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The Use of the Safe Mask Based on Price and Consumer Knowledge

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Abstract

This study aims to find out public knowledge in the use of masks and the decision to use masks to use and the influence of price and knowledge of masks in using masks to use masks to be used partially or simultaneously. This research uses a descriptive verification method by distributing questionnaires to 115 residents of Bandung City evenly in five regions using accuracy tests, the Hosmer and Lemeshow models' feasibility test, the Nagelkerke r square test, and hypothesis testing. Based on the calculation results, it can be concluded that the price has a significant effect on the decision to use a safety mask. Public knowledge has a significant effect on the decision to use a safety mask, and price and public knowledge have a simultaneous influence on using a mask to use.

Keywords: *Price, Public Knowledge and Decision to Use the Safe Use Mask.*

INTRODUCTION

At the beginning of 2020, the world was shocked by discovering a new virus originating from Wuhan, China, known as Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), better known as the Coronavirus. This virus has spread throughout the world, including Indonesia, and has claimed thousands of human lives. The five countries with the highest number of Covid-19 cases are in the United States (US), Brazil, India, Russia, and South Africa. In Asia, Indonesia is ranked 9th with the highest total number of Covid-19 cases. As of September 21, 2020, the total number of cases in the world has reached 31.3 million, 21.5 million recovered, and 965 thousand people died. In Indonesia, the total number of cases has reached 257,176 million indicated. Positive Covid-19, 184 thousand people, and 9,961 million people died. Provinces with the highest cases are in the capital city of Jakarta, East Java, Central Java, and West Java (https://covid19.go.id/).

The level of discipline and public awareness is one factor in the increasing number of cases in Indonesia, namely the lack of discipline in the community in using safe masks. In addition to the low level of public awareness of the importance of using masks that are good for use. The majority of people do not use masks properly and use masks that are not recommended for use, such as scuba and buff type masks and face shields without masks. Masks recommended by the government are N95 masks, medical (surgical) masks, and cloth masks. Scuba and buff masks are more comfortable to use because of the thinness of the materials used. However, the effectiveness level is only 0 - 5%, breaking down droplets into smaller ones and making the droplets fly easier while N95 masks have an effectiveness level above 95%, medical masks (surgical) effectiveness of 80 - 95% and cloth masks have a sufficient level of 50 - 70%.

Figure 1. Effectiveness of Types of Masks
Source: www.health.pa.gov, 2020

At the beginning of the emergence of coronavirus (Covid-19), masks became the most sought-after by the public. After the announcement of an Indonesian citizen who tested positive for the coronavirus, the price of N95 masks and medical (surgical) masks increased by 100% due to high demand. The price of N95 masks has increased. Which initially had a price of 200 thousand rupiahs for one box of masks to 750 - 800 thousand rupiah for one box of masks, while the price of medical (surgical) masks which initially had a price of under 100 thousand rupiahs for one box of masks became 350 - 500 thousand for one box of masks. In addition to the increasing price of masks in the market, masks are becoming a rare item that is difficult to find, especially in pharmacies, because people are flocking to buy masks. Due to the scarcity of N95 masks and medical (surgical) masks, the government advised people to use cloth masks because N95 masks and medical (surgical) masks were prioritized for medical workers. The community uses this opportunity as a business field, namely by making cloth masks that can be used as an alternative for the community if they have difficulty finding N95 masks and medical (surgical) masks on the market. Apart from offering various styles, patterns, and colors, cloth masks can be used periodically because they can be washed.
After the rise of sellers offering cloth masks, the price of N95 masks and medical (surgical) masks has decreased again and returned to normal prices so that the government encourages the public to use N95 masks and medical (surgical) masks because they have a higher level of effectiveness than using masks cloth, especially scuba and buff masks that are considered ineffective in warding off viruses as well as N95 masks and medical (surgical) masks can easily be found on the market or in online-based stores at prices that have returned to normal. It is hoped that the price of masks on the market will return to normal, it is hoped that it can increase the level of public awareness of the importance of using masks that are safe to use in the main prevention of coronavirus. In addition to the price of masks that have returned to normal, people's knowledge of the importance of using masks that are safe to use is considered that the majority of people already know the impact they will get if they do not use masks that are in accordance with health standards because information on the types of masks that are safe to use has been widely spread in the community, both through the internet and through other media, especially those who often spend time outside the home to work.
Although the government has tried to reduce the price of N95 masks and medical (surgical) masks to return to normal, most people prefer to use scuba and buff masks because they are considered more comfortable. The thinness of the materials used so that users do not feel short of breath when using scuba masks and buff. As a result of community negligence, the Covid-19 case, especially in West Java, ranks fourth in Indonesia. In West Java, there have been 17,502 million cases recorded. On Monday, September 21, 2020, the number of positive cases of the coronavirus (Covid-19) in Bandung has reached 1,112 cases or has added 14 new

positive cases. The number of recovered patients was recorded at 878 cases, an increase of 32 cases, while there was an additional 1 case (Covid-19 Daily Report of the Bandung City Health Office). This shows that the low level of public awareness uses masks that are safe to use following government regulations even though the prices of N95 masks and medical (surgical) masks have returned to normal.

LITERATURE REVIEW

Price

According to Kotler and Armstrong (2018: 151), price is the nominal value of money determined for a good or service for the amount of money exchanged by consumers to get the benefits they will receive after making a payment. Price is one of the main factors influencing a consumer who will buy a product or service. Therefore, before a company sets a price, it is a good idea for the company to look for some price references for a product or service set by competitors who sell similar products or services (Suparyanto and Rosad, 2015: 141). According to Kotler and Armstrong (2018: 78), four dimensions can measure pricing: price affordability, price compatibility with product quality, price compatibility with benefits, and price compatibility with price capabilities or competitiveness.

Community Knowledge

According to Blackwell et al. in Surahmat & Rina (2017), consumer knowledge is collecting information about products or services owned by consumers. In the form of information on the benefits of the product or service, how to use it, the product or service's function or service, and so on. Several experiences and information about specific products or services that a person has been referred to as consumer knowledge (Mowen and Minor in Rachmawati and Gusti, 2019). According to Brucks in Romario et al. (2018), consumer knowledge has three dimensions: subjective knowledge, objective knowledge, and experience-based knowledge.

Product Use Decisions

According to Tjiptono and Gregorius (2016: 22), decisions are one part of consumer behavior in determining the choice of products or services to be purchased or used by consumers. The habits of consumers influence the decisions taken. Purchasing habits include the time of purchase or use, the number of purchases, and where the purchase is made (Assauri, 2015: 139).

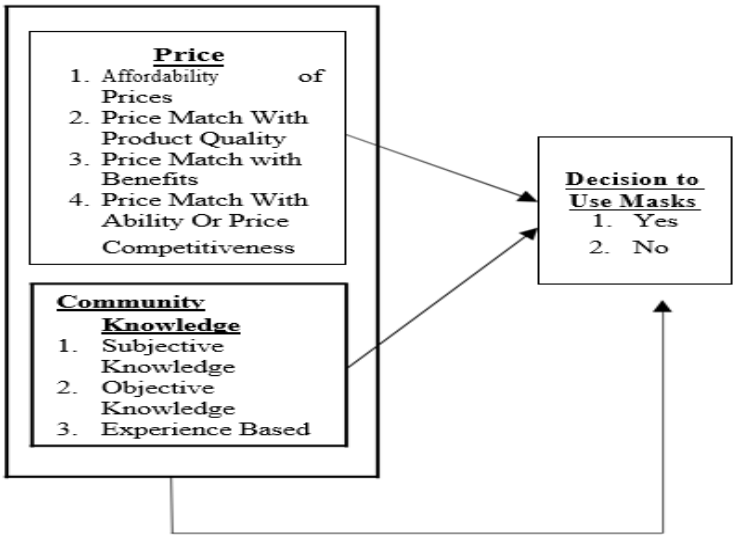

Figure 2. Research paradigm

Research hypothesis
H1 = Price has a significant effect on the decision to use masks that are safe to use
H2 = Public knowledge has a significant influence on the decision to use masks that are safe to use
H3 = Price and public knowledge have a significant effect on the decision to use masks that are safe to use

METHODOLOGY
This research uses descriptive and verification methods. According to Sugiyono (2017: 147), the descriptive method is a method used to determine the existence of independent variables, either only in one or more variables without making comparisons or connecting with other variables (independent variables
are independent variables, not independent variables because if they are independent) always paired with the dependent variable) while the verification method, according to Sugiyono (2017: 35), is a verification method that is a research method that aims to determine the causal relationship between variables through a test through a statistical calculation, the results of which show that the hypothesis is rejected or accepted. This study's population were Bandung City residents who were evenly distributed, divided into five regions, namely North Bandung, South Bandung, East Bandung, West Bandung, and Central Bandung. Because the population in this study is unknown, in determining the sample size used for this study, it was calculated using the iteration method, namely as many as 115 residents of Bandung City. According to Sitepu in Meiditia (2015), using the iteration method is under the analytical tools used in hypothesis testing.

RESULTS AND DISCUSSION
Regression Model Feasibility Test
In this study, the classical assumption test (normality test) is not required in the logistic regression model. However, it is necessary to do a feasibility test for the logistic regression model (overall model fit). To test the logistic regression model's feasibility to be used in this study, several statistical tests were carried out using a statistical test tool, namely SPSS 20. Some statistical tests used are the Accuracy Level Test, Hosmer and Lemeshow Goodness of Fit, Cox and Snell's R Square, and Nagelkerke R Square. The following are the results of statistical tests that have been processed using SPSS 20:

Test the Level of Accuracy

Table 1. Test the Level of Accuracy
Classification Table[a,b,c]

		Observed	Predicted		
			decision		Percentage Correct
			1,00	2,00	
Step 0	decision	1,00	0	9	,0
		2,00	0	106	100,0
	Overall Percentage				92,2

a. No terms in the model.
b. Initial Log-likelihood Function: -2 Log Likelihood = 159.424
c. The cut value is .500
Source: results of data processing SPSS ver 20.

Based on the results of Table 1, it shows that the level of accuracy is 92.2. This can be seen from the Overall Percentage whose value is 92.2.

Hosmer and Lemeshow Model Feasibility Test

The Hosmer and Lemeshow Test is a Goodness of fit test, which is a test to determine whether the model formed is correct or not. The following are the results of the processed data:

Table 2. Hosmer and Lemeshow Model Feasibility Test

Hosmer and Lemeshow Test

Step	Chi-square	Df	Sig.
1	10,900	8	,207

Source: results of data processing SPSS ver 20.

Table 2 shows that the significant value of the model's feasibility test results is 0.207 with a Chi-Square value of 10.900, a significant value> 0.05 indicates that this model has met (fit).

Nagelkerke R Square test

The model assessment test aims to determine how much the independent variable can explain the dependent variable by looking at Cox and Snell's R Square's value. The output in Cox and Snell's R Square has the same analogy as R-Square in linear regression. The following are the results of processed data:

Table 3. Nagelkerke R Square test

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	60,825[a]	,576	,768

a. Estimation terminated at iteration number 6 because parameter estimates changed by less than .001.

Source: results of data processing SPSS ver 20.

Based on Table 4, the Cox & Snell R Square value of 0.576 is obtained. This indicates that the significant contribution given by the variable price and public knowledge to the decision to use a safe mask is 57.6%. The Negelkerke R Square value in the regression model is 0.768, which means that the variance of the variable decision to use masks that are safe to use can be explained by price variables and public knowledge of the decision to use masks that are safe to use, namely 0.768 or 76.8%. In comparison, the remaining 23.2% is influenced by other variables outside of this study, such as variables of experience, lifestyle, product quality, etc.

Partial Hypothesis Test

Table 4. Partial Hypothesis Test Result (t test)

No.	Variable	t value	t table
1.	Prices (X_1)	4,318	1,981
2.	Community knowledge (X_2)	2,015	

Source: results of data processing SPSS ver 20.

Testing Hypothesis X1

Based on the results of Table 4, it can be concluded that the t count value is 4.318, while the t table at α (0.05) is 1.981. Thus t statistic is 4,318> t table 1,981 so that there is a significant influence between the price variable (X1) on the decision to use a mask that is safe to use (Y).

Testing Hypothesis X2

Based on the results of Table 4, it can be concluded that the t value is 2.015, while the t table at α (0.05) is 1.981. Thus t statistic 2.015> t table 1.981 so that there is a significant influence between the public knowledge variable (X1) on the decision to use masks that are safe to use (Y).

Simultaneous Hypothesis Test

Table 5. Simultaneous Test Result (f test)

F value	F table
35,231	3,08

Source: results of data processing SPSS ver 20.

Based on the results of the SPSS output in Table 5, it can be concluded that the F count value is 35.231. Meanwhile, the critical value of the F table value is 3.08. Thus F count 35.231> F table 3.08, so H1 is accepted, and H0 is rejected. This shows that price (X1) and public knowledge (X2) simultaneously affect the decision to use masks that are safe to use (Y).

CONCLUSION

Based on the results of research and discussion, it can be concluded as follows:

1. The price of masks on the market can be said to be quite affordable. This is found in the highest statement regarding the affordability of masks that are safe to use by government regulations during the COVID-19 pandemic. The knowledge possessed by the community regarding the benefits of using masks can be said to be high. This is in the highest statement regarding knowledge of the risks of not using a mask that is safe to use by government regulations. The decision to use safe masks can be said to be low because the majority of people say "No."
2. Price has a significant effect on the decision to use a mask that is safe to use because t count 4,318> t table 1,981. This shows that the servicescape (X1) partially affects the decision to use masks safe to use (Y).
3. Public knowledge has a significant effect on the decision to use masks that are safe to use because t count 2.015> t table 1.981. This shows that public knowledge (X2) partially affects the decision to use masks safe to use (Y).
4. Price and public knowledge have a significant effect on using masks that are safe to use by 76.8%. In comparison, the remaining 23.2% is influenced by other variables outside of this study. Variables of experience, lifestyle, product quality, and price and public knowledge have a simultaneous influence on using masks that are safe to use because F count 35.231> F table 3.08. This indicates that price (X1) and public knowledge (X2) simultaneously affect the decision to use masks safe to use (Y).

SUGGESTIONS

Based on the results of the conclusions that have been described, the suggestions that can be put forward are:

1. To take advantage of the price of masks that are safe to use. This can be done by giving discounts to people who will buy masks that are safe to use, such as N95 masks and medical (surgical) masks. This is done so that people desire to buy masks that are safe to use in large quantities because masks that are safe to use generally cannot be used periodically, such as medical (surgical) masks.
2. To increase public knowledge about masks that are safe to use. The government can provide broad socialization, especially to remote areas where information is minimal about the dangers of using masks that are not recommended for use, such as scuba and buffs, because remote communities are challenging to use. Get detailed information.
3. Suggestions given by researchers are public places to improve health protocols further and impose sanctions on people who continue to violate regulations set by the government.

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