



The Impact of Covid-19 Pandemic to Purchasing Behavior of Coastal Communities in Local Wet Market: Case Study in Small Islands Region

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ABSTRACT

The Covid-19 pandemic has had a significant impact on all aspects of communal life, including consumer purchasing habits. The issues confronting tiny island locations in dealing with the Covid-19 pandemic are more complex due to the lack of other means of satisfying daily necessities, in comparison to areas in larger cities that rely on internet shopping and/or delivery services for acquiring basics. The goal of this study is to examine the purchasing habits of coastal residents in two Kei Islands markets. Additionally, this study will look at the elements that influence purchasing behavior during a pandemic. The data gathering approach for this study is a purposive sample with a total of 206 respondents. The data collection instrument is a questionnaire. Logistic regression was utilized to analyze the data in this study. The study's findings indicate that both the intention to attend and the number of visits to the market have reduced in comparison to pre-pandemic levels. Additionally, the comfort factor, the fulfillment of wants, and health procedures all have a significant impact on how this community behaves. Thus, the primary policy relevance of these findings is the government's involvement in ensuring the comfort and safety of coastal people when they engage in purchasing activities in these two markets, one of which is the enforcement of health protocol.

Keywords: covid-19, purchasing, behavior, local market

INTRODUCTION

A purchasing decision is a consumer's act of selecting and utilizing a product that meets their wants and abilities. According to Nurtantiono (2011), a genuine analysis of consumer behavior takes into account not just visible behaviors, but also the unseen processes that always accompany purchases. Sumarwan (2012: 58) defines consumer behavior as the behaviors of individuals who are directly involved in the acquisition and use of products and services, as well as the decision-making process involved in the preparation and determination of activities. To be more specific, purpose is determined by several elements, including attitude toward conduct, subjective norm, and perception

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of behavioral control. The degree to which an individual's favorable or negative judgment or assessment of behavioral performance is expressed is referred to as their attitude toward conduct. In addition to conspicuous behavioral beliefs and result judgments, attitudes are founded on personal experiences. Behavioral beliefs refer to the perceived likelihood that an expected outcome will occur as a result of engaging in a particular behavior, and outcome evaluation refers to the assessment of the possible consequences of engaging in a particular behavior. Behavioral beliefs and outcome evaluation are two different things (Han and Kim, 2010).

The decision-making process of a consumer's purchase will be determined by their purchasing behavior. Decisions are one of the activities that everyone engages in at any time and from any location, and these decisions include decisions pertaining to one's own personal activities. The ability to influence consumer decisions that are carried out effectively will have an impact on decision-making. In turn, this means that the amount of profit that we get is increasing as well. Activities that are carried out knowingly, rationally, and deliberately by consumers or organizations are known as decision making. Consumer decisions are based on an understanding of problem-solving strategies.

Corona virus, also known as COVID-19 (Corona Virus Disease 2019), was identified in late December 2019 in Wuhan City, China (Yunus and Rezki, 2020). Within a short period of time, this virus spread rapidly and infected practically every country on Earth, including Indonesia. According to some experts, Covid-19 is a particularly hazardous and lethal strain of virus. Individuals diagnosed with COVID-19 will exhibit severe flu symptoms, including a fever, runny nose, dry cough, sore throat, and headache (Yuliana, 2020). Even in individuals with extremely low immunity, Covid-19 can be lethal and result in death if they do not receive prompt medical treatment in the form of isolation and complete quarantine. If someone is exposed to Covid-19, there are only two possible outcomes: symptoms may disappear and heal or may worsen and result in death (WHO, 2020).

Due to the danger posed by Covid-19, all countries, including Indonesia, have implemented preventative measures in the form of social restrictions and regional quarantines, both on a broad and local scale. Numerous countries were compelled to adopt this policy in order to mitigate and suppress the spread of Covid-19, which continues to increase from time to time. Simultaneously, health specialists in several countries have been unable to identify the most efficient medical ingredients for treating persons infected with this virus (Pratama & Rahayu, 2020). In other words, Covid-19 has developed not only into a pandemic, but also into a highly lethal tragedy for humans in a number of countries.

Apart from having a detrimental effect on health, Covid-19 appears to have altered people's behavior when it comes to economic and business activity. Businesses, particularly those reliant on mass industry, have begun laying off and laying off staff. There are so many people who are suddenly out of work, entrepreneurs who fall bankrupt and are forced to stop their businesses because they are no longer financially viable (Ramadhan, 2020). Certain corporate actors in the distribution sector are still attempting to survive by shifting their marketing strategy from direct to online marketing, as consumer behavior grows more conservative and careful when purchasing various products for survival purposes (Nabila, 2020), this condition also happened in Kei Islands, Maluku (Teniwut, 2021). People often avoid local markets due to the direct touch encounters, but every citizen strives to maintain basic integrity. As a result, the objective of this research is to examine the purchasing habits of coastal residents in two Kei Islands

markets. Additionally, this study will look at the elements that influence purchasing behavior during a pandemic.

LITERATURE REVIEW

According to findings of consumer behavior research, attitudes have a critical role in predicting purchasing decisions and are used to anticipate purchasing decisions. Consumer attitude toward a product is a representation of their feelings about the product and describes their trust in the product's numerous qualities and benefits (Sumarwan, 2011). Preference is a term used to distinguish one's attitude from another's. Preference can be defined as the degree to which a person prefers a particular product. When consumers rank a product as their first choice over other products, it can be said that the product is favored over the other products. Because of increased competition in the fruit sector, consumers now have a greater selection of product options. Consumers are free to select the products that appeal to them. Imported fruit and native fruit differ in a variety of ways, including their look, color, and taste. Consumer attitudes and preferences can be influenced by these disparities.

The goal of marketing activities is to persuade customers to purchase the company's products and services when they are in need of them. Before marketing operations can be carried out, managers must first have an understanding of customer behavior. Once this understanding is gained, managers will be able to identify the appropriate marketing or new opportunities that arise from unmet demands, and then establish market segmentation. When it comes to making purchasing decisions, a variety of factors impact consumer behavior. The majority of these elements are beyond the control of marketing, but they must be taken into consideration. Generally speaking, the factors that influence customer behavior can be split into two categories: external factors and internal ones.

Some of the most recent studies conducted on the Theory of Planned Behavior have demonstrated that it may be used to predict and explain consumer buying activity in Thai and Chinese malls (Zagata, 2012), as well as to explain deliberate behavior that has a beneficial impact (Cai and Shannon, 2012). Taiwan's green consumption habit has been shown to be significantly affected (Wu and Chen, 2014; Lai and Cheng, 2015). Following the findings of Zagata's (2012) research, it is concluded that the Theory of Planned Behavior has demonstrated its applicability in describing social behavior pertaining to the purchase of organic food. Attitudes toward conduct and subjective norms are the best predictors of intention to purchase a certain product. Although the historical settings of post-socialist countries differ, the data show that the organic sector in the Czech Republic develops in a similar manner to the pattern of development seen in Western European countries. When customers are more utilitarian in their outlook, the value-attitude-intention-behavior model performs better in terms of predicting the shopping behavior of Chinese consumers, according to the researchers (Cai and Shannon, 2012). Because their primary task is to make a purchase in the Chinese sample, they are more likely to leave as soon as they have completed their transaction.

The community's decision to use the product/service is a type of purchasing. Consumer behavior dictates the decision to use the product/service. The choice to employ the product/service begins with the identification of a problem or need that exists between the current state and the intended one. A person has the ability to overcome his needs via experience and is pushed toward a type of object that he knows can satisfy his urges. As previously stated, customer purchasing decisions are formed through a process. The

apparent purchase choice is merely one stage in the consumer purchasing decision-making process in its whole. Thus, it can be argued that customers' purchasing decisions begin well before the purchase action and continue for an extended period after the purchase is accomplished. Marketers must conduct research on consumers to ascertain the types of difficulties, wants, and needs that develop, the factors that contribute to the sensation of need, and the path taken by the sense of need to obtain a certain object.

RESEARCH METHOD

Southeast Maluku Regency is located in a coordinate position of $131^{\circ} - 133^{\circ} 5'$ East Longitude and $5^{\circ} - 6.5^{\circ}$ South Latitude, according to astronomical coordinates. Southeast Maluku is strategically located, as it is flanked by two enormous oceans that serve as fishing grounds, the Banda Fishing Ground and the Arafura Fishing Ground, which are both located on the island of Sulawesi. Southeast Maluku's physical and economic position is extremely advantageous. This is due to the fact that Southeast Maluku has long served as a political and economic center for Maluku's southern portion (Figure 1).

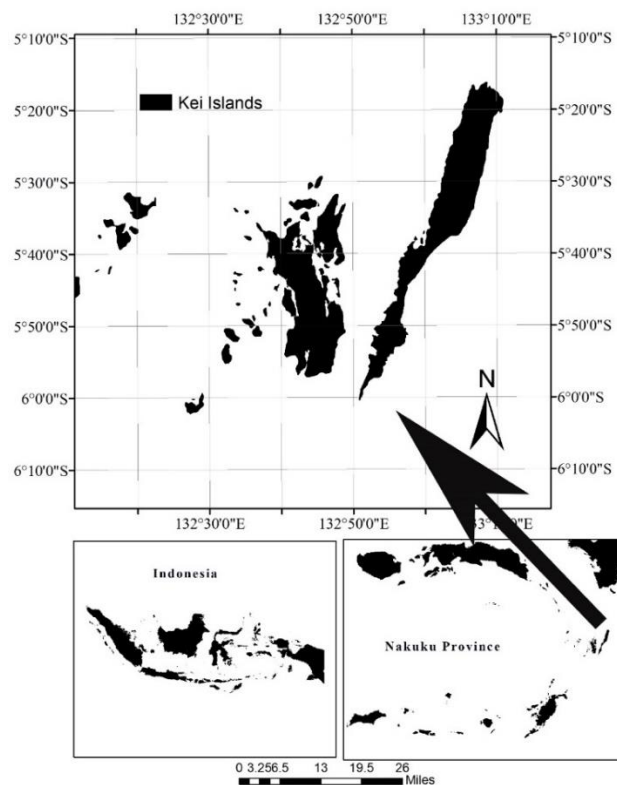


Figure 1. Study Location

Additionally, due to its strategic location on the trade route connecting southern eastern Indonesia and southern Papua, the Southeast Maluku region has a burgeoning commerce industry. Aerial view of Southeast Maluku Regency's geographical features, which include coastal regions, small islands, and several straits and bays. The archipelago of Southeast Maluku, with its abundance of fisheries and tourism opportunities, presents a tremendous opportunity. Southeast Maluku is rich in potential marine resources, both fish and non-fish, and has a total coastal length of 632.15 kilometers, making it the longest

coastline in the region. Since the COVID-19 pandemic began to enter the Kei Islands region, the real impact was felt by all residents, because the remote location of the Kei Islands made dependence on outside areas very large for product supply. In the Kei Islands, there are two local markets, namely the Langgur market in Southeast Maluku Regency and the Tual market in Tual City.

The study's respondents were coastal populations that are vendors, fishermen, marine farmers, and micro scale players in the region, with a total of 206 people responding in total. Purposive sampling used for data collection, and the data collection take place from Januari to March 2021. Approximately 206 respondents took part in the survey, and the results revealed that the bulk of responses are from women at 67.6%, with an average age of 20 to 40 years at 64%. Graduates from high school account for the vast majority of respondents (53.3 percent), followed by elementary and junior high school graduates (each with 15.5 percent), while undergraduate and diploma graduates account for 14.5 percent of the total. Micro enterprises entities account for the vast majority of those who responded. The majority of those who answered the survey had an annual salary ranging from less than 1 million rupiah to 2 million rupiah with over 65% of respondents (Figure 2 and Table 1).

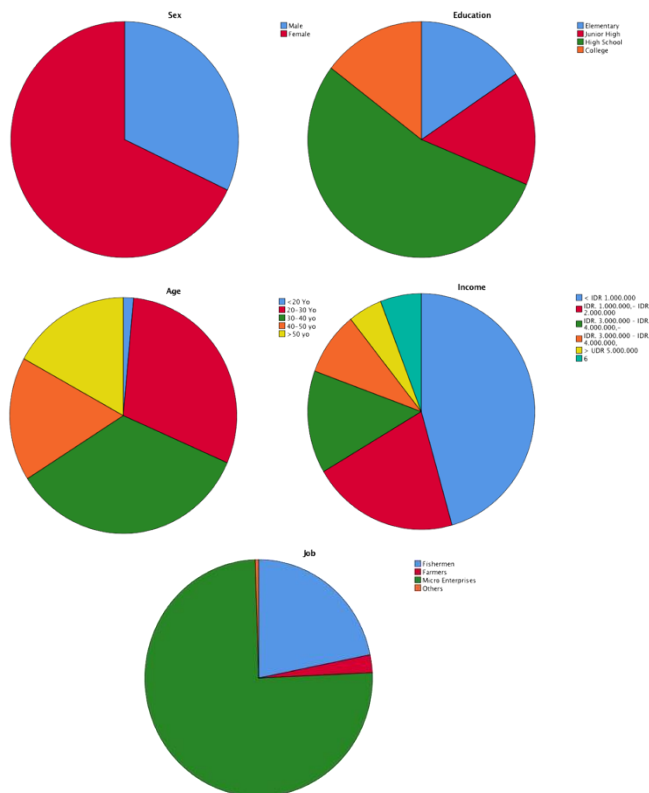


Figure 2. Respondent Socio-Economic Characteristics

The primary goal of this study is to identify the elements that have the potential to influence the purchasing behavior of residents of coastal areas under the present pandemic situation. An analytical procedure called logistic regression is employed to attain this purpose. When it comes to statistics, logistic regression is a technique that matches data to the logit function of a logistic curve in order to forecast the probability of occurrence of an event. For binomial regression, this method uses a general linear model, with equation as follows:

$$L_i = \text{Ln} \left(\frac{P_i}{1 - P_i} \right) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 \dots + \beta_n X_n + \varepsilon$$

Where P_i is tendency to visit local markets, $1 - P$ is tendency not to visit local markets, β_0 is constant, $\beta_1, \beta_2, \beta_3,$ and β_4 are coefficient regression, X_1, X_2, X_3, X_4 and X_n are independent variables ε is error. The model testing was carried out in order to investigate the relationship between the predictor variables and the response variables either simultaneously or as a whole. The chi square model test is another name for this type of simultaneous test. The following is the hypothesis that will be tested (Sepang et al. 2012): $H_0: \beta_1 = \beta_2 = \dots = \beta_i = 0, H_1: \text{there is at least one parameter } \beta_i \neq 0$. The G test statistic, often known as the Likelihood Ratio Test

$$G = -2 \ln \left[\frac{\frac{n_1^{n_1} n_0^{n_0}}{n^n}}{\prod_{i=1}^n \hat{\pi}_i^{y_i} (1 - \hat{\pi}_i)^{1-y_i}} \right]$$

Where n_1 is number of observations that are categorized as 1 and n_0 is number of observations that are categorized. The G-test statistic has a chi-square distribution, therefore to make a decision, compare the results of χ^2 tables, with degrees of freedom (db) = k-1. Reject criteria (reject 0) if $G > \chi^2_{(db, \alpha)}$ or P-value.

The odds ratio is used to explain the parameter coefficients of dichotomous variables. It is a collection of opportunities divided by other opportunities, as expressed in the following equation (Hosmer et al. 2000):

$$\psi = \frac{\pi(1) / [1 - \pi(1)]}{\pi(0) / [1 - \pi(0)]} = \frac{e^{\beta_0 + \beta_1}}{e^{\beta_0}} = e^{\beta_1}$$

If ψ equals 1, no relationship exists between the two variables. If the value is $\psi < 1$, then there is a negative link between the two variables and the change in category from the value of x, and vice versa if the value is $\psi > 1$.

Table 1. Predictor variables

Category	Predictor variable
Socio-Economic	X ₁ Sex
	X ₂ Age
	X ₃ Education
	X ₄ Occupation
	X ₅ Income
Visitation	X ₆ Level of self-awareness
	X ₇ Visitation pre-pandemic
Safety	X ₈ Visitation during pandemic
	X ₉ Confirm positive cases
Comfort	X ₁₀ Paranoia
	X ₁₁ Safe Feeling
	X ₁₂ Obligated to visit
Price	X ₁₃ Main choice for essential goods
	X ₁₄ Know my where around
Need	X ₁₅ Price of goods fits the current situation
	X ₁₆ Ability to predict price fluctuation
Health Protocol	X ₁₇ Importance of Local market
	X ₁₈ Satisfaction
	X ₁₉ Washing hand
	X ₂₀ Seller wear mask
	X ₂₁ Buyer wearing mask
	X ₂₂ Strict Rule
Overall	X ₂₃ Limit on market capacity
	X ₂₄ Vaccination rate
	X ₂₅ Time limit
	X ₂₆ Visitation
	X ₂₇ Safety
	X ₂₈ Comfort
	X ₂₉ Price
	X ₃₀ Health Protocol

RESULT AND DISCUSSION

The value of $\chi^2 = 249.276$ is obtained from the results of the simultaneous test, as indicated by the value of $-2 \log$ likelihood in table 2. By substituting $\alpha = 5\%$, we obtain $2(\text{db.}) = 239.403$, because $\chi^2 > 2(\text{db.})$ implies that there is at least one parameter θ for which one or more predictor variables has a significant effect on the response variable.

Table 2. Simultaneous Test

Iteration	-2 Log Likelihood
Step 0	1
	2
	3

*Chi Square table with DF 205 is 239.403

As shown in Table 3, the significance value is 0.05, indicating that the inclusion of independent variables has a significant influence on the model, or that the model is declared fit.

Table 3. Omnibus Test

Step	Chi-Square	df	Sig.
Step 1	139.883	30	0.000
Step	139.883	30	0.000
Block	139.883	30	0.000
Model	139.883	30	0.000

*Chi Square table with DF 30 is 43,7730

The deforestation opportunity model constructed using the logistic regression equation is usable because it passed the model's construction conditions, namely the Hosmer Lemeshow test. The Hosmer Lemeshow test on table 4 resulted in a deviation of $0.889 > 0.05$ from the specified value, indicating that the model was fit for usage. While the Nagelkerke R^2 score of 70.6 percent indicates that 70.6 percent of the independent variables may explain the model, the remaining independent variables are explained by factors outside the model.

Table 4. Model fit Hosmer and Lemeshow Test

Step	Chi-Square	df	Sig.
1	3.628	8	0.889

Table 5. Pseudo R Square

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	109.334 ^a	0.503	0.706

Table 6. Partial test

Predictor variable	B	Sig	Exp(B)
X ₁ Sex	-.446	.549	.640
X ₂ Age	-.528	.039**	.590
X ₃ Education	.190	.549	1.210
X ₄ Occupation	.991	.025**	2.695
X ₅ Income	-.119	.568	.888
X ₆ Level of self-awareness	3.607	.000***	36.871
X ₇ Visitation pre-pandemic	-.521	.252	.594
X ₈ Visitation during pandemic	.592	.207	1.807
X ₉ Confirm Positive cases	.660	.062*	1.934
X ₁₀ Paranoia	-.008	.977	.992
X ₁₁ Safe Feeling	-.338	.349	.713
X ₁₂ Obligated to visit	.385	.271	1.469
X ₁₃ Main choice for essential goods	-.574	.350	.563
X ₁₄ Know my where around	.182	.658	1.199
X ₁₅ Price of goods fits the current situation	.165	.662	1.179
X ₁₆ Ability to predict price fluctuation	.268	.539	1.307
X ₁₇ Importance of Local market	.305	.408	1.357
X ₁₈ Satisfaction	.946	.105	2.576
X ₁₉ Washing hand	1.497	.014**	4.467
X ₂₀ Seller wear mask	.101	.788	1.106
X ₂₁ Buyer wearing mask	1.394	.069*	4.029
X ₂₂ Strict Rule	-1.241	.076*	.289
X ₂₃ Limit on market capacity	-.580	.095*	.560
X ₂₄ Vaccination rate	.409	.265	1.505
X ₂₅ Time limit	-.440	.164	.644
X ₂₆ Visitation	.087	.763	1.091
X ₂₇ Safety	-.066	.316	.937
X ₂₈ Comfort	-.251	.246	.778
X ₂₉ Price	-.084	.536	.920
X ₃₀ Health Protocol	-.421	.073*	.656

Significant *** α 1%; ** α 5%; * α 10%

According to the Wald test (W) results, which indicate the Z coefficient, there are 9 (nine) explanatory variables that have a significant effect on intention to visit local markets during covid-19 pandemic. Nine explanatory variables have a considerable impact are as follows: 1) Age; 2) Occupation; 3) Hesitation; 4) Confirm positive cases; 5) Washing hand; 6) Buyer wearing mask; 7) Strict Rule; 8) Limit on market capacity; 9) Health Protocol.

Among the nine predictor variables that have a significant effect on coastal communities' intention to frequent local markets, four factors tend to decrease people's willingness to visit local markets. Age, where the older the coastal communities in this area are on average, the more inclined they are to avoid the market. This is because of information regarding parents' vulnerability if they are infected with COVID-19 (Heras et al. 2021). This indicates that the regional and central governments' campaigns are effective and reaching the community. Additionally, excessive health protocols contribute to coastal residents' willingness to attend these two market sites. The findings indicate that coastal communities feel uneasy when there are too many limitations, as this is related to market visitors' understanding and late adjustment. The stringent health procedure is also indicative of the region's COVID-19 pandemic's worrying state.

The type of occupation of the coastal population is one of the characteristics that can tend to increase visits to local markets, as demonstrated by the result that people with more formal jobs such as civil servants or office workers are more likely to attend local markets during the pandemic. Additionally, the more aware coastal populations are of the dangers of COVID-19, the more likely they are to attend the two local markets. The greater the number of confirmed cases, the less likely coastal populations are to shun local markets; this is because the cases have been netted to provide clarity to the community. Additionally, basic health precautions, such as hand washing and buyers who always wear masks, let coastal populations access local market.

CONCLUSION

The findings of this study can be utilized as a guide for local and central governments in order to ensure that the economy continues to function properly and efficiently. Health protocols that do not make market visitors feel too comfortable, such as too strict and complicated health protocol rules, are examples of variables that local governments should focus on in order to increase the likelihood of coastal community visits to both local markets and local markets in general. Due to the fact that the COVID-19 pandemic is expected to last indefinitely, policies that support the local economy are critical in order to maintain the stability of the supply of basic commodities for residents through activities in local markets, as well as to ensure the safety of the general public when shopping at both local markets

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