

CHAPTER III RESEARCH METHODS

3.1 Research Design

In this research approach, the author uses a quantitative approach. The study investigated the influence of *influencer marketing* and Instagram marketing strategies . Regarding the purchase decision on MSGlow products targeted at the millennial generation in Semampir District, North Surabaya City.

3.2 Location and Time of Research

The object of this research will be carried out is the millennial generation in Semampir District, North Surabaya City.

3.3 Types and Data Sources

3.3.1 Types of Research

In this study, quantitative research is used, because the data obtained will be in the form of numbers. From the numbers obtained, it is further analyzed by data analysis.

3.3.2 Data Sources

According to Sugiyono, (2019:106). Based on the source, the data is divided into two, namely primary data and secondary data.

1. **Primary data** is one of the data obtained directly from the respondents studied. This data collection is also carried out by questionnaire or from direct observation. The primary data used by the researcher is the quisioner
2. **Secondary data** is data obtained indirectly which can be in the form of information about an overview of the subject of the research. The secondary data used by the researcher comes from compas.co.id.

3.4 Research Population and Sample

3.4.1 Population

The population in this study is people in North Surabaya City who know *skincare products* , especially MSGlow products, the target population of this study is targeted in Kecamatan Semampir, North Surabaya City with a target of the millennial generation.

3.4.2 Sampling Techniques

According to Sugiyono, (2019:31) the sample is part of the number and characteristics possessed by the population. Thus the sample can represent the entire population in less way than the population because it is the part of the population whose characteristics are the subject of investigation.

According to Riyanto and Hatmawan, (2020:40). The *Lemeshow* method is a formula used to calculate the number of samples in quantitative research when the

total population is not known for sure. The sampling in this study uses the Lameshow method. The sample from this study is part of the total population of people in Surabaya where they are located in North Surabaya City, Semampir District with women or men who have bought MSGlow products at least 100 from respondents. Meanwhile, the sample size was obtained using the Lameshow formula.

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

Information:

n : Number of samples

z : Score

z at 95% confidence = 1.96

p : Maximum estimate

D : Error rate

From this formulation, the researcher uses a maximum estimate of 50% and an error rate of 10%.

$$n = \frac{1,96^2 \cdot 0,5 (1 - 0,5)}{0,1^2}$$

$$n = \frac{3,8416 \cdot 0,5 \cdot 0,5}{0,1^2}$$

$$n = \frac{0,9604}{0,1^2}$$

$$n = 96,04 = 97$$

Based on the results of the calculation, the number of samples obtained was rounded up to 100 respondents.

3.5 Data Collection Techniques

The data collection technique in this study uses questionnaire media. According to Sugiyono, (2019:31). A questionnaire is a data collection method in which respondents are asked to respond to a question or written statement.

Commonly used data collection techniques include surveys, interviews, observations, document analysis, experiments, and the use of questionnaires or questionnaires. The choice of this technique depends on the purpose of the research, the type of data needed, and the source and population being studied. To collect data, the researcher used a questionnaire method.

Table 3.1 Likert scale

Valuation	Score
Strongly disagree	1
Disagree	2
Disagree	3
Agree	4
Strongly Agree	5

3.6 Variable Definitions and Operational Definitions

3.6.1 Variable Definitions

The definition of variables is from the definition used in this study which includes independent and dependent variables. The dependent variable (X) is the element that influences or triggers the change or emergence of the dependent (bound) variable, while the dependent variable (Y) is the variable that is affected or arises as a result of the existence of an independent variable.

There are two research variables, namely the dependent variable and the independent *variable*. Bound variables are variables that depend on other variables, while independent variables are variables that do not depend on other variables.

In relation to this study, the variables used are as follows:

1. Dependent Variable

This variable is the main focus of the study. According to (Sugiyono, 2019) dependent variables are often referred to as output variables, criteria, consequences or bound variables. Dependent (bound) variables are variables that are influenced or that are the result of the existence of independent variables. In this study, the dependent variable is: Purchase Decision (Y).

2. Independent Variable

Independent variable (X) is a variable that affects or causes changes and the emergence of dependent (bound) variables Independent variables (X) consist of:

- *Influencer Marketing*

Influencer marketing is a marketing strategy that features a person (individual) having followers when promoting a product so as to influence other people/the environment to take a stance in an absolute decision, ultimately using the product.

- *Buying Experience*

The online shopping experience is defined as a psychological state embodied or expressed by consumers as a subjective response to the websites owned by online retailers (Rose et al., 2019)

- Instagram Marketing Strategy

According to As'ad, H. AbuRumman, (2022:28). Social media marketing is one of the marketing strategies used by entrepreneurs to be part of a network with the community through the internet.

- Purchase Decision (Y)

Djatkiko and Pradana (2019:34) purchase decision is the final decision of consumers in purchasing products formed from a series of stages of pre-purchase behavioral activities.

3.6.2 Operational Definitions

Operational variables are the use of measurements or observations in a clear and specific way so that they can be observed objectively in the context of research. This involves abstract or theoretical concepts being variables that can be measured by concrete methods. Through the right operational variables, researchers can measure and compare data with more general research results. Mustafa (2022:36-37) The following are the operational variables used:

Table 3. 2 Operational Definition

It	Research Variables	Variable Definition	Indicator	Scale	Source Indicator
1	The Influence of Influencer Marketing (X1)	According to Lie Shearent (2022:20), <i>influencer marketing</i> is a strategic way of marketing techniques by using a person or figure with a large number of followers through social media which has an impact on the behavior of their followers to increase sales of a product brand. So it can be concluded	1. Trust (<i>Trustworthni</i>) 2. Attractiveness 3. Interaction 4. Sumber Daya (<i>Sourcer Credibility</i>)	Likert (1,2,3,4)	According to Mochamad Luqmanul Hakim (2022)
2	Buying Experience (X2)	According to Meyer and Schwager in Aulia &	1. Emotional 2. Action (<i>Physical</i>)	Likert (1,2,3,4)	According to Agustina, & Djati

		Wayuningsih, (2021:29) defines the buying experience as an internal and subjective response that consumers have to direct or indirect contact with a company.	3. Panca Indra (<i>Sensory</i>) 4. Social		Julitriarsa (2021)
3	Instagram Marketing Strategy (X3)	According to Siti Malikhah, (2023:29). Saying that marketing strategy is the logic of marketing and based on which business units are expected to achieve marketing objectives, marketing strategy consists of making decisions about marketing costs using multiple social <i>platforms</i> and network <i>websites</i> to promote the products or services of the organization through paid and unpaid means.	1. <i>Online Communities</i> 2. <i>Interaction</i> 3. <i>Sharing of content</i> 4. <i>Accessibility</i>	Likert (1,2,3,4)	According to Iswatul Saldina, & Novita Anjarsari (2022)
4	Purchase Decision (Y)	According to Kotler & Armstrong, (2020:25). Explaining	1. Product Options 2. Brand Choice	Likert (1,2,3,4)	According to, Dian Mardiana, & Rosdiana Sijabat (2022)

		that the purchase decision is the decision-making stage where a person actually buys a product or service.	3. Satisfaction 4. Belief		
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3.7 Data Processing Process

This study involves several data processing techniques, which are carried out in the following order:

a. *Editing*

Data obtained from *google forms*, or from an observation is edited to be able to ensure the accuracy and completeness of the data.

b. *Coding*

Coding, or coding, involves classifying the answers from respondents based on their type. At this stage, a score or symbol is given to each respondent's answer to facilitate further data analysis, which is coded.

c. *Tabulasi*

Tabulation is the advanced stage after editing and *coding* are completed. At this stage, the data is arranged in the form of tables to facilitate analysis according to the research objectives. The table used is usually in the form of a frequency table that presents data in the form of *percentages*.

3.8 Data Analysis Methods

Data analysis is the process of finding and compiling data that has been obtained systematically, and synthesizing, compiling a pattern of conditions, then describing how the state of these units will eventually be drawn so that it is easy to understand (Sahir 2021:43). In this study, the author uses quantitative data analysis techniques, namely data analyzed using statistical analysis. The examiner uses the SPSS (*Statistical program for social science*) data analysis tool for its data analysis tool.

3.9 Test Instrument

3.9.1 Validity Test

Validity tests are used to test whether the instrument can be used to measure what is supposed to be measured. The validity test was carried out to determine the ability of the instrument to measure the research variables. This test is carried out by submitting questionnaire questions which will later be given to respondents and then a Product Moment Correlation test is carried out. To test the instruments used, the researcher used the SPSS version 20 program. To test the validity of the research instrument, the Pearson *Bivariate correlation technique* was used (Sahir 2021:48).

3.9.2 Reliability Test

Reliability is a translation of the word reliability which means trust, reliability, consistency and so on (Sugiyono 2019:87). The measurement results can be trusted if in several measurements of the same group of subjects the same results are obtained, as long as the measured aspect does not change. The reliability of the instrument is required to obtain data according to the measurement objectives. This reliability test uses *the Alpha Cronbach method* to determine whether each instrument is reliable or not. To measure the reliability of the instrument, it is carried out using the value of the cronbach alpha coefficient which is close to 1 indicating reliability, while the level of reliability with alpha criteria is as follows:

- a) 0.80 – 1.0 = Good Reliability
- b) 0.60 – 0.79 = Accepted Reliability
- c) <0.60 = Poor Reliability

3.10 Classical Assumption Test

3.10.1 Normality Test

The normality test is intended to find out whether the variable variables in the study have a normal distribution distribution or not (Sugiyono, 2019). The normality test in this study uses the Kolmogrov Smirnov test which was calculated using the help of SPSS version 20, to find out whether or not the data is normally distributed only seen on the Asymp row. Sig (2-tailed). If the value is less than the specified significance level, for example 5%, then the data is not distributed normally, on the contrary, if the Asymp value is good. Sig is greater than or equal to 5% then the data is distributed normally.

3.10.2 Multicollinearity Test

The multicollinearity test aims to test whether the regression model finds a correlation between independent variables. A good regression model should not have correlations between independent variables. The correlation value can be seen from collinearity statistics, if the VIF (*Variance Inflation Factor*) value shows a result greater than 10 and a tolerance value greater than 0.1, then the symptoms of multicollinearity do not exist.

3.10.3 Heteroscedasticity Test

The heteroscedasticity test serves to test whether in the regression model there is a variance inequality from the residual from one observation to another. Spearman Rank coefficient test, if the correlation significance result is less than 0.05 (5%), then the equation in the regression model contains heteroscedasticity.

3.11 Hypothesis Testing and Data Analysis Techniques

3.11.1 Hypothesis Testing Techniques

3.11.1.1 Simultaneous Test (F)

The F test is used to find out whether there is a simultaneous influence of the independent variable on the bound variable. The hypotheses used in this test are:

H_0 : Independent variables do not have a significant influence together against their bound variables.

H_a : Independent variables have a significant influence on Together with the bound variables.

3.11.1.2 Test t (Partial)

The partial test or t-test is interpreted as a partial regression coefficient test to determine the significance of the partial or each independent variable to the bound variable (Sahir 2021:53). The test criteria for the t-test are:

1. If the significant probability > 0.05 or if $t \text{ calculates} < t \text{ table}$ then H_0 is accepted.
This means that the free variable does not partially affect the bound variable
2. If the significant probability < 0.05 or if $t \text{ calculates} > t \text{ table}$ then H_0 is rejected.
This means that the independent variable partially affects the bound variable.

3.11.2 Data Analysis.

3.11.2.1 Homepage Linear Regression Analysis

Multiple linear regression analysis is used to measure the influence between more than one independent variable (independent variable) on dependent variables (bound variables) (Sugiyono, 2019). Multiple linear regression equations:

$$Y = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + e$$

Caption :

Y = Purchase

b_0 = Result

b_0 = Konstanta

b_1, b_2 = Coeficin Regresi

X_1 = *Influencer Marketing*

X_2 = Buying Experience

X_3 = Instagram Marketing Strategy

e = Error (the interfering variable outside the independent variable).

3.11.2.2 Determination Coefficient Analysis (R^2)

The determinant coefficient is symbolized by R^2 which is used to see the influence of the independent variable on the bound variable. If the R^2 value is close to one, it means that the model is stronger to explain the independent variable to the bound variable. And if R^2 is close to 0, then the weaker the independent variable is to the bound variable in explaining it.