

IMPACT OF TOURISM IMAGE AND MOTIVATION OF THAI AND CHINESE TOURISTS FOR TRAVELING IN LAO PEOPLE'S DEMOCRATIC REPUBLIC BY LAOS-CHINA RAILWAY

Sakkarin NONTHAPOT^{ID}

Khon Kaen University, Faculty of Interdisciplinary Studies, Khon Kaen, Thailand, e-mail :sakkno@kku.ac.th

Kitimaporn CHOOCHOTE^{ID}

Independent Researcher, Phuket, Thailand, e-mail: kitimaporn.c@gmail.com

Warangkana THAWORNWIRIYATRAKUL^{*ID}

Khon Kaen University, Faculty of Interdisciplinary Studies, Khon Kaen, Thailand, e-mail: wartha@kku.ac.th

Citation: Nonthapot, S., Choochote, K., & Thawornwiriyaatrakul, W. (2025). Impact of tourism image and motivation of Thai and Chinese tourists for traveling in Lao people's democratic republic by Laos-China railway. *Geojournal of Tourism and Geosites*, 59(2), 628–637. <https://doi.org/10.30892/gtg.59210-1442>

Abstract: The main group of Thai and Chinese tourists plays a significant role in the tourism industry of the Lao People's Democratic Republic (Lao PDR). While, the opening of the Laos-China high-speed train service with routes passing through major tourist spots of Lao PDR, will incentivize old tourists to return to travel again or to attract new tourists to attract interest. This research aims to: 1) Test the factors affecting travel motivation. 2) Study the tourism image and motivation factors affecting repeat visits among Thai and Chinese tourists traveling to Lao PDR by train. The population is Thai and Chinese tourists travelling to the Lao PDR using the Lao-China high-speed train service. This study focuses on 4 provinces of Lao PDR, which are the Vientiane Capital City, Vientiane, Luang Prabang and Oudomxay Provinces. A total of 400 samples were collected using a questionnaire in both Thai and Chinese. Explanatory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) were used alongside Structural Equation Modeling (SEM) to verify the structural correctness of latent variables and analyze model consistency using WarpPLS 7.0. The results found that: 1) Demographic factors affect both push factors (e.g., experience, cultural exchange needs) and pull factors (e.g., tourist attraction atmosphere). These factors significantly influence the travel motivation of Thai and Chinese tourists. 2) The tourism image factor consists of four elements: Environmental image of natural attractions; Cultural environmental image; Social environmental image; and Tourist attraction infrastructure. Tourism image and motivation factors positively affect the decision to revisit, with tourism image having a stronger influence. Enhancing Lao PDR's tourism image is important for attracting repeat tourists. According to the results of the study, tourism in Lao PDR is reflected in Thai and Chinese tourists who decide to travel to Lao PDR. In addition, the main factor in travelling to Lao PDR, that is the motivation of tourists, comes from the demographic factors of the tourists themselves. Creating a good tourist image of the Lao PDR in all tourism-related structures. It is a very important variable that will bring a response to the intention of travelling again. For this reason, authorities should have guidelines or measures to develop and promote the country's image in all dimensions. This is to encourage Thai and Chinese tourists, who are the main tourist groups, as well as tourists from other countries, to meet the demand for repeat tourism in Lao PDR.

Keywords: Laos-China Railway, motivation, tourism image, revisit, tourism demand

* * * * *

INTRODUCTION

The COVID-19 pandemic crisis had a severe impact on the global economy and society, which has caused changes in human daily routines, including tourism. According to statistics, in 2020, the global tourism industry has shrunk by more than 49.1 percent, and in mid-2022, people will begin to return to normal life. The tourism industry's GDP is expected to grow by 36.8%, followed by the Asia-Pacific region with a rate of 36.3 percent (Tatereview, 2022).

At the same time, one of the most attractive countries in terms of tourism for the Asia-Pacific region is the Lao People's Democratic Republic (Lao PDR or Laos), which has re-opened high-speed rail services after the COVID-19 crisis has improved on May 2022, resulting in an increase in the influx of tourists to Lao PDR.

The COVID crisis has begun to improve, resulting in an increase in the influx of tourists to Lao PDR. The construction of high-speed trains such as the Laos- China Railway connecting the Bo Han checkpoint. Thai Ethnic Autonomous Region or Xishuangbanna (China), and Laos at Boten, passing through Luang Prabang and ending in the capital Vientiane (Figure 1). The Laos- China Railway opened on December 3, 2021, there are many tourists who are very interested in traveling in Laos using high-speed trains to travel, with 731,754 Thai and Chinese tourists entering Laos in 2022 (Vientiane Times, 2023). For the beginning of 2023 (January-March), there were 344,405 Thai tourists and 143,312 Chinese tourists entering Lao PDR (Table 1). The Laos-China high-speed railway line runs through various districts, with the main important station being Vientiane Capital Station. Vang Vieng Station, Luang Prabang Station, and Mueang Xay Station, each of which has important tourist attractions and is the target of tourists travelling to Lao

* Corresponding author

PDR. In addition, Lao PDR aims to attract 1.4 million foreign tourists in 2023, with revenue from the tourism sector of about 340 million USD (The Laotian Times, 2023). It must create incentives for tourists to travel.

Table 1. Number of tourists entering Lao PDR during 2022 – 2023 (Source: The Laotian Times, 2023)

Tourist Groups	Number of Surfers Travel in 2022	Number of tourists in 2023 (January-April)
Thailand	731,754	454,001
Vietnam	359,721	244,174
China	45,573	210,188
South Korea	26,008	53,785
United States	18,447	22,157
others	112,835	130,645
Total	1,294,338	1,114,950

Including creating a unique image of tourist attractions. The opening of the Laos-China high-speed train service with routes passing through major tourist spots of Lao PDR, will incentivize old tourists to return to travel again or to attract new tourists to attract interest. Motivating tourists is important (Nonthapot, 2020; Sihabutr et al., 2025). One of the important things is the image. However, no studies have been made on the motives of tourists and the image of such places. Therefore, this research intends to study the motivation of tourists to visit, including the image of tourist attractions, so that tourists decide to return to visit and to make new tourists interested in visiting Lao PDR. And it will also increase the nation's income from tourism.



Figure 1. Laos-China high-speed rail route: a. Vientiane Capital Station, May 17, 2024; b. Vang Vieng Station, May 17, 2024; c. Luang Prabang Station, May 19, 2024; d. Muang Xai Station, May 20, 2024, respectively (Source: Positioning, 2024; and researchers)

LITERATURE REVIEW

The general context of the concept of motivation has been used to describe many tourism incentives. For the reason, it is an important factor in stimulating tourism, the motivation is divided into 2 types: 1. Internal motivation (intrinsic motivation) is a drive from within a person, which may be caused by thoughts, attitudes, interests, etc. 2. External motivation (extrinsic motivation) is a force pushed from outside the person that stimulates behavior (Uysal & Hagan, 1993). It is consistent with the concept of the push factor and the pull factor (Push - Pull Factors) (Dann, 1977; Pearce, 1993). That explains that when people want to travel to satisfy their desires. These are desires that arise from the basic driving force that makes people want to travel and the concept of a pulling factor that tourists are attracted to tourist attractions that are designed or have various activities, which are external factors that influence people to travel to meet their needs.

However, travel is not only a motivation, but also a tourism image is also a factor that affects the travel of tourists. Tourism Image is the sum of thoughts, beliefs, and feelings. Therefore, a person's expectations and impressions of a place or object (Baloglu & McCleary, 1999). When the image of tourism is good, it shows famous places. It is beautiful. On the contrary, tourists will avoid traveling to places with a bad image (Kotcharee et al., 2021). Tourism is caused by the tourism experience of tourists, both directly and from the words of others, including perception from four advertisements, public relations of tourism organizations (Tsiotsou & Goldsmith, 2012). Impressions that accumulate from knowledge and experience together to create awareness from what appears in the mind (Saeho, 2016) which Weaver & Laura (2002) said that returning to travel Demonstrate satisfaction with previous travel experiences. The effect of motivation has been studied (Tang et al., 2022).

The image of the destination and the satisfaction with the willingness of tourists to return to rural tourism were studied. Travel Incentives, destination image and the satisfaction of coming back again. It was found that motivation to learn and entertain the natural, social environment, and tourist satisfaction have a direct and positive effect on a traveler's willingness to visit (Image of returning trips and motivation). These is the same studies of Nopsuwan & Chansri (2021); (Kotcharee et al.,

2021) studied the image factors of tourist attractions to the loyalty of tourists. It was found that the factors that affect the loyalty of tourist attractions are environmental factors, access the infrastructure, and cultural heritage are affected on return tourism. It was found that the factors that affect the loyalty of tourist attractions are environmental factors, access to infrastructure, and cultural heritage, which influence return tourism (Jirawattanaphan & Sukserm, 2021; Chou et al., 2023). Moreover, motivation and satisfaction significantly affect tourists' intentions to revisit (Tavitiyaman et al., 2022).

From the above, tourism motivation is influenced by pushing and sucking factors. This is a consequence of demographic factors. However, when tourism incentives are generated, it will affect repeat travel, but that is not the only factor. There are also tourism image factors that may bring revisit of tourist results and created in Figures 2 and 3 in the topic 3.2.

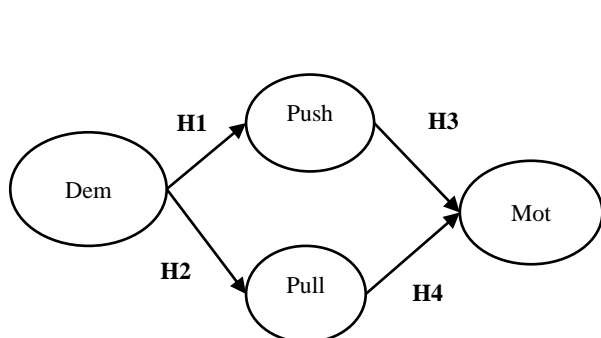


Figure 2. Conceptual research framework I

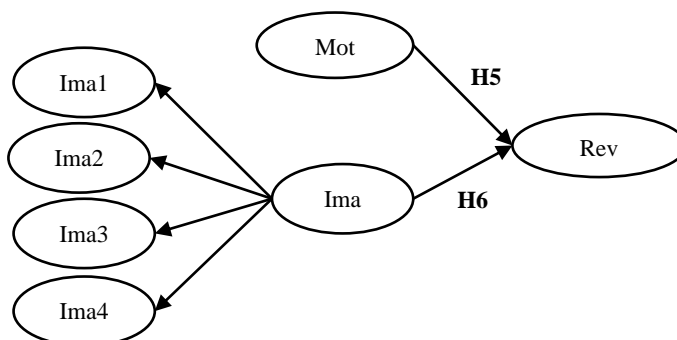


Figure 3. Conceptual research framework II

METHODOLOGY

1. Population and sample

This research is quantitative research in which the population is Thai and Chinese tourists travelling to the Lao PDR using the Lao-China high-speed train service. This study focuses on 4 provinces of Lao PDR, which are the Vientiane Capital City, Vientiane, Luang Prabang and Oudomxay Provinces. The sample is the number of tourists travelling in Laos using the Lao-China high-speed train on the trip because the exact population is unknown. Therefore, the sample was calculated using an unknown population formula 95%, which uses the formula of Cochran, 1977.

$$\text{Formular } n = \frac{Z^2 pq}{e^2}$$

When n is the number of samples; p is the chance of the sample using the service, set to 0.5; q is the chance of not using the service, which is equal to 1-p in the case of the group; Z is the desired confidence level (95%); e is the acceptable tolerance ratio (5%). When represented in the formula by a given confidence level of 95%, Z = 19.6 and an acceptable margin of error in estimating the total population proportion is 5% with e=0.05.

$$\text{Yes. } n = \frac{(1.96)^2 (0.5)(1-0.5)}{0.05^2} = 384.16$$

When calculating the number of samples, the number of samples is 384 observations. In to increase the accuracy of data analysis, 400 samples are collected. This is in line with the study of Sihabutr & Nonthapot (2021), which is divided into the number of Thai tourist groups is 282 samples, Chinese tourists are 118 samples. According to Table 2, divide the data for each area in proportion to the number of hotels, guest houses, restaurants, restaurants & entertainment venues in each province. The sample size is as shown in Table 3, using a convenient sampling method. For collecting the questionnaire, the researchers got permission from the Ministry of Culture, Culture and Tourism of Lao PDR.

Table 2. Proportion of Thai and Chinese tourists in Lao PDR (Source: The Laotian Times, 2023)

Tourist Groups	Number of tourists in Lao PDR Laos 2022	Ratio	Number of samples
Thai tourists	344,405	70.6	282
Chinese tourists	143,312	29.4	118
Total	487,717	100.0	400

Table 3. Proportion of sample sizes in Lao PDR by number of hotels, guesthouses, resorts, restaurants and entertainment venues in 2022 (Source: Tourism Development Department, 2023)

Provinces	Amount	Ratio	Sample Size	
			Thai	Chinese
Vientiane Capital	1,222	30.8	87	36
Vientiane Province	1,455	23.7	67	28
Luang Prabang Province	1,592	28.2	80	33
Oudomxay Province	893	17.3	49	20
Total	5,162	100.0	282	118

2. Data Analysis

The researcher conducted a theoretical study and related research to create a questionnaire as a tool for data collection by dividing it into 6 parts with 50 questions, which are as follows: Part 1: General information of the respondents (6 questions), Part 2: Demographic opinion level that affects travel decisions (6 questions), Part 3: Opinion level about

internal and external factors in travel decisions (17 items). Part 4: Opinions on the motivation of tourists to make travel decisions: 4 questions, Part 5: Opinions on the image of tourist attractions, 12 questions, and Part 6: Opinions on tourists' return visits, 5 questions. When the data is collected, descriptive statistical analysis is performed. Descriptive Statistics was used to analyze the general data of the respondents in Part 1 to analyze the general data, and inferential statistics were analyzed to analyze the data in Parts 2, 3, 4, 5 and 6 of the questionnaires to answer objectives 1 and 2 by analyzing by Structural Equation Modeling (SEM), which is an analysis of Explanatory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) to verify the structural integrity of the latent variables and to analyze the conformity of the model. This analysis employed the using the WarpPLS 7.0 software that is suitable for development model based on SEM-variance base (Hair et al. 2010, Sihabutr and Nonthapot (2021). The model shows as shown in Figure 2 and 3 respectively.

When required to: Rev is Returning to travel; Dem is demography; Mot is tourism motivation; Ima is image of the tourist attraction or Tourism image; Ima1 is environmental image of natural attractions; Ima2 is cultural environment; Ima3 is social environment Image; Ima4 is tourist attraction infrastructure; Push is the push factor; Pull is the pull factor.

The study hypothesis is set out as follows:

H1: Demographic factors affect the push factor.

H2: Demographic factors affect the pull factor.

H3: Driving factors affect tourism motivation factor.

H4: Attraction factors affect tourism motivation factor.

H5: tourism motivation affects the return of repeat trips.

H6: The image of tourist attractions affects the return of repeat trips.

RESULTS

The objectives of this study were 1) to study the pushing and pulling factors that affect the motivation of Thai and Chinese tourists to travel and 2) to study the factors that affect the decision to revisit by high-speed train of Thai and Chinese tourists in the Lao PDR area. After studying the research and related theories, the researcher created a research tool and tested the content conformity index CVI) of 5 experts. After that, the test was conducted before collecting actual data from 30 samples and analyzing the reliability value of 0.83, which is considered to be highly reliable (Nasootorn et al., 2023; Nonthapot et al., 2024). Lao PDR, including Luang Prabang, Oudomxay, Vientiane Provinces and Vientiane Capital City. The results of the data analysis were divided into 2 parts according to the objectives, as follows:

Part 1: Pushing and pulling factors that affect the motivation of Thai and Chinese tourists to travel to the Lao PDR by WarpPLS 7.0

Part 2: Factors that affect the motivation and image that affect the decision to return by high-speed train of Thai and Chinese tourists to the Lao PDR with WarpPLS 7.0

1. General information of the respondents

The sample in this study was 400 people. It was found that most of the tourists were female, accounting for 52 percent, aged between 31–40 years, accounting for 34 percent, a diploma/bachelor's degree, accounting for 63.50 percent. Most of them were employed as employees of private companies, accounting for 35.80 percent, and earning 30,001-50,000 baht/month, Accounting for 30.80 percent, as shown in Table 4.

Table 4. Number and percentage of general information of respondents

		amount	percent
Sex	male	184	46.00
	female	210	52.50
	other	6	1.50
	Total	400	100.00
Age	18-20 years	4	1.00
	21-30 years old	59	14.80
	31-40 years old	136	34.00
	41-50 years	98	24.50
	51-60 years	57	14.20
	61 years and older	46	11.50
	Total	400	100.00
Education Level	Primary Education	10	2.50
	Secondary Education/Equivalent	27	6.80
	Diploma/Bachelor's Degree	254	63.50
	Postgraduate	109	27.30
	Total	400	100.00
Occupation	student	10	2.50
	Employees of private companies	143	35.80
	Government Officials/Employees of State Enterprises	82	20.50
	Trading/Business Owner	115	28.70
	General Contractor	29	7.20
	other	21	5.30
	Total	400	100.00

Income	Below 10,000 Baht/month	13	3.30
	10,001-15,000 THB/month	38	9.50
	15,001-30,000 THB/month	117	29.30
	30,001-50,000 THB/month	123	30.80
	50,001-100,000 THB/month	75	18.80
	More than 100,000 Baht/month	34	8.50
	Total	400	100.00

2. Pushing and pulling factors that affect the motivation of Thai and Chinese tourists to travel to the Lao PDR

According to a study of the pushing and pulling factors that affect the motivation of Thai and Chinese tourists to travel in Lao PDR. In this study, demographic factors (Dem) affect the push factor (Push) and pull factor (Pull). In addition, the push and pull factors affect the motivation factors (Mot) for making travel decisions. The analysis is carried out in the form of structural equations (Structural Equation Model: SEM) with the program Warp PLS 7.0. It was found that the weight value of the elements (Cross-Loading). It represents the value of the relationship between the latent variable and the observable variable of this structural equation. Values from 0.63-0.88 This is considered more valuable than 0.60 and significant (Henseler et al., 2012) as shown in Table 5. From the analysis, it is found that the reliability of the structural equation has statistical values that show the accuracy of the gauge in the equation as follows: The average path coefficient (APC) = 0.599, $P < 0.001$ shows the average degree of influence of the equation, and the statistical significance is less. The Average R-squared (ARS) value = 0.616, $P < 0.001$ assumes that the level of ability to explain the mean of the MOT variable of the equation, which is greater than 0.20, is within the acceptable threshold and the statistical significance level is less than 0.05 (Kock, 2017). Average full collinearity VIF (AFVIF) = 2. The Tenenhaus GoF (GoF) = 0.614 is above 0.36, indicating that the explanatory power of the model is considered acceptable (Cohen's, 1988).

Table 5. Cross-loadings (Source: From calculation)

Factors	Demography (Dem)	Push	Pull	Tourism motivation (Mot)
Entering Retirement Age (DEM1)	0.80			
Empowering Women to Lead in Tourism (DEM2)	0.85			
Your Income (Dem3)	0.85			
Your level of education (Dem4)	0.73			
Your Education Level (Dem5)	0.70			
Your Nationality (DM6)	0.77			
Your Past Travel Experiences (Push1)		0.75		
Your past travel behaviors (Push2)		0.78		
Your own desire to travel (Push3)		0.81		
Unique experiences to get from a travel trip (Push4)		0.75		
Entertainment from travel (Push5)		0.71		
The need to exchange and learn about your culture with other cultures. (Push6)		0.70		
The need to meet people. (Push7)		0.70		
Your financial liquidity (Push8)		0.73		
Need to relax (Push9)		0.63		
Finding information about the tourist attractions you are going to visit (Push10)		0.70		
The atmosphere of the attraction (Pull1)			0.70	
Service at tourist spots (Pull2)			0.82	
Attraction Safety (Pull3)			0.85	
Transportation Facilities (Pull4)			0.78	
The marketing strategy of the services of the tourist attractions that you perceive (Pull5)			0.76	
A new experience for you to shop for souvenirs at the attraction (Pull6)			0.79	
Advertising to invite tourists from the government and various agencies. (Pull7)			0.81	
Tourist attractions (Mot1)				0.80
Personal motivation (Mot2)				0.88
Emotional (Mot3)				0.88
Public Relations (Mot4)				0.67

Table 6. Latent variable coefficients (Source: from calculation)

Diagnostics	Dem	Push	Pull	Mot
R^2		0.68	0.51	0.65
Adjusted R^2		0.68	0.50	0.64
CR	0.91	0.92	0.92	0.89
Cronbach's alpha	0.88	0.90	0.90	0.83
AVE	0.62	0.52	0.63	0.67
VIF	2.76	3.30	2.69	2.91

From Table 6, it is found that the decision coefficient (R^2) of demographic factors (Dem) influencing the push factor and pull factor $R^2 = 0.68, 0.51$, respectively, the deck of push and pull factors influence the tourism motivation factor

(Mot) $R^2 = 0.65$, adjusted R^2 has values ranging from 0.50 to 0.68, CR = 0.89 to 0.92, and Cronbach's alpha = 0.83 – 0.90, which is greater than 0.7 (Kock & Lynn, 2012). AVE = 0.52 – 0.67 is greater than 0.5, which is considered to be a valid latent variable relationship (Henseler et al., 2015; Fornell & Larcker, 1981; Kock & Lynn, 2012), and VIF = 2.76–3.30, which is less than 3.30 (Kock, 2015c; Kock & Lynn, 2012), showing that the variables are correlated at an acceptable level, resulting in a reliable model and leading to the estimation results shown in Figure 4.

From Figure 4, when testing, the statistics are appropriate and within acceptable values. It was found that the demographic factor (DEM) influenced the push factor and the pull factor, which are the transmission variables between the DEM and MOT factors, with β values of 0.83 and 0.72 respectively. There is a statistical significance of less than 0.01 for the pushing factor. The pushing factor influences the tourism motivation factor (MOT) of $\beta = 0.44$ and has a statistical significance of less than 0.01 (99%), and the pull factor had effect on the tourism motivation factor of $\beta = 0.41$, which is statistically significant less than 0.01.

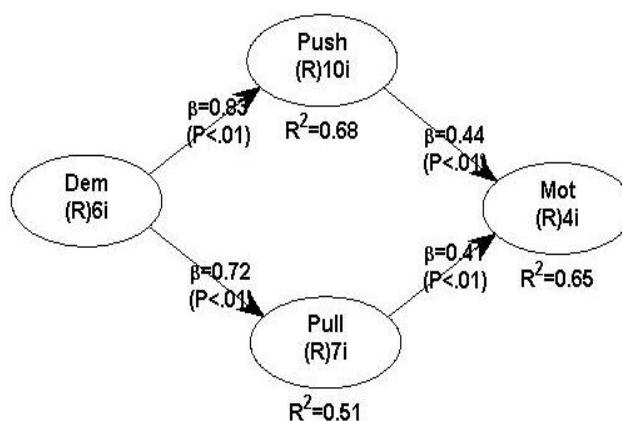


Figure 4. Analysis of conceptual framework I

3. Factors affecting the decision to visit by high-speed train of Thai and Chinese tourists in the Lao PDR area

Based on the study of factors that affect tourism motivation. Therefore, the researcher has studied the motivation factors in tourism that affect the return of travel according to the second conceptual research framework (Figure 3). The independent variable is defined as a factor. Image of the tourist attraction and tourism motivation factors. The following variables are the factors of returning to travel. The researcher studied the elements of the image factor of tourist attractions to confirm the composition of the factors. The image of the tourist attraction is appropriate. By analyzing the survey elements. (Exploratory Factor Analysis: EFA). Analysis of the elements of the image of tourist attractions, which is an analysis of the Exploratory Factor Analysis (EFA) is 0.85, Bartlett's Test of Sphericity Equal to 1613.81, df is 66 and the P-value is less than 0.01. It means that the information obtained is appropriate (Hair et al., 2010) as shown in This Table 7.

Table 7. KMO and Bartlett's Test (Source: From calculation)

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.85
Bartlett's Test of Sphericity	Approx. Chi-Square	1613.81
	df	66
	Sig.	0.001

Then, considering the eigenvalues using the Varimax axis rotation method, it was found that there were 4 values above 1.00, as shown in Table 8, which shows that the image indicators of tourist attractions can be grouped into 4 factors.

Table 8. Total variance explained (Source: From calculation)

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.518	37.648	37.648	4.518	37.648	37.648
2	2.035	67.819	67.819	2.035	67.819	67.819
3	1.667	13.894	51.542	1.667	13.894	51.542
4	1.049	8.742	60.284	1.049	8.742	60.284
5	.943	7.856	68.140			
6	.660	5.502	73.642			
7	.588	4.903	78.545			
8	.558	4.652	83.197			

When considering the factors, each variable has a loading value of more than 0.70 (Table 9) to represent the grouping of factors of the variables. Cultural Environment The image of the social environment and the infrastructure of tourist attractions can be classified into the same group and the latent variables are named to reflect the meaning of the overall factor, namely the image of the tourist attraction.

Table 9. Results of loading analysis

Questions	Component			
	1	2	3	4
The security and safety of buildings in tourist attractions such as buildings, stairs, etc.	0.77			
The road layout is appropriate and accessible.	0.84			
Cleanliness within tourist attractions	0.79			
Unique natural uniqueness		0.81		
There is a variety and richness of the landscape.		0.84		
It has a beautiful ecological environment and abundant waters.		0.82		
It has a highly recognizable traditional architecture.			0.83	
Having local cuisine with an identity			0.81	
There are activities of the traditional agricultural lifestyle.			0.76	
Interaction of local people				0.81
Having a positive attitude of the overall tourism provider.				0.86
Reasonable pricing of goods and services				0.85

After studying the elements of the image factors of tourist attractions and studying the factors that affect the motivation to travel, the factors that affect the return of Thai and Chinese tourists by high-speed train in Lao PDR are analyzed from the image factors of tourist attractions (Ima). This includes 4 variations comprising the environmental image of natural attractions (Ima1), Cultural Environment Image (Ima2), Social Environment Image (Ima3) and Tourist attraction infrastructure (Ima4). Then we took the whole of 4 factors to test the impact on the decision to visit again (Rev). This is a factor combined with the motivation factor in tourism (Mot) that affects the Rev factor.

According to the model as shown in Figure 3, the analysis was carried out in the form of a Structural Equation Model (SEM) with the program WarpPLS 0.7. The results of the estimation showed that the weight of the elements (Cross-Loading It represents the value of the relationship between the latent variable and the observable variable of this structural equation. Values from 0.67-0.90 This is considered more valuable. 0.60 and significant (Henseler et al., 2012) as shown in Table 10. From the analysis, it is found that the reliability of the structural equation has statistical values that show the accuracy of the gauge in the equation as follows: The average path coefficient (APC) = 0.674, $P < 0.001$ shows the average degree of influence of the equation and is less statistically significant. 0.05. Average R-squared (ARS) = 0.641, $P < 0.001$ assumes that the level of ability to explain the mean of Mot variable in the equation, which is greater than 0.20, is within the acceptable threshold and is less than 0.05 (Kock, 2011c).

Table 10. Cross-loadings (Source: From calculation)

Factors	Ima1	Ima2	Ima3	Ima4	Rev	Ima	Mot
Environmental Image of Natural Tourism Sites (Ima1)						0.76	
1. Unique Nature (Ima1.1)	0.81						
2. Diversity and Landscape Integrity (Ima.2)	0.89						
3. It has a beautiful ecological environment and rich water (Ima1.3).	0.72						
Cultural Environmental Image (Ima2)						0.79	
1. It has a highly recognizable traditional architecture (Ima2.1).		0.86					
2. Having Local Food with Identity (Ima2.2)		0.87					
3. Traditional agricultural lifestyle activities (Ima2.3)		0.82					
Social Environmental Image (Ima3)						0.85	
1. Local Human Relations (Ima3.1)			0.82				
2. Overall Positive Attitude of Travel Providers (Ima3.2)			0.87				
3. Reasonable Pricing of Goods and Services (Ima3.3)			0.79				
Tourist Infrastructure (Ima4)						0.71	
1. Stability and safety of buildings in tourist attractions such as buildings, stairs, etc . (Ima4.1)				0.87			
2. The road layout is reasonable and accessible (Ima4.2).				0.90			
3. Cleanliness inside tourist attractions (Ima4.3)				0.84			
1.If you want to travel again, you will choose to travel to Laos first. (Rev1)					0.84		
2. You wants to travel to Lao PDR more. (Rev2)					0.89		
3. You intends to introduce Lao PDR's tourism to his family. (Rev3)					0.84		
4. You intends to recommend Lao PDR tourism to friends and others. (Rev4)					0.81		
5. You intend to review and share news. (Rev5)					0.80		
1.Tourist attractions (Mot1)							0.80
2.Personal motivation (Mot2)							0.88
3.Emotional (Mot3)							0.88
4.Public Relations (Mot4)							0.67

Average full collinearity VIF (AFVIF) = Inf. This is because the variable analyzed is redundant, which can occur if the secondary latency variable is generated from the first-level latency variable. Sympon's paradox ratio (SPR) = 1.00 shows that there are no cases of Simpson's paradox in this model, and the R-squared contribution ratio (RSCR) = 1.00, which means that there is no negative R-squared value, and the statistical suppression ratio (SSR) = 1.00 and the

nonlinear bivariate causality direction ratio (NLBCDR) = 1.000, which is higher than the threshold of 0.7 (Kock, 2021). Table 11 shows that the decision coefficient (R^2) of the image factor (Ima), which is measured by the factors Ima1, Ima2, Ima3, and Ima4, $R^2 = 0.60, 0.64, 0.73$, and 0.52 , respectively, while the Ima factor, the Mot factor, influences the Rev $R^2 = 0.71$ factor, the Adjusted R^2 has values ranging from 0.52 to 0.73 , the CR value ranges from 0.86 to 0.92 , and Cronbach's alpha = $0.75 - 0.90$, which is greater than 0.7 (Kock & Lynn, 2012).

Table 11. Latent variable coefficients

Diagnostics	Ima1	Ima2	Ima3	Ima4	Rev	Ima	Mot
R^2	0.60	0.64	0.73	0.52	0.71		
Adjusted R^2	0.60	0.63	0.73	0.52	0.70		
CR	0.86	0.89	0.87	0.91	0.92	0.86	0.89
Cronbach's alpha	0.75	0.81	0.78	0.84	0.90	0.80	0.83
AVE	0.67	0.73	0.70	0.76	0.71	0.62	0.67
VIF	Inf	Inf	Inf	Inf	3.64	Inf	2.90

The VIF value of the Rev factor is 3.64, which is less than 5 (Hair et al., 1987; 2009; Kline, 1998; Kock, 2014a; 2021a), and the VIF value of the Mot factor is 2.90, which is less than 3.3 (Kock, 2015c; Kock & Lynn, 2012).

From Figure 5, when the statistics are tested, they are appropriate and within acceptable values. It was found that the image factor of tourist attractions (Ima), which is the second measurement factor, was measured from 4 factors: the environmental image of natural tourist attractions (Ima1), $\beta = 0.77$, which was statistically significant less than 0.01, the cultural environmental image (Ima2), $\beta = 0.80$, which was statistically significant less than 0.01, and the social environmental image (Ima3), $\beta = 0.86$ has a statistical significance of less than 0.01, tourist attraction infrastructure (Ima4), $\beta = 0.72$ has a statistical significance of less than 0.01, where the Ima factor has resulted in a Rev factor of $\beta = 0.47$, a statistical significance of less than 0.01, and for the Mot factor that affects the Rev factor, the value of $\beta = 0.42$ has a statistical significance of less than 0.01.

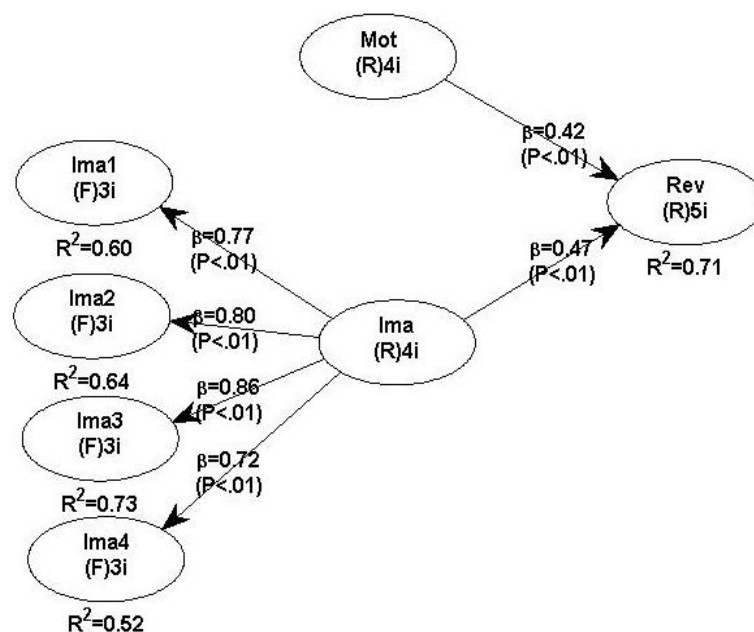


Figure 5. Analysis of conceptual research framework II

DISCUSSION AND CONCLUSIONS

Based on the study of the motivations of Thai and Chinese tourists in the Lao People's Democratic Republic, after the opening of the Laos-China railway service, by collecting questionnaires from Thai and Chinese tourists in the four provinces of Lao PDR, traveling by Laos-China high-speed rail, 400 people, most of whom are female, have a diploma/bachelor's degree, and have a career as an employee.

A Study of factors Affecting the Motivation of Tourists to Travel in Lao PDR found that demographic factors included Entering the retirement age, Giving women leadership in tourism, and Increasing the number of women in tourism, Income, Education level, Single status, and Nationality affect the motivation of Thai and Chinese tourists to travel to Thailand. In addition, there are pushing factors such as: Travel experience, The need to travel, The need for cultural exchange and learning, and pulling factors such as: the Atmosphere of tourist attractions, Transportation Facilities, The safety of tourist attractions (coefficient = 0.41) is a passing variable between demographic factors and the motivation of tourists to travel.

There are opinions about the image of tourist attractions for Thai and Chinese tourists in Lao PDR. The results are found that the image of tourist attractions is divided into 4 aspects, which tourists pay attention to in each aspect. As follows: 1. Environmental image of natural tourist attractions, which pay great attention to all aspects, namely the

uniqueness of nature, the diversity and richness of the landscape, and the beautiful ecological environment and fertile waters. 2. Tourists pay a lot of attention to highly recognizable traditional architecture. 3. Social environmental image Tourists attach great importance to the human relations of the locals and the positive attitude of the tourism provider as a whole and 4. Tourists pay great attention to the security and safety of buildings at tourist attractions in Lao PDR.

These variables are then considered in conjunction with motivation by studying the motivational factors and image factors that affect the decision to repeat the visit by high-speed train of Thai and Chinese tourists in the Lao PDR area. We found that the variables are: environmental image of natural attractions. Cultural environment. The image of the social environment and the infrastructure of tourist attractions can be classified into the same group as one factor, namely the image of tourist attractions. This affects the intention of returning to traveling again. Together with tourism motivation factors, such as incentives from tourist attractions. Motivation from individuals or incentives from the publicity of tourist attractions that affect tourists' intention to return to visit again. The image factor of tourism in the Lao PDR has a positive influence on repeat tourism rather than motivation and the cultural environment.

Based on a study of the level of opinion on the image of tourist attractions of Thai and Chinese tourists traveling by the Laos-China high-speed train in Lao PDR, we found that tourists pay attention to the image of tourist attractions, whether it is the natural identity and the unique landscape of tourist attractions. Traditional architecture in tourist attractions This is in line with the words of Nopsuwan & Chansri (2021), who said that the image of a tourist attraction is important for the decision to visit both in the past and in the future. Therefore, tourists pay attention to the image of tourist attractions. Those who related to tourist organization should have good management to create good memories for those who come to visit and so that the image of the tourist attractions makes an impression on those who visit.

Push and pull factors that affect the motivation of Thai and Chinese tourists to travel to the PDR. It was found that demographic data affects the driving force and pull off tourists to travel because different genders, ages, education levels, and income levels will affect different tourism motivations. In addition, this study shows that the difference in age, gender, education level, or even the income of tourists affects transmission factors such as driving factors and pulling factors of tourists, which affect the motivation of tourists to visit, by pushing factors such as experience, desire to travel, or even the desire to get new experiences from tourist attractions, and for pulling factors such as atmosphere, service at tourist spots, and safety of tourist attractions, it will result in tourists having motivation to decide to travel which consistent the study of Boontham & Busapruuek (2021); Ngondo et al. (2024) It was found that the main driving factor that motivates tourists is relaxation and new experiences to get from tourism.

Factors affecting the decision to visit by high-speed train of Thai and Chinese tourists in Lao PDR are found that the image factor of tourist attractions affects the return of tourists due to the unique natural identity of tourist attractions, the diversity of landscapes, or the security of buildings in tourist attractions. As a result, tourists are impressed and returning to the tourist attractions supports the study of Kotcharee et al. (2021) by those who found that the return trip of tourists is based on the image of tourist attractions, such as good beaches. Attractive local food, suitable accommodation, and the motivation factors for tourism in this study also affect the return of tourists.

Due to the attractive tourist attractions. Personal motivation to travel for leisure or new experiences. The mood of tourists or even the publicity of tourist attractions will affect the return of tourism (Um et al., 2006). Therefore, the impact on the return of tourists depends on the motivation of tourists in tourism to relieve stress, to learn about the culture, or even to motivate them because of the publicity of tourist attractions.

According to the results of the study, tourism in Lao PDR is reflected in Thai and Chinese tourists who decide to travel to Lao PDR. In addition, the main factor in travelling to Lao PDR, that is the motivation of tourists, comes from the demographic factors of the tourists themselves. Creating a good tourist image of the Lao PDR in all tourism-related structures. It is a very important variable that will bring a response to the intention of travelling again. For this reason, the relevant agencies, especially in Lao PDR, should have guidelines or measures to develop and promote the country's image in all dimensions. This is to encourage Thai and Chinese tourists, who are the main tourist groups, as well as tourists from other countries, to meet the demand for repeat tourism in Lao PDR.

Author Contributions: Conceptualization, S.N. and W.T.; methodology, S.N. and W.T.; software, S.N., K.C., and W.T.; validation, S.N. and W.T.; formal analysis, S.N., K.C. and W.T.; investigation, S.N. and W.T.; data curation, S.N.; writing - original draft preparation, S.N. and W.T.; writing - review and editing, S.N. and W.T.; visualization, S.N. and W.T.; supervision, S.N; project administration, S.N. All authors have read and agreed to the published version of the manuscript.

Funding: Not applicable.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: The data presented in this study may be obtained on request from the corresponding author.

Acknowledgments: This is a research program which is supported by the Indo-China Country International Trade and Economic Research Sector and the Research Administration Division, Khon Kaen University, Thailand.

Conflicts of Interest: The authors declare no conflict of interest.

REFERENCES

- Baloglu, S., & McCleary, K. W. (1999). A Model of Destination Image Formation. *Annals of Tourism Research*, 26, 868-897.
- Boontham, W., & Busapruet (2021). Study of Behavior and Motivation for Returning to Travel. *Journal of Peritactic, Management*, 23(2): 39-50.
- Chou, C., Lin, Y., & Hsu, H. (2023). Environmental factors and infrastructure accessibility as determinants of return tourism. *Tourism Management Perspectives*, 30, 89-101. <https://doi.org/10.5678/tmp.2023.34567>
- Cochran, W. G. (1977). *Sampling Techniques*. 3d ed. New York: John Wiley and Sons Inc.
- Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.
- Dann, G. (1977). Anomie, ego-enhancement and tourism. *Annals of Tourism Research*, 4, 184-194. [https://doi.org/10.1016/0160-7383\(77\)90037-8](https://doi.org/10.1016/0160-7383(77)90037-8)
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.
- Hair, J. F., Black, B., Babin, B., Anderson, R. E., & Tatham, R. L. (2010). *Multivariate Data analysis: a global perspective*. New Jersey: Pearson Education.
- Henseler, J., Hubona, G., & Ray, P. A. (2016). Using PLS Path Modeling in New Technology Research: updated guidelines. *Industrial Management & Data Systems*, 116(1), 2-20.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2012). Using Partial Least Squares Path Modeling in Advertising Research: Basic Concepts and Recent Issues. In: Okazaki, S., ed., *Handbook of Research on International Advertising*, Edward Elgar Publishing, Cheltenham, 576.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115-135. <https://doi.org/10.1007/s11747-014-0403-8>
- Jirawattanaphan, A., & Sukserm, T. (2021). Factors influencing tourist loyalty: A case study in cultural tourism. *Journal of Tourism Research*, 45(3), 123-145. <https://doi.org/10.1234/jtr.2021.67890>
- Kotcharee, T., Pathumphon, J., & Isichaikul, R. (2021). A study of image factors of tourist attractions. Destination city selection and tourist attraction loyalty in Thailand among gay foreign tourists. *Interdisciplinary Journal of Humanities and Social Sciences*, 4(2), 727-743.
- Kock, N. (2015). Common method bias in PLS-SEM: A full collinearity assessment approach. *International Journal of e-Collaboration*, 11(4), 1-10.
- Kock, N. (2017). Structural equation modeling with factors and composites: A comparison of four methods. *International Journal of e-Collaboration*, 13(1), 1-9. <https://doi.org/10.4018/IJeC.2017010101>.
- Kock, N., & Lynn, G. (2012). Lateral collinearity and misleading results in variance-based SEM: An illustration and recommendations. *Journal of the Association for information Systems*, 13(7), 546-580.
- Nasoonorn, A., Waiyawet, S., Saengchat, P., & Nonthapot, S. (2023). Supply chain management for water tourism in northeast Thailand. *Uncertain Supply Chain Management*, 11(3), 1149-1158. <https://doi.org/10.5267/j.uscm.2023.4.008>.
- Ngondo, E., Hermann, U. P., & Venter, D. H. (2024). Push and Pull Factors Affecting Domestic Tourism in the Erongo Region, Namibia. *Geojournal of Tourism and Geosites*, 53(2): 575-583. <https://doi.org/10.30892/gtg.53221-1233>
- Nonthapot, S. (2020). The relationships among the five key foreign tourist markets in the Greater Mekong Sub-region. *Decision Science Letters*, 9(4), 511-520. <https://doi.org/10.5267/j.dsl.2020.9.001>
- Nonthapot, S., Choochote, K., Saengchat, P., Waiyawet, S., & Sihabutr, C. (2024). Sequential Mediation between the COVID-19 Epidemic Situation and Reservice by Tourists in the Mekong River Basin. *Journal of Mekong Societies*, 20(2), 154-176.
- Nopsuwan, T., & Chansri, V. (2021). The image of tourist attractions influences the satisfaction and loyalty of tourists in the Old Town, Songkhla Province. *Journal of Economics and Business Administration, Thaksin University*, 13(2): 145-162.
- Pearce, P. L. (1993). *Fundamentals of Tourist Motivation*. In *Tourism Research: Critiques and Challenges*, D. Pearce, R. Butler, eds., 113-134. London: Routledge.
- Saeho, K. (2016). The tourism image of service quality and tourism values affecting sustainable tourism attitudes: A case study of Thai nature tourism of working Thai tourists in Bangkok. Master thesis of Master of Business Administration, Bangkok University.
- Sihabutr, C., & Nonthapot, S. (2021). The effects of economic factors on sustainable community - based tourism in upper northeast Thailand. *International Journal of Management and Sustainability*, 10(3), 79 - 91. <https://doi.org/10.18488/journal.11.2021.103.79.91>
- Sihabutr, C., Wuttiapan, C., Onpium, P., & Nonthapot, S. (2025). Mediation between tourism demand and cultural tourism marketing satisfaction in the twin cities of the Thai-Lao Mekong River. *International Journal of Innovative Research and Scientific Studies*, 8(1), 2133-2142. <https://doi.org/10.53894/ijriss.v8i1.4904>
- Tatreview. (2022). Trending in Travel trends in Travel & Tourism in 2021 and beyond by WTTC. Retrieved 26 June 2023, from <https://tatreviewmagazine.com/article/trending-in-travel/>
- Tang, H., Wang, R., Jin, X., & Zhang, Z. (2022). The Effects of Motivation, Destination Image and Satisfaction on Rural Tourism Tourists' Willingness to Revisit. *Sustainability*, 2022(14), 1-17.
- Tavitiyaman, P., Qu, H., & Tsang, N. K. (2022). The role of motivation and satisfaction in tourist revisit intentions. *International Journal of Hospitality & Tourism Administration*, 23(2), 176-193. <https://doi.org/10.9876/ijhta.2022.56789>
- The Laotian times. (2023). Laos-China Railway Releases Vientiane-Kunming Train Schedule. Retrieved 22 June 2023. <https://laotian-times.com/2023/04/11/laos-china-railway-releases-vientiane-kunming-train-schedule/?amp&fbclid=IwAR1rGyvZQo4H2SrFMhAl4ThgE4UT16ZYMwm5rXWEwq3cC4yfKA3GNawTTwo>
- Tourism Development Department. (2021). *Statistical Report on Tourism in Laos 2021*. Retrieved 27 June 2023, from https://laos-dmn.com/e-library/lao-tourism-statistical-report-in-2021_english/
- Tsiotsou, R. H., & Goldsmith, R. E. (2012). *Strategic marketing in tourism service*. Bingley, UK: Emerald Group Pub.
- Um, S., Chon, K., & Ro, Y. (2006). Antecedents of revisit intention. *Annals of Tourism Research*, 33(4), 1141-1158. <https://doi.org/10.1016/j.annals.2006.06.003>
- Uysal, M., & Hagan, L. A. (1993). Motivations of Pleasure Travel and Tourism. In M. Khan, M. Olsen & T. Car (Eds.), *VNR's Encyclopedia of Hospitality and Tourism*, New York: Van Nostrand Reinhold.
- Vientiane Times. (2023). Laos welcomes over 831,000 visitors in 3 months. Retrieved 27 June 2023. https://www.vientianetimes.org.la/free-Content/FreeContent86_Laos_welcomes_y23.php?fbclid=IwAR1xm0PXil42jmrFVxDBGJJBZdui9niROx4mwPEQ9MxKWZiZgm2cguxgo
- Weaver, D., & Laura, L. (2002). *Tourism management*. (2nd). Milton: John Wiley.