CHAPTER III

RESEARCH METHOD

3.1 Population and Sample

The population of this research refers to the group of people who work as an auditor in Public Accounting Firm in Daerah Istimewa Yogyakarta. It consists of 60 auditors in Public Accounting Firm in Daerah Istimewa Yogyakarta.

The sample that was used in this research are 46 auditors, junior or senior auditors who work in some Public Accounting Firm in Daerah Istimewa Yogyakarta. The sampling method used is purposive sampling. It is one of the non-random sampling techniques in which the researcher determines the sampling by specifying the specific characteristics that are suitable for the objectives of the study.

3.2 Data Collection Method

This research was using quantitative method. By using quantitative method, this research used a questionnaire in the form of Likert-Scale. Likert-Scale is asking the respondents to show their level of agreement (from strongly disagree to strongly agree) with the given statement (items) on a metric scale (Joshi, Kale, Chandel, & Pal, 2015). The questionnaires were distributed to 60 auditors in Public Accounting Firm in Daerah Istimewa Yogyakarta. The questionnaires that were distributed were about the factors that affected the process of making of audit quality. The target populations for this research are senior and junior auditor in Public Accounting Firm in Daerah Istimewa Yogyakarta.

3.3 Research Variables and Measurement

3.3.1 Dependent Variable

The dependent variable is auditor performance. Auditor performance came from auditor attitudes and behaviour. If it is talking in the scope of work, performance of auditor was resulted from the evaluation of audit work in doing the examination measured with the applicable audit standards (Sunyoto et al., 2017). The indicators of measurement of auditor performance variable are adopted from thesis done by Pratama (2015), it has 6 questions and the measurement of every statement is using scale developed by Likert Rensis, the scale is from (1) Strongly Disagree, (2) Disagree, (3) Neutral, (4) Agree, (5) Strongly Agree, if the answer is higher, it means that the value is higher.

3.3.2 Independent Variable

3.3.2.1 Auditor Independence

According to Sukriah et al. (2009) auditor independency is an auditor that is not easily to be affected or affect the client. The indicator of measurement of auditor independence variable are adopted from the research done by Sukriah et al. (2009), the indicators are independence in preparing program, independence in implementing program, and independence in reporting program. The questionnaire used scaling system developed by Likert Rensis. The scale is from (1) Strongly Disagree, (2) Disagree, (3) Neutral, (4) Agree, (5) Strongly Agree, if the answer is higher, it means that by having higher value, the effect of auditor independence to auditor performance is higher.

3.3.2.2 Auditor Experience

Tubbs (1992) stated in his research that the more experienced accountant or auditor, the more they are aware with mistakes toward error that occurred when they are doing audit of financial statements. The indicator of measurement of auditor experience variable can be seen from the length or duration or work as an auditor and the number of works that the auditor has done. The measurement will only ask about how long they have worked as an auditor, the option will be < 5 years, 5-7 years, 7-9 years, and > 9 years.

3.3.2.3 Auditor Competence

According to (Suhayati & Rahayu, 2010) explained Competence means that the auditor must have the ability, expertise and experience in understanding the criteria and in determining the amount of evidence needed to be able to support the conclusions to be taken. According to the explanation of Suraida (2005) about competence, she stated that competence of auditor is measured from their certificate and the frequency of joining or participating in any training or seminar about auditing. The indicator of measurement of auditor competence variable are adopted from thesis questionnaire done by Pratama (2015) and the questions are developed by Tjun, Marpaung, & Setiawan (2012) and the questionnaire used scaling system developed by Likert Rensis. The scale is from (1) Strongly Disagree, (2) Disagree, (3) Neutral, (4) Agree, (5) Strongly Agree, if the answer is higher, it means that by having higher value, the effect of auditor competence to auditor performance is higher.

3.3.3 Moderating Variable

3.3.3.1 Religiosity

According to Al-Goaib (2003) in Achour, Mohd Nor, & MohdYusoff (2015), religiosity in Islam is a commitment of people to their religion by following the religion fundamental based on the theory and the practices, such as going to their worship place for praying, and attending religion occasion. The indicators of measurement of religiosity variable are adopted from Allport & Ross (1967) and it has been developed by Darvyri et al. (2014), from 21 questions to 14 questions. Whether those religiosity factors could affect auditor performance or not. The questionnaire used scaling system developed by Likert Rensis. The scale is from (1) Strongly Disagree, (2) Disagree, (3) Neutral, (4) Agree, (5) Strongly Agree, if the answer is higher, it means that by having higher value, the effect of religiosity to auditor performance is higher.

3.4 Data Quality Test

Data quality test is used to measure whether the instruments of the question are valid and reliable or not. In this research, for the analysis, it used SPSS 22.0 to help analyzing the data collected from the respondents. The results of the processed data will determine the quality of the research results. There are two tests in this research, i.e validity test and reliability test.

3.4.1 Validity Test

Validity explains how well the collected data covers the actual area of investigation (Ghauri & Grønhaug, 2005). Validity basically means "measure what is intended to be measured" as stated by Field (2005) cited in (Taherdoost,

2016). A test can be said to have high validity if the test performs its measuring function or provides a precise and accurate measurement result. In this research, the validity test is measured by the correlation between the scores of the question item with a total score of variables. A questionnaire is valid if r arithmetic > R Table.

3.4.2 Reliability Test

Reliability is a measure of the stability or consistency of test scores. Reliability concerns the extent to which a measurement of a phenomenon provides stable and concise result cited by Carmines and Zeller (1979) in (Taherdoost, 2016). Reliability is also concerned with repeatability. Results of reliability test are used to determine whether the research instruments can be used repeatedly at different times. A reliability coefficient is a measure of how well a test measures achievement.

3.5 Analysis Technique

The analysis techniques used in this research are descriptive statistics test, classical assumption analysis, multiple linear regression, and hypothesis analysis. This analysis is intended to measure the hypothesis and to know whether the independent variables and/or with moderating variable could affect the dependent variable.

3.5.1 Descriptive Statistics Test

3.5.1.1 Respondents Demography

In this research, descriptive statistics provided the explanation of the independent variable about auditor independence, auditor experience, and auditor competence. The results explained in the form of table and data analysis. The results of the questions were based on the respondents' answer.

3.5.2 Classical Assumption Test

3.5.2.1 Multicollinearity Test

According to Jensen & Ramirez (2013) in Daoud (2017), multicollinearity, or near-linear dependence, is a statistical phenomenon in which two or more predictors variables in a multiple regression model are highly correlated. If there is no linear relationship between predictor variables, they are said to be orthogonal. Multicollinearity appears when two or more independent variables in the regression model are correlated. A little bit of multicollinearity sometimes will cause big problem but when it is moderate or high then it will be solved (Daoud, 2017).

3.5.2.2 Heteroscedasticity Test

Heteroscedasticity implies unequal diffuse. In regression examination, it discuss heteroscedasticity with regards to the residuals or mistake term. In particular, heteroscedasticity is an orderly change in the spread of the residuals over the scope of estimated esteems. Heteroscedasticity is an issue since ordinary least squares (OLS) regression expect that all residuals are drawn from a populace that has a steady difference (homoscedasticity). Many heteroscedasticity tests for

regression models were developed a couple of decades ago and usually assume a parametric conditional variance function (Zambom & Kim, 2017). To detect whether the heteroscedasticity appearance is by looking at the scatterplot graph between the prediction values of the dependent variable is ZPRED with residual SRESID. Then, Y-axis becomes the predicted axis and the X-axis is residual.

3.5.2.3 Normality Test

Normality test is a technique that tests the dependent and independent variable distribution pattern, which indicates whether the independent and dependent variable are distributed normally or not. If those variables are not distributed normally, it means that there is a missing important variable that has not been involved in the regression model. If it happens, the model should be changed by adding or subtracting another variable (Ghozali, 2006).

In SPSS, normality test use p-value in the Kolmogorov Smirnov valuation. When the amount of p-value is bigger than 0.05 (>0.05), it means that the variables or the data are distributed normally and if the amount of the p-value is lower than 0.05 (<0.05), it means that the variables or the data are not distributed normally.

3.5.3 Multiple Linear Regression

Multiple linear regression is a technique to measure whether there any effect from the independent variable and/or with moderating variable to the dependent variable in this research.

$$AP = \alpha + \beta_1 AI + \beta_2 AE + \beta_3 AC + \beta_4 |AIxR| + \beta_5 |AExR| + \beta_6 |ACxR| + e$$

AP   = Auditor Performance

α = Constant

β_1-β_6 = Regression Coefficient

AI   = Auditor Independence

AE   = Auditor Experience

AC   = Auditor Competence

|AIxR| = Interaction between Auditor Independence with Religiosity

|AExR|= Interaction between Auditor Experience with Religiosity

|ACxR|= Interaction between Auditor Competence with Religiosity

e   = Error

3.5.4 Hypothesis Testing

The hypothesis testing in this research is to know the effect of auditor independence, auditor experience, and auditor competence as the independent variable with religiosity as moderating variable toward the making or producing audit quality as the dependent variable. There are several hypothesis testing:

3.5.4.1 Coefficient of Determination Test

The coefficient of determination, R^2, is used to analyze how differences in one variable can be explained by a difference in a second variable. By using this coefficient of determination or R^2, we can understand how strong the relation between the independent variable to the dependent variable is. The range of R^2 is from 0 to 1, the greater the results is, the stronger the independent variable could affect the dependent variable.

3.5.4.2 T-Test

A t test is a type of statistical test that is used to compare the means of two groups. It is one of the most widely used statistical hypothesis tests in pain studies. T tests are a type of parametric method; they can be used when the samples satisfy the conditions of normality, equal variance, and independence (Kim, 2015). The significant used is 5% or 0.05, if the significant level of the hypothesis is smaller than 0.05 or 5% (<5%), means that the hypothesis can be accepted. However, if the significant level of the hypothesis is greater than 5% or 0.05 (>5%), it means that the hypothesis should be rejected.