

# CONSUMER PREFERENCE ANALYSIS OF ORGANIC PRODUCTS IN GIANT EXPRESS RETAIL STORE MALANG CITY INDONESIA

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## Abstract

Organic products demand is increasing since more consumers are already aware of their health, but in Malang City the amount of retail stores which sell organic products is considered small. Giant Express Pulosari which was established in 2009 is one retail store that sells organic products. One of the ways to maintain its customers based on consumer buying decisions is to find out the factors that influence consumer preferences for organic products. The purpose of this study is to determine the effect of product attributes towards consumer preferences and buying decisions on organic products. Data collection was executed by distributing questionnaires and interviewing 100 respondents who had bought and consumed organic products sold at this retail store. Data gained then were analyzed by using SPSS 17.0 and Smart PLS 3.2.0 software. The results of this study indicate that the variables of product attributes significantly influence consumer preferences and buying decisions. Consumer preference is able to mediate the relationship between product attributes and buying decisions. The most influential indicator of product attributes variables is packaging design. The most influential indicator on consumer preference variables is price. Meanwhile, the most influential indicator on buying decision variables is consumer needs.

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## **Introduction**

Organic products are one of the product types where they are not mixed in its handling or they don't use any chemicals. Today, the available organic products in the market are mostly vegetables and rice. These two types of products are widely available in the store or supermarket in Malang area. According to Indonesian Agency for Agricultural Research and Development (Balitbangtan) of 2012, organic farming is a farming technique culture relying on natural ingredients without using synthetic chemicals. Excessive use of chemicals can affect the quality of health and environment. Based on this, the community should look for food alternatives free of chemicals. One of the alternatives that can be used by the community is by consuming organic products. According to Central Statistics Body (2016), organic rice production 2015 has reached 79.14 million and if it's compared with the previous year which was only 70.85 million in 2014, there was an increase of 11.7%.

Consumers have their own preference in taking the decision of purchasing organic products. According to Munandar et al. (2015), consumer preferences are something most favorable or prioritized for the consumer toward a product. Consumer preference is used to analyze the level of purchase satisfaction by using the product and choosing the alternative to achieve optimal used value (Muzdalifah, 2012). Consumer preference is expected to give an idea of consumers' desire toward a product and can be used as a reference in taking strategic measure in the marketing. According to Rizki (2013, product attributes that can be studied for organic products are chemicals, size, packaging, labels, colors, and packaging. Consumer preference requires supporting variable in determining the buying decision. According to Wahyuni (2008), the quality of a product can affect consumer preferences, and then Simamora (2008) added that consumer preference can also be affected by the consumer's lifestyle. Price and popularity in purchasing organic products heavily affect consumer preferences. Hence, the consumer can make a buying decision for the product (Pratiwi, 2014).

One of the stores that sell organic in Malang City is Giant Express Pulosari. This retailer sells organic products since 2009. Organic products sold consist of several types and brands. Organic products sold in Giant Express Pulosari are rice and vegetables. Organic rice product consists of white rice and brown rice, while vegetable products that they sell are *buk choy* and *pak choy*. They sell organic products that have been determined by the head office in Jakarta. The issue faced by the Giant Express Pulosari Malang is that the consumer who purchases organic products in Giant Express Pulosari Malang is considered smaller in amount comparing than the consumer of inorganic products. According to Mr. Vifka as the assistant manager, this can be caused by the quite expensive price of organic products. The difference in price with inorganic products owned for rice is around Rp 20,000

to Rp 30,000. Meanwhile, the difference in price for organic vegetables is Rp. 5,000 to Rp 10,000. One of the methods that can be used to analyze consumer preferences is Partial Least Square (PLS) with the help of Smart PLS software. According to Jogiyanto and Willy (2009), PLS has the characteristic of parametric statistics that it can produce good information and can be used well for the explanation or prediction as well as information. On the other hand, PLS method is an analysis method that can be applied to all data scales, it does not need a lot of assumption and large sample size. According to Vinzi *et al.*, (2010), Partial Least Square (PLS) method is used when dealing with small sample size (microarray data), there is relationship between explanatory variables (multicollinearity), there is bias in an estimation (overfitting), and the data used is long-term data validity with unknown certainty. Thus, method that is used for analysis in this research is PLS because it can determine what factors affecting the consumer decision to purchase organic products.

## **1. Research Methods**

Respondents' data collecting was conducted in Giant Express Pulosari, Malang. The scope of the problem in this research is the respondents who purchase and consume rice and vegetables (buk choy and pak choy) organic products in Giant Express Pulosari, Malang. Respondents' age span is 18 years old to over 45 years old. The amount of respondents used in this research are 100 people, the determination of the amount of respondents used purposive sampling formulation with margin of error of 10%. Method used in this research is PLS and data processing using smartPLS software.

### **Instrument Tests**

Instrument tests are done to test the questionnaire used in the research. Instrument tests in this research consist of validity test, reliability test, and validity test. All of these tests are done using SPSS software. Validity test is used to determine the items viability in a list (construct) of question in defining a variable. Reliability Test (reliability) is a standard of respondents' stability and consistency in answering things related to the question constructs which are the dimension of a variable that has been compiled in the form of questionnaire. Reliability test can be used jointly toward all of question items (Gumilar, 2007). According to Juliandi *et al.* (2014), reliability value is considered to be good if  $> 0.6$ . Linearity test aims to determine whether two variables have linear relationship or not significantly. This test is commonly used as the prerequisite in the correlation or linear regression analysis. Good data should contain linear relationship between predictor variable (X) and criterion variable (Y). Variable and indicator used in this research can be seen in **Table 1**.

**Table 1** Research Variables and Indicators

Latent variables	Measured variables (indicators)
Product attributes (X1)	Free chemical agents (X11) Packaging size (X12) Product Colour (X13) Packaging Label (X14) Packaging design (X15)
Consumer preference (Y1)	Quality (Y11) Price (Y12) Popularity (Y13) Life style (Y14)
Purchase decision (Y2)	Wants (Y21) Needs (Y22)

Partial Least Square (PLS) method is one of the analysis tools that can be used to project linear relationship between observed variables. Besides small size of sampling, PLS has other excellences such as capable of handling complex model with multiple exogenous variables that have many indicators, it can be used for indicators with reflective or normative nature, and it does not require normally distributed data (Latan and Ghazali, 2012). The steps in using PLS are as follows:

- 1) Designing the Structural Model (inner model). Designing of the structural model of relationship between latent variables in PLS is based on the formulation of the problem or research hypothesis.
- 2) Designing Measurement Model (outer model). Designing of measurement model (outer model) is used to determine indicator characteristic. There are three variables used in this research. Variables used are formative and reflective in nature. Formative variables are product attributes. Reflective variables are consumer preference and buying decision variables.
- 3) Constructing Path Diagram
- 4) Conversion of Path Diagram to the System of Equations.

a. *Outer model*

Outer model is a specification of relationship between latent variable and its indicator, it is also called outer relation or measurement model, defining the construct characteristic with manifest variable. Basic equation model of outer model can be written as follows (Sofyani, 2013):

$$X = \Lambda_x \xi + \epsilon_x$$

$$Y = \Lambda_y \eta + \epsilon_y$$

Description:

$\lambda_{x1}, \lambda_{x2}, \lambda_{x3}, \lambda_{x4}$  = factor loading of variables *performance, conformance, durability, aesthetics*

$\lambda_{y1}, \lambda_{y2}$  = factor loading of variables buying decision, consumer satisfaction Inner *model*

- b. Inner model is a specification of relationship between latent variables (structural model), it is also called inner relation, and it describes the relationship between latent variables based on the substantive theory of the research.

#### 5) Estimation

The parameter estimation method (estimation) in PLS is the least square method. The calculation process is done by iteration, where the iteration will stop if convergent conditions have been reached. Parameter estimation in PLS covers 3 things, they are:

- a. Weight estimate is used to create latent variable score.
- b. Path estimate connects between latent variables and loading estimation between latent variables with its indicators.
- c. Means and parameter location ((constant value of regression, intercept) for indicators and latent variables.

#### 6) Evaluation of *Goodness of Fit Inner Model*

According to Hayati (2013), goodness of fit inner model is used to measure the *Rsquare* dependent latent variables and *Q-square predictive relevance* for structural model. This evaluation functions to measure how good the observation value resulted by the model as well as its parameter estimation. Good Q-square value should be more than 0; Q-square can be calculated using the formula:

$$Q^2 = 1 - (1 - R^2_1)(1 - R^2_2) \dots (1 - R^2_p)$$

Where  $R_1, R_2,$  and  $R_p$  are *R-square* endogenous variables in the equation model. The value of  $Q^2$  has a value with a range of  $0 < Q^2 < 1$ , the model gets better if it gets closer to 1.

#### 7) Hypothesis

Hypothesis testing is done by using resampling Bootstrap method developed by Geisser & Stone. Resampling method application allows the validity of freely distributed data (distribution free), it does not require the assumption of a normal distribution and large sample (minimum sample of 30). Testing is done by using t-test. If the testing is done by seeing the tcount, if it obtains  $t_{count} > 1,66$  ( $\lambda = 0,1$ ) it is then concluded as significant, and vice versa (Ghozali, 2011). If the hypothesis testing result on outer model is significant, it shows that the indicator can be used as a measuring instrument for latent variables. If the results of inner model testing are significant, it can be interpreted that there is a significant influence between latent variable on other latent variables (Hayati, 2013). The statistical test used is t statistics or t test with the statistical hypothesis as follows:

- a. product attributes variable on consumer preference variable.

H<sub>0</sub>:  $\gamma_i = 0$ ; There is no significant influence between product attributes variable on consumer preference variable

H<sub>1</sub>:  $\gamma_i \neq 0$ ; There is significant influence between product attributes variable on consumer preference variable

- b. Consumer preference mediates the relationship between product attributes with buying decision.

H<sub>0</sub>:  $\gamma_i = 0$ ; Consumer preference cannot mediate between product attributes with buying decision.

H<sub>1</sub>:  $\gamma_i \neq 0$ ; Consumer preference can mediate between product attributes on buying decision.

- c. Consumer preference variable on buying decision variable.

H<sub>0</sub>:  $\gamma_i = 0$ ; There is no significant influence between consumer preference variable on buying decision variable.

H<sub>1</sub>:  $\gamma_i \neq 0$ ; There is significant influence between consumer preference variable on buying decision variable.

- d. product attributes variable on buying decision variable.

H<sub>0</sub>:  $\gamma_i = 0$ ; There is no significant influence between product attributes variable on buying decision variable

H<sub>1</sub>:  $\gamma_i \neq 0$ ; There is significant influence between product attributes variable on buying decision variable.

## **2. Results and Discussion**

### **2.1. Overview of Giant Express Pulosari, Malang**

Giant Express Pulosari Malang is located in Jalan Kawi Atas No. 58, Gading Kasri, Klojen Kota Malang it was established in 2009. It is close to market target, which is why Giant was established in that area was. This Giant Express Pulosari is one of supermarkets that offer various kinds of daily needs. Offered prices in Giant Express Pulosari are mostly relative cheaper comparing to other supermarkets. They sell products with guaranteed quality and quantity. The reason is that they have to sell products that have met the quality requirements set by headquarter as the product standards to be sold, that is why the consumer will feel a lot more satisfied. The products sold include groceries and fresh products. The organizational structure used by Giant Express Pulosari in carrying out its business is line organization. This supermarket is led by a manager. The manager has two assistants

who will help execute the manager's duty in their department. This department is divided into two, they are groceries department for food and non-food products and fresh department for meat, fish, fruit and vegetable. Giant Express Pulosari, Malang also sells organic products that are often sought by consumers. Organic products sold here consist of various types of rice (brown rice, rice and black rice) and organic vegetables (buk choy and pak choy).

## 2.2. Respondents Characteristics

Based on the grouping of gender, most consumers who purchase organic products at Pulosari Giant Express is female with a total of 57 people and 43 for male. According to Dasipah *et al.* (2010), he stated that women are more dominant comparing men in terms of shopping because women have more knowledge on household needs while most of men are busy to provide basic necessities. Based on the age grouping, the age gap of those who mostly purchase organic products is 25-31 years totaling 33 respondents. According to Yuliati (2013), at the age of 21-30 years old a consumer starts to know and understand how important it is to purchase food that can fulfill their various needs. Based on the job grouping, most of respondents are self-employed amounted to 37 respondents and as many as 47 respondents have an income of less than Rp 1,800,000. as many as 85 respondents stated that they have consumed organic products for more than 3 times. According to Rahmawati (2012), consumers tend to try new things they found in their surrounding because of interest factor or product availability.

## 2.3. Research Instrument Testing Results

Based on the validity test results using SPSS software, all indicators used in this research has met the requirements of  $r_{count} > r_{table}$  to be declared as valid (**Table 2**). According to Santoso (2009), an attribute is declared valid if the value of  $r_{count} > r_{table}$  with positive value. Instrument validity is the level of research instrument capability to reveal the data in accordance with the problem to be revealed.

The values generated in **Table 3** indicate that the variables used in this study are all reliable because the value of Cronbach's alpha is greater than 0.6. According to Sugiyono (2007), a variable can be declared reliable if the cronbach alpha  $\geq 0.6$ . An instrument is declared as reliable if the respondent's answers to questions are consistent or stable over time.

Based on the values generated in **Table 4**, all variables used have a linear relationship. According to Hartati (2014), variables are said to be linear with other variables if they have  $F_{statistic}$  value smaller than  $F_{table}$  and a significant value must be greater than 0.05.

Table 2 Validity Test Result

Variables	Indicator	R <sub>count</sub>	R <sub>table</sub>	Note
Product attributes (X1)	Free chemical agents (X11)	0.665	0.202	Valid
	Packaging size (X12)	0.605	0.202	Valid
	Product Colour (X13)	0.744	0.202	Valid
	Packaging Label (X14)	0.688	0.202	Valid
	Packaging design (X15)	0.592	0.202	Valid
Consumer preference (Y1)	Quality (Y11)	0.782	0.202	Valid
	Price (Y12)	0.745	0.202	Valid
	Popularity (Y13)	0.778	0.202	Valid
	Life style (Y14)	0.648	0.202	Valid
Purchase decision (Y2)	Wants (Y21)	0.864	0.202	Valid
	Needs (Y22)	0.558	0.202	Valid

Table 3 Reliability Test Result

Variables	Cronbach's Alpha Value	Note
Product attributes (X1)	0.759	Reliable
Consumer preference (Y1)	0.794	Reliable
Purchase decision (Y2)	0.770	Reliable

Table 4 Linearity Test Result

Intervariabel Relationship	Significance	Requirement	Result
Consumer Preference (Y <sub>1</sub> )* Product Attribute (X <sub>1</sub> )	0,821	>0,05	Linear
Purchase decision (Y <sub>2</sub> )* Product Attribute (X <sub>1</sub> )	0,671	>0,05	Linear

## 2.4. Results of Partial Least Square Analysis

### 2.4.1. Evaluation of Goodness of Fit

#### 1. Evaluation of the Goodness of Fit Outer Model

- a. *Convergent Validity*: The results for the convergent validity test show that all indicators are valid. All loading factor values are declared valid because the obtained values have met the requirements with a value of > 0.5.
- b. *Average Variance Extracted*: The results for the average variance extracted test show that all variables used are valid. All variable values used in the study have met the requirements with a value of > 0.5.
- c. *Discriminant Validity*: The results for discriminant validity test show that the variables used have good values. The cross loading value that each indicator has on its variable must be greater than the correlation with other variables.
- d. *Cronbach's Alpha*: The results for the Cronbach's alpha test show that all variables are declared reliable. All Cronbach's alpha values produced in this study has met the requirements with the value of > 0.6.



- e. Composite Reliability: The composite reliability test results obtain results that indicate the variables used in the study have good consistency. The variable is declared reliable and has good consistency if the value meets the requirements of having a composite reliability value  $> 0.6$ .

## 2. Evaluation of *Goodness of Fit Inner Model*

The value of the inner model's goodness of fit can be measured by looking at the values of  $R^2$  and  $Q^2$ . The value of  $R^2$  in this study consumer preference variable ( $Y_1$ ) is 31.5% and the buying decision variable ( $Y_2$ ) is 13.5%. Based on the value of  $R^2$ , the  $Q^2$  value of 59.3% can be obtained with the calculation formula used as follows:

$$Q^2 = 1 - (1 - R_1^2) \times (1 - R_2^2)$$

$$Q^2 = 1 - (1 - 0.315) \times (1 - 0.135) = 1 - (0.685) (0.865) = 0.593 = 59.3\%$$

Based on the obtained values indicate that the structural model used in this study can explain as much as 59.3%.

### 2.4.2. *Evaluation of the Measurement Model*

#### 1. Product Attributes Variable

In **Table 5**, the product attributes variable ( $X_1$ ) has four indicators, they are packaging size ( $X_{12}$ ), color ( $X_{13}$ ), label ( $X_{14}$ ) and packaging design ( $X_{15}$ ). Based on the results of **Table 5**. The value of the loading factor for the indicator product attributes variable that gives the most dominant influence is packaging design ( $X_{15}$ ) with a value of 0.849. This shows that estimation on product attributes variables is influenced more by packaging indicator. In actual condition, the average indicator value from the product attributes variable shows that the highest value owned by the color indicator ( $X_{13}$ ) of 3.96. It means that the consumer decided to buy organic products because of the more natural color and there is no artificial coloring that can cause diseases in the future. According to Mikasari (2012), color is one of the most important quality attributes in the food and beverage processing industry. This is because color can affect the level of consumer acceptance.

#### 2. Consumer Preference Variable

Consumer preferences variable ( $Y_1$ ) has two indicators, they are quality ( $Y_{11}$ ) and price ( $Y_{12}$ ). Based on the results of **Table 5**, the value of the loading factor for the most influential indicator of consumer preference variable is price ( $Y_{12}$ ) with a value of 0.864. This shows that estimation on consumer preference variable is influenced more by price indicator. In actual condition, the highest average indicator value of consumer preferences variable is in the quality indicator ( $Y_{11}$ ) with an average value of 4.28, showing that in reality most influencing decision to buy organic products is the quality of organic products because the quality of organic products is better than non-organic products and they also have good benefits for health. According to Amar (2008), price has positive

influence with the quality of the received products. The higher the price offered will be directly proportional to the quality of the received products. Consumers will make a decision to buy the product. This is also supported by Kotler and Armstrong (2008) research who stated that there is psychological price, which is the price that shows the image of the product, such as a product a high price that gives a high image of product quality.

Table 5 Variable Measurement Model

<b>Variable</b>	<b>Indicator</b>	<b>Loading Factor</b>	<b>Mean</b>
Product attributes (X <sub>1</sub> )	Packaging size (X12)	0,733	3,92
	Product Colour (X13)	0,562	3,96*
	Packaging Label (X14)	0,726	3,94
	Packaging design (X15)	0,849*	3,89
Consumer preference (Y <sub>1</sub> )	Quality (Y11)	0,783	4,28*
	Price (Y12)	0,864*	3,85
Purchase decision (Y <sub>2</sub> )	Needs (Y22)	1,000*	4,2*

### 3. Purchasing Decision Variable

In the buying decision variable (Y<sub>2</sub>), there is one indicator that influences the buying decision of organic products. Based on the value of loading factor indicator, needs (Y<sub>12</sub>) with the value of 1.000 and the average value of indicators on the buying decision variable is also found in the needs indicator (Y<sub>12</sub>) with a value of 4.2. The values show that consumers of organic products have decided to buy to fulfill their needs. Consumers' needs for organic products are the health benefit of organic products. According to Arwiedya (2011), decision making by the prospective consumers in buying a product begins with the emergence of awareness of the fulfillment of needs and desires in accordance with expectations, after consumers realize the needs and desires, then consumers will take further action to meet those needs.

### 2.5. Structural Model Evaluation

Evaluation of structural models is used to determine the effect between variables in the study, either direct or mediation influence. This relationship can be seen in the path diagram in **Figure 1**.

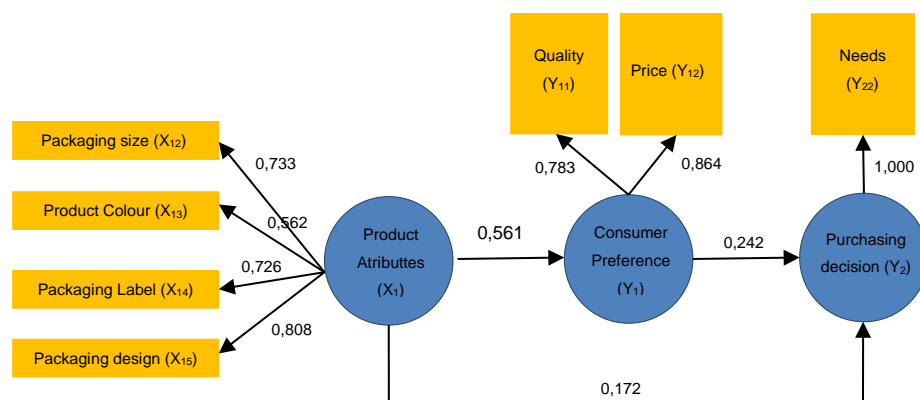


Figure 1 Coefficient Value of Model Structural

### 2.5.1. Discussion of Hypothesis Test

The results of hypothesis test are carried out with the aim of knowing the relationship between exogenous variables (X) with endogenous variables (Y). The values of t table used in the research are 1.66 ( $\alpha = 0.10$  and  $df = 98$ ). The requirement of this hypothesis testing is that t count must be greater than t table to have a significant result. Hypothesis test results are showed in **Table 6**.

Table 6. Hypothesis Test Result

Hypotesis	Effect	Koef.	T <sub>count</sub>	t <sub>table</sub>	Result
1	$X_1 \rightarrow Y_1$	0.561	8.423	1.66	Significant
2	$X_1 \rightarrow Y_2$	0.308	3.203	1.66	Significant
3	$Y_1 \rightarrow Y_2$	0.242	2.203	1.66	Significant

#### Hypothesis 1. Effect of product attributes Variable (X<sub>1</sub>) on Consumer Preferences (Y<sub>1</sub>)

Based on the test that has been done, the value of t arithmetic has a value of 8.423 greater than the t table of 1.66. In the statistical hypothesis, it can be concluded that  $H_0$  is rejected and  $H_1$  is accepted, there is a significant influence between products attributes variable on consumer preference variable. According to consumers of organic products, product attributes indicator used in this research has an influence on consumer preferences of organic products in Giant Express Pulosari Malang.

The path coefficient has a positive value of 0.561 which indicates that the effect of product attributes on consumer preferences is directly proportional, hence better product attributes possessed by organic products will result in better consumer preference for organic products. product attributes of organic products in Giant can be accepted by the respondents because good quality offered. These organic products are produced free from chemical element in the form of pesticides, hormones, and

drugs, which affect the quality and taste of the product when consumed. According to Widiyanto *et al.* (2016), consumers who are involved in the buying process and willing to pay because of the product attributes. This indicates that consumer preference is one of the most important factors in buying decision that will be taken by consumers based on their preferences.

#### Hypothesis 2. Effect of Product Attributes Variable ( $X_1$ ) on Buying Decision ( $Y_2$ )

Based on the results of testing that has been done, it has been obtained the value of t arithmetic of 3.203 greater than the t table of 1.66. Based on the hypothesis, it can be concluded that  $H_0$  is rejected and  $H_1$  is accepted, there is a significant influence between product attributes variable on buying decision variable. According to consumer indicator used in this research, product attributes have an influence on the buying decision of organic products.

Coefficient value for product attributes variable on the buying decision has positive value of 0.308. The owned positive value means that better product attributes of organic products in Giant Express Pulosari will result in better buying decision of organic products. According to the research by Alex and Thomas (2012), consumers tend to know what product they want to buy and they tend to not waste their time to choose low quality products. When consumers are going to take decision, they usually see the product attributes on the products they want to buy. This will happen because in fulfilling their needs and making buying decision to purchase the product continuously, consumers must know what attributes the product has.

#### Hypothesis 3. Effect of Consumer Preferences Variable ( $Y_1$ ) on Buying Decision ( $Y_2$ )

Based on the results of testing that has been done, it is obtained a value of t statistic of 2.203 greater than the table t value of 1.66. In the statistical hypothesis, it can be concluded that  $H_0$  is rejected and the  $H_1$  hypothesis is accepted, there is a significant influence between consumer preferences variable on the buying decision variable. According to consumer indicator used in this research, consumer preferences variable influences the buying decision of organic products.

The coefficient value for consumer preferences variable with buying decision has a positive value equal to 0.242. This positive value has a meaning that better consumer preferences toward organic products will result in better buying decision of organic products by consumers. There are several variables in product to be bought by the consumer that can affect the buying decision. One of them is consumer preferences. If consumer preferences of a product are already good, the consumer will make buying decision on that product which means the company has done a good job in leading people's preferences to make buying decision on the products they sell. According to Rukana (2001), a product to be sold should be set by the company to know consumer preferences toward the quality of that product.

Based on the processed testing, the influence of product attributes on the buying decision through buying preferences it has been obtained t count greater than t table hence H1 is accepted, that is consumer preferences can mediate product attributes variable with buying decision. There are two direct effects on the value of 0.172 and indirect effect with the value of 0.136. Based on this result, the value that has been obtained is positive. It means there are direct effect and indirect effect between product attributes and buying decision through consumer preferences.

In this research, testing has been done with the results showing product attributes give significant influence on buying decision by considering consumer preferences as a mediating variable. Consumer preferences variable functions to mediate part of the relationship between products attributes and buying decision. Product attributes variable is described with packaging design indicator. Organic products package is indeed differentiated from inorganic package, there is an explanation regarding the product on organic package. Consumers prefer cheaper products, with consumer preferences described through the price, it is expected to help improve the consumer buying decision on organic products.

In this research, the occurring effect of mediation is partial mediation because the relationship between product attributes variable ( $X_1$ ) to consumer preferences ( $Y_1$ ) is significant, and the relationship between consumer preferences ( $Y_1$ ) to buying decision ( $Y_2$ ) is significant. in addition, the relationship of product attributes ( $X_1$ ) and buying decision ( $Y_2$ ) through consumer preferences mediation variable ( $Y_1$ ) is significant with the coefficient of  $X_1$ - $Y_1$ - $Y_2$  of 0.136. The coefficient value that has been obtained is  $X_1$ - $Y_1$ - $Y_2$  smaller than the  $X_1$ - $Y_2$  coefficient value of 0.308. According to Solimun (2011), in the effect of mediation variable with dependent variable where dependent variable has significant value and the coefficient value of indirect effect is smaller than direct effect then mediation variable used is partial mediation. Mediation test result is presented in **Table 7**, while Indirect effect and total effect value is showed in **Table 8**.

### **2.5.2. Managerial Implications**

Based on the research results, there are several recommendation alternatives that can be used by Giant Express Pulosari Malang to improve consumer preferences and buying decision toward organic products. Alternative for managerial policies that can be carried out by Giant Express Pulosari, Malang are as follows:

1. Giant Express Pulosari, Malang is recommended to give discount for organic products purchase. The discount can be given by giving it every month or once in two weeks. In addition, the discount can be given if the purchase transaction of organic products reaches certain price amount. the discount can attract consumers' interest to purchase organic products.

2. Giant Express Pulosari, Malang is suggested to keep the quality products that they own by keeping the vegetable products in the fridge to avoid the products from damage or rotten and organic rice product should be kept in dry place. These days, consumers are more critical in making buying decision. The reason is that a quality of a product is considered to be important by consumers, they believe that good quality of a product will give benefits, thus Giant Express Pulosari should always check the quality of the products they sell.

## Conclusion

Based on the results of the processed data from this research, it can be concluded that product attribute variable has significant influence on buying decision of organic products in Giant Express Pulosari Malang. Consumer preferences variable has significant influence on buying decision of organic products in Giant Express Pulosari Malang. Then, the most influential indicator of product attributes is packaging design totaling 0.808. The most influential indicator on consumer preferences variable is price totaling 0.864. The most influential indicator on buying decision variable is basic needs totaling 1.000.

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## References

- Alex, D. and Thomas, S. 2012. Impact of Product Quality, Service Quality and Contextual Experience on Customer Perceived Value and Future Buying Intentions. *Business and Management*, 3(3), 307-315.
- Amar, R. 2008. The Effect of Product Quality, Brand Image, Price and Promotion Towards Purchasing Decision of Toyota Inova Brand MPV Car in Semarang. *Management*, 2(3), 46-58.
- Arwiedya, M. 2011. The Influence of Price, Media Types, Promotion, Performance Risk and Product Diversity on Purchasing Decisions on Online Stores (A Case Study on Online Fashion Store Consumers who Act as Resellers in Indonesia). *Economy*, 1(2), 145-156.
- Statistics Indonesia. 2017. *Ministry of Agriculture Republic Indonesia Data*. Retrieved at February 2<sup>nd</sup> 2017. [http://www.pertanian.go.id/ap\\_posts/detil/1181/2017/09/28/09/30/05/Data%20Kementan%20Selaras%20Dengan%20Data%20BPS](http://www.pertanian.go.id/ap_posts/detil/1181/2017/09/28/09/30/05/Data%20Kementan%20Selaras%20Dengan%20Data%20BPS)

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- Dasipah, E., Haris, B. and Maelani, J. 2010. Consumer Behaviour Analysis of Vegetable Product Purchasing in Bekasi City Modern Market. *Agribisnis dan Pengembangan Wilayah*, 1(2), 24–37.
- Gumilar, I.S. 2007. *Research Methodology for Business and Management*. Utama. Bandung.
- Hayati, N. 2013. *Daya Saing (Competitiveness) Sekolah Tinggi Ilmu Ekonomi (Studi tentang Kapabilitas Pimpinan terhadap Orientasi Pasar dan Orientasi Pembelajaran dan Dampaknya terhadap Kinerja dan Daya Saing Sekolah Tinggi Ilmu Ekonomi di Lingkungan KOPERTIS Wilayah IV Jawa Barat dan Banten Program Studi Manajemen yang Terakreditasi B)*. Disertasi. Fakultas Ilmu Pendidikan Universitas Padjajaran. Bandung.
- Jogiyanto, H. and Willy A. 2009. *Concept and Application of PLS (Partial Least Square) for Empirical Studies*. BPFE Fakultas Ekonomika dan Bisnis UGM. Yogyakarta.
- Juliandi, A. and Irfan M.S. 2014. *Business Research Methodology: Concept and Application*. UMSU Press. Medan.
- Kotler, P and Armstrong, G. 2008. *Principles of Marketing, 13 Edition*. Pearson Prentice Hall. New Jersey.
- Latan, H. and Ghozali I. 2012. *Partial Least Square Method Concept and Application of Running WarPLS 2.0 Program*. Badan Penerbit UNDIP. Semarang.
- Munandar J, Faqih U, dan Meivita A. 2015. Analysis of Factors that Influence Bottled Water Consumer Preference in Bogor. *Teknologi Industri Pertanian*, 13(3), 97-107.
- Muzdalifah. 2012. Consumer Preference Analysis Against Local Fruits in Banjarbaru City. *Agrobisnis Pedesaan*, 2(4), 297–309.
- Pratiwi. 2014. *Analysis of Attributes Affecting Purchase Decision and Perception Mapping of Instant Noodle (A Case Study on Undergraduate Students in Universitas Brawijaya)*. Minithesis. Agricultural Technology Faculty. Universitas Brawijaya.
- Rahmawati, 2012. *Financial Accounting Theory*. Graha Ilmu. Yogyakarta.
- Rizki, D.A. 2013. Consumer Perception Analysis and Marketing Strategy of Analog Rice. *Manajemen dan Organisasi*, 4 (2), 144–162.
- Santoso, S. 2009. *Complete Guide to Mastering Statistics with SPSS 17*. PT Elex Media Komputindo. Jakarta.
- Simamora. 2008. *Consumer Behaviour Research Guide*. Gramedia Pusaka. Jakarta.
- Solimun. 2011. *Multivariate Analysis of PLS Method Structural Modelling*. CV Citra. Malang.
- Vinzi, V.E., Chin W., Henseler J., and Wang H. 2010. *Handbook of Partial Least Square*. Springer. Berlin.
- Widiyanto, N.A., Adriyono K.A., dan Heny K. D. 2016. Attributes Affecting the Attitudes and Consumer Preference in Buying Apples Surabaya and Malang City, East Java Province. *Jurnal Ilm. Kel dan Kons*, 9(2), 136-146.