3. Research Methodology

3.1. Research Location

The location of this research is in Yogyakarta without any specific area. The reason why the researcher decides to do research here is because it will be more effective for the researcher that currently a student in Faculty of Economics, Universitas Islam Indonesia and also originally from Yogyakarta. The city also known as the city of student whereas proper to get university student respondents.

3.2. Populations and Sample Research

Population is known as a certain group or collection of individuals or object under the study. The sample is collection of several part that has identical characteristic with the population that taken for study. In this study population are the university student in Yogyakarta that had an experience in consuming Indomie and ever watch Indomie advertisements. To minimize the biases, minimum 200 samples are required on every estimated SEM (Loehlin, 1997). The respondents consists of male and female student, numbering 300 samples.

3.3. Types and Data Collection Techniques

The data that used in this research is primary data. Primary data is data that obtained by direct observation by using specific research methodology. In this research, the data obtained through questionnaire which was randomly distributed online to university student in Yogyakarta.

The type of the questionnaire is closed question, which means that the option of the answer is already given.

3.4. Definition of Variable Operational and Measurement Research

The variables that will be analyzed in this study are Advertising spending, Attitudes toward advertisements, Perceived quality, Brand awareness, Brand associations, and Brand loyalty. Advertising spending, Attitudes toward advertisements as the independent variables, the next is four dependent variables which are Perceived quality, Brand awareness, and Brand associations. The researcher suggest that Perceived quality and Brand associations will affect Brand Loyalty. All items were measured on a six-point agreement scale ranging from 1 = "Strongly disagree" to 6 = "Strongly agree."

3.4.1. Advertising spending

Researcher conclude that perceptions of high advertising spending contribute to developing a more positive perception of brand quality, higher brand awareness and stronger brand associations (Rao and Monroe, 1989). This variable is measured by the following indicators:

- Brand X is intensively advertised
- Brand X seems to spending a lot on its advertising compared to advertising for competing (product category) brands

▪ The advertisements for brand X are frequently shown

3.4.2. Attitudes toward advertising

Through an original and innovative advertising strategy, business or entity may be more likely to capture consumer's attention. As mentioned earlier, advertising creates brand awareness, links strong, favorable, and unique associations to the brand in consumers' memory, and elicits positive brand judgments and feelings (Keller, 2007). This variable is measured by the following indicators:

▪ The advertisements for brand X are original

▪ The advertisements for brand X are different from the advertisements for competing brands of (product category)

3.4.3. Perceived quality

Perceived quality can be described as the indicator of quality by customer. In this study, the researcher assume that this variable will affected by marketing promotions such as advertising, monetary promotions, and non-monetary promotions (Lavidge and

Steiner, 1961). This variable is measured by the following indicators:

- Brand X offers very good quality products

- Brand X offers products of consistent quality

- Brand X offers very reliable products

- Brand X offers products with excellent features

3.4.4. Brand awareness

Brand awareness here is becoming the indicator on how the promotions of the organizations affect the customer awareness or the level of conscious of the product or services by certain company (Keller and Lehmann, 2003). This variable is measured by the following indicators:

- When I think of (product category), brand X is one of the brands that comes to mind

- X is a brand of (product category) I am very familiar with

3.4.5. Brand associations

While brand awareness is intended to be the indicator of the level conscious, brand associations is more about the credibility or familiarities of a product or services (Keller, 1993) by certain business or entity. This variable is measured by the following indicators:

- Brand X is good value for the money
- Within (product category) I consider brand X a good buy
- Brand X has a personality

3.4.6.   Brand Loyalty

The level of where customer became loyal to their product or services is tend to be every business or other entity desire to achieved. The situation where customer became committed to the product and make repeat orders from the same brands overtime (Oliver, 1999). This variable is measured by the following indicators:

- I consider myself to be loyal to brand X
- I will not buy other brands of PC if brand X is available at the store

3.5. Validity and Reliability Research Instruments

Before the questionnaire was spread to the sample of the research, the questionnaire would be tested. Firstly, the questionnaire would distributed to 30 (thirty) respondents. After that, the validity and reliability of the data would be tested, the methods also known by pilot test.

The number of question in the questionnaire are 16 questions, which are consist of some variable:

- Variable about Advertising Spending consist of 3 questions

- Variable about Attitude Toward Advertisements consist of 2 questions

- Variable about Perceived Quality consist of 4 questions

- Variable about Brand Awareness consist of 2 questions

- Variable about Brand Associations consist of 3 questions

- Variable about Brand Loyalty consist of 2 questions

The measurement model was evaluated by inspecting the reliability of the individual item loadings and the convergent validity of the measures associated with each construct (Hulland, 1999). Individual item reliabilities were first assessed by examining measures of respective constructs for loadings of. 0.70 (which implies a shared variance of .50 percent between the measure and construct).

3.5.1. Questionnaire Validity Test

The validity of the questionnaire was determined by how the questionnaire able to elaborate the measured variable (Ghozali, 2005). The function of product moment formula is to measure the validity of the questionnaire that given to the respondent (Soehardi Sigit, 2003)

The analysis conducted in order to determine how far the relation of one variable to another. To test the level of validity of the variable, the writer use the SPSS 16.0 for Windows. Product moment formula is: When the r value was able to see with the correlation where $(\alpha) = 0.05$ if Rvalue was greater than Rtable or the level of significant $< \alpha$ then the questionnaire would be considered as invalid.

The requirement for an instrument that categorizes as valid if the coefficient correlation is same or greater than 0.3 (Sugiyono, 2005). Valid here means that the instruments were able to utilize to measure the value desired. The result of validity test was attached in Table 3.1.

Table 3.1

Questionnaire Validity Test

Variable	Indicators	Value	Cut Off	Result
Advertising Spending	AS 1	0,751	0,361	Valid
	AS 2	0,857	0,361	Valid
	AS 3	0,784	0,361	Valid
Attitude Toward Advertisiement	ATA 1	0,918	0,361	Valid
	ATA 2	0,929	0,361	Valid
Perceived Quality	PQ 1	0,822	0,361	Valid
	PQ 2	0,846	0,361	Valid
	PQ 3	0,862	0,361	Valid
	PQ 4	0,760	0,361	Valid
Brand Awareness	BAW 1	0,932	0,361	Valid
	BAW 2	0,904	0,361	Valid
Brand Associations	BAS 1	0,862	0,361	Valid
	BAS 2	0,868	0,361	Valid
	BAS 3	0,843	0,361	Valid
Brand Loyalty	BL 1	0,923	0,361	Valid
	BL 2	0,92	0,361	Valid

Sources: Processed Primary Data (2017)

As mentioned in table 3.1 most of the pilot test result are qualified, refer to validity > Rtable, hereby the indicators of the variable are classified as valid.

3.5.2. Questionnaire Variable Reliability Test

Variable reliability testing is proposing to ensure that the indicator is accurate by not showing any indication of bias or inconsistency of each item (Sekaran, 2000). Therefore, by indicating variable reliability testing, the result be expected to give an better accuracy and consistent result in measuring the variable. In this research, to test the reliability of variable, the researcher's use Cronbach alpha coefficient as the benchmark. Refer to Cronbach alpha concept, the value considered is $\alpha > 0.60$, while the maximum score considered is 1.0.

Result of the variable reliability test are shown in table 3.2

Table 3.2

Questionnaire Reliability Test

No	Variable	Cornbach's Alpha	Requirement	Status
1	Advertising Spending	0,714	0,60	Reliable
2	Attitude Toward Advertising	0,826	0,60	Reliable
3	Perceived Quality	0,833	0,60	Reliable
4	Brand Awareness	0,809	0,60	Reliable
5	Brand Associations	0,820	0,60	Reliable
6	Brand Loyalty	0,823	0,60	Reliable

Sources: Processed Primary Data (2017)

3.6. Analysis Technique

Whereas the analytical tools was proposing to process the data to prove reliability and validity. The researcher's used SPSS. In the other hand, for the hypothesis testing this study used analysis of structural equation modeling or known as (SEM), and AMOS for the software. SEM analysis is methods that allows analyzing the influence of some other variable concurrently (Ghozali, 2008).