L. & Bentler, P. (1999). *Cutoff criteria for fit indices in covariance structure analysis: Conventional criteria versus new alternatives.* Structural Equation Modeling, 6(), 1-55

Jalilvand, M.R, Samiei.N, Dini.B, Manzari.P.Y (2012). *Examining the Structural Relationships of Electronic Word of Mouth, Destination Image, Tourist Attitude toward Destination and Travel Intention: An Integrated Approach*. Journal of Destination Marketing and Management, 1,134–143.

Jauhari, V., & Manaktola, K. (2007). *Exploring consumer attitude and behavior towards green practices in the lodging industry in India*. International journal of contemporary hospitality management, 19(5), 364-377.

Lankford Samuel V & Dennis R Howard (1994). *Developing a tourism impact Artitude scale*. Annual of tourism research, 21(1), 121-139;

Lim, C. (1999). A mate-analytic review of international tourism demand. *Journal of Travel Research, 37*(2), 273 - 284.

Luo & Zhong (2015). *Using social network analysis to explain communication characteristics of travel-related electronic word-of-mouth on social networking sites*. Tourism Management, 46, 274-282.

Middleton, V.T.C., & Clarke, J. (2009). Marketing in travel and tourism, third Edition. A division of Reed Educational and Professional Publishing Ltd, Oxfordshire UK.

Morey, E. R., Rowe, R. D., & Shaw, W. D. (1991). A discrete choice model of recreational participation site choice, and activity valuation when complete trip data are not available. *Journal of Environmental Economics and Management, 20*, 181 - 201.

Morley, C. L. (1994). Experimental destination choice analysis. *Annals of Tourism Research, 21*(4), 780 - 791.

Mutinda, R., & Mayaka, M. (2012). *Application of destination choice model: Factor influencing domestic tourists destination choice among residents of Nairobi, Kenya.* Touism Management, 33, 1593 – 1597.

Nhung, N.T.T et al., (2015). *Factors affecting the quality of ecotourism services at Ba Vi National Park, Hanoi.* Journal of Science and Development 2015, volume 13, number 4: 675-686

Obenour, W., Groves, D., & Lengfelder, J. (2006). *Image segmentation and implications for the development of a nature-based destination*. Journal of Hospitality & Leisure Marketing, 14(1), 23–47, doi 10.1300/J150v14n01_03.

Tuyet, T.T & Manh, N.V (2023). *Factors affecting the decision to choose ecotourism destinations in the Red River Delta and Northeast Coast of Vietnam*. Journal of Economics & Development, No. 307(2) January 2023, 41-51.

Thu, H.M et al., (2018). *Factors influencing European tourists' decision to choose a destination: A case study in Can Tho.* Journal of Economics and Forecasting, No. 33/2018, 36-40.

Thuy, V.T.B et al., (2020). *Factors influencing international tourists' decision to choose a destination: A case study in Hanoi.* Industry and Trade Magazine - Results of scientific research and technology application, No. 12, May 2020**.**

Tri, P.Q & Thu, T.T (2021). *Factors affecting the decision to choose a community-based rural tourism destination in the Bac Trung Bo region.* Journal of Social Sciences Central, 01(75), 27-39.

UNWTO. (2005). *A practical guide to tourism destination management*.

Uysal, M., McDonald, C. D., & Martin, B. S. (1994). *Australian visitors to US national parks and natural areas*. International Journal of Contemporary Hospitality Management, 6 (3), 18-24.

Vietnambooking.com (2023). *Ecotourism is new and attractive to tourists.*https://www.vietnambooking.com/du-lich/blog-du-lich/du-lich-sinh-thai-moi-me-va-hap-dan-du-khach.html