

Consumer Perceptions Regarding the Marketing Mix on the Purchase Decision Palm Cooking Oil Products: Mediated by Purchase Interest

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Palm oil is Indonesia's leading plantation commodity with processed cooking oil products. The high price of cooking oil in recent years has made the government issue cooking oil products under the brand "Minyakita". The fluctuating sales of Minyakita make it necessary to pay attention to the basic aspects of consumer consideration of choosing products using marketing mix managerial tools. The purpose of this study is to analyze the effect of marketing mix on purchase interest and decisions, analyze the effect of purchase interest on purchasing decisions, and analyze the indirect effect of marketing mix on purchasing decisions through purchase interest. The sampling technique is probability sampling with a total of 97 samples. Data collection through direct interviews and questionnaires. The data analysis used is path analysis. According to the findings of this study in model I, product, price and promotion have a significant effect on purchase interest while place has no significant effect on purchase interest. Then in model II, product, price and purchase interest have a positive and significant effect on purchasing decisions while place and promotion have no significant effect on purchasing decisions. Indirect effect shows that purchase interest is able to mediate products, prices, and promotions on purchasing decisions. The findings of this study expand knowledge with empirical evidence clarifying the significant influence of the marketing mix on consumer decisions through purchase interest. It is recommended for producers to further improve product quality and maintain prices. For the government, it can provide support to expand market access.

Keywords: Marketing Mix, Purchasing, Purchase Interest, Cooking Oil, Palm oil, Price, Indonesia.

INTRODUCTION

Indonesia is an agrarian country producing various agricultural and plantation products, both directly consumed by humans as food ingredients and indirectly as industrial products. One industrial product derived from plantation produce is cooking oil. Cooking oil from plants is usually produced from crops such as coconuts, palm oil, grains, legumes, corn, soybeans, and canola. Cooking oil, being one of the staple ingredients needed by society, ensures a substantial demand for it annually. The Indonesian Palm Oil Association (IPOA) notes that palm oil consumption in Indonesia reached 18.5 million tons in 2021, increasing from the previous year's 17.35 million tons. The majority of palm oil consumption in Indonesia in 2021, totaling 8.95 million tons was allocated for food purposes. Approximately 2.13 million tons of palm oil were used for oleochemicals, and 7.34 million tons were utilized for biodiesel (Association, 2021).

Therefore, it can be interpreted that the need for palm oil for cooking oil is increasing every year. Palm oil, which produces crude palm oil, is a leading export commodity in Indonesia. Therefore, palm oil has a fairly important role, namely its main subject is cooking oil so that the continued production of palm oil as a raw material for cooking oil will contribute to maintaining the stability of cooking oil prices (Ramadan, 2022). Cooking oil plays a very important role in the broader global market as it affects various aspects, including the economy, health, and environmental sustainability. The demand for cooking oil is constant worldwide as it is used in various types of cooking and prepared foods. The industry includes the production of oil from various sources, one of which is palm oil. The palm cooking oil industry is an integral part of the global food sector with significant market value. As a globally traded commodity, cooking oil prices in Indonesia are directly influenced by international crude palm oil (CPO) prices (Amir *et al.*, 2022). Large companies and

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small producers alike are involved in the production, processing and distribution of cooking oil. Cooking oil products under the Minyakita brand have a fairly wide market coverage in various regions in Indonesia. The distribution of Minyakita to regions in Indonesia has been carried out in order to fulfill the needs of the community evenly.

Pasangkayu Regency is one of the oil palm producing districts in West Sulawesi Province, with an area of oil palm plantations reaching 59,933 ha and production reaching 142,320 tons per year in 2019 (Directorate General of Plantations, 2021). The total population of Pasangkayu Regency, based on data from the Pasangkayu Regency Central Statistics Agency in 2021, reached 193,098 people (BPS of Pasangkayu Regency, 2022). The average per capita expenditure on food items per month, according to data from the Central Statistics Agency in Pasangkayu Regency, fluctuated from 2017 to 2021. In terms of oil and coconut products, the highest expenditure occurred in 2021, amounting to Rp.16,431 per capita per month (BPS of Pasangkayu Regency, 2022). Minyakita is one of the packaged palm cooking oil brands, which is a program of the Ministry of Trade of the Republic of Indonesia outlined in Minister of Trade Regulation Number 49 of 2022 concerning the Governance of the People's Cooking Oil Program. Minyakita, marketed in traditional markets and supermarkets, is distributed by the Logistics Bureau (Bulog) at Maximum Retail Price (MRP) and distributed to various cities and provinces in Indonesia, including Pasangkayu Regency. Being newly launched in the last two years, Minyakita still requires approaches to its target market and better marketing strategies compared to other branded cooking oils that have been in the packaged cooking oil industry for longer, as well as other cooking oil brands that offer various attractive offers in terms of product quality, price, distribution, and promotion. Therefore, palm cooking oil producers must strive to be more creative in marketing it to become the preferred choice for consumers. In creating a profitable marketing system, it is important to look at conditions that satisfy all parties involved including producers, marketing institutions, and consumers. The satisfaction of these parties includes appropriate pricing for producers, adequate services and compensation for marketing institutions and good quality goods or services for consumers (Diansari *et al.*, 2023). One of the issues in the marketing process of palm cooking oil products is its fluctuating sales, prompting producers to pay attention to the fundamental aspects influencing consumers' product choices and to attract consumers by increasing their interest in the product so that they decide to make a purchase. To find out the right sales strategy, a marketing mix is needed as a management tool that can be used to increase sales. In addition, to see how it affects consumer decisions to purchase palm cooking oil products.

Marketing mix is a fundamental concept in marketing strategy. The components of the marketing mix are known as

the 4Ps; Product, Price, Place, and Promotion. This component plays a role in attracting consumer interest and influencing consumer decisions in buying the products offered. Each component of the Marketing mix must be well organized to create added value for consumers as sales targets while increasing product sales. According to Kotler and Keller (2016), Marketing mix is a set of controllable tactical marketing tools, products, prices, distribution, and promotion that are combined by companies to produce the desired response in the target market. In general, the marketing mix is a series and collection of marketing variables, which are applied by organizations or companies in their efforts and activities to achieve their goals, especially marketing goals towards their target market (Raldianingrat and Fitria, 2022). In creating a marketing system that is profitable for all parties concerned, it is important to look at conditions that satisfy all parties involved including producers, marketing institutions and consumers.

Based on previous research conducted by Multazam (2022), it is shown that significant variables of the marketing mix affecting chocolate purchasing decisions are price, place, and promotion, while the product variable does not have a significant impact. Similar research was also conducted by Firmansyah *et al.* (2021), indicating that both marketing mix variables and brand equity have a positive and significant influence on purchasing decisions. The variables that most influence purchasing decisions are product, place, and brand equity. Additionally, research by Solihin (2020) indicates that customer trust and promotion influence purchasing decisions and purchase intention. Purchase intention can mediate customer trust and promotion. Based on these previous studies, it can be concluded that several marketing mix variables affect purchasing decisions and purchase intention, and purchase intention can mediate several marketing mix variables in purchasing decisions. However, in these studies, there are still variables that do not have an impact, depending on the product being researched. Therefore, it is necessary to further examine the influence of each marketing mix variable on both purchasing decisions and purchase intention for palm cooking oil products by considering the perceptions of individual consumers who purchase them.

Aside from fluctuating sales issues, there are several other problems in Minyakita sales, one of which is the occurrence of Minyakita scarcity in early 2023 due to supply and demand issues. The reduction in Domestic Market Obligation (DMO) supply from exporters due to decreased exports led to a decrease in cooking oil production. Meanwhile, demand for cooking oil continues to rise. Minyakita products become scarce because the quota for each region is limited while consumer demand is quite large so that in traditional markets or supermarkets it is sometimes not available. Recent marketing issues with Minyakita will undoubtedly impact consumer decisions about choosing Minyakita products. Purchasing decisions are a series of steps taken by consumers



to buy or use certain products or services offered based on the intention to purchase or use products or services (Hanaysha, 2022). Consumer purchasing decisions are important to observe using marketing mix managerial tools. Of course, every consumer has a different perception of Minyakita products, with this different perception, we can find out what influences consumer decisions to buy Minyakita, especially in Pasangkayu Regency. This is the rationale behind the researcher's deeper analysis of cooking oil by analyzing the marketing mix on purchasing decisions through purchase intention by looking at consumer perceptions of Minyakita. Gaps between marketing mix elements and consumer preferences or expectations can reduce the effectiveness of marketing strategies and affect consumer purchasing decisions. Therefore, careful analysis of each element of the marketing mix and the response from consumers is important in improving marketing strategies and increasing the sales performance of Minyakita. Thus, this study aims to first, analyze the influence of marketing mix (product, price, place, and promotion) on purchase interest. Second, analyze the influence of marketing mix (product, price, place, and promotion) on purchasing decisions. Third, analyze purchase interest on purchasing decisions. Fourth, analyze the indirect influence of the marketing mix (product, price, place, and promotion) on purchasing decisions through purchase interest.

MATERIALS AND METHODS

Time and place of the research: This research was conducted in August-November 2023. The research was carried out in Pasangkayu Regency, West Sulawesi Province, Indonesia. The location was chosen deliberately with the consideration that Pasangkayu Regency is a producers of crude palm oil (CPO) and one of the location of packaging of Minyakita product.

Population and Sample: The population in this study comprises all consumers who have purchased Minyakita cooking oil products in traditional markets or supermarkets in Pasangkayu Regency. The sample in this study consists of consumers of Minyakita cooking oil products in traditional markets or supermarkets in the three districts of Pasangkayu Regency who have purchased Minyakita cooking oil. In this study, data were collected through the distribution of questionnaires to consumers. Questionnaires will yield accurate data when their accuracy is measured using validity and reliability tests, and classic assumption tests are conducted by testing for normality. The population size for this study is unknown. The sampling method used in this study is the probability sampling technique, specifically cluster random sampling, using the Snedecor and Cochran formula (Maretiana and Abidin, 2022) it's a critical value of 10%, resulting in a sample of 97 Minyakita consumers across 3 districts.

$$\begin{aligned}n &= \frac{Z^2 P q}{e^2} \\ &= \frac{(1,96)^2 (0,5)(0,5)}{(0,1)^2} \\ &= 97 \text{ Responden}\end{aligned}$$

Keterangan:

Z = Tingkat keyakinan 95%; q = Peluang salah; P = Peluang benar; e = Margin of error

Data Collection Methods: Data collection methods in this study are interviews and questionnaires. In this study, interviews will be conducted with respondents who buy or have bought Minyakita brand cooking oil in traditional markets and supermarkets in Pasangkayu Regency. Then the respondents will fill out a questionnaire. The questionnaire is a data collection technique by giving a set of questions or written statements to respondents to answer them. Respondents will answer questions and respond to statements regarding products, prices, places, promotions, purchasing decisions and buying interest provided by researchers. The answers to each question or statement have gradations from strongly agree rated 5 to strongly disagree.

Validity Test: The validity test is used to measure the accuracy of an item in a questionnaire or scale and whether the items in the questionnaire are appropriate for measuring the research object. The minimum requirement to be considered valid is to look at the value of $r \geq 0.3$. So, if r count < 0.3 , then the item in the instrument is declared invalid. Meanwhile, if r count ≥ 0.3 , then the items in the instrument are declared valid. The choice of validity test is intended so that the interpretation of the analysis results is based on valid data. This is important to minimize errors in conclusions or generalizations from the data.

Reliability Test: Reliability tests are carried out to test whether respondents' answers are consistent or stable. Test the reliability of this research by looking at the Cronbach's alpha coefficient. If the results of the Cronbach's alpha coefficient show a number ≥ 0.60 , it can be concluded that the instrument is declared reliable (Pratiwi and Dewi, 2021). The reliability test was chosen in measuring the research instrument to help determine the extent to which the measurement results are reliable and consistent. With this test, researchers can identify errors or uncertainties in the measurements used.

Normality Test: This test aims to determine whether the data generated is normally distributed or not. To see whether a regression model is good or not, it can be seen from the data obtained that is normally distributed or close to normal. Normality was chosen because many statistical techniques such as parametric hypothesis testing require the assumption that the data comes from a normal distribution. So that researchers can ensure that this assumption is met before applying the technique. Data normality testing in this study was carried out using the Kolmogorov-Smirnov test. Data testing can be said to be normal if it has a significance value of >0.05 (Raldianingrat and Fitria, 2022).



Data Analysis: This type of research uses descriptive methods with a quantitative approach. Quantitative statistical analysis in this research uses path analysis, which is analyzed using SPSS (Statistical Product and Service Solutions) software version 25. Path analysis is a data analysis technique that aims to test the pattern of relationships between variables to ascertain the direct and indirect impacts of a collection of independent factors (exogenous) on the dependent variable (endogenous) (Multazam, 2022). The purpose of this analysis is to find out how much direct and indirect influence product (X1), price (X2), place (X3), and promotion (X4) have on purchasing decisions (Y) and their influence on purchasing interest (Z). This research model can be seen in the following equation:

$$Z = \beta Zx_1.X_1 + \beta Zx_2.X_2 + \beta Zx_3.X_3 + \beta Zx_4.X_4 + e1..... (1)$$

$$Y = \beta Yx_1.X_1 + \beta Yx_2.X_2 + \beta Yx_3.X_3 + \beta Yx_4.X_4 + \beta Yz.Z + e2.....(2)$$

Information: Z = Purchase interest; Y = Purchase decision; X1 = Product; X2 = Price; X3 = Place; X4 = Promotion; E1 = Residual variabel (error 1); E2 = Residual variabel (error 2)

In path analysis to determine the indirect effect, the product of coefficient strategy is used to see the significance of the indirect effect using the Sobel test by looking at the t value > 1.985. This method is considered to have statistical power. If the calculated t value is greater than 1.985 (with a confidence level of 95%), then the mediating variable is assessed as significantly mediating the relationship between exogenous variables and endogenous variables (Adriyati and Indriani, 2017).

Hypothesis Test: The hypothesis test in this research aims to determine the correlation between the variables tested in this study. In hypothesis testing, this research uses statistical tests in the form of the coefficient of determination/adjusted R square (R²) and a partial test (t-test). The testing of the coefficient of determination/adjusted R square (R²) is used as a measure of how well the model explains the variance of the dependent variable. The range of this coefficient is from zero to one. If the R square value is low or close to 0, it indicates that the ability of independent variables to explain the dependent variable is very limited. If the obtained value approaches 1, it indicates that the independent variable represents almost all the information needed as an estimate of the variation in the dependent variable. Drawing conclusions by observing the value of :

R² = 0 means there is no relationship between variables X and Y. R² = 1 means the regression is a perfect fit.

The partial test aims to determine the partial effects of each independent variable on the dependent variable. There are several criteria used in the partial test (Winarno, 2019), namely that:

H1: accepted if the calculated t > t table and the sum of the sig. level of significance < 0,05, meaning that a significant influence is found between the independent variable and the dependent variable.

H0: accepted if the calculated t < t table and the sum of the sig. level of significance > 0,05, meaning that there is no significant effect between the independent variable and the dependent variable.

RESULTS

Characteristics of Respondents: Respondents in this study were people who bought Minyakita products within the scope of the Pasangkayu Regency area with a total of 97 respondents. Classification of characteristics of respondents of Minyakita products can be seen based on age, education level and employment in Table 1.

Table 1. Characteristics of Respondents.

Description	No. of respondents (people)	Percentage (%)
Age (years)		
20-29 years	23	23.7
30-39 years	35	36.1
40-49 years	22	22.7
50 years and above	17	17.5
Educational level		
Elementary School	35	36.1
Junior High School	17	17.5
Senior High School	28	28.9
Bachelor’s Degree	16	16,5
Master’s Degree	1	1
Employment		
Farmers	7	7.2
Civil servants	15	15.5
Entrepreneur	14	14.4
Housewife	61	62.9

Based on Table 1, it can be seen that the characteristics of respondents of Minyakita products in Pasangkayu Regency are at a productive age level. The age of respondents in this study ranged from 20 years to 50 years and above. The most respondents in this study were at the age of 30 to 39 years with a percentage of 36.1 %. This age shows that consumers who buy Minyakita products are at a productive age so that consumers are considered to be able to consider the attributes observed in this study.

The characteristics of respondents of Minyakita products are also seen from the level of education which is quite varied ranging from elementary school to master’s degree, it can be seen that respondents of Minyakita products who have the largest level of education are elementary school with a percentage of 36.1 % and followed by senior high school with a percentage of 28.9 %, junior high school with a percentage of 17.5 % and bachelor’s degree with a percentage of 16.5 %. A person’s level of education can determine that person in receiving the knowledge and information provided. The



Table 2. Research validity test.

Variable	Total Correlation										
Product	1	2	3	4	5	6	7	8	9	10	11
	0.564	0.541	0.420	0.499	0.783	0.570	0.507	0.502	0.749	0.747	0.752
Price	1	2	3	4	5	6					
	0.864	0.781	0.740	0.657	0.790	0.695					
Place	1	2	3	4	5	6	7				
	0.520	0.704	0.826	0.509	0.632	0.380	0.653				
Promotion	1	2	3	4	5	6					
	0.584	0.845	0.711	0.583	0.711	0.505					
Purchase Interest	1	2	3	4	5	6	7				
	0.724	0.658	0.616	0.747	0.826	0.859	0.777				
Purchase Decision	1	2	3	4	5	6	7				
	0.594	0.716	0.768	0.825	0.838	0.839	0.772				

higher a person’s level of education, the greater the knowledge and information that person will have.

The characteristics of respondents of Minyakita product based on occupation can be seen that those who dominate in using or consuming Minyakita cooking oil are consumers who have jobs as housewife with a percentage of 62.9 % and then followed by consumers who have jobs as civil servants with a percentage of 15.5 %. Meanwhile, respondents who buy cooking oil with jobs as farmers are somewhat smaller namely 7.2 %.

Research Instrument Test: The instrument test in this study carried out two types of tests, namely validity and reliability. The validity test was carried out to measure the accuracy of the items on the questionnaire in measuring the research object. While the reliability test is carried out to measure the stability of the answers of each respondent. The validity test can be seen in Table 2 and the reliability test can be seen in Table 3.

Table 2 shows in this study there were 44 question items used to measuring validity. Each question item on the product, price, place, promotion, purchase interest and purchase decision variables produces a corrected item total correlation coefficient greater than 0.30 ($r > 0.30$). Therefore, all question items are declared valid and can continue to be used in further data processing stages.

Table 3. Reliability test.

No	Variable	Cronbach's Alpha Value	Cronbach's Alpha Minimum	Conclusion
1.	Product	0.800	0.60	Reliable
2.	Price	0.831	0.60	Reliable
3.	Place	0.689	0.60	Reliable
4.	Promotion	0.739	0.60	Reliable
5.	Purchase Interest	0.867	0.60	Reliable
6.	Purchase Decision	0.879	0.60	Reliable

Table 3. Shows the results of the reliability test, which shows that the product variable has a Cronbach’s Alpha value ($0.800 \geq 0.60$), which means that the data is reliable. The price variable has a Cronbach’s Alpha value ($0.831 \geq 0.60$), which means that the data is reliable. The place variable has a Cronbach’s Alpha value ($0.689 \geq 0.60$), which means that the data is reliable. The promotion variable has a Cronbach’s Alpha value ($0.739 \geq 0.60$), which means that the data is reliable. The purchase interest variable has a Cronbach’s Alpha value ($0.867 \geq 0.60$), which means that the data is reliable. The purchase decision variable has a Cronbach’s alpha value ($0.879 \geq 0.60$) which means that the data is reliable. So, it can be concluded that all variables in this study are declared reliable.

Normality Test: The normality test was carried out with two regression models, namely regression model I of the effect of product, price, place, and promotion on purchase interest. Meanwhile, regression model II influences product, price, place, promotion and purchase interest on purchasing decisions. The result of the normality test can be seen in Table 4.

Table 4. Normality test results.

No.	Regression	Asymp. Sig (2-tailed)	Information
1.	Regression Model I	0.200	Normal distribution
2.	Regression Model II	0.061	Normal distribution

Table 4 shows that the Kolmogorov-Smirnov normality test value for model I regression produces a p -value of $0.200 > 0.05$. Based on this, it can be concluded that the residuals from the model I research data are normally distributed. Then, in regression model II, the Kolmogorov-Smirnov normality test produces a p -value of $0.061 > 0.05$. Based on this, it can be concluded that the residual data for model II is normally distributed.



Model-I Path Analysis: In path analysis Model-I, the direct effects of product (X1), price (X2), place (X3), and promotion (X4) on purchase interest (Z) will be analyzed. The output results of data analysis in the SPSS program can be seen in Table 5. as follows:

Table 5. Model-I Regression Path Coefficients and Determination Coefficient.

No.	Variable	Std. Error	Coefficient	T	Significance
1.	Product	0.106	0.330	3.155	0.002
2.	Price	0.110	0.291	2.869	0.005
3.	Place	0.130	0.092	0.945	0.347
4.	Promotion	0.087	-0.209	-2.195	0.031
R Square					0.311

Based on the Table 5, the path model equation I can be constructed as follows:

Path coefficient value of product variable (β_{zx_1}) = 0.330

Path coefficient value of price variable (β_{zx_2}) = 0.291

Path coefficient value of place variable (β_{zx_3}) = 0.092

Path coefficient value of promotion variable (β_{zx_4}) = -0.209

The R square value = 0.311, indicating that the contribution of the effects of product (X1), price (X2), place (X3), and promotion (X4) variables on purchase intention (Z) is 31.1%, while the remaining 68.9% is influenced by other variables not included in this study.

The residual value $e_1 = 0.830$

Therefore, equation (1) can be written as:

$$Z = 0.330X_1 + 0.291X_2 + 0.092X_3 + (-0.209)X_4 + 0.830 \dots \dots \dots (1)$$

Model-II Path Analysis: In path analysis model-II, the direct effects of product (X1), price (X2), place (X3), promotion (X4), and Purchase Interest (Z) on Purchase Decision (Y) will be analyzed. The output results of the data analysis in SPSS can be seen in the following (Table 6).

Based on the Table 6, the path model II equation can be formulated as follows:

Path coefficient value of product variable (β_{yx_1}) = 0.235

Path coefficient value of price variable (β_{yx_2}) = 0.190

Path coefficient value of place variable (β_{yx_3}) = 0.066

Path coefficient value of promotion variable (β_{yx_4}) = -0.081

Path coefficient value of purchase interest variable (β_{yz}) = 0.575

Table 6. Model-II Regression Path Coefficient and Determination Coefficient.

No.	Variable	Std. Error	Coefficient	T	Significance
1.	Product	0.074	0.235	3.318	0.001
2.	Price	0.076	0.190	2.797	0.006
3.	Place	0.086	0.066	1.050	0.297
4.	Promotion	0.059	-0.081	-1.283	0.203
5.	Purchase Interest	0.069	0.575	8.574	0.000
R Square					0.718

The R square value = 0.718, indicating that the contribution of the effects of product (X1), price (X2), place (X3), promotion (X4), and purchase interest (Z) variables on purchase decision (Y) is 71.8%, while the remaining 28.2% is influenced by other variables not included in this study.

The Residual value $e_2 = 0.531$

Therefore, equation (2) become:

$$Y = 0.235X_1 + 0.190X_2 + 0.066X_3 + (-0.081)X_4 + 0.575Z + 0.531 \dots \dots \dots (2)$$

After knowing the direct effects, a Sobel test was carried out to determine the indirect influence by concluding that the calculated t-value was > 1.985 , meaning that the mediating variable was able to influence the independent variable on the dependent variable. The results of the Sobel test can be seen in Table 7.

Table 7 shows the results of the sobel test for indirect effects with the conclusion that the purchase interest variable can positively mediate several variables, namely the product and price variables on purchasing decisions. The mediating effect value of the product variable reaches $2.916 > 1.985$ while for the price variable, it reaches $2.521 > 1.985$. In addition, buying interest is also able to mediate promotion on purchasing decisions in a significant negative way. Meanwhile, for the place variable, buying interest is not able to mediate place on consumer purchasing decisions for cooking oil.

Hypothesis Test: The hypothesis test is seen in the results of partial tests or t-tests to determine the influence of each variable. The t-test results can be seen in Table 8.

Table 8 shows the result of the direct effect t-test with several variables showing significant values, namely the product,

Table 7. Sobel Test Results.

Indirect Connection	Standardized Coefficients Beta	T count	T Table	Sig.	Hypothesis Test	Conclusion
X1 – Z – Y	0.424	2.916	1.985	0.003	t count > t table	Significant
X2 – Z – Y	0.357	2.521	1.985	0.011	t count > t table	Significant
X3 – Z – Y	0.119	0.705	1.985	0.480	t count < t table	Not significant
X4 – Z – Y	-0.201	-2.308	1.985	0.020	t count > t table	Significant negative



Table 8. T-Test Results.

Direct Connection	Standardized Coefficients Beta	T count	T table	Sig.	Hypothesis test	Conclusion
X1 – Z	0.330	3.155	1.985	0.002	t count > t table sig. < 0.05	Significant
X2 – Z	0.291	2.869	1.985	0.005	t count > t table sig. < 0.05	Significant
X3 – Z	0.092	0.945	1.985	0.347	t count < t table sig. > 0.05	Not significant
X4 – Z	-0.209	-2.195	1.985	0.031	t count > t table sig. < 0.05	Significant
X1 – Y	0.235	3.318	1.985	0.001	t count > t table sig. < 0.05	Significant
X2 – Y	0.190	2.797	1.985	0.006	t count > t table sig. < 0.05	Significant
X3 – Y	0.066	1.050	1.985	0.297	t count < t table sig. > 0.05	Not significant
X4 – Y	-0.081	-1.283	1.985	0.203	t count < t table sig. > 0.05	Not significant
Z – Y	0.575	8.574	1.985	0.000	t count > t table sig. < 0.05	Significant

price, and promotion variables have a significant effect on consumer purchase interest while the place variable does not have a significant effect on consumer purchase interest. In addition, the variables of product, price, and purchase interest affect purchasing decisions while place and promotion have no significance on purchasing decisions.

Based on the results of the path analysis of the model I and model II equations previously described above, a regression path can be created from the combination of model I and model II equations in Figure 1. as follows:

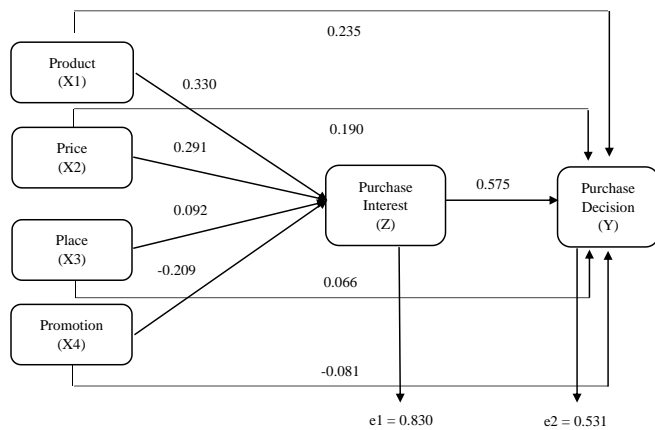


Figure 1. Path Analysis Diagram.

DISCUSSION

The effects of products on purchase interest: The results of the statistical test in the path analysis revealed a computed t-value of 3.155 with a significance level of 0.002. As the significance level is smaller than 0.05 (0.002 < 0.05) and the regression coefficient has a positive value of 0.330, the hypothesis asserting that “there exists a significant positive direct influence of the product on the purchase interest of Minyakita cooking oil consumers in Pasangkayu District” is accepted. This finding aligns with research conducted by Silaningsih and Utami (2018), demonstrating a positive and significant impact of the product on purchase interest.

Additionally, Mahmoud et al. (2017) also discovered that environmentally friendly products influence consumer purchasing interest. Hence, it can be interpreted that the better the quality of the product, as perceived through product appearance, durability, reliability, aesthetics, and consumer perception of product quality, the greater the consumer's desire to purchase the product. Consumers who purchase Minyakita products evaluate that the product appearance meets their expectations, with no packaging damage found, and that the packaging provided is thick and leak resistant. Furthermore, good product quality in terms of color, aroma, and durability fosters consumer confidence in the product quality and stimulates interest in purchasing.

The effects of price on purchase interest: The statistical test results of the path analysis yielded a computed t-value of 2.869 with a significance level of 0.005. Since the significance level is smaller than 0.05 (0.005 < 0.05) and the regression coefficient has a positive value of 0.291, the hypothesis asserting that “there exists a significant positive direct influence of price on the purchase interest of Minyakita cooking oil consumers in Pasangkayu District” is accepted. The testing of this hypothesis indicates that the price variable, as assessed by affordability, price stability, price-quality ratio, and competitive pricing, successfully influences consumers' interest in purchasing palm cooking oil products. This finding aligns with research conducted by Silaningsih and Utami (2018), demonstrating that price has a positive and significant impact on purchase interest. Additionally, Syarifuddin et al. (2021) also found that the pricing marketing mix has a significant influence on consumer purchase interest. Thus, providing appropriate and accessible pricing can enhance consumers' intentions to choose the offered products. Price is one of the factors considered by consumers when making product purchases, and easily accessible pricing makes consumers more likely to choose the product. Competitive pricing will always be remembered by consumers and encourage repeat purchases (Meilani and Simanjuntak, 2011). The price of Minyakita products offered is set based on the Maximum Retail Price (MRP), which is relatively cheaper



than similar products from different brands. This serves as a trigger for consumer interest in palm cooking oil products.

The effects of place on purchase interest: The statistical test results of the path analysis yielded a computed t-value of 0.945 with a significance level of 0.347. Since the significance level is greater than 0.05 ($0.347 > 0.05$) and the regression coefficient has a value of 0.092, the hypothesis asserting that “there exists a significant positive direct influence of place on the purchase interest of Minyakita cooking oil consumers in Pasangkayu District” is rejected. Testing this hypothesis indicates that the place variable, as assessed by accessibility, visibility, distribution process duration, and sales environment, has not been able to influence consumer purchase interest. This finding is consistent with research conducted by (Silaningsih and Utami, 2018; Coanto *et al.*, 2019) which indicates that place does not significantly affect consumer purchase interest. Therefore, it can be interpreted that better locations tend to increase purchase interest, whereas poorer sales locations tend to decrease purchase interest. Improvements in sales locations are still needed by making them easily accessible to consumers, and distribution processes must be enhanced to ensure product availability in the market and prevent shortages. Thus, by improving location indicators, consumer purchase interest can be increased.

The effects of promotion on purchase interest: The statistical test results of the path analysis yielded a computed t-value of -2.195, which is greater than the negative critical t-value of -1.985, as observed from the rejection and acceptance curve of the null hypothesis, with a significance level of 0.031. Since the significance level is smaller than 0.05 ($0.031 < 0.05$), and the regression coefficient has a negative value of -0.209, the hypothesis asserting that “there exists a significant influence of promotion on the purchase interest of Minyakita cooking oil consumers in Pasangkayu District” is accepted. Testing this hypothesis indicates that promotion has a significant negative influence on consumer purchase interest. This finding is consistent with the research findings of Solihin (2020), which state that the promotion variable significantly affects consumer purchase interest. The research results of Gusrita and Rahmidani (2019), Hanaysha *et al.* (2021) also demonstrate a significant negative relationship between promotion and consumer purchase decision-making interest. Therefore, it can be interpreted that for every unit increase in promotion, consumer interest in purchasing the product decreases. Offering promotions frequently will reduce consumer decisions to purchase the offered products because consumers may feel hesitant due to the abundance of promotions.

The effect of products on purchase decisions: The statistical test results of the path analysis yielded a computed t-value of 3.318 with a significance level of 0.001. Since the significance level is smaller than 0.05 ($0.001 < 0.05$) and the regression coefficient has a positive value of 0.235, it can be

concluded that the hypothesis asserting that “there exists a positive and significant influence of the product on consumer purchase decisions of Minyakita cooking oil in Pasangkayu District” is accepted. The significant positive influence of the product indicates that purchasing decisions for palm cooking oil are influenced by product appearance, durability, reliability, aesthetics, and consumer perceptions of product quality. The better the consumer perception of the product, the more consumers decide to purchase palm cooking oil products. This research finding is consistent with the study conducted by Mulyati (2020), which demonstrates a significant positive influence of the product variable on purchase decisions. Additionally, the research findings of Evan and Christian (2021) also suggest that the product variable significantly influences purchase decisions. This indicates that Minyakita products have been proven to have good quality and are capable of influencing consumer purchase decisions, even in the presence of other cooking oil products. Quality is a source of competitiveness for every industry or company. Superior product quality will improve the company’s image and sustainability of the company’s excellence in the long term (Munizu, 2013).

The effect of price on purchase decisions: The statistical test results of the path analysis yielded a computed t-value of 2.797 with a significance level of 0.006. Since the significance level is smaller than 0.05 ($0.006 < 0.05$) and the regression coefficient has a positive value of 0.190, it can be concluded that the hypothesis asserting that “there exists a positive and significant influence of price on consumer purchase decisions of Minyakita cooking oil in Pasangkayu District” is accepted. This research finding is consistent with the studies conducted by Karsono and Salma (2023), Suyanto and Dewi (2023), which demonstrate that the price marketing mix significantly and positively influences consumer purchase decisions. The significant positive influence of price indicates that consumer purchase decisions regarding palm cooking oil products are influenced by the affordability and stability of product prices, the price-quality ratio, and market competitiveness with similar products. The more affordable and stable the prices are, and the more they align with the product’s quality, the higher the likelihood of consumers deciding to make a purchase. The prices of Minyakita cooking oil sold in the market are considered reasonably affordable for consumers, given the Maximum Retail Price (MRP) accepted by consumers. Therefore, when compared to similar products, consumers are more inclined to make a purchase decision.

The effect of place on purchase decisions: The statistical test results of the path analysis yielded a computed t-value of 1.050 with a significance level of 0.297. Since the significance level is greater than 0.05 ($0.297 > 0.05$) and the regression coefficient has a positive value of 0.066, the hypothesis asserting that “there exists a positive and significant influence of place on consumer purchase decisions of Minyakita cooking oil in Pasangkayu District” is rejected.



The results of testing this hypothesis indicate that place or distribution does not have a significant influence on purchase decisions. Based on the research findings of (Mittal *et al.*, 2020; Hidayat, 2021), it is also shown that the place or distribution marketing mix variable does not have a positive and significant influence on purchase decisions. This indicates that the more accessible the sales location is, the higher the likelihood of consumers deciding to purchase Minyakita products. Increased accessibility in terms of access, visibility, distribution process duration, and sales environment lead to higher consumer purchase decisions. Place plays an important role as the environment where and how products or services are provided (Hidayat, 2021). However, consumers sometimes do not prioritize the location where products are sold, so without improvements in sales location accessibility, it will not affect consumer purchase decisions.

The effect of promotion on purchase decisions: The statistical test results of the path analysis yielded a computed t-value of -1.283 with a significance level of 0.203. Since the significance level is greater than 0.05 ($0.203 > 0.05$) and the regression coefficient has a negative value of -0.081, the hypothesis asserting that “there exists a positive and significant influence of promotion on consumer purchase decisions of Minyakita cooking oil in Pasangkayu District” is rejected. This research finding is consistent with the study conducted by Mulyati (2020), indicating that the promotion variable does not have a positive and significant influence on purchase decisions. The correlation value generated is negative, indicating that frequent promotions will reduce consumer decisions to purchase Minyakita products. This aligns with Gusrita and Rahmidani (2019), which suggests that the more frequent promotions are conducted, the lower the consumer's decision to purchase the product. Promotions in this study have not been able to influence consumers' purchase decisions. The lower the consumer's perception of the results of the promotions conducted, the lower their decision to make a purchase.

The effect of purchase interest on purchase decisions: The statistical test results of the path analysis yielded a computed t-value of 8.574 with a significance level of 0.000. Since the significance level is smaller than 0.05 ($0.000 < 0.05$) and the regression coefficient has a positive value of 0.575, the hypothesis asserting that “there exists a significant influence of purchase interest on consumer purchase decisions of Minyakita cooking oil in Pasangkayu District” is accepted. This study aligns with the findings of research by Solihin (2020), indicating that purchase interest has a positive and significant effect on purchase decisions. Additionally, research by (Suyanto and Dewi, 2023; Mittal *et al.*, 2020) also demonstrates that the purchase interest variable significantly influences consumer purchase decisions. This proves that the higher the purchase interest in palm cooking oil products by

consumers, the higher their decisions to purchase palm cooking oil products in Pasangkayu District.

The indirect effects of product, price, place and promotion on purchasing decisions through purchase interest: The Sobel test results for the product yielded a test statistic value of 2.916, which is greater than the t table value (1.985), and the regression coefficient has a positive value of 0.424. Thus, the hypothesis stating that “products have a positive and significant effect on purchase decisions through purchase interest” is accepted. This finding indicates that the indirect effect of the product through purchase interest significantly influences purchase decisions. Purchase interest successfully acts as an intervening variable in influencing the product's purchase decisions. This aligns with the study by Hilmawan (2019), showing that purchase interest can mediate the effect of product quality on purchase decisions. This is because consumers nowadays are more critical when selecting products and tend to seek information and recommendations from others or through social media. With advanced technology, consumers have more freedom to gather various product-related references. As a result, consumers are interested and willing to make purchases and decide to buy the products.

For the price, the Sobel test yielded a test statistic value of 2.521, which is greater than the t table value (1.985), and the regression coefficient has a positive value of 0.357. Thus, the hypothesis stating that “price has a positive and significant effect on purchase decisions through purchase interest” is accepted. The indirect effect of the price through purchase interest significantly influences purchase decisions. This implies that purchase interest successfully acts as an intervening variable in influencing price on purchase decisions. This is in line with the research conducted by Ayumi and Indriani (2017), indicating that the price variable affects purchase decisions through purchase interest. This proves that an affordable price for Minyakita can attract consumer interest, thus impacting consumer purchase decisions.

However, for the place, the Sobel test yielded a test statistic value of 0.705, which is less than the t-table value (1.985), and the regression coefficient has a positive value of 0.119. Thus, the hypothesis stating that “place has a positive and significant effect on purchase decisions through purchase interest” is rejected. The indirect effect of the place through purchase interest does not significantly influence purchase decisions. This indicates that purchase interest cannot mediate the effect of place on purchase decisions. This is consistent with the study by Kusuma *et al.* (2013), which states that purchase interest cannot mediate the relationship between place and purchase decisions. The ease of place and distribution by Minyakita manufacturers and distributors has not been able to increase purchase decisions mediated by purchase interest. The distribution process of Minyakita has



not been effective and efficient, leading to inconsistency in consumer purchases.

Regarding the promotion, the Sobel test yielded a test statistic value of -2.308, which is greater than the t table value (1.985), and the regression coefficient has a negative value of -0.201. Thus, the hypothesis stating that “promotion has a positive and significant effect on purchase decisions through purchase interest” is accepted. The indirect effect of promotion through purchase interest has a significant negative effect on purchase decisions. This aligns with the study by Solihin (2020), showing that the promotion variable affects purchase decisions through purchase interest. Therefore, purchase interest is considered to mediate the negative effect of promotion on purchase decisions.

Conclusion: Products and prices can directly and partially influence consumer purchase interest and decisions, where products are assessed based on appearance, durability, reliability, aesthetics, and consumer perception of product quality, while prices are evaluated based on affordability, price-quality suitability, and competitiveness. Thus, the higher the product quality and the more affordable the price, the higher the consumer interest and decision to choose palm cooking oil products. On the other hand, the place directly and partially does not affect consumer purchase interest and decisions, considering accessibility, visibility, distribution process duration, and sales environment. Hence, it needs to be improved to exert its influence on consumer interest and decisions. Promotion directly and partially has a significant negative effect on purchase interest but does not significantly affect purchase decisions. Promotions, indicated by promotion frequency, discount frequency, and media used, imply that the more frequently promotions are conducted by manufacturers, the lower consumer purchase interest and decisions regarding palm cooking oil products. In addition, purchase interest directly influences consumer purchasing decisions. Indirectly, products and prices also affect purchase decisions mediated by purchase interest. Therefore, purchase interest, indicated by exploratory interest, referential interest, transactional interest, and preferential interest, successfully acts as an intervening variable influencing products and prices in purchase decisions. Furthermore, indirectly, purchase interest has not successfully mediated the place on purchase decisions. Indirectly, purchase interest can mediate promotions negatively, significantly affecting consumer purchase decisions.

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REFERENCES

- Adriyati, R. and F. Indriani. 2017. The Effect of Electronic Word of Mouth on Brand Image and Purchase Interest in Wardah Cosmetic Products. *Diponegoro Journal of Management* 6:1-14.
- Amir, M.F., M. Nidhal and A. Alta. 2022. From Ban to Export Acceleration: Why Edible Oil Price Intervention Ineffective. *Ringkasan Kebijakan* 6.
- Association, I.P.O. 2021. *Palm Industry Performance 2021 and Outlook 2022.1*.
- Ayumi, B. and F. Indriani. 2017. The Effect of Price and Promotion on Purchasing Decisions Through Purchase Intention as an Intervening Variable (Study on Hypermart Paragon Semarang Consumers). *Jurnal Ilmu Administrasi Bisnis* 10:1169-1176.
- BPS of Pasangkayu Regency. 2022. *Pasangkayu Regency in Figures*. <https://mamujuutarakab.bps.go.id/>
- Hidayat, Candra Wahyu. 2021. The Influence Of Mix Marketing On Decisions For Use Of Online Transportation Towards Global Competition. *International Journal of Science, Technology & Management* 2:1154 1163.
- Coanto, V.V., R. Novaria and A. Pujiyanto. 2019. The Effect of Product Quality, Location and Facilities on Consumer Purchase Interest. (Case Study at The Cowboy Burger Shop Surabaya. *Jurnal Dinamika Administrasi Bisnis* 4.
- Diansari, P., D. Rukmana and Wahyudi. 2023. Examining the Economic Impact of Cayenne Pepper in Traditional Markets of Makassar City: A Price Analysis Study. *Agriecobis : Journal of Agricultural Socioeconomics and Business* 6:34-41.
- Directorate General of Plantations, M. of A. of the R of I. 2021. *National Leading Plantation Statistics 2019-2021*. Directorate General of Plantations. Ministry. Agriculture. Republic of Indonesia 1-88. <https://ditjenbun.pertanian.go.id/template/uploads/2021/04/buku-statistik-perkebunan-2019-2021-OK.pdf>
- Evan, H. and S. Christian. 2021. The Effect of Marketing Mix on Purchasing Decisions at Buono Pulp in Surabaya.



- Performa 4:446-456.
<https://doi.org/10.37715/jp.v4i3.1658>
- Firmansyah, M.R., U. Sumarwan and M.M. Ali. 2021. Marketing Mix, Brand Equity, and Purchase Decisions of Packaged Rice Products. *Jurnal Manajemen Dan Agribisnis* 18:240-251.
<https://doi.org/10.17358/jma.18.3.240>
- Gusrita, D. and R. Rahmidani. 2019. The Influence of Marketing Mix and Social Environment on Online Purchasing Decisions for Women's Clothing in Padang City. *Jurnal Ecogen* 1:944.
<https://doi.org/10.24036/jmpe.v1i4.5674>
- Hanaysha, J.R., M.E. Al Shaikh and H.M. Alzoubi. 2021. Importance of marketing mix elements in determining consumer purchase decision in the retail market. *International Journal of Service Science, Management, Engineering, and Technology* 12:56-72.
- Hilmawan, I. 2019. The Effect of Product Quality and Price on Purchasing Decisions With Purchase Intention as an Intervening Variable (Study on Vario Motorcycle Consumers in Serang City). *Jurnal Elektronik Rekaman (Riset Ekonomi Bidang Manajemen Dan Akuntansi) Sekolah Tinggi Ilmu Ekonomi Galileo* 3:154-166.
<https://ojs.jurnalrekaman.com/index.php/rekaman/articledownload/21/21>
- Karsono, L.D.P. and L.F. Salma. 2023. The impact of 9P's of marketing mix strategy towards the decision to purchase halal tourism services. *Journal of Islamic Economics Lariba* 9:1-18.
<https://doi.org/10.20885/jielariba.vol9.iss1.art1>
- Kotler, P. and K.L. Keller. 2016. *Marketing Management (15th ed.)*. Pearson Education.
- Kusuma, E.I., J.Surya and I. Suhendra. 2013. The Effect of Green Marketing Strategy and Environmental Knowledge on Purchasing Decisions Through Purchase Intention as an Intervening Variable 14:1-10.
- Mahmoud, T.O., S.B. Ibrahim, A.H. Ali and A. Bledy. 2017. The Influence of Green Marketing Mix on Purchase Intention: The Mediation Role of Environmental Knowledge. *International Journal of Scientific & Engineering Research* 8:1040.
- Maretiana, R.S. and Z. Abidin. 2022. The Effect of Price, Service Quality and Promotion on Purchasing Decisions. *Jurnal Manajemen (JEBM)* 14:590-597.
- Meilani, Y.F.C.P. and S. Simanjuntak. 2011. Factors Affecting Interest in Buying Food and Beverage Product of Small and Medium Enterprises in Tangerang Regency. *Jurnal Manajemen Dan Kewirausahaan* 14:
- Mittal, S., T. Yusnitasari, T. Oswari, R.D. Kusumawati and V. Kumar. 2020. Impact of Marketing-Mix, Culture and Experience as Moderator to Purchase Intention and Purchase Decision for Online Music Product in Indonesia. *International Journal of Business Innovation and Research* 1:1.
- Muliyati. 2020. The Effect of Marketing Mix on Purchase Decisions. *Jurnal Manajemen Bisnis* 11:173-180.
- Multazam, J., M.A.R. 2022. Analysis of the Effect of Marketing Mix on Purchase Decisions and Impact on Consumer Loyalty at Chocolate Houses in Palu City. *Technium Business and Management* 2:16-26.
- Musran, M. 2013. Total Quality Management (TQM) Practices toward Product Quality Performance: Case at Food and Beverage Industry in Makassar, Indonesia. *IOSR Journal of Business and Management* 9:55-61.
- Pratiwi, R. and A.F. Dewi. 2021. Binary Logistic Regression Analysis on the Effect of Price, Service Quality and Promotion on Customer Satisfaction in Using Grab Services in Lamongan Regency. *Inferensi* 4:77.
- Raldianingrat, W. and F. Fitria. 2022. The Effect of Marketing Mix and Consumer Perceptions on Consumer Purchase Interest in Madona Potato Donut Home Industry in Unaaha District. *PROMOSI (Jurnal Pendidikan Ekonomi)* 10:82-96.
- Ramadan, F.L. and RR. Kurniawan. 2022. Corporate Governance of Edible Oil Companies in Indonesia: A Literature Study The Phenomenon of Scarcity and Price Increase of Cooking Oil in Indonesia. *Articles on Operations and Supply Chain Management* 1.
- Silaningsih, E. and P. Utami. 2018. The Effect of Marketing Mix on Consumer Purchase Interest in Micro Small and Medium Enterprises (UMKM) Processed Snack Products. *Jurnal Sosial Humaniora* 9:144.
- Solihin, D. 2020. The Effect of Customer Trust and Promotion on Consumer Purchasing Decisions at Mikaylaku Online Shop with Purchase Intention as an Intervening Variable. *Journal Mandiri: Ilmu Pengetahuan, Seni, Dan Teknologi* 4:38-51.
- Suyanto, A.M.A. and D.G. Dewi. 2023. Marketing Mix on Purchase Intention and its Impact on the Decision to Purchase Somethinc Products. *International Journal of Professional Business Review* 8:e03779.
- Syarifuddin, A.D.I., S. Basalamah, B. Sinring and M. Mas'ud. 2021. The Effect of Marketing Mix on Consumer Purchase Intention and Decisions on Frozen Food in Makassar, Indonesia. *American Journal of Humanities and Social Sciences Research* 5:32-40.
- Winarno, A.F. 2019. The Effect of Occupational Safety and Health, Work Environment, Morale, and Work Stress on Employee Performance Pt. Maspion I at Maxim Devision Spray Coating Department Sidoarjo. *JEM17: Jurnal Ekonomi Manajemen* 4:79-104.

