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# Factors Influencing Purchase Intention of Healthcare Products During the COVID-19 Pandemic: An Empirical Study in Indonesia

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## Abstract

The trend towards health product marketing to increase public attention to health values increased during the COVID 19 pandemic. Healthy sanitization is now a more integrated solution to hand washing in Indonesian culture and a tool for monitoring pandemic risk. This study aims to investigate Health Value and Subjective Norms effect on consumers' Purchase Intention toward hand sanitizer by using attitude as an intervening variable. The total respondents were 160 collected with purposive sampling method, who have bought hand sanitizer in the past eight months, more than 17 years old, and resides in Indonesia during the pandemic. The data was then analyzed using structural equation modelling techniques. The results show that Subjective Norm influence the intention to purchase directly, whilst Health Value does not directly influence the intention to purchase. The processed data then reveal that the attitude has a substantial effect on purchase intention. Consequently, attitude can intervene in the influence of Health Value and Subjective Norm on Purchase Intention. These findings suggest that the medical industry should pay attention to the quality of products it provides to meet consumer expectations and evaluate it regularly to establish a positive approach to marketing activities and to emphasize group references.

**Keywords:** Health Value, Attitude, Subjective Norm, Purchase Intention, Covid-19 Pandemic

**JEL Classification Code:** C83, D91, E21, I11, I18

## 1. Introduction

Corona Virus Disease 2019 is an abbreviation for COVID-19. It is officially called the SARS-COV-2 virus

disease by the World Health Organization (WHO). As of June 5, 2020, over 6,5 million cases were received in 210 countries, with about one third of all cases worldwide from the United States (WHO, 2020). The first case in Indonesia was found on 2 March 2020 (Halodoc, 2020). In the first place, the small number of cases, combined with the assumption that there was a stronger government alertness, since the virus had spread to other countries, made people unconcerned and worried.

Unfortunately, in a few weeks, there was no evidence of a decrease in the numbers of cases, and people became more concerned with the risk of getting infected with regular information about the victims of the health care staff with COVID-19. The level of concern also affects awareness, leading to behaviors that can reduce the risk, more concern on green, and achieve a healthier lifestyle.

BPS (Central Bureau of stats) carried out the "COVID-19 Impact demographics social survey" of 13–20 April 2020, which included an audience of 87.379 respondents, and results indicated that the majority of those surveyed expressed their concern at COVID-19 and its health during the pandemic (BPS, 2020). Concerns of respondents also

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grow when activities outside the home are carried out. These statements show how strong enough consumer perceptions are to change consumer behavior and the high value of health in Indonesian life (Yustisia et al., 2021).

As the situation and environment shift, people's values affect consumer decision-making and buying purpose for a particular product (Soelton et al., 2021). It is a situation in which people become more sensitive to each other than usual. After all, the health and safety of one another and others are current priorities (Handoko et al., 2020). In other words, changes in buying behavior occur (Wijayaningtyas et al., 2019).

The pandemic cannot be avoided by changing from offline to online and changing the method of financial payment and technology transfer program process in SMEs of health care products (Goh et al., 2021; Handoko, 2017; Handoko et al., 2019; Herwany et al., 2021; Hidayat et al., 2018; Khanthavit, 2021). As a result, the number of e-commerce transactions in Indonesia has increased, mainly in health care products. Research at iPrice has revealed that the interest in shopping online for hand hygiene products, like hand sanitizers, has increased significantly by 5.585 per cent through the use of Google Analytics print data in February and March 2020. (iprice.co.id, 2020). It is one of the trends in the pandemic of COVID-19.

The use of hand sanitizers in the Indonesian pandemic has become more integrated (BPS, 2020). This does not only mean that consumers are encouraged to have a little control over their lives in this uncertain, dangerous situation by being able to buy and use the product but also to support health care and to maintain well-being (Berardi et al., 2020; Laros & Steenkamp, 2005). It serves as both a complementary and to some extent an effective alternative to hand washing and a means of controlling risk in this pandemic (Golin et al., 2020; Spears & Singh, 2004; Hillier, 2020).

There has undoubtedly been an increase in the perceived value of hand sanitizer and health in itself. This is a serious time for e-commerce in healthcare to expand its growth and presence, further expanding its web audience. The number of potential consumers increases considerably, and hand sanitation is increasing more quickly as an integral part of consumer hygiene practices (Berardi et al., 2020). But everybody is still in the fluid, quick-moving situation with the pandemic. Consumer demand has been made more volatile and unpredictable. To predict the consumer's actual conduct in buying hand sanitizers on a solid foundation, a study is required of consumer intention (Brahmana et al., 2018; Dobewall et al., 2018).

This is why the author aims to investigate the relationship between the factors that can encourage customers to buy hand sanitizer. Furthermore, the theory of reasoned action is the foundation to determine which factors are important in this ongoing change of consumer behavior exceedingly. It is the author's opinion that the study is reasonable and also

attractive. Hand sanitizer was considered to be a good health product that some, if not all, can manufacture or store to capitalize on the trend even after the COVID-19 pandemic.

## 2. Literature Review

This section will explain the Theory of Reasoned Action (TRA) as the grand theory and the variables used in this research.

### 2.1. Theory of Reasoned Action (TRA)

One of the most commonly used frameworks and proven to be reliable enough to get a good understanding of consumer intentions and behavior is from the Theory of Reasoned Action (TRA). TRA (Ajzen & Fishbein, 1975) is widely recognized as a suitable model for social psychology and marketing (Thorbjørnsen et al., 2007). The theory of reasoned action aims to explain the relationship between attitudes and behaviors within human action. TRA states that a person's intention to perform a behavior is the main predictor of whether or not they actually perform that behavior. Ajzen and Fishbein stated that a person's intention to carry out a behavior determines whether the behavior will be carried out or not. The intention is influenced by two fundamental determinants; attitudes and social influences or what is known as subjective norms. Throughout the years, TRA's framework and variables have been applied to more research fields of study and become more flexible in adapting over time with the different content in each analysis that uses its framework (Paul et al., 2016).

### 2.2. Attitude

Attitude is the assessment, feeling, and consistent tendency to favor or dislike objects or ideas (Kotler & Gary, 2008). Other definitions of attitude are that when someone is positive or unfavorable in evaluating the behavior concerned it is a level of auto-evaluation (Ajzen et al., 2011). In all, the more positive your behavior attitude is, the more likely your behavior is to be carried out (Nam et al., 2017). It has also been shown that behavioral intention has a positive influence in different health contexts (Conner et al., 2001; Lin et al., 2017; Pajor et al., 2017).

Petraszko (2013) had found a higher probability of showing an interest in the use of multivitamin-minerals supplements by studying the use of multivitamin/minerals. Besides, Petraszko et al. (2010) found that the behavioral attitude is a consequence of one's belief that certain behaviors may produce positive or negative results. Positive behavioral assumptions about functional foods like health benefits, reduction of the effect of the disease, and improvement of health have led to a positive approach to the buying of functional foods.

### **2.3. Subjective Norm**

Subjective norms refer to the belief that an important person or group of people will approve and support a particular behavior. Subjective norms are one's perceptions or views of other people's beliefs that will influence his/her intention to do or not to perform the behavior under consideration (Wijayaningtyas et al., 2021). Subjective norms have a significant direct effect on the desire to buy. Research conducted by Maichum et al. (2016) stated that subjective norms positively and significantly affect people's desires.

It becomes even more prevalent when a research study's social environment is more conducive and supportive of a product's purchasing behavior; in this situation, subjective norms will be among the best predictors for consumers' intention (Conner et al., 2001). Besides from that, several research studies have also indicated the importance of subjective norms as a predictor of consumers' intention to engage in behaviors that are related and aimed at supporting health (Conner et al., 2001; Fulham & Mullan, 2011).

### **2.4. Purchase Intention**

Athapaththu and Kulathunga (2018) stated that purchase intention is the customer's willingness to buy a specific product or service. Purchase intention usually is related to the behavior, perceptions, and attitudes of consumers. This is in line with previous research, which defines purchase intention as the probability that a customer will buy a product (Wijayaningtyas & Nainggolan, 2020). Purchase intention is also defined as consumers' actions towards a brand (Spears & Singh, 2004).

According to Kiriakidis (2015), purchase intention is an essential factor for predicting consumer buying behavior. Likewise, these arguments also apply in the context of online purchases. In the research conducted by Pavlou (2003), the final stage of online transactions is to buy products. Therefore, based on all of the above arguments, it can be said that purchase intention plays an essential role in consumer behavior both offline and online. The higher the purchase intention of the consumers, the better the development of a business will be.

### **2.5. Added Variable: Health Value**

To preserve the reliability of the TRA model in various types of research, other complementary variables should be properly added to the model (Brahmana et al., 2018; Hart et al., 2016). Thus, the author adds health value to the TRA in the context of this study (Conner et al., 2001). The previous studies have also demonstrated that health as a value has many motivational meanings; and is linked to health-related behavior (Dobewall et al., 2018; Lau et al., 1986; Yoo & Robbins, 2008). Thus, within this context, the more people value their health, the more likely they are to do proactive health-minded buying.

The principle is that terminal values can influence consumer and domain positions and promote their intentions and/or actions through value orientation (Tudoran et al., 2009). Besides, adding value to TRA's framework also bridges the theoretical gap that exists. TRA does have certain limitations, which have to be considered, despite its many strengths. One is the fact that the attracting characteristics of purchases by consumers are not addressed (Jayawardhena, 2004; Taherdoost, 2018).

In the end, the additional variable helps to highlight the potential of the Reasoned Action Theory (TRA) in the exploration of health-related behavior and sheds light on factors that influence the motivation of a person to use a hand sanitizer. Therefore, more scope for research and insights are created.

### **2.6. Hypotheses Development**

Health value has been widely adopted and validated in various research contexts for its ability to gauge individuals' underlying motivation toward health (Su & Zeng, 2020) and for its influence on consumers' attitudes (Tudoran et al., 2009). In the previous research of Tudoran et al. (2009), since health value is positively related to attitudes towards health behaviors, health value should positively influence health-related product purchases. And, the empirical evidence reveals that consumer interest in health is significantly associated with positive attitudes towards health-supporting products.

Drawing insights from previous research, evidence suggests that health value is more likely predictive of preventive health intentions and behaviors. It is supported by the findings of Pajor et al. (2017) concerning the role of health value in dietary supplement use. The results showed that individuals who place a high value on their health are more inclined to purchase and use dietary supplements through precaution. Research conducted by Tudoran et al. (2009) also found that both positive expectations and perceptions of healthiness were significantly reflected in consumers' intentions to purchase a product. Thus, it is consistent with the recent findings (Brahmana et al., 2018; Hasnah & Wai, 2015) in which those who perceive that health is everything will have a solid intention to purchase healthcare products.

Subjective norms form external influence, affecting one's perception of a particular object, actions, and behavior (Rahadi et al., 2012). So, the variable has been examined more specifically in many researchers' marketing and consumer behavior fields. The above studies' results affirm the ability of social influence in explaining the consumers' attitude towards the use of products. Furthermore, in a study done by Nam et al. (2017) and Irianto (2015), the findings proved that social influence does affect the consumers' attitude towards a product. Thus, the stronger the subjective norm is, the more favorable the consumers' attitude toward the product.

In the research conducted by Aryadhe (2018), the findings revealed that subjective norms have a significant relationship and positively influence the consumers' purchase intention. It implies that the stronger the consumers' subjective norms, the stronger their purchase intention will be toward the product. The finding supports the result of previous research conducted by Lee et al. (2014), who stated that subjective norms can stimulate the consumers' intention to purchase a product. Thus, when more people demand a person to buy a hand sanitizer, the greater the tendency of that person to purchase the product, especially if his/her essential people are the ones who demand him/her to purchase it.

Attitude is the degree to which people evaluate an action, behavior, and consequences that will result from it (Petraszko, 2013). If the person considers that what he is doing is good, then favorable thoughts will be formed. These thoughts will then influence that person's intention to perform a specific behavior until, finally, that person engages in the particular behavior (Ajzen et al., 1991). Many previous studies have indicated a significant relationship between customer attitude and purchasing intention (Han et al., 2010; Yoon & Kang, 2000), and that attitude is an essential predictor of consumers' intentions to conduct certain health-related behaviors.

Thus, this study examined the TRA and added variables to investigate healthcare product purchase intention and the research framework (see Figure 1). Following the arguments above, the proposed hypotheses are:

**H1:** Health value has a positive influence on consumers' attitude.

**H2:** Health value has a positive influence on consumers' purchase intention.

**H3:** Subjective norm has a positive influence on consumers' attitude.

**H4:** Subjective norm has a positive influence on consumers' purchase intention.

**H5:** Attitude has a positive influence on consumers' purchase intentions.

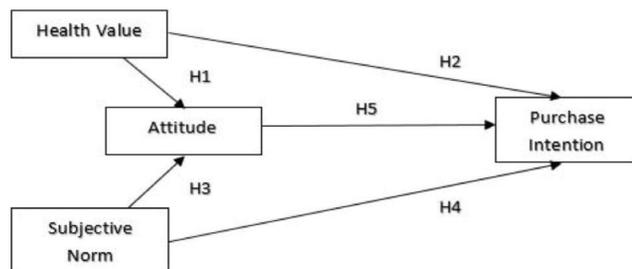


Figure 1: Research Framework

### 3. Research Methods

This research is theory-testing research in which the interpretations of the theories employed were put to the test. It is also designed to establish the causality between the variables in the model. The research was conducted using quantitative methods where online questionnaires are used as the data collection tool to analyze the causal impact between the variables. Google Forms was used to make the questionnaire readily shared via a shared link option, which was later distributed to social media and instant messaging apps to invite respondents to participate in this research study. So, the data used in the research is primary data that is collected directly from respondents.

#### 3.1. Population, Sample, and Sampling Techniques

The population used was all people who were in Indonesia in the COVID-19 pandemic. Meanwhile, by applying the purposive sampling method, namely determining the sample with consideration of certain conditions or criteria, the sample has bought hand sanitizer in the past eight months, aged  $\geq 17$  y.o., and resides in Indonesia during the pandemic.

#### 3.2. Variables Identification

In this research, the Exogenous variables have consisted of Health Value (HV) and Subjective Norm (SN); the Intervening variable is Attitude (ATT), and the Endogenous variable is Purchase Intention.

### 4. Results and Discussion

The total number of respondents in this research is 226, of which only 160 are qualified in meeting the respondent requirements established for this study and have decent answers after further screening is carried out. Respondents' responses to the variables studied through the maximum and minimum values can be seen on the following descriptive statistics (DS).

#### 4.1. DS: Health Value (HV)

The variable Health Value (HV) was measured using two positive statements (HV1 & HV3) and two negative statements (HV2 & HV4). The respondents are more focused and careful in filling out the questionnaire and avoiding inconsistencies in the data. The respondents' responses for the variable HV ranged from 1.869–4.681 before reverse scoring [RS] for the negative statements, and the total average value obtained is 3.397, which indicates the

responses as “neutral” while, after reverse scoring, the total average value becomes 4.228, which indicates “strongly agree”. It implies that most respondents agree that health is something that should be highly valued. Also, among the four indicators, the statement with the highest mean score of 4.681 is HV3, “*I think it is important to protect my health and avoid disease*”, followed by the HV1 statement “*Health is everything to me*”.

#### 4.2. DS: Attitude (ATT)

The respondents’ responses to the ATT variable range from 3.981–4.413. The total average value obtained is 4.145, which indicates the responses as “agree”. It means that most respondents agree that purchasing hand sanitizers is favorable to them. Among the five indicators, the statement with the lowest mean score of 3.981 is ATT2 “*I feel comfortable using hand sanitizer*”. Thus, it means the healthcare products e-commerce and those who capitalize from selling hand sanitizers still have much room for improvement in the product’s comfiness aspect.

#### 4.3. DS: Subjective Norm (SN)

The respondents’ responses for the variable SN ranged from 3.519–4.056, and the total average value obtained is 3.786, which indicates the responses as “agree”. It means that most respondents agree that there is social pressure toward them to purchase hand sanitizer. Also, among the 5 indicators, the statement with the highest mean score of 4.056 is SN2, “*My family advised me to buy hand sanitizers*”, followed closely by the SN3 statement “*My close friends advised me to buy hand sanitizer*”.

#### 4.4. DS: Purchase Intention (PI)

The respondents’ responses to the PI variable range from 3.531–4.206. The total average value obtained is 3.823,

which indicates the responses as “agree”. Among the 4 indicators, the statement with the lowest mean score of 3.531 is PI1 “*I intend to buy a hand sanitizer in the near future*”. The result is reasonable, as many respondents claim to have purchased many hand sanitizers before the quarantine began; a form of stockpiling behavior and panic buying, which is an impulsive reaction. Meanwhile, the statement with the highest mean score of 4.206 is PI2, “*If needed, I will buy a hand sanitizer*”, followed by the PI3 statement “*I love buying hand sanitizers because they are good for my health*”.

#### 4.5. Hypothesis Testing

The test is done by looking at the *t*-statistic as the cut-off value, with the expected *t*-value of  $\geq 1.96$ . A hypothesis will be accepted if it meets these criteria. From Table 1, it can be seen that out of the five proposed hypotheses, only H2 is not accepted, while two indirect relationships are established by existing variables via LISREL 8.8 data processing which help to explain the phenomena observed.

Thus, the results of the hypothesis testing can be described as follows:

**Health Value (HV) has a positive and significant effect on Attitude (ATT).** This result follows the previous study conducted by Tudoran et al. (2009) who showed health value can influence consumers’ attitudes toward health-related products. The findings from previous research conducted by Brahmana et al. (2018) also showed a positive relationship between health values and attitude toward health-related products. Thus, the consequential result is that when people value their health intensely, the attitude towards purchasing hand sanitizer will be more robust.

**Health Value (HV) has an insignificant effect on Purchase Intention (PI).** This finding is potentially important, theoretically. The statement, along with the results of other hypothesis testing related to the health value variable,

**Table 1:** Hypothesis Testing Result

| Hypothesis | Variable      | Direct/Indirect | Loading Factor | $t_{\text{value}}$ | $t_{\text{stas}}$ | Result       |
|------------|---------------|-----------------|----------------|--------------------|-------------------|--------------|
| H1         | HV → ATT      | Direct          | 0.31           | 2.58               | 1.96              | Accepted     |
| H2         | HV → PI       | Direct          | -0.10          | -0.92              | 1.96              | Not Accepted |
| H3         | SN → ATT      | Direct          | 0.58           | 6.32               | 1.96              | Accepted     |
| H4         | SN → PI       | Direct          | 0.48           | 4.06               | 1.96              | Accepted     |
| H5         | ATT → PI      | Direct          | 0.56           | 3.80               | 1.96              | Accepted     |
|            | HV → ATT → PI | Indirect        | 0.17           | 2.31               | 1.96              | Accepted     |
|            | SN → ATT → PI | Indirect        | 0.32           | 3.73               | 1.96              | Accepted     |

concludes that personal values alone (in this case, health value) cannot directly encourage people to buy hand sanitizer. Consumers must first show a positive attitude towards the product and believe that it has good health and quality of life. This finding supported the previous study of Yang (2002).

**Subjective Norm (SN) has a positive and significant effect on Attitude (ATT).** This accepted hypothesis supports the previous research conducted by Endah (2014) who concluded that subjective norms affected consumers' attitudes. It is also in line with previous research by Chinomona (2016), in which the findings proved that subjective norm does have a positive correlation with consumers' attitude.

**Subjective Norm (SN) has a positive and significant effect on Purchase Intention (PI).** This finding supports the previous research conducted by Triyastiti and Saputro (2013) who concluded subjective norms affected consumers' purchase intention. It is also in line with James and Christodoulidou (2011) finding who proved that subjective norm does have a positive correlation with consumers' purchase intention. This demonstrates that the normative belief and motivation to follow the opinions of other people about Indonesian consumers is quite high and should be considered in drawing up business plans, on health care SMEs particularly.

**Attitude (ATT) has a positive and significant effect on Purchase Intention (PI).** This research result follows the previous study conducted by Wijayaningtyas and Nainggolan (2020) who showed the consumers' attitudes can significantly influence consumers' purchase intention. The finding of Chen and Chang (2012) also shows a strong positive relationship between consumers' attitudes and purchase intention. Therefore, a positive attitude is an essential factor that will influence a person's intention to purchase.

## 5. Conclusion

In this study, four variables are used: health value (HV), attitude (ATT), subjective norm (SN), and purchasing intention (PI) to examine the high value of health within society and how it correlates with factors that may encourage the consumer's intention in the COVID-19 pandemic to purchase hand sanitizer products.

The strong link between HV and ATT shows that the greater the consumer's appreciation for their health, the greater the consumer's behavior and the higher the chance of purchasing a sanitizer. Meanwhile, the insignificant relationship between HV and PI indicates the specific aspect of consumers towards existing health products. Even in a pandemic situation, people won't buy hand sanitizers blindly, simply because they look highly at their health.

The significant connection between SN and ATT reinforces the social influence of the consumer on the hand sanitation approach and therefore the intention to purchase it. The important relationship between SN and PI also indicates a high standard of conviction and motivation to follow others' opinions. The role of the subjective norms in drawing up business plans is therefore crucial. Finally, the significant relationship between ATT and PI means that, where the consumer's attitude to a hand sanitizer is positive, consumers can be encouraged to buy the product. Thus, a positive attitude is an essential factor that will influence a person's intention to purchase.

Some of these limitations are due to pandemic circumstances in this research study. The primary data for current research could only be obtained via a Google Form link via online questionnaires. Meanwhile, the ideal approach is to engage the interviewees directly when the questionnaires are completed to reduce the risk of incomprehension and obtain further information in the cognitive discussion.

A small research sample is only 160 respondents as the primary source for this research data processing. Therefore, those who wish to take advantage of the results of this study should carefully generalize or analogize the findings of the research because if the research results on other research objects are done to represent the population, the results may not necessarily be the same.

Further research is thus recommended to determine the impact on the purchase intent of other healthcare products in Indonesia by conducting a more thorough analysis of other endogenous variables, such as the perceived value of healthcare products. For further post-pandemic research, it will be suggested to analyze the intention to purchase again variable using a specific brand of hand sanitizer as the object for the study with the other variables in the current framework.

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