Chapter III

RESEARCH METHODS

1.1 Research Sites

This research was conducted at Abadi Hotel Jogja by Tritama Hospitality with the address on Jl. Ps. Kembang No.49, Sosromenduran, Gedong Tengen, Yogyakarta City, Special Region of Yogyakarta 55271.

1.2 Population and Samples

The population is a family or group of objects who are the target of research Kurniawati (2008). Therefore, the research population is the whole (universe) of the object of research so that these objects can be a source of research data. The population in the study are all Abadi Hotel Jogja employees by Tritama Hospitality, with the number of 118 employees. 100 are permanent employees and 18 are apprentice employees.

The sample is a part of the population that is the real object of a study Soeratno and Arsyad (2003). According to Subiyanto (1993), a good sample must contain two criteria namely accuracy and precision. In a study using survey methods, it is not always necessary to examine all individuals in the population because it to consumies very large costs and also takes a long time. However if the population is small, there is no need to use the sampling method because the entire population were examined. In this study, the entire population will be examined so that the total population because the sample which were 100 employees of Abadi Hotel Jogja by Tritama Hospitality. Therefore, the population method used is the census method.

1.3 Operationalization of Variables

3.3.1. Identify Variables

Variables were identified based on the formulation of the problem and hypothesis as follows:

a. Independent variable or independent variable are namely transformational leadership style (X1) and work environment (X2)
b. Mediation variable (Z) is employee motivation
c. The dependent variable or dependent variable (Y) is measured by employee performance

3.3.2. Variable Operational Definition

1. Transformational Leadership Style

According to Husnan et al. (1990), leadership style can be defined as behavior designed to integrate individual goals to achieve goals. The research of leadership style chosen was a transformational leadership style. Transformational leadership is a leadership style that requires action to motivate subordinates or followers to be willing to work for organizational goals Bass and Riggio (2006). The transformational leadership questionnaire was developed by Almer et al. (2017), with 4 indicators of transformational leadership style:

a. *Idealized Influence*

The idealized influence is a type leaders who show trust, confidence and are admired by followers. Question items consist of:

1) Leaders as an example
2) Trust in leaders
3) Leaders as regulators

b. *Inspirational Motivation*

inspirational motivation leaders know how to motivate and inspire subordinates to the challenges of the task. The influence is expected to increase group spirit. Question items consist of:

1) Career certainty

2) Financial security

3) Leaders for example

c. *Intellectual Stimulation*

The intelectual stimulation leader is a type of leader who seeks to encourage subordinates to think of innovation, creativity, methods or new ways. Question items consist of:

1) Opportunities to improve

2) Opportunities to share new ideas

3) Opportunities for creative thinking

d. *Individualized Consideration*

The individualized consideration leader is a type of leader who gives attention to the development and achievement needs of subordinates. Question items consist of:

1) An interesting task

2) The leader facilitates self-development

3) Bonus

2. Working Environment Variables

According to Robbins (2003) in Muchtar (2016), the environment is an institution or outside force that has the potential to affect organizational performance. The surrounding environment is formulated into two general

environments and special environments. The working environment of the indicator consists of Muchtar (2016):

a. Physical Work Environment

The physical work environment is the whole or every aspect of physical and social-cultural symptoms that surround or influence individuals. The physical work environment consists of the following items:

1) The condition of tables and chairs

2) Work equipment

3) The comfort of workspace that is sufficient

b. Nonphysical Work Environment ($X_{3.2}$)

The non-physical work environment is all the conditions that occur related to work relations, both relationships with superiors and relationships with subordinates of fellow, colleagues, or relationships with subordinates. The non-physical work environment consists of:

1) Conditions of relationship with superiors

2) Conditions of relationship with coworkers

3. Motivation (Z)

Motivation is a condition in a person who encourages the individual's desire to carry out certain activities in order to achieve goals. The instrument for measuring motivation was developed by Almer et al. (2017) with the following indicators:

a. Existence needs are requirements that cover all desires belonging to physiological and material needs.

1) Adequate incentives

2) Feel safe from being fired

b. The need to become a group member (relatedness needs) is the need to have a harmonious relationship with other parties or colleagues and satisfaction is achieved because of a sense of belonging and security.

1) The need for communication with leaders

2) The need for communication with coworkers

c. Growth needs are the need to develop into humans and make use of all the abilities of individuals to reach their full potential.

1) Opportunities to improve career

2) Challenging tasks

4. Employee Performance (Y)

According to Sedarmayanti (2011), performance is a translation of performance, which means the work of an employee, the management of a process or organization as a whole, where the results of work must be shown with tangible evidence and can be measured or compared to predetermined standards. The performance indicator was developed from Muchtar (2016) which consists of:

a. Quantity is the amount produced presented in the form of the number of units, the number of cycle activities completed

b. Quality, namely obedience to procedures, discipline, and dedication

c. Reliability is the ability to do the work needed with a minimum supervision

d. Presence is the belief that you will come to work every day and according to work hours

e. The ability to work together, the ability of an employee to work with others in completing tasks and the work that has been done are arranged in such a way as to achieve as much efficiency and effectiveness as possible

3.4. Technique (Method) Data Collection

Data collection techniques used in this study to collect data needed by researchers through two research stages are:

1. Library Research

Literature study is used to collect secondary data from companies, theoretical foundations, and information related to this research by means of documentation. The study was conducted, among others, by collecting data sourced from the literature, lecture material, and other research results that have to do with the object of research. This is done to get additional knowledge about the problem being discussed.

2. Field Research

In this study, the researcher collects the data needed by making direct observations of the company concerned, both through observation/observation, interviews and questionnaires to employees. Field research is carried out by:

1. Observation

Observation is a way of collecting data by conducting direct observations of an object in a given period and holding a systematic recording of certain things observed. This activity is carried out when the researcher takes to the field to observe the behavior and activities of individuals at the research site and then record all activities that occur in the research location (Moleong, 2013).

2. Interview

Interviews are a way of collecting data by asking questions directly by the interviewer (interviewer) to the interviewees (interviewee) who provide answers to the question. This technique is used to hold communication with research sources so that researchers obtain the necessary data. Interview techniques in qualitative research are in-depth interviews where the data obtained is primary data that is data that directly comes from the subject of research through a series of questions and answers with the parties concerned with the subject matter (Moleong, 2013).

3. Questionnaire

A questionnaire is a technique of collecting data by giving a set of questions and written statements to the respondent to answer. Questionnaires are efficient data collection techniques if researchers know for sure the variables to be measured and know what can be expected from the respondents is quite large and spread over a wide area. Questionnaires can be closed or open questions can be given directly to respondents (Sugiyono, 2009). The weights used in each statement are:

1. Strongly agree
2. Agree
3. Neutral
4. Don't agree
5. Strongly disagree

3.5. Likert Scale

According to Sugiyono (2009), the Likert scale is used to measure attitudes, opinions, and perceptions of a person or group of people about social phenomena. In research, this social phenomenon has been determined specifically by researchers who use the research instrument in the form of a questionnaire with a scale method of briquettes.

With a Likert scale, the variables to be measured are translated into indicators of variables. Then, the variable indicators are used as a starting point for compiling instrument items that can be in the form of statements or questions. According to Sugiyono (2009), research instruments that use the Likert scale can be made in the form of a checklist. The following are the categories of the Likert scale:

1. Strongly agree = 5
2. Agree = 4
3. Neutral = 3
4. Disagree = 2
5. strongly disagree = 1

3.6. Test of Research Instruments

1. Test Validity

Validity is a measure that shows the validity level of an instrument. Valid instruments have high validity, whereas instruments that are less valid means they have low validity. The high and low validity of the instrument shows the extent to which the data collected does not deviate from the description of the intended variable.

Whereas for testing empirical validity using item analysis is to correlate each item with its total score. Therefore the index of validity of each item can be obtained with its total score, so that the validity index of each item can be obtained (r). An instrument is declared valid, if the calculated r value is greater than r table.

2. Reliability Test

Reliability is a tool for measuring a questionnaire which is an indicator of a variable or construct. A questionnaire is said to be reliable if someone's answer to the question is consistent or stable over time (Ghozali, 2011). A reliable instrument means that if it is used several times to measure the same object, it will produce the same data. There are several techniques used to test the reliability of the instrument, including Cronbach's alpha coefficient. SPSS provides facilities to measure reliability with Cronbach Alpha (α) statistical tests. A constructor variable is said to be reliable if it gives a value (α) of 0.70 (Ghozali, 2011).

3.7. Data Analysis Technique

Data analysis is the process of simplifying data into a form that is easier to read and interpret. Data analyses used in this study are:

3.7.1 Descriptive Analysis

The purpose of this analysis is to explain/describe the characteristics of each variable studied. The shape depends on the type of data. Numerical data means values (mean), median, standard deviation, etc. While categorical data, of course, it can only explain the numbers/values of the number and percentage of each group.

3.7.2. Regression Analysis

Phase I of regression analysis was used to determine transformational leadership style and work environment towards work motivation. The stage I ofmultiple linear regression equation is as follows:

$Z = a + b_1X_1 + b_2X_2$..... (1)

Where :

Y1 = Work motivation

a = Constant

b1,2, = Regression coefficient X1, X2

X1 = Transformational Leadership Style

X2 = Work environment

1) Phase II of Regression Analysis

Phase II of regression analysis was used to determine the effect of transformational leadership style, work environment and work motivation on employee performance. The stage II of multiple linear regression equation is as follows:

$Y = a + b_3X_1 + b_4X_2 + b_5Z$..... (2)

Where :

Y = Employee performance

a = Constant

b3,4,5 = Regression coefficient X1, X2, Z

X1 = Transformational Leadership Style

X2 = Work environment

Z = Work motivation

3.7.3. Path analysis

To test the influence of intervening variables, path analysis method is used. Path analysis is an extension of multiple linear regression analysis, or path analysis is an extension of regression analysis to estimate the quality relationships between variables that have been previously determined based on theories (Ghazali, 2011). The direct effect means the direction of the relationship between one direct variable without going through another variable, while the indirect relationship must go through another variable. In this path, multiple linear regression analysis is used to determine the support of the influence of independent variables on the dependent variable, multiple linear regression can be used (Solimun, 2013).

In path analysis, there are several steps as follows (Solimun, 2013):

1) Path Diagram Model

Path diagram model as the first step in path analysis designs a model based on theoretical concepts. Theoretically, it can be concluded as follows:

a) Transformational leadership style and work environment influence work motivation

b) Tansformational leadership style, work environment and work motivation affect employee performance.

Based on the influence between the theoretical variables, a model can be made in the form of a diagram in Figure 3.1:

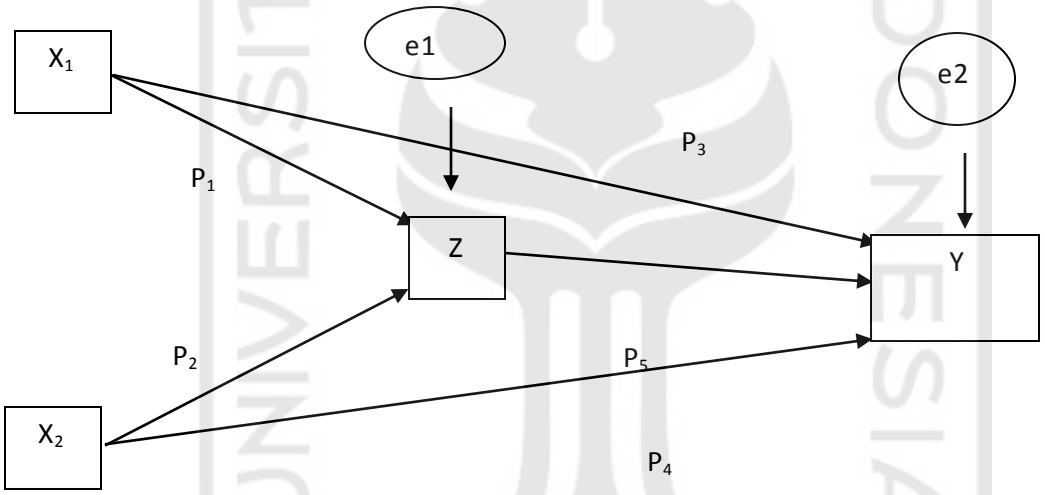

Figure 3.1. Path Analysis

Information :

X_1 = Transformational leadership style

X_2 = Work environment

Z = Work motivation

Y = Employee performance

P_1 = Coefficient of the influence of transformational leadership style on work motivation

P_2 = The coefficient of the influence of the work environment on work motivation

P_3 = Coefficient of the influence of transformational leadership style on employee performance

P_4 = The coefficient of the influence of the work environment on employee performance

P_5 = The coefficient of the influence of work motivation on employee performance

E = Standard error ($\sqrt{1-R^2}$)

The model can also be expressed in terms of equations, thus forming a system of path equations:

$Z = p_1X_1 + p_2X_2$..... (1)

$Y = p_3X_1 + p_4X_2 + p_5Z$..... (2)

2) Examination of Underlying Assumptions

The assumptions underlying the analysis of this path are:

a. In path analysis, the relationship between variables is linear and addictive
b. Only recursively can be considered namely a causal system in one direction. Whereas in the model containing reciprocal path analysis is not done.
c. There are minimum endogenous variables in the interval scale.
d. Observed variables are measured without errors (valid and reliable measurement instruments).
e. The model analyzed is specified (identified) correctly based on relevant theories.

3) Examination of Model Validity

The third step in *path* analysis is checking the validity of the model. Valid or not depends on whether or not the underlying assumptions are met. The assumption of *path* analysis has two indicators of model validity, namely the total termination coefficient and *trimming theory*.

a) Total determination coefficient

The total diversity of data that can be explained by the model measured by:

$R^2m = 1 - P_{e1}^2 P_{e2}^2 .....P_{ep}^2$

In this case, the achievement of R^2m is the same as the achievement (r) in the regression analysis. For the R^2 test (coefficient of determination), this coefficient of determination looks for how much the influence of the independent variable in explaining the whole to the dependent variable and its effect partially. Then, the coefficient of determination only measures how much the overall dependent variable contributes to the increase in the dependent value variation. This R^2 value will have a range of 0-1

b) Trimming Theory

Test the validity of the path coefficients on each direct influence path is the same as in the regression, using the p-value of the t-test, namely testing the regression coefficient of variables is partially standardized.

Based on the *Trimming Theory*, the non-significant pathways are discarded.

This regression t-test is as follows:

$$t = \frac{b_1}{S_e}$$

Information :

t = Value t count

b_1 = Coefficient of variable 1

S_e = Standard error value

The significance level is determined 0.05

If the p-value is <0.05, then Ho is rejected, which means the independent variable has an effect on the dependent variable

If p-value> 0.05, then Ho is accepted which means that the independent variable has no effect on the dependent variable

4) Interpret the Results of the Analysis

The fourth step in path analysis is to interpret the results of the analysis by taking into account the results of model validity, and calculating the total effect of each variable that has causality to endogenous variables. In path analysis, there are a direct influence and an indirect influence, and total influence. The coefficient P_1 is called the direct effect of path coefficient, while the indirect effect of coefficient and total influence are calculated by:

a) Direct effect of X1 to Z = p1
b) Direct effect of Z to Y = p5
c) The effect is not straight X1 to Z to Y = p1 x p5
d) Direct effect of X2 to Z = p2
e) Influence is not straight X2 to Z to Y = p2 x p5

3.7.4. Hypothesis Testing

To test the direct influence hypothesis, the t-test was used, by comparing the probability value (sig) of the variable concerned with a significance level of 0.05. If the value of sig <0.05, then Ho is rejected and Ha is supported, meaning that the independent variable has a direct and significant effect on the dependent variable. Whereas, to examine the indirect effect of transformational leadership style and work environment on employee performance through emotional intelligence with statistics Z (Z_{count}) can be calculated with the following formula:

p1p5

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$$\text{Z count} = \frac{}{\sqrt{p_5^2 Sp_1^2 + p_1^2 SP_5^2 - Sp_1^2 Sp_5^2}}$$

Information :

p1 is the *direct effect* coefficient of the independent variable on the mediating variable

p5 is the mediating *direct effect* variable coefficient on the dependent variable

sp1 is the *standard error* of the coefficient p1

sp5 is the *standard error* of the p2 coefficient

If the value of Z counts> 1.96 (Z table), then Ho is rejected and Ha is accepted, which means that the variable transformational leadership style or work environment has an indirect effect on employee performance through work motivation.