CHAPTER III

RESEARCH METHOD

3.1. Research Approach

Research approach that is used in this research is quantitative research. A quantitative research is a research that said as a positivistic method because it is based on philosophy of positivism. This method also stated as a scientific method because it already meets concrete, objective, measurable, rational, and systematic principles. Research with quantitative method is approaches of empirical studies to collect, analyze, and display data in numerical form rather than narrative.

1.2. Research Site

This research was conducted at 3 hotels in Semarang, which are:
1. Grand Candi located at Jalan Sisingamangaraja No.16, Kaliwiru, Candisari, Semarang, Jawa Tengah 50232
2. Patra Jasa Hotel located at Jalan Sisingamangaraja No.4, Kaliwiru, Candisari, Semarang, Jawa Tengah 50235
3. Dafam Hotel at Jalan Imam Bonjol No.188, Sekayu, Semarang Tengah, Kota Semarang, Jawa Tengah 50132

3.3. Population and Sample

1.3.1 Population

According to Sekaran (2003) population is overall, refers to people, event, or any interesting matter that researcher want to research or find out. In this research, the population is the employee of Hotels in Semarang.

1.3.2 **Sample**

Sample is a partial or representative of the population under the study (Arikunto, 2010). By considering the large population and limited time and cost of research, the researcher needs to limit the samples in sampling. The sampling technique used is random sampling, which takes a random sample of a population that has been determined and suggested appropriate sample size between 100-200 respondents in order to use interpretation estimation with Structural Equation Model (SEM). For that reason, the number of samples will be determined based on the results of the minimum sample calculations. The determination of the minimum sample size for SEM according to Hair et al. (2010) is:

(Number of indicators + number of latent variables) x (estimated parameters) Based on the guidelines, the minimum sample size for this study is:

Minimum sample = (23 + 4) x 5 = 135 respondents.

Based on the formula above, the minimum sample size in this research is 135 respondents.

3.4.   Research Variable

Based on the literature review and the preparation of the hypotheses, the research variables are:

1. **Independent Variable**

Independent variables are the either variables that affect the dependent variable, positively or negatively (Sekaran, 2003). In this research, the independent variables are organizational commitment (X_1) and attitude towards work (X_2).

2. Dependent Variable

Dependent variable is the variable being a primary interest of the research. The researcher's goal is to understand and describe or predict the dependent variable (Sekaran, 2003). In this research, the dependent variable is employee's job performance (Y).

3. Intervening Variable

Sekaran (2003) argued that intervening variable is the remaining variable between independent that influence dependent variable, and the impact of independent variable to other variable. In this study, the intervening variable is job satisfaction (Z).

3.5   Variables and Measurement

3.5.1   Independent Variable

3.5.1.1. Organizational Commitment

Organizational commitment is one attitude that reflects feelings of likes or dislikes of the organization (Robbins, 2013). Organizational commitment is adapted Ahmad et al. (2010) as follow:

1. I am willing to put in a great deal of effort, beyond what is normally expected in order to help this organization be successful.

2. I talk up this organization to my friends as a great organization to work for.

3. I would recommend a close friend to join this company

4. I feel very loyalty to this organization.

5. In my work, I like to feel that I am contributing, not for myself but for the organization as well.

6. I am proud to tell others that I am a part of this organization.

7. I really care about the fate of this organization.

8. The offer of a little money with another company would not seriously make me think of changing jobs.

3.5.1.2. Attitude towards Work

Riketta (2008) explained that work attitude refers to the evaluation or personal interests of work-related targets. Attitude towards work is adapted from Ahmad et al. (2010) as follow:

1. Compared to other employees doing similar work, the overall quality and quantity of my performance is good.

2. Thinking of respondents about their productivity as compared to other employees

3. Perception of respondents about their problem solving ability as compared to others

3.5.2. Dependent Variable

3.5.2.1 Employee's Job Performance

Job performance is the value, quality or quantity of the work contributed by an employee (Chang & Hsieh, 2018). Employee's job performance is adapted from (Hafiz, 2017) as follow:

1. I completed assigned tasks.

2. I can fulfill the responsibilities of my job

3. I can do all tasks that are expected to me.

4. I fulfilled the formal requirements of job performance.

5. I have engaged in the activities that influence my evaluation related to job.

6. I cannot do important duties.

3.5.3. Intervening Variable

3.5.3.1 Job Satisfaction

Locke (1976) stated that job satisfaction could be defined as pleasurable emotional state resulting from appraisal of one's job or job experience. Job satisfaction is adapted from Ahmad et al. (2010) as follow:

1. I feel very positive and favorable about my job.

2. As soon as I can find a better job, I will leave.

3. I am generally satisfied with the kind of work I do on this job.

4. I frequently think of quitting this job.

5. I have sense of worthwhile accomplishment in my work.

6. I get the chance to take decisions on the performance of my job role.

3.6.   Type of Research Data

Primary data was collected to conduct this research. The data used are obtained directly from the respondents by doing the field research. The data was gathered by distributing questionnaires. In order to collect the data needed to meet the research needs, the data obtained

from the questionnaire to the respondents where the questions are provided by researcher to support the data information through questionnaire.

Questionnaire that will be used and presented to the respondent consists of two parts, namely:

a. Part that reveals the characteristic of the respondents. Contains data of characteristic of respondents including gender, age, income level, and length of work.

b. Part that contains questions about research variables such as organizational commitment, attitude towards work, job satisfaction, and employee's job performance.

3.7. Data Collection

The data collection instrument used to measure variables is using questionnaires. The questionnaire contains the question items as a description of the variable indicators. To change the data of the variables that exist into the calculation of data, the researcher used Likert scale. In this Likert scale respondent answering the questions by giving cross mark (X) to alternative answer with 5 chances of possibility that available in the questionnaire.

In this case the research questionnaires will be examined with 5 alternative answers to choose one answer. Researcher will give the value of each choice of answers to questions that are 5 for a positive answer and a value of 1 for a very negative answer. Below are the indicators of variables that can be measured using Likert Scale:

Answer	Score
Strongly Agree	5
Agree	4
Neutral	3
Disagree	2
Strongly Disagree	1

3.8 Data Analysis

3.8.1 Data Testing

3.8.1.1 Validity

Several types of validity test are used to test the goodness of measures (Sekaran, 2003). Validity test is a measurement that shows the validity level of an instrument. An instrument is considered valid if able to measure what is desired. The method used for the validity test is the Pearson correlation test.

3.8.1.2 Reliability

Reliability is the degree of precision or accuracy that is demonstrated by the research instrument. Sekaran (2003) stated that the reliability of a measure is an indication of the stability and consistency which the instrument measures the concept and helps to assess the goodness of a measure.

3.8.2 Technique Data Analysis

3.8.2.1 Respondents Characteristic

In this part, this research will describe the characteristic of the respondents. The characteristics that will be explained are gender, range of age, income level, and length of work.

3.8.2.2 Descriptive Analysis

Descriptive statistical analysis techniques are statistics used to analyze data by describing the data that has been collected as it is without intending to make general conclusions (Sugiyono, 2010). This analysis is a description explaining the identity of the respondents.

3.8.2.3 Structural Equation Model

Research model will be analyzed by using Structural Equation Model (SEM), by utilizing AMOS software. SEM is an analytical technique that allows complex and complex relationships simultaneously. In simple explanation, SEM provides the most efficient and efficient estimation technique for multiple and multiple regression equations and it is estimated simultaneously (Ghozali, 2011).

Hair et al. (2010) explain seven steps of data analyzing process with SEM as follows:

Step 1: Model Development Based on Theory

Models are simplifying complex problems for easy analysis. The model builds on the literature and results of previous relevant studies.

Step 2: Build a path diagram

The model that has been built is then described in the form of a path diagram. At this stage, the study defines and defines the exogenous and endogenous constructs and then connects them in the form of the path diagram. With this path diagram will be clearly known which bag to do confirmatory test which mean to testing does the indicator can explain the latent variable and which part that should be tested hypothetically that is test the influence of all exogenous

variables to endogen variables either directly or indirectly, and to test endogen effect to another endogenous variable.

Step 3: Convert path diagrams in equation model

At this stage, the researcher describes the flowchart of research model in the form of structural equation and the equation of measurement model specification.

Step 4: Choosing Input Matrix and Estimation Model

Because in this research tested is causality, then the input used is covariance. The steps of input use in SEM are as follows:

1. Confirmatory factor

This measurement model is to test whether indicators can significantly quantify latent variables in the model.

2. Path analysis

At this stage test the influence of both direct and indirect exogenous variable to endogenous variables and the influence of endogenous variables with other endogenous variables.

Step 5: Predict identification model

This stage is to estimate whether the structural model created is capable of producing a good estimation. Signs of a problem in this stage are:

1. Standard deviation for one or more coefficients of models is very large.

2. The required information cannot be presented by the program.

3. The appearance of unnatural numbers. For example, there is a negative variant.

There is a correlation coefficient rate between the coefficient estimation is very high.

Step 6: Evaluate the accuracy of model estimation

Model estimation will be tested if several assumptions on SEM usage can be met. Things that should be considered are a sample size of at least 100 units; normal and linear patterned distributed data; evaluation of outliers with univariate and multivariate methods. If SEM user assumptions are met, then the next step is to goodness of fit test.

Step 7: Interpret and modify the model

The final step of the series of steps above is to interpret and modify the model if it turns out that the resulting estimate does not have the expected level of prediction nor has a high residual rate.

3.8.2.4 Goodness of Fit Criteria

In summary, the guidance of the *goodness of fit* index is as follows:

a. Chi-square (X^2)

This test tool is chosen because it is the most fundamental test tool for measuring overall-fit. Moreover, this tool is believed as statistic tool that is able to illustrate the difference between covariance matrix of population and covariance matrix sample. Model tested are considered good if it shows a low *chi-square.*

b. RMSEA (Root Mean Square Error of Approximation)

Root Mean Square Error of Approximation (RMSEA) is a measurement of approximate fit in the population and is therefore concerned with the discrepancy due to approximation. RSMEA is estimated by the square root of the estimates discrepancy due to approximation per degree of freedom. RSMEA is regarded as relative independent of sample size, and additionally favors parsimonious models. The RSMEA is bounded below zero. Although, there is a general agreement that the value of RMSEA for a good model should be less than 0.05, an RSMEA of less than 0.006 is a cutoff criterion.

c. GFI (Goodness of Fit Index)

GFI suitability index calculates the weighted proportion of variance in the sample covariance matrix, which described by the estimated covariance matrix of population. GFI is a non-stratification measurement, which has value with a range between 0 (poor fit) up to 1.0 (perfect fit). The higher value it gets; it will show *"better fit"*.

d. AGFI (Adjusted Goodness of Fit)

With a slight similarity with GFI, the fit index of AGFI is being adapted toward the degrees of freedom that are available to test whether a model is acceptable or unacceptable. The recommended acceptance rate is AGFI $\geq$ 0.90. AGFI is a criterion that calculates the weighted proportion from variance of a matrix covariance sample. The value of 0.95 is interpreted as a good overall model fit, while $0.90 - 0.95$ indicates adequate fit.

e.   TLI (Tucker Lewis Index)

Tucker-Lewis index (TLI) is also called the non-normed fit index (NNFI) while adjustment to the TLI is called the relative fit index (RFI). According to Haryono & Wadoyo (2012), TLI was originally used as a tool to evaluate the factor analysis that is later developed to SEM. This measurement combines parsimony size into comparison index between the proposed model and null model and the TLI value than ranges from 0 to 1.0. TLI recommended value equal to or greater than 0.09.

f. CFI (Comparative Fit Index)

CFI index is identical to the Relative Non-Centrality Index (RNI). The value of this index is with a range of 0-1. As GFI index approaches 1, meaning is the highest *fit* level (a very good fit). However, the recommended value is ≥ 0.90. the advantages of this index are the amount of index numbers are not affected by sample size, therefore it considered good to measure the level of acceptance on a model. In assessing a model, TLI and GFI are highly recommended to be used, because this both index is relatively not sensitive toward the sample size and are not affected by the complexity of a model.

Goodness of Fit	Cut-off value
Chi-Square (X^2)	Small Value
Significance Probability	≥ 0,05
RMSEA	≤ 0,08
GFI	≥ 0.90
AGFI	≥ 0.90
CMN / DF	≤ 2,00
TLI	≥ 0,95
CFI	≥ 0.95

Source**:** Hair et al. (2010)

3.8.2.5 Hypotheses Testing

Hypothesis testing is used to determine the direct relationship occurs if one variable affects other variables without any third variables that mediate (intervening) the relationship of these two variables. The indirect relationship is if there is a third variable mediating the relationship between these two variables. Then, on each dependent variable (endogen variable) there will be arrows leading to this variable and this serve to explain the amount of unexplained variance by that variable. Hypothesis testing in this research is as follows:

P value < 0, 05 or value of Critical Ratio > 1, 96, then the hypothesis are **accepted**.

P value > 0, 05 or value of Critical Ratio < 1, 96 then the hypothesis is **rejected**.