CHAPTER III RESEARCH METHODS

A. Place and Time of Research

This research was conduct at the Traditional Market Pasar Raya Padang City located in Kampung Jao, Padang City, West Sumatra 25227. The location of the research was deliberately (purposive), based on the consideration that the Traditional Market Pasar Raya Padang City is a largest traditional market in Padang City. In the Traditional Market Pasar Raya Padang City, there are many rice traders who sell SFSP rice and market it directly to consumers. This study was conducted for 1 (month) starting from the issuance of research recommendations from the Faculty of Agriculture starting from May 1 to May 31, 2025.

B. Research Methods

The research method use in this study is a quantitative descriptive method with a survey approach to find out how factors affect consumer purchase decisions on SFSP rice in Traditional Market Pasar Raya Padang City. Research with a quantitative descriptive method is a research conducted to find out the value of the observed variables, both the variables themselves and the relationship of one variable to another, so that this research can answer and decipher how much value a variable has to something (Garaika *et al*., 2019).

The descriptive method, according to Nazir (2009), is a method in researching the status of a group, age, an object, a condition, a system of thought or a class of events in the present. The purpose of this descriptive research is to make a systematic, factual and accurate description of the facts, properties and relationships between the phenomena being investigated.

According to Sugiyono (2016) the survey method is a method carried out on large and small populations, but the data studied is data from samples taken from the population, so that it can find relative events, distributions and relationships between variables, sociological and psychological. Through this survey method, it is possible

to obtain detailed information and information about the research topic to be researched.

The information was obtained from observations conduct by researchers with questionnaires as a data collection tool regarding factors that affect consumer decisions. With this, the answer to the research question of factors influencing consumer purchase decisions on SFSP Rice at the Traditional Market Pasar Raya Padang City is obtained.

C. Sampling Methods

According to Sugiyono (2015), samples are part of the number and characteristics possessed by the population. Samples are useful for population research purposes and are useful for the purpose of research on opulation and its aspects. The sampling method used in this study is a non-probability sampling technique, namely by means of Accidental Sampling, because the consumer population is difficult to know. This is due to the fact that the number of consumers who buy SFSP Rice at the Traditional Market Pasar Raya Padang City every day is not the same. According to Sugiyono (2015), non-probability sampling is a sampling technique that does not provide the same opportunity or opportunity for each element or member of the population to be selected as a sample. Determination of respondents at the research location accidentally. According to Martono (2015), accidental sampling is a technique for determining samples based on chance, that is, anyone who happens to meet a researcher can be used as a sample if it is considered suitable as a data source, with criteria. In this case, accidental sampling will aim at consumers who were coincidentally see by researchers who purchase SFSP Rice at the Traditional Market Pasar Raya Padang City.

Polulation in this study is all consumers who purchase SFSP Rice at the Traditional Market Pasar Raya Padang City. The respondents taken in the data collection have the following criteria: (1) Respondents who are 17 years old or older, with the consideration that the age of 17 years is considered to have an attitude and can determine the right thing and knows that they have an attitude and can determine

the right and wrong things of an event so that it can be used as a sample in this study, (2) Respondets have made at least one purchase and consumed SFSP Rice more than onece in the period from February to May, considering this criterion, are considered to be able to know and be able to assess the attributes owned by SFSP Rice.

Based on Roscoe's opinion in the book Sugiyono (2018) stated that in a study that uses multivariate analysis, the minimum number of samples is 10 times the number of variables studied. In this study, the variables will use 8 variables (7 independent variables and 1 dependent variable), so 10 x 8 = 80 respondents will obtain. So that the minimum number of sample members in this study is 80 consumers of SFSP Rice in Traditional Market Pasar Raya Padang City. The number of respondents was taken based on the number of rice shops in the traditional market of Pasar Raya Padang City. According to Appendix 2, there are 10 rice shops that are willing to conduct research and still sell SFSP rice during data collection. However, because in this study only focused on rice commodities, there were 8 rice shops that would be studied, because 2 other shops sell other staples besides rice. Based on interviews with each rice shop seller, which states that the number of consumer populations who buy SFSP rice in each non -permanent rice shop, therefore for the number of respondents in each store will be carried out accidentally and prospective respondents have the right criteria for respondents.

D. Data Collection Methods

The data used in this study is sourced from two types of data, namely primary data and secondary data. Primary data is data obtained directly from original sources obtained by researchers such as observations, interviews, and documentation (Sangadji and Sopiah, 2013). Meanwhile, secondary data is obtained from a second source or secondary source of the required data. Secondary data sources do not directly provide data to data collectors but through other people or documents. For this data collection, it was obtained from the Badan Pusat Statistik (BPS), previous reports, journals, consumer behavior books

The primary data in this study come from the results of interviews with the help of questionnaires give to research participants. Interviews are the collection of data from participants that are determine with guidelines on a list of questions that have been prepare. Questionnaire is a data collection technique that is carried out by giving several questions orally or in writing to participants to be answere. This technique can be efficient if the researcher knows exactly the variables to be measured Kasiran, (2008). In this study, data collection by interviews and filling out questionnaires will carried out by distributing or assisted in filling out questionnaire forms to consumers around business places which will be guided in filling out questionnaire forms.

E. Data Measurement Methods

In measuring a variable, the researcher uses a likert scale as a tool to measure the variable that is use as the object of research. According to Sugiyono (2016) the likert scale is used to measure the attitudes, opinions, and experiences of a person or group of people about social phenomena. In research, this social phenomenon has been specifically determined by the researcher, which is further referred to as the research variable.

The Likert scale is used to express the level of agreement or disagreement of respondents regarding various statements regarding behaviors, objects, people, or events. Usually the proposed scale consists of 5 or 7 points. In this study, a 7-point likert scale was used (Ferdinand, 2006).

The type of scale used in answering questions from the questionnaire uses a 5-point likert scale to examine how strongly the subject agrees or disagrees with the statements described as follows:

Table 5. Scale Likert

No	Answer Type	Weight
1	SA = Strongly Agree	5
2	S = Strongly	4
3	N = Netral	3
4	D = Disagree	2
5	SD = Strongly Disagree	1

Source: Sugiyono (2016)

F. Observed Variables

A research variable is a concept that can be assume by a person or a certain phenomenon or object that contains values, a concept that has a variety of values. The variables in this study can be describe according to the research objectives as follows:

1. The first research objective is to describe the characteristics of SFSP Rice consumers in Traditional Market Pasar Raya Padang City, to find out, the description of indicators can be seen in the following table:

Table 6. Demographic Characteristics and Consumer Behavior

Variable	**Indicator**
Demographic Characteristics	Age
	Gender
	Income
	Job
	Domicile
Characteristics of Consumer Behavior	Purchase frequency in 1 month
	Since when did SFSP rice consume
	Reasons for buying SFSP rice
	Nominal money spent in 1 purchase

2. The second goal is to analyze the factors considered by consumers in making decisions to purchase SFSP rice. In this study, the variables observed consisted of exsogenous (independent) variables and endogenous variables (dependen):

a. Exsogenous or independent variable (X): is a variable that affects or is the cause of change and the emergence of endogenous (dependent) variables. The exsogenous variables used in this study consist of:

-Cultural factors (X_1)

Conceptual definition: culture is all values, beliefs, norms, customs, habits, and traditions that can affect a person's behavior, attitudes, beliefs, and habits in society (Sumarwan, 2011)

Operational definition: cultural factors in this study cover customs/culture, geographical area, and social class.

Table 7. Cultural Factor Indicators

Variable	Indicator
X1.1	Consumer habits/beliefs in consuming SFSP rice as a staple food
X1.2	Current culture/trend of consuming SFSP rice
X1.3	The distance between the consumer's residence and the place of purchase
X1.4	Consuming SFSP rice can describe the social class of consumers

-Social factors (X_2)

Conceptual definition: social factors are factors that can affect a person's behavior consisting of reference groups, family, and roles status of consumers (Kotler and Amstrong, 2008)

The operational definition of social factors in this study includes reference groups, families, as well as roles and statuses.

Table 8. Social Factor Indicators

Variable	Indicator
X2.1	Recommendations of friends/colleagues that affect the purchase of SFSP rice
X2.2	The majority of friends/colleagues buy SFSP rice
X2.3	Experiences from family members who influence consumers in purchasing SFSP Rice
X2.4	The role and position of consumers in their environment that have influenced purchasing decisions

-Personal factors (X_3)

Conceptual definition: personal factors are buyer decisions that are influenced by personal characteristics such as age and life cycle stage, occupation, lifestyle, personality, and self-concept, as well as income (Kotler and Armstrong, 2001)

Operational definition: personal factors in this study include age, occupation, lifestyle, personality and self-concept, and income.

Table 9. Personal Factor Indicators

Variable	Indicator
X3.1	The influence of consumer age on the purchase decision of SFSP Rice at the Traditional Market Pasar Raya Padang City
X3.2	The effect of the job of the consumer on purchase decisions of SFSP Rice at Traditional Market Pasar Raya Padang City
X3.3	Buying SFSP rice at Traditional Market Pasar Raya Padang City reflects the healthy lifestyle of consumers
X3.4	Buying SFSP rice reflects the personality of consumers who like simplicity and affordable quality

-Psychological factors (X_4)

Conceptual definition: psychological factors are a state in which a person has a desire from himself to determine decisions according to his desires which can be influenced by motivation, perception, learning or knowledge and belief factors (Kotler, 2009)

Operational definition: psychological factors in this study include motivation, understanding, learning, or knowledge as well as beliefs and attitudes.

Table 10. Psychological Factor Indicators

Variable	Indicator
X4.1	Self-encouragement to buy SFSP Rice at Traditional Market Pasar Raya Padang City
X4.2	Understanding of the good content of the products offered
X4.3	The experience when buying SFSP rice affects consumers to buy or not there
X4.4	Trust in the quality of SFSP rice offered
X4.5	Convenience when buying SFSP rice at Traditional Market Pasar Raya Padang City

-Product Quality Factors (X_5)

Conceptual definition: a product quality factor is the ability of a product to perform its function. Indicators of the product quality include performance, durability, reability, features, aesthetics, and perceived quality (Kotler and Keller, 2009)

Operational definition: product quality factors in this study include performance, reability, durability, perceived quality, conformance, service ability, and aesthetics.

Table 11. Product Factor Indicators

Variable	Indicator
X5.1	The quality performace of SFSP rice at Traditional Market Pasar Raya Padang City
X5.2	The reability of the the product which has fluffy texture and delicious consistenly
X.5.3	Durability of SFSP rice at Traditional Market Pasar Raya Padang City
X5.4	Attractive design packaging of SFSP rice at Traditional Market Pasar Raya Padang City
X5.5	Consideration for purchasing SFSP Rice because the tastes better compared to other brand of rice

-Price factors (X_6)

Conceptual definition: price is the amount of money charged for a product and service or the amount of value that a customer exchanges to benefit from owning or using a product and service. Prices have indicators such as list prices, rebates, payment periods and credit terms (Kotler, 2009)

Operational definition: price factors in this study include price affordability, price suitability with product quality, price competitiveness, and price suitability with benefits.

Table 12. Price Factor Indicator

Variable	Indicator
X6.1	Price suitability with the quality of SFSP rice at Traditional Market Pasar Raya Padang City
X6.2	SFSP rice price competitiveness that is more economical than other rice brands
X6.3	The price of SFSP rice is in accordance with the benefits felt

-Brand Image Factor (X_7)

Conceptual definition: brand image is the impression of consumers and the tendency of consumers to choose a brand that consumers as a whole believe according to the viewpoint inherent in consumers' memories

Operational definition: brand image factors in this study include maker image, user image, and product image

Table 13. Brand Image Factor Indicator

Variable	Indicator
X7.1	SFSP rice made by a company that has a good reputation and wide sales distribution
X7.2	SFSP rice is safer to consume and widely used by housewives
X7.3	SFSP rice brands are easier to remember

b.Dependent or endogenous variables

Dependent variables are variables that are influenced or that are the result of the existence of exsogenous (independent) variables. The dependent variable used in this research is the purchase decision.

i. Conceptual definition: a purchase decision is a consumer decision regarding the preference for brands in the selection pool (Kotler, 2009)

ii. Operational definition: purchase decisions are measured through indicators of need recognition, information search, alternative evaluation, purchase decisions, and post-purchase behavior.

Table 14. Purchase Decision Factor Indicator

Variable	Indicator
Y.1	The need and interest in consuming SFSP Rice because of its distinctive taste
Y.2	Obtaining information from close friends, family, or internet media about SFSP rice
Y.3	Evaluation of alternatives regarding product information and flavor comparison with other rice brands
Y.4	Consumer purchase decision to buy SFSP Rice
Y.5	Consumer behavior after purchasing SFSP rice

G. Data Analysis

Data analysis is the process of processing, presenting, interpreting, and analyzing data obtained from the field with the aim of making the data presented meaningful, so that readers can know the results of the research (Martono, 2015). The data analysis process aims to answer the research period and prove the research hypothesis; Compile and interpret the data that has been obtained; Compile data in a meaningful way so that it can be understood; so that it makes it easier for readers to understand the results of our research; explain the compatibility between theory and findings in the field; and explain the arguments of the findings in the field (Murtono, 2015). There are two data analysis in this study, namely:

1. Descriptive Analysis

According to Sugiyono (2016), the definition of descriptive analysis is an analysis used to determine the existence of the value of an independent variable, either one or more variables without making comparisons or relationships with other variables. To answer the first objective of the study, it is to find out the characteristics of consumers related to age, gender, income, status, last education, occupation, length of product consumption, and reasons for being interested in consuming products. The results of the research are sourced from observations and direct interviews with the

consumers concerned and will be studied theoretically sourced from appropriate literature and literature reviews.

In a systematic, factual, and accurate description of the facts and phenomena investigated, a number of questions are asked to consumers using a questionnaire. Then the respondents' answers were collected and then grouped based on the same answer for each variable of each variable, and based on the same answer for each variable. The data was analyzed to obtain the percentage of the number of respondents for each variable, and based on the percentage obtained, conclusions will then be drawn to be able to describe the characteristics of consumers who buy SFSP Rice at the Traditional Market Pasar Raya Padang City.

Formula used:

$$\%\text{Number of Respondents} = \frac{\text{the same answers of number respondents}}{\text{number of respondents}} \text{x}100\%$$

2. Partial Least Square (PLS) Analysis

To answer the second research objective regarding the factors that affect the decision to purchase SFSP Rice at the Traditional Market Pasar Raya Padang City a questionnaire will use a likert scale. Scala likert is used to measure the value of each variable indicator, then the indicator is used as a starting point to compile instrument items that can be in the form of questions.

Based on the results of the answers obtain from the questionnaire using a Likert scale, then the data was analyzed using PLS-SEM analysis using the SmartPLS 3.0 software tool. Structural Equation Model (SEM) or better known as Partial Least Square (PLS) is a method that can close the weaknesses of the regression method. PLS is classified as a non-parametric type. PLS modeling does not require data with normal distribution. PLS is variant-based so it does not require large quantities of samples.

The research using PLS analysis has a different orientation from multiple regression analysis. The PLS procedure emphasizes the overall use of covariants

compared to individual cases. In ordinary statistical analysis, the minimized function is the difference between the observed and predicted values, while in PLS the minimized is the difference between the sample covariance and the predicted covariance. One of the advantages of PLS is the ability to create a construction model as a latent variable or variable that cannot be directly observed but is measured using indicator variables directly and is assumed to have a relationship with the latent variable. Thus, it is possible to determine the unreliability of a measurement by allowing structural relationships between latent variables that are made into a model (Haryono, 2017).

PLS-SEM analysis is carried out by evaluating the measurement model or outer model and the structural model or inner model.

A. Measurement Model or Outer Model Test

The measurement model or outer model shows how each indicator relates to its latent variable. The outer model is used to ensure that each indicator is worthy of measurement (valid and reliable). There are 3 criteria to assess the outer model, namely Convergent Validity, Discriminant Validity, and Composite Reliability.

i. Convergent Validity

According to Ghozali and Latan (2015), convergent validity is a tool to assess the magnitude of the correlation between the construct and its latent variables. The convergent validity value can be seen from the loading factor. The assessment of the factor value indicator above 0.7 is said to be ideal, which means that the indicator is said to be valid for measuring the construct. Another method to measure convergent validity is with Average Variance Extraction (AVE), if the AVE value of each variable has a value above 0.5, it has met the convergent validity criteria (Hair et al, 2011).

ii. Discriminant Validity

The discriminant validity of the indicator can be seen in the cross loading between the indicator and its construction. If the correlation of the construct with the indicator is higher than the correlation of the indicator with the indicator in other blocks. The value of the cross loading itself must be greater than 0.7 for each

indicator. Another method to assess discriminant validity is to compare the square acr of the average variance exracted (√AVE) for each construct with the correlation between the construct and the other construct with the model. The model is said to have a fairly good discriminant validity if the root of the AVE for each construct is greater than the correlation between the construct and the other construct (Fornell & Larcker, 1981 in Ghozali, 2011).

In Gozali & Latan (2015) explained another test to assess the validity of a construct by looking at the AVE value. The model is said to be good if the AVE value of each construct is greater than 0.50.

iii. Reliability Test

In the reliability test, it can be seen from two things, namely the composite reliability value and Cronbach's alpha. Composite reliability must have a value greater than 0.7 and for cronnach's alpha must be greater than 0.6. indicators that have achieved the assessment requirements can be said to be reliable and can be analyzed further (Ghozali, 2011).

Table 15. Outer Model Assesment Criteria

Criteria	Explanation
Convergent Validity	An indicator is said to be ideal and highly correlated if the loading factor values >0.7 and 0.6 are considered sufficient.
Average Variance Extract (AVE)	The value of the indicator on crossloading must be higher than other indicators and must be above 0.7
Composite Reliability	The composite reliability value must be above 0.7
Cronbach’s Alpha	Cronbach'salpha value must be higher than 0.6

B. Structural Model or Inner Model Test

Structural models or inner models are carried out to predict causal relationships between latent variables.

i. R-Square

In assessing the structural model, first assess the R-Square for each endogenous latent variable as the predictive power of the structural model. Testing of the structural model was carried out by looking at the R-Square value which is a goodness-fit-model test. Changes in the R-Square value can be used to explain the influence of certain exogenous latent variables on endogenous latent variables whether they have a substantive influence. R-Square values of 0.75, 0.50, and 0.25 can be concluded that the model is strong, moderate, and weak (Ghozali & Latan, 2015).

ii. F-Square

This F-Square test was carried out to test the goodness of the model. F-Square values of 0.02, 0.15, and 0.35 can be interpreted whether the predictors of latent variables have a weak, medium, or large influence on the structural level (Ghozali, 2011).

iii. Q2 Predictive Revelance Test

Predictive relevance is a test that is carried out to show how good the observation value is produced using the blindfolding test. If the Q square value > 0 then it indicates that the model used is good or relevant and if the Q square value < 0 then it indicates that the model is not good or less relevant (Ghozali and Latan, 2015).

iv. Indirect Effect Test (Significance)

This test was carried out to see the magnitude of the indirect influence between the variables. This test was carried out using the bootsrapping method using SmartPLS 3.0. In this study, there is an intervening variable, namely audit dysfunctional behavior. The intervening variable is said to be able to mediate the influence of the exogenous variable (independent) on the endogenous variable (dependent) if the statistical T value is greater than the table T and the P value is

smaller than the significant level used (5% or 0.05). The significant niali used (two-tailed) t-values were 1.65 (significant level=10%), 1.96 (significant level 5%), and 2.58 (significant level=1%) (Ghozali and Latan, 2015).

Table 16. Inner Model Assessment Criteria

Criteria	Explanation
R-Square	Values of 0.67, 0.33, and 0.19 indicate strong, medium, and weak models
Effect size f^2	0.02, 0.15, and 0.35 (weak, medium, strong)
Q^2 predictive revelance	Q^2>0 indicates that the model has predictive revelance and if Q^2<0 means that the model lacks predictive revelance
Significant	The significant values used (two-tailed), t-value 1.65 (significant level=10%), 1.96 (significant level=5%), and 2.58 (significant level=1%).

H. Hypothesis Research

The hypothesis in this study consist of:

H_0: There is no influence between cultural, social, personal, psychological, product, and price variables, and brand image on the purchase decision of SFSP Rice at Traditional Market Pasar Raya Padang City.

H_1: There is an influence between cultural, social, personal, psychological, product, price, and brand image variables on the purchase decision of SFSP Rice at Traditional Market Pasar Raya Padang City

The SEM-PLS analysis in this study was used to analyze the influence of cultural, social, personal, psychological, product, price and brand image variables on the purchase decision of SFSP Rice at Traditional Market Pasar Raya Padang City.

Hypothesis testing is carried out using the bootstrap method by looking at the P-value. P-value is used for statistical test decisions by comparing the P-value with alpha (α) = 5% with the following conditions:

1. P-value ≤ 0.05, then the decision is that the hypothesis is accepted. The accepted hypothesis means that there is a significant influence of independent variables on dependent variables.
2. The P-value > 0.05, then the decision is that the hypothesis is rejected. The rejected hypothesis means that there is no influence of independent variables on dependent variables.

Based on literature review, previous research, and data analyisis that has been explained, a PLS-SEM construction which will later become a conclusion from the variables involved in this research. in this PLS-SEM construct model, where where there is a reflective line (a line of latent variables to indicators) and a formative line (line of latent variables to variable Y). It is called reflective because the indicator is the embodiment or reflection of its construction. While the formative line has the characteristic that changes in the indicator will cause changes in the structure. Indicators in this case are the cause or form the construct. The characteristics of reflective indicators are similar and interchangeable. On the other hand, formative constructs generally have different contents. Each indicator is unique and not interchangeable. So the PLS-SEM construct model of thought in this study is as follows:

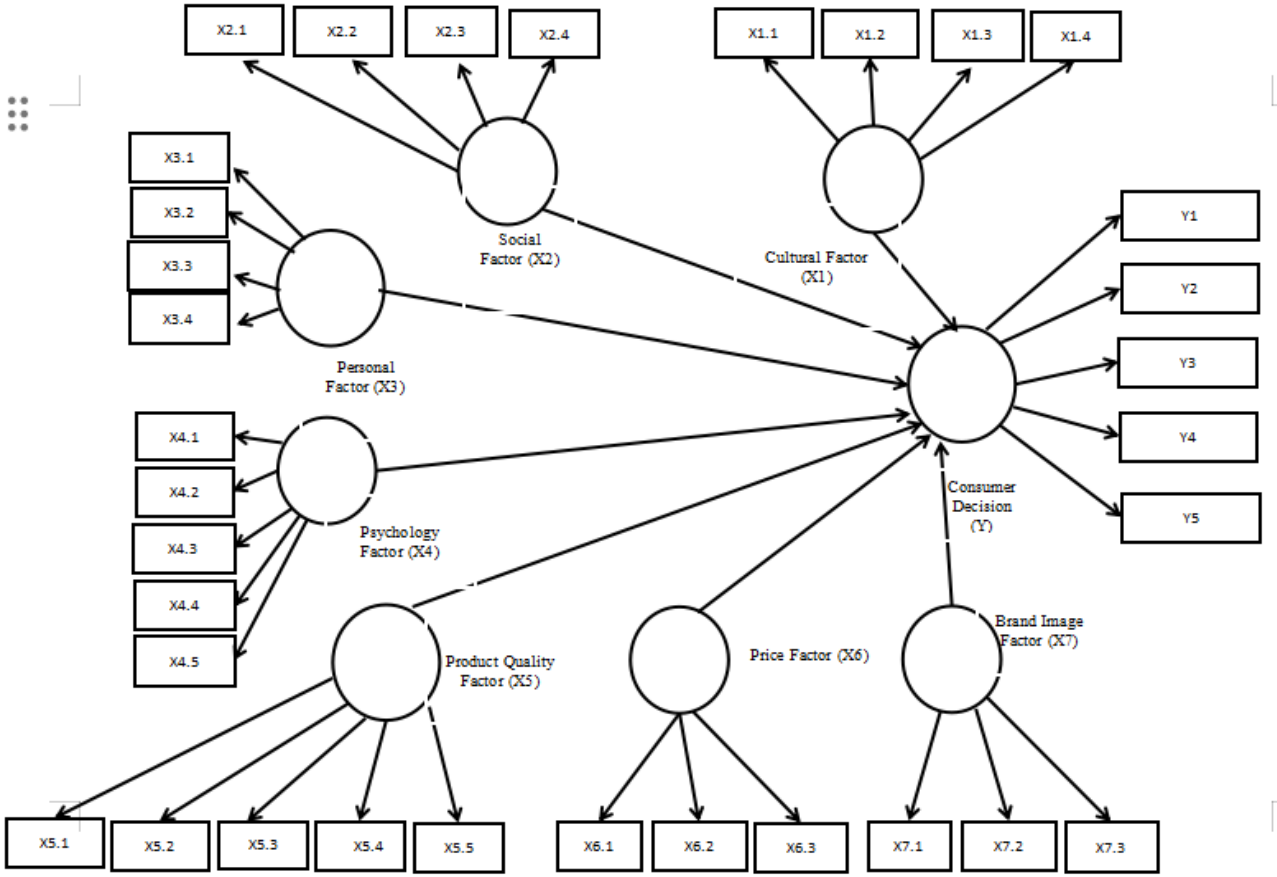

Figure 4. PLS-SEM Constract Model

Table 17. PLS-SEM Construct Model Descriptions

Variable	Indicator	Information
Cultural Factor (X1) (Setiadi, 2003)	X1.1	Consumer Habits
	X1.2	Current Trend
	X1.3	Geographical Conditions
	X1.4	Social Class
Social Factor (X2) (Setiadi, 2003)	X2.1	Direct Friend Recommendations
	X2.2	Indirect Friend Recommendations
	X2.3	Family Recommendation
	X2.4	Consumer's Social Position
Personal Factor (X3) (Setiadi, 2003)	X3.1	Age
	X3.2	Income
	X3.3	Lifestyle
	X3.4	Personality
Psychology Factor (X4) (Setiadi, 2003)	X4.1	Encourage Yourself
	X4.2	Understand the Product Content
	X4.3	Previous Consumer Experience
	X4.4	Confidence in Quality
	X4.5	Convenience on Buying
Product Quality Factor (X5) (Putri, 2019)	X5.1	Performance (Kotler and Keller, 2016)
	X5.2	Reability (Kotler and Keller, 2016)
	X5.3	Durability (Kotler and Keller, 2016)
	X5.4	Aesthetics (Kotler and Keller, 2016)
	X5.5	Perceived Quality (Kotler and Keller, 2016)
Price Factor (X6) (Putri, 2019)	X6.1	Price Affordability (Kotler and Armstrong, 2008)
	X6.2	Price Competitiveness (Kotler and Armstrong, 2008
	X6.3	Price Matching with Benefits (Kotler and Armstrong, 2008)
Brand Image Factor (X7) (Putri, 2019)	X7.1	Maker Image (Nedi, 2008)
	X7.2	User Image (Nedi, 2008)
	X7.3	Product Image (Nedi, 2008)
Consumer Decision (Y) (Setiadi, 2003)	Y.1	Introduction of Needs
	Y.2	Information Research
	Y.3	Evaluation of Various Alternatives
	Y.4	Purchase Decision
	Y.5	Post-Purchase Behaviour