



Analysis of the Influence of Product Attributes and Consumer Characteristics on Consumer Preferences and Purchase Decisions of Vitamin C Oral Products During The Covid-19 Pandemic

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ABSTRACT

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During the Covid-19 pandemic, there was an increase in sales of vitamin C products. A preliminary survey of 57 people aged 18-60 years showed that the most oral vitamin C products consumed is 500 mg and buying decisions was influenced by several things. This study aims to analyze the effect of product attributes and consumer characteristics on consumer preferences and buying decisions for oral vitamin C products during the COVID-19 pandemic. This study was an explanatory quantitative study of 159 respondents who purchased 500 mg oral vitamin C products. Respondents was men and women, aged 18-60 years, bought 500 mg oral vitamin C products without a doctor's prescription at pharmacies in Bogor district, West Java during December 2020 - January 2021 and were not in the healing period. Data was collected by purposive sampling and analyzed by SEM (Structural Equation Modeling) using the Second Order Confirmatory Factor Analysis technique using the Lisrel program. The results showed that the product attributes of 500 mg oral vitamin C had no significant effect on consumer preferences and buying decisions. Consumer characteristics have a significant effect on consumer preferences and buying decisions for 500 mg oral vitamin C products. Consumer preferences have a significant effect on buying decisions for 500 mg oral vitamin C products. During the COVID-19 pandemic, personal psychological factors which are consumer characteristics have the most significant influence on consumer preferences in choosing and buying decisions of 500 mg oral vitamin C products, followed by socio-economic factors and cultural factors.

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1. Introduction

The COVID-19 pandemic (Corona Virus Disease 2019) is caused by Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) which causes acute respiratory distress with symptoms of fever, cough and shortness of breath. In severe cases it can cause pneumonia, kidney failure and even death. The corona virus attacks humans of various ages, ranging from infants, children, to adults, including pregnant women and breastfeeding mothers. (Ministry of Health, 2020) Based on COVID-19 monitoring data on September 9, 2020 in Jakarta, it shows that the productive age, namely the age range of 20-60 years, is the age most exposed to the corona virus. (Hangara, 2020)

Immunity is one way to ward off the transmission of viral infections. Immunity is related to adequate nutritional intake for the body, including vitamin C intake. (Komsan, 2020) Hemila Herri said that high doses of vitamin C in addition to being able to relieve or prevent infections caused by bacteria, viruses and protozoa can actually shorten the duration of colds and prevent colds. occurrence of pneumonia. (Hemilä, 2017; Achmad, 2021) The Indonesian Ministry of Health recommends a dose of

100-200 mg of vitamin C three times a day for 14 days for patients with mild and asymptomatic symptoms. (BPOM, 2020) The dose of vitamin C for prevention during the COVID-19 pandemic is 500 mg per day, while for medical personnel or treatment it is recommended 500 - 1000 mg / day. (Dance, 2020).

There is an increase in sales of vitamin C because of its benefits for the immune system. Iprice on April 9, 2020 in detik.com stated that the number of online sales of vitamin C experienced a significant increase, namely by 1986% in March 2020 when compared to February 2020. (Iprice, 2020) Executive Director of the Indonesian Pharmaceutical Company Association (GP Pharmacy), Darodjatun Sanusi in coil.com on April 9, 2020 stated that sales of oral vitamin C tablet products in pharmacies increased by 7 times during the pandemic. (spool, 2020)

A preliminary survey conducted by researchers on 57 respondents with an age range of 18-60 years said that 94.7% of respondents consumed oral vitamin C products during the Covid-19 pandemic, as many as 40.4% of respondents consumed 500 mg oral vitamin C products, as many as 45.6% of respondents choose vitamin C products in the form of tablets/caplets and the reasons for making decisions to purchase vitamin C products are influenced by several things. In general, the preferences or preferences of consumers in choosing and buying a product will see the attributes of the product. Attributes that accompany the product include price, quality, consumption method, packaging and ease of obtaining the product. (Kotler & Armstrong, 2018) However, according to Simmamora (2003) there are other factors that can make consumers change their decisions at the last moment, namely consumer characteristics. These consumer characteristics are influenced by cultural, socio-economic and personal psychological factors. (Harahap, 2014; Dadi, 2021)

Research on consumer preferences and purchasing decisions that combine product attribute factors and consumer internal factors has been carried out by Prasojo Pribadi, Rayi Citra Ayu Pangestuti, Nesya Jeihan Daniswara published in February 2020. From the research it is known that when buying over-the-counter drugs, consumers will consider advertising factors products, opinions of family/friends and manufacturing companies. (Personal et al., 2020). The phenomenon of increasing sales of vitamin C products during this pandemic is very interesting to study because of the lack of empirical data and studies. This study aims to examine the effect of product attribute factors (price, quality, consumption method, packaging and ease of obtaining the product) and consumer characteristics factors (culture, socio-economic and personal psychology) on consumer preferences and purchasing decisions for oral vitamin C products during the COVID-19 pandemic. -19.

Product attributes are everything that is attached to the product and will usually be considered by consumers in choosing a product. Consumer preferences can be triggered by the attributes contained in the product that affect a person or become a person's consideration for choosing a product. (Pamartha, 2016; Maulida & Nugrahenti, 2020). Price is one of the product attributes that play a role in consumer preferences. (Kotler & Armstrong, 2018) Garvin in Irawan (2016) states that product quality is a product attribute that is a concern for consumers in choosing products. (Irawan, 2016) In addition to price and quality, the easy way to use is one of the product attributes that can be a reason for consumers to choose a product. Ibrahim, Inas Rifaat Ibrahim, Mohamed Izham Mohamed Al-Haddad, Mahmoud Sa in (2012) in his research in Bahdaq Iraq stated that 95% of consumers make it easy to swallow solid dosage drugs as a preference in choosing pharmaceutical drug preparations. (Ibrahim et al., 2012; Maulida, 2020). According to Ares et al (2010) in Annunziata and Vecchio (2013) product packaging also plays an important role in consumer preferences. Kautsar (2012) states that the ease of getting a product is one of the product factors that influence consumer preferences.

H1: Product attributes affect consumer preferences

Product attributes in addition to influencing the preferences of consumers can also influence consumers in making purchasing decisions for a product. (Pamartha, 2016; Prawira, 2018) All elements in the product that are considered important by consumers can be used as the basis for making purchasing decisions. (Tjiptono, 2008). Basyits Ali Alfairi (2019) states that the better the price and quality of the product owned by the product, the more significant it will be on product purchasing decisions. Denny Lestyorini (2018) states that packaging can influence consumers to make product choices, which in turn makes a strong reason to buy the product. Rizal, genesis, Nugroho et al (2019)

mentioned how to take drugs is one of the factors that consumers choose over-the-counter drugs. In the current digitalization era, it is no longer traditional for consumers to get products, where consumers come alone to buy products at the place that sells them (offline), but now consumers will prefer to use technological advances, namely buying online through market places or media. social. Research on consumer attitudes towards Sariपुर brand teabags against Sariwangi (Atmojo 2012), consumers give high importance to the ease of obtaining.

H2: Product attributes affect purchasing decisions

Consumers in choosing and making decisions are not only influenced by product attributes, but also influenced by psychophysiological processes originating from internal consumers or consumer characteristics. Consumer characteristics can be formed due to the influence of the surrounding factors. (Simamora, 2003; Sudrajat et al., 2018). According to Howard and Sheth (1998) in Harahap (2014) consumer characteristics that can influence preferences in purchasing decisions are cultural, social, personal, economic and psychological characteristics.

H3: Consumer characteristics affect consumer preferences

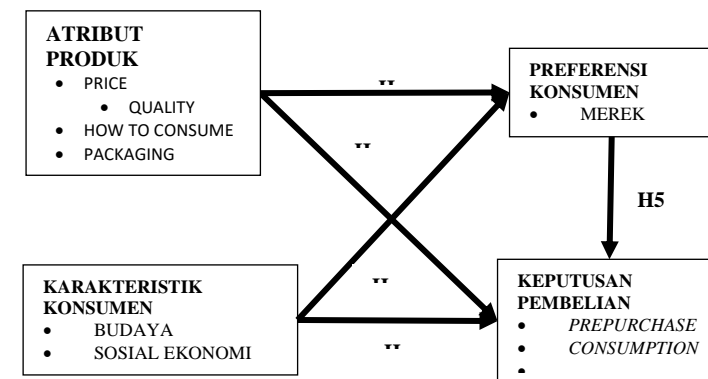
The decision of Aristia Rosiani Nugroho, Angela Irena (2017) in Gunawan (2019) is known that the characteristics of consumers that influence are cultural and psychological factors on purchasing decisions. Meanwhile, Hendra Gunawan (2019) mentions cultural, personal and psychological factors that influence purchasing decisions. (Gunawan, 2019)

H4: Consumer characteristics affect purchasing decisions

In the process of making a purchase decision, it consists of the prepurchase, consumption and postpurchase stages. Consumer preferences appear in the postpurchase stage, namely at the purchase evaluation stage. Kotler and Keller (2011) argue that in the evaluation stage consumers form preferences for brands in the choice set. Consumer preferences according to Sohany and Fahmi (2020) are influenced by brands and are subjective. Pamartha, Yulianto and Sunarti (2016) mention that consumer preferences influence purchasing decisions.

H5: Consumer Preferences affect purchasing decisions.

Based on the relationship between variables, the conceptual framework can be obtained as follows:



Source: Researcher

Figure 1. Research Concept Framework

2. Methods

This research is an explanatory quantitative research, the data is obtained by means of a survey where the sampling is non-probability sampling using purposive sampling technique. The data were analyzed statistically SEM (Structural Equation Modeling) with the Second Order Confirmatory Factor Analysis technique using the Lisrel 8.80 program. The survey was conducted to 159 respondents. In accordance with the theory proposed by Satora and Saris (1985) in Riadi (2018), revealing that 75-200 cases is a reasonable number for the chi-square fit measure. (Riadi, 2018) The study samples were men and women, bought 500 mg oral vitamin C products without a doctor's prescription at pharmacies

in the Bogor district, West Java in December 2020 - January 2021, aged 18-60 years, had or regularly consumed vitamin products C oral, not in healing period.

The research consists of four latent variables, namely product attributes, consumer characteristics, consumer preferences and purchasing decisions. Product attribute variables consist of five dimensions, namely price, quality, consumption method (WAY), packaging (KACK) and ease of obtaining the product (EASY). The consumer characteristics variable (CHARACTER) consists of three dimensions, namely culture (CULTURE), socio-economic (SOSEKO) and personal/psychological (PRIPSI). The consumer preference variable consists of two dimensions, namely brand (BRAND) and subjective (SUBJECT). The purchase decision variable consists of three dimensions, namely prepurchase (PRE), consumption and postconsumption. Each dimension has four statements.

3. Result and Discussion

3.1 Test the Validity and Reliability of the Research Questionnaire

Validity and reliability tests were conducted on 30 respondents. Data were analyzed using IBM SPSS version 25 program. Validity test using Pearson's Product Moment method with a significance level of 5%. If r count is greater than r table, then the statement is said to be valid. The decision is reliable if the value of Cronbach Alpha 0.6.

3.2 Research Respondent Profile

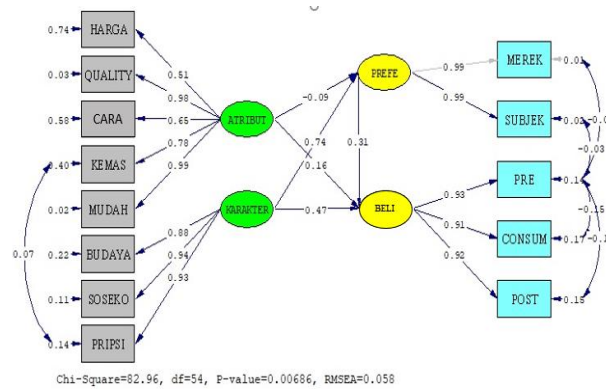
Respondents who filled out the research questionnaire were 159 people consisting of 79 men and 80 women. The criteria for the age of the respondents are 18 -30 years as many as 74 people (46.54%), age 31-40 years as many as 43 people (27.04%) and age 51-60 years as many as 9 people (5.7%). The last education level of the respondents was SMP 3 (1.9%), SMA 78 people (49%), Diploma 34 people (21.38%), S1 43 people (27%) and Masters/S3 1 person (0.63%). The occupations of the respondents were 23 students (14.4%), 23 entrepreneurs (14.4%), 76 private employees/civil servants (47.8%), 25 housewives (15.7%) and 12 others (7.55%).

3.3 SEM Analysis

Each of the four research variables was analyzed using Second Order Confirmatory Factor Analysis (2nd CFA) to test the validity, reliability and suitability of the structural model and calculate the value of latent variables. In testing the product attribute variables, it is known that from the twenty statements owned by the five dimensions, there is one statement from the price dimension and one statement from the consumption dimension which has a loading factor value of less than 0.5. According to Hair et al (2014) in Riadi (2018) stated "an acceptable factor loading value is more than 0.5". Both statements were dropped and not used for analysis. Eighteen existing statements were retested and declared valid because they have a loading factor of 0.5 and reliable because they have a construct reliability value of 0.5. (Riadi, 2018) Meanwhile, from the model fit test, it was concluded that the product attribute variable measurement model could be accepted and continued.

The consumer characteristics variable has twelve statements from three dimensions, all statements are valid and reliable. In the model fit test, it was concluded that the measurement model of consumer characteristics variables could be accepted and continued. In testing the consumer preference variable, it is known that from the eight statements that are owned by two dimensions, there is one statement that has a loading factor of less than 0.5. The statement is dropped and not used for analysis. The seven statements were tested again and declared valid because they have a loading factor of 0.5 and reliable because they have a construct reliability value of 0.5. (Riadi, 2018) Meanwhile, from the model fit test, it was concluded that the product attribute variable measurement model could be accepted and continued.

The purchasing decision variable has twelve statements from three dimensions, all statements are valid and reliable. In the model fit test, it was concluded that the measurement model of the purchasing decision variables could be accepted and continued. After the four structural models and the suitability of the research variable models are accepted, the latent variable score is calculated and a structural model is made so that the full path diagram of the research is obtained as follows:



Source: Lisrel output, data processed

Figure 2. Full Path Diagram of Standardized Solution Research

Table 1. Research Validity and Reliability Test

Latent variable	Dimension	Loading Factor	Critical Loading factor	Decision	δ	AVE	CR	Critical Value	Decision
PRODUCT ATTRIBUTES	PRICE	0.51	0.5	VALID	0.74	0.9	0.6	0.5	RELIABLE
	QUALITY	0.98	0.5	VALID	0.03				
	METHOD	0.65	0.5	VALID	0.58				
	PACK	0.78	0.5	VALID	0.4				
CHARACTER CONSUMER ISTIK	EASY	0.99	0.5	VALID	0.02	0.9	0.8	0.5	RELIABLE
	CULTURE	0.88	0.5	VALID	0.22				
CONSUMER PREFERENCES	BRAND	0.99	0.5	VALID	0.01	1.0	0.9	0.5	RELIABLE
	SUBJEK	0.99	0.5	VALID	0.02				
KEPUTUSAN PEMBELIAN	PRE	0.93	0.5	VALID	0.14	1.0	0.8	0.5	RELIABLE

Source: lisrel output, data processed

All research variables are declared valid because the value of the loading factor ≥ 0.5 and reliable because the value of CR and AVE ≥ 0.5 .

Table 3. Research Goodness of Fit Test

Kriteria GOFI	Hasil	Cut off Value	Keputusan
Chi square Statistic	df = 54 X ² = 82.96	• $0 \leq X^2 \leq 2df = fit$ • $2df < X^2 < 3df = dapat diterima$	Fit
DF	82.96/54 = 1.53	< 2 = fit	Fit
Significance probability	0.006826	0 – 1	Fit
RMSEA (The Root Mean Square Error of Approximation)	0.058	• $\leq 0.08 = fit$ • $0.05 = close fit$	Fit
ECVI	0.99	• Harus lebih kecil dari saturated ECVI (1.15)	Fit

Kriteria GOFI	Hasil	Cut off Value	Keputusan
Model AIC	156.96	•Harus lebih kecil dari <i>saturated</i> AIC (182.00)	Fit
Model CAIC	307.51	Harus lebih kecil dari <i>saturated</i> CAIC (552.27)	Fit
NFI	0.98	> 0.90	Fit
TLI/NNFI	0.99	0.80 < TLI < 0.90	Fit
PNFI	0.68	Harus Kecil	Fit
CFI	0.99	>0.90 = fit 0.90<CFI<0.97 = dapat diterima	Fit
TLI/IFI	0.99	>0.90 = fit 0.80<IFI<0.90 = dapat diterima	Fit
RFI	0.97	>0.90 = fit 0.80<CFI<0.90 = dapat diterima	Fit
CN	155.40	> 200	Tidak Fit
SMSR	0.051	≤ 0.05	Fit
GFI	0.90	• > 0.90 = <i>fit</i> • 0.80<GFI<0.90 = dapat diterima	Fit
AGFI	0.84	• > 0.89 = <i>fit</i> • 0.80<RFI<0.89 = dapat diterima	Dapat Diterima
PGFI	0.54	> 0.5	Fit

Source: Lisrel output, processed data.

The measurement model is declared feasible or suitable for use if the goodness of fit category that meets the criteria or cut off value is more than the criteria that do not meet the requirements, where first the chi-square value is seen, if this value meets the criteria or cut off value, then the goodness of criteria is seen. other fit. (Malhotra, 2010) Referring to the GOFI test results above, it shows that the full research model as a whole is feasible to use because almost all assessment indicators meet the criteria or cut-off value requirements, although there is one category that does not fit and one category is not accepted, the category does not fit. .

The equation of the structural model of the research is as follows:

$$\text{PREFE} = -0.090 \cdot \text{ATRIBUT} + 0.74 \cdot \text{CHARACTER},$$

$$\text{Errorvar.} = 0.54, R^2 = 0.46$$

$$(0.11) \quad (0.12) \quad (0.077)$$

$$-0.82 \quad 6.03 \quad 7.04$$

$$\text{BELI} = 0.018 \cdot \text{PREFE} + 0.0093 \cdot \text{ATRIBUT} + 0.028 \cdot \text{CHARACTER}, \text{Errorvar.} = 0.0010, R^2 = 0.71$$

$$(0.0058) \quad (0.0049) \quad (0.0079)$$

$$3.15 \quad 1.88 \quad 3.51$$

Based on the structural equation, it is known that product attributes and consumer characteristics can explain consumer preference variables by 46% and the remaining 54% is influenced by variables not included in the research model. Consumer purchasing decision variables can be explained by consumer preferences, product attributes and consumer characteristics by 71%, while the remaining 29% is influenced by other variables not included in the research model. The influence relationship between research variables obtained through LISREL is as follows:

Table 4.
Hypothesis testing

Hypothesis	Regression Coefficient	T value	T tabel	Decision
H1: The product attribute of oral vitamin C 500 mg has a significant effect on consumer preferences.	-0.090	-0.82	1.96	Rejected
H2: Attributes of 500 mg oral vitamin C products have a significant effect on purchasing decisions	0.0093	1.88	1.96	Rejected
H3: Consumer characteristics have a significant effect on consumer preferences for choosing oral vitamin C products 500 mg	0.74	6.03	1.96	Accepted
H4: Consumer preferences have a significant effect on purchasing decisions for oral vitamin C products 500 mg	0.028	3.51	1.96	Accepted
H5: Consumer preferences have a significant effect on purchasing decisions for 500 mg oral vitamin C products	0.018	3.15	1.96	Accepted

Source: Lisrel output, processed data.

If the value of t count is greater than or equal to t table for = 5% of 1.96, then there is an influence between these variables. If not or the value of t count is smaller than t table, then there is no effect. The first hypothesis examines the effect of product attributes on consumer preferences. From the table, it is known that the t value is -0.82, this value has a value smaller than 1.96, which means the first hypothesis is rejected, which means that the attributes of the 500 mg oral vitamin C product have no significant effect on consumer preferences.

The second hypothesis examines the effect of product attributes on purchasing decisions. From the table, it is known that the t value is 1.88, this value has a value smaller than 1.96, which means the second hypothesis is rejected, which means that the attributes of the 500 mg oral vitamin C product have no significant effect on purchasing decisions. The third hypothesis examines the effect of consumer characteristics on consumer preferences. From the table, it is known that the t value is 6.03, this value has a value greater than 1.96 which means the third hypothesis is accepted which means that consumer characteristics have a significant effect on consumer preferences for choosing oral vitamin C products 500 mg.

The fourth hypothesis examines the effect of consumer characteristics on purchasing decisions. From the table, it is known that the t value is 3.51, this value has a value greater than 1.96, which means that the fourth hypothesis is accepted, which means that consumer characteristics have a significant effect on consumer preferences for choosing oral vitamin C products of 500 mg. The fifth hypothesis examines the effect of consumer preferences on purchasing decisions. From the table, it is known that the t value is 3.15, this value has a value greater than 1.96, which means that the fifth hypothesis is accepted, which means that consumer preferences influence purchasing decisions for 500 mg oral vitamin C products. Based on the research hypothesis test table, it is known that consumer characteristics have the most significant influence on consumer preferences with a regression coefficient value of 0.74.

3.4 Influence between Product Attributes and Consumer Preference

Product attribute variables consist of five dimensions, based on the results of data analysis, it is known that the ease of obtaining products (MUDAH) has the most significant influence on product attributes, followed by quality (QUALITY), packaging (KEMAS), aspects of how to consume (CARA) and the last is price. (PRICE). From the results of data analysis, it is known that the five dimensions are not able to make product attribute variables have an influence on consumer preferences for choosing oral vitamin C products during the COVID-19 pandemic.

Ease of getting a product is the dimension of the product attribute that is most preferred by the respondents and has a significant influence compared to other product attributes. Vitamin C products that can be purchased without a doctor's prescription are the indicators that have the highest influence, followed by indicators of the safety or authenticity of vitamin C products in pharmacies. The

next influential indicator is the product that is easy to find by pharmacies, and the last influential statement is that it can be found in various regions. The second product attribute is product quality. The statement that there is an additional composition that is most preferred by consumers, product reliability is the long-lasting effect in the body which is then preferred by the respondent, a statement that increases immunity, a statement that a good preparation is the next statement that consumers prefer in choosing an oral vitamin C product.

Packaging is the third product attribute chosen by the respondents. packaging indicators that guarantee quality, packaging makes practical, informative labels and is available in various variations successively selected by consumers. The way of consumption is the fourth product attribute chosen by consumers. Easy to swallow, choosing the dosage form because it is easy to swallow and the rules for using the product once a day are chosen by consumers. The last product attribute is price. Affordable prices, product prices can be selected according to needs and competitive prices are the choices of the respondents.

500 mg oral vitamin C products are widely circulated in Indonesia with various brands and various accompanying attributes. The study found that product attributes have no effect on consumer preferences. The results of this analysis are not in line with the results of Pamartha's research (2016) which states that product attributes affect consumer preferences. This is thought to be due to a shortage of vitamin C products at the beginning of the pandemic. This vacancy occurred due to panic buying, consumers bought up vitamin C products on the market massively to maintain health in the midst of a pandemic. Due to this emptiness and the importance of vitamin C products during the pandemic, consumers are no longer making product attributes a preference. Buying a product regardless of the brand and the content of the active vitamin C substance is more important than consumer preference or preference for a brand of oral vitamin C product during a pandemic. According to Kotler and Keller (2011), consumer preferences show consumer preferences from a wide selection of existing service products. Preference is a preference (tendency) for something. Preferences can be formed by habits in choosing several products and can also be formed from repetitive behavior and become long-term memory. Habits are difficult to change, but the pandemic has caused many changes in shaping preferences for choosing vitamin C products.

3.5 Influence between Product Attributes and Purchase Decisions

Product attribute variables consist of five dimensions, based on the results of data analysis, it is known that the ease of obtaining products (MUDAH) has the most significant influence on product attributes, then quality (QUALITY), packaging (KEMAS), aspects of how to consume (CARA) and price (PRICE).). From the results of data analysis, it is known that the five dimensions are not able to make product attribute variables have an influence on purchasing decisions for oral vitamin C products during the COVID-19 pandemic.

Ease of getting a product has the greatest influence on product attributes. These factors include indicators that can be purchased without a doctor's prescription, statements of safety or authenticity of vitamin C products at pharmacies, product statements that are easy to find pharmacies, and can be found in various regions. The second product attribute is product quality. The indicator is that there are additional compositions that are most preferred by consumers, long-lasting effects in the body which are then preferred by respondents, statements that increase endurance, statements of good preparation are further statements that consumers prefer in choosing oral vitamin C products.

Packaging is the third product attribute chosen by the respondents. Packaging statements that guarantee quality, packaging makes practical, informative labels and are available in various variations successively selected by consumers. The way of consumption is the fourth product attribute chosen by consumers. Easy to swallow, choosing the dosage form because it is easy to swallow and the rules for using the product once a day are chosen by consumers. The last product attribute is price. Affordable prices, product prices can be selected according to needs and competitive prices are the choices of the respondents. Price is one of the factors considered by consumers in buying a product. According to Tjiptono (2008) all elements in a product that are considered important by consumers and can be used as a basis for making purchasing decisions are called product attributes. In other words, product attributes will affect the purchase decision of a product.

The study found that product attribute variables did not have a significant influence on purchasing decisions, this was different from the results of Pamartha's research (2016) which stated that product attributes had an effect on purchasing decisions. Based on the results of this study, it is suspected that there are other factors that cause consumers to decide to buy vitamin C products during the pandemic and do not consider product attribute factors. The ineffectiveness of product attributes on purchasing decisions is thought to have occurred due to a shortage of vitamin C products that occurred at the beginning of the pandemic. This vacancy occurred due to panic buying, consumers bought available vitamin C products without questioning the brand, and it is suspected that this continues to this day.

Shou et al (2011) in Fahmi and Sohani (2020) describe panic buying starting from the act of people buying products in unusually large quantities to avoid a lack of supply in the future. Where this causes a bigger problem because this unusual demand can cause stock depletion and even empty stock, triggering panic buying. Panic buying occurs for several reasons, usually the main reason is due to disruption of product supply caused by several reasons such as natural disasters, labor strikes, government regulations and many more.

3.6 The influence of consumer characteristics on consumer preferences

The consumer characteristics variable has three dimensions, based on the results of data analysis it is known that personal psychology (PRIPSI) has the most significant influence on the consumer characteristics variable, followed by socio-economic (SOSEKO) and cultural (CULTURE). From the results of data analysis, it is known that these three dimensions make consumer characteristics significantly influence consumer preferences in choosing 500 mg vitamin C products during the COVID-19 pandemic.

Consumer characteristics are internal factors of consumers (consumer black boxes), which are formed due to the influence of factors that exist around consumers. Psychological personal factors, which are components of consumer characteristics that have the greatest influence, are successively influenced by lifestyle, motivation, work activities and perceptions.

Lifestyle is part of the personal factors that are owned by someone without coercion and following trends or existing life changes. The lifestyle of buying and consuming vitamin C products has been started before the pandemic period to maintain health. During the pandemic, the lifestyle trend of consuming vitamin C products was judged by the respondents to be good for continuing to maintain health, especially for those of productive age who have to do outdoor activities or work. The motivation of the respondents to stay healthy during the pandemic is thought to encourage them to consume 500 mg of vitamin C. Motivation can be described as a desire, need, drive within the individual to act. (Schiffman & Leslie, 2015) The desire to stay healthy is a positive drive and a sense of security during a pandemic. This is reflected in the existing questionnaire responses, where motivation affects personal psychological factors on consumer characteristics variables. The work of the respondents, including personal psychological factors, will certainly affect the need for consumption of 500 mg of vitamin C during this pandemic. Sixty-two percent of respondents are employees and entrepreneurs, of course they believe that consuming 500 mg of vitamin C will support activities in their respective workplaces. Perception is an individual's process of selecting, organizing and interpreting stimuli to make sense and meaning. Usually consumers will organize the perceptions they receive in a psychological form. This can be subjective because it depends on experience, motives, interests and even the time of occurrence of stimuli. (Schiffman & Leslie, 2015) The statement of perception of the use of vitamin C products 500 mg on this dimension contributes to the influence, although not as big as the three previous psychological personal indicators.

The second dimension or factor, namely socio-economic, is influenced by indicators of setting aside money to buy 500 mg vitamin C, government recommendations, sharing with friends, family. The COVID-19 pandemic has an impact on socio-economic life. Respondents tried to set aside some of their income to buy 500 mg vitamin C products to maintain health. The government, friends, family are also included in the reference group that is considered by consumers. Simmamora (2003) mentions a reference group is a group that is a direct or indirect point of comparison in the formation of a person's attitude. People can be influenced by a reference group even if they are not a member of it. (Simamora, 2003).

Analysis of the Influence of Product Attributes and Consumer Characteristics on Consumer Preferences and Purchase Decisions of Vitamin C Oral Products During The Covid-19 Pandemic (Kurnia Kusumawati, et al)

Cultural factors are the last factors that influence consumer characteristics. Products available at home, gender or gender who consume vitamin C products 500 mg, habits about consuming vitamin C products 500 mg before illness. and regularly consuming 500 mg vitamin C products is an indicator of cultural factors. Gender is part of different cultural groups and is considered an easily recognizable segment in a large or complex society (Schiffman & Leslie, 2015). According to the respondents, 500 mg vitamin C products can be consumed by both men and women. Based on the results of the questionnaire, the statement of the habit of consuming vitamin C before illness also contributed to cultural factors on the consumer characteristics variable. This contribution is thought to be due to the habit of vitamin C products that are always present at home and families who are accustomed to consuming vitamin C so that it affects consuming vitamin C before getting sick. But it can also be because this habit affects other family members so that vitamin C products are always at home. This is in accordance with the opinion of Schiffman and Kanuk (2015) who say that the impact of culture in society is so natural and ingrained that its influence on behavior is rarely noticed. (Schiffman & Leslie, 2015) In addition, Schiffman and Kanuk (2015) state that the family is one of the social institutions that has a major influence on cultural elements. (Schiffman & Leslie, 2015) This opinion is in accordance with the statement in the questionnaire for families who regularly consume 500 mg vitamin C products. This is reinforced by Sumarwan (2014) who states that habit is a form of behavior that is culturally acceptable and can be passed down from generation to generation. (Sumarwan, 2014) This habit is seen by the respondents according to the pandemic situation which requires them to stay healthy so that the respondents will consume vitamin C to prevent illness. The results of this study support the research of Yudhianto (2015) which states that socio-economic psychological factors influence the selection of modern and traditional medicines as well as research. (Yudhianto, 2015) Marwati and Amidi (2019) also revealed that cultural factors influence consumer preferences. (Marwati & Amidi, 2019).

3.7 The influence of consumer characteristics on purchasing decisions

The consumer characteristics variable has three dimensions, based on the results of data analysis it is known that personal psychological factors (PRIPSI) have the most significant influence on consumer characteristics variables, followed by socio-economic aspects (SOSEKO) and cultural aspects (CULTURE). From the results of data analysis, it is known that these three dimensions make consumer characteristics significantly influence purchasing decisions for 500 mg vitamin C products during the COVID-19 pandemic.

The four consecutive indicators that have the most influence on the psychological personal dimension are lifestyle, work, perception and motivation. Lifestyle is the biggest indicator of personal factors which are consumer characteristics that influence purchasing decisions. Respondents who are in productive age, namely 18-60 years, most agree that consuming 500 mg vitamin C products during a pandemic is a healthy lifestyle to maintain health so that they make decisions to buy vitamin C products. Lifestyle is a desire from someone without coercion from others which is not permanent and can follow existing developments.

The next indicator of the psychological personal dimension chosen by the respondent is motivation. Motivation is part of the psychological factor is an impulse that exists in humans to achieve certain goals. (Firmansyah, 2019) Staying healthy during the pandemic is the motivation of respondents to make purchasing decisions for vitamin C products. The next indicator that influences is work. Work is a personal thing of the respondent which is intended to earn income for survival. Work sometimes requires a person to leave the house which is contrary to the government's advice to stay at home to prevent transmission of the virus. Respondents who have to work outside the home buy vitamin C products to maintain their health so they don't get sick and support their activities at work during the pandemic.

Perception is a psychological indicator of consumer characteristics that influence purchasing decisions. Perception is the result of a person's meaning of the stimulus or event he receives. This can be subjective because it depends on experience, motives, interests and even the time of occurrence of stimuli. (Schiffman & Leslie, 2015) The perception of the importance of buying 500 mg vitamin C

products on consumer characteristics contributes to the influence, although not as big as the three previous indicators.

The socio-economic dimension is an indicator of the next consumer characteristic variables that have an influence on purchasing decisions. This dimension is influenced by four indicators, namely setting aside their income to buy 500 mg vitamin C products to maintain health, the government, friends and family. Even though the Covid-19 pandemic had an impact on the economy, it turned out that respondents still tried to set aside their income to buy 500 mg vitamin C products to maintain their health. Socio-economic indicators are influenced by indicators that set aside their income to buy 500 mg vitamin C products to maintain health. The government, friends, family, respectively, are included in the reference group or social environment from the characteristics of consumers.

The government, friends, family, respectively, are included in the reference group or the environment as part of the consumer characteristics that influence purchasing decisions. The three groups are a reference group of respondents, where respondents are influenced by these groups in making decisions to purchase vitamin C products. The government provides accurate information, health services, provides guidance related to the pandemic period so that it becomes the hope and reference of the respondents in going through the pandemic period. Friends and family provide word of mouth communication and is a very effective social incentive for making a buying decision. (Firmansyah, 2019).

Cultural factor is the last factor of consumer characteristics that influence consumer decisions. The indicators of this dimension are the products available at home, gender or gender who consume vitamin C products 500 mg, the habit of consuming vitamin C to prevent illness and consuming vitamin C regularly. The habit of providing vitamin C products at home will certainly shape consumer behavior and can influence the purchase decision of a particular product. Gender is part of different cultural groups and is considered an easily recognizable segment in a wider or complex society (Schiffman & Leslie, 2015) Vitamin C products are products that can be consumed by both men and women and this is also agreed by the respondents so that this also be involved in making purchasing decisions.

The habit of consuming 500 mg vitamin C products before getting sick is the third influential indicator based on the results of the questionnaire. This is based on the fact that respondents know the benefits of vitamin C, namely increasing body resistance. Therefore, consumers will make purchasing decisions for vitamin C products during the pandemic. After knowing the benefits of vitamin C, there is a possibility that respondents will consume vitamin C regularly during a pandemic, which of course will make consumers buy routinely vitamin C products.

The results of this study are in accordance with the theory according to Kotler & Armstrong (2018) which states that there are factors that influence purchasing decisions, one of which is the characteristics of buyers which consist of cultural, social, personal, and psychological. (Kotler & Armstrong, 2018) As well as supporting the results of Saputri and Yuliani's research (2020) cultural variables, social variables, personal variables and psychological variables have a significant effect on product purchase decision variables C in Bojonegoro. (Saputri & Yuliani, 2020).

3.8 The Influence of Consumer Preferences on Purchase Decisions

The fifth hypothesis is that there is an influence of consumer preferences on purchasing decisions of 500 mg oral vitamin C products. Based on the results of SEM analysis, it is known that consumer preferences affect purchasing decisions. The consumer preference variable is most influenced by subjective factors (SUBJECT) with the preferred indicators successively being family advice, sharing information with friends, reading label information and pharmacy advice. While the brand factor (BRAND) which has a preferred indicator is testimonials, because they have consumed and are interested because they see displays in pharmacies. Interestingly, the statement of buying because seeing the ad does not really influence consumers to buy 500 mg oral vitamin C products.

The consumer decision variable consists of three factors, namely preconsumption which is influenced by indicators of widespread news about COVID-19, alternative assessments, the right dose of 500 mg and the need for vitamin C during the pandemic. The second factor is consumption which is influenced by indicators of buying as needed, quality confidence, dosage is more important than brand and price considerations. The third factor is postconsumption which is influenced by indicators of

Analysis of the Influence of Product Attributes and Consumer Characteristics on Consumer Preferences and Purchase Decisions of Vitamin C Oral Products During The Covid-19 Pandemic (Kurnia Kusumawati, et al)

repurchase, satisfaction, referring and buying for others. Consumer preferences that influence consumer purchasing decisions are in accordance with the theory revealed by Kotler and Keller (2011) that consumer preferences appear in the evaluation stage of alternatives in the purchasing decision process. In this evaluation stage, the influencing factor is the consumer's cognitive and emotional state. Or in other words, the characteristics of consumers that have the most influence on consumer preferences which lead to purchasing decisions. Consumer preferences affect purchasing decisions in line with the research of Pamartha, Yulianto and Sunarti (2016) which states that consumer preferences affect purchasing decisions.

Consumers of pharmaceutical products have different characteristics from consumers of other products. In general, consumers make purchasing decisions based on consumer wants and needs. Meanwhile, pharmaceutical consumers in making decisions to buy products or services are usually based on desires, for example the desire to recover from a fever, the desire to be healthy, and others.

4. Conclusion

The results showed that the product attributes of 500 mg oral vitamin C had no effect on consumer preferences and purchasing decisions. Consumer characteristics influence consumer preferences and purchasing decisions for 500 mg oral vitamin C products. Consumer preferences influence purchasing decisions for 500 mg oral vitamin C products during the COVID-19 pandemic. During the pandemic, psychological personal factors which are dimensions of consumer characteristics have a significant influence on consumer preferences in choosing and buying 500 mg oral vitamin C products, followed by socio-economic and cultural factors.

Producers must begin to consider consumer characteristics, especially personal psychological, socio-economic and cultural factors as a future strategy to build consumer preferences so that it leads to purchase decisions. Although the results of the study indicate that the attributes of the 500 mg oral vitamin C product do not have an influence on consumer preferences and purchasing decisions, manufacturers of 500 mg oral vitamin C products should still pay attention to product attributes in detail and adjust existing developments such as the availability of products in various choices of vitamin product packaging. C with various prices so that consumers can buy according to their economic capabilities, diversify vitamin C products. Research still has limitations and shortcomings, in this study the consumer preference variable is the dependent variable of product attribute variables and consumer characteristics variables. Suggestions for further research is that consumer preference variables are used as intervening variables for purchasing decisions, besides increasing the number of samples and expanding research locations can be done in further research.

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