

The Effect of Work Environment on Employee Performance Through the Job Satisfaction in Drinking Water Company Pandaan Indonesia

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ABSTRACT

The background of this study aims to determine the effect of work environment on employee job satisfaction, the influence of work environment on employee performance, the influence of job satisfaction on employee performance and to determine the indirect effect of work environment on employee performance through job satisfaction at Drinking Water Company in Pandaan on Water Quality Laboratory. This research is included in explanatory research. In accordance with the objectives to be achieved in this study describes the relationship and influence some predefined variables. This study used a sample of 50 employees of Drinking Water Company in Pandaan on Water Quality Laboratory with data collection techniques through interviews, documentation and spread questionnaires. The test used to test the research instrument in the form of validity test, reliability test and classical assumption test. Hypothesis test using path analysis. To analyze the data used is the residual normality test.

KEYWORDS: Work Environment, Job Satisfaction, Employee Performance.

INTRODUCTION

The work environment is everything that exists around the worker and that can influence him in carrying out the tasks he carries or is responsible for. To improve the productivity of the work environment greatly affect the performance because a good working environment will create ease of implementation tasks. This work environment itself consists of physical and non-physical work environment attached with employees so that can not be separated from the business development of employee performance.

Human resources have a vital role in a company. All aspects related to human resources ultimately affect the output of the company concerned. Given its vital role, it is proper that a company undertakes a mechanism of maintenance of human resources by paying attention to the satisfaction of its employees. To create a high performance, required an optimal work enhancement and able to utilize the potential of human resources owned by employees in order to create organizational goals, so that will contribute positively to the development of the organization. In addition, the organization needs to pay attention to various factors that may affect employee motivation, in this case is necessary for the role of the organization in improving motivation and create a conducive working environment in order to encourage the creation of professional attitudes and actions in completing the work in accordance with their respective

fields and responsibilities - each. Human resources play a role in processing and utilizing the resources and materials so that the product. Therefore, to improve the performance, it should be noted that human resources can work efficiently and display performance that can contribute to productivity is a fundamental problem of various management and leadership concepts (Wulan: 2011).

This research was conducted at Drinking Water Company in Pandaan on Water Quality Laboratory with the reason that many customers are not satisfied with the service in that office especially in Water Quality Laboratory. This is because employees are lazy in solving the results of water analysis so that the results of water analysis is not completed on time and it makes customers complain. In addition, there are some employees who leave the office before the break time, so that sometimes customers are left waiting for hanging around without any certainty. It certainly makes the customer angry and not satisfied with the service employees at Drinking Water Company in Pandaan on Water Quality Laboratory.

LITERATURE REVIEW

According to Sukanto and Indriyo in Khoiriyah (2009) the work environment is everything that is around the workers that can affect in the work includes the setting of lighting, noise control, workplace hygiene settings and workplace

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security settings. According Sudiro (2013), states that in general, the type of work environment is divided into two namely the physical work environment and non physical work environment. Physical work environment factors according to Wulan (2011) are Coloring, Illumination, Air, Noise, Space, Security and Hygiene. While the factors of non-physical work environment is the structure of work, work responsibilities, attention and support leaders, cooperation between groups, and smooth communication.

Job satisfaction is a set of employee feelings about whether or not their work is fun. There is an important difference between these feelings and the other two elements of employee attitudes. According to Davis and John (2014) Job satisfaction is a relative pleasure or dislike that is different from objective thinking and behavioral desires. These three attitudes help managers understand employees' reactions to their work and predict their impact on future behavior. According to Wibowo (2013) there are five factors that can affect the occurrence of job satisfaction, namely Need fulfillment, Discrepancies (Differences), Value attainment, Equity, Dispositional / genetic components (genetic component). Performance is defined as the work of a worker, a management process or an organization as a whole, in which the work must be shown in concrete evidence and can be measured (compared with predetermined standards). According Simamora (2010), performance (performance) refers to the level of achievement of tasks that form an employee job. Performance reflects how well employees meet the requirements of a job. Pramudyo (2012) states that performance is a measure of what to do and what employees do not do. Often misinterpreted as an effort that reflects the energy spent, performance is measured from a result (.Endo, 2014)

Table 1.1. Variables Associated with Job Satisfaction

Variables Related with Satisfaction	Direction of Relationship	Strength of Relationship
Motivation	Positive	Moderate
Job Involvement	Positive	Moderate
Organizational Citizenship Behavior	Positive	Moderate
Organizational Commitment	Positive	Strong Weak
Absenteeism	Negative	Weak
Tardiness	Negative	Moderate
Turnover	Negative	Strong
Heart Disease	Negative	Moderate
Perceived Stress	Negative	Moderate
Pro-union	Negative	Weak
Voting Job performance	Negative	Moderate
Life Satisfaction	Positive	Moderate
	Positive	

Source: Primary Data (processed)

STATEMENT OF THE PROBLEM

Based on the background and problems that have been described, it can be formulated as follows:

Formulation Of The Problem

1. Does the work environment directly affect the performance
2. Does the work environment directly affect job satisfaction
3. Does job satisfaction affect directly on performance
4. Does the work environment indirectly affect performance through job satisfaction

HYPOTHESES

1. The work environment directly affects performance.
2. Work environment directly affects job satisfaction.
3. Job satisfaction has a direct effect on employee performance.
4. The work environment has an indirect effect on performance through job satisfaction.

RESEARCH METHOD

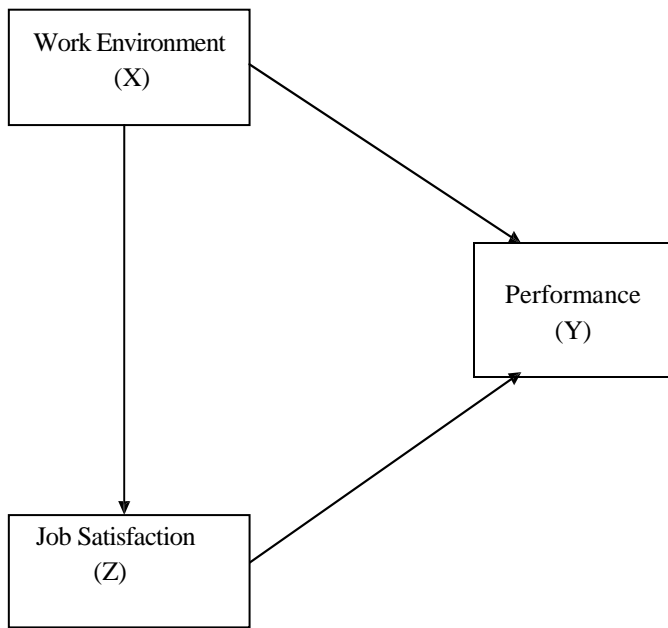
Based on the research objectives that have been previously disclosed is to examine the effect of work environment on performance, the influence of work environment on job satisfaction and the effect of job satisfaction on performance, the researcher uses explanatory research type (explanation). This type of research is a research used to test the hypothesis about the relationship of variables (causality). research topic.

This research uses a quantitative approach. Quantitative approach is an approach that emphasizes the existence of variables as research objects and these variables must be defined in the form of operationalization of each variable and external understanding. Reliability and validity is an absolute requirement that must be met in using this approach because both elements will determine the quality of research results and replication capabilities and generalizations of users of similar research models.

The population in this research is all employees of Drinking Water Company in Pandaan on Water Quality Laboratorys much 50 people. The population is chosen because the working environment at the Water Quality Laboratory is quite possible to be used as research material.

The laboratory location is close to the genset machine and its noise is very noisy as well as the cleanliness and comfort need to get more attention. Furthermore, all of these employees become research respondents. Considering the number of population is small, so this research is a census research, that is research which use all population as research respondent. Techniques of collecting data in the form of documentation, interviews and questionnaires.

Conceptual Framework



1. Dependent variable, that is variables influenced by other variables. Dependent variable in this research is Performance (Y).
2. Independent variable, that is variables that affect other variables. Independent variable in this research is Work Environment (X).
3. Intervening variable, that is variable which bridge influence of a dependent variable with independent variable. Interval variable in this research is Job Satisfaction (Z).

From the framework explained that the work environment variables have an influence on employee performance which means that if the work environment in the workplace fun and comfortable, then the employees will be more active in the work. While the work environment variables also affect the job satisfaction which means that if the work environment of employees in the workplace comfortable and safe then employees will work with pleasure and satisfied.

RESULTS AND DISCUSSIONS

Characteristics of respondents by sex shows that of the 50 respondents, the majority of women are 28 people (56%) and 22 people (44%) are male. Thus most of the dominant work at Drinking Water Company in Pandaan on Water Quality Laboratory are female sex.

Characteristics of respondents by age shows that from 50 respondents, the majority of respondents aged between 21 to 30 years are 23 people (46%), then 19 people (46%) aged 31 to 40 years, 7 people (14%) aged 41 up to 60 years old and as many as 1 person (2%) aged 17 to 20 years. Characteristics of respondents based on the last level of education can be seen that the Drinking Water Company in Pandaan on Water Quality Laboratory of the most

dominant level of education is high school graduates, but most of them continue education to a higher level by taking Diploma / Bachelor while working, while the lowest is junior high school graduates. Characteristics of respondents based on length of work showed that from 50 respondents, the majority of respondents worked less than 5 years ie 20 people (40%), then 17 people (34%) worked for 11 to 15 years and 13 people (26%) worked more from 15 years. From Table 4.4. it can be seen that most of the dominant employees working at Drinking Water Company in Pandaan on Water Quality Laboratory. is the majority have worked for 11-15 years. It shows that employees tend to have long working so that employees have high knowledge and experience a lot because of training and development routine done. Characteristics of respondents based on marital status indicate that from 50 respondents majority are unmarried respondents are as many as 28 people (56%), then 22 people (44%) are married respondents. So it can be said that most of the employees at Drinking Water Company in Pandaan on Water Quality Laboratory have not married status.

Table 1.2. Respondent's Answer Descriptions for Physical Working Environment Variables

Items	S D		D		N		A		S A		Average
	f	%	f	%	f	%	f	%	f	%	
x1	0	0	0	0	3	6	24	48	23	46	4.4
x2	0	0	3	6	15	30	15	30	17	34	3.92
x3	0	0	2	4	16	32	16	32	16	32	3.92
x4	0	0	3	6	24	48	10	20	13	26	3.66
x5	0	0	3	6	11	22	26	52	10	20	3.86

Source: Primary Data (processed)

Table 1.3. Description of Respondents' Answer to Non-Physical Working Environment Variables

Variables	Item	S D		D		N		A		S A		Average
		f	%	f	%	f	%	f	%	f	%	
Non Physical Work Environment	x6	0	0	0	0	2	4	27	54	21	42	4.38
	x7	0	0	0	0	4	8	23	46	23	46	4.38
	x8	0	0	0	0	13	26	26	52	11	22	3.96
	x9	0	0	0	0	4	8	32	64	14	28	4.2
	x10	0	0	0	0	8	16	26	52	16	32	4.16

Source: Primary Data (processed)

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Table1.4. Respondent's Answer Descriptions for Job Satisfaction Variables

Items	S D		D		N		A		S A		Average
	f	%	f	%	f	%	f	%	f	%	
z1	0	0	3	6	13	26	26	52	8	16	3.78
z2	0	0	1	2	12	24	22	44	15	30	4.02
z3	0	0	3	6	10	20	22	44	15	30	3.98
z4	0	0	1	2	14	28	20	40	15	30	3.98
z5	0	0	1	2	8	16	27	54	14	28	4.08

Source: Primary Data (processed)

Table1.5. Respondents 'Respondents' Answers to Employee Performance Variables

Items	S D		D		N		A		S A		Average
	f	%	f	%	f	%	f	%	f	%	
y1	0	0	1	2	2	4	30	60	17	34	4.26
y2	0	0	3	6	3	6	32	64	12	24	4.06
y3	0	0	1	2	8	16	29	58	12	24	4.04
y4	0	0	1	2	2	4	37	74	10	20	4.12
y5	0	0	0	0	9	18	30	60	11	22	4.04

Source: Primary Data (processed)

The format of a typical five-level Likert item:

1. Strongly Disagree (SD)
2. Disagree (D)
3. Neither agree nor disagree (N)
4. Agree (A)
5. Strongly Agree (S A)

Validity indicates the extent to which the measuring instrument to measure what is measured validity of an instrument item can be known by comparing the Pearson product moment correlation index with a significance level of 5% with the critical value. If the probability of a correlation result is less than 0.05 (5%) then it is declared valid and vice versa is not valid. Based on the test results it can be seen that all the question items for the variables X, Z and Y have the value of $r_{count} > r_{table}$ (0.279) and also the probability (sig) is less than 0.05 so it can be said that all question items for variables X, Z and Y have valid and can be used in this research.

Table 1.6. Reliability Test Item Questionnaire Questionnaire

Variable	Alpha Coefficient	Information
Physical work environment (X1)	0,816	Reliabel
Non-physical work environment (X2)	0,725	Reliabel
Job satisfaction (Z)	0,663	Reliabel
Employee Performance (Y)	0,747	Reliabel

Source: Primary Data (processed)

Based on the above it can be seen that the value of Alpha Cronbach on the physical work environment (X1) question variable of 0.816, the question variable Non-physical work environment (X2) of 0.725, Job satisfaction (Z) 0.663, and Employee Performance) of 0.747.

Residual Normality Test Model Path

The path model can be said to satisfy the assumption of normality if residual which is caused by the normal distributed path model. To test this assumption, Kolmogorov -Smirnov's test can be used against the residuals of each path model.

Table 1.7. Residual Normality Test Model Path

Model Path	Kolmogorov-	Significance
Modelpath I	1.178	0.125
Modelpath II	0.939	0.341

Source: Primary Data (processed)

Based on Table 1.7. it can be seen that the residual model path is spreading normally, since each Kolmogorov-Smirnov test significance of path model I and II is greater than α ($\alpha = 0.05$), it can be concluded that the assumption of normality has been fulfilled.

Path Analysis

In this study, the analysis used to test the hypothesis that has been proposed is among the variables hypothesized by using path analysis. This analysis is used to determine the level of influence on a causal relationship, which is done from the survey results.

Table1.8. Result of Path Analysis X1, X2 to Y

Variabl	Beta	t	Sig t	Information
X	0,276	2,125	0,039	Significance
Z	0,416	3,202	0,002	Significance
t table= 2,009				
R Square = 0,344				

Source: Primary Data (processed)

From the table above can be concluded that the value of R Square shows the value of 0.344 or 34.4%. This means that

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Employee Performance (Y) is affected by 34.4% by Work Environment (X), and Job Satisfaction (Z). While the rest equal to 65,6% influenced by other variables outside independent variable under study. From the value of t_{count} shows that the Work Environment Variable (X) has a t_{count} of 2.125 with a probability of 0.039. Because $t_{count} > t_{table}$ ($2,125 > 2,009$) or $sig\ t < 5\%$ ($0,039 < 0,05$) then variable X (Work Environment) have significant effect to Employee Performance (Y).

Job Satisfaction Variable (Z) has a t_{count} of 3.202 with probability of 0.002. Because $t_{count} > t_{table}$ ($3,202 > 2,009$) or $sig\ t < 5\%$ ($0,002 < 0,05$) then the variable Z (Job Satisfaction) have a significant effect on Employee Performance (Y). From the above explanation can be concluded that Work environment variables significantly influence employee performance and job satisfaction variables have a significant effect on employee performance at Drinking Water Company in Pandaan on Water Quality Laboratory..

Table 1.9 Result of Path Analysis X to Z

Variable	Beta	t	Sig t	Information
X	0,415	3,160	0,003	Significance
t table= 2,009				
R Square = 0,172				

Source: Primary Data (processed)

From the table above can be concluded that the value of R Square shows the value of 0.172 or 17.2%. This means that Job Satisfaction (Z) is influenced by 17.2% by Work Environment (X). While the rest of 82.8% influenced by other variables outside the independent variables studied. From t_{count} value indicate that Work Environment Variable (X) have t_{count} value 3,160 with probability equal to 0,003. Because $t_{count} > t_{table}$ ($3,160 > 2,009$) or $sig\ t < 5\%$ ($0,000 < 0,05$) then variable X (Work Environment) have a significant effect to Job Satisfaction (Z). From the above explanation can be concluded that the work environment variables significantly affect employee job satisfaction at Drinking Water Company in Pandaan on Water Quality Laboratory.

R^2 calculation results indicate the diversity of data that can be explained by the model is 45.6% or in other words the information contained in the data 45.6% can be explained by the model. While the remaining 54.4% is explained by other variables (not yet contained in the model). Overall, the model in this study is divided into 3 direct effects, and 1 indirect influence.

The following table presents the results of testing of direct and indirect effects:

Table 2.0. Results of Direct Effect Hypothesis Testing

Independent Variable	Dependent Variable	Path	p-value	Information
X	Y	0,276	0,039	Significance
Z	Y	0,416	0,002	Significance
X	Z	0,415	0,003	Significance

Source: Primary Data (processed)

Table 2.1. Results of Indirect Effect Hypothesis Testing

Independent Variable	Intervening Variables	Dependent Variable	Path	Information
X	Z	Y	0,114816	Significance

Source: Primary Data (processed)

The indirect influence of the Working Environment (X) on Performance (Y) through Job Satisfaction (Z), obtained from the direct influence of Work Environment (X) on Job Satisfaction (Z) and direct influence between Job Satisfaction (Z) (Y), so the indirect effect of $0.276 \times 0.416 = 0.114816$.

DISCUSSION

The first stage of data analysis is a test of the validity and reliability of respondents' answers obtained through questionnaires. The next stage is testing the classical assumption that is the assumption of residual normality test. The next test uses path analysis that is to know the direct and indirect influence among the variables studied.

The purpose of this research is to know whether there is influence of work environment variable (X) to performance variable (Y) employee, to know whether there is influence of work environment variable (X) to job satisfaction variable (Z), to know whether there is influence of variable of satisfaction work (Z) on the performance variable (Y) employees. to know whether there is influence on indirect variable work environment (X), to variable performance (Y) through job satisfaction variable (Z).

The indirect influence of the Working Environment (X) on Performance (Y) through Job Satisfaction (Z), is obtained from the direct influence of Work Environment (X) on Job Satisfaction (Z) and direct influence between Job Satisfaction (Z) (Y), so the indirect effect of $0.276 \times 0.416 = 0.114816$. Because of the direct influence between Work Environment (X) on Job Satisfaction (Z) and the direct influence between Job Satisfaction (Z) on Performance (Y) significant, indirect influence between Work Environment (X) on Performance (Y) through Job Satisfaction Z) is also significant.

The Effect of Work Environment Variable (X1) on Performance (Y)

The results showed a significant influence between work environment variable (X) to performance variable (Y) on the employees of Drinking Water Company in Pandaan on Water Quality Laboratory. So the more comfortable work environment in work place perceived by employees resulted increasingly also performance of employees. Based on this research, the hypothesis stating that there is significant influence between work environment variable to employee performance variable is accepted.

The Effect of Job Satisfaction Variable (Z) on Performance (Y)

The results showed a significant influence between variable of job satisfaction (Z) to performance variable (Y) at employees of Drinking Water Company in Pandaan on Water Quality Laboratory. So the bigger job satisfaction perceived by employees resulted increasingly also performance of employees. Based on this research, the hypothesis that there is a significant influence between job satisfaction variable on employee performance variable is accepted.

The Effect of Work Environment Variable (X) on Job Satisfaction (Z)

The results showed a significant influence between work environment variable (X) to job satisfaction variable (Z) on the employees of Drinking Water Company in Pandaan on Water Quality Laboratory. So, the more comfortable work environment in the workplace that is felt by the employees resulted in the increase also the job satisfaction on the employees. Based on this research, the hypothesis that there is significant influence between work environment variable to employee job satisfaction variable is accepted.

The Indirect Effect of Working Environment Variables (X) on Performance (Y) Through Job Satisfaction (Z)

The result of the research shows that there is indirect influence between work environment variable (X) to performance variable (Y) through job satisfaction variable (Z) at Drinking Water Company in Pandaan on Water Quality Laboratory. So the more comfortable work environment in work place perceived by employees resulted increasingly also performance of employees. A company will definitely provide facilities that make employees comfortable in the work so that it can improve its performance.

Job satisfaction has to do with employee performance. Job satisfaction reflects one's feelings toward one's work. If employees feel satisfied with what they do then performance will increase and it gives benefits to the company. The condition of job satisfaction then becomes the feedback that will affect the performance of work or performance in the future. The result of research stated that the contribution of

job satisfaction variable can add total influence of work environment variable to performance.

CONCLUSION

This study was conducted to determine whether there is a direct and indirect influence between the work environment on job satisfaction and employee performance at Drinking Water Company in Pandaan on Water Quality Laboratory.

From the research conducted, Drinking Water Company in Pandaan on Water Quality Laboratory has provided a good working environment to its employees both physically and non physically, besides the company also provide facilities needed by employees such as jamsostek, allowances and security at work.

Proven by the results of research that has been done shows the influence between the work environment on job satisfaction and employee performance. The following are the results of the research that can be concluded, among others:

1. There is a direct influence between the work environment on employee performance. This indicates that the more comfortable work environment in the workplace resulting in increased employee performance.
2. There is a direct influence between job satisfaction on employee performance. This indicates that the increasing employee job satisfaction resulted in an increase in employee performance.
3. There is a direct influence between the work environment on employee job satisfaction. This indicates that the more comfortable working environment in the workplace resulting in increased employee job satisfaction.
4. There is an indirect influence between the work environment on performance through employee job satisfaction. This indicates that the more comfortable work environment in the workplace resulting in increased employee performance, if employee job satisfaction also increases.

RECOMMENDATIONS

Based on the results of the study, suggestions proposed are as follows:

1. Drinking Water Company in Pandaan on Water Quality Laboratory should maintain comfort in the work environment and pay more attention to things that are needed employees because it proved able to provide employee job satisfaction and also increased performance both directly and indirectly.
2. In order to improve the performance of employees, the leaders of Drinking Water Company in Pandaan should always create a conducive working

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atmosphere that can improve job satisfaction and ultimately will improve employee performance.

3. Based on the results of research indicates that the non-physical work environment is better than the physical work environment. Therefore, companies need to give more attention to the physical work environment so that employees more enthusiasm in work.

4. For further research should the researcher develop his research by using unrelated variables and variables between different. Thus, it is expected that the results of further research will be obtained different conclusions and can complement the results of this study.

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