CHAPTER III

RESEARCH METHOD

3.1. Type of Study

This research is using primary data. The research data is obtained directly from the source without media intermediaries. Instruments used in the form of the questionnaire that contains several questions about the competence, independence, due professional care, and auditor ethics. Source of data in this study is the score of each indicator variables obtained from filling the questionnaire that has been distributed to auditors working throughout Financial Supervision and Development Agency in D.I Yogyakarta.

3.2. Population and Sample

Population is a set of data that have the same characteristics and become the object of inference. The population in this research is auditors who work throughout Financial Supervision and Development Agency in D.I Yogyakarta.

Data collection method used by the researcher was convenience sampling. Convenience sampling is type of non-probability sampling method that relies on data collection from population members who are conveniently available to participate. The researcher chose convenience sampling method because the researcher was not sure about the exact amount of the auditor at BPKP D.I Yogyakarta. Thus, the researcher could choose 35 auditors at BPKP DIY as respondent freely.

3.3. Data Collection Method

A technique of data collection is conducted by survey method. The data is obtained using a questionnaire distributed directly to the auditor who works at Financial Supervision and Development Agency in D.I Yogyakarta. The questionnaire is sent by researcher directly to Financial Supervision and Development Agency DIY then took it backs himself directly.

3.4. Research Variable

This research used dependent variable, independent variables, and moderating variable. The scaling method is used by symbols on the instrument response categories in the research. Scaling method used in this research was 5-point Likert scale for each statement submitted to respondents (Tjun et al., 2012).

3.4.1 Dependent Variable

Dependent variable is type of variable which is influenced by independent variable. The dependent variable in this research is audit quality. Audit quality is a quality assurance function which the quality will be used to compare the actual with what was required (Kharismatuti & Hadiprajitno, 2012). Variable of audit quality will be measured with the instrument that adopted by Yenny (2012) along with 10 questions.

3.4.2 Independent Variable

Independent variable is variable that can influence on dependent variable or variable believed to affect the dependent variable. In this research, there are three independent variables

a. Competence

Competence is auditor capability to do their job that is received from education, training, and experience. Competence variable is measured with the instrument which was developed by Murtanto (1998) those are experience and knowledge. There are 7 questions as an indicator of competence.

b. Independence

Independence is a public accountant mental attitude which is expected to not easily influence in their duties. Independence variable is measured with the instrument that developed by Wanodya (2013) as follows: client pressure and client cooperation length. There are 5 questions as an indicator of independency.

c. Due Professional Care

Due professional care is professional proficiency which is careful, thorough and critical thinking in evaluating audit evidence. Due professional care is measured with the instrument that developed by Aprianto (2015) in using skepticism and confidence adequately. There are 7 questions as an indicator of due professional care.

3.4.3 Moderating Variable

Moderating variable is variables that strengthen or weaken the relationship between independent variable and dependent variable. Variable that has strong contingent effect between independent variable and dependent variable. The moderating variable in this research is auditor ethics. Ethics

as a set of rules or guidelines to regulate people that done directly or indirectly Aprianti (2010). Ethics is required for all auditors because it has principle in their self to confront all obstacles. Auditor ethics variable is measured with the instrument that developed by Alim, Hapsari, &Purwanti (2007) developing some factors from current research that probable influences the audit quality. There are 4 questions as an indicator of audit ethics.

3.5. Data Quality Test

Data quality test is used to measure the questions whether the instruments of the questionnaire are valid and reliable or not. The truth of the processed data will determine the quality of research results.

3.5.1. Validity Test

Validity test is used to measure the validity of the questionnaire. A questionnaire is considered to be valid if its question can reveal something that will be measured on the questionnaire. Validity test is used to determine the feasibility of the items in a question of defining a variable (Tjun et al., 2012). An instrument will be valid if r value > from r table and sig. value (2-tailed) < 0.05 (Sujarweni, 2015).

3.5.2. Reliability Test

Reliability test shows how far the measurement resulting relatively consistent if it was repeated twice or more. Reliability test is done after the validity of the analysis carried out. Analyses were performed by Cronbach's Alpha (α) is the coefficient of reliability which indicates how

well an instrument item positively correlated with other instrument items. Higher coefficient alpha (α) will result in better measurement of the instrument.

3.6. Analysis Technique

The analysis technique is efficient way to resolve data into its component to reveal its structure and element. The analysis techniques that used in this research are descriptive statistics analysis, classical assumption analysis, multiple regression analysis, and hypothesis test. These techniques are used to test the hypothesis and to conclude directly about the effect of each independent variable used in partially or simultaneously.

3.6.1. Descriptive Statistics Test

a. Respondent Demography

Descriptive statistics provide explanation about gender, last education, respondent position, length of work, and auditor education from research sample. The result will be explained in the form of table, group, and data analysis. Those forms of test result are based on the respondent answer.

b. Research Variable

Descriptive statistics provide explanation about maximum, minimum value, standard deviation of research variable. Descriptive statistics regard how the data can be presented numerically to get a glimpse of the data that is easier to read and meaningful.

3.6.2. Classical Assumption Test

Classical assumption test is committed with regression analysis in order to reach a good data and generate a good model. There are several classical assumption tests as follows:

a. Normality Test

Normality test is done to see the data distributed normally or not. This research is using non-parametric Kolmogorov Smirnov statistic test. It is assumption that each variable normally distributed. If Sig. Asymp. value (2-tailed) > 0.05, it means data normally distributed.

b. Multicolinearity Test

Multicolinearity test is a predictor where the independent variable was correlated each other. Multicolinearity test is used to test whether regression model was correlated among the independent variables or not (Aprianti, 2010). Multicolinearity test is detected by Variance Inflation factor (VIF) or Tolerance value (TOI). The criteria of using this test when tolerance value < 0.10 or equal to VIF value > 10, it shows there was multicolinearity among the independent variables (Sujarweni, 2015).

c. Heteroscedasticity Test

Heteroscedasticity test is used to test inequality variance from an observation residual to another observation residual. By using scatterplot pattern with ZPRED plot as a prediction value, and SRESID

as a residual value. The regression is free from heteroscedasticity if there is no specific pattern in the scatterplot (Sujarweni, 2015).

3.6.3. Multiple Linear Regression

Multiple linear regression is a technique that measures how influence of some independent variables to dependent variable. In this study, the multiple linear regressions will be modified into moderated regression. Moderated Regression Analysis (MRA) is multiple linear regression special application which is regression equation consists of interaction (multiply two or more independent variable). The multiple linear regression analysis is formulated as follow:

$$AU = \alpha + \beta 1 CP + \beta 2 IP + \beta 3 DPC + e$$

In this research, moderated regression analysis is formulated as follows (Kharismatuti & Hadiprajitno, 2012):

$$AU = \alpha + \beta 1 CP + \beta 2 IP + \beta 3 DPC + \beta 4 CP.AE + \beta 5 IP.AE + \beta 6 DPC.AE + e$$

Notes: AU = Audit Quality

α = Constant Value

β1– β6 = Regression Coefficient

CP = Competence

IP = Independence

DPC = Due Professional Care

AE = Auditor Ethics

e = Error

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3.6.4. Hypothesis Test

In the hypothesis test, it is using statistical tools that will produce information or result about coefficient determination, F-test value, and T-test value.

3.6.4.1. Coefficient Determination (Adj. R^2)

Determination of coefficient test is used to know the high degree of influence between independent variable and dependent variable. The value of coefficient determination near 1 shows that the independent variable has greater influence to the dependent variable.

3.6.4.2. F-test Value

F-test is used to know the influences of independent variable to dependent variable simultaneously. If sig. $F < \alpha$ 0.05 there will be influence of independent variable to dependent variable simultaneously.

3.6.4.3. T-test Value

T-test is used to determine the influence of each independent variable to dependent variable. Hypotheses are accepted if Sig t value $\leq \alpha$ 5%. If Sig. t value $> \alpha$ 5% the hypothesis is rejected.

3.7. Discussion

The researcher will compare the findings with the theoretical review and previous studies about the influence of competence, independence, and due professional care to audit quality with auditor ethics as moderating variable. This research is expected to give additional understanding and knowledge to readers for the development of previous studies and for the reference of the future studies.