CHAPTER 3

RESEARCH METHODOLOGY

3.1. Introduction

In this chapter, the researcher will discuss the process needed to conduct the research. Primary data will be obtained using a questionnaire by giving questions to respondents distributed using Google forms. The answer from this questionnaire will be used as hypothesis testing data.

3.2. Research Location

This research will be conducted in Yogyakarta by spreading questionnaire targeting Indonesian millennial university students.

3.3. Data Collection

This research uses a quantitative form of research. This quantitative research emphasizes the use of statistical data, figures, structures, and controlled experiments (Hamdi & Bahruddin, 2014, p. 5).

3.3.1. Data Source

The data going to be used in this research is primary data. Primary data is data obtained directly from the source. In this study, the primary data used are data derived from the results of questionnaires that have been distributed to respondents according to the research object.

3.3.2. Data Collection Method

Questionnaire is used as a technique to collect the data of this study. The questionnaire has advantages because it contains effective and efficient information in accordance with the research objectives

(Abdillah & Jogiyanto, 2015, p. 52). The questionnaire applied in this study was included in a closed-ended questionnaire. Closed-ended questionnaire means the researcher directs the respondent to answer or argue based on the choice of answers provided by the researcher in the questionnaire (Abdillah & Jogiyanto, 2015, p. 52). Closed-ended questionnaire consists of several statements with a number of options that have been determined. Later respondents were asked to answer by marking the option that was most appropriate for them (Suwartono, 2014, p. 53). The questionnaire in this study will consists of 2 sections, which are:

1. **Section I**

   It contains a question of whether the respondents are actively engage in any social media platform (e.g. Whatsapp, Youtube, Facebook, Instagram, etc).

2. **Section II**

   It contains with questions related to the profile of the respondents, consists of age, gender and how many hours they actively engage in their social media platform.

3. **Section III**

   This section contains 16 questions related to all four variables in this study, which is divided into 4 questions of brand consciousness, 4 questions of value consciousness, 4 questions of brand loyalty, and lastly 4 questions about social media marketing.

3.3.3. Data Measurement Method

Questionnaire in this study is using the "Likert Scale" data measurement method, where the scores given to each respondent's answers were:

- Strongly Agree = 5 points
- Agree = 4 points
- Neutral = 3 points
- Disagree = 2 points
- Strongly Disagree = 1 point

3.4. Research Variable

The main concern of this study is to analyze the influence of social media marketing among millennials in Indonesia. The main objective of this study is to investigate the relationship between independent variables that will affect the dependent variable. To measure the influence of social media marketing, there are three dependent variables considered. They are value consciousness, brand consciousness and brand loyalty.

In this study, value consciousness and brand consciousness also measured as independent variables that have affection to brand loyalty as dependent variable.The questionnaire items that is used as reference are taken from (Ismail,

2017), then for this study the author translated it into Bahasa, to facilitate the respondents in answering the question items.

3.5. Data analysis method

3.5.1. Statistic Descriptive Analysis

Descriptive statistical analysis of respondent was used to determine respondents' profile in this study. The method used is to present all of the respondents' answers result about their personal data contained in the research questionnaire. The percentage size of the respondent's answer will show the characteristic results of the respondent. Gender, age and the frequency of respondents' social media activeness would be analyzed, so a more comprehensive comparison and result will be obtained.

The frequency of respondents' social media activeness will be grouped into three categories, the medium users (those who access the internet between 1-3 hours a day), the heavy users (those who access the internet for 4-6 hours a day), and the addicted user (those who access the internet more than 7 hours a day). Grouping is done using a reference from previous research conducted by IDN Research Institute (Utomo, 2019).

3.5.2. *Partial Least Square*

Data analysis method used in this research is Structural Equation Modeling Partial Least Square (SEM-PLS). PLS is a powerful analytical method because it can be applied to all types of data scales, it does not require a lot of

assumptions and the sample size does not have to be large. Besides being able to be used as a theoretical confirmation, PLS can also be used to build relationships that do not yet have a theoretical basis or are commonly used for testing propositions (Mindra Jaya and Sumertajaya, 2008).

According to (Mindra & Sumertajaya, 2008), the following steps must be done in modeling using SEM – PLS:

3.5.2.1. First Step : Designing Structural Model (Inner Model)

Constructing the structural models of relationships between latent variables based on the problem identification or research hypotheses.

3.5.2.2. Second Step : Designing Measurement Model (Outer Model)

Constructing the measurement model in PLS is very important because researcher must identify the type of the indicators; whether it is formative or reflective. SEM is used not to generate a model, but to confirm the theoretical model through empirical data.

Mediating Effect

This study will examine mediating variables based on criteria conducted by Zhao et al. (2010) to examine the direct and indirect effects of mediating variables which will be explained in Figure 3.1. and 3.2.

Figure 3.1 : Mediating Variables Model

Based on the understanding of Zhao et al. (2010) if β (a) x β (b) x β (c) results are positive or significant, then it is called complementary mediation. If the result is negative then it is called competitive mediation. If β (a) x β (b) is significant and β (c) is not significant, it means mediating indirectly. If β (a) x β (b) the result is not significant and β (c) is significant, it does not mediate directly. If β (a) x β (b) the results are not significant and β (c) are not significant, then there is no mediating effect.

Figure 3.2 : Mediation Model
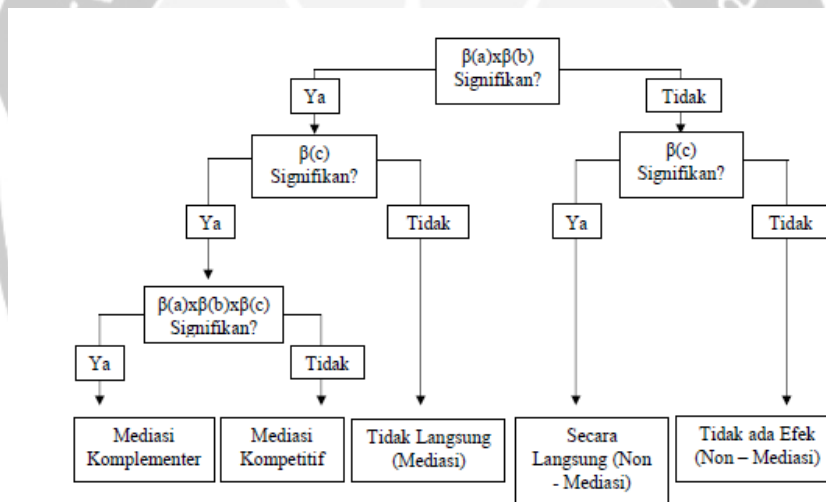
3.5.2.3. Third Step : Constructing Path Diagram

Path diagrams (path diagrams) are made to make it easier to understand the results of the first step and the second step to explain the pattern of relationships between latent variables and related indicators.

3.5.2.4. Fourth Step : Estimation

The PLS method has estimation parameters with the least squares. This estimation process is done by iteration (repetition), where the iteration will stop when a data has reached a convergent condition.

3.5.2.5. Fifth Step : Goodness of Fit

In PLS, there are two steps in measuring Fit Model of a research model. The steps are shown below:

1. Evaluation of Goodness of Fit : Outer Model

There are three criteria in using PLS to analyze the outer model of an data. They are convergent validity tests, discriminant validity tests and composite reliability.

a. Convergent Validity

Convergent validity from the estimation model with reflective indicator will be judged based on the correlation between score item or component score.

b. Drisciminant Validity

Discriminant validity is done to make sure that every latent variable is different between one and another or having low correlation. A model can be said has a good discriminant validity if it fulfills two criteria. The first is if the value of square root of Average Variance Extracted (AVE) is higher than the correlation between variables in the model. In this study, the square root of AVE values is taken from Fornell-Larcker Criterium.

c. Reliability Test

Beside the validity test of constructs, reliability test also must be done which will be measured with two criteria, which are Composite Reliability and Cronbach's Alpha. A construct can be said reliable if both Composite Reliability and Cronbach's Alpha are more than 0.7.

2. Evaluation of Goodness of Fit : Inner Model

Goodness of Fit evaluation is done by looking at the R-Square model to evaluate the inner model or structural model in seeing the relationship between variables.

3.5.2.6. Sixth Step : Hypotheses Testing

According to Ghozali and Latan (2015: 80) this study will use a confidence level of 95% (alpha = 5%) and 90% (alpha = 10%) and will compare t-statistics with t-tables (t-tables for 5% = 1.96 (alpha = 5%)) and compared the p-value with a significance level of 5% with p-value <0.05 and the significance level of 10% with p-value <0.1.