



Perceptions of Marine Tourism in Lampung Bay's Small Islands: A Comparative Study

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<https://doi.org/10.18280/ijdne.180529>

ABSTRACT

Received: 7 August 2023

Revised: 3 September 2023

Accepted: 10 September 2023

Available online: 31 October 2023

Keywords:

amenities, ecotourism, facilities, island tourism, Pasaran Island, Permata Island, tourist access, tourist perception

Pasaran and Permata Islands, situated within the Lampung Bay cluster, offer unique tourist experiences yet have not succeeded in attracting substantial visitor interest. This study aims to analyze perceptions of marine tourism on these small islands located in Bandar Lampung City, Lampung Province, Indonesia. A total of 228 respondents, visiting Pasaran and Permata Islands, participated in the study. The adopted analytical method was Exploratory Factor Analysis, supplemented by f-tests and t-tests. The analysis of 23 tourism perception attributes yielded five distinct factors: tourist access, supporting facilities, natural resources, cleanliness, and additional supporting factors. Notably, the perceptions of the two islands differed significantly, attributable to variations in attractions, facilities, accommodation, and access. This divergence manifested in tourists' perceptions analyzed by gender, age, and income. The insights suggest that both islands require enhancements in specific areas. Pasaran Island necessitates advancements in 'supporting factors', while 'tourist access' is an area for improvement on Permata Island. The findings contribute to the understanding of marine tourism perceptions and provide actionable suggestions for enhancing the tourist experience on these islands.

1. INTRODUCTION

Tourism, notably one of the most pivotal sectors globally, has Indonesia as a significant contributor [1, 2]. Among Indonesia's regions, Lampung Province exhibits remarkable potential for diverse tourism, encapsulating nature, education, religion, marine, culture, and culinary tourism [3]. Marine tourism, which involves extensive travel primarily to coastal and oceanic regions for leisure, is an area of particular interest [4]. It has seen rapid growth and is increasingly attracting both local and international tourists [5, 6].

Despite the growth of the tourism sector, Lampung Province faces challenges in increasing tourist arrivals. A decline in visitors was observed in 2020, attributed to the pandemic. Although the numbers began to ascend in 2021 and 2022, they did not reach the pre-pandemic level, with an approximate 3 million tourists visiting in 2022 out of an average of 9 million. Expectations for 2023 anticipate a slight increase to 4 million tourists.

Lampung Bay, known for its marine tourism, is a primary attraction in Lampung Province. Positioned within the Sunda Strait in the southern part of the province, it is proximate to Bandar Lampung, South Lampung Regency, and Pesawaran Regency. It houses various tourist attractions such as Pasaran Island, Sebesi Island, Sebuku Island, Legundi Island, Kelagian Island, Condong Laut Island, Tangkil Island, Tegal Island, and several other small islands, each possessing unique characteristics [7].

Marine or island tourism in Lampung Bay is distinct and has been identified for development to boost sustainable tourism

[8]. The attractions of each island vary due to unique characteristics, as evidenced by Pasaran Island and Permata Island, located in Bandar Lampung City. Despite numerous studies on marine and island tourism in Indonesia, focusing on tourist perceptions [9], promotional strategies [10], and the condition of marine ecosystems [11], research specific to island tourism in the Lampung Bay area, especially Bandar Lampung City, remains scarce.

Pasaran Island, known for marine attractions and shopping tours, is the primary center for anchovy production in Lampung Province, with a yield of 57.6 tons per month [12]. It also sells diverse sea fish and green mussels [13, 14]. Additionally, Pasaran Island boasts natural tourism attractions, such as scenic views. Six tourism potentials for Pasaran Island were identified, including mariculture, aquaculture groups, sport and recreation fishing, fishery product tourism, environmental and conservation tourism, and scenic views of nearby coral reefs [15]. Effective management strategies could potentially elevate Pasaran Island as a prominent tourist destination.

On the contrary, Permata Island, formerly known as Grave Island, offers only marine tourism attractions in an area of less than 5 hectares. It features white sand beaches, steep cliffs for fishing, a diverse underwater ecosystem, and attractive sunset views [16]. Pulau Pasaran and Permata are very close to the Provincial Capital. Easy access, such as highways or lots of public transportation, will be a motivation for tourists to come and revisit a tourist attraction [17-19]. This can be one of the potential developments for the convenience of tourists visiting. Despite its potential, Permata Island is often a secondary

destination after other attractions, and consequently, it records lower visitor counts.

Pasaran Island's prominence, tied to the anchovy business, is contingent on fishing periods. The inconsistency of fish harvests, along with the emergence of new tourist attractions, contributes to the limited development of these islands as tourist destinations [20]. Tourist interest greatly influences the growth of tourism [21], making it essential to investigate the low interest in visiting Permata Island and Pasaran Island. The increase in tourist visits can significantly impact the local economy [22], and the advancement of marine tourism holds the potential for new business and employment opportunities. This could contribute to poverty reduction, especially in Lampung Province, Indonesia [22].

The framework of tourist perception is instrumental in analyzing the lack of tourist interest in certain destinations. The varied experiences on Permata Island and Pasaran Island yield different tourist perceptions. Understanding these perceptions is vital, as it can serve as a reference for destination management. Despite the great potential of each island group in Indonesia, there is no visible trend in marine tourism development [10]. Therefore, this research aims to analyze this phenomenon using a tourist perceptions approach.

Measurement of perception can be carried out through various attributes such as tourist attractions, infrastructure, facilities, and services [2, 23]. The measurement serves as a tool to identify deficiencies and improve tourist satisfaction [3, 24]. The insights from this study can be used to enhance management, formulate marketing strategies, increase competitiveness, and guide future research on island tourism development. Consequently, this research intends to analyze the perceptions of marine tourism in Lampung Bay's Small Islands, Bandar Lampung City, Lampung Province, Indonesia.

2. METHOD

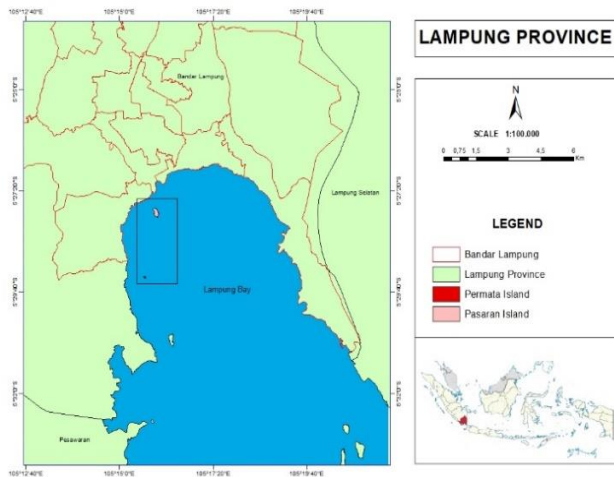


Figure 1. Study area

The study was carried out during the academic break in June 2023. The study was conducted on Pasaran Island and Permata Island, which are both being part of the group of small islands in Lampung Bay at Bandar Lampung City, Lampung Province, Indonesia. The research location was chosen because these two islands represent small island marine tourism in Lampung Bay, Bandar Lampung City, Lampung Province, Indonesia. In

addition, these two locations are unique in that Pasaran Island has the potential for nature tourism and shopping for marine products in the form of salted fish which is very rarely found on other islands. Meanwhile, Permata Island is a small island that was previously included in the administrative area of Pesawaran Regency and is currently included in the administrative area of Bandar Lampung. This island's natural beauty in the middle of the sea and its past as an uninhabited island that is now run as a tourist attraction are what make it unique. The research location can be seen in Figure 1.

The population in this study are tourists in Pasaran Island and Permata Island. Based on Permata Island management data, tourists who visit are usually around 400 tourists (all visitors ranging from children to adults). Meanwhile, on Pasaran Island there is no database on tourist visits. However, from the interview results, it can be assumed that tourist visits in 1 month can reach 200 visitors. In order to collect research data, a total of 300 structured questionnaires were distributed among tourists. There were 228 complete questionnaires (117 on Permata Island and 111 on Pasaran Island). A total of 228 questionnaires were utilized as the sample size for this study.

The people who were chosen to answer the questions were tourists who were at least 15 years old. This age was chosen because it was thought that people of this age could answer the questions well. The questionnaire is divided into two sections, the first of which examines the characteristics of the respondents and the second of which contains numerous statements used to assess tourists' perceptions. Respondent characteristics consist of respondent profile and tourist travel characteristics. Profile information on respondents, including gender, age, income, and education. In addition, information on the features of tourist journeys was gathered regarding information sources, using a tour package or not, visiting purpose, visitation type, and visiting frequency. Meanwhile, the perception section is structured based on various attributes adapted from research by Harianto et al. [3] which uses several attributes to assess tourists' perceptions of natural tourist locations in Lampung Province. The characteristics listed include restrooms, a garbage disposal system, a trash bin, a guard station, parking, a prayer room, food stalls, a center for information, benches, public transportation, lodging, a communication/signaling network, an electrical network, clean water, a gazebo, an entrance, road signs, a beach, and rides. Tourists are asked to score sentences that describe various qualities on a five-point Likert scale from (1) not very interesting, (2) not interesting, (3) quite interesting, (4) interesting, (5) very interesting. The data was examined using factor analysis to find complex relationships between items and classify them according to their features. Furthermore, an examination of tourists' perceptions of gender, age, and income levels was performed on components that had been categorized based on factor analysis. To see the significance of differences in perceptions of the three levels of tourist characteristics, t-tests, and f-tests were carried out at a significance level of 5%. Following that step, a rating of the characteristics that determine the tourist attraction of the two different islands was carried out.

The questionnaire was tested on 30 participants before primary data were collected. After that, the validity and reliability of these findings were assessed. This validity test is used to assess whether a questionnaire is valid or not, whereas the reliability test is a technique used to measure a questionnaire, which is an indicator of a variable [25].

3. RESULTS AND DISCUSSION

3.1 Respondent profile

The data analysis revealed that the majority of responses were female. The analysis of respondent demographics reveals that on Pasaran Island, 58.9% of the participants identify as women, whereas on Permata Island, this figure rises to 71.1%. The majority of participants on both islands fall between the age range of 19 to 28 years, with 29.7% in Pasaran Island and 41.0% in Permata Island. According to the education variable of the respondents, it has been observed that 35.1% of individuals from Pasaran Island have completed high school. Additionally, the average income of this group is within the range of IDR 1.000.000-2.000.000 (50.9%). Based on Table 1, 51% of respondents from Permata Island were high school graduates, and 50.8 percent had an annual income of less than Rp 2.000.000.

3.2 Tourist travel characteristics

There are a number of distinctive travel characteristic among tourists from Pasaran Island and Permata Island (Table 2). The majority of Pasaran Island (81.1%) and Permata Island

(74%) tourists obtained information verbally from friends, family, or acquaintances. None of the tourists read any print media for information. One of the reasons why tourists do not rely on print media for information is that its existence is currently fading [26]. Tourist information is usually also obtained from travel agents. But, the Pasaran Island is not a tourist destination for travel agents. As a result, no tourists seek travel agencies for information. Unlike Permata Island, which is usually an additional vacation spot for tourists from Duta Wisata beach or other beaches in the Teluk Betung area. One of the tour packages that travel agencies provide is to Permata Island.

43.2% of visitors to Pasaran Island are there for business related. In general, this visitor is more interested in purchasing anchovy or other marine goods from Pasaran Island. In fact, 89.2% of visitors make Pasaran Island their main destination, and many (59.5%) tourists have stopped and shopped there multiple times. As opposed to Permata Island, where 87.2% of visitors only want to take a vacation. Permata Island's natural attractiveness is a major tourist attraction. Despite the fact that Permata Island is one of the second-most popular tourist destinations, more than half of respondents (62.3%) chose it as their main visit, with 71.8% visiting for the first time.

Table 1. Respondent profile

| Variable | Indicator | Pasaran Island (%) | Permata Island (%) |
|--------------|---------------------|--------------------|--------------------|
| Gender | Male | 41.1 | 28.9 |
| | Female | 58.9 | 71.1 |
| Age (years) | 15-18 | 0 | 5.1 |
| | 19-28 | 29.7 | 41.0 |
| | 29-38 | 21.6 | 20.5 |
| | 39-48 | 24.3 | 23.1 |
| | 49-58 | 21.6 | 10.3 |
| | >59 | 2.7 | 0 |
| Education | Uneducation | 5.4 | 0.0 |
| | Elementary school | 27.0 | 5.1 |
| | Junior High School | 13.5 | 10.3 |
| | Senior High School | 35.1 | 64.1 |
| | Bachelor | 16.2 | 15.4 |
| | Masters | 2.7 | 5.1 |
| Income (IDR) | 0-1.000.000 | 3.2 | 4.7 |
| | 1.000.000-2.000.000 | 50.9 | 51.8 |
| | 2.000.000-3.000.000 | 29.7 | 23 |
| | 3.000.000-4.000.000 | 5.4 | 2.6 |
| | 4.000.000-5.000.000 | 5.4 | 12.8 |
| | >5.000.000 | 5.4 | 5.1 |

Table 2. Tourist travel characteristics

| Variable | Indicator | Pasaran Island (%) | Permata Island (%) |
|---------------------------------------|----------------------------------|--------------------|--------------------|
| Tourist Attraction Information | Print media | 0.0 | 0.0 |
| | Electronic media | 16.2 | 17.9 |
| | Verbal information | 81.1 | 74.4 |
| | Tour travel agency | 0.0 | 7.7 |
| | Other | 2.7 | 0 |
| Tour Packages | Yes | 0 | 2.6 |
| | No | 100 | 97.4 |
| Visiting Purpose | Recreation/ vacation | 29.7 | 87.2 |
| | Business/ work | 43.2 | 0 |
| | Education | 24.3 | 12.8 |
| Visitation Type | Buying marine products | 2.7 | 0 |
| | The main purpose | 89.2 | 62.3 |
| | Another destination after travel | 10.8 | 37.7 |
| | 1 | 32.4 | 71.8 |
| Visiting Frequency | 2 | 5.4 | 0 |
| | 3-5 | 2.7 | 7.7 |
| | >5 | 59.5 | 20.5 |

Table 3. Factor analysis of tourist attraction attributes

| Attribute | Factor Loading | | | | |
|------------------------------------|---------------------------|-------------------------------------|--|---------------------------------|---------------------------------|
| | Factor 1 (cleanliness) | Factor 2 (supporting factors) | Factor 3 (supporting facilities) | Factor 4 (tourist access) | Factor 5 (natural resources) |
| Toilet | 0.877 | | | | |
| Waste disposal system | 0.212 | | | | |
| Rubbish bin | 0.72 | | | | |
| Guard post | | 0.532 | | | |
| Parking | | 0.526 | | | |
| Mushola | | 0.612 | | | |
| Food stalls | | 0.823 | | | |
| Information Center | | 0.858 | | | |
| Seat | | 0.323 | | | |
| Public transport | | | 0.799 | | |
| Accommodation | | | 0.584 | | |
| Communication/signal network | | | 0.726 | | |
| Electrical network | | | 0.707 | | |
| Clean water | | | 0.545 | | |
| Gazebo | | | 0.376 | | |
| Entrance | | | | 0.873 | |
| Road signs | | | | 0.584 | |
| Natural beauty | | | | | 0.596 |
| Uniqueness | | | | | 0.576 |
| Beach | | | | | 0.782 |
| Rides | | | | | 0.584 |
| Vegetation | | | | | 0.372 |
| Eigenvalues | 7.827 | 3.774 | 2.3 | 1.405 | 1.114 |
| Variance explained (%) | 35.576 | 17.153 | 10.456 | 6.387 | 5.064 |
| Cummulative variance explained (%) | 35.576 | 52.729 | 63.185 | 69.572 | 74.636 |
| Cronbach α | 0.894 | | | | |

3.3 Factorial analysis of tourist attraction attributes

In this study, twenty-three characteristics were used to find out how tourists felt about small island attractions in Lampung Bay, Bandar Lampung City. The attributes were chosen based on the research by Harianto et al. [3] who used various attributes to measure tourist perceptions of natural destinations for tourism in Lampung Province. Based on the results of the factorial analysis of the study attributes, five main factors were made and put in order by their own characteristics (Table 3).

Factor 1 (eigen value 7,827) consists of three attributes: waste disposal system, toilets, and rubbish bin. The "cleanliness" of tourist destinations is described by this factor. A tourist area's cleanliness can be disrupted, for example, because there are many tourists, the volume of waste also increases [27]. As a result, tourist attractions no longer maintain their previous degree of cleanliness. Considering the fact that cleanliness is one of the main aspects of a tourism destination [28]. Cleanliness can be supported by the availability of bins and a reliable waste disposal system. Toilets are an important source of cleanliness for travelers. Toilets in tourist destinations are a crucial part of public services because they cater to visitors' basic physiological demands [29] and have even evolved into a significant symbol in assessing regional tourism growth [30].

The "supporting factors" component of factor 2 (eigen value 3,774) includes parking qualities, prayer rooms, food stalls, information centers, and chairs. Maintaining the security of tourist vehicles involves key considerations about parking and guard post characteristics. Almost all of the small island attractions in the Lampung Bay cluster must be accessed by boat. Before crossing, tourists must leave their vehicles in the port parking area that has been prepared near the port. Therefore, it is important to have facilities that support tourists'

sense of security when they leave their vehicle so they can take boats to the island. The attribute of the mushola (muslim prayer room) is also important because many tourists are Muslims who have to do their prayers in the middle of the visit. The existence of religious facilities supports tourists' sense of comfort in traveling [31]. According to the attributes of the food stalls, some tourists tend to bring their food, while some, particularly young tourists, look for meals at tourist destinations. After swimming at the beach, tourists tend to seek out hot beverages or food to consume to regain their body temperature. Another attribute of this factor is the information center. The attribute of the information center holds significant importance as it serves as a comprehensive source of information about tourist destinations. This includes delineating borders for children's play areas, bathing areas, fishing zones, as well as providing lists of fees for various rides and activities. Another aspect to consider is the seating arrangement. This characteristic is frequently observed in seaside environments. Generally, benches consist of simple wooden chairs or repurposed automobile tires.

Factor 3 (eigen value 2, 3) classified in "supporting facilities" namely public transportation, lodging, signals, electricity, clean water, and gazebos. Public transportation is a crucial component of tourist sites and may even play a role in determining how satisfied visitors are with their experience [32]. Island tourists will use public transportation to the island in the form of boats that depart from the port. The vessel is commonly referred to as a "ketinting boat" by the locals. The maximum capacity of this boat is 15-20 passengers. To travel between the small islands in Lampung Bay, boats can be rented for the day. Therefore, that people can have both the experience of visiting an island and the feeling of travelling across the ocean. Accommodation serves as an additional factor that contributes to enhancing the overall tourist

experience while vacation. According to Gössling and Lund-Durlacher [33] accommodation is a crucial component that is integral to the tourism sector and serves as a significant link in the tourism value chain. Tourist accommodation serves as a facility where individuals can find respite or lodging when visiting a tourist destination [34]. In addition to simple residences and opulent lodging, small-island tourist destinations provide accommodation in the form of simple residences. Accommodation establishments typically offer a variety of choices, including small-capacity lodging suitable for 4-5 individuals, large-capacity lodging capable of accommodating up to 10 individuals, and even tents supplied for travellers interested in camping near the beach. The communication network/mobile phone signal is another feature that is currently a requirement for tourists. The advancement of the digital realm has facilitated the growth of tourism by providing a supportive platform for communication networks. Most of the time, tourists take shots and share them on social media. Sharing pictures of tourist destinations on social media can be a good way to promote them [35]. In addition to the communication network, the provision of energy infrastructure is another crucial factor that contributes to the development and sustainability of tourism attractions. Island tourism destinations situated at a considerable distance from the Provincial or Regency Capital often encounter challenges in accessing an electricity network. One such approach is the utilisation of solar cells and generators to establish a network and power supply. Solar cells have the capability to capture solar energy and transform it into electrical energy [36]. Nonetheless, one of the disadvantages of utilising solar cells is that if damage occurs, it is difficult for the manager to restore. In the end, solar panels frequently go dormant and are no longer usable. As a replacement, a generator with a more familiar for the manager is utilised. The next attribute is clean water. The significance of access to clean water in island tourism destinations cannot be emphasised. Water is a crucial resource for the future of the tourism industry and is a significant concern within the global tourism sector [33, 37]. In general, individuals touring islands for recreational purposes, engaging in activities such as playing or swimming on the beach, will want access to uncontaminated water for the purposes of rinsing and bathing. While there is adequate and correct access to clean water on the islands, it typically still tastes like seawater rather than freshwater. In spite of this, the tourists' requirements for clean water at this time have been fulfilled by this resource. The presence of a gazebo further contributes to the enhancement of travel comfort on the island. These facilities are often offered in a range of sizes. Most tourists will rent a gazebo, put all of their luggage inside, and then play on the beach while taking part in rides or other activities.

Factor 4, with an eigenvalue of 1.405, is referred to as "tourist access" and comprises two distinct attributes, namely the entrance and the road signs. The entrances attribute in the island tourism are different in comparison to other tourist destinations. In order to accessing the marina, tourists are required to go through the roadway and afterwards transfer to a boat for sailing (not all islands, currently Pasaran Island already has a bridge that allows it to be reached by land vehicle). Directions to the port are have convenient accessibility to the mainland via motorbikes and cars. Nevertheless, a limitation exists in the form of the signage directing individuals to the port. Upon arrival at the designated site, the only discernible feature present was a signboard with

the name of the port. Still, the absence of multiple roads signs to the port, with the main road being the only access route, does not pose any significant issues. If tourists adhere to the primary route, it is highly likely that they will come across multiple ports that facilitate transportation across the island. The ease of access for tourists entering this particular tourist destination is a key factor that contributes to their desire to visit and potentially revisit the site. The provision of accessibility is an essential prerequisite for a destination to ensure that it can be accessed and enjoyed by individuals of all backgrounds [38].

Factor 5, with an eigen value of 1.114, encompasses the attribute of natural beauty, uniqueness, beaches, rides, and vegetation, which are categorised as "natural resources" in this context. Island tourism offers natural beauty and distinctive landscape that draws travellers as a tourist destination that sells its natural circumstances. The beach area serves as a recreational space where tourists can engage in activities like as swimming, playing, and enjoying the different rides offered by local tourist attractions. This feature contributes to the overall appeal of the island as a destination for visitors to spend their leisure time. One of the distinguishing factors between island tourism and other forms of tourism lies in the distinctive vegetation attribute. Island tourism with landscape conditions in the form of areas impacted by sea tides results in the formation of vegetation that is distinct from other excursions. The vegetation inside the island tourism region has a diverse array of plant species, ranging from mangroves to clustered trees, which organise themselves into distinct formations based on their respective habitats [39]. This area is a good place for tourists to take photos.

Additionally, the values of the variance explained, cumulative variance explained, and cronbach's alpha are shown in Table 3. The derived values for variance explained were 35.578%, 17.153%, 10.456%, 6.387%, and 5.064%, resulting in a cumulative explained variance of 74.636%. The Cronbach α coefficient for the 23 qualities is 0.894. The Cronbach α value above 0.80 indicates that the attribute measuring data is reliable [40].

3.4 Analysis of tourist perceptions at the level of gender, age and income

Analysis of tourist perceptions of tourist objects in the small islands of Lampung Bay in Bandar Lampung City was also carried out at the levels of gender, age, and income to see the significance of differences in perceptions of the three characteristics of tourists. The selection of these three characteristics was adopted from the research by Chen et al. [41] who looked at tourist perceptions from 3 tourist demographic levels, namely gender, age, and income. When examining the available attractions, it can be observed that Pasaran Island provides opportunities for maritime tourism and shopping experiences. This island is the main center for anchovies in Lampung Province. In contrast to Permata Island, which only offers tourist attractions such as white and fine sand beaches, there are rocky cliffs that can be used for fishing spots. With the differences between these two islands, there will be different perceptions of tourists on the two islands and also from the level of gender, age and income. The results of the analysis using Tourists' perceptions by gender are presented in Table 4.

Tourists' perceptions by gender show the results of the mean, standard deviation, t-value, and p-value on Pasaran Island and

Permata Island (Table 4). On the two islands, several outcomes and values were found. The results of the t-test of tourists' perceptions by gender on Pasaran Island show significant differences in the attributes of facilities, access, and natural resources. The mean results show that women have a higher interest in these three attributes than men. In contrast to the results of the tourists' perceptions by gender on Permata Island, which showed only cleanliness attributes that differed significantly between men and women. The mean results show that women pay more attention to cleanliness than men. This can also be seen in Eriksson et al.'s [42] research that there are indications that men tend to consider this hygiene behavior to be less important than women.

Table 5 shows the results of the one-way analysis of

variance for tourist age level regarding the 5 factors that have been formed. The age group starts from 15 years. The results of the analysis show that there are no significant differences in the perceptions of tourists with various age groups on Permata Island. Meanwhile, on Pasaran Island, there are significant differences in tourists' perceptions at age level with the attributes of cleanliness and tourist access. Tourists with different age classifications and even elderly people tend to be greatly influenced by the cleanliness of the tourist attraction. The majority of participants on both islands fall between the age range of 19 to 28 years, but Pasaran Island does not have respondents aged 15-18 years, while Permata Island does not have elderly respondents (> 59 years).

Table 4. Tourists' perceptions by gender

| Attribute | Gender | Pasaran Island Tourists | | | | Permata Island Tourists | | | |
|----------------------------------|--------|-------------------------|-------|---------|---------|-------------------------|-------|---------|---------|
| | | Mean | Std. | t-Value | p-Value | Mean | Std. | t-Value | p-Value |
| Factor 1 (cleanliness) | Male | 1.94 | 0.861 | -1.786 | 0.078 | 2.36 | 0.653 | -3.575 | 0.001* |
| | Female | 2.20 | 0.677 | | | 2.82 | 0.541 | | |
| Factor 2 (supporting factors) | Male | 1.81 | 0.571 | -1.293 | 0.199 | 3.00 | 0.968 | 0.193 | 0.847 |
| | Female | 1.99 | 0.795 | | | 2.96 | 0.870 | | |
| Factor 3 (supporting facilities) | Male | 2.12 | 0.393 | -7.099 | 0.001* | 2.58 | 0.663 | 0.117 | 0.907 |
| | Female | 2.86 | 0.713 | | | 2.56 | 0.683 | | |
| Factor 4 (tourist access) | Male | 2.50 | 0.744 | -3.839 | 0.001* | 2.52 | 0.712 | 0.569 | 0.571 |
| | Female | 2.99 | 0.556 | | | 2.44 | 0.608 | | |
| Factor 5 (natural resources) | Male | 1.88 | 0.959 | -3.934 | 0.001* | 2.03 | 0.684 | -.192 | 0.848 |
| | Female | 2.51 | 0.678 | | | 2.06 | 0.869 | | |

Note: Mean value (1) not very interesting, (2) not interesting, (3) quite interesting, (4) interesting, (5) very interesting.

Table 5. Tourists' perceptions by age

| Attribute | Age (year) | Pasaran Island Tourists | | | | Permata Island Tourists | | | |
|-------------------------------|------------|-------------------------|-------|---------|---------|-------------------------|-------|---------|---------|
| | | Mean | Std. | f-Value | p-Value | Mean | Std. | f-Value | p-Value |
| F1 (cleanliness) | <18 | 2.43 | 0.787 | 3.131 | 0.011* | 3.00 | 0.000 | 1.239 | 0.299 |
| | 19-28 | 1.80 | 0.833 | | | 2.71 | 0.756 | | |
| | 29-38 | 2.12 | 0.612 | | | 2.56 | 0.506 | | |
| | 39-48 | 2.38 | 0.495 | | | 2.60 | 0.507 | | |
| | 49-58 | 2.00 | 0.885 | | | 2.75 | 0.452 | | |
| | >59 | 3.00 | 0.000 | | | | | | |
| F2 (supporting factors) | <18 | 2.29 | 0.951 | 1.332 | 0.256 | 3.25 | 1.055 | 0.975 | 0.424 |
| | 19-28 | 2.09 | 0.887 | | | 2.90 | 0.806 | | |
| | 29-38 | 1.75 | 0.442 | | | 2.93 | 0.997 | | |
| | 39-48 | 1.88 | 0.612 | | | 3.27 | 1.033 | | |
| | 49-58 | 1.75 | 0.676 | | | 2.75 | 0.622 | | |
| | >59 | 2.00 | 0.000 | | | | | | |
| F3 (supporting facilities) | <18 | 2.57 | 0.787 | 0.962 | 0.444 | 2.75 | 0.965 | 0.894 | 0.470 |
| | 19-28 | 2.54 | 0.701 | | | 2.49 | 0.505 | | |
| | 29-38 | 2.50 | 0.722 | | | 2.52 | 0.753 | | |
| | 39-48 | 2.75 | 0.847 | | | 2.80 | 0.862 | | |
| | 49-58 | 2.38 | 0.495 | | | 2.50 | 0.522 | | |
| | >59 | 3.00 | 0.000 | | | | | | |
| F4 (tourist access) | <18 | 2.57 | 0.787 | 3.620 | 0.005* | 2.50 | 0.798 | 0.029 | 0.998 |
| | 19-28 | 2.63 | 0.547 | | | 2.45 | 0.577 | | |
| | 29-38 | 2.88 | 0.612 | | | 2.44 | 0.641 | | |
| | 39-48 | 3.00 | 0.511 | | | 2.47 | 0.743 | | |
| | 49-58 | 2.62 | 0.875 | | | 2.50 | 0.674 | | |
| | >59 | 4.00 | 0.000 | | | | | | |
| F5 (natural resources) | <18 | 2.43 | 0.976 | 0.764 | 0.578 | 2.17 | 1.115 | 0.392 | 0.814 |
| | 19-28 | 2.14 | 0.845 | | | 2.08 | 0.627 | | |
| | 29-38 | 2.46 | 0.833 | | | 1.89 | 0.892 | | |
| | 39-48 | 2.25 | 0.897 | | | 2.07 | 1.100 | | |
| | 49-58 | 2.08 | 0.881 | | | 2.17 | 0.718 | | |
| | >59 | 2.67 | 0.577 | | | | | | |

Note: Mean value (1) not very interesting, (2) not interesting, (3) quite interesting, (4) interesting, (5) very interesting.

The majority of elderly tourists to Pasaran Island are buying marine products and traveling for business. Pasaran Island, which tends to have more tourists doing shopping tours, with less clean market conditions will affect visitor satisfaction. One of the qualities that the elderly pay enough attention to is cleanliness (mean=3.00). In addition, visitors of all ages are significantly impacted by the effects of tourist access. Easy access will be a factor that significantly affects tourists' decisions. The elderly frequently select accessible tourist destinations. Pasaran Island, which can be reached by land, is a major draw for the elderly as a tourist destination. The mean value of 4.00 indicates that the elderly tend to think about access more than those of other age groups. This is supported by Kan et al.'s research [43] discover that the elderly pay more attention to cleanliness than younger people do. In addition, compared to other age groups, seniors favor tourism destinations that are simple to reach. This is due to the fact that elderly people want simple access and cleanliness. The elderly simply want to unwind and have a good time when traveling.

The results of the analysis of tourists' perceptions by income in Table 6 show that there are significant differences in the perceptions of Pasaran Island tourists at the income level with the attributes of cleanliness and tourist access. Based on the mean value, it can be seen that tourists with an average salary range of 2-3 million rupiah show more interest in the cleanliness of tourist sites compared to others. Meanwhile, in

the tourist access attribute, the highest mean is at a salary of 1-2 million rupiah, followed by > 5 million rupiah, 0-1 million rupiah, 2-3 million rupiah, and 3-4 million rupiah (found at a mean value close to "quite interesting"). In contrast to Permata Island, which showed significant results only on supporting factors attribute. Based on the mean value generated, this quality falls into the "quite interesting" and "interesting" categories. Tourists whose annual income ranges from 4 to 5 million and 1 to 2 million rupiah fall into the category of individuals deemed as "interesting." The remaining four fall under the classification of being "quite interesting."

Upon examining the respondents' income, it can be seen that tourists from the two islands are very diverse. There are many tourists who have salaries below the UMR (regional minimum wage) and there are also many tourists who have incomes above the UMR. According to the Decree of the Governor of Lampung Number G/744/V.08/HK/2022, which pertains to the establishment of the minimum wage for the City of Bandar Lampung in the year 2023, it has been determined that the minimum salary for this city is set at IDR 2.991.349,35 per month. Even though many people have salaries below the minimum wage, the need to travel is a need for everyone from young, old, poor, rich, foreigner, domestic, experienced or not, everyone wants to travel with different desires and expectations [44]. However, the difference is income which will influence individual decisions on the choice of travel [45].

Table 6. Tourists' perceptions by income

| Attribute | Income (IDR) | Pasaran Island Tourists | | | | Permata Island Tourists | | | |
|-------------------------------|--------------|-------------------------|-------|---------|---------|-------------------------|-------|---------|---------|
| | | Mean | Std. | f-Value | p-Value | Mean | Std. | f-Value | p-Value |
| F1 (cleanliness) | 0-1 million | 2.00 | 0.781 | 7.727 | 0.000* | 2.65 | 0.732 | 1.366 | 0.243 |
| | 1-2 million | 2.33 | 0.480 | | | 3.00 | 0.000 | | |
| | 2-3 million | 3.00 | 0.000 | | | 2.71 | 0.463 | | |
| | 3-4 million | 1.50 | 0.548 | | | 2.50 | 0.548 | | |
| | 4-5 million | 1.00 | 0.000 | | | 3.00 | 0.000 | | |
| F2 (supporting factors) | >5 million | 2.42 | 0.793 | 1.746 | 0.130 | 2.50 | 0.522 | 4.747 | 0.001* |
| | 0-1 million | 2.00 | 0.781 | | | 2.95 | 0.910 | | |
| | 1-2 million | 1.89 | 0.577 | | | 3.67 | 1.033 | | |
| | 2-3 million | 1.50 | 0.548 | | | 2.62 | 0.590 | | |
| | 3-4 million | 1.50 | 0.548 | | | 2.50 | 0.548 | | |
| F3 (supporting facilities) | 4-5 million | 1.50 | 0.548 | 2.212 | 0.058 | 3.83 | 0.937 | 2.016 | 0.082 |
| | >5 million | 2.17 | 0.718 | | | 2.75 | 0.622 | | |
| | 0-1 million | 2.60 | 0.669 | | | 2.60 | 0.718 | | |
| | 1-2 million | 2.78 | 0.801 | | | 2.67 | 0.516 | | |
| | 2-3 million | 2.50 | 0.548 | | | 2.43 | 0.507 | | |
| F4 (tourist access) | 3-4 million | 2.50 | 0.548 | 2.869 | 0.018* | 2.17 | 0.408 | 0.784 | 0.563 |
| | 4-5 million | 2.00 | 0.000 | | | 3.00 | 0.853 | | |
| | >5 million | 2.17 | 0.718 | | | 2.33 | 0.492 | | |
| | 0-1 million | 2.80 | 0.514 | | | 2.52 | 0.651 | | |
| | 1-2 million | 3.00 | 0.480 | | | 2.17 | 0.408 | | |
| F5 (natural resources) | 2-3 million | 2.50 | 0.548 | 1.833 | 0.112 | 2.48 | 0.602 | 0.750 | 0.588 |
| | 3-4 million | 2.50 | 0.548 | | | 2.17 | 0.408 | | |
| | 4-5 million | 2.00 | 1.095 | | | 2.58 | 0.793 | | |
| | >5 million | 2.92 | 1.240 | | | 2.33 | 0.651 | | |
| | 0-1 million | 2.20 | 0.935 | | | 2.08 | 0.869 | | |
| | 1-2 million | 2.33 | 0.679 | | | 1.83 | 0.753 | | |
| | 2-3 million | 2.00 | 0.000 | | | 2.14 | 0.573 | | |
| | 3-4 million | 2.50 | 0.548 | | | 1.50 | 0.837 | | |
| | 4-5 million | 1.50 | 0.548 | | | 2.17 | 1.115 | | |
| | >5 million | 2.67 | 1.073 | | | 2.00 | 0.603 | | |

Note: Mean value (1) not very interesting, (2) not interesting, (3) quite interesting, (4) interesting, (5) very interesting.

Tourists that have more money typically pay more attention to the supporting infrastructure. Because the bigger the income, the greater the ability to pay for travel expenses [46]. So, they often want better services. Tourists from the second-highest

income (Table 2) found the island of Pasaran to be "quite interesting," with a mean satisfaction score of 3.00 (Table 6). Regarding the tourist accessibility attribute, travelers earning between 1-2 million show a mean value of 3.00 which is

included in the "quite interesting" category. The amount of money to be paid will depend on how easily someone is able to travel. Research by Awad-Núñez et al. [47] found that people with lower incomes will choose tourist locations with cheaper and easier access compared to people with higher incomes. Apart from that, people with higher incomes will find it easier to spend money to obtain supporting facilities that support their satisfaction. As can be seen in Table 6, Permata Island tourists with an income of 4-5 million are more interested in supporting factor conditions compared to other income levels. These conditions are also influenced by the fact that tourists from Permata Island tend to aim for nature tourism, in contrast to Pasaran Island, which tends to do tourism while doing business in marine products.

At the levels of gender, age, and income, the perceptions of visitors to Pasaran Island and Permata Island have been examined. Following that, the tourist impressions about the five pre-established elements, namely cleanliness, supporting factors, supporting facilities, tourist access, and natural resources, will be assessed and ranked. The purpose of this analysis is to examine the ranking of factors that influence the tourist attraction of the two islands. This can illustrate the vitality and potential that must be sustained or revived to back the growth of tourism attractions. The results of the tourists' perception ranking are presented in Table 7.

Table 7. Tourists' perception ranking

| Attribute | Mean | | Ranking | |
|----------------------------|----------------|----------------|----------------|----------------|
| | Pasaran Island | Permata Island | Pasaran Island | Permata Island |
| F1 (cleanliness) | 2.11 | 2.69 | 4 | 2 |
| F2 (supporting factors) | 1.92 | 2.97 | 5 | 1 |
| F3 (supporting facilities) | 2.59 | 2.56 | 2 | 4 |
| F4 (tourist access) | 2.84 | 2.46 | 1 | 5 |
| F5 (natural resources) | 2.27 | 2.65 | 3 | 3 |

Note: mean value (1) not very interesting, (2) not interesting, (3) quite interesting, (4) interesting, (5) very interesting.

According to the data shown in Table 7, there exists differences in the perceptions of tourists regarding the ranking of the five characteristics between Pasaran Island and Permata Island. In Pasaran Island, the criteria are ranked from highest to lowest as follows: tourist access, supporting facilities, natural resources, cleanliness, and supporting factors. As for Permata Island, it received the highest ranking for the attributes of supporting factors, which was followed by cleanliness, supporting facilities, tourist access, and natural resources. There are differences in the ranking values of the supporting facilities on Pasaran Island and Permata Island. The mean values, though (Pulau Pasaran 2.59 and Pulau Permata 2.56), are not significantly different. The analysis of the natural resources attribute reveals that Pasaran Island has a relatively low average value (2.27) under the "not interesting" category. Permata Island exhibits a mean value of 2.65, which approximates 3, so placing it inside the category of "quite interesting." The cleanliness attribute of Permata Island falls under the "quite interesting" category, exhibiting a mean value of approximately 3 (2.69). Comparatively speaking, Pasaran Island has a mean rating of 2.11 with the qualification "not interesting" perception. Meanwhile, supporting factors have very different values on these two islands. This attribute has

the highest rank on Permata Island but the lowest rank on Pasaran Island.

The difference in how tourists are rated on the two islands is due to the different attractions from two island. The majority of tourists originating from Pasaran Island have a greater inclination towards engaging in shopping tourism, whereas those from Permata Island tend to display interest in natural tourism. In addition to this, it is perceived that the accessibility to Pasaran Island tourism is comparatively more convenient and cost-effective than that of Permata Island. In order to access Pasaran Island, it is no longer necessary to rely on marine transportation. The island of Pasaran currently has provided with a bridge that serves as a connection to Karang City. This bridge is the only land connection that connects the mainland to the island of Pasaran. Regarding Permata Island, travel can only be accomplished via land and marine roads at this time. The cleanliness of the two islands exhibits disparities due to their respective visitor profiles. Pasaran Island, being mostly frequented by shoppers, tends to have somewhat lower maintenance of hygiene standards compared to Permata Island. In contrast, Permata Island showcases a greater emphasis on environmental conditions, characterised by enhanced attractiveness, comfort, and cleanliness. The prioritisation of elements that impact the tourist attractions on Pasaran Island and Permata Island is an essential task for managers in order to enhance the development of these destinations. There is a need for enhancing the environmental conditions and facilities at tourist attractions in order to provide favourable outcomes for the sustainability of these tourist attractions. Managers are supposed to be able to come up with the right plan based on what's going on at the moment. The presence of enhanced management practises might serve as an indicator of the progress made towards achieving sustainable tourism development [48].

The development of tourist objects on the two islands can be successful if management on both islands improves and is supported by the government. The primary changes that need to be addressed, as indicated by the analysis's findings, Pasaran Island really needs to be repaired at the guard post, parking, prayer room, food stalls, information center and benches. As for Permata Island, improvements are urgently needed in access to public transport, accommodation, communication/signal network, electrical network, clean water, and gazebos.

4. CONCLUSIONS

The viability of the tourist attraction in the small islands of Lampung Bay, located in Bandar Lampung City, Lampung Province, Indonesia, is underpinned by a multitude of variables. Based on a factor analysis of 23 tourist perception attributes, five factors were created: cleanliness, supporting factors, supporting facilities, tourist access, and natural resources. Analysis of tourist perceptions at the level of gender, age, and income shows a different significance for each factor. An analysis of tourist perceptions by gender on Pasaran Island reveals significant differences in their views regarding facilities, access, and natural resources. Tourists' perceptions by age show the results that there are no significant differences in the perceptions of tourists with various age groups on Permata Island. Whereas on Pasaran Island, there are significant differences in the perception of tourists at the elderly age level (> 59 years) with the attributes of cleanliness

and tourist access. The results of the analysis of tourists' perceptions by income show that there are significant differences in the perceptions of Pulau Pasaran tourists at the income level with the attributes of cleanliness and tourist access. In contrast to Permata Island which showed significant results only on supporting factors. In the two islands, perceptions of each level by gender, age, and income show different outcomes. This is determined by the available tourist attractions, the condition of existing facilities, entry access, and also tourist destinations. Differences in tourist attraction can also indicate differences in consumer targets. If you look deeper, Pasaran Island is more directed to consumers who have shopping and business tourism interests. In contrast to Permata Island, which emphasizes natural beauty, targeting families and young people traveling. So, it is necessary to make a strategy for the development of tourist objects that also pay attention to the target consumers of each tourist attraction. The results of ranking tourists' perceptions of the five factors that have been determined on Pasaran Island, the attributes with the highest ranking to the lowest respectively are tourist access, supporting facilities, natural resources, cleanliness, and supporting factors. As for Permata Island, it showed the highest ranking on the attributes of supporting factors followed by cleanliness, supporting facilities, tourist access, and natural resources. The analysis's findings point to the necessity of improved tourism development and management in both islands. Pasaran Island's guard station, parking, prayer room, food stands, information center, and benches all need to be fixed up. Regarding Permata Island, there is an urgent need for enhancements in various aspects including access, accommodation, communication/signal network, electrical network, clean water, and gazebos. Numerous analyses indicate that there is a requirement for enhanced tourism development and management strategies that are specifically customized to align with the objectives of individual tourist attractions. There is a need to address and improve several aspects of island tourism in order to promote the growth and long-term viability of island tourist destinations. The findings of this study may be used in subsequent studies and planning for tourist development, as well as to enhance facilities, management, marketing strategies, competitiveness, and other areas. Additional research is required to examine the impact of different factors on visitor loyalty and ODTW analysis within the Lampung Bay cluster, with the aim of integrating diverse tourist attractions in the Lampung Bay region.

ACKNOWLEDGMENT

This work is supported by Directorate of Research, Technology and Community Service; Directorate General of Higher Education, Research and Technology; Ministry of Education, Culture, Research and Technology (Grant numbers: 131/E5/PG.02.00.PL/2023).

REFERENCES

- [1] Xu, A., Wang, C., Tang, D., Ye, W. (2022). Tourism circular economy: Identification and measurement of tourism industry ecologization. *Ecological Indicators*, 144, 109476. <https://doi.org/10.1016/j.ecolind.2022.109476>.
- [2] Machya, K.T., Harianto, S.P., Santoso, T., Winarno, G.D., Masruri, N.W. (2021). Penilaian Wisatawan Terhadap Komponen Destinasi Wisata: Atraksi, Amenitas, Aksesibilitas dan Pelayanan Tambahan Pada Objek Wisata Kebun Raya Liwa. *Jurnal Ilmu Kehutanan*, 15(1): 13-27. <https://doi.org/10.22146/jik.v15i1.1515>.
- [3] Harianto, S.P., Winarno, G.D., Tsani, M.K., Santoso, T. (2020). Development strategy for ecotourism management based on feasibility analysis of tourist attraction objects and perception of visitors and local communities. *Biodiversitas Journal of Biological Diversity*, 21(2): 689-698. <https://doi.org/10.13057/BIODIV/D210235>
- [4] Orams, M. (1999). *Marine tourism: Development, impacts and management*. Psychology Press.
- [5] Leposa, N. (2020). Problematic blue growth: A thematic synthesis of social sustainability problems related to growth in the marine and coastal tourism. *Sustainability Science*, 15: 1233-1244. <https://doi.org/10.1007/s11625-020-00796-9>
- [6] Husna, N., Novita, D. (2020). Peran Aesthetic Experiential Qualities Dan Perceived Value Untuk Kepuasan Dan Loyalitas Pengunjung Wisata Bahari Di Provinsi Lampung. *Jurnal Pariwisata Pesona*, 5(2): 136-141. <https://doi.org/10.26905/jpp.v5i1.4732>
- [7] FGD pengelolaan sampah Teluk Lampung. (2018). <https://docplayer.info/202144582-Fgd-pengelolaan-sampah-teluk-lampung.html>.
- [8] Walker, T.B., Lee, T.J., Li, X. (2021). Sustainable development for small island tourism: developing slow tourism in the Caribbean. *Journal of Travel & Tourism Marketing*, 38(1): 1-15. <https://doi.org/10.1080/10548408.2020.1842289>
- [9] Towner, N., Orams, M. (2016). Perceptions of surfing tourism operators regarding sustainable tourism development in the Mentawai Islands, Indonesia. *Asia Pacific Journal of Tourism Research*, 21(11): 1258-1273. <https://doi.org/10.1080/10941665.2016.1140663>
- [10] Briandana, R., Doktoralina, C.M., Sukmajati, D. (2018). Promotion analysis of marine tourism in Indonesia: A case study. *European Research Studies Journal*, 21(1): 602-613. <https://doi.org/10.35808/ersj/973>
- [11] Sidauruk, T., Rahmadi, M.T., Sugiharto, S., Suciani, A., Sari, R.M., Yuniastuti, E. (2022). Distribution analysis of coral reefs for development of marine tourism in Weh Island, Aceh, Indonesia. *Depik*, 11(2): 237-245. <https://doi.org/10.13170/depik.11.2.25919>
- [12] Ali, M., Efendi, E., Noor, N.M. (2018). Proses pengolahan ikan teri (*Stolephorus sp.*) dan pemanfaatan limbahnya sebagai bahan baku pakan ikan dalam mendukung konsep zero waste. *Jurnal Perikanan Unram*, 8(1): 47-54. <https://doi.org/10.29303/jp.v8i1.78>.
- [13] Putri, B. (2018). Pembinaan usaha budidaya kerang hijau dan ikan di pulau pasaran lampung. *Jurnal Pengabdian Kepada Masyarakat Sakai Sambayan*, 2(1): 30-35. <https://doi.org/10.23960/jss.v2i1.50>
- [14] Ali Imron, A., Dewie Brima Atika, D.W., Eko Budi Sulistio, E.B. (2019). Pemberdayaan Masyarakat Pesisir Melalui Pengembangan Klaster Ikan di Pulau Pasaran Kota Bandar Lampung. in *Prosiding Seminar Nasional FISIP Universitas Lampung (SeFila) 3*, 113-120. <http://repository.lppm.unila.ac.id/id/eprint/40543>.
- [15] Noor, N.M., Utomo, D.S.C., Hastuti, A.Y., Habibi, A., Ali, M. (2021). Pengembangan potensi wisata bahari berbasis masyarakat di Pulau Pasaran, Bandar Lampung.

- Inovasi Pembangunan-Jurnal Kelitbangan, 9(1): 103-114. <https://doi.org/10.35450/jip.v9i01.219>.
- [16] Martanti, M., Zulkarnain, Z., Utami, D. (2021). Penilaian Potensi Objek Wisata Pulau Permata di Telukbetung Timur Kota Bandar Lampung. *Jurnal Penelitian Geografi (JPG)*, 9(1): 38-46.
- [17] Oh, C.O., Draper, J., Dixon, A.W. (2010). Comparing resident and tourist preferences for public beach access and related amenities. *Ocean & Coastal Management*, 53(5-6): 245-251. <https://doi.org/https://doi.org/10.1016/j.ocecoaman.2010.04.007>
- [18] Rolfe, J., Flint, N. (2018). Assessing the economic benefits of a tourist access road: A case study in regional coastal Australia. *Economic Analysis and Policy*, 58: 167-178. <https://doi.org/https://doi.org/10.1016/j.eap.2017.09.003>.
- [19] Haron, H.I.C., Abdullah, H., Ahmad Tajuddin, S.A.F.S., Rahim, N.A.A.A. (2023). Bootstrapping on Tourist Satisfaction: Examine the Mediating Effects Between Determinant Factors and Tourist Intention to Revisit Terengganu's Edutourism Destinations. *International Journal of Sustainable Development & Planning*, 18(6): 1691-1706. <https://doi.org/10.18280/ijstdp.180605>
- [20] Hailuddin, H., Suryatni, M., Yuliadi, I., Canon, S., Syaparuddin, S., Endri, E. (2022). Beach area development strategy as the prime tourism area in Indonesia. *Journal of Environmental Management and Tourism*, 13(2): 414-426. [https://doi.org/10.14505/jemt.v13.2\(58\).11](https://doi.org/10.14505/jemt.v13.2(58).11)
- [21] Waseza, F.C. (2017). Faktor-faktor yang mendukung pengembangan obyek wisata bukit khayangan di kota sungai penuh provinsi Jambi. *Nur El-Islam*, 4(1): 89-106.
- [22] Arismayanti, N.K. (2017). Development strategy of ecotourism marine sustainable in indonesia. *ASEAN Journal on Hospitality and Tourism*, 15(2): 118-138. <https://doi.org/10.5614/ajht.2017.15.2.4>
- [23] Prayitno, A.A., Winarno, G.D., Rusita, R.R., Harianto, S.P. (2021). Persepsi wisatawan terhadap objek daya tarik wisata di pantai ketapang, kabupaten pesawaran, provinsi lampung. *Journal of Tropical Marine Science*, 4(2): 65-72. <https://doi.org/10.33019/jour.trop.mar.sci.v4i2.2313>
- [24] Bhuiyan, M.A.H., Darda, M.A., Hasan, M.R. (2021). Tourist perception and satisfaction on safari tourism at Bangabandhu Sheikh Mujib Safari Park in Bangladesh. *International Journal of Geoheritage and Parks*, 9(4): 430-440. <https://doi.org/10.1016/j.ijgeop.2021.11.005>
- [25] Sopyan, S., Widiyanto, I. (2015). Analisis Pengaruh Daya Tarik Wisata dan Kualitas Pelayanan Terhadap Minat Berkunjung Ulang Pengunjung dengan Kepuasan Pengunjung Sebagai Variabel Intervening (Studi pada Cagar Budaya Gedung Lawang Sewu) (Doctoral dissertation, Fakultas Ekonomika dan Bisnis).
- [26] Saragih, M.Y., Harahap, A.I. (2020). The Challenges of Print Media Journalism in the Digital Era. *Budapest International Research and Critics Institute (BIRCI Journal): Humanities and Social Science*, 3(1): 540-548. <https://doi.org/10.33258/birci.v3i1.805>
- [27] Khair, H., Utami, R., Lordye, G., Sari, U., Pasaribu, E. (2022). Cleanliness assessment of Lake Toba tourist attractions from stakeholders' perspective. In *IOP Conference Series: Earth and Environmental Science*, 1098(1): 012005. <https://doi.org/10.1088/1755-1315/1098/1/012005>.
- [28] Liew, S.L., Hussin, S.R., Abdullah, N.H. (2021). Attributes of senior-friendly tourism destinations for current and future senior tourists: An importance-performance analysis approach. *SAGE Open*, 11(1): 2158244021998658. <https://doi.org/10.1177/2158244021998658>
- [29] Ali, F., Lestari, D.L., Putri, M.D. (2020). Eco-friendly toilet for sustainable wastewater management in tourism area. In *E3S Web of Conferences*, 211: 1-10. <https://doi.org/10.1051/e3sconf/202021101009>
- [30] Sang, S. (2017). Reconstructing a tourism toilet servicescape conception based on grounded theory-a case study of Lhasa City. In *2nd International Conference on Education Technology and Economic Management (ICETEM 2017)*, pp. 75-81. <https://doi.org/10.2991/icetem-17.2017.17>
- [31] Aulet, S., Vidal, D. (2018). Tourism and religion: Sacred spaces as transmitters of heritage values. *Church, Communication and Culture*, 3(3): 237-259. <https://doi.org/10.1080/23753234.2018.1542280>
- [32] Boivin, M., Tanguay, G.A. (2019). Analysis of the determinants of urban tourism attractiveness: The case of Québec City and Bordeaux. *Journal of destination marketing & management*, 11: 67-79. <https://doi.org/10.1016/j.jdmm.2018.11.002>.
- [33] Gössling, S., Lund-Durlacher, D. (2021). Tourist accommodation, climate change and mitigation: An assessment for Austria. *Journal of Outdoor Recreation and Tourism*, 34: 100367. <https://doi.org/https://doi.org/10.1016/j.jort.2021.100367>.
- [34] Primadewi, S.P.N., Sueca, N.P., Dwijendra, N.K.A., Siwalatri, N.K.A. (2021). Emerging architect's design method in designing tourist accommodation case study: tourist accommodation in ubud, bali. *Civil Engineering and Architecture*, 9(2): 271-280. <https://doi.org/10.13189/cea.2021.090201>
- [35] Huerta-Álvarez, R., Cambra-Fierro, J.J., Fuentes-Blasco, M. (2020). The interplay between social media communication, brand equity and brand engagement in tourist destinations: An analysis in an emerging economy. *Journal of Destination Marketing & Management*, 16: 100413. <https://doi.org/https://doi.org/10.1016/j.jdmm.2020.100413>
- [36] Hendri, H., Awal, H. (2021). Solar-Cell Implementation for Supporting Tourist Facilities and Tourism Promotion Media. In *Journal of Physics: Conference Series*, 1783(1): 012058. <https://doi.org/10.1088/1742-6596/1783/1/012058>
- [37] Alarcón, D.M., Cole, S. (2019). No sustainability for tourism without gender equality. *Journal of Sustainable Tourism*, 27(7): 903-919. <https://doi.org/10.1080/09669582.2019.1588283>
- [38] Natalia, P., Clara, R.A., Simon, D., Noelia, G., Barbara, A. (2019). Critical elements in accessible tourism for destination competitiveness and comparison: Principal component analysis from Oceania and South America. *Tourism Management*, 75: 169-185. <https://doi.org/https://doi.org/10.1016/j.tourman.2019.04.012>.
- [39] Fajariyah, S.N., Lisminingsih, R.D., Zayadi, H. (2019). Eksplorasi vegetasi kawasan hutan pantai sebagai atraksi

- Edu-Wisata di pantai gatra dusun sendang biru desa Sihatjo kecamatan sumbermanjing Wetan Kabupaten Malang. *Jurnal Ilmiah Biosaintropis (Bioscience-Tropic)*, 5(1): 7-17. <https://doi.org/10.33474/e-jbst.v5i1.210>
- [40] Bougie, R., Sekaran, U. (2019). *Research methods for business: A skill building approach*. West Sussex, England, England: John Wiley & Sons.
- [41] Chen, C.M., Chen, S.H., Lee, H.T., Tsai, T.H. (2016). Exploring destination resources and competitiveness—A comparative analysis of tourists' perceptions and satisfaction toward an island of Taiwan. *Ocean & Coastal Management*, 119: 58-67. <https://doi.org/10.1016/j.ocecoaman.2015.09.013>
- [42] Eriksson, K., Dickins, T.E., Strimling, P. (2022). Global sex differences in hygiene norms and their relation to sex equality. *PLOS Global Public Health*, 2(6): e0000591. <https://doi.org/10.1371/journal.pgph.0000591>
- [43] Kan, T., Ku, E.C., Sun, W. C., Lai, T.C., Hsu, P.Y., Hsu, S.C. (2023). Wellness tourism enhances elderly life satisfaction. *Journal of Quality Assurance in Hospitality & Tourism*, 24(4): 402-428. <https://doi.org/10.1080/1528008X.2022.2052394>
- [44] Suwena, I.K., Widyatmaja, I.G.N., Atmaja, M.J. (2010). *Pengetahuan dasar ilmu pariwisata*. Udayana University Press.
- [45] Dėdelė, A., Miškinytė, A., Andrušaitytė, S., Nemaniūtė-Gužienė, J. (2020). Dependence between travel distance, individual socioeconomic and health-related characteristics, and the choice of the travel mode: a cross-sectional study for Kaunas, Lithuania. *Journal of Transport Geography*, 86: 102762. <https://doi.org/10.1016/j.jtrangeo.2020.102762>
- [46] Nikita, L.A., Masinambow, V.A., Tolosang, K.D. (2017). Pengaruh Pendapatan Perkapita (Global) Terhadap Jumlah Wisatawan Asing Dan Pdrb Sektor Pariwisata Sulawesi Utara. *Jurnal Berkala Ilmiah Efisiensi*, 17(2): 13-24.
- [47] Awad-Núñez, S., Julio, R., Gomez, J., Moya-Gómez, B., González, J.S. (2021). Post-COVID-19 travel behaviour patterns: impact on the willingness to pay of users of public transport and shared mobility services in Spain. *European Transport Research Review*, 13: 1-18. <https://doi.org/10.1186/s12544-021-00476-4>
- [48] Sangkhaduang, T., Visuthismajarn, P., Kongchouy, N. (2021). The relationship between responsible tourism practice, destination sustainability and quality of life: Perspective of Marine National Park communities. *Planning*, 16(5): 895-901. <https://doi.org/10.18280/ijstdp.160510>