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EFFECT OF PRODUCT QUALITY, PACKAGING DESIGN, PRICE PERCEPTION, BRAND IMAGE ON LEMINERALE REPURCHASE INTENTION

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Abstract

This study aims to investigate the factors that influence consumer repurchase intentions on the Le Minerale mineral water brand in Greater Solo. In response to the significant growth of the food and beverage industry, drinking water companies are vying to expand their market share, creating intense competition. The main focus of companies, including Le Minerale, is to maximize marketing strategies through product quality, competitive pricing, attractive packaging design, and building a positive brand image. This research focuses on students of Universitas Muhammadiyah Surakarta as the study population, identifies repurchase intention as the dependent variable, and analyzes independent factors such as product quality, packaging design, price perception, and brand image. This study contributes by expanding the understanding of repurchase intention among university students, taking these factors into account to guide water companies in developing more effective marketing strategies. By involving these new variables, this research is expected to provide valuable insights for marketing practitioners and management science.

Keywords: *Repurchase Intention, Packaging Design, Price Perception, Brand Image, Product Quality*

INTRODUCTION

Every company tries to achieve its goals and objectives through the products it produces. The company strives for how to make its products well received by the public so that they decide to make a purchase. In the process of achieving these goals, the company directs its business activities to produce something that prioritizes customer satisfaction. One of the things that companies can do to strive for success is through strategies in marketing their products. Marketing strategy is a process in determining the company's techniques or ways to approach the public and offer the products produced. The formation of this marketing strategy is expected to be able to influence consumer interest in the company's products so that in the end they will make the decision to make a purchase and continue to repeat. One product that is simple but very much needed by the community is mineral water products (Purwaningsih et al., 2019).

The high demand for drinking water has more or less influenced the growth of Indonesia's Gross Domestic Product (GDP). In the first quarter of 2019, GDP growth in the food and beverage industry reached 6.77%, earning the title of the largest contributor to Indonesia's GDP (Rafikasari & Fauzy, 2021). This is considered an opportunity by companies so that various bottled drinking water companies with

various brands are established. This business seems simple because what is produced is only bottled drinking water, but the demand for bottled water is very high considering that drinking is one of the basic needs that must be met (Bangun, 2023). The high demand for bottled water ultimately makes competition among drinking water companies tighter. Various mineral water products are very well known in Indonesia and one of them is bottled mineral water brand Le Minerale (Rafikasari & Fauzy, 2021). To be able to compete with its competitors, Le Mineral seeks to expand its market share by maximizing its marketing strategy through product quality, price competition, attractive packaging design, and brand image so as to attract consumers to make repeat purchases.

Products are outputs or results of production activities in a company (M. Anang, 2019). The products produced must be considered from all attributes, especially quality to characteristics that are different from competitors (Satriadi, 2021). Product quality can influence consumer purchasing intentions. This is supported by Nazarani & Suparna (2021) which shows that product quality can have an influence on purchase intentions. A product produced by a company has several certain attributes and one of them is packaging. Tjiptono in Satriadi (2021) explains that product attributes act as identity and promotional and marketing tools. Packaging is included in an important attribute as the face of a product that will attract consumer attention because the first thing that will be seen by consumers is product packaging. Various information about the product is printed on the packaging, making it easier for consumers to find out several things about the product they want to buy. The packaging design and design of a product can subjectively influence consumers. Thus, an attractive packaging design can foster consumer purchasing interest. Research by Khuong & Tran (2018) found that packaging design has a positive effect on product purchase intentions, therefore the product packaging design must be easy to remember with attractive colors.

Another factor that can influence purchase intentions is price perception. Price perception is how price information is fully understood and provides deep meaning for consumers. Price perception is an important factor for consumer consideration in the product purchasing process (Rafikasari & Fauzy, 2021). Research by (Amanda et al., 2021) found that price perception has an influence on consumer purchase intentions. Apart from price, another factor that is also taken into account by buyers is brand image. Kotler and Armstrong in M. Anang (2019) suggest that brand image is consumer confidence in certain brands. Good consumer perceptions of a brand will make consumers feel a strong connection, making it easier for consumers to remember information from a particular brand product. Then & Nelly (2021) found that brand image is proven to have a positive influence on purchase intention.

This study uses repurchase intention as the dependent variable, this is one of the factors that distinguishes current research from previous research which uses purchasing decisions as the dependent variable. This study also uses packaging design as one of its independent variables which also distinguishes it from previous research. Researchers chose to study students at Universitas Muhammadiyah Surakarta because students have quite busy activities and based on initial observations, many students consume Le Minerale brand mineral water. From the explanation and description above, the researcher decided to conduct research on students' repurchase intentions for the Le Mineral brand mineral water and examine influencing factors such as price

perceptions, quality, packaging design, and brand image. The title of this research is "The Effect of Product Quality, Packaging Design, Price Perception, and Brand Image on Consumer Repurchase Intention on the Le Minerale Drinking Water Brand (Case Study on Students in Solo Raya).

METHODS

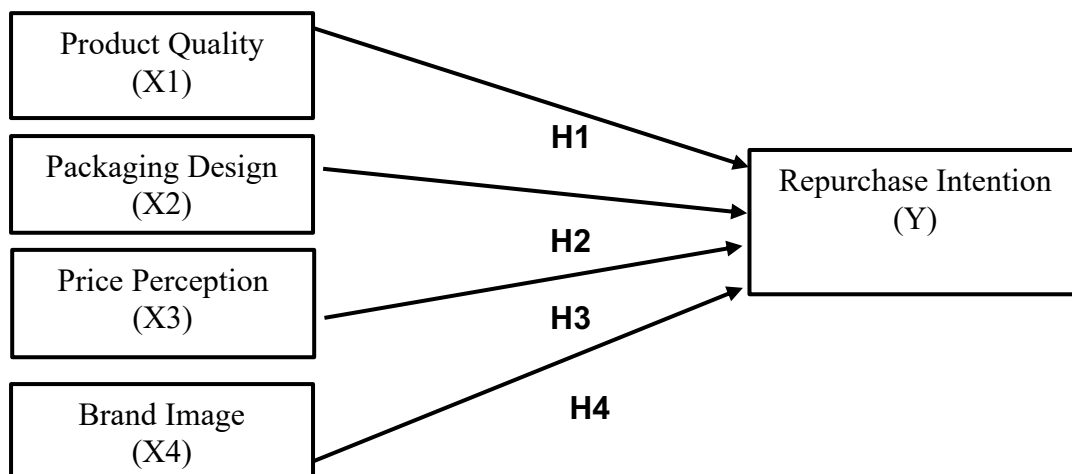
The type of research used by the author in this study is quantitative with explanatory methods. Quantitative research is research using numbers that are processed and statistical analysis is carried out which will then show the results so that a conclusion or conclusion can be drawn (Ahyar, 2020). Meanwhile, associative is used to determine the influence and relationship between one variable and another so that it can explain, predict and control a symptom (Abdullah, 2015). The population used in the study were students in Solo Raya who had bought AMDK Le Mineral. The sampling technique used is purposive sampling which has the meaning as a way of taking samples with various considerations so that the data obtained will be accurate, valid and accountable (Abdullah, 2015). The data used in this study are primary data. The questionnaire was used as a technique in extracting data in this study. In this study, the questionnaire was prepared using a Likert scale as a checked assessment on the question form (Ahyar, 2020).

Table 1. Gender Characteristics

Gender	Frequency (Person)
Male	62
Female	149
Total	211

Source: Data processed by researchers, 2023

Based on Table 1. above, this study used 211 student samples where from the selected sample when viewed in terms of gender, the overall sample was female as much as 71% and the remaining 29% were male. This shows that female respondents dominate in this study.



Picture 1. Research Model

RESULTS AND DISCUSSION

Validity Testing

The validity test is used to measure whether a questionnaire is valid or not. The questionnaire is said to be valid if the questions on the questionnaire are able to reveal something that will be measured by the questionnaire. The method used to assess the validity of the questionnaire is convergent validity. Convergent validity is fulfilled when each variable has a high loading factor value, which is >0.7 for each related question item (Abdillah, 2015).

Table 2. Validity Testing Results

No	Variable	Indicator	Correlation Coefficient	Description
1.	Product Quality	X1.1	0,773	Valid
		X1.2	0,827	Valid
		X1.3	0,797	Valid
		X1.4	0,742	Valid
		X1.5	0,797	Valid
2.	Packaging Design	X2.1	0,835	Valid
		X2.2	0,836	Valid
		X2.3	0,832	Valid
		X2.4	0,833	Valid
3.	Price Perception	X3.1	0,814	Valid
		X3.2	0,797	Valid
		X3.3	0,770	Valid
		X3.4	0,763	Valid
		X3.5	0,707	Valid
4.	Brand Image	X4.1	0,825	Valid
		X4.2	0,863	Valid
		X4.3	0,774	Valid
5.	Repurchase Intention	Y1.1	0.833	Valid
		Y1.2	0.867	Valid
		Y1.3	0.763	Valid
		Y1.4	0.858	Valid

Source: Data processed by researchers, 2023

From the validity test results, it can be seen that the outer model value provides the results of all loading factor values having a value of >0.7 so that each variable indicator is confirmed to be valid because it is able to effectively reflect the measured construct. It can be interpreted that each variable indicator has a strong and significant relationship with the construct or dimension it represents.

Reliability Testing

The reliability test is to measure a questionnaire which is an indicator of a variable or construct. A questionnaire is said to be reliable if a person's answer to a statement is

consistent or stable over time. A variable is said to be reliable if it provides a Cronbach Alpha value > 0.60 (Ghozali, 2016).

Table 3. Reliability Testing Results

No	Variable	Cronbach's Alpha	Description
1.	Product Quality	0,844	Reliable
2.	Packaging Design	0,854	Reliable
3.	Price Perception	0,824	Reliable
4.	Brand Image	0,754	Reliable
5.	Repurchase Intention	0,846	Reliable

Source: Data processed by researchers, 2023

The reliability test results in the table above state that all have a Cronbach's alpha value above 0.6 ($CA > 0.6$) so that the research instrument is declared reliable (Ghozali, 2016).

Normality Test

The normality test is used to test whether in the regression model, confounding or residual variables have a normal distribution. The normality test method that can be used to test residual normality is Kolmogorov-Sminov (KS).

Table 4. Normality Testing Results

N	211
Test Statistic Kolmogrof-Smirnov Z	0,985
Asymp.Sig.(2-tailed)	0,286

Source: Data processed by researchers, 2023

The normality test results in table 4. Shows that the Kolmogrof-Smirnov Z value for the purchase intention variable is 0.985 with Asymp.Sig. (2-tailed) 0.286 > 0.05 . This means that the research data meets the requirements for normal distribution. The Kolmogrof-Smirnov Z value is a coefficient used to measure the normality of data distribution data. The greater the Kolmogrof-Smirnov Z value, the smaller the probability value Asymp.Sig. (2-tailed) and the greater the Kolmogrof-Smirnov Z value of data distribution in a test model.

Multicollinearity Test

The multicollinearity test aims to test whether the regression model finds a correlation between the independent variables. A good regression model should not have a correlation between the independent variables. To determine the presence of multicollinearity in the regression model, it can be seen from the Variance Inflation Factor (VIF) value of less than 10 so that it can be stated that there is no multicollinearity (Ghozali, 2018).

Table 5. Multicollinearity Testing Results

No	Variable	Tolerance	VIF	Description
1.	Product Quality	0,427	2,340	No Multicollinearity
2.	Packaging Design	0,447	2,239	No Multicollinearity
3.	Price Perception	0,483	2,071	No Multicollinearity
4.	Brand Image	0,488	2,051	No Multicollinearity

Source: Data processed by researchers, 2023

The multicollinearity test results in the table above show that each independent variable has a tolerance value of more than 0.1 and a variable inflation factor (VIF) value of less than 10 so that it can be stated that there is no multicollinearity (Ghozali, 2018).

Heteroscedasticity Test

The heteroscedasticity test aims to test whether in the regression model there is an inequality of variance from residuals or other observations. Several ways to determine the presence or absence of heteroscedasticity in the regression model, but in this study using the Glejser test. There is no heteroscedasticity if the significance value is >0.05 . Conversely, heteroscedasticity occurs if the significance value is <0.05 (Ghozali, 2018).

Table 6. Heteroscedasticity Testing Results

No	Variable	Sig.	Description
1.	Product Quality	0,922	No Heteroscedasticity
2.	Packaging Design	0,599	No Heteroscedasticity
3.	Price Perception	0,481	No Heteroscedasticity
4.	Brand Image	0,235	No Heteroscedasticity

Source: Data processed by researchers, 2023

Based on table 6. The results of the heteroscedasticity test based on the Glejser test show that the significance value of each variable has a significance value of more than 0.05. It can be concluded that this regression model does not experience symptoms of heteroscedasticity.

Hypothesis Testing

Multiple Regression Analysis

The tool used in testing the hypothesis is multiple regression analysis. This analysis is used to measure the strength of the relationship between the independent variable and the dependent variable, as well as to show the direction of the relationship between

these variables. This analysis will form an equation which can be explained by the results below:

Table 7. Multiple Regression Analysis Results

Variable	Regression Coefficient	t-count	Sig.	Description
Constant	0,094			
X1 (Product Quality)	0,221	3,352	0,001	Significant
X2 (Packaging Design)	-0,094	-1,253	0,212	No Significant
X3 (Price Perception)	0,249	4,369	0,000	Significant
X4 (Brand Image)	0,628	6,759	0,000	Significant
F-count		72,233	R	0,764
F Sig.		0,000	<i>R Square</i>	0,584

Source: Data processed by researchers, 2023

Based on table 7. above shows the coefficient β is the form of a regression equation that can be generated as follows:

$$Y = 0,094 + 0,221 X1 - 0,094 X2 + 0,249 X3 + 0,628 X4 + e$$

From the above equation, it can be used as a reference to be interpreted as follows: The constant value (α) has a positive value of 0,094. The positive sign means that it shows a unidirectional influence between the independent variable and the dependent variable. This shows that if all independent variables which include X1, X2, X3, and X4 are 0, then Y on average is 0,094.

The regression coefficient value for the Product Quality (X1) has a positive value of 0,221. This shows that if Product Quality (X1) increases by 1, then Repurchase Intention (Y) will increase by 0,221 assuming other independent variables are considered constant. The positive sign means that it shows a unidirectional influence between the independent variable and the dependent variable. The regression coefficient value for the Packaging Design (X2) has a negative value of -0,094. This shows that if Packaging Design (X2) increases by 1, then Repurchase Intention (Y) will decrease by -0,094 assuming other independent variables are considered constant. The negative sign means that it shows the opposite effect between the independent variable and the dependent variable.

The regression coefficient value for the Price Perception (X3) has a positive value of 0,249. This shows that if Price Perception (X3) increases by 1, then Repurchase Intention (Y) will increase by 0,249 assuming other independent variables are considered constant. The positive sign means that it shows a unidirectional influence between the independent variable and the dependent variable. The regression coefficient value for the Brand Image (X4) has a positive value of 0,628. This shows

that if Brand Image (X4) increases by 1, then Repurchase Intention (Y) will increase by 0,628 assuming other independent variables are considered constant. The positive sign means that it shows a unidirectional influence between the independent variable and the dependent variable.

Test Coefficient of Determination (R²)

The Coefficient of Determination (R²) test is used to measure how far the model's ability to explain variations in the dependent variable. In table 7, the coefficient of determination (R²) is 0.584, which means that Product Quality, Packaging Design, Price Perception, and Brand Image can explain the Repurchase Intention variable by 58.4%. While the rest ($100\% - 58.4\% = 41.6\%$) is explained by other variables outside the model in this study.

F-test

The F test is used to test the effect of the independent variables together on the dependent variable by comparing f count with f table or seeing from its significance. In table 7, it can be seen that the significance value of F is 0.000. Because the significance value of F is less than 0.05 ($0.000 < 0.05$) so that H₀ is rejected. In other words, Product Quality, Packaging Design, Price Perception, and Brand Image together have a positive and significant effect on Repurchase Intention of students in Solo Raya.

T-test

The purpose of this test is to determine the effect of independent variables individually in explaining the variation in the dependent variable. To provide results for the t test, it can be explained in Table 7. with the following interpretation:

The t value generated in the Product Quality variable is 3.352 with sig. 0,001. The results of the analysis t count $3.352 > 2$ (t table) and sig. $0.001 < 0.05$ means that individually the Product Quality variable has a significant effect on Repurchase Intention. The t value generated on the Packaging Design variable is -1.253 with sig. 0,212. The results of the analysis of t count $-1.253 < 2$ (t table) and sig. $0.212 > 0.05$ means that individually the Packaging Design variable does not have a significant effect on Repurchase Intention. The t value generated in the Price Perception variable is 4.369 with sig. 0,000. The results of the analysis of t count $4.369 > 2$ (t table) and sig. $0.000 < 0.05$ means that individually the Price Perception variable has a significant effect on Repurchase Intention.

The t value generated on the Brand Image variable is 6.759 with sig. 0,000. The results of the analysis of t count $6.759 > 2$ (t table) and sig. $0.000 < 0.05$ means that individually the Brand Image variable has a significant effect on Repurchase Intention.

CONCLUSION

Based on the results of data analysis and discussion of the research results regarding the Effect of Product Quality, Packaging Design, Price Perception, and Brand Image on Consumer Repurchase Intention on the Le Minerale Drinking Water Brand, the conclusions of this study can be drawn as follows: The first hypothesis (H1) is accepted that the Product Quality variable has an effect on Repurchase Intention. So it can be concluded that the better the product quality, it will increase consumer repurchase intentions. The second hypothesis (H2) is rejected that the Packaging Design variable has no effect on Repurchase Intention. So it can be concluded that packaging design does not affect consumer repurchase intentions.

The third hypothesis (H3) is accepted that the Price Perception variable has an effect on Repurchase Intention. So it can be concluded that the better the price perception, it will increase consumer repurchase intentions. The fourth hypothesis (H4) is accepted that the Brand Image variable has an effect on Repurchase Intention. So it can be concluded that the better the brand image, it will increase consumer repurchase intentions.

Suggestions for further research are:

It is hoped that further research can expand the scope of its research by using other variables that can be factors that influence Repurchase Intention apart from the variables of Product Quality, Packaging Design, Price Perception, and Brand Image. For further research, it is hoped that it can use a data sample of more than 211 samples so that the research results will be stronger.

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