

# The Influence of Promotion, Brand Image and Price Perception of "Nusarina" Brand Mineral Water on Purchasing Decisions using Structural Equation Modeling Methods

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**Abstract:** *Purchasing decision is a concept in purchasing behavior where consumers decide to act or do something and in this case make purchases or take advantage of certain products or services (Balawera, 2013). Consumer decision making is basically a problem-solving process. Researchers use this purchasing decision variable because the study of purchasing decisions is still worth researching considering that the increasing number of products in circulation results in the need for various considerations for the public in making purchasing decisions. In this study, researchers took three variables, namely Promotion, Brand Image and Price Perception to become a reference for consumers to make purchasing decisions. This study aims to determine the effect of Promotion, Brand Image and Price Perception on Purchasing Decisions for the "Nusarina" brand mineral water. The sampling method used is to use the Lemeshow formula from the number of people in Wanayasa District to produce 269 respondent the data used is primary data with questionnaire techniques, hypothesis testing is carried out using multiple linear regression analysis techniques using the one-tailed test with the Analysis of moment structure version 24 application. The results showed that Promotion has a significant effect on Purchasing Decisions, while Brand Image has no effect and is not significant to Purchasing Decisions and for Price Perceptions has no negative and insignificant effect on Purchasing Decisions.*

**Keywords:** Purchase Decision, SEM, AMOS

## 1. Introducing

Purchasing decision is a concept in purchasing behavior where consumers decide to act or do something and in this case make purchases or take advantage of certain products or services (Balawera, 2013). Consumer decision making is basically a problem solving process. Researchers use this purchasing decision variable because the study of purchasing decisions is still worth researching considering that the increasing number of products in circulation results in the need for various considerations for the public in making purchasing decisions.

According to (Kotler and Keller, 2018) Promotion is any form of communication used to inform (to inform), persuade (to persuade), and remind (to remind) the target market about products produced by organizations, individuals or households.

(Tjiptono, 2015) Brand image is a description of consumer associations and beliefs about a particular brand. Brand image is the observations and beliefs that consumers hold, as reflected in associations or in consumer memories. Brand

image is a series of consumer beliefs about a particular brand so that the brand association is embedded in the minds of consumers. Brand image can be defined as a perception that appears in the minds of consumers when remembering a brand of a particular product.

According to Lee and Lawson-Body (2011: 532), price perception is a consumer assessment and associated emotional form regarding whether the price offered by the seller and the price compared to other parties makes sense, is acceptable or can be justified.

According to (Alma Buchari, 2016) suggests that a purchasing decision is a consumer decision that is influenced by financial economics, technology, politics, culture, product, price, location, promotion, physical evidence, people, process. So that it forms an attitude in consumers to process all information and draw conclusions in the form of a response that appears what product to buy.

For example, bottled mineral water customers at CV Rahmat Sanusi Putra, which is located at Kp Babakan Pameungpek, Wanayasa District. Bottled Mineral Water is one of the basic needs of society as a source of human life in order to avoid

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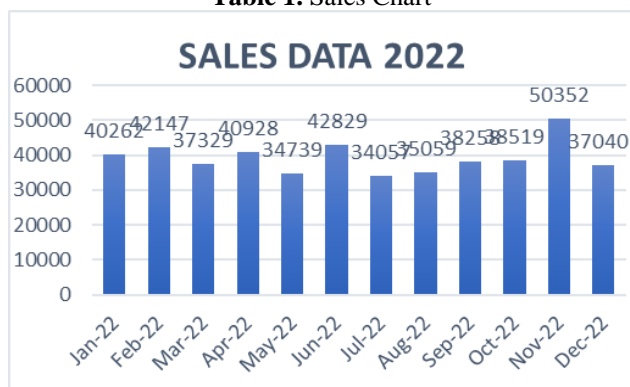
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the lack of fluids in the body. The increasing need of the community for practical and economical drinking water has increased the competition in the Bottled Drinking Water business (Widiaswara, 2017).

CV. Rahmat Sanusi Putra is a company engaged in the sale of Bottled Mineral Water with the "Nusarina Brand". The following is a graph of Sales of Bottled Mineral Water at CV. Rahmat Sanusi Putra as follows:

Table 1. Sales Chart



From the graph above, the sales of Bottled Mineral Water Products of the "Nusarina" Brand have a Fluctuating Trend in sales during 2022, the Fluctuating Trend itself is also called the Horizontal Pattern if around a constant average value there are fluctuating values. Fluctuations here are data up and down depending on the condition of the data as well as between one data and another. In this study there was a decrease in March, May, July, August, September, October and December 2022 and had a spike in sales in January, February, April, June and November. This is due to one of the factors is Promotion, namely sales at soccer events in the Wanayasa District area as well as Brand Image and Price Perception.

## 2. Literature Review

### 2.1 Structural Equation Modelling (SEM) Methods

According to (Ghozali, 2020) Structural Equation Modeling (SEM) is an evolution of multiple equation models developed from econometric principles and combined with organizing principles from psychology and sociology, SEM has emerged as an integral part of academic managerial research. SEM consists of 2 parts, namely the latent variable model and the measurement model, namely:

- The first part, the latent variable model, adapts the simultaneous equation model in econometrics. If in econometrics all variables are several measured/observed variables.
- While the second part, known as the measurement model, describes several indicators or several measured variables as an effect or reflection of the latent variable.

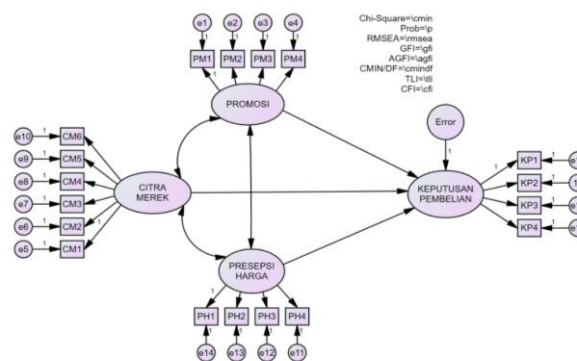


Figure 1. SEM Model (Structural Equation Model)

### 2.2 AMOS (Analysis of Moment Structure)

AMOS (Analysis of moment structure) is one of the programs or software used to estimate models in structural equation models. (Ghozali, 2020). Amos implements a general approach to data analysis in structural equation models that describe covariance structure analysis or causal modeling, this approach includes special cases of many well-known conventional techniques, including general linear models and general factor analysis.

### 2.3 Promotion

According to (Kotler and Keller, 2018) Promotion is any form of communication used to inform (to inform), persuade (to persuade), and remind (to remind) the target market about products produced by organizations, individuals or households. Promotion made as attractive as possible will increase purchasing decisions, on the other hand, promotions are less attractive, so purchasing decisions will decrease. This is in accordance with Ayuningtyas's research (2015) on Promotion on purchasing decisions for the Ezatta Jilbab at Royal Plaza Surabaya and results in promotions having a positive effect on purchasing decisions. In line with research conducted by (Ernawati, 2019) that Promotion has a positive and significant effect on Purchasing Decisions.

Promotion Indicators According to (Tjiptono, 2008) namely:

- 1) Advertising
- 2) Personal Selling
- 3) Sales Promotion
- 4) Public Relations

Based on the explanation above, the following hypothesis is obtained:

**H<sub>1</sub>: Promotion has a positive effect on Purchasing Decisions**

### 2.4 Brand Image

(Kotler and Keller, 2012) defines that brand image is the perceptions and beliefs held by consumers, as reflected in the associations held in consumer memory. Where considering something that is considered important in the brand image, a good brand image in the minds of consumers, will be a special attraction to attract purchasing decisions. This is in accordance with research conducted by Indrawati (2015)

showing that brand image has a positive effect on purchasing decisions. However, research conducted by (Wowor et al., 2021) that Brand Image has no effect on Purchasing Decisions, therefore it is necessary to conduct research for the Brand Image variable.

Brand Image Indicators According to (Kotler and Keller, 2016) among them are as follows:

- 1) Brand Association Advantage
- 2) Strength of Brand Association
- 3) Uniqueness of Brand Association

Meanwhile, according to (Swaminathan, 2020) indicators that can be used to measure and assess brand image are as follows

- 1) Company Image
- 2) User Image
- 3) Product Image

Based on the explanation above, the following hypothesis is obtained:

**H<sub>2</sub>: Brand Image has a positive effect on Purchasing Decisions**

## 2.5 Price Perception

According to Lee and Lawson-Body (2011: 532) suggest that price perception is a consumer assessment and associated emotional form regarding whether the price offered by the seller and the price compared to other parties makes sense, is acceptable or can be justified. If the price is expensive, the purchasing decision will increase, and vice versa if the price is low, the purchasing decision will decrease, where the purchasing decision occurs due to the influence of consumer attitudes and beliefs. This is in accordance with the research of Laila and Sudarwanto (2018) which states that price has a positive effect on purchasing decisions for the Rabbani Jilbab at the QTA Ponorogo Boutique. On the other hand, Setyani & Prabowo, 2020. stated that the most dominant indicator in the Price Perception variable is Product price affordability.

Price Perception Indicators according to (Kotler, 2008) namely:

- 1) Product price affordability
- 2) Price match with product quality
- 3) Product price competitiveness
- 4) Price compatibility with product benefits

Based on the explanation above, the following hypothesis is obtained:

**H<sub>3</sub>: Price perception has a positive effect on purchasing decisions**

## 2.6 Purchase Decision

According to (Alma Buchari, 2016) suggests that a purchasing decision is a consumer decision that is influenced by financial economics, technology, politics, culture, product, price, location, promotion, physical evidence, people, process. So that it forms an attitude in consumers to process all information and draw conclusions in the form of

a response that appears what product to buy. According to (Arthur A. Thompson, 2016) there are 4 indicators in purchasing decisions, namely:

- 1) According to customer needs
- 2) Has product benefits
- 3) Accuracy in buying products
- 4) Repeated purchase of circumstances

## 2.7 Hypothesis

Hypothesis testing is done using the one-tailed Deegan test at a 5% significance level. The hypothesis H<sub>1</sub> will be accepted if it has a t-value greater than 1.64 (Hair, 2010). The t-value in the AMOS 24 program is the Critical Ratio (C.R.) value on the Regression Weights of the fit model. If the Critical Ratio (C.R.) value  $\geq 1.64$  or the probability value (P)  $\leq 0.05$ , the research hypothesis H<sub>1</sub> is accepted, H<sub>0</sub> research is rejected.

## 3. Research Methodology

### 3.1 Type of Research

The type of research used in this study is quantitative research. Quantitative research is research conducted by collecting data in the form of numbers. The data in the form of numbers is then processed and analyzed to obtain scientific information behind the numbers. (Martono, 2011).

### 3.2 Object of Research

The object of this research is the consumers of bottled mineral water brand "Nusarina" produced by CV. Rahmat Sanusi Putra which is located at Babakan Pameungpeuk, Wanayasa District, Purwakarta Regency.

### 3.3 Population

According to (Sugiyono, 2017) population is a generalization area consisting of objects or subjects that have certain qualities and characteristics set by researchers to study and then draw conclusions. The general population in this study is the entire community of Wanayasa District. While the target population is all consumers who have purchased products or have consumed the "Nusarina" brand AMDK and the exact number is unknown.

### 3.4 Sample

The sample is part of the number and characteristics possessed by the population Sugiyono (Sugiyono, 2018) So if the population is too large, it is impossible for researchers to reach all populations, for example due to limited conditions, time and energy. Then the researcher can use a sample taken from that population. The sampling technique used in this study is the accidental sampling technique method, which is a sampling method based on one that is suitable, which means that the sample obtained by a researcher by chance without any prior planning and the researcher believes that the person is worthy of being a source of information for his research. (Sugiyono, 2017).

According to (Riyanto, S., & Hatmawan, 2020) sample calculation with the Lemeshow formula approach can be used to calculate the number of samples with a total population that cannot be known with certainty.

In the sample research, the criteria used are:

People in Wanayasa Sub-district who have consumed "Nusarina" Brand bottled water

$$n = \frac{z^2 \cdot p \cdot (1 - P)}{d^2}$$

Description:

n = Number of Samples

z = Z score at 95% confidence = 1.64

p = Maximum estimation

d = 5% error rate

From the formulation above, the determination of the number of samples using the Lemeshow formula with a maximum estimate of 50% and an error rate of 5%.

$$n = \frac{1,64^2 \cdot 0,5 (1 - 0,5)}{0,05^2}$$

$$n = \frac{2,6896 \cdot 0,5 \cdot 0,5}{0,05^2}$$

$$n = \frac{0,6724}{0,0025}$$

$$n = 268,96 = 269$$

### 3.5 Data Measurement Scale

(Sugiyono, 2013) stated that measuring variables with an interval scale using a Likert scale instrument. The questionnaire to be distributed is equipped with 5 alternative answers, each alternative is given a score, namely:

SS = strongly agree scored 5

S = agree is given a score of 4

N = neutral scored 3

TS = less agree is given a score of 2

STS = strongly disagree scored 1

### 3.6 Research Instruments

The measuring instrument used in the data collection process is to use a questionnaire sheet, the research instrument is used to measure the value of the variable under study, or in this study it is the variable Promotion (X1), Brand Image (X2), Price Perception (X3) and Purchase Decision (Y). Each instrument must have a scale, in this study, the scale used is a Likert scale.

### 3.7 Data Processing Technique

Data analysis techniques are grouping data based on variables and types of respondents, tabulating data based on variables from all respondents, presenting data for each variable studied, performing calculations to answer problem formulations, and performing calculations to test hypotheses that have been proposed.

#### a) Descriptive Statistics

Descriptive statistics are used to provide information about the characteristics of research variables and respondent demographics. Descriptive statistics relate to describing a data how the data is characterized. With descriptive statistical methods, we will know the classification of data, the tendency of centering and dispersion of data and the presentation of data in various forms of graphs.

#### b) Validity Test with CFA Test

Validity Test with CFA Test or Construct Validity Test (indicator), which measures whether the construct (indicator) is able or not to reflect the latent variable. Validity testing with confirmatory factor analysis is carried out to test the unidimensionality of the dimensions forming each latent variable. The validity of an indicator can be declared valid, if the indicator used can measure a particular construct if the critical ratio (CR) of the regression weight shows a value above 2.0 with a p smaller than the value of 0.05 (Ghozali, 2020).

#### c) Validity test with Average Variance Extracted (AVE) Test

Validity Test with Average Variance Extracted (AVE) Test, which is a confirmatory test by looking at the average variance extracted between indicators of a latent variable. Qualified if AVE > 0.5.

$$Variance\ extract = \frac{\sum Standar\ Loading^2}{\sum Standar\ Loading^2 + \sum \epsilon_j}$$

Description:

- Standard Loading ( $\lambda$ ) is obtained from standardized loading for each indicator obtained from AMOS calculation results.
- $\epsilon_j$  is the measurement error of each indicator = 1 - standardized loading<sup>2</sup>

#### d) Construct Reability Test

Construct Reliability is a measure of the internal consistency of the indicators of a variable that shows the degree to which each indicator indicates a common variable.... A research instrument is declared reliable if the limit value of the acceptable level of reliability is construct reliability > 0.7. While the reliability of 0.6 - 0.7 is still acceptable (Ghozali, 2020), the reliability test can be obtained through the following formula

$$Construct\ reliability = \frac{(\sum standar\ loading)^2}{(\sum standar\ loading)^2 + \sum \epsilon_j}$$

Description:

- Standard Loading ( $\lambda$ ) is obtained from standardized loading for each indicator obtained from AMOS calculation results.
- $\epsilon_j$  is the measurement error of each indicator = 1 - standardized loading<sup>2</sup>

#### e) Confirmatory Factor Analysis

SEM analysis in this study was carried out using a two-stage approach (Two-Step Approach). The first stage is done by specifying a full model as a CFA (Confirmatory Factor Analysis) model so that the CFA model of each exogenous and endogenous construct is acceptable. The CFA model is

acceptable if it has a good validity and reliability model data fit (Wijayanto, 2007). The second stage of the two-step approach is to combine the CFA models of exogenous and endogenous constructs that have been accepted into one overall full model to be estimated and analyzed to see the overall model fit and evaluation of the structural model so that an acceptable full model is obtained, confirmatory factor analysis is designed to test the unidimensionality of a theoretical construct. This analysis is often called testing the validity of a theoretical construct (Ghozali, 2020).

**f) Normality Test**

Maximum likelihood estimation requires the observed variables to fulfill the assumption of multivariate normality. Therefore, it is necessary to test to see the level of multivariate normality of the data used in this study. This test is by observing the kurtosis value of the data used. Multivariate normality evaluation with AMOS 24.00 is carried out using the critical ratio (c.r.) criteria from Multivariate on kurtosis, if it is in the range between ± 2.58, it means that the data is normally distributed multivariate. Thus it can be concluded that the data is normally distributed if the critical ratio (c.r.) value of Multivariate on kurtosis is below the absolute price of 2.58.

**g) Evaluation of Goodness of fit Criteria**

In SEM analysis, there is no single statistical test tool to test hypotheses about the model (Ferdinand, 2002). But various fit indices are used to measure the degree of fit between the presented model and the data presented. Fit indices used according to (Ghozali, 2020) are: Chi Square, Probability, RMSEA, AGFI, GFI, CMIN / DF, TLI and CFI.

**4. Result and Discussion**

**4.1 Validity Test**

Confirmatory Factor Analysis (CFA) Validity Test

**Table 2:** Confirmatory Factor Analysis (CFA) Validity Test Results

|     |      |    | Estimate | S.E.  | C.R.   | P   | Label  |
|-----|------|----|----------|-------|--------|-----|--------|
| PM1 | <--- | PM | 1        |       |        |     |        |
| PM2 | <--- | PM | 0,963    | 0,058 | 16,736 | *** | par_1  |
| PM3 | <--- | PM | 0,969    | 0,058 | 16,849 | *** | par_2  |
| PM4 | <--- | PM | 0,917    | 0,055 | 16,554 | *** | par_3  |
| CM1 | <--- | CM | 1        |       |        |     |        |
| CM2 | <--- | CM | 1,034    | 0,064 | 16,26  | *** | par_4  |
| CM3 | <--- | CM | 1,011    | 0,061 | 16,512 | *** | par_5  |
| CM4 | <--- | CM | 1,108    | 0,066 | 16,755 | *** | par_6  |
| CM5 | <--- | CM | 1,002    | 0,062 | 16,275 | *** | par_7  |
| CM6 | <--- | CM | 1,014    | 0,062 | 16,25  | *** | par_8  |
| PH4 | <--- | PH | 0,941    | 0,055 | 17,183 | *** | par_9  |
| PH3 | <--- | PH | 0,956    | 0,056 | 17,008 | *** | par_10 |
| PH2 | <--- | PH | 0,937    | 0,054 | 17,395 | *** | par_11 |
| PH1 | <--- | PH | 1        |       |        |     |        |
| KP1 | <--- | KP | 1        |       |        |     |        |
| KP2 | <--- | KP | 0,983    | 0,06  | 16,308 | *** | par_12 |
| KP3 | <--- | KP | 0,948    | 0,059 | 15,939 | *** | par_13 |
| KP4 | <--- | KP | 0,919    | 0,057 | 16,148 | *** | par_14 |

From the table above it can be seen that the results of the validity test on all indicators show that the constructs of variable X, namely Promotion (PM), Brand Image (CM),

Price Perception (PH) and Y, namely Purchasing Decisions (KP) have a significant regression weight with a value above 2.0 with p smaller than the value of 0.05. Thus it can be stated that all means that all indicators that make up the constructs of variables X and Y can be declared valid.

**h) Validity Test with Average Variance Extracted (AVE) Test**

Validity Test with Average Variance Extracted (AVE) Test, which is a confirmatory test by looking at the average variance extracted between indicators of a latent variable. Qualified if AVE > 0.5.

**Table 3:** Average Variance Extracted (AVE) Validity Test Results

| Variables              | AVE Value |
|------------------------|-----------|
| Promotion (PM)         | 0,637     |
| Brand Image (CM)       | 0,683     |
| Price Perception (PH)  | 0,680     |
| Purchase Decision (KP) | 0,660     |

In table 3. the AVE results in this study are all > 0.5. Thus it can be stated that all indicators that form variable constructs can be declared valid.

**i) Construct Reability Test**

The reliability test is used to test whether the research instrument can demonstrate its ability to measure without error and the results are always consistent (remain the same), even though it is used by other people or in other places to measure the same thing (Sugiyono, 2007). The reliability test in this study was carried out by looking at the construct reliability value in SEM which was obtained through the following formula (Ghozali, 2020):

$$Construct\ reliability = \frac{(\sum\ standar\ loading)^2}{(\sum\ standar\ loading)^2 + \sum\ \epsilon_j}$$

A research instrument is declared reliable if the limit value of the acceptable level of reliability is construct reliability > 0.7. Meanwhile, reliability of 0.6 - 0.7 is still acceptable (Ghozali, 2020). Based on the calculation of construct reliability with AMOS 24 software, the following results are obtained.

**Table 4:** Reliability Test Results

| Variables              | Construct Reliability |
|------------------------|-----------------------|
| Promotion (PM)         | 0,892                 |
| Brand Image (CM)       | 0,928                 |
| Price Perception (PH)  | 0,895                 |
| Purchase Decision (KP) | 0,886                 |

Based on the results obtained from testing the reliability of the research instruments in Table 4.4 above, because the construct reliability coefficient value > 0.7 is obtained, it can be stated that the research instrument is reliable.

**4.2 Normality Test**

Evaluation of multivariate normality with AMOS 24.00 is carried out using the critical ratio (c.r.) criterion from Multivariate on kurtosis, if it is in the range between ± 2.58, it means that the data is normally distributed multivariately.

Thus it can be concluded that the data is normally distributed if the critical ratio (c.r.) value of Multivariate on kurtosis is below the absolute price of 2.58 (Ghozali, 2020).

**Table 5:** Normality Test

| Variable     | min | max | skew   | c.r.   | kurtosis | c.r.   |
|--------------|-----|-----|--------|--------|----------|--------|
| KP4          | 1   | 5   | -0,264 | -1,768 | -0,915   | -3,065 |
| KP3          | 1   | 5   | -0,264 | -1,766 | -0,973   | -3,256 |
| KP2          | 1   | 5   | -0,387 | -2,594 | -1,019   | -3,41  |
| KP1          | 1   | 5   | -0,346 | -2,316 | -1,035   | -3,466 |
| PH1          | 1   | 5   | -0,392 | -2,627 | -1,001   | -3,352 |
| PH2          | 1   | 5   | -0,364 | -2,435 | -1,002   | -3,354 |
| PH3          | 1   | 5   | -0,333 | -2,226 | -1,017   | -3,406 |
| PH4          | 1   | 5   | -0,303 | -2,029 | -0,915   | -3,063 |
| CM6          | 1   | 5   | -0,313 | -2,098 | -0,923   | -3,091 |
| CM5          | 1   | 5   | -0,356 | -2,384 | -0,894   | -2,994 |
| CM4          | 1   | 5   | -0,343 | -2,298 | -1,091   | -3,651 |
| CM3          | 1   | 5   | -0,348 | -2,329 | -0,95    | -3,179 |
| CM2          | 1   | 5   | -0,247 | -1,657 | -0,951   | -3,184 |
| CM1          | 1   | 5   | -0,248 | -1,662 | -0,915   | -3,064 |
| PM4          | 1   | 5   | -0,277 | -1,858 | -0,977   | -3,272 |
| PM3          | 1   | 5   | -0,366 | -2,448 | -1,028   | -3,442 |
| PM2          | 1   | 5   | -0,353 | -2,362 | -0,959   | -3,212 |
| PM1          | 1   | 5   | -0,459 | -3,072 | -0,982   | -3,288 |
| Multivariate |     |     |        |        | -3,641   | -1,113 |

Based on Table 5. the critical ratio (c.r.) value of Multivariate on kurtosis is below  $\pm 2.58$ , it can be concluded that the multivariate data is normally distributed.

**4.3 Proposed Input and Estimation Matrix**

This study aims to explore patterns of interrelationships, so the matrix used is a matrix in the form of correlation. The AMOS program will convert from raw data to covariance or correlation form first as analysis input (Ghozali, 2020).

AMOS' standard estimation model suggestion is to use maximum likelihood (ML) estimation. ML estimation requires the fulfillment of assumptions:

a) Number of samples

According to (Ferdinand, 2002) If the sample size is small (100 - 200) then the estimation technique used is maximum likelihood estimation (ML), the number of samples used in this study was 269 samples, in fact this number can also use maximum likelihood estimation (ML). Data is multivariate normally distributed

b) Based on the software output in table 5. it can be concluded that the data has met the multivariate normal assumption, because the c.r kurtosis value is below 2.58.

c) The hypothesized model is valid

d) The hypothesized model has been based on existing marketing theory. Supported by the validity value in the output presented in the standardized regression weight table as follows:

**Table 6:** Output Standardized Regression Weight

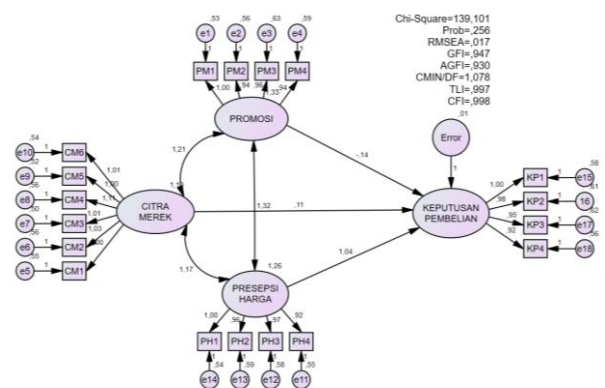
|          |             | Estimate |
|----------|-------------|----------|
| PM1 <--- | PROMOTION   | 0,836    |
| PM2 <--- | PROMOTION   | 0,815    |
| PM3 <--- | PROMOTION   | 0,819    |
| PM4 <--- | PROMOTION   | 0,811    |
| CM1 <--- | BRAND IMAGE | 0,817    |

|          |                   |       |
|----------|-------------------|-------|
| CM2 <--- | BRAND IMAGE       | 0,822 |
| CM3 <--- | BRAND IMAGE       | 0,832 |
| CM4 <--- | BRAND IMAGE       | 0,84  |
| CM5 <--- | BRAND IMAGE       | 0,824 |
| CM6 <--- | BRAND IMAGE       | 0,822 |
| PH4 <--- | PRICE_PERCEPTION  | 0,817 |
| PH3 <--- | PRICE_PERCEPTION  | 0,812 |
| PH2 <--- | PRICE_PERCEPTION  | 0,823 |
| PH1 <--- | PRICE_PERCEPTION  | 0,845 |
| KP1 <--- | DECISION_PURCHASE | 0,826 |
| KP2 <--- | DECISION_PURCHASE | 0,814 |
| KP3 <--- | DECISION_PURCHASE | 0,802 |
| KP4 <--- | DECISION_PURCHASE | 0,808 |

Based on table 6. it can be seen that there are no indicators with a value below 0.5, so that the formation indicators presented in the model can fulfill the valid assumptions.

**4.4 Confirmatory Factor Analysis**

After the hypothesis model and data matrix are inputted, the next analysis step is the analysis of the full model, namely confirmatory factor analysis, confirmatory factor analysis which is carried out to investigate the unidimensionality of the indicators that explain a factor or variable formation. For the 4 variables used in this study, it will be observed and confirmed whether the variable is strong enough to reflect a dimension of a factor. The confirmatory model of this research is as follows:



**Figure 2:** Path Diagram Output

**Table 7:** Goodness of Fit Confirmatory Factor Analysis

| GOF         | Cut of Value                    | Results | Ket |
|-------------|---------------------------------|---------|-----|
| Chi-Square  | X2 table df(0.05,129) = 156.508 | 139,101 | FIT |
| Probability | $\geq 0,05$                     | 0,256   | FIT |
| RMSEA       | $\leq 0,08$                     | 0,017   | FIT |
| GFI         | $\geq 0,90$                     | 0,947   | FIT |
| AGFI        | $\geq 0,90$                     | 0,930   | FIT |
| CMIN/DF     | $\leq 2,00$                     | 1,078   | FIT |
| TLI         | $\geq 0,90$                     | 0,997   | FIT |
| GOF         | Cut Of Value                    | Results | Ket |

Based on Table 7. Goodness Of Fit Confirmatory Factor Analysis above, the value of Chi-Square, probability, CMIN / DF, GFI, AGFI, TLI, CFI, RMSEA is known. Chi-Square has a value of 139.101, so the theoretical model and the sample model are said to be suitable because the smaller the Chi-Square indicates that the input covariance matrix between predictions and actual observations is not

significantly different. The probability value is 0.256 and CMIN / DF has a positive value of 1.078. This means that the hypothesized model fits the observation data. The model fit is also supported by the GFI value = 0.951, AGFI = 0.930, TLI = 0.997, CFI = 0.998 and the RMSEA value of 0.017.

Thus Confirmatory Factor Analysis on the measurement model above shows that the model is acceptable.

#### 4.5 Hypothesis Test

After going through the confirmatory factor analysis process and analyzing the full model, it can be seen that the model is well accepted. Based on the Goodness Of Fit Evaluation. Then the next step is to test the research hypotheses proposed based on the results of the analysis that has been carried out. Hypothesis testing is carried out using the one-tailed Deegan test at a 5% significance level. The hypothesis will be accepted if it has a t-value greater than 1.64 (Hair, 2010). The t-value in the AMOS 24 program is the Critical Ratio (C.R.) value on the Regression Weights of the fit model. If the Critical Ratio (C.R.) value  $\geq 1.64$  or the probability value (P)  $\leq 0.05$  then  $H_0$  is rejected (the research hypothesis is accepted). Regression Weights values: the results of processing by AMOS 24 appear in the following table:

**Table 8:** Regression Weight

|    |      |    | Estimate | S.E.  | C.R.  | P    |
|----|------|----|----------|-------|-------|------|
| KP | <--- | PM | 1,037    | 0,542 | 1,91  | 0,05 |
| KP | <--- | CM | 0,105    | 0,743 | 0,14  | 0,88 |
| KP | <--- | PH | -0,139   | 0,636 | -0,21 | 0,82 |

By looking at the test results above, the hypothesis results of this study are as follows:

- 1) **The First Hypothesis** is that the Promotion variable has a significant effect on the Purchasing Decision variable. Where the C.R value is  $1.91 > 1.64$  and  $P 0.05 > 0.05$ . with an estimated value of the effect of Promotion on Purchasing Decisions of 1.037. This means that  $H_1$  is accepted, where there is a significant effect of Promotion on Purchasing Decisions. This means that there is a significant effect of Promotion on Purchasing Decisions. Hasil penelitian ini sejalan dengan penelitian yang dilakukan oleh (Ernawati, 2019) bahwa Promosi memberikan pengaruh yang positif dan signifikan terhadap Keputusan Pembelian. Promosi berperan dalam penjualan produk AMDK merek Nusarina di Kecamatan Wanayasa.
- 2) **The second hypothesis** is that the Brand Image variable does not have a significant effect on the Purchasing Decision variable. Where the C.R value is  $0.14 < 1.64$  and  $P 0.88 > 0.05$ , with an estimated value of the effect of Brand Image on Purchasing Decisions of 0.105. This means that  $H_0$  is accepted, where there is an influence and insignificance of Brand Image on Purchasing Decisions. This means that there is no insignificant influence of Brand Image on Purchasing Decisions.
- 3) **The third hypothesis** is that the Price Perception variable has no negative and insignificant effect on the Purchasing Decision variable. Where the C.R value is -

$0.21 < 1.64$  and  $P 0.827 > 0.05$ . with an estimated value of the effect of Price Perception on Purchasing Decisions of -0.139. This means that  $H_0$  is accepted, where there is no negative and insignificant effect of perceived price on purchasing decisions. This means that there is no negative effect of perceived price which is not significant on purchasing decisions.

**Table 9:** The following hypothesis test results proposed in this study are described

| Hypothesis | Construct        | C.R.  | P    | Decision       |
|------------|------------------|-------|------|----------------|
| 1.         | Promotion        | 1,91  | 0,05 | $H_1$ Accepted |
| 2.         | Brand Image      | 0,14  | 0,88 | $H_0$ Accepted |
| 3.         | Price Perception | -0,21 | 0,82 | $H_0$ Accepted |

#### 5. Conclusion

Based on the discussion and results of the research that has been carried out, the following conclusions can be drawn:

- 1) Testing Promotion Variables has a positive and significant effect. This means that the greater the promotion held, the greater the level of Purchasing Decisions of consumers of the "NUSARINA" brand bottled water in Wanayasa District and the most dominant indicator in the Promotion variable is Advertising. The results of this study are in line with research conducted by (Ernawati, 2019) that Promotion has a positive and significant effect on Purchasing Decisions. Promotion plays a role in the sale of Nusarina brand bottled water products in Wanayasa District.
- 2) Brand Image Variable Testing has no effect and is not significant. This means that the Purchasing Decision for the "NUSARINA" brand AMDK product in Wanayasa District does not depend on Brand Image. The most dominant indicator in the Promotion variable is Company Image. This research is in line with research conducted by (Wowor et al., 2021) that Brand Image has no effect on Purchasing Decisions.
- 3) Variable Testing Price Perception has no negative and insignificant effect. This means that the Purchase Decision for the "NUSARINA" brand AMDK product in Wanayasa District does not depend on Price Perception. The most dominant indicator in the Promotion variable is Product Price Affordability. This research is in line with research conducted by (Setyani & Prabowo, 2020)

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