# **CHAPTER III**

# **RESEARCH METHODS**

#### A. Research's Object

The object of research is an attribute or judgment of people, objects or activities that have certain variations that have been determined by the researcher to then be studied and concluded (Sugiyono, 2015). The population in this study is all auditors who worked on Public Accountant Firm (KAP) registered with OJK. The object of this research is all auditors who work in Public Accounting Firm (KAP) in Surabaya, Malang, Yogyakarta and Semarang. This research was conducted in those regions because there is quite a lot of Public Accounting Firm. The differences of Public Accounting Firm locations from research caused cultural differences that could create different character from each auditor in different region. Researcher choose Semarang region because Semarang's position as the provincial capital of Central Java where most business activities are centered in the city. Researcher also choose Surabaya and Malang because both are big cities in East Java and there are a lot of Public Accountant Firm (KAP).

### B. Types of Data

The type of data used in this study is primary data. The source of the data comes from the respondent's answer to the questionnaire distributed directly to the auditor. A brief presentation on the purpose of study and other explanations related to the questionnaire and others will be done at the beginning before filling out the questionnaire so that obscurity or difficulty can be achieved asked directly by the respondent. The scale used is Likert scale to measure one's attitudes, opinions, and perceptions about social events or symptoms.

### C. Sampling Technique

This research use survey method. Jogiyanto (2011) stated that survey method or polls are primary data collection methods by giving questions to the respondents written. The survey uses a questionnaire instrument to communicate with the respondents. Therefore, surveys are often also referred to as surveys questionnaire. Survey methods are used to obtain a general picture of the characteristics of population and the instrument of data can be obtained from spreading questionnaire. The purpose of survey research is to give a detail picture about the background, traits, and characteristics from cases or general nature. Researcher use survey method because it is relative low-cost, it can reach out some regions only with email or telephone, and very large samples give statistically significant results even when analyzing several variables.

#### **D.** Data Retrieval Technique

Data collection technique is carried out by questionnaire. In this method, respondent was given the questionnaire directly and asked to fill in each item in question in the questionnaire. Each KAP is given 1-5 questionnaires with a period of time 2 weeks return up to 1 month from the time the questionnaire was received respondent. Each respondent was asked to

choose one of the answers in questionnaire that corresponds to its perception among alternative answers has been provided. The questions in the questionnaire were made using scale 1 to 4 to get the answer range strongly disagrees (Sangat Tidak Setuju) until the answer strongly agree (Sangat Setuju) by giving a cross ( $\times$ ) in the selected column. Questionnaire with this form is more attract respondents because of their ease in giving answers and also the time used to answer will be shorter.

# E. Variable Operational Definition

According to Sugiyono (2015), research variables is the nature or values of people, objects or activities that have certain variations set by the researcher to learn and draw conclusions. Based on this tittle of this research, researcher examine two variables, there are independent variables and dependent variable.

# 1.) Independent Variables

According to Sugiyono (2015) defining the independent variable is variable that influence or become the cause of change or emergence of dependent variable. In this research, the independent variables are auditor's professionalism, skepticism, and auditor's experience.

### a. Auditor's Professionalism (X<sub>1</sub>)

Auditor's professionalism is the attitude and behavior of the auditor in carry out his profession with sincerity and responsibility so achieve the performance of tasks issued by the organization profession, including service to the profession, social obligations, independence, professional beliefs and relationships with colleagues (Alvina and Suryanawa, 2011).

## **b.** Skepticism (X<sub>2</sub>)

Skepticism is an attitude full of questions in his mind as well as a critical attitude towards audit evidence obtained by auditor (Christina and Zainal, 2016).

## c. Auditor's Experience (X<sub>3</sub>)

Auditor's experience is experience in conducting audits financial statements both in terms of length of time, number of assignments and the types of companies that have been handled (Ekawati, 2013).

#### 2.) Dependent Variables

According to Sugiyono (2015), define the dependent is variables that are affected or become sequel because of independent variable. In this research, the dependent variable is the level of materiality.

# a. Level of Materiality (Y)

Auditor's consideration of the disappearance's magnitude or misstatement of accounting information that can influence the consideration of those who giving trust in the information that is seen based on knowledge of the level of materiality, how important the level of materiality, audit risk, the level of materiality between company and the order of materiality level in the audit plan (Pramita, 2017).

#### F. Data Analysis

#### a. Descriptive Statistic Test

#### 1.) Descriptive Statistics of Respondent Demographics

The respondent's demographics are descriptive statistics explain about gender, age, recent education, audit experience, tenure and job position.

#### 2.) Descriptive Statistics of Research Variables

Descriptive statistics for research variables are measures used to describe frequency, central tendency and dispersion with a certain measurement scale, depict about tendency central for example like average, median and mode. Whereas for dispersion size such as standard deviation expressed for clarify the description of the respondent. This statistic explains about responses of respondents to the questionnaire regarding research variables that are auditor's professionalism, skepticism, and auditor's experience.

### b. Instrument and Data Quality Test

## 1. Validity and Reliability Test

a) Validity Test

Validity test is used to measure validity of the data, and what are the dimensions measure seriously can become items in measurement. Validity test in this study was conducted by calculating the correlation between the scores of each item questions with total score questions. Criteria used valid or invalid if the value of KMO > 0.50 and value loading factor > 0.4 means the item is valid (Nazaruddin & Basuki, 2017).

b) Reliability Test

Reliability test is used to determine the consistency of result if done twice or more the same symptoms using a same measuring instrument. Measuring a questionnaire is an indicator of variable or construct. A questionnaire is said to be reliable if someone's answer to the statement is consistent or stable from time to time. Instrument can said to be reliable if each variable has a coefficient Cronbach's alpha > 0.6 (Nazaruddin & Basuki, 2017). Test results questionnaire reliability is highly dependent on the sincerity of the respondents in answering all items of research questions.

# 2. Classic Assumption Test

#### a) Normality Test

The normality test aims to find out whether in the model regression, independent variables and dependent variables have residuals are normally distributed (Nazaruddin & Basuki, 2017). This test using the Kolmogorov-Smirnov statistical test, if the probability value (Kolmogorov Smirnov) > significance level 5% (0.05), then residual data said to be normally distributed.

## b) Multicollinearity Test

Multicollinearity test aims to test whether the model is correlates between independent variables. Good regression model there should be no correlation between the independent variables. Multicollinearity can be seen from the value of tolerance and the value of VIF (Variance Inflation Factor). If the tolerance value is > 0.10 and with a VIF value < 10, then the regression model does not experience multicollinearity (Nazaruddin & Basuki, 2017).

#### c) Heteroscedasticity Test

The heteroscedasticity test aims to test whether in the model regression are occurs inequality of variance from the residual one observation to their observations. If the variance from the residual one observation to another observation remains, it is called homoscedasticity, and if different is called heteroscedasticity. А good regression model is one homoscedasticity heteroscedasticity does not or occur. Heteroscedasticity test uses the Glejser statistical test, if the variable independent has a significance value < 0.05 so it occur heteroscedasticity, and if the significance is > 0.05 then it does not occur heteroscedasticity (Nazaruddin & Basuki, 2017).

# c. Hypothesis Test & Data Analysis

# 1. Multiple Linear Regression

In this study, three independent variables and one is dependent variable. The analytical method used to test the hypothesis is multiple linear regression, there is regression used to find out how much influence the independent variables has on dependent variable. Simple regression is used to test  $H_1$ ,  $H_2$ , and  $H_3$  to meet expectations researchers regarding the effect of professionalism, skepticism, and auditor's experience towards determining the level of materiality.

The regression equation is as follows:

 $Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$ 

Where:

Y	: the Level of Materiality	
α	: Constanta	
$\beta_1,\beta_2,\beta_3,$	Regression Coefficient	
X <sub>1</sub>	: Auditor's Professionalism	
X <sub>2</sub>	Skepticism	
X <sub>3</sub>	Auditor's Experience	
e	: Error	

## a) Partial Test (Value *t*-Test)

The t-Test basically shows how far the effect of one explanatory variable or individual independent variable in the dependent variable. The hypothesis is accepted if probability value significance  $t \leq alpha 0.05$  and regression coefficient ( $\beta$ ) in line with the hypothesis (Nazaruddin & Basuki, 2017).

b) Determination Coefficient Test (Adjusted R<sup>2</sup>)

The coefficient of determination (adjusted  $R^2$ ) measures how far the ability of the model to explain variations in dependent variable. The coefficient of determination is between 0 (zero) and 1. Value of Adjusted  $R^2$ , the small one means the ability of the independent variables inside explains the variation of the dependent variable is very limited. Value that is approaching 1 means the independent variables give almost all information needed to predict variable variations dependent (Nazaruddin & Basuki, 2017).

c) Simultaneous Test (Value F Test)

The F statistic test basically shows what all independent or independent variables included in the model have a simultaneously effect on variables dependent or bound. If sig F value < alpha 0.05 then there is simultaneously effect of independent variables on dependent variable.

#### d. Research Instrument and Research Variable Measurement

# 1. Research Instrument

## a. Independent Variable (X)

1.) Auditor's Professionalism

Auditor professionalism is measured by indicators that refer to the research instrument conducted by Kusuma (2012) with several adjustments, namely the use of public accountants replaced with auditors. The indicators are as follows:

- a.) Dedication to the profession
- b.) Social obligation
- c.) Independence
- d.) Profession belief
- e.) Relations with colleagues
- 2.) Skepticism

Skepticism is measured by indicator that refers to the research instrument conducted by Aditama (2018) with several adjustments, namely the use of public accountant replaced with auditors. The indicators are as follows:

- a.) Critical evaluation of audit evidence
- b.) Use of professional proficiency
- c.) Caution attitude
- d.) Understanding towards procedure audit evidence

- e.) The level of auditor's doubt
- f.) Thinking that is always questioning
- g.) Intensity of examination
- 3.) Auditor's Experience

Auditor's Experience is measured by indicators that refer to the research instrument conducted by Kusuma (2012) with several adjustments, namely the use of public accountants replaced with auditors. The indicators are as follows:

- a) Experience gained from working in one time month.
- b) Experience gained from many tasks done by the auditor.
- c) Experience gained from many types of companies audited.

#### b. Dependent Variable (Y)

Materiality considerations are measured by indicator which refers to the research instrument conducted by Kusuma (2012) with some adjustments, namely the use of public accountants replaced with the auditor. The indicators are as follows:

- a) The importance of materiality
- b) Knowledge of materiality levels
- c) Audit risk
- d) Materiality levels between companies

e) Sequence of materiality level in the audit plan

# 2. Research Variable Measurement

Variable Auditor's Professionalism, Skepticism, and Determining the Level of Materiality is measured on an ordinal scale using modified Likert scale 1-4, namely, Strongly Disagree (Sangat Tidak Setuju) given score of 1, Disagree (Tidak Setuju) given score of 2, Agree (Setuju) given score of 3, and Strongly Agree (Sangat Setuju) given score of 4.

Variable Auditor Experience is measured by interval scale, namely:

- a. For working period
  - 1.) Score 1 for 0-1 year intervals
  - 2.) Score 2 for 1-2 year intervals
  - 3.) Score 3 for 3-4 year intervals
  - 4.) Score 4 for intervals of more than 5 years

The division of years into the interval above based on the results of the research conducted by Kusuma (2012) where the lowest work period of auditors in the study were 11 months and the highest is 372 months. Auditors with a working period of 12 months and 360 the month is the most.

- b. Number of assignments
  - 1.) Score 1 if no assignments have been completed

- 2.) Score 2 if 1-2 cases
- 3.) Score 3 if 3-4 cases
- 4.) Score 4 if more than 5 cases
- c. The type of company that has been handled
  - 1.) Score 1 if no company is handled
  - 2.) Score 2 if only 1-2 types of companies
  - 3.) Score 3 if only 3-4 types of companies
  - 4.) Score 4 if more than 5 types of companies

Mention the type of company that has been handled is only to facilitate the respondent in fulfill questionnaire. The following is a grid of research instruments used in this research.

No.	Variable	Indicator	Items
1.	Level of	The importance of materiality	Number 1,2
1.	Materiality	Knowledge of materiality levels	3,4,5
	1, Incontante y	Audit risk	6,7,8
		Materiality levels between companies	9,10
		Sequence of materiality level in the audit plan	11,12
2.	Auditor's	Dedication to the profession	1,2,3
	Professionalism	Social obligation	4,5,6
		Independence	7,8,9
		Profession belief	10,11,12
		Relations with colleagues	13,14,15
3.	Skepticism	Critical evaluation of audit evidence	1,2
		Use of professional proficiency	<u>3,4</u> 5
		Caution attitude	5
		Understanding towards procedure and audit evidence	6,7
		The level of auditor's doubt	8
		Thinking that is always questioning	9
		Intensity of examination	10
4.	Auditor's	Length of time	1
	experience	Number of assignments	2
		Types of companies that have been handled	3

Table 3.1 shows the indicator for each variable: