The Effect of Destination Image on Tourist Satisfaction and Future Intention: A Case Study in Phong Nha – Ke Bang National Park, Quang Binh Province, Vietnam

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ARTICLE INFO	ABSTRACT
Published Online: 04 August 2022 Corresponding Author: **Minh-Man CAO**	This paper was conducted to explore the effects on visitors' future intention in Phong Nha - Ke Bang National Park. A quantitative approach was used as the main method to analyze statistical methods via the SPSS and AMOS software. This research was conducted on 313 visitors who have traveled to PN-KB National Park at least once. The results show that The Future Intention is directly affected by Destination Image and Tourist Satisfaction. Destination Image is affected by 4 factors: Travel Environment, Natural and Cultural Characteristics, Tourism for Infrastructure, and Local Government Support. In addition, Destination Image positively affects Tourist Satisfaction. This study also generated notable recommendations for PN-KB National Park as well as other research conducted in the future in the related industry.
KEYWORDS: Destination Image, Satisfaction, Future Intention, Phong Nha - Ke Bang National Park, Vietnam.	

1. INTRODUCTION

PN-KB National Park was recognized by UNESCO as one of the eight world heritage sites in 2003. According to the Management Board of Phong Nha-Ke Bang National Park (2021), visitors rapidly rose from 2016 to 2019 but significantly declined in 2020 due to not only the Covid 19 pandemic but also the large-scale floods in the area. To boost the local economy as well as to promote images of inhabitants and landscapes here, this national park wishes to attract a huge number of visitors.

Although there are several researches on the topic of destination image (eg: Walmsley and Jenkins (1993), Echtner and Ritchie (2003), Prebensen (2007), Chew and Jahary (2014), etc), papers on both destination image and its effect on satisfaction as well as revisit intention through websites and social media are still limited (Moura, Gnoth, & Deans, 2015). Furthermore, researchers did not pay enough attention to the link among destination image, visitors' satisfaction, and intention to revisit PN-KB National Park. Therefore, it is essential to carry out a study based on data collected by actual surveys from visitors coming to this place.

As a result, this study is conducted with following objectives:

(1) To identify factors which are directly affecting Future Intention to visit PN-KB National Park.

(2) To identify factors which are directly affecting the Destination Image of PN-KB National Park.

(3) To analyze the relationship between Destination Image and Tourist Satisfaction.

(4) To utilize results from the study to offer recommendations for PN-KB National Park attraction in the context of opening borders for tourism on 15 March.

2. LITERATURE REVIEW

2.1. Destination image

There are several definitions of destination image. According to Pike (2002), 142 studies on destination image have been published in tourist journals since 1973 demonstrating the importance of destination image. "It is defined as a mental portrayal of a location" (Alhemoud & Armstrong, 1996). Destination image is like a person's overall thoughts or impressions about the place (Phelps, 1986). According to Crompton (1979), the destination image is "the sum of beliefs, ideas and impressions that a person has of a destination". Likewise, Coshall (2000) stated that "the destination image is the perception of individuals about the characteristics of the destination". In addition, Lin, Morais, Kerstetter, & Hou (2007) argued that it refers to visitors' perceptions of a certain location or place where they visit.

Destination image can be measured by several distinct elements depending on different author's point of view (eg: Echtner and Ritchie (2003), Prebensen (2007), Walmsley and Jenkins (1993), Chew and Jahary (2014), Raimkulov, Juraturgunov, & Ahn (2021)). Based on existing studies, the

most significant factors include: tourism environment, natural and cultural characteristics, infrastructure, and government support.

2.1.1. Tourism environment

According to Lin et al. (2007), the tourism environment depends on many distinct factors: the current sociopolitical and economic situation, the quality of life of locals, and the products and services offered at the tourist site. The sense of safety when traveling, the hospitality of inhabitants, the cleanliness of the tourist destination, the reasonable prices of services and goods at tourist sites, and the necessary accessible information about tourist destinations are all factors that influence the tourism environment (Bigne, Sanchez, & Sanchez, 2001; Prayag, 2008).

2.1.2. Natural and cultural conditions

"The natural and cultural conditions bring about a positive and attractive experience for the tourism destination" (Hai, Thuong, & Nguyen, 2020). According to Lin et al. (2007) and San Martín and Rodríguez (2008), Natural and Cultural Conditions include natural scenery, environmental background, climate, and architectural structures surrounding tourist destinations.

2.1.3. Infrastructure

Infrastructure, which typically requires investments that are high-cost but critical to a country's economic growth and success, is defined as a physical system of an enterprise, a region, or a country (Boyle, 2022). According to Lin et al. 2007, "infrastructure is the road systems and means of transport serving the moving, staying or visiting of tourists". "Infrastructure comprises not only general things such as: transport and health care facilities, telecommunication, etc., but also tourist infrastructure such as: hotels, restaurants, tourist companies, etc." (Beerli and Martin, 2004). A good infrastructure system will help attract people from other places or even locals (Hai et al., 2020).

2.1.4. Government support

Local authorities in many nations are not directly involved in tourism and have limited experience with its preparation, growth, and administration; however, this is changing in recent years, and the importance of government support is widely recognized (Can, Alaeddinoglu, & Turker, 2014). "Local authorities are widely acknowledged as a pivotal and influential stakeholder in a destination, and they are important actors to support tourism development within a destination thanks to their local knowledge" (Briedenhann, 2007; Connell, Page & Bentley, 2009; Dinica, 2009; Bramwell & Lane, 2010). Many studies including Bigne et al. (2001), Duc & Kien (2017), and Prayaf (2008) showed that administrative services, information systems, tourist guidance and assistance, security, and a hotline for issues are all the examples of this support.

2.2. Tourist satisfaction

2.2.1 Definition

According to Mazumder & Hasan (2014), "tourist satisfaction can be a driving force for organizations, which are gearing up to survive in the competitive market". Pizam, Neumann, and Reichel (1978) stated that "it is the results of the comparison between a tourist's experience at the destination visited and the expectations about the destination." Similarly, Chon (1989) argued that satisfaction of visitors is "the result of the relationship between tourists' expectations about the destination based on their previous destination's images and their experiences' evaluation at the destination". In this industry, tourist satisfaction is the evaluation of travelers based on their experience (Abubakar & Mavondo, 2014). "Satisfaction reflects the ability of businesses to survive and upscale their business activities" (Sun, Chi, & Xu, 2013).

2.2.2 Relationship between the tourist satisfaction and destination image

Many researchers found that destination image positively affects tourist satisfaction (Prayag, 2009; Devesa, Laguna, & Picos, 2010; Abubakar & Mavondo, 2014). According to Wang & Hsu (2010), higher levels of tourist satisfaction result from formation of a positive attitude toward the tourism location. "Tourist satisfaction would improve if the destination has a positive image" (Geng & QingChi, 2008).

2.3 Future Intention

2.3.1 Definition

Swan (1981) referred to behavioral intention as a person's planned behavior in the future. In addition, tourist behavior includes selecting and visiting a place as well as evaluating tourism items and future behavioral intentions (Chen & Tsai, 2007). Abubakar et al. (2014) argued that "the intention to return is the willingness to visit the destination again." According to Baker & Crompton (2000), behavioral intention after traveling is the likelihood of visitors to return to their destination.

2.3.2 Relationship between future intention and destination image

Many studies claimed that the image of a tourist destination is a crucial trigger for various tourist behaviors such as destination selection, evaluation, and behavioral intention in the future (Zhang, Fu, Cai, & Lu, 2014). According to Yoon & Uysal (2005), if visitors has a good evaluation of a destination, they tend have a positive impression of this location, return in the future, and/or recommend it to family, relatives, and friends. Since tourists' behavioral intention is crucial to determining if they would return to a location in the future and recommend it to others, the destination image and local services influence tourists' future intention (Chang & Lin, 2020).

2.3.3 *Relationship between future intention and tourist satisfaction*

Kozak and Rimmington (2000) found that "tourist satisfaction affects the choice of destination, the consumption of products, services and revisit decisions". Researchers in the tourism sector have argued that clients who are by influenced by electronic word of mouth (eWOM) relied on other satisfied experiences after traveling to a destination (Pantelidis, 2010; Jeong and Jang, 2011). Moreover, "generally, behavioral intention can be captured by the intentions to recommend and revisit." (Jeong, Yu, & Kim, 2019)

2.4. Hypotheses and model

H1: Tourism environment has a positive influence on destination image.

H2: Natural and cultural conditions have a positive influence on destination image.

H3: Infrastructure has a positive influence on destination image.

H4: Government support has a positive influence on destination image.

H5: Destination image has a positive influence on tourist satisfaction.

H6: Destination image has a positive influence on Future Intention.

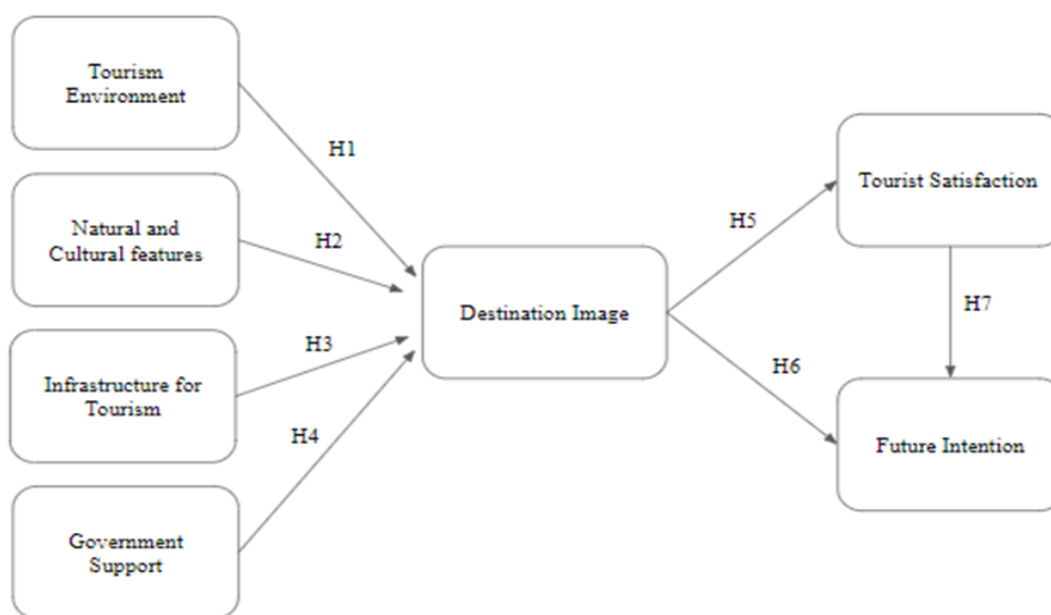**H7:** Tourist satisfaction has a positive influence on Future Intention.

Figure 1: Proposed model
Source: adapted from Shafiee et al. (2016), Hai et al. (2020)

3. Methodology

3.1 Research method

Because the quantitative approach analyzes the link between variables and supports both hypotheses as well as the proposed model, this method is most suitable for this study according to the objectives and questions mentioned above.

3.2. Measurement scales

According to Comrey and Lee (1992), "the scale of sample size adequacy: 50 – very poor, 100 – poor, 200 – fair, 300 – good, 500 – very good, and 1,000 or more – excellent". There are 31 items in this study; therefore, it was adequate to have 313 survey respondents.

Table 1: Scale of Measurement

Construct and Code	Item Code	Items with modification	Reference
Travel environment (TE)	TE1	I feel safe traveling here	Bigne et al. (2001); Prayag G. (2008)
	TE2	Residents are friendly and polite	
	TE3	The environment in this national park is very clean	
	TE4	The management activities at this national park were well implemented	
	TE5	The information about this national park is clear, detailed and easily accessible	

Natural and cultural characteristics (NACC)	NACC1	This national park has poetic scenery	Bigne et al. (2001); Lin et al. (2007); Prayag G. (2008)
	NACC2	The scenery at this national park is very impressive	
	NACC3	The history of spiritual places is special	
	NACC4	The environment and atmosphere at this national park are clean and free of pollution	
	NACC5	There are many impressive and unique souvenir products	
Tourism for infrastructure (TI)	TI1	The transport system leading to this national park is good and congestion rarely occurs	Duc & Kien (2017); Lin et al. (2007); Nguyen (2009)
	TI2	Transportation to this national park is convenient	
	TI3	The infrastructure system in this national park is organized and arranged for convenience	
	TI4	Places to stay before, during, and after traveling are easy to find	
Local government support (GS)	GS1	Request of public information of prices of tourism products and services	Duc & Kien (2017); Nguyen (2009); Stylos, Vassiliadis, Bellou, & Andronikidis (2016)
	GS2	Security systems at tourist destinations ensure safety for visitors	
	GS3	There are media programs to raise awareness for residents and visitors	
	GS4	The government has timely hotlines to assist visitors	
Destination Image (DI)	DI1	Overall, PN-KB National Park is a well-organized tourism place	Nisco, Mainolfi, Marino, & Napolitano (2015); Lee, Graefe, & Burns (2007)
	DI2	Visiting PN-KB National Park is a good quality tourism product	
	DI3	Compared to other tourism destinations, visiting PN-KB National Park is a good value for money	
	DI4	PN-KB National Park is a place with lots of tourist attractions	
	DI5	After I visited PN-KB National Park, my image of PN-KB National Park is improved	
Tourist satisfaction (TS)	TS1	I feel happy about the trip	Shafiee et al. (2016)
	TS2	I feel satisfied about the trip	
	TS3	After the trip, I have a better understanding of Vietnamese history and national culture	
	TS4	I feel that expectation before the trip has been met	
Future intention (FI)	FI1	I will say positive things about PN-KB National Park	Bhattacherjee (2001); Chi & Qu, (2008); Shafiee et al. (2016)
	FI2	I will recommend PN-KB National Parke to my friends/family	
	FI3	PN-KB National Park is my next vacations place	
	FI4	I intend to come back to PN-KB National Park in the future	

3.3. Data collection

Before sending designed questionnaires to the participants, pilot testing is normally done to confirm that both content and structure in survey questionnaire are valid, understandable and reliable. For a pilot test, a total of 15-25 respondents are considered a good quantity (Aaker, Kumar,, & Day, 2006); therefore, this study will conduct a pilot test with 20 respondents to determine whether the questionnaire is understandable. If not, the researcher had to modify the content.

Target audience includes visitors taking a trip to Phong Nha Ke Bang National Park at least once. Nunnally (1978) suggested a quantity of respondents that's 10 times the quantity of variables. In addition, according to Comrey and

Lee (1992), "the scale of sample size adequacy: 50 – very poor, 100 – poor, 200 – fair, 300 – good, 500 – very good, and 1,000 or more – excellent". There are 31 items in study; therefore, the survey needed at least 300 respondents to ensure reliability and validity.

3.4. Data analysis
This step will be conducted by the "Statistical Package for the Social Sciences (SPSS)" and the "Analysis of Moment Structures (AMOS)" to on the measurement model (to conduct confirmatory factor analysis and assess the reliability and validity of variables) and the structural model (to analyze the model fit and hypothesis testing).

4. FINDINGS AND RESULTS
4.1. Demographic analysis
The number of valid respondents is 313, which is more than the required 300.

Table 2: Sample Demographic

		Frequency	Percent	Valid Percent	Cumulative Percent
Gender					
Valid	Male	145	46.3	46.3	46.3
	Female	168	53.7	53.7	100.0
	Total	313	100.0	100.0	
Age					
Valid	Under 18	25	8.0	8.0	97.4
	18 to 25	70	22.4	22.4	22.4
	26 to 40	77	24.6	24.6	47.0
	41 to 60	133	42.5	42.5	89.5
	Above 60	8	2.6	2.6	100.0
	Total	313	100.0	100.0	
Frequency					
Valid	1	52	16.6	16.6	16.6
	2	72	23.0	23.0	39.6
	3	53	16.9	16.9	56.5
	More than 3	136	43.5	43.5	100.0
	Total	313	100.0	100.0	
Monthly Income					
Valid	Under 5 mil	70	22.4	22.4	22.4
	5 mil to 10 mil	113	36.1	36.1	100.0
	10 mil to 20 mil	102	32.6	32.6	63.9
	Over 20 mil	28	8.9	8.9	31.3
	Total	313	100.0	100.0	
Do you often have a tour guide during your trip?					
Valid	Never	138	44.1	44.1	44.1
	Always	23	7.3	7.3	51.4
	Sometimes	152	48.6	48.6	100.0
	Total	313	100.0	100.0	

Source: From the author's analysis data

4.2. Data analysis
4.2.1. Measurement model: Reliability and Validity testing
4.2.1.1. Reliability testing
Cronbach's alpha value ranges from 0.705 to 0.898 (see Table 3), which is higher than 0.7 criterion suggested by George and

Mallery (2003). However, the value of total correlation coefficients of NACC5 is 0.061 (<0.4); therefore, NACC5 is removed. After that, all total correlation coefficients were greater than 0.3. As a result, all remaining measurement scales were reliable (Nunnally, 1978).

Table 3: Reliability Analysis Result

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
1. Travel environment: Cronbach's Alpha: .843 N of Item: 5				
TE1	18.313	5.703	.610	.824
TE2	18.262	5.841	.715	.795
TE3	18.102	6.547	.524	.842
TE4	18.403	5.511	.696	.798
TE5	18.319	5.603	.712	.793
2. Natural and cultural characteristics: Cronbach's Alpha: .705 N of Item: 5				
NACC1	17.885	4.070	.633	.615
NACC2	17.990	3.599	.657	.579
NACC3	17.997	3.638	.622	.592
NACC4	17.994	3.558	.662	.575
NACC5	18.575	4.457	.061	.875
3. Natural and cultural characteristics (after removing NACC5): Cronbach's Alpha: .875 N of Item: 4				
NACC1	13.850	3.019	.669	.866
NACC2	13.955	2.492	.761	.827
NACC3	13.962	2.518	.725	.843
NACC4	13.958	2.418	.789	.815
4. Tourist Infrastructure: Cronbach's Alpha: .815 N of Item: 4				
TI1	13.665	2.660	.620	.780
TI2	13.633	2.650	.686	.760
TI3	13.923	1.789	.687	.769
TI4	13.748	2.369	.649	.760
5. Local government support Cronbach's Alpha: .867 N of Item: 4				
GS1	10.387	7.917	.677	.847
GS2	10.073	7.985	.652	.856
GS3	10.323	7.328	.779	.806
GS4	10.460	6.717	.776	.808
6. Local government support Cronbach's Alpha: .873 N of Item: 5				
DI1	18.233	4.397	.722	.843
DI2	18.380	3.935	.782	.825
DI3	18.284	4.307	.732	.840
DI4	18.323	4.027	.695	.849
DI5	18.230	4.530	.590	.872

7. Tourist satisfaction Cronbach's Alpha: .835 N of Item: 4				
TS1	13.744	2.293	.725	.775
TS2	13.815	2.196	.698	.780
TS3	13.987	2.006	.581	.846
TS4	13.882	2.085	.710	.772
8. Future intention Cronbach's Alpha: .898 N of Item: 4				
FI1	12.109	6.578	.810	.855
FI2	12.147	6.728	.774	.868
FI3	12.160	6.846	.759	.874
FI4	12.006	6.526	.753	.877

Source: From the author's analysis data

4.2.1.2. Exploratory Factor Analysis (EFA)

Because many researchers recommended that the load factor above 0.5 is a good quality observation variable, any item with a value less than 0.5 will be removed to assure the quality of the results. Item TS3 with value lower than 0.5 is eliminated. After eliminating TS3, KMO value is 0.850 (>0.8); therefore, the acceptance level is good (Kaiser, 1974).

In addition, the total variance extracted of the final solution is above 50% with the value of 62.705% (Anderson & Gerbing, 1988), and "Bartlett's Test of Sphericity" is significant because it is under 0.05 (Tabachnick & Fidell, 2007). As a result, the output of EFA is suitable, and no item is eliminated.

Table 4: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.850
Bartlett's Test of Sphericity	Approx. Chi-Square	4991.115
	Df	406
	Sig.	.000

Source: From the author' s analysis data

Table 5: Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings[a]
Factor	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	6.915	23.843	23.843	6.562	22.629	22.629	4.286
2	3.288	11.338	35.181	2.865	9.880	32.508	5.033
3	2.905	10.018	45.200	2.564	8.841	41.350	3.035
4	2.503	8.631	53.831	2.164	7.462	48.812	2.914
5	2.192	7.559	61.389	1.830	6.310	55.122	3.057
6	1.636	5.642	67.032	1.290	4.450	59.571	3.453
7	1.249	4.306	71.338	.909	3.133	62.705	4.029

Source: From the author's analysis data

Table 6: Pattern Matrix[a]

	Factor						
	1	2	3	4	5	6	7
FI1	.901						
FI3	.847						
FI2	.804						
FI4	.767						
DI2		.882					
DI1		.807					
DI4		.786					
DI3		.719					
DI5		.539					
TE4			.820				
TE2			.803				
TE5			.797				
TE1			.616				
TE3			.566				
NACC4				.855			
NACC2				.818			
NACC3				.770			
NACC1				.745			
GS4					.868		
GS3					.858		
GS1					.750		
GS2					.685		
TI2						.786	
TI3						.760	
TI1						.681	
TI4						.677	
TS1							.899
TS2							.804
TS4							.610

Source: From the author's analysis data

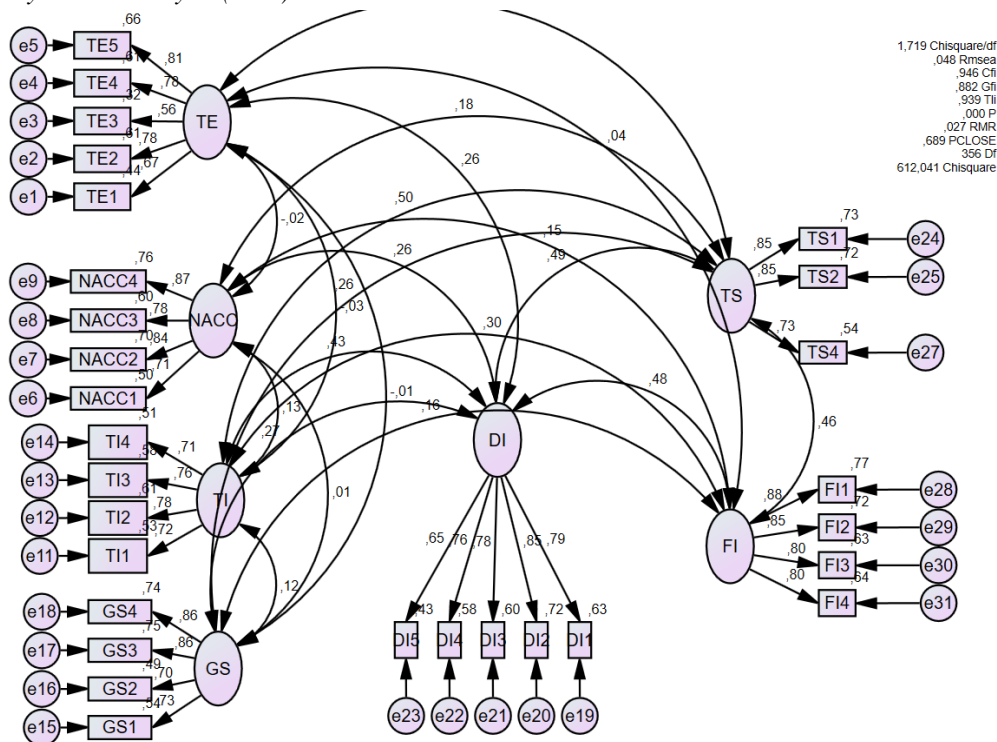*4.2.1.3. Confirmatory Factor Analysis (CFA)*

Figure 2: Result of CFA
Source: From the author's analysis data

Based on the results, the value of Chi-square = 612,041; CMIN/DF = 1.719 (between 1 and 3); CFI = 0.946 (between 0.9 and 0.95); DFI = 0.882 (Between 0.8 and 0.9); TLI = 0.939 (>0.9), RMSEA= 0.048 (< 0.06), and Pclose = 0.689 (>0.05). All of the number satisfy the criterion of model fit index, which means that it is a good model fit (Gaskin, J. & Lim, J. 2016).

Table 7: Value of CR and AVE

	CR (Composite Reliability)	AVE (Average Variance Extracted)
TE	0,847	0,529
NACC	0,877	0,642
TI	0,834	0,557
GS	0,870	0,628
DI	0,877	0,590
TS	0,855	0,663
FI	0,899	0,690

Source: From the author's analysis data

The measurement scale is considered as a reliable scale when the value of Composite Reliability is above 0.5 and the value of "Average Variance Extracted" is higher than 0.5 (Hair et al. 1992; Nunnally, 1978). Table 35 shows that the values of CR and AVE of TE, NACC, TI, GS, DI, TS, FI, are larger than 0.5. Therefore, reliability is satisfied.
4.2.1.4. Convergent validity

1. "The scale is considered to reach converged value when the index of Standardized Regression Weights is greater than 0.5 and statistically significant." (Hair et al. 1992)
2. According to Fornell & Larcker (1981), "another criterion to check the convergent validity is the value of AVE, and for the factor to achieve convergence, the AVE should be over 0.5."

Table 8: Standardized Regression Weights Value

			(Regression Weights)	(Standardized Regression Weights)
TE1	<---	TE	1,000	,665
TE2	<---	TE	1,009	,783
TE3	<---	TE	,685	,563
TE4	<---	TE	1,145	,782
TE5	<---	TE	1,140	,814
NACC1	<---	NACC	1,000	,710
NACC2	<---	NACC	1,498	,837
NACC3	<---	NACC	1,411	,775
NACC4	<---	NACC	1,588	,873
TI1	<---	TI	1,000	,725
TI2	<---	TI	1,016	,783
TI3	<---	TI	1,674	,762
TI4	<---	TI	1,168	,712
GS1	<---	GS	1,000	,732
GS2	<---	GS	,969	,702
GS3	<---	GS	1,214	,864
GS4	<---	GS	1,359	,859
DI1	<---	DI	1,000	,792
DI2	<---	DI	1,255	,847
DI3	<---	DI	1,017	,777
DI4	<---	DI	1,170	,759
DI5	<---	DI	,888	,653
TS1	<---	TS	1,000	,854
TS2	<---	TS	1,099	,850
TS4	<---	TS	1,015	,733
FI1	<---	FI	1,000	,879
FI2	<---	FI	,960	,847
FI3	<---	FI	,890	,796
FI4	<---	FI	,963	,797

Source: From the author's analysis data

All the indexes of Standardized Regression Weights and Regression Weights are over 0.5; moreover, the values of AVE of TE, NACC, TI, GS, DI, TS, FI are larger than 0.5 (see Table 7). Therefore, they meet all criteria, and the convergent validity of the scale is proven.

4.2.1.5. Discriminant validity

Hair et al. (2010) suggested that the Discriminant Validity is approved if it meets the following two criteria:
- "Maximum Shared Variance < Average Variance Extracted"
- "Square Root of AVE > Inter-Construct Correlations"

Table 9: Model Validity Measure

	AVE	MSV	TE	NACC	TI	GS	DI	TS	FI
TE	0,529	0,069	**0,727**						
NACC	0,642	0,066	-0,021	**0,802**					
TI	0,557	0,246	-0,025	0,126†	**0,746**				
GS	0,628	0,071	-0,011	0,014	0,116†	**0,793**			
DI	0,590	0,238	0,263***	0,258***	0,426***	0,266***	**0,768**		
TS	0,663	0,246	0,162*	0,179**	0,496***	0,257***	0,488***	**0,814**	
FI	0,690	0,233	0,039	0,152*	0,298***	0,157*	0,483***	0,460***	**0,830**

Source: From the author's analysis data

All MSV values are smaller than that AVE. In addition, SQRTAVE of TE is higher than the other 6 Inter-Construct Correlations, and other 6 items experience the similar pattern.

(In Table 9, the values of SQRTAVE of all items are highlighted in yellow). In conclusion, Discriminant Validity is checked and valid.

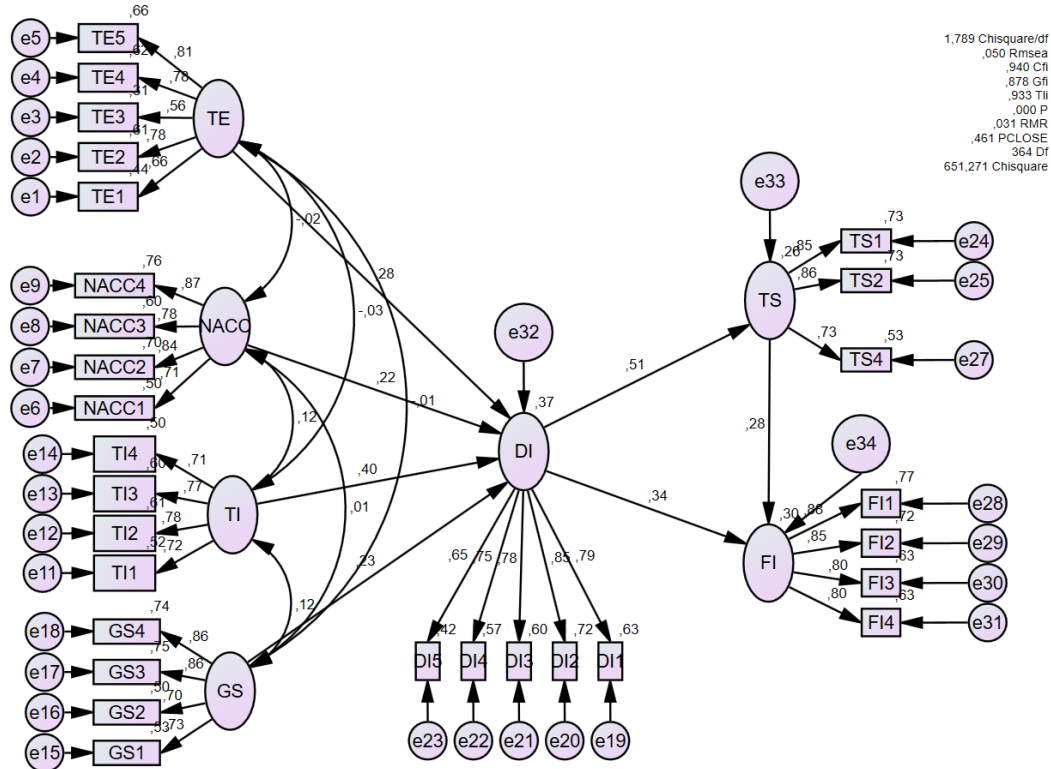*4.2.2. Structural Model: Model fit and Hypotheses testing*

Figure 3: SEM results
Source: From the author's analysis data

Based on the results, the value of Chi-square = 651,271; CMIN/DF = 1,789 (between 1 and 3); CFI = 0.940 (between 0.9 and 0.95); GFI = 0.878 (between 0.8 and 0.9); TLI = 0.933 (>0.9), RMSEA= 0.031 (< 0.06), and Pclose = 0.461 (>0.05). All the number satisfy the criterion of model fit index. Thus, it is a good model fit (Gaskin, J. & Lim, J. 2016).

Table 10: Regression Weights table

			Regression Weights	S.E.	C.R.	P-value
DI	<---	TE	,227	,048	4,712	***
DI	<---	NACC	,267	,070	3,809	***
DI	<-	TI	,486	,077	6,335	***
DI	<---	GS	,139	,034	4,044	***
TS	<---	DI	,482	,060	8,010	***
FI	<---	DI	,643	,130	4,954	***
FI	<---	TS	,569	,138	4,135	***

Source: From the author's analysis data

In order to conduct hypothesis testing, the value of Sig (see P-value column of table 10) is checked. Statistically, when P-value is below 5%, it shows strong evidence against the null hypothesis and is significant. According to Table 10, all of P-Value is ***, below 1%. Therefore, the result of hypothesis testing step is presented as following (Table 11):

Table 11: Summary of Hypothesis testing

Hypothesis	Result
H1: Tourism environment has a positive influence on destination image.	**Supported**
H2: Natural and cultural conditions have a positive influence on destination image.	**Supported**
H3: Infrastructure has a positive influence on destination image.	**Supported**
H4: Government support has a positive influence on destination image.	**Supported**
H5: Destination image has a positive influence on tourist satisfaction.	**Supported**
H6: Destination image has a positive influence Future Intention.	**Supported**
H7: Tourist satisfaction has a positive influence on Future Intention.	**Supported**

Source: From the author's analysis data

5. DISCUSSION

In order to identify which factors affect Future Intention in PN-KB National Park, H6 and H7 are checked by SEM via Amos. With the P-value at *** (below 1%), they have supported results. This means that two independent variables Destination Image (DI) and Tourist Satisfaction (TS) have significant effect on Future Intention (FI). To be more specific, the variable Destination Image (DI) has a stronger positive effect on Future Intention (FI) with standardized regression weight at 0.341 while Tourist Satisfaction (TS) has a weaker positive effect with standardized regression weight at 0.284. These results support previous studies in tourism. This positive relationship between Destination Image and Future Intention is already supported by results from Shafiee et al. (2016), Kanwe et al. (2019), Hai et al. (2014). In addition, these studies also confirmed the positive influence

of Tourist satisfaction on Future Intention (including intention to revisit and word of mouth).

The first 4 hypotheses (H1, H2, H3, and H4) are used to test which factors directly impact Destination Image. The previous study conducted in Phong Nha Ke Bang of Hai et al. (2020) stated that Destination Image includes 4 factors (Tourism for infrastructure (TI), Tourism environment (TE), Government support (GS) and Natural and cultural conditions (NACC)), but it did not measure the impact of each 4 independent variables on Destination Image. This study measures their impact and concludes that hypotheses H1, H2, H3 and H4 are supported with the P-value of 0.00 and standardized weights of 0.402, 0.278, 0.229 and 0.215, respectively. In conclusion, Tourism Infrastructure, Tourism Environment, Government Support, and Natural and Cultural Conditions all positively affect Destination Image.

The data analysis shows that Destination positively affects tourist satisfaction with the P-value at *** (below 1%) and with a strong standardized regression weight at 0.512. This result fits with the results of previous studies such as Ramseook-Munhurrun, Naidoo, and Seebaluck (2015); Shafiee et al. (2016), and Kanwe et al. (2019).

Before the outbreak of COVID-19, this national park was known as an outstanding tourist destination in Viet Nam. But during the pandemic, the number of tourists and tourist income of this National Park declined significantly, especially from 2019-2021. That's why this park needs to improve its destination image to increase visitor satisfaction and generate positive future intention when it reopens to tourists in 15th March. In order to boost the satisfaction, revisit intention, as well as positive WOM of travelers after their visit, this paper has the following recommendations:

Because this is a world heritage that attracts visitors from Viet Nam and around the world, it needs to focus on improving and developing its destination image. To be more specific, it is essential for the local government to have some activities to increase visitor's awareness about the importance of this national park and protecting the biodiversity, atmosphere, as well as landscape of the destination. In addition, the park's tourist center needs to create more attractive souvenirs related to the destination, employ more tour guides who are well-trained about this park, and provide better infrastructure to because it is located far from Dong Hoi City. In addition, continuing to ensure the security for customers is important to meet the visitors' satisfaction.

6. CONCLUSION AND RECOMMENDATION

6.1 Conclusion

In conclusion, the study is conducted based on the model as well as the literature review of relevant existing studies. The results support previous findings. In addition, this paper used a quantitative approach as the main method, which includes some statistical methods and uses both SPSS as well as Amos for data analysis stage. It found that the Destination Image of the Phong Nha Ke Bang National Park is positively influenced by the following 4 elements: Tourism Infrastructure, Tourism Environment, Government Support, and Natural and Cultural Conditions. These positive relationships have not been tested before this study. In addition, this study reaffirms the results of previous studies such as the positive impact of Destination Image and Tourist Satisfaction on Future Intention and the positive impact of "Destination Image" on "Tourist Satisfaction".

6.2 Limitations and Recommendation for further research

The first limitation is that there are additional factors that directly affect Destination Image not mentioned in this paper. For future research, a short interview should be conducted to analyze these additional factors.

Secondly, because this study is conducted over the short time period of 2 months, it cannot provide the most comprehensive results. Future research should be conducted over a longer period, especially the data collection stage, to collect more data and generate more comprehensive results.

Finally, this study uses the quantitative method. Future studies should consider combining both Qualitative and Quantitative methods for more interesting findings.

REFERENCES

1. Abubakar, B., & Mavondo, F. (2014). Tourism Destinations: Antecedents to Customer Satisfaction and Positive Word-of-Mouth. Journal of Hospitality Marketing & Management, 23(8), 833-864.

2. Alhemoud, A. M., & & Armstrong, E. G. (1996). Image of tourism attractions in Kuwait. Journal of Travel Research, 34(4), 76-80.

3. Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. Psychological bulletin, 103-411.

4. Baker, D., & Crompton, J. (2000). Quality, Satisfaction and Behavioral Intentions. Annals of Tourism Research, 27, 785-804.

5. Beerli, A., & Martín, J. D. (2004, July). 31(3), 657-681. Retrieved from https://doi.org/10.1016/j.annals.2004.01.010

6. Bhattacherjee, A. (2001). An Empirical Analysis of the Antecedents of Electronic Commerce Service Continuance. Decision Support Systems, 32, 201-14.

7. Bigne, J., Sanchez, M., & Sanchez, J. (2001). Tourism image, evaluation variables and after purchase behavior: Interrelationship. Tourism, 22, 607-616.

8. Boyle, M. (2022, January 07). GOVERNMENT SPENDING & DEBT. Retrieved February 28, 2022, from Investopedia: https://www.investopedia.com/terms/i/infrastructure.asp

9. Bramwell, B., & Lane, B. (2010). Sustainable Tourism and the Evolving Roles of Govern-ment Planning. Journal of Sustainable Tourism, 18, 1-5.

10. Briedenhann, J. (2007). The Role of the Public Sector in Rural Tourism: Respondents' Views. Current Issues in Tourism, 10, 584-607.

11. Can, A. S., Alaeddinoglu, F., & Turker, N. (2014). LOCAL AUTHORITIES PARTICIPA-TION IN THE TOURISM PLANNING PROCESS. Transylvanian Reviewof Administrative Sciences, 190-212. Retrieved from https://www.researchgate.net/publication/28607359

3_Local_Authorities_Participation_in_the_Tourism_Planning_Process

12. Chang, H.-M., & Lin, C.-H. (2020). Island Tourism: Participation Behavior of Tourists. Social Behavior and Personality: An International Journal, 48.

13. Chen, C.-F., & Tsai, D. (2007). How Destination Image and Evaluative Factors Affect Behavioral Intentions? Tourism Management, 28, 1115-1122.

14. Chew, T., & Jahary, A. (2014). Destination images as a mediator between perceived risks and revisit intention: The case of post disaster Japan. Tourism Management, 24(9), 624 – 636.

15. Chi, G. Q., & Qu, H. L. (2008). Examining the structural relationships of destination image, tourist satisfaction and destination loyalty: an integrated approach. Tourism Management, 29, 624-636.

16. Chon, K. S. (1989). Understanding recreational traveler's motivation, attitude and satisfactionUnderstanding recreational traveler's motivation, attitude and satisfaction. The Tourist Review, 44, 3-7. Retrieved from https://doi.org/10.1108/eb058009

17. Comrey, A., & Lee, H. (1992). A first course in factor analysis. Hillsdale: NJ: Erlbaum.s

18. Connell, J., Page, S., & Bentley, T. (2009). Towards Sustainable Tourism Planning in New Zealand: Monitoring Local Government Planning Under the Resource Management Act. Tourism Management, 30, 867-877.

19. Coshall, J. T. (2000). Measurement of tourists' images: The repertory grid approach. Journal of travel research, 39(1), 85-89.

20. Crompton, J. L. (1979). An assessment of the image of Mexico as a vacation destination and. Journal of Travel Research, 17, 18-23.

21. Devesa, M., Laguna, M., & Picos, A. P. (2010). The role of motivation in visitor satisfaction: Empirical evidence in rural tourism. Tourism Management, 547-552. doi:10.1016/j.tourman.2009.06.006

22. Dinica, V. (2009). Governance for Sustainable Tourism: A Comparison of International and Dutch Visions', 2009. Journal of Sustainable Tourism, 17, 583-603.

23. Duc, P., & Kien, D. (2017). Influence of destination image, emotional value on visitor satisfaction and loyalty: Case study of Dalat City. Economic Journal and Development, 236, 82-91.

24. Echtner, C., & Ritchie, B. (2003). The meaning and measurement of destination image. Journal of Tourism Study, 14(1), 47-48.

25. Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. Journal of Marketing Research, 39-50.

26. Gaskin, J., & Lim, J. (2016). Model Fit Measures. AMOS Plugin, 1-55.

27. Geng, C., & QingChi. (2008). Examining the structural relationships of destination image, tourist satisfaction and destination loyalty: An integrated approach. Tourism Management, 29(4), 624-636.

28. George, D., & Mallery, M. (2003). SPSS for Windows, step by step: a simple (14 ed.). Boston: Allyn & Bacon.

29. Hai, P. T., Thuong, M. T., & N. L. (2020). TOURISTS' SATISFACTION, LOYALTY AND INTENTION TO RETURN: SURVEY AT PHONG NHA - KE BANG NATIONAL PARK, VIETNAM. JOURNAL OF SOUTHWEST JIAOTONG UNIVERSITY, 55, 2-4.

30. Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1992). Multivariate Data Analaysis. New York: Macmillan.

31. Hair, J. F., Black, B., Black, W. C., Babin, B. J., & Anderson, R. E. (2014). Multivariate Data Analysis 7th Pearson Prentice Hall. NJ: Upper Saddle River.

32. Hair, J., Black, W., Babin, B., & & Anderson, R. (2010). Multivariate Data Analysis (7th ed.). New Jersey: Prentice Hall.

33. Jeong, E., & Jang, S. S. (2011). Restaurant experiences triggerin positive electronic word-of-mouth (eWOM) motivations. International Journal of Hospitality Management, 30(2), 356-366.

34. Jeong, Y., Yu, A., & Kim, S.-K. (2019). The Antecedents of Tourists' Behavioral Intentions at Sporting Events: The Case of South Korea. Sustainability, 1-16.

35. Kaiser, H. F. (1974). An index of factorial simplicity. Psychometrika, 31-36.

36. Kanwe, S., Lingqiang, Z., Asif, M., Hwang, J., Hussain, A., & Jameel, A. (2019). The Influence of Destination Image on Tourist Loyalty and Intention to Visit: Testing a Multiple Mediation Approach. Tourism & Hotel Management.

37. Kozak, M., & Rimmington, M. (2000). Tourist Satisfaction with Mallorca, Spain, as an Off-Season Holiday Destination. Journal of Travel Research, 38, 260-269.

38. Lee, J., Graefe, A. R., & Burns, R. C. (2007). Examining the Antecedents of Destination Loyaltyin a Forest Setting. LEISURE SCIENCES, 463-481.

39. Lin, C., Morais, D., Kerstetter, D., & Hou, J. (2007). Examining the role of cognitive and affective image in predicting choice across natural, developed, and

theme-park destinations. Journal of Travel Research, 46, 183-194.

40. Mazumder, S., & Hasan, A. B. (2014). Measuring Service Quality and Customer Satisfaction of the Hotels in Bangladesh: A Study on National and International Hotel Guest. Tourism and Hospitality Management, 2, 2372-5133.

41. Moura, F. T., Gnoth, J., & Deans, K. R. (2015). Localizing Cultural Values on Tourism Destination Websites: The Effects on Users' Willingness to Travel and Destination Image. Journal of Travel Research, 54, 528-42.

42. Nguyen, T. (2009). Place development: Attributes and business customer satisfaction in Tien Giang province. Journal of Macromarketing, 29 (4), 384-391.

43. Nisco, A. D., Mainolfi, G., Marino, V., & Napolitano, M. R. (2015). Tourism satisfaction effecton general country image,destination image, andpost-visit intentions. Journal of Vacation Marketing, 21 (4), 305–317.

44. Nunnally, J. (1978). Psychometric Theory (2nd Ed.). New York: McGraw-Hill.

45. Pantelidis, I. (2010). Electronic meal experience: A content analysis of online restaurant comments. Cornell Hospitality Quarterly, 51(4), 483-491.

46. Phelps, A. (1986). . Holiday Destination Image— The Problem of Assessment: An Example Developed In Menorca. Tourism Management, 7(3), 168-180.

47. Pike, S. (2002). Destination image analysis: A review of 142 papers from 1973-2000. Tourism Management, 23(5), 541-549.

48. Pizam, A., Neumann, Y., & Reichel, A. (1978). Dimensions of Tourist Satisfaction with a Destination Area. Annals of Tourism Research, 314-322.

49. Prayag, G. (2008). Image, satisfaction and loyalty - The case of Cape Town. Anatolia, 19(2), 205-224.

50. Prayag, G. (2009). Tourists' evaluations of destination image, satisfaction, and future behavioral intentions-the case of mauritius. Journal of Travel & Tourism Marketing, 26(8), 836-853.

51. Prebensen, N. (2007). Exploring Tourists' Image of a Distant Destination. Tourism Management, 28(3), 747-756.

52. Raimkulov, M., Juraturgunov, H., & Ahn, Y.-j. (2021). Destination Attractiveness and Memorable Travel Experiences. Sustainability, 1.

53. Ramseook-Munhurrun, P., Seebaluck, N., & Naidoo, P. (2015). Examining the Structural Relationships of Destination Image, Perceived Value, Tourist Satisfaction and Loyalty: Case of Mauritius. Procedia - Social and Behavioral Sciences, 175. doi:10.1016/j.sbspro.2015.01.1198

54. San Martín, H., & Rodríguez. (2008). Exploring the cognitive – affective nature of destination image and the role of said factors in its formation. Tourism Management, 29 (2), 263-277.

55. Shafiee, M. M., Tabaeeian, R. a., & Tavakoli, H. (2016). The effect of destination image on tourist satisfaction, intention to revisit and WOM: An empirical research in Foursquare social media. Conference: 2016 10th International Conference on e-Commerce in Developing Countries: with focus on e-Tourism (ECDC). doi:10.1109/ECDC.2016.7492964

56. Stylos, N., Vassiliadis, C., Bellou, V., & Andronikidis, A. (2016). Destination images, holistic images and personal normative beliefs: Predictors of intention to revisit a destination. Tourism Management, 53, 40-60.

57. Sun, X., Chi, C. G., & Xu, H. (2013). Developing destination loyalty: The case of Hainan Island. Annals of Tourism Research. 43, 547-577. doi: DOI: 10.1016/j.annals.2013.04.006

58. Swan, J. (1981). Disconfirmation of expectations and satisfaction with a retail service. Journal of Retailing, 57, 49-66.

59. Tabachnick, B. G., & Fidell, L. S. (2007). Using Multivariate Statistics. New York: Allyn and Bacon.

60. Walmsley, D., & Jenkins, J. (1993). Appraisive images of tourist areas: Application of personal construct. Australian Geographer, 24, 1-13.

61. Wang, C.-y., & Hsu, M. K. (2010). The Relationships of Destination Image, Satisfaction, and Behavioral Intentions: An Integrated Model. Journal of Travel & Tourism Marketing, 27(8), 829-843.

62. Yoon, Y., & Uysal, M. (2005). M. An examination of the effects of motivation and satisfaction on destination loyalty: A structural model. Tour. Manag., 26, 45–56.

63. Zhang, H., Fu, X., Cai, L., & Lu, L. (2014). Destination image and tourist loyalty: A meta-analysis. Tour. Manag., 40, 213–223.