

PAPER NAME

**KNE PREDICTION MODEL.pdf**

AUTHOR

**s s**

WORD COUNT

**5377 Words**

CHARACTER COUNT

**27255 Characters**

PAGE COUNT

**14 Pages**

FILE SIZE

**1.6MB**

SUBMISSION DATE

**Jul 31, 2023 5:37 AM GMT+7**

REPORT DATE

**Jul 31, 2023 5:37 AM GMT+7**

### ● 19% Overall Similarity

The combined total of all matches, including overlapping sources, for each database.

- 5% Internet database
- Crossref database
- 6% Submitted Works database
- 14% Publications database
- Crossref Posted Content database

### ● Excluded from Similarity Report

- Bibliographic material
- Cited material
- Manually excluded sources
- Quoted material
- Small Matches (Less than 10 words)

## Research Article

# Prediction Model of Eco-tourism Visitor's Intention to Pahawang Island, Lampung Province, Indonesia

Samsul Bakri<sup>1,2\*</sup>, Mia Putri Utami<sup>2</sup>, Abdul Firman Ashaf<sup>3</sup>, Hartuti Purnaweni<sup>4</sup>, Andi Windah<sup>5</sup>

<sup>1</sup>Department of Forestry, Faculty of Agriculture, Lampung University

<sup>2</sup>Magister of Environmental Science Study Program, The Graduate School, Lampung University

<sup>3</sup>Department of Communication Science, Faculty of Social and Political Science, Lampung University

<sup>4</sup>Department of Public Administration, Faculty of Social and Political Science, Diponegoro University

<sup>5</sup>Environmental Study Program, School of Post Graduate, Diponegoro University

## Abstract.

A rise in tourism activities, including the marine ecotourism object of Pahawang Island, Lampung Bay, Indonesia, was observed once the COVID-19 pandemic started reducing. This research aimed to determine the influence of the characters of potential tourists to Pahawang Island, conducted from May to August 2022; and therefore make a prediction model of their interest as a basis for management and planning for this island. This study applies ordinal logistic regression modeling using Minitab 18 software at a 95% confidence level. The three levels of the response variable scored 0, 1, and 2 to express the tourists' interest to visit Pahawang Island. Predictor variables are respondent characteristics, consisting of the respondent's origin, age, gender, number of dependents, income, and professional group. Data was collected using Google Forms (in English, French, Japanese, Korean, and Arabic) to show response variables and predictor variables. Results of the research showed that: (1) interest in visiting Pahawang Island was influenced by (a) country origin, with very few visitors being foreigners, with  $P = 0.037$ ; (b) those who were 1 year older had an interest rate higher than 1.07; and (c) those whose professions were civil servants had lower interest, compared to housewives/students, while other professions were not significantly different; and (2) the ratio between those who were interested and the ones not interested in visiting can be modeled robustly (goodness and fit) using 9 variables of respondent characteristics as evidenced by the results of the Statistical Test  $G = 38.726$ ;  $DF = 9$ ;  $P_{-value} = 0.037$ . This finding is very useful for management planning and developing interest in ecotourism at Pahawang Island after the COVID-19 pandemic.

**Keywords:** tourism management, ecotourism, post-COVID-19 pandemic, ordinal logistics regression, tourist characteristic

<sup>1</sup>Corresponding Author: Samsul Bakri; email: samsul.bakri@fp.unila.ac.id

Published 6 March 2023

Publishing services provided by Knowledge E

© Samsul Bakri et al. This article is distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use and redistribution provided that the original author and source are credited.

Selection and Peer-review under the responsibility of the IAPA 2022 Conference Committee.

## OPEN ACCESS

## 1. Introduction

The COVID-19 pandemic had an impact on slowing down and even decreasing economic growth in many countries since early of 2020. The spread of the Coronavirus19 also had an impact on the Indonesian economy [8]. Indonesia's economic growth in the second quarter of 2020 contracted by -5.32% from the growth in the first quarter of 2020, which was 2.97% [3]. The decline in the economic sector affected by COVID-19 are in many sectors, in which tourism sector is one among the most affected due to the falling demand from domestic and foreign tourists [14]. When the new normal is applied, tourism is allowed to reopen, although there are restrictions that must be carried out, such as restrictions according to strict health protocols [4].

Indonesia is one of countries with extraordinary natural beauty. There are still many hidden places in Indonesia that have very interesting natural Cham, aside from those which have been made use for tourism purposes. As a place that is rich in natural beauty, it is not uncommon for Indonesia to make it a state asset used for tourism [6]. Tourism in Indonesia continues to grow and is marked by the number of international and domestic tourist arrivals that continue to show positive growth [7]. However, based on data from the Central Statistics Agency (BPS) in January-November 2020, the number of foreign tourist visits to Indonesia reached 3.89 million visits, a decrease of 73.60% compared to the number of foreign tourist visits in the same period in 2019, which amounted to 14.73 million visits. This is due to the impact of the spread of the COVID-19 virus. In general, tourism is seen as a sector that can encourage and increase development activities, open new business areas, create jobs, and increase community income and local revenue, if it can be managed and developed properly. Tourism can also encourage the process of environmental and physical, social, and cultural protection by the local community because these activities are assets that can be sold to tourists. In the world of tourism, tourist intensions are one elements of tourism.

Beach is a natural potential that is often used as a tourist object. One of the provinces with quite a lot of beaches is Lampung. Lampung's strategic location makes this area have potential coastal areas to be developed as a leading tourist destination, one of which is the Pahawang Island Tourism Area, which show the island's natural beauty to tourists [12]. Pahawang is a village administrative area consisting of Pahawang Besar Island, Pahawang Kecil Island, and a 694 hectares area located on the mainland of Sumatra [6]. It is located at 5°40.2' - 5°43.2' South Latitude and 105°12.2' - 105°15.2' East Longitude. Before Pahawang Island tourism was developed, the population of Pahawang Island mostly made a living in the agricultural sector, which was 80% of

about 400 families, while the remaining 20% made a living from the fishery sector, namely as fishermen [2].

Pahawang Island is one of the sites of rapidly growing marine tourism in Pesawaran Regency, so it is easy to see the development of marine tourism in the area. This island has beautiful natural waters, with coral reefs still intact and various types of fish being the main attraction. This island can also be used as a place for snorkeling and underwater photography. Pahawang Besar Island is available for snorkeling and underwater photography, while Pahawang Kecil has beautiful villas. Based on data from the Tourism Office in 2016, the highest number of tourists who came to marine tourism objects in 2016 was to Pahawang Island tourism, which had 81.933 tourists. The higher the value of tourist intension to one destination will certainly increase the tourism so that these tourists decide to revisit the area. Stated that the presence of tourists can increase the potential of tourist intensions by maintaining natural areas for the sustainability of this natural tourism. Of course, the presence of tourists with varying characteristics such as gender, place of origin, type of work, amount of income, and number of dependents will influence interest and visits to travel. As a basis for management and planning for the development of tourist interest, it is necessary to determine the influence of the character of potential visitors to Pahawang Island, and therefore there could be a prediction model of their interest. For these two purposes, this research was conducted.

## 2. Research Method

This research was conducted from May to August 2022 on Pahawang Island, Punduh Pidada District, Pesawaran Regency, Lampung Province. The research location is presented in Figure 1.

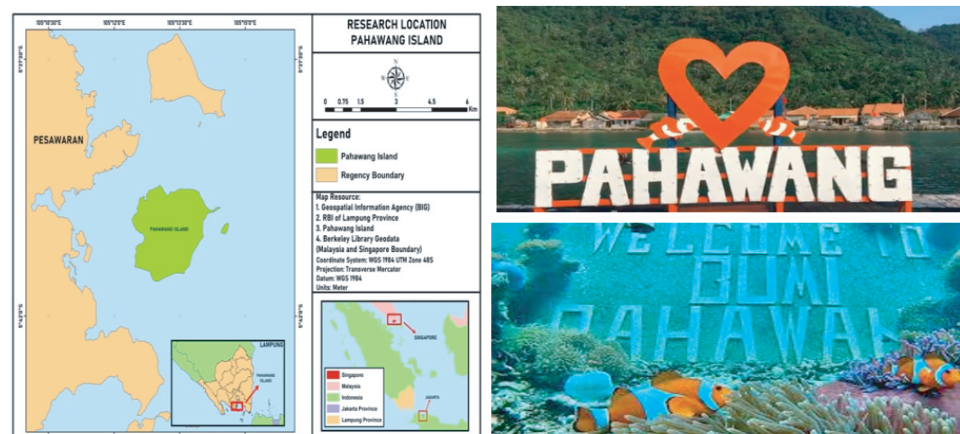


Figure 1: Research Location (Source: <https://jadesta.kememparekraf.go.id>: Modified).

This study applies ordinal logistic regression modeling using Minitab 18 software at a 95% confidence level. In connection with this model, there are several studies that also apply the ordinal logistic regression model, such as [11], which uses the same method to develop extension programs with the target of increasing conservation behavior of endangered species in the buffer zone of the Lampung Provincial Park. In addition, [15] also used a multiple linear regression model to investigate the intention to revisit agritourism destinations in Bali, Indonesia.

The three levels of the respondents' response are scored 0, 1 and 2 to express "not interested, quite interested, and very interested" in visiting Pahawang Island, respectively. Predictor variables are respondent characteristics, covering the respondent's origin, age, gender, number of dependents, income, and professional group. Data was collected using Google Forms (in English, French, Japanese, Korean, and Arabic), to show response variables and predictor variables.

The predictor variables used consisted of nine variables, namely tourist country of origin [ORIGIN]<sub>i</sub>, age [AGE]<sub>i</sub>, sex [SEX]<sub>i</sub>, monthly income [INCM]<sub>i</sub>, number of dependents [CHILD]<sub>i</sub>, occupation government employee [GVEMPL]<sub>i</sub>, teacher or lecturer [TEACH]<sub>i</sub>, occupation Entrepreneur [ENTR]<sub>i</sub>, occupation professional [WSKILL]<sub>i</sub>. The response variable used is tourist intension [Y]<sub>i</sub> traveling on Pahawang Island. This study uses the ordinal logistic regression model with 9 predictor variables. The hypothetical research model can be expressed in the following equation:

$$[Y]_i = \text{Ln} \frac{[P(intension)_i=1]}{1-[P(intension)_i=1]} = \lambda_{01} + \lambda_{02} + \lambda_1[ORIGIN]_i + \lambda_2[AGE]_i + \lambda_3[SEX]_i + \lambda_4[INCM]_i + \lambda_5[CHILD]_i + \lambda_6[TEACH]_i + \lambda_7[GVEMPL]_i + \lambda_8[ENTR]_i + \lambda_9[WSKIL]_i + \xi_i$$

|   |   |
|---|---|
| Notes, Ln   | : The logarithm operator uses the basis of natural or Napier's number (=2.728281) |
| $\lambda_{01}, \lambda_{02}, \lambda_1, \lambda_2, \lambda_3, \dots, \lambda_9$ | : model parameters that are optimized by employing the least square principle.    |
| $i$   | : The $i^{th}$ respondent, $i=1,2,3,\dots, 200$                                   |
| $\xi_i$   | : The error of parameter model (indicator of model accuracy)                      |
| The other symbols   | : Listed in Table 1.  |

The working hypothesis can be stated as the follows:

|       |   |   |
|-------|---|---|
| $H_0$ | : | $\lambda_1 = \lambda_2 = \lambda_3 = \dots \lambda_9 = 0$ (There is none of the predicted variables has significantly on influencing intension to Pahawang Island).                     |
| $H_1$ | : | $\lambda_1 \neq \lambda_2 \neq \lambda_3 \neq \dots \beta \lambda_9 \neq 0$ (At least there is of the predicted variables has significantly on affecting intension to Pahawang Island). |

1 TABLE 1: Predictor variables, symbol, data scale, and data scoring.

| Predictor Variables                   | Symbols               | Data Scale | Data Scoring                           |
|---------------------------------------|-----------------------|------------|--|
| Origin ( <i>1=foreign</i> )           | [ORIG] <sub>i</sub>   | Binary     | 1= if from foreign; 0= if domestic     |
| Age (year)                            | [AGE] <sub>i</sub>    | Ratio      | Raw data                               |
| Sex ( <i>1=male</i> )                 | [SEX] <sub>i</sub>    | Binary     | 1= if male; 0= otherwise               |
| Income (USD)                          | [INCM] <sub>i</sub>   | Ratio      | Raw data                               |
| Number Dependent                      | [CHILD] <sub>i</sub>  | Ratio      | Raw data                               |
| Dummy Occupation ( <i>0=student</i> ) |                       |            |  |
| Teacher                               | [TEACH] <sub>i</sub>  | Dummy      | 1= if the teacher; 0= otherwise        |
| Gov. Employee                         | [GVEMPL] <sub>i</sub> | Dummy      | 1= if government employee; 0= if other |
| Entrepreneur                          | [D_ENTR] <sub>i</sub> | Dummy      | 1= entrepreneur; 0= if other           |
| Skill Worker                          | [WSKILL] <sub>i</sub> | Dummy      | 1= if professional; 0= otherwise       |

### 3. Results and Discussion

#### 3.1. Tourist Characteristics

1 In order to describe the general characteristics of the data obtained, it is necessary to carry out a descriptive statistical analysis. 1 This analysis is important as a basis for examining the results of inferential statistical analysis in the next section. Descriptive statistics for respondents are presented in Figure 2.

Based on Figure 2, the dominating tourist countries came from Indonesia, numbering to 196 respondents, while the remaining 4 respondents came from Japan, Korea, Arab countries, and Croatia. Based on 1 the age of tourists, it can be seen that

from 200 respondents are at the age of 26–50 years amounted to 114 people, or 57%, Meanwhile those aged 15–25 years, 47 people (23%), Furthermore, those over 50 1 amounted to 39 people, or 19.5%. From these data, it can be seen that the tourist intension on Pahawang Island is dominated by the age group of 26–50. In the gender

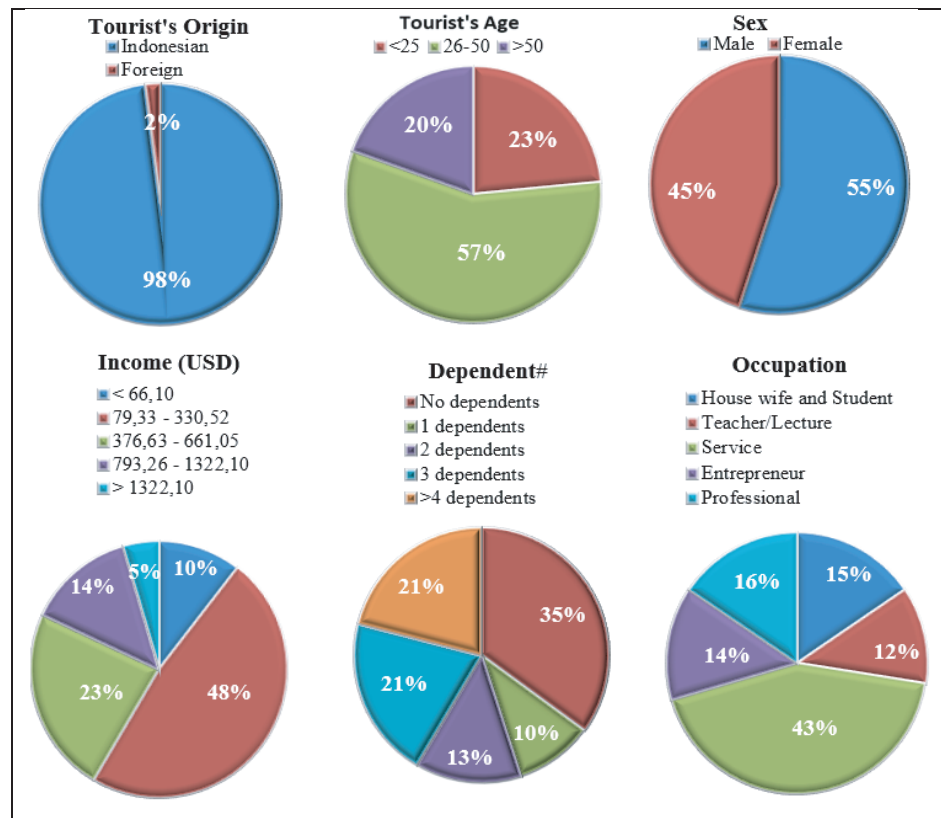


Figure 2: Descriptive Statistics of Respondent (n=200).

diagram of Figure 2, it can be seen that the male is 110 people (55%), while the female is 90 people (45%). Therefore, tourist intensions on Pahawang Island are dominated by men. Based on Figure 2, it can also be seen that out of the 200 respondents, there are 10.5% with income of \$ 79.33-330,52 (48%), \$ 376.63-661,05 (23.5%), \$ 793.26-1322,10 (13.5%), \$ <66.10 (10.5%), \$ >1322.10 (4.5%).

This means that respondents' income of \$ 79.33-330,52 dominates compared to the others. In the diagram, the number of dependents of tourists can be seen: out of 200 respondents, there are no dependents (35%), 3 dependents are 20.5%, > 4 dependents are 21% 1 dependent is 10%, and 2 dependents are 13.5%. This means that respondents who dominate in the diagram are those who are dependent-free (35%).

Meanwhile, based on the type of work from 200 respondents who have a job service as many as 86 people or 43%, as House wife and Student as many as 31 people or 31%, as entrepreneur 14 people or 28%, professionals as many as 31 people or 15.5%, and teacher/lecture as many as 24 people or 12%. In the type of occupation, the respondents who dominate are job service as many as 86 people or 43%,

### 3.2. Tourist Interest to Visit Pahawang Island

## Tourist Interest to Visit Pahawang Island



**Figure 3:** Percentage of tourist Interest (n=200).

In the picture above (Figure, 3), which is a diagram of the percentage of tourist intensions, there are a total of 200 respondents. It can be seen that the respondents who are very interested, as many as 175 respondents or 88%; quite interesting, as many as 24 respondents or 12%; and not interested are 1 respondent or 0.5%. This shows that many 88% respondents are very interested in traveling to Pahawang Island.

### 3.3. Model Parameters Achieved

Model parameters achieved are the outputs from optimizing process using Minitab 18, as depicted in Table 2 as follows.

### 3.4. Hypothesis Test

As shown in Table 2, the indicators of good fit for the model achieved are strong. The  $P_{value} = 0.037$  denotes robustness. This value means that the tourist intension of Pahawang Island [Y] can be properly modeled or predicted by using these 9 variables because the probability of missing this model is low and it has high accuracy (>



TABLE 2: Optimized model parameters and indicators of goodness model fit.

| Predictor Variable   | Symbol in Model       | Coef.   | SE Coef. | Z     | P     | Odds Ratio | 95% Confident Interval |        |
|--|-----------------------|---------|----------|-------|-------|------------|------------------------|--------|
|  |                       |         |          |       |       |            | Lower                  | Upper  |
| Constant (1)   | Const (1)             | -6.9263 | 1.2953   | -5.35 | 0.001 | -          | -                      | -      |
| Constant (2)   | Const (2)             | -3.3564 | 0.7937   | -4.23 | 0.001 | -          | -                      | -      |
| Country Origin   | [ORIGN] <sub>i</sub>  | 2.5737  | 1.2328   | 2.09  | 0.037 | 13.11      | 1.17                   | 146.94 |
| Age (year)   | [AGE] <sub>i</sub>    | 0.0668  | 0.0238   | 2.80  | 0.005 | 1.07       | 1.02                   | 1.12   |
| Sex (1=female)   | [SEX] <sub>i</sub>    | -0.3863 | 0.4961   | -0.78 | 0.436 | 0.68       | 0.26                   | 1.80   |
| Income (USD)   | [EARN] <sub>i</sub>   | -0.0002 | 0.0003   | -0.76 | 0.445 | 1.00       | 1.00                   | 1.00   |
| Child Number   | [CHILD] <sub>i</sub>  | 0.0397  | 0.1361   | 0.29  | 0.770 | 1.04       | 0.80                   | 1.36   |
| <b>Dummy Profession (0=Student)</b>  |                       |         |          |       |       |            |                        |        |
| Teacher  | [TEACH] <sub>i</sub>  | -1.5642 | 1.0014   | -1.56 | 0.118 | 0.21       | 0.03                   | 1.49   |
| Gov. Employee  | [GVEMPL] <sub>i</sub> | -2.0050 | 0.8730   | -2.30 | 0.022 | 0.13       | 0.02                   | 0.75   |
| Entrepreneur   | [ENTRP] <sub>i</sub>  | -0.8682 | 0.9496   | -0.91 | 0.361 | 0.42       | 0.07                   | 2.70   |
| Skill Worker   | [WSKILL] <sub>i</sub> | 0.0706  | 0.7753   | 0.09  | 0.927 | 1.07       | 0.23                   | 4.90   |
| <span style="border: 1px solid blue; border-radius: 50%; padding: 2px;">1</span> The indicators of goodness fit for the model achieved:<br>Log-Likelihood = -72.580; Test that all slopes are zero: G = 38.726; DF =9; P <sub>-value</sub> = 0.037 |                       |         |          |       |       |            |                        |        |

96.3%). This claim is designated by the number P-value = 0.037, which is a measure of the probability of missing this model, or  $0.037 \times 100\% = 3.7\%$ , which means the minimum exact chance is 100% minus 3.7%, or 96.3%. This also means that we have succeeded in developing the theory that the tourist intension of Pahawang Island can be explained or significantly influenced by 9 variables with a minimum level of theoretical accuracy of 96.3%. This value means that there is no reason to accept Ho. Instead, we should accept H<sub>1</sub>. There are nine predictor variables that significantly affect the tourist intension of Pahawang Island, namely tourist country of origin [ORIGIN]<sub>i</sub>; age [AGE]<sub>i</sub>; Sex [SEX]<sub>i</sub>; monthly income [INCM]<sub>i</sub>; number child of dependents [CHILD]<sub>i</sub> teacher [TEACH]<sub>i</sub>; government employee [GVEMPL]<sub>i</sub>; entrepreneur [ENTRP]<sub>i</sub>; and professional [WSKIL]<sub>i</sub>; as shown in Table 2. The country of origin of tourists [ORIGIN]<sub>i</sub> is one of three predictor variables that have a significant effect on the tourist intension to visit Pahawang Island, age [AGE]<sub>i</sub>, and government employee [GVEMPL]<sub>i</sub>.

### 3.4.1. The effect of tourist country origin on their intension

The origin of tourists is an important variable in every tourism product's development planning. In this study, it is unfortunate to find that the main potential demand still rests on local tourists. Variable [ORIGIN]<sub>i</sub> produces Odds ratio (OR) of 10.46. That is, if the other predictor variables remain, then tourists who are domiciled in the country, have a tourist intension to Pahawang Island on average of 10.46 higher than foreign tourists. Based on the calculations, it shows that it has a statistically significant effect after it is obtained ( $P_{-value} = 0.037$ ), where this prediction is quite accurate because the chance of missing is only  $3.7% < 5%$ , so we have to accept  $H_1$ , which means that the domicile of tourists has a direct effect on attracting tourists to visit Pahawang Island. Based on these data, respondents are dominated by domestic tourists. This happens because the distance is closer. Based on research by [9] tourists who travel further from their place of origin are more likely to stay longer at the destination, as well as tourists who visit the destination for the first time. So the farther the distance traveled to get to the tourist intension, the greater the opportunity to enjoy various events, phenomena, or even panoramas along the way.

### 3.4.2. The effect of tourist age on their intension

Based on the results of the questionnaire, the age of tourists from the youngest to the oldest is 18 to 66 years. The variable [AGE]<sub>i</sub> produces a probability ratio (OR) of 1.07. This means that if the other predictor variables remain constant, each time the visitor's age increases by 1 year, the tourist intension increases by 1.07, as shown by the odd ratio. Based on the calculations, it shows that it has a statistically significant effect after it is obtained ( $P_{-value} = 0.005$ ), This prediction is quite accurate because the chance of missing is only  $0.5% < 5%$ , which means the exact chance is at least  $100% - 0.5% = 99.5%$ , so accept  $H_1$ , which means the age of tourists has a direct effect on the attractiveness of tourists visiting Pahawang Island. The dominating age of tourists is the age range of 26-50, which is 57%. This is because at this age, people are more energetic and happy to take interesting trips.

### 3.4.3. The effect of tourist sex on their intension

The gender variable gives the parameter 3 a value of -3386324. The effect of the gender variable [SEX]<sub>i</sub> produces an Odds Ratio (OR) of 0.68. That is, if the other

predictor variables are held constant, male tourists have a lower tourist intension to Pahawang Island on average of 0.68 compared to female tourists, where the probability of missing is  $43.6\% > 5\%$ , which means the exact chance is only  $100\% - 43.6\% = 56.4\%$ , so accept  $H_0$ , which means that the origin of the tourist gender has no direct effect on the attractiveness of tourists visiting Pahawang Island. The number of respondents who have an intension to Pahawang Island tourism objects based on gender shows that men and women are relatively evenly distributed, although dominated by men; the difference is not significant. This also shows that Pahawang Island Object is a tourist intension that can be enjoyed by both women and men [10] Men dominate the number. This happens because men prefer challenges such as snorkeling on Pahawang Island [1].

#### 3.4.4. The effect of tourist income on their intensions

The variable number of dependents  $[INCM]_i$  produces an Odds Ratio (OR) of 1.00. This means that if the other predictor variables remain constant and tourist income increases by 1 USD, then the chance of attractiveness to tourism increases 1 time based on the odd ratio. Based on the calculation, it shows that it has a statistically significant effect after it is obtained ( $P_{-value} = 0.445$ ), where the chance of missing is  $44.5\% > 5\%$ , which means that the exact chance is at least  $100\% - 44.5\% = 55.5\%$ , so accept  $H_0$ , which means that tourist income does not directly affect the attractiveness of tourists visiting Pahawang Island. This happens because people who visit Pahawang Island may have a hobby of traveling so they will sacrifice their income to travel, regardless of income level [1].

#### 3.4.5. The effect of tourist dependent number on their intension

The variable number of dependents  $[CHILD]_i$  produces an Odds Ratio (OR) of 1.04. That is, the effect of the number of dependents if the other predictor variables remain constant is increased by 1.04 times each time. Based on the calculation, it shows that it has a statistically significant effect after it is obtained ( $P_{-value} = 0.77$ ), where the chance of missing is  $77\% > 5\%$ , which means the minimum exact chance is only  $= 100\% - 77\% = 23\%$ , so accept  $H_0$ , which means the number of dependents of tourists do not directly affect the attractiveness of tourists visiting Pahawang Island. Tourists visiting this Island tourism objects are dominated by unmarried tourists, amounting to 35%. This happens may because unmarried people have more time to gather and free time to travel [1].

### 3.4.6. The effect of tourist as teachers on their intentions

The variable type of a teacher or lecturer job gives the parameter  $\beta_6 = -1.56427$ . The effect of the type of work of the teacher or lecturer [GVS<sub>RVC</sub>]<sub>i</sub> results in an Odds Ratio (OR) of 0.21. That is, if the other predictor variables remain, then tourists with teacher or lecturer jobs have a lower tourist intention to Pahawang Island by 0.21 compared to housewives and students. Based on the calculation, it shows that statistically it has no significant effect after it is obtained ( $P_{-value} = 0.118$ ), where the chance of missing is 11.8% > 5%, which means that the exact chance is at least 100% (-11.8% = 89.2%), so accept H<sub>0</sub>, which means that the type of work of teachers and lecturers does not directly affect the attractiveness of tourists visiting Pahawang Island.

### 3.4.7. The of tourist as government employee on their intentions

The variable type of work for civil servants gives the parameter  $\beta_7 = -2.000508$ . The effect of the type of work for civil servants [GVS<sub>RVC</sub>]<sub>i</sub> results in an Odds Ratio (OR) of 0.13. That is, if all other predictor variables remain constant, tourists with Civil Servant [GVS<sub>RVC</sub>]<sub>i</sub> have a 0.13 lower tourist intention to Pahawang Island than housewives and students. Based on the calculation, it shows that it has a statistically significant effect after it is obtained ( $P_{-value} = 0.022$ ), where the chance of missing is only 2.2% (<5%), which means the exact chance is at least 100% 2.2% = 97.8% so accept H<sub>1</sub>, which means that civil servants has a direct effect on the attractiveness of tourists visiting Pahawang Island. Employment can play an important role in influencing the performance of tourism visits. Majority of visitors to the Pahawang Island have a type of work that is dominated by civil servants (43%). One's job has an important role in influencing the performance of tourist visits. This relates to the ability of personal spending to relax after meeting a surplus of basic needs. This income surplus is a function of expenditure to meet psychological needs, including for tourism activities. In addition to this income surplus requirement, the next requirement is that one must have some free time or slack. It could be that a person has sufficient excess income, but because of his job, he does not have free time for recreational activities [11].

### 3.4.8. The effect of tourists as entrepreneurs on their intention

The variable describing the type of an entrepreneur's work gives the parameter  $\beta_8$  a value of -0.868203. The effect of the type of employer's work is [ENTR]<sub>i</sub>, resulting in

an Odds Ratio (OR) of 0.13. If all other predictor variables remain constant, tourists with entrepreneur jobs [ENTR]<sub>i</sub> have a lower tourist intension to Pahawang Island (0.42) than housewives and students. Based on the calculation, it shows that it has a statistically significant effect after it is obtained ( $P_{-value} = 0.361$ ), where the chance of missing is 36.1% > 5%, which means the minimum exact chance is only = 100% - 36.1% = 63.9%, so accept  $H_0$ , which means that the type of work of the entrepreneur does not directly affect the attractiveness of tourists visiting Pahawang Island.

### 3.4.9. The effect of tourist as skill worker on their intension

The effect of professional work type [WSKILL]<sub>i</sub> produced an Odds Ratio (OR) of 1.07. That is, if all other predictor variables remain constant, tourists with professional jobs [WSKILL]<sub>i</sub> have 1.07 times the tourist intension to Pahawang Island as housewives and students. Based on the calculation, it shows that it has a statistically significant effect after it is obtained ( $P_{-value} = 0.927$ ), where the chance of missing is 92.7% > 5%, which means the minimum exact chance is only = 100% - 92.7% = 7.3%, so accept  $H_0$ , which means that the type of professional work does not directly affect the attractiveness of tourists visiting Pahawang Island.

## 7 4. Conclusion

Based on the description of the results and discussion of this research, it can be concluded that the origin of the tourist country has a direct effect on the interest of visiting tourists, which is dominated by domestic tourists. This happens because the distance is closer. The age of tourists has a direct effect on their attractiveness, with an age range of 26–50, which is 57%. This is because at this age, people are more energetic and happy to take interesting trips. The number of tourists who have an intension to Pahawang Island tourism objects based on gender shows that men and women are relatively evenly distributed, although dominated by men; the difference is not significant.

Tourist income does not directly affect the attractiveness of tourists visiting Pahawang Island. This happens because people who visit Pahawang Island do it as a hobby and is not dependent on income. The number of dependents does not directly affect the attractiveness of tourists visiting Pahawang Island. Tourists visiting Pahawang Island intensions are dominated by unmarried tourists. This happens because unmarried people have more free time to travel. The work of tourists as civil servants has a direct

effect on the attractiveness of visiting tourists, with a  $P_{-value} = 0.022$ , or  $2.2\% < 5\%$ . His profession as a civil servant has lower interest, which is only 0.13 times compared to housewives or students, while other professions are not significantly different. One's job has an important role in influencing the performance of tourist visits. This relates to the ability of personal spending to relax after meeting a surplus of basic needs. This research result, therefore, can be used as a basis for planning the development of marine ecotourism services through increasing student and executive worker visits.

## References

- [1] Al-Khoiriah R, Prasmatiwi FE, Affandi MI. Economic evaluation using the travel cost method at the Pahawang Island Tourism Park, Pesawaran Regency. *JIIA*. 2017;5(4). <https://jurnal.fp.unila.ac.id/index.php/JIA/article/view/1750>
- [2] Alvi NN, Nurhasanah IS, Persada C. Evaluation of the sustainability of marine tourism on Pahawang Island, Pesawaran Regency. *Plano Madani*. 2018;7(1):59-68. [https://journal.uin-alauddin.ac.id/index.php/planomadani/article/view/4242/pdf\\_1](https://journal.uin-alauddin.ac.id/index.php/planomadani/article/view/4242/pdf_1)
- [3] Handayani A, Erynayati. The effect of the Covid-19 pandemic on Bali tourism. *Journal of Equilibrium Management and Business*. 2021;7(2):246–256.
- [4] Auliya F, Firdaus. Analysis of the impact of Covid-19 on the tourism and economic sector of Karangrejo Village, Dlopo Hamlet, Kediri Regency. *J Commun Service*. 2021;1(2):70-76. <https://journal.univpancasila.ac.id/index.php/abdi/article/view/2628>
- [5] Central Bureau of Statistics. The number of foreign tourist visits to Indonesia in November 2020 reached 175.31 Thousand Visits. 2021. [www.bps.go.id](http://www.bps.go.id). Accessed on October 8, 2022 at 14:30.
- [6] Destanti F. Pahawang Island as a Tourist Attraction in Lampung. Domestic Case Study. *Ambarrukmo Pariwisata High School*. Yogyakarta. 2018. <https://osf.io/8djgw/download/?format=pdf>. Accessed on 02 October 2022 at 20:10.
- [7] Fatimah L. Terbaya Beach natural resources development strategy as a tourism object based on public perception, domestic market and MEA market. Thesis. Lampung University, Lampung. 2017. <https://adoc.tips/download/strategi-pengembangan-sumber-daya-alam-pantai-terbaya-sebaga.html>. Accessed on 02 October 2022 at 20:18.
- [8] Hanoatubun S. Impact of Covid-19 on the Indonesian economy. *EduPsyCouns: J Edu Psychol Couns*. 2020;2(1):146-153. <https://ummaspul.ejournal.id/Edupsycouns/article/view/423>

- [9] Hikmah N, Larasati E, Purnaweni H, Yuniningsih T. Collaboration of stakeholders in the development of ecotourism of Tangkahan village in Pulang Pisau Regency of Central Borneo. *Management and Entrepreneurship: Trends of Development*. 2021;2(16):31–40.
- [10] Kismartini PH, Djumiarti T, Khotimah N. A change in tourism management: New normal era in Riau Islands Province, (2021), Proceedings of the 5th International Conference on ICISPE 2020, 9-10 October 2020, Semarang, Indonesia, <https://doi.org/10.4108/eai.9-10-2020.2304726>
- [11] Nicolau JL, Zach J, Tussyadiah IP. Effects of distance and first time visitation on tourists' length of stay. *J Hosp Tour Res (Wash DC)*. 2016;10(20):1–16.
- [12] Nurlatu R, Seipalla BB. Potential attractions and visitors' perceptions of Wamsoba Beach Tourism Objects. Walli Village, South Buru Regency; 2021. <https://doi.org/10.30598/jhppk.2021.5.2.116>.
- [13] Nurhaida I, Bakri S, Setiawan A, Karomani K, Windah A, Sarwoko S, et al. Modeling pro-conservation attitude toward the endangered species based on demographics variables of the suburban community as the basis for extension programs planning: Study at Buffer Zone's Provincial Park of Lampung Indonesia. *Nat Volatiles and Essentials Oils*. 2022;9(1):1711-1732. <https://www.nveo.org/index.php/journal/article/view/4869>
- [14] Nurhasanah IS, Alvi NN, Persada C. Embracing sustainable tourism through local community's empowerment in Pahawang Island, Pesawaran, Lampung Province. *Tata Loka*. 2017;19(2):117–128.
- [15] Island P. YouTube of Master of Environmental Sciences Study Program, Lampung University, <https://youtu.be/R9z6BqWYkeg>
- [16] Pesawaran Regency Tourism Office. (2021). Regional Tourism Master Plan (RIPPDA) Pesawaran Regency 2017-2031. Pesawaran Regency: Tourism Office of Pesawaran Regency. <https://pariwisata.pesawarankab.go.id>. Retrieved October 8, 2022 at 2:25 p.m.
- [17] Pradana MI, Mahendra GK. Analysis of the Impact of Covid-19 on the Tourism Sector in Goa Pindul Tourism Object, Gunungkidul Regency. *JSPG: Journal of Social Politics and Governance*. 2021;3(2). <https://jurnal.amikom.ac.id/index.php/jspg/article/view/623>
- [18] Utama IG, Trimurti CP, Krismawintari NP, Junaedi IW. Revisit intention regression model of agritourism destinations off Pelaga and Buyan-Tamblingan, Bali, Indonesia. *Turk J Comp Math Edu*. 2021;12(6):2504–2512.

## ● 19% Overall Similarity

Top sources found in the following databases:

- 5% Internet database
- Crossref database
- 6% Submitted Works database
- 14% Publications database
- Crossref Posted Content database

### TOP SOURCES

The sources with the highest number of matches within the submission. Overlapping sources will not be displayed.

|   |   |     |
|---|---|-----|
| 1 | <b>Ida Nurhaida, Siti Herawati Sitorus, Samsul Bakri, Dikpride Despa, Nurh...</b> | 13% |
|   | Crossref  |     |
| 2 | <b>Universitas Riau on 2023-03-06</b>   | 3%  |
|   | Submitted works   |     |
| 3 | <b>ijisrt.com</b>   | <1% |
|   | Internet  |     |
| 4 | <b>jurnal.pnk.ac.id</b>   | <1% |
|   | Internet  |     |
| 5 | <b>kne-publishing.com</b>   | <1% |
|   | Internet  |     |
| 6 | <b>banklampung.co.id</b>  | <1% |
|   | Internet  |     |
| 7 | <b>pdfs.semanticscholar.org</b>   | <1% |
|   | Internet  |     |
| 8 | <b>coursehero.com</b>   | <1% |
|   | Internet  |     |



|    |   |     |
|----|---|-----|
| 9  | <b>bioflux.com.ro</b><br>Internet   | <1% |
| 10 | <b>Management &amp; Science University on 2021-11-19</b><br>Submitted works | <1% |
| 11 | <b>turcomat.org</b><br>Internet   | <1% |

## ● Excluded from Similarity Report

- Bibliographic material
- Cited material
- Manually excluded sources
- Quoted material
- Small Matches (Less than 10 words)

---

### EXCLUDED SOURCES

**knepublishing.com**

Internet

**93%**

---

**Samsul Bakri, Mia Putri Utami, Abdul Firman Ashaf, Hartuti Purnaweni, Andi W...**

Crossref

**92%**