



## FACTORS OF STOCKPILING BEHAVIOR USING THE HEALTH BELIEF MODEL WITH THE MODERATING ROLE OF PERCEIVED SCARCITY IN THE BUSINESS CONTEXT IN THE COVID-19 PANDEMI ERA

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### Article Information    Abstract

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This study aims to determine the factors of stockpiling behavior using the health belief model with the moderating role of perceived scarcity in the business context during the Covid-19 pandemic and so that business owners and the government can take action and make appropriate regulations when a pandemic occurs. This study used a quantitative research method involving 300 respondents and was examined using a non-probability convenience sampling approach with the Smart PLS application to test the validity, reliability and hypotheses. The results of this study explain that perceived vulnerability, perceived severity, and perceived obstacles have a positive relationship with hoarding, and perceived scarcity moderates the relationship between perceived severity and hoarding. The implications of this research are divided into theoretical and managerial implications. The cause of hoarding behavior during the Covid-19 pandemic is the theory of the Health Belief Model which is proven to be able to examine the phenomenon of hoarding. Meanwhile, the managerial implication in this study is customer behavior when buying products in an unstable condition. In addition, people who have experienced the ferocity or have perceptions of the enormity of Covid-19 have triggered people to hoard and not leave their homes anymore after buying a lot of things.

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### INTRODUCTION

The novelty of coronavirus disease (COVID-19) has become a virus that threatens many people as a globe and was first invented in Wuhan, China in 2019. The virus spreads rapidly due to an easily transmitted through contact among individuals. Until now, the COVID-19

outbreaks continued to infect humans and claim many people's lives. Coronavirus disease has an enormous impact on both infected and non-infected people (Yuen et al., 2021) physically and mentally (Chua et al., 2021). The occurrence of the diseases has overcome the world and brought a psychological change in consumer behavior

(Duan & Zhu, 2020), namely stockpiling. Many countries, including Indonesia, have experienced stockpiling during the early stages of the COVID-19 pandemic (Omar et al., 2021), particularly on hygiene products and medical supplies (Nurhayati-Wolff, 2020). During the epidemic, people will tend to stock up on certain goods in inadequate quantities to avoid possible perceived threats in the future (Micalizzi et al., 2021) and ensure a fulfillment was met (Duan & Zhun, 2020; Omar et al., 2021). Therefore, stockpiles can be categorized when people purchase in excessive quantities compared to everyday purchases (Sadus et al., 2021).

The stockpile will occur when people believe they are vulnerable and severe by the diseases which refer as a perceived threat (Liren et al., 2012). The higher the threat perception of COVID-19, the higher intention for an individual to stockpile. Due to the perceived threat of uncertainty and insecurity, one of the ways that individuals are currently dealing with COVID-19 is to enforce health-related behavior, namely preventive behavior. Preventive behavior helps individuals ensure their health by providing hygiene and medical products. Despite the significant spike in COVID-19 cases, the government tends to impose stricter policies or regulations to prevent future outbreaks. Government regulation of limiting the product purchased, lockdown policies (e.g., PPKM/PSBB), and facilities shutdown are motivating factors for an individual to stockpile (Sadus et al., 2021; Nowak et al., 2020) since those policies restrict their behavior. Stockpiling caused by COVID-19 has negative impacts on society. It creates society to purchase essential products (hygiene and medical products) in enormous amounts and this can frequently lead to product stock out (Chua et al., 2021) and perceived scarcity due to high demand for essential products (Omar et al., 2021). Hence, the scope of stockpiling behavior will be more substantial due to people's perception of scarcity and fear of being unable to maintain their health necessities (Li et al., 2021).

Nowadays, the stockpile situation has become an intriguing phenomenon because the country must continue to be cautious against COVID-19 despite decreasing cases.

Additionally, on April 3, 2022, Shanghai experienced a massive lockdown due to the dramatic increase in COVID-19 cases (Tan, 2022). Several studies have been carried out to examine consumer stockpiling behavior as a form of panic buying (Yuen et al., 2020). Most research concentrated on the threat of COVID-19 and did not consider the possible barriers that society faces when carrying out preventive behavior. Some prior studies have discussed the causes of stockpiling from a health belief point of view (Chua et al., 2021; Sadus et al., 2021), but the discussion of perceived scarcity as a modifying factor moderate stockpiling behavior throughout the pandemic is still limited.

Although the COVID-19 cases in Indonesia are decreasing, the society continues to stock up on health-related products (hygiene & medical products), particularly when their stock is run out. Currently, the uncertainty and insecurity of COVID-19 still affect people's perceptions and society remains attentive to preventing and maintaining their health from COVID-19. Thus, washing hands, carrying hand sanitizers, and stocking up on health products have become standard practices to prevent future threats. To address this issue, this study informs society and the government that changes in consumer behavior continue to occur despite decreasing the outbreak to avoid future threats. To the best of our knowledge, the study about the current situation of COVID-19 toward stockpiling is still lacking.

The decline in the number of COVID-19 cases in Indonesia changed its status from pandemic to endemic. However, this research is considered important for analysis and evaluation if similar behavior occurs in different circumstances. Therefore researchers are interested in conducting research with the title "Factors of Stockpiling Behavior Using the Health Belief Model With The Moderating Role of Perceived Scarcity in the Business Context in the Covid-19 Pandemi Era".

## LITERATURE REVIEW

### Health Belief Model (HBM)

The Health Belief Model (HBM) was created in 1950 by social scientists who work for the U.S. Public Health Service to help explain health related behavior on tuberculosis X-ray

screening (Hochbaum, 1958). In the beginning, the researchers began to investigate how people make health decisions and what factors impact health behavior. Therefore, the main purpose of HBM itself is to concentrate on people's efforts on trying to improve health behavior by analyzing the failure on adopting health decisions (Rosenstock, 1974). Then, HBM was adapted by Becker et al. (1974) to understand the psychological factors in health-related decision making. Prior studies have developed and adapted HBM research for larger application, includes HIV/AIDS prevention, breast cancer (Champion, 1999), H1N1 pandemic prevention (Jones et al., 2015), COVID-19 prevention (Chua et al., 2021; Sadus et al., 2021).

According to (Washburn, 2020), the health belief model is known as an individual's assumptions that influence their health-related behavior or actions. HBM was concentrated on two aspects of people's perception of health behavior: threat perception and behavior evaluation. In perceived threat, there are two beliefs, including perceived susceptibility toward illness, perceived severity of illness consequences. Based on Liren et al. (2012) found that health related behavior occur when someone perceives the threat of how severe and vulnerable their chances of contracting the illness. However, behavioral evaluation also consists of two factors of people's belief, including: perceived benefits and perceived barriers. Nowak et al. 2020) found that perceived barriers in carrying out preventive measures are the main predictor of a person's health behavior, while perceived benefits are not related to health-related behavior. Therefore, we assume that using the Health Belief Model (HBM) in present study, which includes perceived susceptibility, perceived severity, and perceived barriers as main predictors for people to avoid from COVID-19.

#### Stockpiling

Blattberg & Neslin (1990) stated that stockpiling can be defined as consumers purchasing products in large quantities. The difference between stockpiling and rational buying is the number of purchases of that item. When people purchase in a rational way, the number of products purchased is sufficient to meet daily needs, but when the number of

purchases exceeds the usual needs is known as stockpiling behavior (Sadus et al., 2021)

Ahmadi et al. (2022) found two main factors driving stockpiling behavior during the COVID-19 pandemic, namely: fear of contracting COVID-19 and anticipation of shortages. Besides that, the hedonic nature of individuals who do stockpiles is also carried out to express people's concern of protection, and satisfaction for themselves and their families (Novemsky et al., 2007). However, while the supply of goods has decreased, consumer demand for some products is very high (Li et al., 2021). Due to the limited supply, people tend to purchase the goods that are near-empty to avoid fear of missing out the food and it becomes stockpiles (Chua et al., 2021).

#### Perceived susceptibility toward stockpiling

This study defines perceived susceptibility with consumer perceptions of the possibility of being exposed to COVID-19 (Li et al., 2021c). The level of vulnerability to COVID-19 depends on their physiological and psychological health state, this means that the probability of getting COVID-19 depends on each person's level of health and their own mental health (Chua et al., 2021). Huang et al. (2016) said that perceived susceptibility can lead a person to make health-related behavior changes. Regarding health, perceived susceptibility can make a person perform certain behaviors to maintain their health (Sadus et al., 2021). Therefore, because perceived susceptibility can change a person's behavior, perceived susceptibility can trigger someone to do stockpiling in an effort to prevent them from getting COVID-19.

#### H1: Perceived Susceptibility has a positive relationship with Stockpiling

#### Perceived severity toward stockpiling

Perceived severity refers to a situation where an individual's risk perception of negative consequences to avoid particular behavior to avoid the disease (Yuen et al., 2020). Therefore, every person is motivated to make a particular behavior to increase their safety from the risk of contracting the illness (Yuen et al., 2021). In a COVID-19 situation when the disease comes out, the perceived severity of the disease can trigger an individual to perform a stockpiling. This situation

occurs because every individual wants to protect themselves from the potential danger by performing the behavior (Yuen et al., 2020). In addition, there is a change in consumer behavior during the COVID-19 pandemic (Laato et al., 2020). Commonly, changes in consumer behavior occur when the environmental stimuli are changed. The environment changes can lead to people's emotions such as anxiety, fear of missing out (Qian et al., 2020), and stockpiling behavior (Leung et al., 2020).

People will feel threatened when they have an opportunity to contract the disease, which can trigger uncontrollable behavior such as stockpiling. Thus, the coronavirus causes people to purchase unnecessary products to prevent the disease, and the run out of some products becomes the other factor that consumers purchase immediately (Laato et al., 2020). Furthermore, it shows that in COVID-19 outbreaks, perceived severity has an impact on stockpiling.

**H2: Perceived Severity has a positive relationship with Stockpiling**

#### **Perceived Barriers toward stockpiling**

Perceived barriers refer to people's beliefs about the difficulties to perform a new behavior or particular action (Huang et al., 2016; LaMorte, 2019). Carpenter (2010) stated that perceived barriers and perceived benefits were the most powerful predictive behavior change. In addition, perceived barriers become one of the factors in determining behavioral change (Washburn, 2020), particularly on stockpiles. Perceived barriers to prevention (e.g. limited product availability to implement prevention) become a significant predictor of stockpiles (Nowak et al., 2021). Regulation of purchasing products during COVID-19 (e.g. limited number of product purchases); financial factors (price fluctuation) influence people to do stockpiles (Sadus et al., 2021). Therefore, when barriers occur in people's perception, they tend to choose to protect themselves by performing new behavior such as stockpiling

**H3: Perceived Barriers have a positive relationship with Stockpiling**

#### **Moderating effect of perceived scarcity**

Perceived scarcity refers to an

individual's perception of the level of resource availability that cannot be met due to unavailable products after an epidemic of the disease occurred (Sheu & Kuo, 2020). Perceived scarcity occurs from a person's loss of control due to the influence of the surrounding environment (Bonneux & Van Damme, 2006) and feelings of insecurity (Hendrix & Brinkman, 2013). During the COVID-19 pandemic, resources for daily needs, especially health products, were very limited and not easily accessible to many people because of the perception that they wanted to avoid contracting COVID-19. Buying and stock up on health products can help them prevent the risk of contracting COVID-19. Sterman & Dogan (2015) stated that the perception of scarcity can cause a person to feel fear and panic, which leads a person to carry out preventive behavior such as purchasing health products in irrational quantities. The higher a person's fear of contracting COVID-19, the higher the perception of scarcity due to fear and panic that a person faces, causing a person to have to ensure that the resources they need are met to avoid COVID-19 (Yuen et al., 2020; Lerner & Keltner, 2001; Omar et al., 2021). Therefore, the proposed hypothesis is as follows:

**H4: Perceived Scarcity moderates the relationship between Perceived Susceptibility and**

#### **Stockpiling**

The significant and rapid environmental changes can control cognitive abilities to handle situations that are usually influenced by emotions, such as causing stockpiling (Leung et al., 2020). The emergence of the corona virus disease makes people uncomfortable about the severity of contracting COVID-19 (Miri et al., 2020). Moreover, it can motivate people to keep stock up the hygiene and health products to avoid the risk of COVID-19. According to Laato et al. (2020), there is nothing wrong with hoarding and storing hygiene and health products during COVID-19 because if left without health products, the risk of getting COVID-19 will be higher. Stockpiles are one of the main things for people to survive when there is a health crisis. Therefore, the more dangerous the COVID-19 virus, the higher one's perception of scarcity, which causes people to

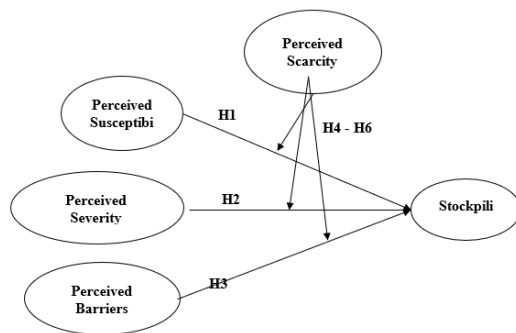
stockpile health products to safe from COVID-19 (Chua et al., 2021). Thus, the proposed hypothesis is as follows:

**H5: Perceived Scarcity moderates the relationship between Perceived Severity and Stockpiling**

Due to the high perceived barriers toward COVID-19, including social distancing, PPKM/PSBB, and WFH can lead people to believe that they are currently experiencing scares (Li et al., 2021). In fact, the more serious and easy the virus of COVID-19 infects people, the more strict the restriction within the country (Chua et al., 2021). Therefore, people tend to stock up on more hygiene and healthy products due to stricter regulations. Higher the restriction during COVID-19, including limiting the purchase of hygiene or healthy products, the higher people's perception toward scarcity. Thus, motivates people to do health-related behavior on stockpiling (Islam et al., 2020)

**H6: Perceived Scarcity moderates the relationship between Perceived Barriers and Stockpiling**

## Theoretical Framework



**Figure 1**  
**Theoretical Framework**

## METHOD

### Design & Participants

This study uses quantitative methods to analyze the relationship between variables. The quantitative method consists of numerical and statistical data collected through online surveys based on respondents' responses. In distributing the survey, we used a quantitative non-probability

convenience sampling approach. The unit of analysis that we used for this study were Indonesians over the age of 17, hoping they are more knowledgeable and experienced. Therefore, respondents who can contribute to this survey must have an experience buying medical devices in large quantities during the COVID-19 period to identify their buying behavior after COVID-19 pandemic. In addition, we conducted a pretest study before testing the relationship between variables. The total number of respondents that we collected in the pre-test was 10 respondents. The pre-test was conducted to find out whether the questions that the researcher gave to the respondents were easy to understand or not. We changed several sentences to make the questions easier to understand for the respondents. In addition, primary data collection must be carried out to 260 respondents using the rule of thumb by Hair et al., 2010. The formula that can determine the exact number of respondents shown as follows:

$10 \times \text{Number of questions} = \text{Number of Respondents}$

Since there are 26 questions, the equation can be implemented as follows:

$$10 \times 26 \text{ Questions} = 260 \text{ Respondents}$$

In conclusion, the total number of respondents that were selected in this research is sufficient as it exceeds 260.

## Procedures

The research was conducted using an online survey and distributed via Google Forms as a method of collecting respondent data. We distribute the questionnaires through online media platforms such as WhatsApp, Line, and Instagram. The questionnaires were distributed to respondents above 17 years old who are experienced in stockpiling during COVID-19 pandemic. In the Google Forms, there is a brief description of the survey to be conducted to ensure that the respondent knows the purpose of the survey research. The respondent will be given 3 filter questions, if they meet the criteria, the respondent can immediately proceed to the next part of the questionnaire, while if they do not meet the criteria, they can complete the questionnaire. Furthermore, there are several demographic questions that must be answered by respondents

such as gender, age, monthly expenses, occupation. Lastly, the respondent must answer each variable question which includes, perceived susceptibility, perceived severity, perceived barriers, perceived scarcity, and stockpiling.

### Measures

In this study, there are three independent variables, one dependent variable, and three moderation variables. There are six hypotheses that will be measured in this study to analyze the stockpiling behavior after COVID-19 pandemic. The variables are including perceived susceptibility (PSUS), perceived severity (PSEV), perceived barriers (PBR), perceived scarcity (PS), and stockpile (STO). All the measurement items were presented with a 6-point Likert-scale to answer the questions, where 1 (Strongly Disagree) and 6 (Strongly Agree) which help to avoid the neutral point of the respondent's answer. The measurement items for perceived susceptibility are adapted from (Chong et al., 2020; Chua et al., 2021; Mertens et al., 2021) with total questions are six. There are 5 questions for perceived severity, perceived barriers, perceived scarcity, stockpile. The measurement item for perceived severity are adapted from (Laato et al., 2020; Li et al., 2021a; Omar et al., 2021). For perceived barriers are adapted from (Huang et al., 2016; Trent et al., 2021). Perceived scarcity measurement items are developed from (Yuen et al., 2021 ; Chua et al., 2021 : Omar et al., 2021 ; Byun et al., 2007). Lastly, for stockpile items are developed from (Omar et al., 2021; Tan et al., 2021; Lehberger et al., 2020). All the variables will be measured by using Partial Least Square (SEM-PLS) to analyze and understand the relationship of the regression between the variable and the moderation variable. The PLS-SEM method allows the authors to estimate the complex cause-effect relationship with many indicator items (Hair et al., 2019).

## RESULT AND DISCUSSION

The data was collected by using an online

survey (Google Forms) with a total of 238 usable respondents from 300 respondents. All the respondents who participated live in greater Jakarta and most of the respondents are females who have behavior on stockpiling during COVID-19. Out of 238 respondents, there are 60% respondents are female and 40% are male. 49% of our respondents are aged 17 to 25 years old, followed by the respondents who are aged 26 to 35 years old by 34%. 52% with the most respondents are employees (52%) and 30% of the respondents are University students. There are 34% respondents have monthly expenses of > Rp 7,000,000,-

Before testing the relationship between the variables, we conducted the reliability and validity test to determine the consistency and connection between the measurement items. According to the rules of thumb for model evaluation by Hair et al. (2011), the reliability and validity test can be tested through Confirmatory Factor Analysis (CFA), including convergent validity, discriminant validity, composite reliability. To test the convergent validity, the construct will be valid if the factor loading is above 0.7 and the Average Variance Extracted (AVE) is above 0.5. Perceived susceptibility consists of six measurement items and the factors loading is more than 0.7 and AVE of 0.561. Then, there were five items assigned to measure perceived severity, perceived barriers, perceived scarcity and stockpile with all the factors loading is > 0.7 and > 0.5 (0.607; 0.541; 0.643; 0.548) respectively. However, to test the consistency or known as reliability test, the researchers refer to Composite Reliability which must be bigger than 0.6. Therefore, all the items in the measurement items of perceived susceptibility, perceived severity, perceived barriers, perceived scarcity, and stockpile can be indicated as reliable due to all the composite reliability is bigger than 0.6. Summary of validity & reliability test results can be seen on Table 1.

**Table 1**  
**Validity & Reliability Test**

Construct	Measurement Items	Factor Loadings	Average Variable Extract (AVE)	Composite Reliability
<b>Perceived Susceptibility [PSUS]</b>	<b>PSUS1.</b> I do not know whether I will be infected with the new variant of COVID-19 or not in the future.	0.717	0.561	0.884
	<b>PSUS2.</b> I am worried that I can transmit the COVID-19 virus to people around me	0.739		
	<b>PSUS3.</b> I feel that there is still a possibility of contracting COVID-19	0.809		
	<b>PSUS4.</b> I am still worried about the possibility of a new variant COVID-19	0.708		
	<b>PSUS5.</b> I am worried about the possibility of contracting COVID-19 from people around me	0.714		
	<b>PSUS6.</b> With the current condition, there is still a possibility that I will contracting COVID-19	0.801		
<b>Perceived Severity [PSEV]</b>	<b>PSEV1.</b> If there is a new variant of COVID-19, it can have an impact on my work performance	0.707	0.607	0.885
	<b>PSEV2.</b> If I catch COVID-19 in the future, my relationships with those closest to me could be affected	0.790		
	<b>PSEV3.</b> The emergence of a new variant of COVID-19 in the future is a threat to me	0.822		
	<b>PSEV4.</b> In my opinion, if the COVID-19 cases spike in the future it will be a threat to me	0.799		
	<b>PSEV5.</b> I am afraid of contracting a new variant of COVID-19 in the future.	0.773		
<b>Perceived Barriers [PBR]</b>	<b>PBR1.</b> I feel disappointed if the number of purchases is limited (especially health products).	0.786	0.541	0.855
	<b>PBR2.</b> I feel afraid that I can not afford health products when the price goes up.	0.706		
	<b>PBR3.</b> I have no control over government regulations	0.702		



	<b>PBR4.</b> I feel that I need more effort to avoid the threat of COVID-19	0.752		
	<b>PBR5.</b> I feel that my mobility (access) will be disrupted if PPKM is reinstated.	0.730		
<b>Perceived Scarcity [PS]</b>	<b>PS1.</b> I feel that my mobility (access) will be disrupted if PPKM is reinstated.	0.723	0.643	0.900
	<b>PS2.</b> Health products became scarce when COVID-19 spiked.	0.836		
	<b>PS3.</b> Health products are very difficult to obtain when COVID-19 is surging.	0.816		
	<b>PS4.</b> The amount of health products I usually buy is limited when COVID-19 spikes.	0.837		
	<b>PS5.</b> Health products in stores/supermarkets/pharmacies are empty when a new variant of COVID-19 appears.	0.791		
<b>Stockpile [STO]</b>	<b>STO1.</b> I keep health products even though the COVID-19 condition has subsided	0.747	0.548	0.858
	<b>STO2.</b> I will buy more health products when COVID-19 spikes	0.710		
	<b>STO3.</b> I still buy more health products even though COVID-19 has subsided	0.781		
	<b>STO4.</b> I still have the desire to buy more health products than before the pandemic.	0.713		
	<b>STO5.</b> I still buy health products in the current condition.	0.748		

Testing the hypotheses and the moderation between the variables, the researchers use SEM-PLS through SMART-PLS with the total hypothesis are six. To test the hypothesis, the p-value must be  $< 0.05$  which indicates that the hypothesis has a significant impact among the variables. According to the hypothesis findings, H1, H2 and H3 shows that there is a positive relationship between PSUS to STO (p-value = 0.037 and  $\beta = 0.157$ ), PSEV to STO (p-value = 0.018 and  $\beta = 0.158$ ), and PBR to STO (p-value = 0.001 and  $\beta = 0.255$ ). Thus, H1, H2, and H3 is supported which in terms of health belief models,

perceived susceptibility, perceived severity, and perceived barriers are the key factors in stockpiling during COVID-19. Even though the current cases of COVID-19 in Indonesia have decreased, the perceived threat (perceived vulnerability and perceived severity) is still being experienced by many people. Perceived barriers refers to a person's feelings because there are obstacles to carrying out a health action that they want to take. During COVID-19, there are always many regulations imposed by the government which include the existence of PSBB/PPKM, limiting the number of



purchases/customers, etc. This is one of the reasons why during COVID-19, the presence of obstacles felt by a person has a significant impact on stockpiling. Moreover, this study found that PS moderates the relationship between PSEV and STO ( $p$ -value = 0.017 and  $\beta$  = 0.167), which

indicates that H5 is supported. However, there are no moderation relationship between PSUS toward STO and PBR toward STO, which considered that H4 and H6 were rejected. The result of the hypotheses can be seen on Table 2

**Table 2**  
**Hypothesis Testing Result**

Hypothesis		$\beta$	T-Values	P-Values	Conclusion
H1	PSUS $\rightarrow$ STO	0.157	2.085	0.037	Supported
H2	PSEV $\rightarrow$ STO	0.158	2.364	0.018	Supported
H3	PBR $\rightarrow$ STO	0.255	3.384	0.001	Supported
H4	MR*PSUS $\rightarrow$ STO	0.078	1.267	0.205	Not Supported
H5	MR*PSEV $\rightarrow$ STO	-0.167	2.380	0.017	Supported
H6	MR*PBR $\rightarrow$ STO	0.041	0.608	0.543	Not Supported

\*PSUS = Perceived Susceptibility; PSEV = Perceived Severity; PBR = Perceived Barriers; MR\*PSUS = Moderation of Perceived Susceptibility; MR\*PSEV = Moderation of Perceived Severity; MR\*PBR = Moderation of Perceived Barriers; STO = Stockpiling

## CONCLUSION

It can be seen from this study, that perceived severity, perceived susceptibility, and perceived barriers have a significant relationship to stockpiling. In addition, perceived scarcity strengthens the relationship between the perceived severity of stockpiling but does not moderate the relationship between perceived susceptibility and perceived barriers to stockpiling.

The cause of stockpiling behavior during the COVID-19 pandemic can be related to the Health Belief Model (HBM). From the result, there are two theoretical implications in this study. The HBM theory is proven to be able to research the stockpiling phenomenon, because perceived susceptibility, perceived severity, and perceived barriers which are variables in the HBM theory are proven to have an influence on someone stockpiling.

This study describes customer behavior when buying a product in an unstable condition. Business owners can add stock of health products

when a pandemic such as COVID-19 occurs in the future because people who have perceived susceptibility or have a perception of the easy spread of COVID-19 will do stockpiling.

In future research, researchers can conduct research in different countries, conducting research focusing on health products, and conduct research when the pandemic situation has not subsided.

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