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WILLINGNESS TO PAY THE ORGANIC VEGETABLE: THE IMPACT OF COVID-19 PANDEMIC IN INDONESIAN EXPERIENCE

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Abstract:
The Covid-19 pandemic has resulted in a renewed emphasis on health and wellness among consumers, increasing demand for organic vegetables despite their higher prices. The research was conducted to analyze alterations in the consumers' attitude towards organic vegetables during the pandemic, focusing on their willingness to pay (WTP) and the factors that influence it. The research was carried out in three stages, including collecting socio-demographic data from 155 respondents using the Slovin formula and accidental sampling technique, calculating WTP for organic vegetables using the Contingent Valuation Method approach and conducting Structural Equation Modeling (SEM) analysis to identify factors that affect WTP. Results showed that consumers were willing to pay more for various types of organic vegetables, with spinach, chayote, and kale being the most sought-after. However, the level of education, income, and type of work significantly influenced WTP. Additionally, consumer behavior was a significant factor affecting WTP during the pandemic, suggesting that the crisis presents an opportunity to increase the consumption and purchase of organic vegetables. Overall, these findings provide valuable insights into the impact of the pandemic on consumer behavior and can inform marketing strategies to promote healthy food choices.

Keywords: Consumption Behavior, WTP, Organic Vegetable, Pandemic.
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INTRODUCTION

Starting in 2020, after WHO (World Health Organization) declared the covid-19 outbreak as a world pandemic, all countries began to anticipate to prevent the spread. The data from WHO has reported more than 1,130,247 cases of coronavirus in Southeast Asia, and in concrete terms, 76,981 cases have come from Indonesia (Kontan.co., 2020). Some countries, such as China, Italy, and Saudi Arabia, have taken action to fight the Covid-19 pandemic by implementing lockdown policies (Damanik, 2020). Meanwhile, in early March 2020, the Indonesian government decided to take a stricter security policy: a ban on assembly and large-scale social restrictions (PSBB) at the local level according to the severity zone. This PSBB has made a decrease in the intensity of life activities because the fundamental interactions of socioeconomic life are limited, which results in a decrease or even loss of sources of income and leads to changes in the structure of household expenditures, including a decrease in the quantity and quality of food consumed (Johara *et al*., 2019). The increase in covid-19 has dramatically affected world economic conditions, including in Indonesia. The UN has determined that the most affected sectors are health, transportation, tourism, trade, and others (Susilawati *et al*., 2020). FAO analyzes and provides input on the impact

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of the emerging covid-19 pandemic on the agricultural sector - the significant effects of which are still unknown, but general assessment criteria for predicting supply and demand for agricultural products suggest possible disruptions in trade and logistics (Schmidhuber *et al*., 2020). The sudden and radical change from the drastic reduction of any form of sociality and self-isolation profoundly affects the lives of citizens, affecting certain eating habits, work routines and daily behavior (Di Renzo *et al*., 2020).

Optimizing the condition of society during this pandemic requires not only medical and biological knowledge but also all human sciences related to behavior, socioeconomic studies, and communication (Rodriguez-Perez *et al*., 2020). Avoiding close contact with other people or doing activities only at home can, in some cases, lead to anxiety, stress/depression, risk of cardiovascular disease, and even increased mortality (Lima *et al*., 2020). In this regard, some psychological research considers that everyone makes a connection to the choice of good food consumption. Choosing food leads to a concept that has become a significant trend in the food industry, namely "Healthy, Functional, and Satisfied Foods." The products with this concept pay attention to the balance of nutrition, safety, and quality of raw materials. Plasek *et al.* (2019) explored consumer considerations for consuming healthy and functional food products to prevent digestive problems, weak immune systems, and high cholesterol levels. In addition, in encouraging quality improvement, the world community began to leave chemical-based products by choosing organic materials (Hojnik *et al*., 2019). Srinieng and Thapa (2018) revealed that people's perceptions and knowledge about organic products are fundamental for consuming organic vegetables, fruits, and rice.

Table 1. Comparison of Nutritional Content of Some Organic and Inorganic Vegetables

Nutritional Content (mg/kg)	Types of Vegetables							
	Organic Beans	Inorganic Beans	Inorganic water spinach	Inorganic Water Spinach	Organic spinach	Inorganic spinach	Organic lettuce	Inorganic lettuce
Calcium (Ca)	40.5	15.5	60	17.5	96	47.5	71	16
Magnesium (Mg)	60	14.8	43.6	15.6	203.9	46.9	49.3	13.1
Potassium (K)	99.7	29.1	148.3	53.7	257	84	175.5	53.7
Sodium (Na)	8.6	<1	20.4	<1	69.5	<1	12.2	<1
Thiamin	60	2	13	2	117	2	169	1
Iron (Fe)	227	10	24	20	1,584.00	19	516	1
Copper (Cu)	69	3	18	<1	32	<1	60	<1

Source: Secondary Data (Processed), 2021

During the Covid-19 pandemic, maintaining health is essential, especially a healthy lifestyle by consuming many balanced, diverse, and nutritious foods, including fruits and vegetables (United Nations Indonesia, 2020). The Indonesian population consumes 173 grams of fruit and vegetables per day, less than the nutritional adequacy rate of 400 grams per capita per day WHO recommends. However, the potential for organic commodities is growing significantly as a health need because the product is richer in vitamins and nutrients that are good for the body and do not contain chemicals (Anggiasari et al., 2016). States that, internationally, agricultural products must have attributes that are safe for consumption, high in nutrients, and environmentally friendly. One of the agricultural products with these attributes can be found in organic vegetable products,

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whose nutritional content comparisons can be seen in Table 1. The awareness of the dangers posed by synthetic chemicals in agricultural products has led to organic farming as a healthy life movement in an urban society that can attract consumer and producer attention.

So far, although there is a different understanding of organic vegetables, many people have welcomed them, and their sustainability must be connected to the economic, environmental and social dimensions.

In line with the study conducted by Gastol et al. (2011), the comparison of several nutritional values of conventional and organic agricultural products is higher solute content (14.9% and 12.5%, respectively) and slightly higher antioxidant activity than conventional. However, the organic cultivation system affected the growth of vegetables positively by 43% and negatively by 57%. Organic cultivation affected vegetable yields 59% positively, 29% negatively, and 12% had no significant effect, and organically grown vegetables had the most (65%) better nutritional values than those grown conventionally. Renzo et al. (2020) found that lifestyle changes during the Covid-19 pandemic and eating habits resulted in weight gain of 48.6% of the observed population, 3.3% of smokers decided to quit smoking, and 15% of respondents switched to organic consumption, buy fruit and vegetables, especially in northern and central Italy. Stanciu et al. (2020) wrote an article to analyze Romanian consumers' behavior in the context of the emergence of Covid-19, significantly reducing consumers' social activities and changing their actions oriented primarily toward covering basic needs. Interpreting changes triggered by covid-19 is seen in the purchase intentions of vegetables in distribution systems and in their desire for digital transformation in information gathering, ordering, and proof payment.

Different empirical strategic studies have been implemented in various countries to identify common attributes related to the consumption behavior of organic vegetable products (Stolz et al., 2011). Ensure behavioral changes in the covid-19 pandemic conditions can be seen in the acceleration of individual actions in consuming goods or services daily. These individual behaviors, directly and indirectly, affect the environment (Khalina et al., 2017). Then supported by modifying regulations or new procedures, lockdowns and social distancing, it has disrupted consumer buying habits, shopping methods and services (Sheth, 2020). Before the Covid-19 pandemic, several previous research results suggested that organic food products in Indonesia were still constrained by public perceptions of prices that were considered expensive, and there was no adequate price incentive for producers (Anggiasari et al., 2016). While public awareness of the importance of maintaining health has begun to increase, it only ensures that the behavior of all consumers switches to organic vegetable products even at this time in the face of the Covid-19 pandemic. Therefore, this research paper aims to identify the changes in the behavior of consuming organic vegetables during the Covid-19 pandemic in Indonesia.

Framework Analysis and Reasoning. The 21st century has witnessed various socioeconomic, political and technological changes. This technical revolution left important notes, one of which was helpful for the agricultural sector, such as sustainability. The agricultural production process is increasingly vital after facing industrial agriculture's social, ecological and economic impacts. Researchers have found solutions to low input production concerning the environment, health and social welfare. World policies and organizations have set out to take action in the sustainable use of natural resources through organic agriculture (Vega-Zamora et al., 2020). Organic farming systems are more profitable and provide high nutritional value or contain fewer (no) pesticide residues compared to conventional farming.

Organic agriculture is a production management system that relies on agronomic, biological, and mechanical methods such as crop rotation, crop residues, animal waste, organic waste outside of agriculture, and crop protection to increase biodiversity, biological cycles and agro-ecosystem

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health. Regarding the safety and quality of agricultural products, this has sparked awareness among consumers and the public, who began to be suspicious of conventional products. Based on this scenario, the role of organic agriculture is in the spotlight as a more sustainable form of production that can help reduce climate change (Skinner et al., 2019). Meanwhile, the most disturbing occurrence of climate change is its consequence for environmental damage, disruption to the community's economic life, and its negative impact on human health. The arrival of the covid-19 pandemic has further aggravated the overall socioeconomic system of life, especially in health (Mas'udi & Winanti, 2020). However, on the other hand, Covid-19 may bring blessings for the development of organic agriculture, which can encourage the spread of healthy food awareness, which has positive consequences for a sustainable agricultural system.

The "blessing" opportunity for organic products can be traced back to the turmoil caused by the COVID-19 pandemic, which has prompted an urgent need to conduct clinical trials to combat the spread of the deadly virus (Setiabudy, 2020). As is known, COVID-19 can be transmitted through the air or through direct or indirect contact, with clinical symptoms such as mild flu, runny nose, sore throat, cough, and fever, to more severe cases such as pneumonia (difficulty breathing). It can even cause death (Cirrincione et al., 2020). A healthy lifestyle is a mandatory requirement during the Covid-19 pandemic. People are encouraged to be more selective in their behavior, especially regarding the safety of the products they consume (need to pay attention to food safety attributes) and high nutritional content (nutritional attributes). Consuming organic food can reduce the risk of disease due to the loss of pesticides. Public awareness of the dangers of pesticides (chemical substances) makes them more selective in choosing a product for consumption (Mie et al., 2017). Adapting and applying these conditions can influence individuals to change their behavior, especially in consuming food (Avis, 2016).

Many different forms of behavior change appear, both positive and negative, which are interesting to study further and research. The adoption process is fast for some behaviors that are easy to modify, whereas, for behavior that is difficult to change or usually complicated, it generally requires behavior change intervention (Crutzen & Peters, 2020). Referring to Berlin (2017), the need for behavior change interventions that are effective in maintaining long-term health through lifestyles, such as physical activity, nutrition, and sleep, are essential factors in being able to modify the prevention and treatment of disease. However, looking at the social aspects of humans who are created as dynamic creatures, without even intervention, they will continue to develop and experience changes from time to time (Marsilia & Mahmudi, 2015).

The formation of behavior change is in line with the development of science and technology, which gives birth to a new mode, such as consumer behavior and mindset. The mode of consuming a product also changes due to the emergence of organic products. It comprehensively reflects changes in people's consumption behavior (Wang, 2015). They explained the types of organic products consumed, including vegetables and fruits cultivated organically. Organic vegetables include leaf, fruit, flower, root, and stem vegetables. The organic leafy vegetables often cultivated are green spinach, red spinach, leeks, claim, cassava leaves, kale, kailan, cabbage, Pak Choy, Chinese cabbage, chicory, curly lettuce, head lettuce, celery and spinach. The organic fruit vegetables are baby corn, beans, chilies, sweet corn, red beans, peas, winged beans, machete gourds, chayote, cucumber, pariah, eggplant, tomatoes and zucchini. The following types of organic flower vegetables are broccoli and cauliflower. The root vegetables often grown organically are beets, potatoes, radishes, and carrots. In comparison, the stem vegetable that is often grown organically is asparagus. Consuming organic vegetables is an action that must become a habit in life, although consumption behavior is a function of attitudes toward the environment, lifestyle and income.

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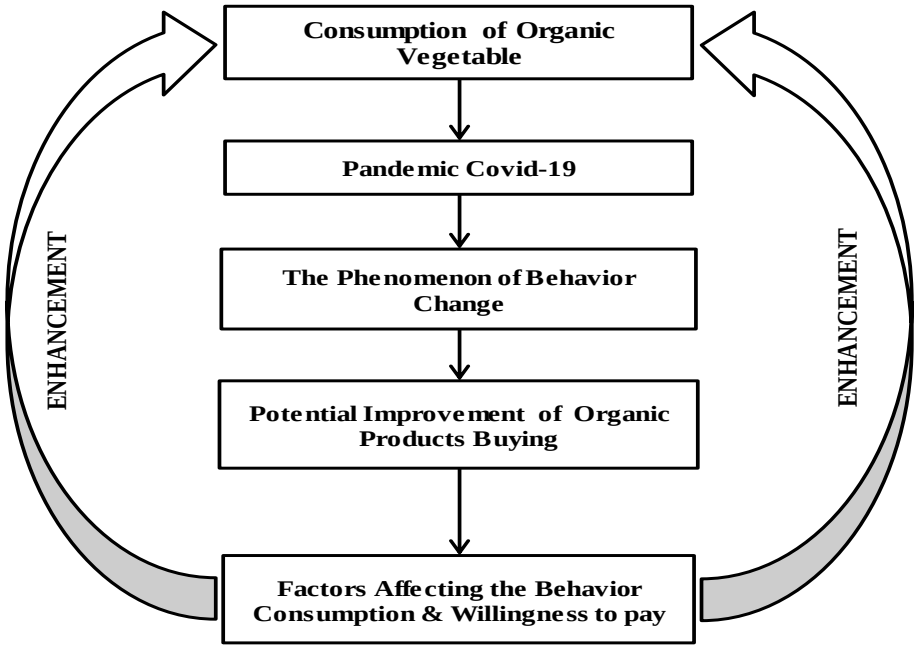

Figure 1. Framework Analysis

The demand for organic vegetable products in Indonesia still needs to be solved related to the selling price, which is considered too expensive. Based on the study conducted by Srinieng & Thapa (2018), in which the perception of environmental effects and health benefits of organic vegetables have a positive influence on the consumption of organic vegetables, our study of organic vegetable consumers is expected to illustrate the trend of changing consumer behavior of organic vegetables in Indonesia. Therefore, we are interested in exploring the issues of changes in individual or household consumption behavior and referring to Sheth (2020) and Marsilia. & Mahmudi (2015), the consumption behavior change of organic products is hypothetically based on variables of age, gender, employment status, education and monthly income due to the Covid-19 pandemic. Furthermore, the researcher wants to know how organic vegetable consumption behavior affects willingness to pay (WTP) for organic vegetables. In this case, regarding the factors that affect the willingness of consumers to pay for analog rice. These factors include the level of concern for food diversification, knowledge of analog rice, conventional rice consumption behavior, and food preferences as a source of carbohydrates. More specifically, this study attempts to explain consumers' willingness to pay to buy and consume organic vegetable products through the calculation of WTP. This WTP calculation is associated with improving product quality to determine the price individuals or households can pay. Therefore, this method is adopted to maximize the value that consumers are willing to pay to improve product quality.

The need to maintain good health during the covid-19 pandemic is thought to have triggered behavior change. According to Chen et al. (2018), people are increasingly concerned about the environment (global warming, the destruction of the ozone layer and natural habitats), which is thought to influence consumers' decisions to buy environmentally friendly products. Based on these conditions, the authors assume that one of the changes in behavior during the Covid-19 pandemic is manifested in the consumption behavior of products that support improving body health, even though not many official studies discuss behavior changes during the Covid-19

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pandemic. However, psychologically the public already thinks that Covid-19 will easily infect people with a lack of immunity and nutritional intake. Therefore, this study aims to examine the extent to which there has been an increase in the consumption of organic vegetables, which have more nutritional value than inorganic vegetables, during the Covid-19 pandemic and the extent to which this increase in consumption affects willingness to pay for organic vegetables. The framework analysis of this research is visualized in Figure 1.

METHODS

Research Population and Sample. The research results from a community can become a reference for developing a healthy food tradition, especially the consumption of organic vegetables. Therefore, the population of this research is consumers of "Toko Pangan Sehat 31" (The 31 Healthy Food Stores). This store sells organic vegetable products online and offline in Jakarta, Indonesia. The "Toko Pangan Sehat 31" ("TPS 31") is a marketer for organic products that are widely known by the public, especially for organic-loving communities in Jabodetabek (Jakarta-Bogor-Depok-Bekasi), the area around Jakarta. Marketing activity is indeed a process of behavior change. Marketers are extension agents whose job is to convey information and shape behavior. The consumers of "TPS 31" as the population of this study, based on our consideration to determine the sample size, we adopted the Slovin formula. By adopting this formula with a 5% error probability, the sample of this research is 155 people. In this context, we also determine the criteria of the sample, namely those aged 20 years and over, with the assumption that they are members of society who already have basic knowledge of organic products and can provide information about their habits in consuming organic vegetables so that they can answer questions objectively (Alao et al., 2018). Another respondent's criteria are those who have purchased organic vegetables at "TPS 31." Among these people who have met these criteria, we have taken part of them as a sample in an accident sampling way, namely the consumer who is purchasing in "TPS 31" while we collect the data in this store. They are ready to become a respondent. In addition, data collection was carried out by closed interviews based on a research questionnaire, which was equipped with in-depth interviews, and of course, by adhering to health protocols to avoid catching covid-19.

Data Analysis. The study used three analytical tools, first was descriptive statistics to describe socio-demographic characteristics (age, gender, education level, occupation and monthly income). Second is the Willingness to Pay (WTP) calculation using the Contingent Valuation Method approach. The evaluation treatment is intended to determine whether the price paid by consumers is by the benefits that will be obtained by consumers from organic vegetables. Third, SEM (Structural Equation Modeling) analysis is intended to explain the optimal effect of socio-demographic characteristics on the consumption behavior of organic vegetables; and the structural influence between the variable consumption behavior of organic vegetables and the willingness to pay for organic vegetables. This scenario analysis is made to increase public interest in the importance of maintaining health and the environment, which is thought to cause changes in consumer preferences for organic vegetables. Data were analyzed using IBM AMOS version 24.00 software.

RESULT AND DISCUSSION

Characteristics of Organic Vegetable Consumers. Based on the objective of determining changes in consumer behavior in the consumption of organic vegetables during the Covid-19 pandemic, this research report begins by presenting the main characteristics (socio-demographics) of organic vegetable consumers, as presented in Table 2.

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Table 2. Socio-Demographic Characteristics of Organic Vegetable Consumers

Characteristics	Category	Frequency	Percentage
Gender	Male	29	18,8
	Female	126	81,2
Age	21-25 Years	7	4,5
	26-30 Years	13	8,3
	31-35 Years	17	10,9
	36-40 Years	25	16,1
	41-45 Years	43	27,7
	≥45 Years	50	32,5
Last Education	Senior High School	23	14,9
	Diploma-Bachelor	132	85,1
Job	Government employees	40	25,9
	Private employee	62	40,0
	Entrepreneur	23	14,8
	Woman House Hold	30	19,3
Income	≤ IDR.000.000,00	14	9,0
	IDR 1.000.000,00 – IDR 3.000.000,00	35	22,5
	IDR 3.000.000,00 – IDR 6.000.000,00	35	22,5
	≥ IDR 6.000.000,00	71	46,0
Vegetable Organic Consumption	Every Day	99	63,8
	Occasionally	56	36,2
Paying for Organic Vegetables	Ready	143	92,2
	Not Ready	12	7,8

Source: Primary Data (Processed), 2021

Most consumers who bought organic vegetables comprised 81.2% of women, and only 18.8% were men. Furthermore, only a few respondents are young/20 years (4.5%) and old/above 45 years (32.5%), while 63% of consumers are 26-45 years old. Regarding formal education, 14.9% of the respondents have the lowest education (senior high school), 46% have at least a diploma and bachelor's degree, and none of the consumers have a junior high school education (Table 1). Most consumers have permanent jobs in the private sector and government departments and own private businesses with an income of between IDR 500,000.00 to more than IDR 6,000,000.00 per month. The distribution of respondents based on income is as much as 46% with an income ≥ IDR 6,000,000.00, 22.5% with an income of IDR 3,000,000.00-IDR6,000,000.00, while those with an income of IDR 1,000,000.00-IDR 3,000,000.00 were also 22.5%; and as many as 9% of the respondents had an income ≤ IDR 1,000,000.00 (9%). These data findings are consistent with previous survey studies that describe the purchasing power of a consumer (Alao et al., 2018; Liu et al., 2019).

Regarding the consumption of organic vegetables, 63.8% of consumers of "TPS 31" have a high level of consumption of organic vegetables. They usually consume organic vegetables every day. Most respondents are aware and pay full attention to the safety of the food they buy, so

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consumers trust the food traded by "TPS 31." Regarding the variable of WTP, it is known that there are 143 respondents (92.2%) who answered that they are willing to pay more for some organic vegetable commodities of "TPS 31," and the remaining 12 people respondents (7,8%) answered that they are not willing to pay more organic vegetables for get health benefits and environmental improvements.

The Value of Willingness to Pay. This study aims to show the value of the respondent's willingness to pay for organic vegetables. It is done by using the Contingent Valuation Method analysis. Operationally, this method is carried out by providing information to respondents about the importance of maintaining health during the Covid-19 pandemic through high nutritional intake with increased consumption of organic vegetables so that respondents have an idea of the purpose of the market situation and can determine the amount of money they are willing to pay.

Table 3. The Average of Total Maximum WTP Value

No	Vegetables	Everage WTP (IDR/250 gram)	Total WTP (IDR/250 gram)
1	Spinach	7,148 ± 2,965 (n = 155)	1,787,097
2	Chayote	8,248 ± 3,165 (n = 155)	2,061,935
3	Kale	13,442 ± 3,808 (n = 155)	3,360,484

Source: Primary Data (Processed), 2021

This method has identified that the average consumer agrees to pay a certain amount of money proposed as a starting point, after which the value of money is increased to an agreed amount. The estimated average WTP value of the "TPS 31" consumer is calculated based on the distribution data of the respondents' WTP. The calculation of the average WTP value for spinach is IDR 7,148 ± 2,965 per 250 grams, the commodity of chayote is IDR 8,248 ± 3,165 per 250 grams, and kale commodity is IDR 13,442 ± 3,808 per 250 grams (Table 3). This value reflects the amount of purchasing power and willingness to pay respondents for the implementation of increasing consumption of organic vegetables after the circulation of the Covid-19 pandemic information.

The result of this research is mostly the same as the results of the study of Laguna et al. (2020), which categorized people's understanding of the impact of the early stages of the Covid-19 pandemic on products purchased with higher frequency as vegetables (with health motivations), other products purchased to improve mood, namely nuts, cheese and chocolate. However, there has been a decrease in purchases for products with a short shelf life, such as fish and seafood, or because they are unhealthy and contribute to weight gain, such as sweet bread. In addition, consumers acknowledge that the statements made by experts/scientists are considered the most reliable.

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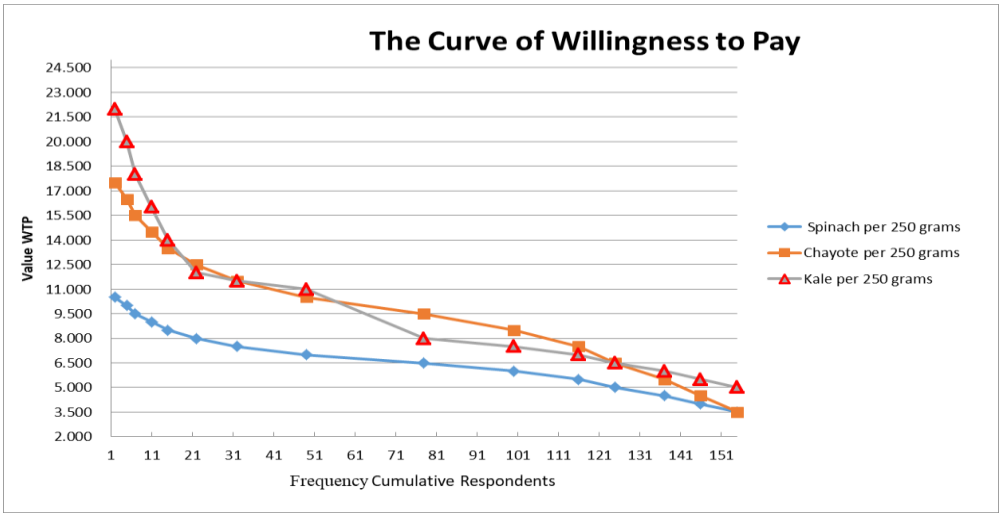

Figure 2. The Curve of Respondent's WTP for Organic Vegetable

The WTP curve (Figure 2) is formed based on the cumulative number of respondents who have chosen a specific WTP value. The amount of the respondent's WTP value is obtained by using a bidding game carried out when interviewing the respondent, whether he is willing to pay a certain amount of money; if "yes," then the amount of money value is increased to the agreed level. The results of the WTP curve illustrate the relationship between the level of value for money willing to be paid and the number of respondents willing to pay. The WTP curve in Figure 1 has a negative slope, indicating that the higher the WTP value, the less people are willing to pay. This finding is almost the same as the research by Priambodo and Najib (2014) that stated that organic vegetables such as cabbage, lettuce, broccoli, pakchoi, and carrots indicate less interest in respondents paying higher than conventional vegetables. Meanwhile, consumers of "TPS 31" after learning about the Covid-19 pandemic were very interested in organic vegetables and were willing to pay the premium offered by the shop. Furthermore, there is a potential increase in consumers buying organic vegetables because the average premium offered to 155 respondents already exceeds the exchange rate for buying organic vegetables of spinach, chayote and kale per 250 grams at "TPS 31".

The research results showed that several factors influenced the consumption behavior of organic vegetables. They were changing Factors in Consumption Behavior during the Covid-19 Pandemic. This study uses the SEM model to evaluate how consumer behavior affects WTP, with the prerequisite that the structural model is built first to satisfy the criteria for a satisfactory fit. Based on the data presented in Table 3, the variables used in this study have met the requirements for a good fit, namely Chi-Square (4.54), P-Value (0.474 ≥ 0.05), GFI (0.99 ≥ 0.90), RMSEA (0.00 ≤ 0.08), AGFI (0.95 ≥ 0.90), NFI (0.97 ≥ 0.90) and good at representing data, so it deserves to be analyzed further.

Table 4. The result of SEM Analysis Between Variables

Predictor			Estimate	SESE	CRCR.	P-Value	Label
Y1	<---	X1	-0,110	0,033	-1,423	0,155	Insignificant
Y1	<---	X2	0,070	0,099	0,872	0,383	Insignificant
Y1	<---	X3	0,099	0,019	1,107	0,028	Significant
Y1	<---	X4	0,184	0,039	1,597	0,010	Significant
Y1	<---	X5	0,430	0,050	3,465	0,000	Significant

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Predictor			Estimate	SESE	CRCR.	P-Value	Label
Y2	<---	Y1	0,370	0,045	0,835	0,004	Significant

Note: If |P-value| ≤ 0,05 is significant, confident interval 95% or α = 5%
Source: Primary Data (Processed), 2021

The SEM analysis equation model shows that three variables have a significant effect on the behavior of consuming organic vegetables, namely education level (X3), type of work (X4), and monthly income (X5). The behavior of consuming organic vegetables (Y1) also has a significant effect on WTP for organic vegetables (Y2) (Figure 2). Meanwhile, the variables that did not affect the consumption behavior of organic vegetables were age (X1) and gender (X2). It can be seen whether or not a variable affects the dependent variable is based on the P-value. If the P-value is less than the actual level of 5% ($p \leq 0.05$), the independent variable is declared to affect the dependent variable significantly. The level of education, type of work and income have indicated a positive and significant effect ($p \leq 0.05$) on the behavior of consuming organic vegetables. It means that the increase in these three variables, the tendency to consume organic vegetables and the willingness to pay also increases. This study's results align with Bhattarai (2019), who showed that consumers who are more educated, have better jobs and incomes have a higher tendency to consume organic vegetables and have a higher willingness to pay for organic vegetables.

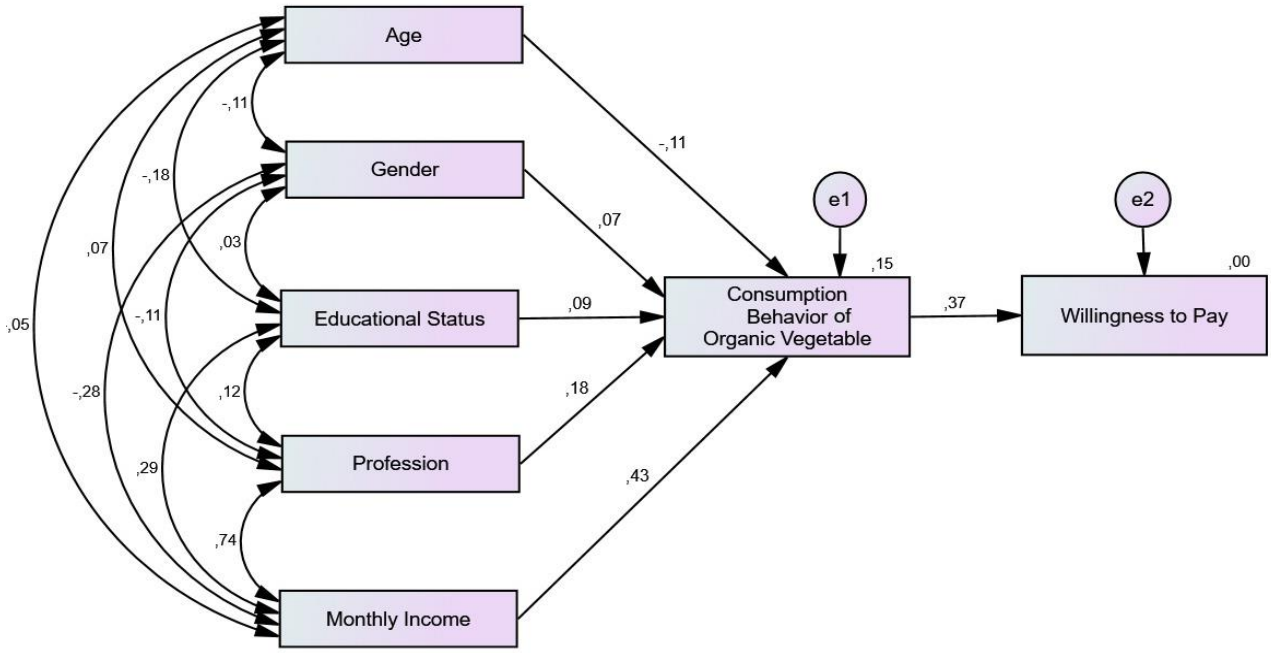

Figure 3. SEM Analysis Scheme of Influence between Variables

The social status aspect for consumers "TPS 31" plays a relatively small or even non-influential role in consumer decision-making in consuming organic vegetables. Priambodo and Najib (2014) reported that age and gender had a positive but insignificant effect on the behavior of consuming organic vegetables, which indicated that the behavior of consuming organic vegetables was not influenced by social status (age and gender). Elaborating on the data in Figure 3, the age variable produces a negative estimation value of -0.110. It does not affect the consumption

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behavior of organic vegetables, which is indicated by a p-value (0.155 ≥ 0.05). The gender variable resulted in a positive estimated value of 0.07. However, it did not affect the consumption behavior of organic vegetables as indicated by the p-value (0.383 ≥ 0.05), where the variables age and gender could not indicate an effect for increased or decrease behavior of consumption of organic vegetables.

In addition, based on several studies, the behavior of consuming organic vegetables is divided into consuming them every day or occasionally. The SEM analysis results show that the estimated value of the organic vegetable consumption variable is positive at 0.37. It shows that if the respondent is accustomed to eating organic vegetables daily, it will increase the WTP value by IDR 730 per 250 grams at the 95 percent confidence level. The variable consumption of organic vegetables has a significant effect on WTP as indicated by the P-value, which is smaller than the actual level of 5% (0.004 <0.05), which means that respondents who consume organic vegetables not every day will significantly affect the WTP of organic vegetables. The knowledge regarding the Covid-19 pandemic causes consumers to rely heavily on health values, thus affecting the WTP for organic vegetables. Referring to the findings of Hassen et al. (2020), consumers in Qatar show a shift to a healthier diet during the COVID-19 pandemic and a reduction in the consumption of unhealthy foods such as fast food, unhealthy snacks, candy, and pastries. At the same time, the respondent of this research is already aware of healthy eating, including more consumption of organic fresh fruits and vegetables. It is a positive change towards a healthy diet compared to before the COVID-19 pandemic.

CONCLUSION

The information about the covid-19 pandemic has encouraged consumers to be more interested in organic vegetables; even 92.2 percent of consumers are willing to pay a higher premium offer. Consumers realize that during the Covid-19 pandemic, it is necessary to prioritize maintaining health. Most respondents considered that organic vegetables have higher nutritional value than conventional vegetables. The average willingness to pay for green spinach is IDR 7,148 per 250 grams, chayote is 8,248 per 250 grams, and kale is 13,442 per 250 grams. The price offered exceeds the selling price of spinach, chayote and kale organic vegetables per 250 grams at "TPS 31" Thus, consumers are willing to pay more for organic products. The consumption of organic vegetables is significantly influenced by education level, type of work and income. In addition, consumer behavior significantly influences the willingness to pay for organic vegetables during the Covid-19 pandemic. Given the importance of the impact of the COVID-19 pandemic on changes in consumption behavior globally, further studies are needed on changes in consumption behavior towards organic products.

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