

The Effect of Motivation Work Discipline and Work Environment on Employee Performance with Job Satisfaction as Intervening variables (Study of Employee of PT CCPS West Jakarta)

¹Dihin Septyanto, ²Risca Elda Pertiwi

¹Management study program, Faculty of Economics and Business
Esa Unggul University, Jakarta

²Management study program, Faculty of Economics and Business
Esa Unggul University, Jakarta

*Corresponding author: dihin.septyanto@esaunggul.ac.id

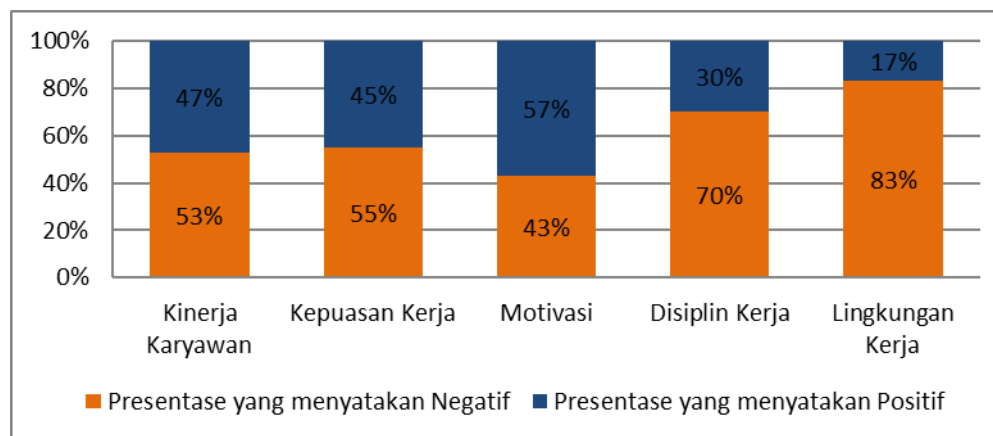
Abstract. *This study was to determine the effect of motivation, work discipline and work environment on employee performance with job satisfaction as an intervening variable (Study of Employees of PT. CCPS West Jakarta). The type of data used is primary and secondary. With a total population of 350 employees and a total sample of 187 employees (with the Slovin method), and the sampling technique using purposive sampling method with survey. Data analysis techniques used were validity test, reliability test, classic assumption test, data analysis method using path analysis, f test, t test and coefficient of determination using SPSS version 24. The results of the analysis that have been processed, motivation, work discipline, work environment have a positive and significant effect on job satisfaction, and motivation, work discipline, work environment, work satisfaction has a positive and significant impact on employee performance, motivation has a direct influence on employee performance without going through satisfaction work, work discipline has a direct effect on employee performance without going through job satisfaction, work environment has a direct influence on employee performance without going through job satisfaction on employees of PT. CCPS in the production department.*

Keywords: *Motivation, Work discipline, Work environment, Employee satisfaction and performance.*

1.INTRODUCTION

Competition between companies in the globalization era is increasingly sharp, so that human resources (HR) are required to continuously be able to develop themselves proactively. Human resources must be human learners, namely individuals who want to learn and work hard with enthusiasm, so that the potential for human development is maximized. Therefore, the human resources needed at this time are human resources capable of mastering technology quickly, adaptively, and responsive to technological changes. In these conditions personal integrity is increasingly important to win the competition.

Based on interviews that have been conducted by researchers to HRD managers and several employees (representing) PT.CCPS has a problem: poor employee absenteeism, often not achieving targets, and a bad work environment. The frequency of absences is too much, attendance is less timely, often employees violate the rules set and targets that are often not achieved by employees.



Based on the results of the pre survey and data regarding the performance of employees of the employees of PT.CCPS, West Jakarta seems still less effective and efficient. This can be seen from the performance of each employee is still not optimal in the completion of the tasks and responsibilities set by the company. In the previous research, related to factors that influence job satisfaction, as follows, the first factor is motivation that has a positive and significant effect on job satisfaction (Nurchayani & Adinyani, 2016). Meanwhile, motivation does not have a positive and significant effect on job satisfaction (Lidia Lusri and Hotlan Siagian, 2017). The second factor, work discipline has a significant effect on job satisfaction (Fatimah, 2017). Meanwhile, work discipline has no significant effect on job satisfaction (Anak Agung Ngurah Bagus Dhermawan, I Gde Adnyana Sudibya, 2012). The third factor is the work environment has a significant effect on job satisfaction (Fatimah, 2017). Meanwhile, the work environment has no significant effect on job satisfaction (Anak Agung Ngurah Bagus Dhermawan, I Gde Adnyana Sudibya, 2012).

Factors that affect employee performance, the first is work motivation has a significant effect on employee performance (Siagian, 2018). Meanwhile, work motivation has a positive but not significant effect on performance (Novitasari, 2018). Second, work discipline has a significant influence on employee performance (Siagian, 2018). Meanwhile, discipline does not significantly influence employee performance (Utari, 2015). Third, the work environment influences performance (Siti Nurhidayah, 2018). Meanwhile, employee work environment has a positive but not significant effect on performance (Novitasari, 2018). Fourth, job satisfaction has a significant effect on employee performance (Utami, 2018). Meanwhile, job satisfaction has no significant effect on performance (Ica Monica Oktapriani, Myrna Sofia, and Iranita, 2018).

Factors that influence employee performance through job satisfaction. Motivation, work discipline and work environment have a positive and significant effect on employee performance through job satisfaction (Fatimah, 2017). Meanwhile, according to Rizka Afrisalia Nitasari (2012), motivation does not significantly influence employee performance through job satisfaction and work discipline and the work environment does not significantly influence employee performance through job satisfaction (Btara Putra Riyanto, 2016).

The research problems that can be identified are as follows:

1. PT.CCPS employees have not been able to complete the task according to the specified target due to the lack of cooperation between employees
2. The level of awareness in attendance is still very poor due to work systems that move locations so employees often do not attend
3. The work environment is not supportive due to the noisy and hot work atmosphere.

2.LITERATURE REVIEW

2.1. Employee Performance

Performance according to Robert L. Mathis and John H. Jackson (2006) is what employees do or don't do. Rivai and Basri explain the performance and quoted by Kaswan (2012) as follows: "Performance is the result or overall level of success of a person during a certain period in carrying out

the task compared with various possibilities, such as work standards, targets or targets, or predetermined criteria and agreed / jointly." Performance is the output produced by the functions or indicators of a job or a profession within a certain time (Wirawan, 2012). Meanwhile according to Wibowo (2014), "Performance is an implementation of the plan that has been prepared".

2.2. Performance assessment

According to Sutrisno (2009), work performance measurement is directed at six aspects which are key achievement areas for the company concerned. The key achievement areas are:

1. The work result is the level of quality and quantity that has been produced and the extent of supervision carried out.
2. Job knowledge, namely the level of knowledge associated with work tasks that will directly affect the quantity and quality of work.
3. Initiative is the level of initiative during carrying out work tasks, especially in terms of handling problems that arise.
4. Mental dexterity, namely the level of ability and speed in receiving work instructions and adjusting to work and existing work situations.
5. Attitude is the level of morale and positive attitude in carrying out work duties.
6. Discipline of time and absenteeism namely the level of timeliness and the level of attendance.

"Performance appraisal, also known as performance evaluation, performance rating, performance assessment, service rating, etc. is basically a process where the organization obtains information about how well an employee does his job" (Kaswan, 2012).

2.3. Factors that affect employee performance

According to Keith Davis in Anwar Prabu Mangkunegara (2009) it is formulated that the factors that can affect performance are:

1. Ability factor,
Psychologically, the abilities of employees consist of potential abilities (IQ) and reality abilities (knowledge + skills). Therefore, employees need to be placed in jobs that match their expertise (the right man on the right place, the right man on the right the job).
2. Motivation factors
Motivation is formed from the attitude of an employee in dealing with work situations. Motivation is a condition that drives employees who are directed to achieve company goals. Mental attitude is a mental condition that encourages maximum. An employee's mental attitude must be psychophysically prepared (attitude mentally, physically, goals and situations).

2.4. Job Satisfaction

The level of job satisfaction shows a positive attitude towards the job, conversely if someone who is dissatisfied with the job shows a negative attitude towards the job. Robbins (Donni, 2016) argues, that job satisfaction is a general attitude of an individual towards his work. Likewise Gibson, Ivancevich, and Donnely (Priansa, 2016) stated that job satisfaction is a person's attitude towards their service, that attitude comes from their perception of their work. Similarly, George Dan Jones (Priansa, 2016) job satisfaction is a collection of feelings, beliefs, and thoughts about how to respond to his work. The cognitive aspect of job satisfaction is workers' beliefs about work and work situations. Job satisfaction shows the compatibility between someone's expectations that arise and the benefits provided by the company. Satisfaction is something that can affect work behavior, work lags, absenteeism, and employee turnover.

Job Satisfaction Indicators, According to Edy Sutrisno (2017), states the indicators of job satisfaction that: 1. The work itself, 2. A sense of security (peace), 3. Relationships with coworkers, 4. Communication, 5. Work environment, 6. Discipline, 7. Salary and 8. Career path.

2.5. Work motivation

Motivation is defined as an activator or impulse in humans that can cause, direct, and organize behavior (Darmawan, 2013). George, J.M., and Jones (2005), stated that the elements of work motivation consist of behavioral direction, level of effort, and level of persistence. Motivation is an

ability to provide encouragement to someone (employee) to exert capabilities in the form of expertise and skills in the context of achieving a target or goal.

Motivation theories can be categorized into three groups, namely:

1. Motivation theory with a content theory
2. Motivation theory with a process approach (process theory)
3. Motivation theory with reinforcement theory

Motivation theory with the content approach emphasizes more on what factors make employees take a particular action, for example Abraham Maslow's motivation theory. The motivation theory of the process approach not only emphasizes what factors make employees act, but also how the employee is motivated, for example achievement motivation theory from David Mc. Clelland Motivation theory with a reinforcement approach emphasizes more on factors that can increase an action taken or that can reduce an action, for example motivation theory from Skinner (Operant Conditioning).

2.6. Employee work discipline

According to Terry (in Tohardi, 2002), discipline is an employee mobilization tool. So that each job can run smoothly, it must be endeavored so that there is good discipline. Latainer (in Soediono, 1995), defines discipline as something that develops strength in the body of employees and causes employees to voluntarily adjust to the decisions, regulations, and high values of work behavior.

Turangan et al. (2016), states that work discipline is one of the factors affecting employee performance. According to Iriani (2010), states that employee discipline is absolutely necessary so that all activities that are and will be carried out according to the mechanism that has been determined.

According to Singodimedjo (2000), factors that influence employee discipline are:

1. The size of the payment of wages.
2. The presence or absence of leadership in the company.
3. The presence or absence of definite rules that can be used as a handle.
4. The courage of the leader in taking action
5. The presence or absence of leadership supervision.
6. The presence or absence of attention to employees.
7. Creating habits that support the establishment of discipline.

Positive habits include: a. Mutual respect, when meeting in the work environment. b. Give praise in accordance with the place and time, so that employees will also feel proud of the praise. c. Often involving employees in meetings, let alone meetings related to their destiny and work. d. Tells if you want to leave the workplace with coworkers, by informing them, where and for what matters

2.7. Employee Work Environment

According to Robbins (2003) environment are institutions or forces outside which have the potential to influence organizational performance, the environment is formulated into two namely general environment and special environment. The general environment is anything outside the organization that has the potential to influence the organization. This environment is in the form of social and technological conditions. While the special environment is the part of the environment that is directly related to the achievement of the goals of an organization. Sedarmayanti (2010), explains the dimensions of employee work environment are:

1. Physical work environment

The physical work environment is all physical forms that exist around the workplace environment that can affect employees both directly and indirectly.

The physical work environment can be divided into 2 categories, namely:

- a. Directly related environment and intermediary environment. Environment related directly to employees (such as work centers, chairs, tables, etc.)
 - b. The intermediary environment can also be called a work environment that affects the human condition, (for example: temperature, humidity, air circulation, lighting, noise, mechanical vibrations, unpleasant odors, coloration, etc.).
2. Non-physical work environment

Non-physical work environment is all conditions that occur relating to work relationships, both relationships with superiors and fellow co-workers, as well as relationships with employees.

3. METHODS

3.1. Research Design

This research is in the form of causal associative research with survey method. This study has five variables, namely the independent variable (motivation, work discipline, work environment), the dependent variable (employee performance) and job satisfaction as an intervening variable. The subject of this research is PT. CCPS, West Jakarta. The object of this research is all employees of PT. CCPS, West Jakarta. The company is engaged in distributors and services.

3.2. Data Types and Sources

Source of data used in this study are primary data and secondary data. Primary data collection in this study was in the form of data through interviews with leaders (company leaders, HRD managers, production managers, and project managers), and production employees representing from PT. CCPS, West Jakarta.

3.3. Population, Samples and Sampling Techniques

The population in this study were all employees of PT. CCPS West Jakarta, which is in the production section, totaling 350 employees. Research on the number of samples in this study using the Slovin method, with the following formula :

$$n = N / (1 + N (e)^2)$$

Information:

n = Number of Samples

N = Number of population studied

e = Error error rate

$$350 / (1 + 350 (0.05)^2) \quad n = 350 / (1 + 350 (0.0025)) \quad n = 350 / 1,875 \\ n = 186.67 \text{ (rounded to 187)}$$

3.4. Sampling technique

The sampling technique in this study used a purposive sampling method. According to Kriyantono (2010), purposive sampling technique includes people who are selected on the basis of certain criteria made based on research objectives. The sample used has the following criteria:

1. Gender male and female; 2. Aged over 17 years; 3. Middle school education; and 4. Length of work > 6 months

3.5. Data analysis technique

Validity test. According to (Ghozali, 2013), the validity test is used to measure the validity or validity of a questionnaire. Valid means that the instrument can be used to measure what should be measured. The testing process is carried out by measuring the dimensions of each question the level of validity will be tested. A valid statement will be used as a questionnaire to be distributed to respondents while invalid questions will be deleted. **Reliability test** is a tool to measure a questionnaire which is an indicator of a variable or construct. A questionnaire is said to be reliable or reliable if the respondent's answer to the question is consistent or stable over time.

3.6. Classic assumption test

Classical Assumption Test is an analysis conducted to assess whether in a Ordinary Least Square (OLS) linear regression model there are classic assumption problems. The classic assumption tests that are often used are multicollinearity test, heteroscedasticity test, normality test, autocorrelation test and linearity test.

3.7. Data analysis method

The data analysis technique used in this study is the Path Analysis method. Sandjojo (2014) said that path analysis is a research method that is mainly used to test the strength of the direct and indirect relationship of the independent (exogenous) variable to the dependent variable (endogenous). In the path analysis there are two kinds of variables, namely exogenous variables and endogenous variables.

1. Exogenous Variables

Exogenous variables are variables for which there are no explicit causes or in the diagram there are no arrows in their direction, other than in the measurement error section. If between endogenous variables are correlated then the correlation is shown with a double-headed arrow that connects the variable. In this study, which included exogenous variables are motivation, work discipline and work environment.

2. Endogenous Variables

Endogenous variables are variables that have arrows to the variable. Variables included include all intermediate and dependent variables. Endogenous intermediate variables have arrows going in their direction and from that direction in a path diagram model. The dependent variable only has arrows going in its direction. In this study the endogenous variables are job satisfaction and employee performance.

In this analysis divided into 2 substructural:

1. The first substructure equation is one variable (intervening) Z Job satisfaction and three exogenous variables (independent) X1 Motivation, X2 Work discipline and X3 Work environment. With the development of the research model as follows: $Z = pzX1 + pzX2 + pzX3 + e1$

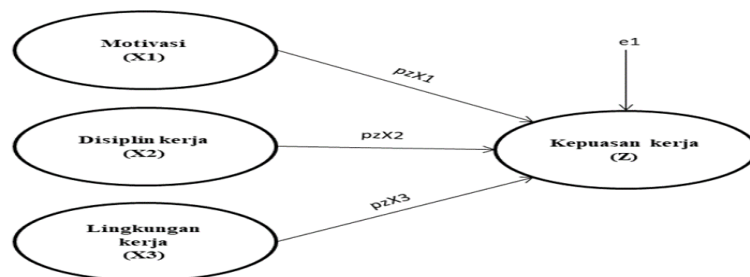


Figure 3.1. Substructural Causal Relations1

2. The second substructure equation is one endogenous (dependent) Y Employee performance, and three exogenous variables (independent) X1 Motivation, X2 Work discipline, X3 Work environment. With the development of the research model as follows: $Y = pyX1 + pyX2 + pyZ + pyX3 + e2$

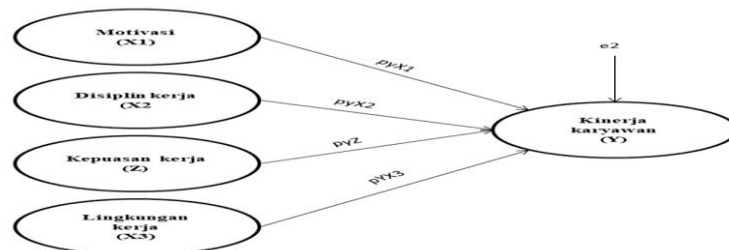


Figure 3.2 Substructural Causal Relations 2

3. Structural overall three namely one endogenous (dependent) Y Employee performance, variables (intervening) Z Job satisfaction and two exogenous variables (independent) X1 Motivation, X2 Work discipline, and X3 Work environment.

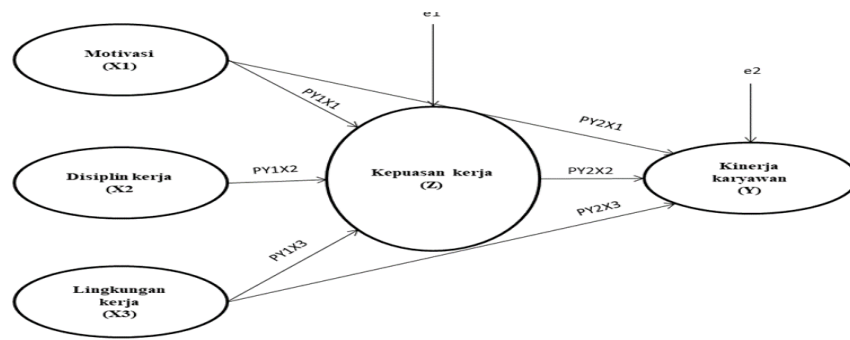


Figure 3.3 Overall Substructural Causal Relations

4. At this stage systematically concludes path analysis by following the pattern of structural methods, namely by deciding structural equations and path diagrams based on the study of certain theories and using variable relationships and inferring the effects that occur from relationships between variables.

3.8. Hypothesis testing

Hypothesis testing is intended to determine whether there is a significant influence between the independent variables on the dependent variable. In testing this hypothesis, researchers set using a significant test, with the determination of the null hypothesis (H_0) and the alternative hypothesis (H_a).

The null hypothesis (H_0) is a hypothesis that states that there is no significant effect between the independent variable and the dependent variable while the alternative hypothesis (H_a) is the hypothesis that there is a significant influence if between the independent variable and the dependent variable. This test is carried out simultaneously (F test) and partially (t test).

Simultaneous Testing (Test F), According to (Ghozali, 2013) the F test basically shows whether all independent variables intended in the model have a simultaneous influence on the dependent variable. Tests carried out using significance level 0.05 ($\alpha = 5\%$). Provisions for the acceptance or rejection of a hypothesis are as follows. If the significant value > 0.05 , then the hypothesis is accepted (regression coefficient is not significant). This means that simultaneously the independent variable does not have a significant effect on the dependent variable. If the significant value ≤ 0.05 , the hypothesis is rejected (significant regression coefficient). This means that simultaneously the independent variable has a significant effect on the dependent variable

Partial Testing (t Test), According to (Ghozali, 2013) t test basically shows how far the influence of one explanatory or independent variable individually in explaining the variation of the dependent variable. Tests carried out using significance level 0.05 ($\alpha = 5\%$). Acceptance or rejection of the hypothesis is carried out with the following criteria. If the value is significant > 0.05 then the hypothesis is rejected (the regression coefficient is not significant). This means that partially the independent variable does not have a significant effect on the dependent variable. If the significant value ≤ 0.05 , the hypothesis is accepted (significant regression coefficient). This means that partially the independent variable has a significant effect on the dependent variable.

Determinant Coefficients, According to (Ghozali, 2013) the coefficient of determination (R^2) basically measures how far the model's ability to explain variations in the dependent variable. The coefficient of determination is between zero and one. A small R^2 value means that the ability of independent variables to explain the variation of the dependent variable is very limited. A value close to one means that the independent variables provide almost all the information needed to predict the variation of the dependent variable. In general the coefficient of determination for cross data is relatively low because of the large variations between each observation, whereas for time series data usually have a high coefficient of determination. The formula used is:

$$KD = r^2 \times 100\%$$

Information:

KD = Determination Coefficient

r = Correlation Coefficient.

4. RESULT AND DISCUSSION

4.1. Results of Respondent Characteristics

In this section, a summary of the profile of the research respondents will be explained based on the identification statement contained in the research questionnaire. The number of respondents in this study were taken as many as 190 respondents who were examined based on gender, age, last education, and length of work. By looking at the respondent's profile, it can be seen that the data analysis is presented in the following, it can be explained that the number of male respondents is more that is equal to 70% or with the number of respondents 130 employees, while female respondents are much less that is equal to 30% or with the number of respondents 57 employees.

Based on data, it can be explained that employees aged 17-20 years get a percentage of 33% or with 62 respondents, employees aged 21-30 years get a percentage of 29% or with a number of respondents 55 employees, employees aged 31-40 years get a percentage of 29% or the number of respondents 55 employees, then employees aged 41-50 years get a percentage of 6% or the number of respondents 10 employees, while employees who are over 51 years get a percentage of 3% or the number of respondents 5 employees. 17-20 years old dominates because 17-20 years old is the most productive age.

Based on data, it can be explained that employees who have the most recent junior high school education get a percentage of 34% or with the number of respondents as many as 63 employees, who have the last high school / vocational education get a percentage of 59% or with a total of 111 respondents, those who have the last education D3 get a percentage 3% or the number of respondents as many as 5 employees, while those who have the last education S1 get a percentage of 4% or with the number of respondents as many as 8 employees.

Based on data, it can be explained that employees who work more than 6 months get a percentage of 46% or the number of respondents as many as 86 employees, then employees who work 1 to 3 years get a percentage of 49% or with a total of 91 employees, while employees who work more from 3 years get a percentage of 5% or with a total of 10 respondents.

4.2. Validity Test Results

In this study, a validity test was conducted to measure the extent of a statement on the questionnaire used to measure the indicator data variables examined in this study. Statements to be tested amounted to 34 statements, valid or invalid a statement seen from the person correlation value of declared valid if the results obtained with a value > 0.361 and declared invalid if the results obtained < 0.361 . It can be seen from the table of critical values for product product r correlations, while the validity test results are as follows:

Employee Performance Validity Test Results, To test the validity of employee performance consisting of 6 statements in which all of the statements stated are valid because they have $r_{count} > r_{alpha\ table\ 0.05,\ N = 30\ and\ r\ table\ 0.361}$.

Job Satisfaction Validity Test Results, To test the validity of job satisfaction consisting of 8 statements in which all of the statements stated are valid because they have $r_{count} > r_{alpha\ table\ 0.05,\ N = 30\ and\ r\ table\ 0.361}$.

Work Motivation Validity Test Results, To test the validity of work motivation which consists of 7 statements which of all the statements are valid because they have $r_{count} > r_{alpha\ table\ 0.05,\ N = 30\ and\ r\ table\ 0.361}$.

Work Discipline Validity Test Results, To the validity test of work discipline which consists of 6 statements where all of the statements stated are valid because they have $r_{\text{count}} > r_{\text{alpha table } 0.05}$, $N = 30$ and $r_{\text{table } 0.361}$.

Work Environment Validity Test Results, To test the validity of the work environment consisting of 7 statements in which all of the statements stated are valid because they have $r_{\text{count}} > r_{\text{alpha table } 0.05}$, $N = 30$ and $r_{\text{table } 0.361}$.

4.3. Reliability Test Results

Reliability is a form of testing of the quality of primary data, with the aim of measuring the consistency of all questions in research. Reliability tests were carried out using the Cronbach Alpha formula. A data is considered reliable if it has a value above 0.6.

Employee Performance Reliability Test Results, From the calculations, it can be seen that the results of the calculation of the statement of employee performance variables cronbach's alpha value is greater than 0.6 which is equal to .796 with 6 statements, so it is said to be reliable.

Job Satisfaction Reliability Test, From the calculations it can be seen that the results of the calculation of the statement of job satisfaction variable cronbach's alpha value is greater than 0.6 which is equal to .883 with 8 statements, it is said to be reliable.

Work Motivation Reliability Test Results, From the calculations it can be seen that the results of the calculation of the statement of work motivation variable cronbach's alpha value is greater than 0.6 which is equal to .808 with 7 statement items, so it is said to be reliable.

Work Discipline Reliability Test Results, From the calculations it can be seen that the results of the calculation of the statement of the work discipline variable cronban's alpha value is greater than 0.6 which is equal to .742 with 6 statements, so it is said to be reliable.

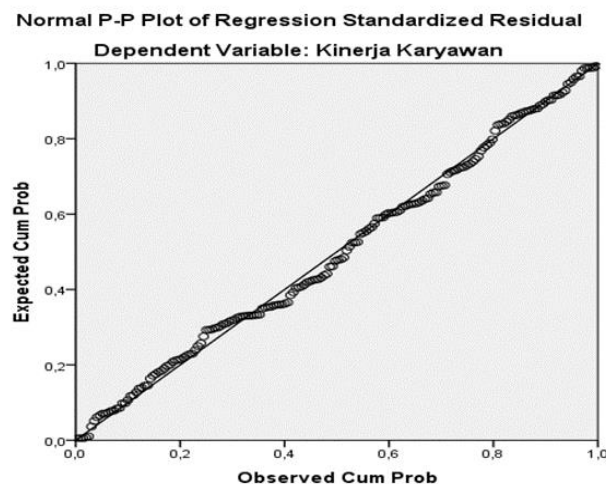
Work Environment Reliability Test Results, From the calculations it can be seen that the results of the calculation of the statement of the work environment variable Cronban's alpha value is greater than 0.6 which is equal to .814 with 7 statement items, so it is said to be reliable.

4.4 Classical Assumption Test

Testing requirements analysis is used as a statement in the use of linear regression analysis models. A regression model must meet the requirements that the data are normally distributed, heterocedasticity does not occur. Here are the results of testing classic assumptions:

4.4.1 Normality Test

The method used by looking at the normal probability plot that compares the cumulative distribution of the normal distribution. Normal distribution will form a straight diagonal line and plotualual data will compare with a diagonal line. As for the results of the normality test calculation by looking at the graph shown in the following P-P neural drawings of the plot:



In the normal plot graph, it can be seen that the points spread around the diagonal line, and the spread follows the direction of the diagonal line with a significance value of Asiympt.Sig (2-tailed) of 0.200 greater than 0.05. Then it can be concluded that the data of motivation, work discipline, work environment and job satisfaction are normally distributed. Thus, the assumptions or normality requirements in the regression model have been fulfilled.

4.4.2 Multicollinearity Test

Multicollinearity testing aims to determine whether the independent variables have a relationship or not with each other. Multicollinity test needs to be done because the number of independent variables in this study amounted to more than one.

Table Multicollinearity Test Results

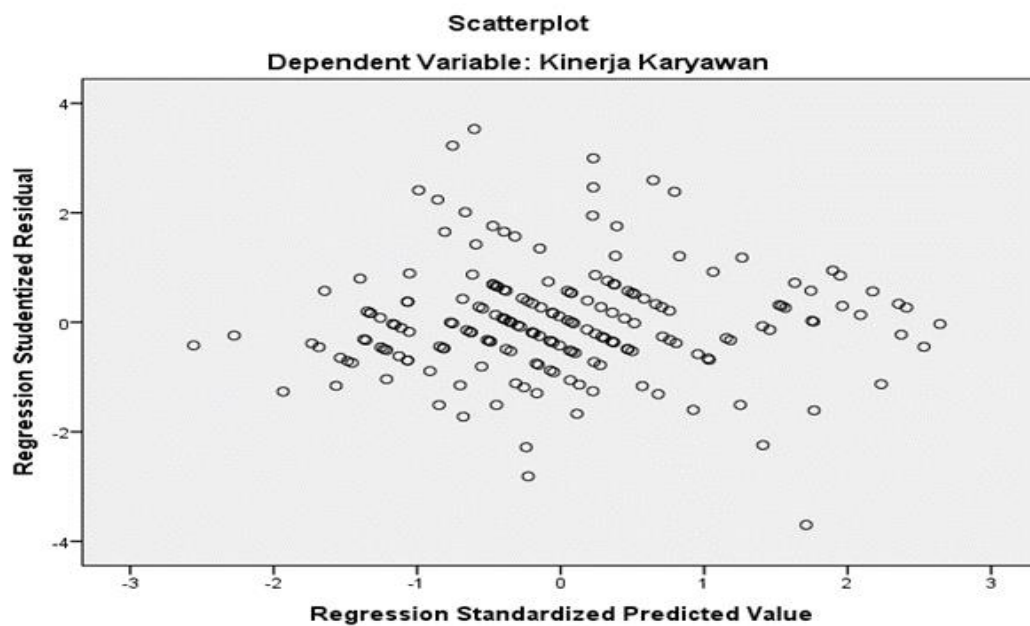
Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	8.641	1.353		6.388	.000		
	Work Satisfaction (Z)	.164	.049	.191	3.379	.001	.779	1.283
	Work Motivation X1)	.355	.055	.514	6.438	.000	.393	2.548
	Work Discipline X2)	.113	.039	.221	2.920	.004	.438	2.283
	Work Environment (X3)	.029	.062	.030	0.468	.641	.622	1.608
a. Dependent Variable: Employee Performance (Y)								

Source: Researcher processed data (2019)

Based on table the multicolliniarity test results of work satisfaction variables have a tolerance value of $0.779 > 0.10$ and a VIF value of $1.283 < 10.00$, motivation has a tolerance value of $0.393 > 0.10$, a VIF value of $2.548 < 10.00$, work discipline has a tolerance value of $0.438 > 0.10$ VIF value $2.283 < 10.00$, and the work environment has a tolerance value $0.622 > 0.10$ VIF value $1.608 < 10.00$. Then referring to the basis of decision making in the multicollinearity test, it can be concluded that there are no multicollinearity symptoms in the regression model.

4.4.3 Heteroscedasticity Test

Heteroscedasticity test is a test used to test whether in the regression model there is a similarity in variance from the residuals of observations to other observations. If the variance shows a fixed pattern, it can be stated that Heteroscedasticity does not occur (Ghozali, 2016). Heteroscedasticity is one of the factors that causes a simple linear regression model is not efficient and accurate, also resulted in the use of the maximum likelihood method in estimating the parameters (coefficients) of the regression will be disrupted. Figure Heteroscedasticity Test :



Source: Researcher processed data (2019)

From the heteroscedasticity test results can be seen from the picture above it can be seen that the points spread with irregular patterns above and below the number 0 and the Y axis with a significance value greater than 0.05. so it can be concluded that there is no heteroscedasticity problem in the regression model

4.4.4 Autocorrelation Test

According to Priyatno (2010), autocorrelation is a state where there is a correlation of residuals for one observation with another observation which is arranged based on time series. A good regression model is a regression that does not occur autocorrelation problems. The test method used by using the Watson durbin test (DW test).

Table Autocorrelation Test Results

Model Summary^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,784 ^a	0,614	0,606	1,890	1,996
a. Predictors: (Constant), Kepuasan Kerja, Disiplin Kerja, Motivasi , Lingkungan Kerja					
b. Dependent Variable: Kinerja Karyawan					

Source: Researcher processed data (2019)

From the results of the autocorrelation test can be seen from the table above it can be seen that the Durbin-Watson results of 1.996 is greater than the Table of DW 5% of 1.755, so it can be concluded that there is no autocorrelation.

5. Path Analysis

Path analysis in this study is used to determine the direct relationship of Motivation, Work Discipline, Work Environment on Job Satisfaction, the direct relationship of Motivation, Work Discipline, Work Environment, Job Satisfaction on Employee Performance. The direct relationship of Job Satisfaction to Employee Performance and the indirect relationship of Motivation, Work Discipline, and Work Environment through Job Satisfaction to Employee Performance, through the 2-step

regression equation calculation model. Phase I: substructure 1, namely testing the effect of Motivation, Work Discipline, Work Environment on Job Satisfaction and substructure 2 stage to test Motivation, Work Discipline, Work Environment and Job Satisfaction on Employee Performance and stage 2 namely testing the combined stages of substructural I and substructural II as follows :

5.1. Path Analysis Phase 1

Determine Substructures and path equations consist of two substructural equations. The equation can be written as follows:

In Equation I Substructure, the test is conducted to measure the direct effect between the variables of motivation, work discipline, work environment variables on job satisfaction as follows:

$$Z = 9,564 + 0,442X_1 + 0,571X_2 + 0,718X_3$$

A constant value of 9.564 if motivation (X₁), work discipline (X₂), and work environment the value is 0, then job satisfaction (Z) value is 9.564.

1. The regression coefficient of motivation (X₁) is 0.442, meaning that if other independent variables have a fixed value and motivation has increased 1%, job satisfaction will increase by 0.442. The regression coefficient on motivation has a positive value on job satisfaction, which means that the level of motivation that is felt is increasingly increasing, job satisfaction of employees at PT. CCPS; 2. The work discipline regression coefficient (X₂) of 0.571, meaning that if other independent variables have a fixed value and work discipline has increased 1% then job satisfaction will increase by 0.571. The regression coefficient on work discipline has a positive value on job satisfaction, which means that the level of discipline that is felt is increasingly increasing as well as job satisfaction among employees of PT. CCPS; 3. The work environment regression coefficient (X₃) is 0.718, meaning that if other independent variables have a fixed value and the work environment has increased by 1%, job satisfaction will increase by 0.718. The regression coefficient in the work environment has a positive value on job satisfaction which means the more comfortable the level of the work environment that is felt increasingly increasing job satisfaction of employees of PT. CCPS, West Jakarta.

The F test

The F test is used to determine whether the independent variable is Work Stress on Job Satisfaction variable (Z). The following results from the F test on work stress variables and compensation for job satisfaction:

Table 4.18 Sub-structural F Test Results equation I

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1259,838	3	419,946	68,513	,000 ^b
	Residual	1140,078	186	6,129		
	Total	2399,916	189			
a. Dependent Variable: Keouasan Kerja (Z)						
b. Predictors: (Constant), Work Environment (X3), Work Discipline (X2), Work Motivation (X1)						

Source: Researcher processed data (2019)

Based on table 4.20 above the results of the calculation of the table using the F test, obtained an F count of 68.513 with a significant level of 0.000. because the probability value <0.05 is (0.000 <0.05), thus Ho is rejected and Ha is accepted. From the results of this F test the independent variables namely motivation, work discipline, work environment simultaneously or together significantly influence the intervening variable, namely job satisfaction on employees of PT. CCPS, West Jakarta.

T test

T test is used to determine whether the independent variable, namely work stress and compensation, has a partial or own effect on the dependent variable, namely job satisfaction. A model is said to be influential if $t_{\text{arithmetic}} > t_{\text{table}}$. Here are the results of the t test in this study:

Table Sub-structural T Test Results I

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	9,564	1,205		7,934	,000
	Motivation (X1)	,442	,102	,426	4,333	,000
	Work Discipline (X2)	,571	,113	,465	5,034	,000
	Work Environment (X3)	,718	,149	,644	4,807	,000
a. Dependent Variable: Work Satisfaction (Z)						

Source: Researcher processed data (2019)

Based on the table above can be seen the results of the t test calculations for each variable are as follows:

1. Motivation (X1)

For the motivation variable has a calculated t value of 4.333 and t table of 1.972 where $4.333 > 1.972$ with a significance value of 0.000 where $0.000 < 0.05$. The conclusion is that the motivation variable partially has a positive and significant effect on job satisfaction in PT. CCPS motivation in this study using the dimensions of individual motivation as measured by indicators such as work targets, work quality, responsibilities, communication, friendship (coworkers), leaders and exemplary work related to what employees feel at PT.CCPS. Then the motivational dimensions of the need to excel, the need to expand relationships, and the need to master an existing job at PT. CCPS.

2. Work Discipline (X2)

For work discipline variables, the t value is 5.034 and t table is 1.972 where $5.034 > 1.972$ with a significance value of 0.000 where $0.000 < 0.05$. The conclusion is that work discipline variables partially have a positive and significant effect on job satisfaction of employees of PT.CCPS. The work discipline variable in this study uses dimensions of obedience to the rules of time, obedience to company rules, and obedience to rules of conduct in work. Then use the indicators of suitability of working hours, according to the target, how to dress, behave, do work in accordance with the duties and responsibilities, and relate well with other work units.

3. Work Environment (X3)

For the work environment variable has a t value of 4.807 and t table of 1.972 where $4.807 > 1.972$ with a significance value of 0.000 where $0.000 < 0.05$. The conclusion is that the work environment variables have a positive and significant effect on job satisfaction of PT.CCPS employees. The working environment in this study uses the dimensions of the individual work environment as measured by indicators of lighting, air temperature, room color, workspace specialization, work safety, relationship work and work atmosphere relating to work related to what employees feel at PT. CCPS. Then the dimensions of the work environment linkages are the physical and non-physical environment at PT.CCPS, West Jakarta.

Coefficient Determination

This step is carried out to find out how much the coefficient of determination between the variables Motivation (X1) Work Discipline (X2) and Work Environment (X3) on Job Satisfaction (Z) can be seen from the large number of R square (R^2) shown in the table below :

Return : Koefisien Determinasi Sub Struktur I

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estim
1	,725 ^a	0,525	0,517	2,475
a. Predictors: (Constant), Work Environment (X3), Work Discipline (X2), Motivation (X1)				

Based on table above obtained R square figures (R^2) or ($[0.725^2]$) of 0.525. This figure is used to determine the effect of work stress (X1) and compensation (X2) on job satisfaction (Z) by calculating the coefficient of determination (R^2) by using the following formula:

$$R^2 = r^2 \times 100\% = 1 - r^2 = 0.525 \times 100\% = \sqrt{1 - 0.525} = 52.5\% = 0.475$$

From the results of the calculation of the coefficient of determination above, it is known that the variable Motivation (X1) Work Discipline (X2) and Work Environment (X3) gives an influence on Job Satisfaction (Z) of 52.5% and the remaining 47.5% (100% - 52 , 5%) influenced by other factors not examined in this study. Based on the calculation of path analysis phase I can be described through the following path:

5.2 Path Analysis Phase II

Determine Substructures and path equations consist of two substructural equations. The equation can be written as follows:

In Equation II Substructure, the test is carried out to measure the direct effect between the variables of motivation, work discipline, work environment and job satisfaction on Employee Performance as follows:

$$Y = 2,431 + 0,211X1 + 0,222X2 + 0,325X3 + 0,361Z$$

A constant value of 2,431 if motivation (X1), work discipline (X2), work environment (X3) and job satisfaction (Z) value is 0, then turnover intention (Y) value is 2.431.

1. Motivation regression coefficient (X1) of 0.211, meaning that if other independent variables the value is fixed and motivation has increased 1% then employee performance will increase by 0.211. Regression coefficient on positive motivation on employee performance which means the higher the motivation of employees the higher employee performance for the company; 2. The coefficient of work discipline (X1) of 0.222, meaning that if other independent variables the value is fixed and work discipline has increased 1% then the employee's performance will increase by 0.222. The regression coefficient on work discipline increases on employee performance, which means increasing work discipline increases employee performance; 3. The work environment regression coefficient (X3) of 0.325, meaning that if other independent variables have a fixed value and the work environment has increased by 1%, employee performance will increase by 0.325. The regression coefficient in the positive work environment on employee performance means that the work environment increases so the performance of the employee increases; 4. The job satisfaction regression coefficient (Z) of 0.361, meaning that if other independent variables have a fixed value and job satisfaction has increased 1%, then employee employment will increase by 0.361. The regression coefficient on positive job satisfaction on employee performance which means increasing job satisfaction increases employee performance

Test F

F test is used to test the effect of Motivation, Work Discipline, Work Environment and Job Satisfaction as an independent variable on Employee Performance as a dependent variable on the employees of PT. CCPS imultaneously or together.

Based on the calculation of the table using the F test obtained F count of 73.714 with a significant level of 0.000. because the probability value <0.05 is (0.000 <0.05), thus Ho is

rejected and H_a is accepted. From the results of this F test the independent variables namely motivation, work discipline, work environment and job satisfaction simultaneously or together significantly influence the dependent variable namely the performance of employees at PT. CCPS in the production department.

Test T

T test is used to test the effect of motivation, work discipline, work environment and job satisfaction as an independent variable on employee performance as a dependent variable partially or individually, if the probability of t value or significance <0.05 , it can be said that there is an influence between variables independent of partially dependent variables. However, if the probability value of t or significance > 0.05 , it can be said that there is no significant effect between each independent variable on the dependent variable. Here are the results of the t test in this study:

Motivation (X1)

For the motivation variable has a t value of 2.580 and t table of 1.972 where $2.580 > 1.972$ with a significance value of 0.011 where $0.011 < 0.05$. The conclusion is that the motivation variable partial has a positive and significant effect on employee performance in PT.CCPS. production. Motivational variables in this study use the dimensions of individual motivation as measured by indicators such as work targets, work quality, responsibilities, communication, friendship (coworkers), leaders and role models regarding work related to what employees feel at PT.CCPS. Then the motivational dimensions of the need to excel, the need to expand relationships, and the need to master an existing job at PT.CCPS

Work discipline (X2)

For the work discipline variable has a t value of 2.408 and t table of - 1.972 where $2.408 > -1.972$ with a significance value of 0.017 where $0.017 < 0.05$. The conclusion is that work discipline variables have a negative and significant effect on employee performance in PT.CCPS production section. The work discipline variable in this study uses the dimensions of obedience to the rules of time, obedience to company rules, and obedience to the rules of behavior at work. Then use the indicators of suitability of working hours, according to the target, how to dress, behave, do work in accordance with the duties and responsibilities, and relate well with other work units.

Work environment (X3)

For the work environment variable has a t value of 2.688 and t table of 1.972 where $2.688 > 1.972$ with a significance value of 0.008 where $0.008 < 0.05$. The conclusion is that the work environment variables that have a positive and significant effect on employee performance on the employees of PT.CCPS production section. Work environment variables in this study use the dimensions of individual work environment as measured by indicators of lighting, air temperature, room color, workspace specialization, work safety, work relationships and work atmosphere related to work related to what employees feel at PT.CCPS Then the dimensions of the work environment linkages are the physical and non-physical environment at PT. CCPS

Job Satisfaction (Z)

For the job satisfaction variable has a t value of 6.451 and t table of 1.972 where $6.451 > 1.972$ with a significance value of 0.003 where $0.000 < 0.05$. The conclusion is that job satisfaction variables partially have a negative and significant effect on employee performance in PT.CCPS, The variable of job satisfaction in this study uses individual dimensions as measured by indicators of the job itself, security (peace), relationships with colleagues, communication, work environment, work discipline and time management, salary and career path. Then the dimensions of psychological factors, social factors, physical factors, and financial factors that exist in PT.CCPS

Coefficient of Determination

This step is done to find out how much the coefficient of determination between the variables Motivation (X1), Work Discipline (X2) and Work Environment (X3) on Job

Satisfaction (Z) can be seen from the large number of R square (R^2) shown in the table below this:

$$\begin{aligned} R^2 &= r^2 \times 100\% \quad \epsilon = 1 - r^2 \\ &= 0.614 \times 100\% = 1 - 0.614 \\ &= 61.4\% = 0.386 \end{aligned}$$

The equation above means that the influence of motivation, work discipline and work environment on job satisfaction has a value of 61.4% while the remainder can be calculated by means of 38.6% (100% - 38.6%) influenced by other variables outside the research variable researched.

Analisis Jalur Gabungan Substruktural I dan Substruktural II

The structural equation for the model presented in Figure 4.9 is as follows:

Substructural I:

$$\begin{aligned} Z &= p_{zx1} + p_{zx2} + p_{zx3} + \epsilon_1 \\ &= 0.426 + 0.465 + 0.644 + 0.475 \end{aligned}$$

$$\begin{aligned} \text{Substructural II: } Y &= p_{yx1} + p_{yx2} + p_{yx3} + p_{yz} + \epsilon_2 \\ &= 0.240 + 0.214 + 0.345 + 0.427 + 0.386 \end{aligned}$$

In Figure can be seen the path diagram model which is a whole path diagram of the research results. For the indirect effect of motivation, work discipline, work environment and job satisfaction on employee performance. The following is a table of the results of the calculation of the effect as a whole based on calculations that have been done before.

Variabel	Direct Effect	Indirect Effect	Total Effect
X1 \longrightarrow Y	0.240	0.102	0.342
X2 \longrightarrow Y	0.214	0.091	0.305
X3 \longrightarrow Y	0.345	0.147	0.492
Z \longrightarrow Y	0.427	-	0.427

Source: Data processed by researchers, 2019

1. From table 4.25, the motivation variable has a value of direct influence on employee performance variables of 0.240 and the influence of motivation variables on employee performance through job satisfaction has an influence value of 0.102. The total value of the influence of the motivation variable is 0.342; 2. Work discipline variables have a value of the direct influence to the work discipline variable by 0.214 and the effect of work discipline variables on loyalty through job satisfaction has an influence value of 0.091, the total value of the influence of the work discipline variable is 0.305; 3. the price perception variable has the value of the direct influence to the work environment variable of 0.345 and the effect of the work environment variable on employee performance through job satisfaction has an influence value of 0.147, the total value of the influence of the work environment variable is 0.492. the last variable job satisfaction has a value of direct influence on employee performance variables of 0.427.

CONCLUSION

Based on the results of research that has been done, researchers can draw conclusions as follows:

1. Motivation has a positive and significant effect on job satisfaction on employees of PT. CCPS in the production department. Which means the motivation of the employees of

PT.CCPS is good. This means that the more PT. CCPS employees feel motivated, the higher the level of job satisfaction with the work achieved;

2. The quality of work discipline has a positive and significant effect on job satisfaction on employees of PT. CCPS in the production department. Which means that employees of PT. CCPS in the production department is able to discipline well. This means that the better work discipline at PT. CCPS production section, the higher the job satisfaction of the resulting performance.
3. The work environment has a positive and significant effect on job satisfaction for employees of PT.CCPS in the production department. Which means that the better work environment available for in the production department so that employees will feel satisfied with the facilities provided;
4. Motivation has a positive and significant effect on employee performance in the production department. Which means motivation is needed by the employees of PT.CCPS in the production department because it can trigger work results obtained by employees. This means that the higher the employee feels motivated, the better the performance will be.
5. 5. Work discipline has a positive and significant effect on employee performance in the employees of PT.CCPS in the production department. Which means the discipline of employees in the production section is good. This means that the higher the level of work discipline in the production department, the better the performance of the employees of PT.CCPS in the production department;
6. The work environment has a positive and significant effect on employee in the production department. Which means the better the work environment available the employee will feel comfortable at work. This means that the better the work environment available to employees, the better the performance of employees produced;
7. Job satisfaction has a positive and significant effect on employee performance in the production department. Which means that if employees are satisfied with the results achieved targets, do work in accordance with their duties and responsibilities and get a comfortable environment, employees will work accordingly. This means that the higher the level of job satisfaction, the higher the performance of employees of PTCCPS;
8. Motivation has a direct influence on employee performance without going through job satisfaction on employees in the production department;
9. Work discipline has a direct influence on employee performance without going through job satisfaction on employees in the production department;
10. The work environment has a direct influence on employee performance without going through job satisfaction on the employees in the production department.

Recommendation

Based on the conclusions, the following suggestions can be given: 1. It is recommended that PT.CCPS be able to motivate employees to optimize their work results. How to increase motivation can be to meet primary needs, provide bonuses if performance is good, and provide career paths (promotion of responsibilities); 2. It is recommended to improve work discipline in terms of adhering to the rules of the company and the rules of behavior that are still found such as the act of using uniforms that have been determined to behave unfavorably, and do not establish good relations with other work units. You do this by giving penalties in accordance with the violations committed, for example giving warning letters to employees who violate established rules; 3. It is recommended to also pay attention to the non-physical environment in terms of work relations. get the right solution for the conflict. Then from the side of the working atmosphere that is not good, the noise that is found in the work environment will have a bad impact on employee performance, how to cope with it by making a closed workspace and no noise so that employees can work well.

REFERENCES

- Anak Agung Ngurah Bagus Dharmawan, I Gde Adnyana Sudibya, I. W. M. U. (2012). Pengaruh Motivasi, Lingkungan Kerja, Kompetensi, Dan Kompensasi Terhadap Kepuasan Kerja Dan Kinerja Pegawai Di Lingkungan Kantor Dinas Pekerjaan Umum Provinsi Bali. *Jurnal Manajemen, Strategi Bisnis, Dan Kewirausahaan*.
- Btara Putra Riyanto. (2016). Pengaruh Motivasi Kerja dan Disiplin Kerja Terhadap Kepuasan Kerja Karyawan Bank Tabungan Negara Yogyakarta.
- Fatimah, S. (2017). Pengaruh motivasi, disiplin dan lingkungan kerja fisik terhadap kinerja pegawai dengan kepuasan pegawai sebagai variabel intervening.
- Juniasari, R. I. (2018). Pengaruh Kompensasi dan Lingkungan Kerja Terhadap Kinerja Karyawan Melalui Kepuasan Kerja Karyawan Pada PT. Japfa Comfeed Indonesia Unit Sukajawa Tahun 2017. Director. <https://doi.org/10.22201/fq.18708404e.2004.3.66178>
- Kuncoro, W. S., Wulan, H. S., & Haryono, A. T. (n.d.). Pengaruh Konflik Kerja, Lingkungan Kerja, dan Stres Kerja Terhadap Prestasi Kerja (Kepuasan Kerja Sebagai Variabel Intervening) di PT. Roberta Prima Tobacco.
- Lestari, A. N., & Suryani, E. (2018). Pengaruh Gaya Kepemimpinan Transformasional dan Budaya Organisasi Terhadap Kinerja Karyawan Melalui Kepuasan Kerja Sebagai Variabel Intervening. 13(2), 274–299.
- Novitasari, D. (2018). Pengaruh Kemampuan dan Lingkungan Kerja Terhadap Kinerja Karyawan Bank Syariah Melalui Motivasi Kerja Sebagai Variabel Mediator (Studi Kasus Pada Karyawan BTN Syariah KC Surakarta).
- Nurchayani, N. M., & Adnyani, I. G. A. D. (2016). Pengaruh Kompensasi Dan Motivasi Terhadap Kinerja Karyawan Dengan Kepuasan Kerja Sebagai Variabel Intervening. *E-Jurnal Manajemen Unud*, 5(1), 500–532.
- Siagian, M. (2018). Peranan Disiplin Kerja Dan Kompensasi Dalam Mendeterminasi Kinerja Karyawan Dengan Motivasi Kerja Sebagai Variabel Intervening Pada Pt Cahaya Pulau Pura Di Kota Batam. *JIM UPB (Jurnal Ilmiah Manajemen Universitas Putera Batam)*, 6(2), 22. <https://doi.org/10.33884/jimupb.v6i2.675>
- Siti Nurhidayah. (2018). Pengaruh Lingkungan Kerja Terhadap Kinerja Karyawan Dengan Motivasi Kerja Sebagai Variabel Mediasi. <https://doi.org/10.22201/fq.18708404e.2004.3.66178>
- Utami, N. P. (2018). Pengaruh Kompensasi Terhadap Kinerja Karyawan Dengan Kepuasan Kerja Sebagai Variabel Intervening. Director. <https://doi.org/10.22201/fq.18708404e.2004.3.66178>
- Suwondo, D. I., & Sutanto, E. M. (2015). Hubungan lingkungan kerja, disiplin kerja, dan kinerja karyawan. *Jurnal Manajemen Dan Kewirausahaan*, 17(2), 135–144. <https://doi.org/10.9744/jmk.17.2.135>
- Hasbullah, R., & Rumansyah, H. B. (2011). Pengaruh Motivasi Terhadap Kinerja Karyawan di Outlet PT. Sinarmas Multifinance Cabang Telagasari Karawang, *Jurnal Sumber Daya* 9(1), 548–559
- Hasibuan, Melayu. 2010. *Manajemen Sumber Daya Manusia*. Edisi Revisi. Jakarta: Bumi Aksara.
- Hastuti, Sri., Andi, Sularso., dan Siti, Komariyah. 2013. Pengaruh Komunikasi, Motivasi dan Etos Kerja terhadap Kinerja Pegawai Koordinator Unit Pelaksana Teknis Dinas Pendapatan Provinsi Jawa Timur di Probolinggo. *Jurnal JEAM*. 12(1): 80-103.
- Ika, Agustina. 2009. Faktor-faktor Motivasi yang mempengaruhi Kinerja Karyawan pada PT. Gaya Manunggal Kresitama. *Jurnal Aplikasi Ekonomi*, 2(5): 64-76.
- Rivai, Veitzal. 2004. *Manajemen Sumber Daya Manusia Untuk Perusahaan : Dari Teori Ke Praktik*. PT. Raja Grafindo Persada. Jakarta.
- Febrianto, A., Minarsih, M. A., & Warso, M. M. (2016). Pengaruh Insentif, Komunikasi Dan Lingkungan Kerja Terhadap Kepuasan Kerja Dan Implikasinya Terhadap Produktivitas Kerja Di Cv. Duta Karya Semarang. *Journal Of Management*, 2(2), 2.

- Roring, Y. M., Soegoto, S. A., & Dotulong, L. (2014). Stres Kerja Dan Lingkungan Kerja Pengaruhnya Terhadap Prestasi Pegawai Pada Biro Umum Setda Provinsi Sulawesi Utara. *Jurnal EMBA*, 2(3), 1359-1368.
- Setiadi, N. J., Miftah, G. R., & Nugraha Widi, S. K. (2014). Stres Kerja Dan Motivasi Karyawan Lini Depan Serta Pengaruhnya Terhadap Kepuasan Kerja: Kajian Empiris Pada Beberapa Perusahaan Jasa Sub Sektor Industri Kreatif. *Prosiding Seminar Nasional*.
- Sugiyono. (2016). *Metode penelitian Kuantitatif, Kualitatif dan R & D*. Bandung: CV. Alfabeta
- Vratskikh, I., Masa'deh, (. R., Al-Lozi, & Maqableh, M. (2016). The Impact of Emotional Intelligence on Job Performance via the. *International Journal of Business and Management*, 11(2), 2.
- Fanny Putriningrum. 2015. *Pengaruh Kompensasi, Motivasi, Disiplin Kerja, Dan Lingkungan Kerja Terhadap Kinerja Pegawai PT. Sampharindo Perdana Semarang*. Dokumen Karya Ilmiah Universitas Dian Nuswantoro Semarang. eprints.dinus.ac.id/8767/1/jurnal_13446.pdf
- Gita Sugiarti. 2013. *Pengaruh Lingkungan Kerja, Budaya Organisasi Dan Kompensasi Terhadap Kepuasan Kerja Untuk Meningkatkan Kinerja Pegawai (Studi Pada Fakultas Ekonomi Universitas 17 Agustus 1945 Semarang*. *Jurnal serata citya Jurnal Ilmiah UNTAG Semarang*. Vol 1, No 2.
- Hasibuan, Malayu S.P. 2011. *Manajemen Sumber Daya Manusia*. Jakarta: PT. Bumi Aksara.
- Hasibuan, Malayu, S.P., 2012. *Manajemen Sumber Daya Manusia*. Edisi Revisi: PT. Bumi Aksara, Jakarta.
- Hasibuan, Malayu S. P. 2001. *Manajemen Sumber Daya Manusia*, Edisi Revisi: Bumi Aksara. Jakarta.
- Sugiyono. (2013). *Statistika untuk Penelitian*. Bandung: Alfabeta.
- Sutrisno, Edy. (2016). *Manajemen Sumber Daya Manusia*. Jakarta. Kencana.