

# Model of Increasing Tourist Satisfaction through Attraction, Accessibility, Security, Safety, Health and Hygiene at the Ujung Kulon National Park

**Soehardi**

Bhayangkara Jakarta Raya University, Indonesia  
[soehardi@dsn.ubharajaya.ac.id](mailto:soehardi@dsn.ubharajaya.ac.id)

## Abstract

*The purpose of this research was to analyze the model of increasing tourist satisfaction through attraction, accessibility, safety and security, health and hygiene in Ujung Kulon National Park, Pandeglang Regency, Banten Province. The population in this research were all foreign and domestic tourists who visited Ujung Kulon National Park with the sample used was purposive sampling totaling 95 respondents. Quantitative research methods are used in this study with analysis of construct validity and reliability, outer loading, collinearity statistics, path coefficients, R square and model fit. The result of this research is that there is a significant effect of attraction on tourist satisfaction, accessibility on tourist satisfaction, security and safety on tourist satisfaction and health and hygiene on tourist satisfaction in Ujung Kulon National Park. It can be concluded that tourist satisfaction is influenced by attraction, accessibility, safety and security and health and hygiene in Ujung Kulon National Park.*

## Keywords

attraction; accessibility; safety and security; health and hygiene; tourists satisfaction



## I. Introduction

Ujung Kulon National Park (TN) is located in Sumur District and Cimanggu District, Pandeglang Regency, Banten Province. It is one of 54 National Parks in Indonesia. This location is located 226.7 km from Soekarno-Hatta International Airport or 238.7 km from Halim Perdana Kusuma Airport. Ujung Kulon National Park can be passed by tourists via land and sea transportation.

(Kementerian Lingkungan Hidup dan Kehutanan, 2021) and (Balai Taman Nasional Ujung Kulon, 2021) explained that the attraction of foreign and domestic tourists visiting Ujung Kulon National Park is the endangered or endemic one-horned rhinoceros which is protected and designated as a world heritage by the United National Education, Scientific and Cultural Organization (UNESCO) dated February 1, 1992. Ujung Kulon National Park covers an area of 122,956 hectares of land and water for conservation of natural resources, a combination of mangrove forest vegetation, coastal forest and lowland rain forest, a marine nature conservation area with a population of rhinos continues to increase to reach 75 in 2021. As a Model National Park based on the Decree of the Director General of Forest Protection and Nature Conservation Number SK 69/IV-Set/HO/2006 dated 3 May 2006 concerning the Designation of 20 (Twenty) National Parks as National Parks Model.

Various travel and tourism service agents through their official websites market their products and services to tourists to visit Ujung Kulon National Park for 3 days 2 nights with a gathering point at Plaza Festival Mall Kuningan Jakarta, Waiting Statue Serang City or Sumberjaya Pier, Sumur District, Pandeglang Regency, Banten Province with prices vary from IDR 560,000 to 760,000 per person. The tourist attractions offered are trekking,

wildlife monitoring, sunset, snorkeling in the Ujung Kulon National Park Peninsula such as Peucang Island, Badul Island, Handeleum Island, Cibiuk Hot Springs, Cikacang Waterfall, Cigenter River, Cidaon and Cigenter Shepherd Fields, Tanjung Layar, 12155-12168Coral Copong and others.

For tourists who have a hobby of trekking, they can travel overland to Ujung Kulon National Park Post in Ujungjaya Village, Sumur District and Rancapinang Village, Cimanggu District. However, the accessibility along this highway has not been concreted and the ground is still a bit rocky for foreign and domestic tourists who want to choose to see the natural beauty along the coast and Mount Honje at the Ujung Kulon National Park Post in Ujungjaya Village. This post can be reached via Tunggaljaya Village, Cigorondong Village, Tamanjaya Village and finally Ujungjaya Village as far as + 25.3 km. Road conditions are also very bad for foreign and domestic tourists who take the road to Ujung Kulon National Park Post in Rancapinang Village as far as + 25 km from the Cimanggu District Office. The Pandeglang Regency Government should allocate APBD for infrastructure development as far as 50 km aimed at increasing foreign and domestic tourist visits to Ujung Kulon National Park so as to facilitate the smooth traffic of people and their luggage and can increase MSME income and the welfare of the people of Sumur District and Cimanggu District.

Tourists who have a hobby of marine tourism, nature tourism and cultural tourism are very suitable to visit Ujung Kulon National Park such as wildlife viewing, diving, snorkeling, surfing, canoing, trekking and research. In addition to the one-horned rhinoceros (*Rhinoceros sondaicus*), Javan gibbons (*Hylobates moloch*), surili (*Presbytis aigula*), banteng (*bos javanicus*), deer (*Cervus timorensis*), langur (*Presbytis cristata*), peacock (*Pavo muticus*), green turtle (*Chelonia mydas*), hawksbill turtle (*Eretmochelys imbricate*), estuarine crocodile (*Crocodylus porosus*) and various species of birds. Ujung Kulon National Park is a habitat for 700 types of flora and 608 fauna with natural views of Mount Honje, white sand, diving and snorkeling Ciapus on Peucang Island, Ganesha Statue and big waves for diving, snorkelling and surfing known as One Palm Point. on Panaitan Island, canoeing or canoing on Handeleum Island, the Dutch lighthouse at Tanjung Layar, canoing the Cigenter river, hot springs in Cibiuk hunting sunset in the Cidaon and Cigenter pastures, Kiara trees, Karang Copong and Prabu Siliwangi religious tourism in Goa Sang Hyang Sirah.

## **II. Review of Literature**

### **2.1 Attraction**

(Stainton, 2021) mentions that tourist attraction is an integral part of the structure of the tourism industry. People travel far and wide to visit certain tourist spots. Visiting these attractions could be the reason for their trip, or it could be a by-product of their trip. Tourist attraction is a tourist place that is usually visited by tourists. A tourist attraction will usually have value for tourists in terms of history, cultural value, politics, natural or artificial beauty, entertainment and pleasure.

(Tourismtheory.org, 2012) The most important characteristic of a tourist attraction is that it is "consumed" at a destination such as a beach destination, concert, nature reserve or special sporting event. Tourism consists of several mandatory components, such as overnight stay (minimum one night) and mobility. Being a tourist involves traveling voluntarily to places that are not your home environment. The supply of information is also an indispensable part of tourism for exactly the same reasons a tourist travels to a part of the world he is largely or completely unfamiliar with. The traveler should be well informed

about the destination he wants to visit and even the decision itself about where to go is based on the information. Tourist attraction can be seen as a relationship with visitors, the object of the phenomenon itself, and the image it presents.

## **2.2 Accessibility**

(J.-P. Rodrigue, 2020) accessibility is a proxy for spatial disparity. The notion of accessibility consequently relies on two core concepts: location, where the relativity of space is estimated in relation to transport infrastructure as it offers the means to support mobility. Each location has a set of referential attributes, such as its population or level of economic activity; distance, which comes from the physical separation between locations. Distance can only exist when it is possible to connect two locations via transportation. Friction distance is expressed in units such as kilometers or time, but variables such as cost or energy spent can also be used. The economic condition of the population is a condition that describes human life that has economic score (Shah et al, 2020). Economic growth is still an important goal in a country's economy, especially for developing countries like Indonesia (Magdalena and Suhatman, 2020).

## **2.3 Safety and Security**

According to the United National World Tourism Organization (UNWTO) on tourism and competitiveness as cited by (Hamarneh & Jeřábek, 2018), safety is a set of precautions taken to prevent tourists and industrial workers from being exposed to situations where they believe they are in personal danger, due to crime, accidents, and emergencies. While security is a series of preventive measures taken against the enemy, actions that seek to inflict large-scale damage resulting in maximum economic disruption or measures taken to guard against espionage or sabotage, crime, attack or escape. Peace, safety, and security are the main requirements for successful tourism development.

(J. P. Rodrigue et al., 2020) the issue of safety and security concerns the modes of transportation in which passengers and goods congregate and disperse. Access is monitored and controlled, and movement is routed along pathways that provide secure access to and from platforms and gates. In the transport industry, security concerns have been directed to two areas: worker safety and theft. Indicators of the implementation of transportation security measures require the following considerations: Security procedures, physical security of passengers and crew and their luggage, secure information and telecommunications systems.

## **2.4 Health and Hygiene**

(Guevara & Clercq, 2020) Health, hygiene and safety are paramount in today's era. Personal experience, expert advice, and social distancing concerns will guide consumer behavior in the short to medium term to ensure readiness and implementation of health and travel safety protocols. In this context, trust, between travelers and employees, businesses and suppliers, and visitors and local communities, will be a key driver in the recovery of the travel and tourism sector. The public and private sectors must jointly agree on the adoption of industry-wide health, hygiene & safety standards in Travel and Tourism. Recognizing businesses for their compliance with the protocol can further increase tourists' confidence in travel and tourism. For example, Turismo de Portugal makes a "Clean & Safe" seal and receives a safe travel stamp to be able to distinguish businesses that meet the hygiene and safety requirements set by the government for travelers. It is important that health & hygiene measures are timed limited and re-evaluated and reduced as risks are reduced.

(Gupta et al., 2021) Six factors related to destination choice in the new normal were found, namely health and hygiene, safety and security, accessibility and connectivity, destination information, perception of travel risk, and value for money. These findings will help various tourism stakeholders in India to develop their policies and attract more domestic and foreign tourists.

## 2.5 Satisfaction

(Li & EHL Insight, 2019) Dr. Gang Li began building his index to determine how best to measure tourism satisfaction, and whether tourism is good for people or not. So, if tourists are looking for happiness, then their happiness is not just the amount of money they spend, or the places they visit and should be a measure to shape the future of tourism. Measuring tourism satisfaction is important for several reasons: (1) satisfied tourists stay longer, shop more and come back again, (2) tourists promote providers on social media and online rankings, thereby contributing to the competitiveness of businesses and destinations, (3) tourists bring friends and family on their next visit, (4) satisfaction with vacation time affects their overall quality of life. To properly measure tourism satisfaction, some of those key elements are: (1) expectation versus reality: subjects should be asked what tourists expect and how those expectations are met or not, (2) satisfaction must be measured for each part of the experience: transportation, immigration, feature experience, accommodation, food and beverage, (3) data must include personal factors such as age and gender.

## 2.6 Hypothesis

(Chaisaengduean, 2021) Tourist attractions provide tourist pleasure and are generally inherent in cultural and historical values that enhance the educational experience of tourists which ends in tourist satisfaction. In addition, it can be seen that tourist attractions also mediate aesthetics and tourist satisfaction because the beauty and environment of tourist attractions affect aesthetics which in turn affects tourist satisfaction. The mediating effect of tourist attraction on entrainment and tourist satisfaction is also significant because the main feature of tourist attraction is entertainment so that tourists are attracted to a tourist destination and fully entertained will increase tourist attraction. (M. Shahedul Alam et al., 2020) comprehensively explained that tourists are satisfied with attractions and entertainment facilities, hotel and restaurant services as well as administrative and other support services. (Fitri et al., 2019) explained in detail the direct and indirect effects of tourist attraction on tourist satisfaction in the Grogol Tourism Village, Yogyakarta. (Simanihুরু, 2019) explained that there was a significant influence of tourism attraction on visitor satisfaction at the Sindang Barang Cultural Village, Bogor.

**H1:** There is an influence of tourism attraction on tourist satisfaction

(Chaloux et al., 2019) The traditional approach to accessibility is to reduce travel time to work clusters for commuting. Shortening travel times to work will increase the number of jobs accessible with time-satisfying commuting, and increase the current level of travel satisfaction. This could be done by creating more jobs closer to commuters' homes or increasing the service frequency, speed and regularity of the transport system. Providing clean and comfortable facilities, frequent service, screen customer information, and affordable fares are particular examples of public transportation that can increase satisfaction, or reduce perceived travel time, without necessarily reducing travel time. (Nobsuwan & Jansri, 2021) shows that the travel environment, accessibility, infrastructure,

and heritage attractions have an effect on tourist satisfaction and tourist satisfaction has a positive effect on tourist loyalty to the continuity of tourist visits to the old city of Songkhla province.

**H2:** There is an effect of accessibility on tourist satisfaction

(Kővári & Zimányi, 2010) Safety and security has always been an absolute requirement for tourism travel and tourist satisfaction. Educational and research activities also face security and safety issues in tourism to prepare future specialists in the industry by incorporating new research results into academic curricula. (Tasci & Boylu, 2010) The results show that positive perceptions of Turkey's safety and security help visitors to get greater travel satisfaction, especially if they stay longer and enjoy the tourist trip.

**H3:** There is an effect of safety and security on tourist satisfaction

(Guevara & Clercq, 2020) Travelers' awareness of good practices in health & hygiene has been and will continue to grow, influencing their expectations for travel. A recent survey revealed that 89% of Americans are now more aware of germs and 90% say they wash their hands more frequently and thoroughly than ever before. While in a number of Asian countries, face masks have become a regular fixture, the trend is expected to become more common in the West. Between March and April, for example, e-commerce website Etsy saw its sales double, largely due to the sale of 12 million face masks worth \$133 million. Even after vaccines are available, travelers are likely to remain more aware of future health problems. In fact, 88% of Americans stated that they would maintain this new hand-washing regimen even after the virus had passed. A report focusing on Chinese tourist consumption revealed that tourists will be more likely to seek destinations with well-established infrastructure and high-quality medical facilities after the pandemic. (Arlinda & Sulistyowati, 2021) explained in more detail that the variable implementation of the CHSE adaptation program (Cleanliness, Health, Safety, Environment) had a significant effect on visitor satisfaction. (Salleh et al., 2013) findings related to public transport factors reveal that tourists are generally satisfied with cleanliness and health in Malaysia.

**H4:** There is an effect of health and hygiene on tourist satisfaction

### III. Research Method

The questionnaire used in the study used a Likert scale of 1, 2, 3, 4 and 5 ranging from strongly disagree, disagree, moderate, agree and strongly agree. Quantitative research methods are used in this study. The population in this study are all customers who have an account at PT BSM Tbk. The sample used is accidental sampling totaling 86 respondents. Quantitative research methods are used in this study with analysis of construct validity and reliability, outer loading, collinearity statistics, path coefficients, R square and model fit.

### IV. Results and Discussion

#### 4.1 Results

According to (BPS Kabupaten Pandeglang, 2018), the population of Sumur District is 24,098 people consisting of 2,813 people working in agriculture, fisheries and animal husbandry, 5 people working in mining, 72 people working in industry and crafts, 172 people working in hotels and restaurants. Based on data collected by researchers from Sumur Pier, Legon Pakis Campground, Ujung Kulon National Park Post in Rancapinang

Village and Ujung Kulon National Park Post on Peucang Island, data on tourists visiting Peucang Island, Panaitan Island and Ujung Kulon National Park Peninsula from May to November 2021 totaled 2,335 people.

Based on table 1 shows that 70.53% of tourist jobs are private employees and 29.47% government employees. 52.64% of tourist income more than 10 million, 37.89% income 5 – 10 million and 9.47% income below 5 million. 74.74% of tourists use the services of travel agents and 25.26% visit Ujung Kulon National Park on their own initiative. 63.15% visited with more than 3 people, 27.38% visited with a partner and 9.47% visited alone. 76.84% of tourists stay for 2 nights, 14.74% of tourists stay more than 2 nights and 8.42% of tourists stay for 1 night.

**Table 1.** Respondent Data

Description	Category	Total	Percentage
Gender	Male	40	42,10
	Female	55	57,90
Age	≤ 17 years	32	33,68
	17 – 44 years	46	48,42
	> 45 years	17	17,90
Education	Elementary to High School	49	51,58
	Bachelor Degree	32	33,68
	Masteral and Doctoral Degree	14	14,74
Residence	Jakarta	42	44,21
	Serang City and Municipality	11	11,57
	Bogor City and Municipality	4	4,21
	Tangerang City and Municipality	15	15,79
	Bekasi City and Municipality	13	13,68
	Other Cities and Municipalities	10	10,53
Occupacion	Government Employee	28	29,47
	Private Employee	67	70,53
Income	≤ 5 million per month	9	9,47
	6 – 10 million per month	36	37,89
	> 10 million per month	50	52,64
Tour Arrangements	Myself	24	25,26
	Travel and Tour Agent	71	74,74
Person	Person	9	9,47
	Two Person Partner	26	27,38
	More Than Two Person	60	63,15
Length of Stay	1 night	8	8,42
	2 night	73	76,84
	≥ 2 night	14	14,74

Source: Data Processed by Author, 2021.

#### **a. Construct Reliability and Validity**

Based on table 2. The average value or mean attraction is 3.819; accessibility 4,158; security and safety 3,687; health and hygiene 4.037 and tourist satisfaction 4.092. While the standard deviation value of the average attraction value is 0.695; accessibility 0.454; security and safety 0.842; health and hygiene 0.565 and tourist satisfaction 0.609. This

shows that tourists pay great attention to the accessibility of land and sea transportation because they play an important role for tourists visiting Ujung Kulon National Park. It can be interpreted that the Pandeglang Regency Government should allocate funds for the construction of land infrastructure from Tunggaljaya Village to Ujungjaya Village and also the construction of the Sumur pier and other supporting facilities.

**Table 2. Mean and Standard Deviation**

	<i>Attraction</i>	<i>Accessibility</i>	<i>Safety and Security</i>	<i>Health and Hygiene</i>	<i>Tourists Satisfaction</i>
<i>Mean</i>	4,095	4,137	4,032	3,958	4,000
	3,011	4,168	3,137	3,853	4,211
	4,158	4,168	3,747	4,074	3,947
	4,011	4,158	3,832	4,263	4,211
<i>Standar Deviation</i>	0,682	0,473	0,623	0,664	0,523
	1,021	0,451	1,072	0,739	0,479
	0,488	0,427	0,833	0,417	0,489
	0,589	0,466	0,842	0,440	0,456

Source: Data Processed by SmartPLS, 2021.

Table 3 data shows that convergent validity is used to prove the questionnaire items on each exogenous latent variable of product quality and service quality as well as endogenous variables of customer satisfaction and customer loyalty. Construct reliability and validity using Cronbach's alpha, rho\_A, composite reliability and average variance extracted analysis. Cronbach's alpha value > 0.600 can be said to be acceptable, reliable or consistent. The value of rho\_A > 0.600 can be said to be acceptable, reliable or consistent. The composite reliability value > 0.600 can be said to be acceptable, reliable or consistent. Based on table 4, discriminant validity is used to prove that the questionnaire items are valid or invalid. The average variance extracted and discriminant validity > 0.500 can be said to be valid or acceptable.

**Table 3. Construct Reliability and Validity**

	<i>Crombach's Alpha</i>	<i>Rho_A</i>	<i>Composite Reliability</i>	<i>Average Variance Extracted</i>
<i>Accessibility</i>	0,876	0,888	0,915	0,728
<i>Attraction</i>	0,651	0,627	0,723	0,520
<i>Health and Hygiene</i>	0,799	0,823	0,863	0,612
<i>Safety and Security</i>	0,686	0,762	0,678	0,529
<i>Tourists Satisfaction</i>	0,635	0,687	0,679	0,506

Source: Data Processed by SmartPLS, 2021

**Table 4.** Discriminant Validity

	Accessibility	Attraction	Health and Hygiene	Safety and Security	Tourists Satisfaction
Accessibility	0,853				
Attraction	0,751	0,648			
Health and Hygiene	0,675	0,595	0,783		
Safety and Security	0,569	0,546	0,597	0,655	
Tourists Satisfaction	0,624	0,521	0,640	0,533	0,637

Source: Data Processed by SmartPLS, 2021.

Table 5 data on the outer loading test shows that the loading factor value of the latent variables of accessibility, attraction, health and hygiene, safety and security and satisfaction  $> 0.600$  can be said to be valid or acceptable.

**Table 5.** Outer Loading

	Accessibility	Attraction	Health and Hygiene	Safety and Security	Tourists Satisfaction
1	0.865	0.685	0.782	0.602	0,660
2	0.825	0,651	0.721	0.676	0,849
3	0.890	0,857	0,800	0.896	0,675
4	0,832	0.765	0,823	0,919	0,859

Source: Data Processed by SmartPLS, 2021.

Based on the Outer VIF table above, it shows that all indicators of latent variables of accessibility, attraction, health and hygiene, safety and security and satisfaction have VIF values  $< 5$  so that all indicators do not experience multicollinearity problems. If there is a VIF indicator value  $> 5$  then there is a multicollinearity problem. The consequence is that dropping or removing one of the indicators that are strongly correlated can be done.

**Table 6.** Collinearity Statistics (VIF)

	Accessibility	Attraction	Health and Hygiene	Safety and Security	Satisfaction
1	2.357	1.193	3.443	1.051	1,210
2	2.423	1,111	3.127	1.065	1,439
3	3.173	1,441	1.561	1.994	1,273
4	2,022	1.348	1,695	2,014	1,373

Source: Data Processed by SmartPLS, 2021.

### b. Path Coefficients

In table 7 and Figure 1 it is recorded that the first hypothesis is the t-count value of 3.251  $>$  than the t-table of 1.988 and a significant value of 0.022  $< 0.05$ , it can be interpreted that attraction has a significant influence on tourist satisfaction. The second hypothesis is the t-count value of 2.298  $>$  than the t-table of 1.988 and a significant value of 0.002  $< 0.05$ , it can be interpreted that accessibility has a significant influence on tourist satisfaction. The third hypothesis is the t-count value of 3.326  $>$  from the t-table of 1.988 and a significant value of 0.013  $< 0.05$ , it can be interpreted that safety and security have a significant influence on tourist satisfaction. The fourth hypothesis is that the t-count value

is 2.485> from the t-table 1.988 and the significant value is 0.044 <0.05, it can be interpreted that health and hygiene have a significant influence on tourist satisfaction.

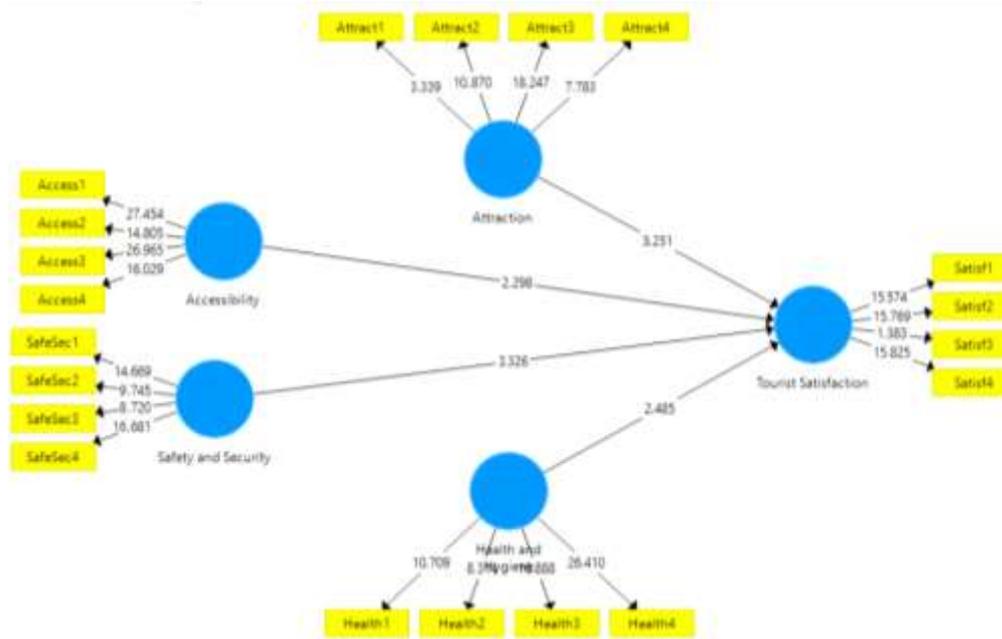


Figure 1. T Values

Table 7. Path Coefficients

	T Statistic	P Values
Accessibility on Satisfaction	2,298	0,022
Attraction on Satisfaction	3,251	0,002
Health and Hygiene On Satisfaction	2,485	0,013
Safety and Security on Satisfaction	3,326	0,044

Source: Data Processed by SmartPLS, 2021.

### c. R Square

In table 8 it is noted that the R square value of 0.479 means that accessibility, attraction, health and hygiene, safety and security have an influence on tourist satisfaction of 47.90% and 52.10% is influenced by other variables.

Table 8. R Square and R Square Adjusted

	R Square	R Square Adjusted
Satisfaction	0,479	0,456

Source: Data Processed by SmartPLS, 2021.

### d. Model Fit

Model fit or model fit can be measured in several ways such as SRMR, d\_ULS, d\_G, Chi Square and NFI. The Standardized Root Mean Square (SRMS) value of 0.078 can be said that the model fit between the observed correlations or relationships is quite good. The value of d\_ULS (the Square Euclidean Distance) of 3.382 and d\_G (the Geodesic

Distance) of 1.215 can be said to meet the criteria for a fairly good model fit. The Chi Square value of 584,953 can be said to meet the criteria of very good model fit. The Normed Fit Index (NFI) has a statistical value of 0.491, so this shows that it is quite good to meet the criteria of the fit model.

**Table 9. Model Fit**

	<i>Saturated Model</i>	<i>Estimated Model</i>
SRMR	0,078	0,078
d_ULS	3,382	3.382
d_G	1,215	1,215
Chi Square	584.953	584.953
NFI	0.491	0.491

Source: Data Processed by SmartPLS, 2021.

## 4.2 Discussion

### a. Attraction on Tourist Satisfaction

The first hypothesis is that the t-count value is  $3.251 >$  from the t-table 1.988 and a significant value of  $0.022 < 0.05$ , it can be interpreted that attraction has a significant influence on tourist satisfaction or the results of  $H_0$  are rejected and  $H_1$  is accepted. The more tourist attractions, the more tourist satisfaction increases. The dominant indicator is tourist interest in the natural beauty of beaches, forests, rivers, flora and fauna of one-horned rhinoceros, bison, deer and various kinds of birds in Ujung Kulon National Park compared to others such as Sanghyang Sirah religious tourism, amusement rides or games and hospitality.

This study is in accordance with previous research conducted by (Nobsuwan & Jansri, 2021) showing that the travel environment, accessibility, infrastructure, and heritage attractions have an effect on tourist satisfaction and tourist satisfaction has a positive effect on tourist loyalty to the continuity of tourist visits to the old city of Songkhla province. (Ismail & Rohman, 2019) in their research proves that tourism attraction and ancillary have a significant effect on tourist satisfaction on Gili Ketapang Beach.

### b. Accessibility on Tourist Satisfaction

The second hypothesis obtained a t-count value of  $2.298 >$  from t-table 1.988 and a significant value of  $0.002 < 0.05$ , it can be interpreted that accessibility has a significant influence on tourist satisfaction or the results of  $H_0$  are rejected and  $H_1$  is accepted. The better the accessibility of land and sea transportation, the higher the tourist satisfaction. The dominant indicators are the travel time of sea transportation is faster from Sumur Pier to Peucang Island and the Ujung Kulon National Park Peninsula compared to the travel time of land transportation, the lack of signposts and the lack of road signs and the difficulty of getting a cellphone signal.

This study agrees with the previous research conducted by (Woldeamanuel & Cyganski, 2011) on tourist satisfaction research for each survey year using the German Mobility Panel (1997-2008). The modeling results show a remarkable relationship between the explanatory variables and satisfaction with accessibility to public transportation (Natalia et al., 2020) stated that accessibility has a positive and significant influence on tourist satisfaction at Broken Beach and Angel's Billabong.

### **c. Safety and Security on Tourist Satisfaction**

The third hypothesis is the t-count value of 3.326 > from the t-table of 1.988 and a significant value of 0.013 < 0.05, it can be interpreted that safety and security have a significant influence on tourist satisfaction. The better the safety and security, the greater the tourist satisfaction. The dominant indicator is the presence and preparedness of Ujung Kulon National Park officers making them feel safe and secure while in Ujung Kulon National Park compared to walking during the day and night as well as security and safety instructions.

This study is in line with previous research conducted by (Ngoc Khuong et al., 2016) The findings of this study indicate that leisure and entertainment are the most important factors influencing tourist satisfaction in Halong Bay, Vietnam followed by infrastructure, safety and security, cultural factors, and shopping affects tourist satisfaction in Halong Bay, Vietnam. This research is also in line with previous research conducted by (Hamarnah & Jeřábek, 2018)

Peace, safety, and security are the main requirements for the success of tourism development. According to UNWTO data, the steady growth in arrivals since 2011 is due to safety and security in Slovenia and Montenegro. Safety and security are fundamental predispositions for the development of tourist destinations

### **d. Health and Hygiene on Tourist Satisfaction**

The fourth hypothesis is that the t-count value is 2.485 > from the t-table 1.988 and the significant value is 0.044 < 0.05, it can be interpreted that health and hygiene have a significant influence on tourist satisfaction. The better the health and hygiene, the higher the tourist satisfaction. The dominant indicator is the availability of health and hygiene facilities at the tourist sites of Ujung Kulon National Park compared to clean and healthy food and drinks, an environment free from air pollution, and there are janitors.

This study agrees with previous research proposed by (Jovanović et al., 2015) Health and hygiene are very important for many tourists who choose a destination and plan to visit a country. The health care and sanitation of tourists in Serbia is an important factor for tourist attraction, and the safety of disease prevention insurance. (Tasci & Boylu, 2010) comprehensively describe that positive perceptions of Turkey's health and hygiene help visitors to get greater travel satisfaction, especially if they stay longer and enjoy tourist trips. Also this study conforms to (Mirzaei et al., 2021)

Health and safety has become the main need of travelers. The cleanliness and disinfection of tourism facilities has changed from a hygiene factor to a motivating factor. Long journeys are considered a risk to their health; hence tourists prefer to take shorter trips. Tourists prefer to get help from professionals to book trips

## **V. Conclusion**

Tourist satisfaction is significantly influenced by tourist attraction. Tourist satisfaction is increasing due to the many tourist attractions to visit such as the natural beauty of beaches, forests, rivers, flora and fauna of one-horned rhinoceros, bison, deer and various kinds of birds in Ujung Kulon National Park. Tourist satisfaction is significantly affected by accessibility. Tourist satisfaction is increasing, supported by the travel time of ships carrying passengers and their luggage from Sumur Pier to Peucang Island and Ujung Kulon National Park Peninsula which is faster than the travel time using land transportation. In addition, the lack of signposts and the lack of road signs as well as the difficulty of getting a cellphone signal in Ujung Kulon National Park.

Tourist satisfaction is significantly influenced by safety and security. Tourist satisfaction is increasing, supported by the presence and preparedness of Ujung Kulon National Park officers who feel security and safety while in Ujung Kulon National Park compared to walking alone during the day and night and the lack of security and safety instructions. Tourist satisfaction is also influenced by health and hygiene. Tourist satisfaction is also increasing, supported by the availability of health and hygiene facilities at the tourist sites of Ujung Kulon National Park compared to clean and healthy food and drinks, an environment free from air pollution, and there are janitors. It can be concluded that tourist satisfaction is influenced by tourist attraction, accessibility, safety and security and health and hygiene. Tourist satisfaction can be viewed from staying longer, inviting friends and family to visit again and promoting tourist destination products and services on social media such as Facebook, Instagram and Twitter, telling other people about their travel experiences.

## References

- Arlinda, F., & Sulistyowati, R. (2021). Pengaruh Penerapan Program Adaptasi CHSE (Cleanliness, Health, Safety, Environment) terhadap Kepuasan Pengunjung Destinasi Wisata Kabupaten Kediri. *Jurnal Pendidikan Tata Niaga (JPTN)*, 9(3), 1404–1416.
- Balai Taman Nasional Ujung Kulon. (2021). *Sejarah, Status Kawasan, Letak dan Luas, Ekosistime, Flora dan Fauna*. Balai Taman Nasional Ujung Kulon.
- BPS Kabupaten Pandeglang. (2018). *Kecamatan Sumur Dalam Angka*. BPS Kabupaten Pandeglang.
- Chaisaengduean, K. (2021). The Potential of Tourist Attractions Affects Satisfaction of Visitor in Nan Province. *Psychology and Education*, 58(2), 5309–5322. <https://doi.org/https://doi.org/10.17762/pae.v58i2.2943>
- Chaloux, N., Boisjoly, G., Grisé, E., El-Geneidy, A., & Levinson, D. (2019). I Only Get Some Satisfaction: Introducing Satisfaction into Measures of Accessibility. In N. Chaloux, G. Boisjoly, E. Grisé, A. El-Geneidy, & D. Levinson (Eds.), *98th Annual Meeting of the Transportation Research Board, Washington D.C., USA*. (pp. 1–26). 98th Annual Meeting of the Transportation Research Board, Washington D.C., USA.
- Fitri, A., Pujiastuti, E. E., & Sugiarto, M. (2019). Pengaruh Tourist Attraction dan Service Quality terhadap Perceived Value serta Satisfaction (Studi pada wisatawan yang berkunjung di Desa Wisata Grogol Daerah Istimewa Yogyakarta). *Jurnal BUSINESS UHO: Jurnal Administras Bisnis.*, 4(2), 168–182. <https://doi.org/http://dx.doi.org/10.52423/bujab.v4i2.9453>
- Guevara, G., & Clercq, M. de. (2020). *The Future of Travel & Tourism in the Wake of Covid-19* (G. Guevara & M. de Clercq (eds.); 1st ed., Issue September). World Travel and Tourism Council. [https://www.oliverwyman.com/content/dam/oliverwyman/v2/publications/2020/To\\_Recovery\\_and\\_Beyond-The\\_Future\\_of\\_Travel\\_and\\_Tourism\\_in\\_the\\_Wake\\_of\\_COVID-19.pdf](https://www.oliverwyman.com/content/dam/oliverwyman/v2/publications/2020/To_Recovery_and_Beyond-The_Future_of_Travel_and_Tourism_in_the_Wake_of_COVID-19.pdf)
- Gupta, S., Shukla, V., & Pandiya, B. (2021). Tourists Motivation Towards Destination Visit Intention Post-Pandemic: Scale Development and Validation. *International Journal of Tourism Policy*, 1(1), 19. <https://www.inderscience.com/info/ingeneral/forthcoming.php?jcode=ijtp>
- Hamarnah, I. I., & Jeřábek, M. P. (2018). The Impact of the Security Situation on Tourism in the Countries of the Former Yugoslavia. *INTERNATIONAL SCIENTIFIC JOURNAL "SECURITY & FUTURE"*, 2(3), 111–115.

- Ismail, T., & Rohman, F. (2019). The Role of Attraction, Accessibility, Amenities, and Ancillary on Visitor Satisfaction and Visitor Attitudinal Loyalty of Gili Ketapang Beach. *Jurnal Manajemen Teori Dan Terapan*, 12(2), 149–165. <https://doi.org/http://dx.doi.org/10.20473/jmtt.v12i2.14423>
- Jovanović, S., Janković–Milić, V., & Ilić, I. (2015). Health and Hygiene Importance for the Improvement of Tourism Sector Competitiveness in Serbia and the South-Eastern Europe Countries. *Procedia Economics and Finance*, 19(15), 373–382. [https://doi.org/10.1016/s2212-5671\(15\)00038-6](https://doi.org/10.1016/s2212-5671(15)00038-6)
- Kementerian Lingkungan Hidup dan Kehutanan. (2021). *Populasi Badak Jawa di Taman Nasional Ujung Kulon Meningkat*. Kementerian Lingkungan Hidup Dan Kehutanan.
- Kővári, I., & Zimányi, K. (2010). Safety and Security in The Age of Global Tourism (The Changing Role and Conception of Safety and Security in Tourism). *Applied Studies in Agribusiness and Commerce*, 4(5–6), 67–69. <https://doi.org/10.19041/apstract/2010/5-6/11>
- Li, G., & EHL Insight. (2019). *Tourism Satisfaction: Importance, Measureability and Impacts*. EHL Insight.
- M. Shahedul Alam, S., Ferdush Rahman, M., Majedul Huq, S., & Kamruzzaman, M. (2020). Measuring the Tourist Satisfaction Towards the Man-made Theme Park in Bangladesh: A Comprehensive Study on Some Selective Sites. *International Journal of Hospitality & Tourism Management*, 4(1), 8. <https://doi.org/10.11648/j.ijhtm.20200401.12>
- Magdalena, S., Suhatman, R. (2020). The Effect of Government Expenditures, Domestic Investment, Foreign Investment to the Economic Growth of Primary Sector in Central Kalimantan. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)*. Volume 3, No 3, Page: 1692-1703.
- Mirzaei, R., Sadin, M., & Pedram, M. (2021). Tourism and COVID-19: Changes in Travel Patterns and Tourists' Behavior in Iran. *Journal of Tourism Futures*, 1–13. <https://doi.org/10.1108/JTF-01-2021-0017>
- Natalia, C. Y., Karini, N., & Mahadewi, N. (2020). Pengaruh Aksesibilitas dan Fasilitas terhadap Kepuasan Wisatawan ke Broken Beach dan Angel's Billabong. *Jurnal IPATA (Industri Perjalanan Wisata)*, 8(1), 10–17. <https://doi.org/https://doi.org/10.24843/IPTA.2020.v08.i01.p02>
- Ngoc Khuong, M., Thi Hong An, N., & Thi Mai Uyen, N. (2016). Direct and Indirect Effects on International Tourists' Destination Satisfaction — The Case of the World Natural Heritage of Halong Bay, Vietnam. *Journal of Economics, Business and Management*, 4(2), 85–91. <https://doi.org/10.7763/joebm.2016.v4.372>
- Nobsuwan, T., & Jansri, W. (2021). The Influence of Tourist Attraction's Image on Tourist's Satisfaction and Loyalty in Songkhla Old Town. *Economics and Business Administration Journal Thaksin University*, 13(2), 145–162. <https://so01.tci-thaijo.org/index.php/ecbatsu/article/view/244465>
- Piana, C. (2017). Best Practices in Transport Security. In C. Piana (Ed.), *Confederation of European Security Services (CoESS)* (1st ed.). Confederation of European Security Services (CoESS).
- Rodrigue, J.-P. (2020). The Geography of Transport Systems. In J.-P. Rodrigue (Ed.), *The Geography of Transport Systems* (Fifth). Routledge Taylor & Francis Group.
- Rodrigue, J. P., Slack, B., & Comtois, C. (2020). *Transport Safety and Security* (A. B. Slack & J. Rodrigue (eds.); Fifth). Routledge Taylor & Francis Group.
- Salleh, M., Omar, K., Yaakop, A. Y., & Mahmmod, A. R. (2013). Tourist Satisfaction in Malaysia. *International Journal of Business and Social Science*, 4(5), 221–226.

- Shah, M. M., et al. (2020). The Development Impact of PT. Medco E & P Malaka on Economic Aspects in East Aceh Regency. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)*. Volume 3, No 1, Page: 276-286
- Simanihuruk, M. (2019). Tourist Attraction and Tourist Facilities Intentions to Visitor Satisfaction: Case of Sindang Barang Cultural Village. *E-Journal of Tourism*, 6(2), 210. <https://doi.org/10.24922/eot.v6i2.53472>
- Stainton, H. (2021). *Types of Tourist Attractions: Understanding Tourism*. <https://Tourismteacher.Com>.
- Tasci, A. D. A., & Boylu, Y. (2010). Cultural Comparison of Tourists' Safety Perception in Relation to Trip Satisfaction. *International Journal of Tourism Research*, 192(July 2009), 179–192. <https://doi.org/10.1002/jtr.745>
- Tourismtheory.org. (2012). *Information and Tourism*. Tourismtheory.Org.
- United Nations Economic Commission for Europe. (2012). *Security in Transport*. United Nations Economic Commission for Europe.
- Woldeamanuel, M. G., & Cyganski, R. (2011). Factors Affecting Travellers' Satisfaction with Accesibility to Public Transportation. *Association For European Transport and Contributors*, 1–19.
- Yanti, D. K., & Widyanti, N. N. W. (2021). *Hore! Taman Nasional Ujung Kulon Sudah Bisa Dikunjungi*. Kompas.Com.