

THE INFLUENCE OF SUSTAINABLE CONSUMPTION ATTITUDES AND INFORMATION ANXIETY ON THE BEHAVIOR OF BUYING ORGANIC PRODUCTS WITH CONSUMER ASSESSMENT AS A MEDIATOR (IN THE CONTEXT OF THE COVID-19 PANDEMIC IN SURABAYA)

Lakshita Dwita Purwasono

Rawdiance Mart

dwita1905@gmail.com

<https://doi.org/10.37715/rmbe.v2i2.3414>

Abstract-This study aims to determine the influence of sustainable consumption attitudes and *information anxiety* on consumer assessment and its impact on the behavior of buying organic products in the city of Surabaya. The variables used in this study are sustainable consumption attitudes and *information anxiety* as a free variable, consumer judgment as a mediating variable and organic product buying behavior as bound variables. The method used is quantitative mediation. The samples used in this study used a *non-probability sampling* method with a combination technique of *purposive sampling* and *snowball sampling*. Data collection techniques in this study were carried out by distributing questionnaires using a Likert scale with 107 respondents of Surabaya residents as the population and residents of Surabaya who have purchased organic products during the Covid-19 pandemic. The results of this study indicate that the attitude toward sustainable consumption has a significant influence on consumer ratings, *information anxiety* has a significant influence on consumer judgment, consumer judgment has a significant influence on buying behavior, *information anxiety* has no influence on buying behavior with consumer valuation on organic products as a mediator variable, and sustainable consumption attitudes have an influence on buying behavior with consumer judgment as the mediator variable.

Keywords: Sustainable Consumption Attitude, Information Anxiety, Consumer Assessment, Buying Behavior, Organic Products, Surabaya

1. Introduction

The Covid-19 pandemic has changed people's habits to increase immunity, one of which is consuming healthy food through organic products. High consumption of organic products every year in Indonesia and the increase in demand during the pandemic, make Rawdiance (the author's organic product business project) conducted simple research by distributing questionnaires to 94 people in the city of Surabaya which obtained results that 85.1% of respondents had consumed organic vegetables and 49.5% of respondents were motivated to buy organic vegetables. The many similarities in organic product information during the pandemic affect consumer behavior and assessment of organic goods for their consumption. Therefore, this study wants to find out more about the

influence of sustainable consumption and information factors that can influence consumer values on organic products.

2. Literature Review

2.1 Previous Research

Research by Mafe and Blaz, 2006, in Liu *et al.* (2019) shows that *information anxiety* has a positive and significant effect on consumer values and buying behavior. Research by Liu et al. (2021) aims to find out the dimensions of consumer values in the context of Covid-19, namely functional values, health values, and environmental values. Research by Wang et al. (2019) shows that consumer values related to the environment, health, and knowledge related to organic products are one of the strongest determinants for consumers to buy organic products. Liang's research (2020) shows that consumer preference for natural foods is the most important factor for increasing purchase intentions, followed by health awareness, health risks, attitudes towards organic foods and confidence in labeling.

2.2 Theoretical Foundations

2.2.1 Sustainable Consumption Attitudes

The attitude of sustainable consumption is consumer behavior that improves social and environmental performance, aimed at the wants and needs of the individual. (Kristina, 2019, in Liu, et al., 2019). Based on the research of Liu et al. (2019), sustainable consumption attitudes are divided into two indicators, namely: (1) Perceptions of Sustainable Consumption; (2) Sustainable Consumption Behavior.

2.2.2 Information Anxiety

Information Anxiety refers to negative consumer experiences characterized by difficulty in being able to understand a problem and make decisions caused by too much information (Shweta et al. 2017, in Liu et al. 2019). Furthermore, the development of information *anxiety* into 4 indicators, namely: (1) Understanding information; (2) Information overload; (3) Knowing the information available; (4) Access information.

2.2.3 Consumer Ratings

Consumer assessment can be seen as the value that a particular consumer gives, to a company or vice versa, the value that a company gives to consumers. Liu et al. (2019) referring to Rahmana (2016) and Goncalves et al. (2016) establishing three consumer assessment indicators, namely: (1) Functional value; (2) Health value; (3) Environmental value.

2.2.4 Buying Behavior

Buying behavior is the process of choosing, buying, using or spending products, services, ideas or experiences by individuals, groups and organizations to meet their needs and wants (Solomon, 2006 in Liu, et al., 2019). According to research by Liu, et al., (2019) buying behavior in the context of Covid-19 is divided into two indicators, namely: (1) Intensity of Buying Organic Products; (2) Ease of Access in purchasing organic products (offline, online or community).

3. Research Framework

3.1 Analysis Models

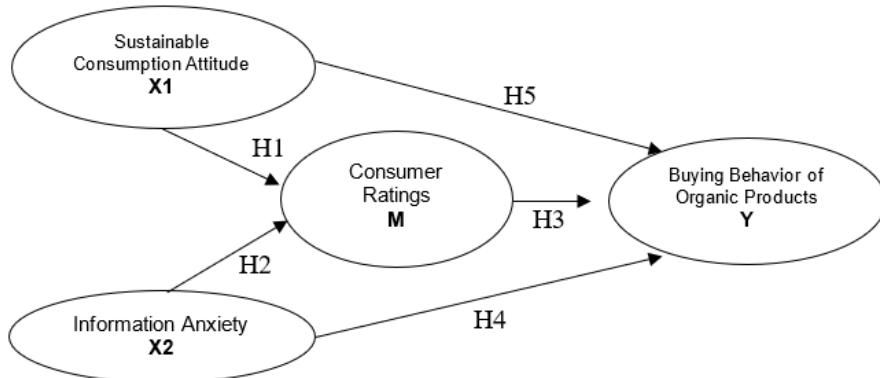


Figure 3.1 Analysis Model

Source: Researcher's Thought Results (2022)

3.2 Hypothesis

There are five hypothetical in this study based on the applied analysis model, namely:

H1: There is a direct influence between Sustainable Consumption Attitudes (X1) and Consumer Valuation (M) on organic products

H2: There is a direct influence between *Information Anxiety* (X2) on Consumer Assessment (M) in Organic Products

H3: There is a direct influence between Consumer Valuation (M) on Organic Product Buying Behavior (Y)

H4: There is an indirect influence between *Information Anxiety* (X2) on Buying Behavior (Y) and Consumer Valuation (M) on organic products as Mediator Variables

H5: There is an indirect influence between the Attitude of Sustainable Consumption (X1) to Buying Behavior (Y) and the Consumer Valuation (M) of organic products as a Mediator Variable.

4. Research Methods

4.1 Types of Research, Samples, and Data Collection

This research uses a quantitative approach carried out at the location of the research object, namely the City of Surabaya in May-June 2022. The research population is infinite, namely individuals domiciled in the city of Surabaya. The study sample used a non probability sampling technique with a combination of purposive sampling and snowball sampling:

1. Residents domiciled in Surabaya.
2. Have bought organic products during the Covid-19 pandemic.

The types of data of this study are primary and secondary data. Primary Data was collected through a questionnaire with Likert scale measurements (1-5).

4.2 Operational Variables and Definitions

Table 4.1 Operational Definitions of Variables

Variable	Conceptual Definition	Indicators	Questionnaire
Sustainable Consumption Attitudes	The attitude of sustainable consumption is	1. Perceptions of Sustainable Consumption	1. I think that sustainable consumption attitudes are important

	consumer behavior that improves social and environmental performance, aimed at the wants and needs of the individual. (Kristina, 2019, in Liu, et al., 2021)	2.Sustainable Consumption Behavior (Liu, et al., 2019)	2. I am very interested in the issue of sustainable consumption 3. I am interested in finding and reading about Sustainable Consumption Attitudes 4. I care deeply about the Sustainable Consumption Attitude.
Information Anxiety	<i>Information Anxiety</i> refers to negative consumer experiences characterized by difficulties in being able to understand a problem and make decisions caused by too much information (Shweta, et al., 2017 in Liu, et al., 2019)	1.Understanding information 2.Information overload 3.Knowing the information that exists 4.Access information This indicator was developed by Liu, et al., (2019) referring to Shweta, et al., (2017)	1. After the COVID-19 outbreak, I often feel worried in the face of information about the massiveness of Covid-19 2. After the COVID-19 outbreak, it was easy for me to feel panic and anxiety in the face of massive information about COVID-19 3. After the COVID-19 outbreak, I sometimes can feel the heart beating faster when facing information about COVID-19 5. I feel unsure of the authenticity of organic product labels 6. I am concerned if some foods labeled organic turn out not to be organic products 7. I feel worried about spending more money when buying organic products 8. I feel like I don't have much confidence in organic products on the market today
Consumer Ratings	Consumer assessment can be seen as the value that a particular consumer gives, to a company or vice versa, the value that a company gives to consumers (Puolakoski, 2016).	1.Functional value 2.Health Standards 3.Environmental values This indicator was developed by Liu, et al. (2019) referring to Rahmana (2016) and Goncalves, et al., (2016)	1. I think organic products have consistent quality 2. I think organic products are made through a good process 3. I think organic products have good quality standards 4. In my opinion, organic products are always maintained in quality 5. I think organic products have a suitable price 6. I think the product has a higher price compared to non-organic 7. I think organic products are products that match the quality and price offered
Buying Behavior	Buying behavior is the process of choosing, buying, using or spending products, services, ideas or experiences by individuals, groups and organizations to meet their needs and wants (Solomon, 2006 in Liu, et al., 2019)	1.Intensity of Buying Organic Products 2.Easy Access to buy organic products (offline, online or community) (Liu, et al., 2019)	1. I have often bought organic products 2. I don't really mind the higher price of organic products than food or non-organic ingredients 3. I buy organic products more often through online media 4. I buy organic products more often in organic stores and supermarkets 5. I more often produce organic through organic communities

Source: Data processed by author, 2022.

The analysis of this study used descriptive analysis, hypothesis testing, and Goodness of Fit evaluation using the SEM-PLS method conducted with the SmartPLS application version 3.2.

5. Results and Discussion

5.1 Analysis

5.1.1 Descriptive Respondents

Female respondents dominated by 60.7%. The majority of respondents aged 26 to 35 years were 66.4%. The largest monthly income was 39.3% of respondents with an income of 2,500,000 – 5,000,000 rupiah.

5.1.2 Description Statistics

On the variable attitude of continuous consumption, the response to IA1 has a smaller standard deviation and homogeneous. In the Consumer Assessment variable, the response to PK 13 has a smaller standard deviation and homogeneous. In the Buying Behavior variable, the response to PM 4 has a smaller standard deviation and homogeneous.

5.1.3 Outer Model

1. Reliability Indicators

In the pls algorithm, some outer loading indicator values are less than 0.7, namely IA1 (0.021), IA2 (0.220), IA3 (0.292), PK1 (0.683), PK11 (0.535), PK12 (0.416), PK13 (0.379), PK6 (0.297), PM3 (0.625), PM4 (0.570), PM5 (0.599) AC3 (0.646), IC4 (0.647), IC13 (0.681), LA1 (0.591). Therefore, the removal of such indicators to qualify is carried out, so that the following results are obtained:

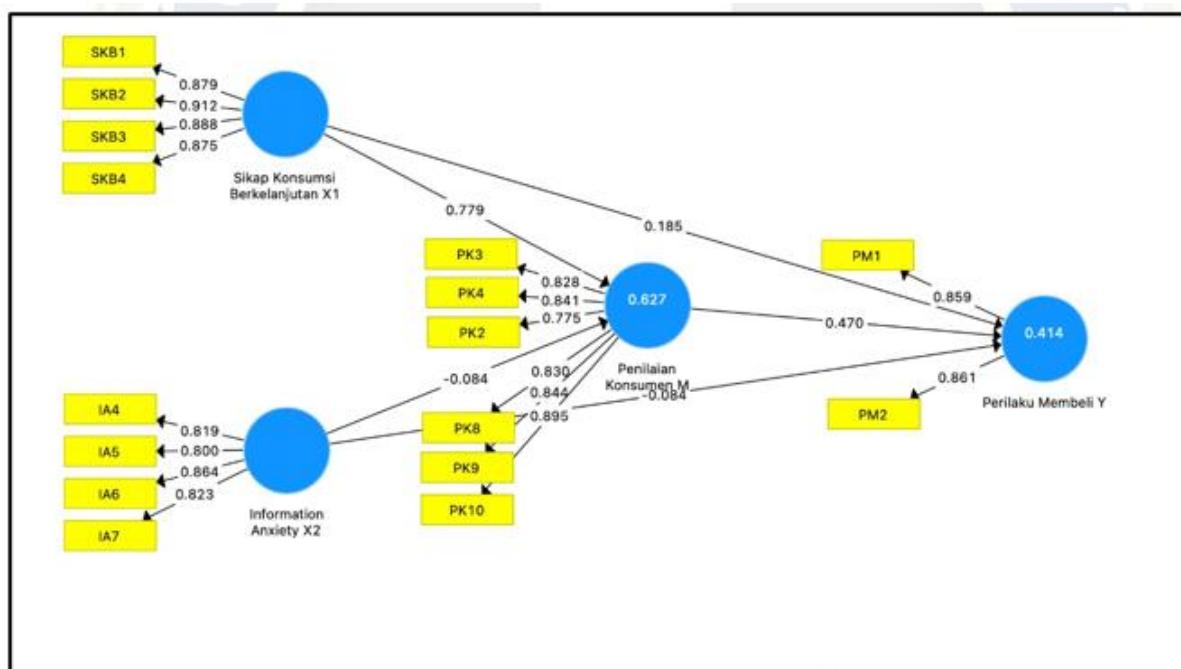


Figure 5.1 Descriptive Statistical Data Framework Model

Source: SmartPLS Processed Data 2022

Table 5.1 PLS Loading Factor Test Results

	Information Anxiety X2	Consumer Assessment M	Buying Behavior Y	Sustainable Consumption Attitude X1
IA4	0,819			

IA5	0,800			
IA6	0,864			
IA7	0,823			
PK10		0,895		
PK2		0,775		
PK3		0,828		
PK4		0,841		
PK8		0,830		
PK9		0,844		
PM1			0,859	
PM2			0,861	
SKB1				0,879
SKB2				0,912
SKB3				0,888
SKB4				0,875

Source: SmartPLS Processed Data 2022

In the reability test, there were 16 statements used by this study to have a *loading factor* value with a minimum requirement of 0.7. Therefore, it can be concluded to be valid.

2. Convergent Validity AVE (Average Variance Extracted)

Table 5.2 Final AVE Results

	Average Variance Extracted (AVE)
Information Anxiety X2	0,684
Consumer Assessment M	0,700
Buying Behavior Y	0,739
Sustainable Consumption Attitude X1	0,789

Source: SmartPLS 202 Processed Data2

In the test results, it can be seen that the *AVE* value has met the requirements, which is greater than 0.5. So it can be concluded that the variable is declared valid.

3. Discriminant Validity (Cross Loading)

Table 5. 3 PLS Cross Loading Test Results

	Information Anxiety X2	Consumer Assessment M	Buying Behavior Y	Sustainable Consumption Attitude X1
IA4	0,819	-0,099	-0,044	-0,043
IA5	0,800	-0,064	-0,105	-0,054
IA6	0,864	-0,166	-0,221	-0,039
IA7	0,823	-0,151	-0,126	-0,180
PK10	-0,094	0,895	0,599	0,698
PK2	-0,087	0,775	0,427	0,526
PK3	-0,182	0,828	0,502	0,688
PK4	-0,167	0,841	0,526	0,581
PK8	-0,148	0,830	0,549	0,731
PK9	-0,126	0,844	0,533	0,692
PM1	-0,249	0,508	0,859	0,517
PM2	-0,057	0,573	0,861	0,451
SKB1	-0,089	0,701	0,481	0,879
SKB2	-0,091	0,755	0,538	0,912
SKB3	-0,097	0,703	0,507	0,888
SKB4	-0,072	0,630	0,470	0,875

Source : Data Processed SmartPLS 2022

The results of the *cross loading* test show that the indicator value of each of its variables is the largest value when compared to the indicator results against other variables, so that all of these research questions are valid.

4. Composite Reliability

Table 5. 4 Table of Cronbach's Alpha and Composite Reliability

	Cronbach's Alpha	Composite Reliability
Information Anxiety X2	0,859	0,896
Consumer Assessment M	0,914	0,933
Buying Behavior Y	0,747	0,850
Sustainable Consumption Attitude X1	0,911	0,937

Source : Data Processed SmartPLS 2022

In the results of the construct reliability test, the *composite reliability* value and Cronbach's Alpha is greater than 0.7. So it can be concluded that all three variables are declared reliable.

5.1.4 Inner Model

The inner model test shows the relationship between latent variables in *the structural model*. The test carried out is to test the goodness of the model or *goodness of fit*.

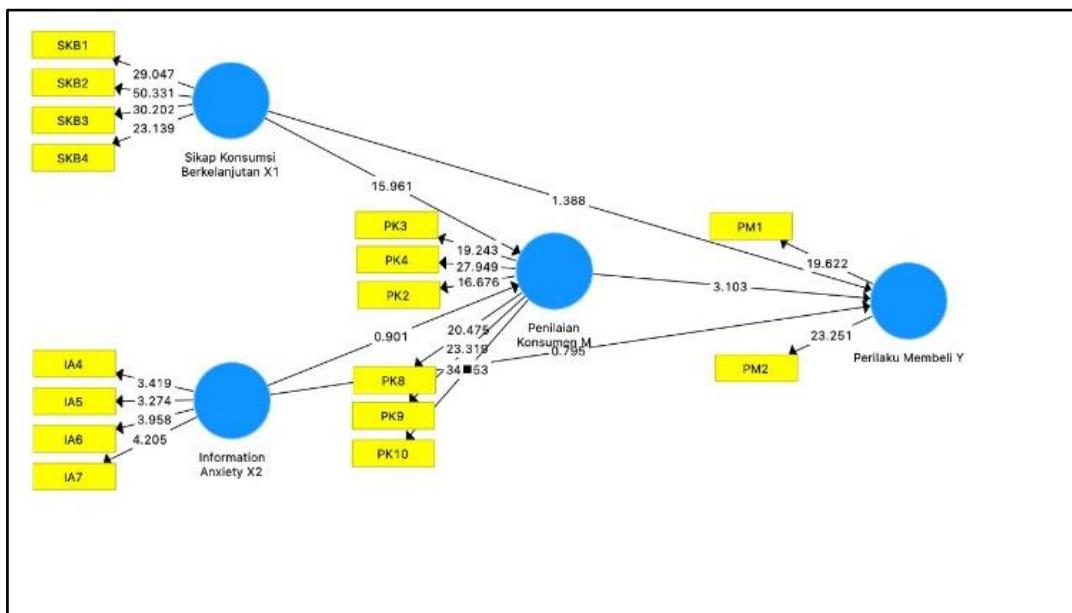


Figure 5.2 Bootstrap Framework Model

Source: SmartPLS Processed Data 2022

1. R Square and Q Square

Table 5. 5 Inner Model R Square Test Results

	R Square	R Square Adjusted
Consumer Assessment M	0,627	0,620
Buying Behavior Y	0,414	0,397

Source: SmartPLS Processed Data 2021

Table 5. 6 Q Square Inner Model Test Results

	Sso	SSE	Q ² (=1-SSE/SSO)
M (PK)	856,000	535,692	0,374
X1 (SKB)	428,000	428,000	
X2 (IA)	428,000	428,000	
Y (PM)	214,000	148,162	0,308

Source: SmartPLS Processed Data 2021

Based on testing, the *R-Square* value of consumer ratings was 0.687. The *R-Square* value of buying behavior is 0.414. Both have values above 0.36 (large GoF) close to 1, so they are stated to have a strong influence. The Q^2 value of the study is as follows:

$$\begin{aligned}
 Q^2 &= 1 - (1 - R^2 \text{ Buying Behavior}) \times (1 - R^2 \text{ Consumer Rating}) \\
 &= 1 - (1 - 0.308) \times (1 - 0.374) \\
 &= 1 - (0.692) \times (0.626) \\
 &= 1 - 0.433 = 0.567
 \end{aligned}$$

Based on the calculation results of 0.567. This means that the diversity of research data is 56.7%. While the remaining 43.3% is explained by factors outside the research model. This study has a good *predictive relevance* model because it is greater than 0 and close to 1.

2. T Statistics Test and Mediation Test

Table 5. 7 Results of Testing the Hypothesis of Direct Influence

Independent Variables	Dependent Variables	Original Sample	T Statistics (O/STDEV)	P Values
SKB X1	PK M	0,779	15,961	0,000
IA X2	PK M	-0,084	2,901	0,036
PK M	PM Y	0,470	3,103	0,002

Source: SmartPLS 202 Processed Data2

The variable is declared to have a significant effect if the T-statistical value \geq T-table (1.96) and the p-value < 0.05 . The results of the direct influence of the variable Sustainable consumption attitude (X1) on Consumer Valuation (M) have a significant effect. *Information Anxiety* (X2) on Consumer Valuation (M) has a significant effect. Consumer Assessment (M) of Buying Behavior (Y) has a significant effect.

Table 5. 8 Indirect Influence Hypothesis Testing Results

Independent Variables	Mediator Variables	Dependent Variables	Original Sample	T Statistics (O/STDEV)	P Values
SKB X1	PK M	PM Y	0,366	3,079	0,002
IA X2	PK M	PM Y	-0,040	0,841	0,401

Source: SmartPLS 202 Processed Data2

The results stated that there was no indirect influence between *Information Anxiety* (X2) on Buying Behavior (Y) and Consumer Valuation (M) as a mediator. Meanwhile, there is an indirect influence between the attitude of sustainable consumption (X1) on buying behavior (Y) and the assessment of consumers (M) as mediators.

5.2 Discussion

5.2.1 Effect of Sustainable Consumption Attitudes on Consumer Valuation of Organic Products

The results of the study concluded that the attitude of sustainable consumption has a positive and significant influence on consumer judgment, so the first hypothesis was accepted. Awareness of Sustainable Consumption has emerged even since the Covid-19 pandemic on organic products. The consumption of organic foods is indicated by trends in healthy, minimalist, and *mindfulness* lifestyle behaviors that support sustainable consumption and environmental preservation.

5.2.2 The Effect of Information Anxiety on Consumer Assessment of Organic Products

The results of the study concluded that *information anxiety* has a positive influence on consumer judgment, so the second hypothesis is accepted. Respondents were dismayed by information during COVID-19 that influenced their values in consuming products and perceptions of a healthy lifestyle, but not accompanied by

the availability of sufficient organic products. *Information anxiety* is not the only factor that undermines the value of the community.

5.2.3 The Effect of Consumer Assessment on Buying Behavior of Organic Products

The results of the study concluded that consumer assessments have a positive and significant influence on buying behavior, so the third hypothesis is accepted. The change and shift in consumer value towards organic products after Covid-19 emerged because of public awareness of healthy living such as increasing and maintaining immunity.

5.2.4 The Effect of *Information Anxiety* on Buying Behavior with Consumer Ratings on organic products as a Mediator Variable

The results of the study can be concluded that *information anxiety* on buying behavior with consumer judgments on organic products as mediator variables has no influence, so the fourth hypothesis is rejected. This raises the possibility that, the purchasing power factor more strongly influences the buying behavior of consumers, because the price of organic products reaches 2-4 times that of conventional products.

5.2.5 Effect between Sustainable Consumption Attitudes towards Buying Behavior and Consumer Valuation of organic products as Mediator Variables

The results of the study can be concluded that the variable sustainable consumption attitude towards buying behavior variable with consumer assessment variable as a mediator has a positive influence. Business people can increase the perceived value of consumers from organic food products. Business people and policymakers can formulate appropriate strategies to drive organic consumption demand.

5.3 Implications of Research Results

Based on the results of the study, there is an influence on sustainable consumption attitudes towards buying behavior with consumer judgment as a mediator. It shows consumers of organic products in Surabaya, including loyal consumers. Organic products have a price above inorganic product. In general, the target market for premium products is the middle and upper economic groups. Therefore, organic product entrepreneurs who have *offline stores* should still maintain the quality of organic products sold, pay attention to the *store layout* to be more organized, clean, comfortable, friendly and good service, and the availability of a large parking area. The use of *social marketing* so that individual behavior is changed towards a sustainable lifestyle that does not harm nature. This aims to educate and show the image of the product being sold is a premium product that is comparable to the price offered. Another statement shows that *information anxiety* has no influence on consumer behavior with consumer judgment as a mediator. Therefore, organic product entrepreneurs are advised to conduct education and socialization through *brand ambassadors* or *influencers* who have a healthy living image in the hope of increasing consumer knowledge about *value* organic products as the strength of such products.

6. Conclusions and Suggestions

6.1 Conclusion

Based on the results of statistical and descriptive data analysis, it is concluded that:

1. The attitude of sustainable consumption has a significant influence on consumer judgment.
2. Information anxiety has an influence on consumer judgment.

3. Consumer ratings have a significant influence on buying behavior.
4. Information anxiety has no influence on buying behavior with consumer judgment on organic products as a mediator variable.
5. Sustainable consumption has an influence on buying behavior with consumer judgment as a mediator variable.

6.2 Suggestion

Advice for organic product business actors in Surabaya, to increase public awareness, it is necessary to prioritize creative product promotion through advertising and sales promotion, namely by creating innovations that can influence consumers to implement sustainable consumption. These innovations include providing social value with minimum environmental costs, integrating the sustainability of life cycle processes, product design without affecting quality, price, market performance that encourages consumers to be more efficient. This is done by consumers and stakeholders by demonstrating that sustainable products and lifestyles provide superior performance at the best prices.

For later researchers, other variables were added that had a significant influence such as trust and finances. It is necessary to increase the number of respondents so that the results of the study become more complete to be identified further.

7. Reference

Gonçalves, H. M., Lourenço, T. F., and Silva, G. M. (2016). Green buying behavior and the theory of consumption values: a fuzzy-set approach. *Journal of Business Research, Elsevier*, 69(4), 1484–1491. doi: 10.1016/j.jbusres.2015.10.129

Liu, C., & Zheng, Y. (2019). The predictors of consumer behavior in relation to organic food in the context of food safety incidents: advancing hyper attention theory within an stimulus-organism-response model. *Front. Psychol.* 10(2512). doi: 10.3389/fpsyg.2019.02512

Shweta, B., Harshali, P., and Sujit, S. (2017). Role of information anxiety and information load on processing of prescription drug information leaflets. *Pharmacy* 5(57). doi: 10.3390/pharmacy5040057

Wang, X., Pacho, F., Liu, J., & Kajungiro, R. (2019). Factors influencing organic food purchase intention in developing countries and the moderating role of knowledge. *Sustainability* 11(1). <https://doi.org/10.3390/su11010209>