

The Effect of Physical Work Environment and Communication on Employee Job Satisfaction in PT. Razza Prima Trafo Medan

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Abstract.

The subject of this research was PT. Razza Prima Transformer Medan, because there was a decrease in employees job satisfaction in the company. Employee satisfaction indicate whether or not the employees feel satisfied working in a company. The decline in employee satisfaction was in a decline in physical working environment that is unfavorable to disturb the concentration of employees at work. On the other hand, the poor communication experienced among employees often occurred such as miscommunication of information that lead to errors in the execution of tasks. This study to analyze the effect of the physical working environment and communication on employees job satisfaction at PT. Razza Prima Transformer Medan. The research used a quantitative approach, the type of research was quantitative descriptive, and the nature of the research was explanatory. Data were collected by interviews, questionnaires, and documentation study. Methods of analysis used was linear regression analysis. The populations were 120 employee respondents of PT. Razza Prima Trafo Medan. Samples were drawn by purposive sampling technique that the samples used were 73 employees and 30 employees were used for the validity test which were carried out at the branch of PT. Razza Prima Transformer Medan. The results showed that the physical work environment and communication simultaneously or partially had a significant effect on job satisfaction of employees at PT. Razza Prima Transformer Medan. The results also indicated where the determination coefficient was 29.1%. The study concluded that simultaneously and partially, physical work environment and personal communication have a significant effect on job satisfaction at employees at PT. Razza Prima Transformer Medan.

Keyword: Physical Work Environment, Communications, Job Satisfaction.

1. INTRODUCTION

Every company wants employees who are responsible and honest for their own work because the company will also pay attention to job satisfaction and employee behavior to develop human resources. If employees are satisfied with their work, employees will be more enthusiastic about working, have a comfortable feeling about what is around them and vice versa.

Efforts to increase employee comfort at work must be supported by a conducive physical work environment or create working conditions that are able to provide motivation to work. Such as an attractive workspace decoration, with bright

lighting and stable room temperature and away from noise and odors caused by the company's production process so that employees can focus on doing their work, and employees will be more enthusiastic and passionate about working. Because the work environment that arises in the organization is a factor that determines employee behavior in carrying out their activities in an optimal, healthy, safe, and comfortable way.

Employee job satisfaction at this company is considered to be still not good, it can be seen from the high level of employee *turnover* and employee discomfort at work. The physical work environment is a physical condition and symptom that affects the implementation of tasks within the company. need to create a conducive work environment that can make employees comfortable at work. The physical work environment at PT. Razza Prima Transformer Medan is considered to be still not good by employees, this is due to the distance between the office and the workshop or the production and repair of transformers that are in one place, the noise generated by the machine being operated, the arrangement of the workspace layout such as room decorations that are less attractive where the manager's room is the same as the employee's room, the lighting is not bright, the air temperature is hot in the room and the smells caused by the machine and transformer material.

Another factor that is suspected to be the cause of the decline in employee job satisfaction at PT. Razza Prima Transformer Medan is communication. Communication is the main tool for members of the organization to be able to work together in carrying out management activities in order to achieve the goals that have been set. Communication that occurs at PT. Razza Prima Transformer Medan is still considered lacking, because employees often experience misunderstandings caused by unclear communication between divisions. As a result of unclear communication causing errors in winding wires, errors in transformer installation (pairing marks on transformers) so that errors occur in carrying out tasks and a failure test that causes employees to get reprimands from superiors.

The physical work environment is a very important component in employees doing work activities, by paying attention to a good work environment/creating working conditions that are able to provide motivation to work, it will have an influence on the enthusiasm and enthusiasm of employees to work, Sunyoto (2013). According to Sedarmayanti (2011), the physical work environment means the overall tools and materials encountered, the surrounding environment in which a person works, work methods, and work arrangements both as individuals and as groups.

Mangkunegara (2010) stated that working conditions are all aspects of physical work, work psychology and work regulations that can affect job satisfaction and the achievement of work productivity, According to Hanggraeni (2011) the work environment is a factor related to the relationship between a person and his co-workers and superiors, both the same and different types of work. Someone wants a comfortable work environment to make it easier for them to do their job.

Sunyoto (2013) stated that every company certainly has a way of supporting factors for the success and progress of the company, as for factors related to the organizational environment are as follows: a) Employee Relations. In this employee relationship there are two relationships, namely the relationship as an individual and a relationship as a group. Relationships as individuals, the motivation obtained by an employee comes from co- workers and superiors, becomes a motivation, if the relationship between employees and their colleagues and superiors is harmonious.

b) Work environment noise level. An environment that is not quiet or noisy will be able to cause an unfavorable influence, namely the presence of restlessness at work. For employees, of course, a calm work environment is very helpful in completing work and can increase work productivity. c) Work rules. Good and clear work regulations can have a good influence on employee satisfaction and performance to develop careers in the company. d) Explanation. In this case, lighting is not limited to electric lighting but also includes solar lighting. e) Air circulation. Adequate circulation or air exchange is the first thing that must be done to provide ventilation. Wide enough ventilation, especially in rooms that are considered too hot. f) Security. A work environment with a sense of security will lead to calm and comfort, which can provide encouragement to work. The security that is incorporated into the work environment is the security of the employee's personal property.

Office layout (physical work environment) include: 1) Preventing wasted personnel and employee time because work procedures can be shortened, 2) Ensure the smooth running of the work process, 3) Allows the use of work space to be more efficient, 4) Prevent employees in other sections from being disturbed by the public who will meet certain sections, or prevent being disturbed by noise and others, 5) Creating employee work comfort. 6) office visitors, 7) Strive for flexibility for: a) Movement of employees who are working, b) The possibility for employees to use the room for other purposes at certain times, c) Development and expansion of office activities in the future (if possible).

Sedarmayanti (2009) stated that indicators of the physical work environment are: 1) Lighting in the workplace, 2) Temperature/temperature at work, 3) Humidity at work, 4) Air circulation in the workplace, 5) Noise at work, 6) Mechanical vibration at work, 7) Smells at work, 8) Coloring in the workplace, 9) Decoration at work, 10) Music at work, 11) Safety at work.

According to Siswandi (2011), what is meant by communication is the process of sending and receiving news between related parties so that an understanding of what is meant by each other is obtained from it. Mangkunegara (2011) stated that communication is the process of transferring information, ideas, understanding from one person to another in the hope that the other person can interpret it according to the intended purpose. Communication is the thing that binds organizational unity. Communication helps members, respond to and implement organizational changes,

coordinate organizational activities, and play a role in almost all relevant organizational actions, Romli (2014). According to Siswandi (2011:174) effective and efficient communication has a very important meaning for management in carrying out its functions to plan, organize, implement, direct and supervise all organizational performance.

Mangkunegara (2011) stated that there are two reviews of factors that influence communication, namely: 1) Factors from the sender or communicator, namely skills, attitudes, knowledge of the sender, the channel media used. The sender as a sender of information, ideas, news, messages needs to master the ways of conveying thoughts both in writing and orally. The attitude of the sender greatly affects the receiver. The sender who is arrogant towards the receiver can result in the information or message given being rejected by the receiver. Likewise, the attitude of the sender who hesitates causes the receiver to distrust the information or message conveyed. Therefore, the sender must be able to convince the receiver of the message given to him. Senders who have extensive knowledge and master the material presented will be able to inform the receiver as clearly as possible. Thus, the receiver will more easily understand the message conveyed by the sender. Media or communication channels are very helpful in conveying ideas, information or messages to receivers. Senders need to use appropriate communication channel media and attract receiver's attention. 2) Factors from the receiver side, namely receiver skills, receiver attitudes, receiver knowledge, and communication channel media. The receiver's skill in listening and reading the message is very important. The message given by the sender will be understood well, if the receiver has listening and reading skills. The receiver's attitude towards the sender greatly affects the effectiveness of the communication. For example, the receiver behaves a priori, underestimates, has a bad attitude towards the sender, then the communication becomes ineffective, and the message becomes meaningless to the receiver. Therefore the receiver must have a positive attitude towards the sender, even though the sender's education is lower than him. Receiver knowledge is also very influential in communication. Receivers who have extensive knowledge will find it easier to interpret the ideas or messages they receive from the sender. If the receiver's knowledge is not extensive, it is very possible that the message he receives becomes less clear or less understandable to the receiver. The communication channel media used is very influential in receiving ideas or messages. The communication channel media in the form of the senses on the receiver will determine whether the message can be received or not for him. If the receiver's senses are disturbed, the message given by the sender can become less clear to the receiver.

The benefits of communication are: 1) Provide a positive influence for the progress of an organization, 2) Cultivating intimacy that increases morale and self-confidence, 3) Increase knowledge and increase sensitivity to problems, 4) Facilitate solving problems encountered, 5) Equalize perceptions of something and carry out

decision making, with full consideration on the basis of deliberation and priority scale; and 6) Exchange experiences that will increase ideas or ideas for the advancement of the organization or the like, There are several purposes of communication, namely: 1) Attitude change, 2) Behavior change, 3) Change of opinion (opinion change), 4). Social change, Athoillah (2010).

According to Umam (2010) there are 5 aspects that must be understood in building effective communication, namely: a) Clarity: the language and information conveyed must be clear, b) Accuracy: the language and information conveyed must be really accurate or precise, c) Context: the language and information conveyed must be in accordance with the circumstances and the environment in which the communication occurs, d) Flow: the coherence of language and information flow is very important in establishing effective communication, e) Culture: aspects that not only involve language and information, but also manners and ethics.

Job satisfaction is a pleasant or unpleasant emotional state in which employees view their work. Job satisfaction reflects a person's feelings towards his job. According to Handoko (2012). According to Sutrisno (2009) job satisfaction is an employee's attitude towards work related to work situations, cooperation between employees, rewards received at work, and matters relating to physical and psychological factors. job satisfaction is a simple thing because people are basically driven to behave in a certain way that is felt by the direction of the reward. After they believe the organization can fulfill their obligations to them, the employees also carry out their obligations, Darmawan (2013). According to Rivai and Sagala (2013) job satisfaction is basically something that is individual. Each individual has a different level of satisfaction according to the value system that applies to him. high satisfaction with these activities. There are two factors that affect job satisfaction, namely the factors that exist in the employee and the work factor: 1) Employee factors, namely intelligence (IQ), special skills, age, gender, physical condition, education, work experience, years of service, personality, emotions, ways of thinking, perceptions, and work attitudes. 2) Occupational factors, namely type of work, organizational structure, rank (class), position, quality of supervision, financial guarantee, opportunity for promotion, social interaction, and work relations, Mangkunegara (2011).

Sutrisno (2009) stated that job satisfaction is a problem that is quite interesting and important, because it has great benefits for the benefit of individuals, industry, and society. Individual interests, research on the causes, and sources of job satisfaction allow the emergence of efforts to increase their happiness in life. In the interest of industry, research on job satisfaction is carried out in the context of efforts to increase production and reduce costs through improving employee attitudes and behavior. Furthermore, the public interest will certainly enjoy the results of the maximum capacity of the industry as well as the increase in human value in the context of work. Job satisfaction basically has indicators that influence so that job satisfaction can be

realized. According to Rivai and Sagala (2013: 860) satisfaction indicators are: 1) Content of work; performance of actual work tasks and as a control over work, 2) Supervision, 3) Organization and management, 4) Opportunity for advancement, 5) Salaries and other financial benefits, such as incentives, 6) Colleagues, 7) Workingconditions.

II. METHODS

Population is a generalization area consisting of objects/subjects that have certain qualities and characteristics determined by researchers to be studied and conclusions drawn (Sugiyono, 2012). The population that will be used in this study are all employees of PT. Razza Prima Transformer Medan, totaling 120 people. The sample is part of the number and characteristics possessed by the population This study uses a *purposive sampling technique*. According to Sanusi (2011) sampling is based on certain considerations, especially considerations given by a group expert or *expert*. The characteristics used in this sampling are the working period of employees > 2 years, so that a total sample of 73 employees is obtained. To test the validity and reliability test as many as 30 employees were carried out at the branch company of PT. Razza Prima Trafo Medan.

In this study, researchers used primary and secondary data. Sugiyono (2012), there are types and sources of data that can be used in this study are as follows: 1) Primary Data is a data source that directly provides data to data collectors. Data obtained by researchers directly from the object under study by distributing questionnaires to respondents and interviews with company employees.

Example: conducting interviews with employees of PT. Razza Prima Transformer Medan about the company's work environment and distributed questionnaires to employees by including the identity of the respondent, 2) Secondary Data is data that contains information and theories used to support research. Secondary data is data obtained from company documents and written reports. For example: employee turnover data, communication error data and recapitulation of the number of employees in the company, existing literature in the company and the materials section or other writings that have to do with the problem to be studied.

III. RESULT AND DISCUSSION

In research at PT. Razza Prima Transformer Medan, the independent variable (independent variable) observed is the Physical Work Environment (X_1) and Communication (X_2), while the dependent variable (dependent variable) is job satisfaction (Y). Descriptive statistics can be seen in Table 1:

Table 1. Descriptive Statistics

Descriptive Statistics				
N	Minimum	Maximum	Mean	Std. Deviation

Physical Work Environment	73	30	43	34.99	3.084
Communication	73	30	43	36.56	2.823
Job satisfaction	73	28	47	35.67	4.311
Valid N (listwise)	73				

Source: Research Results, 2021

Based on Table 1, it can be seen that the physical work environment variable (X_1) with a sample of 73 respondents has an average value of 34.99 with a standard deviation of 3,084, the maximum value of 43 units is found in respondent number 31. , and the minimum value is 30 units for respondents number 22, 37, 60, and 68. The communication variable (X_2) with a sample of 73 respondents has an average value of 36.56 with a standard deviation of 2.823, the maximum value of 43 units is found in respondent number 11, and a minimum value of 30 units is found in respondent number 22. Job satisfaction variable (Y) with a sample of 73 respondents has an average value of 35.67 with a standard deviation of 4,311, the maximum value is 47 units for respondent number 2 and the minimum value is 28 units for respondents number 22 and 28.

The normality test aims to test whether in the regression model, the confounding or residual variables have a normal distribution. This normality test can be seen in two ways, namely by graphical analysis and statistical tests. The results of the normality test on the P-Plot graph and the *Kolmogorov-Smirnov non-parametric statistical test* can be seen in Table 2:

Table 2. Normality Test Results with the Kolmogorov-Smirnov

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		73
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	3.57985133
Most Extreme Differences	Absolute	.070
	Positive	.070
	Negative	-.039
Test Statistics		.070
asympt. Sig. (2-tailed)		.200 ^{c,d}

a. Test distribution is Normal.

b. Calculated from data.

Source: Research Results, 2021

Based on Table 2 above, it can be seen that the significant value (Asymp.Sig 2-tailed) is 0.200, greater than 0.05 significant, then the data is declared to be normally distributed residual.

Multicollinearity test aims to test whether the regression model found a correlation between the independent variables (independent). To detect the presence or absence of multicollinearity, it can be seen from the *tolerance* value with the *variance inflation factor* (*vif*) value. The *cut off* value commonly used to indicate the presence of multicollinearity is the *tolerance value* 0.10 or the same as the VIF value 10. The results of the multicollinearity test are as follows:

Table 3. Multicollinearity Test

Model	Collinearity Statistics	
	Tolerance	VIF
(Constant)		
Physical Work Environment	.803	1.246
Communication	.803	1.246

Source: Research Results, 2021

Based on Table 3, it shows that the tolerance value for each independent variable in the physical work environment is 0.803 and Communication is 0.803, which is greater than 0.1, while the VIF value for each independent variable in the physical work environment is 1.246 and Communication is 1.246 is less than 10, then the data is stated not to have multicollinearity symptoms.

The heteroscedasticity test aims to test whether in the regression model there is an inequality of variance from the residuals of one observation to another observation. A good regression model is homoscedasticity or there is no heteroscedasticity. To detect the presence or absence of heteroscedasticity, it can be seen from the glejser test.

Table 4. The Heteroscedasticity Test

Model	Collinearity Statistics	
	T	Sig
(Constant)	-816	.417
Physical Work Environment	1.026	.308
Communication	.721	.473

a. Dependent Variable: Absolute

Source: Research Results, 2021

Based on Table 4 it can be seen that the value of Sig. Each independent variable X_1 is 0.308 and X_2 is 0.473 which is greater than the significance value of 0.05 (5%), so it is concluded that this regression model does not contain heteroscedasticity.

The data analysis model in this study is multiple regression analysis which aims to determine the magnitude of the influence of the physical work environment and communication on employee job satisfaction. Multiple linear results can be seen in the following Table 5:

Table 5. Multiple Regression Analysis Test

Model	Coefficients ^a			t	Sig.
	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta		

1	(Constant)	1.176	6.165		.191	.849
	Physical Work Environment	.344	.155	.246	2,220	.030
	Communication	.615	.169	.402	3,633	.001

a. Dependent Variable: Job Satisfaction

Source: Research Results, 2021

Based on Table 5 above, it is obtained the multiple linear regression equation, ie: $Y = 1.176 + 0.344 X_1 + 0.615 X_2$. From the multiple linear regression equation above, the following can be explained. 1) The constant value (a) of 1.176 means that if there is no physical work environment (X_1) and communication (X_2) = 0, then the value of job satisfaction is 1.176 units. 2) physical work environment variable (X_1) of 0.344 has a positive value, which means that for every 1 unit increase in the physical work environment variable, the value of the job satisfaction variable will increase by 0.344 units. 3) The communication variable (X_2) is 0.615 and has a positive value, which means that every increase in the communication variable is 1 unit, the value of the job satisfaction variable will increase by 0.615 units.

The coefficient of determination is used to measure how much the ability of the independent variable can explain the dependent variable. Analysis of the coefficient of determination is done by looking at the value of R square which is presented in the table below:

Table 6. Adjusted R Square Test

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.557 ^a	.310	.291	3,631

a. Predictors: (Constant), Communication, Physical Work Environment

b. Dependent Variable: Job Satisfaction

Source: Research Results, 2021

Based on Table 6 above, the Adjusted R Square value is 0.291 meaning that the ability to vary the physical work environment (X_1) and Communication (X_2) variables can explain the variation of job satisfaction (Y) is 29.1 % and the remaining 70.9 % are other variables not examined in this study such as leadership, compensation, work discipline, competence and others.

The F test aims to see the effect of the independent variable, namely competence and job satisfaction, simultaneously or jointly on the dependent variable, namely employee performance, it can be done using the F statistical test.

Table 7. F-test statistic

ANOVA ^a					
Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	415,405	2	207,703	15,757	.000 ^b

Residual	922,704	70	13.181
Total	1338110	72	

a. Dependent Variable: Job Satisfaction

b. Predictors: (Constant), Communication, Physical Work Environment

Source: Research Results, 2021

Based on Table 7, it can be seen that the calculated F value is 15,757 while the F table is 3.12. From these results, it is known that $F_{count} > F_{table}$ and significance $0.000 < 0.05$. So the results of the study indicate that simultaneously H_1 is accepted and H_0 is rejected. This shows that the physical work environment (X_1) and communication (X_2) have a significant effect on employee job satisfaction (Y) at PT. Razza Prima Transformer Medan.

The t-test aims to see the effect of the independent variable, namely competence and job satisfaction, which has a partial or partial effect on the dependent variable, namely employee performance, it can be done using the t-test statistic.

Table 8. T-test statistic

		Coefficients ^a			t	Sig.
Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta		
1	(Constant)	1.176	6.165		.191	.849
	Linker_physical	.344	.155	.246	2,220	.030
	Communication	.615	.169	.402	3,633	.001

a. Dependent Variable: Job Satisfaction

Source: Research Results, 2021

Based on Table 8, the results of the partial test were obtained with the following results. 1) The partial hypothesis test of the physical work environment variable from the table can be seen that the t value of the physical work environment variable (X_1) is 2.220 with a significance of 0.030, then the results show that the hypothesis H_1 is accepted because $t_{count} > t_{table}$ ($2.220 > 1.660$) and the significance is smaller than 0.05 which means that the physical work environment variable (X_1) has a positive and significant effect on job satisfaction (Y) at PT. Razza Prima Transformer Medan. 2) Partial Hypothesis Testing for Communication Variables from the table, it can be seen that the t value of the communication variable (X_2) is 3.633 with a significance of 0.001. Hypothesis H_a is accepted because $t_{count} > t_{table}$ ($3.633 > 1.660$) and significantly less than 0.05 which means that the communication variable (X_2) has a positive and significant effect on job satisfaction (Y) at PT. Razza Prima Transformer Medan.

IV. CONCLUSION

1. Physical Work Environment, has a positive and significant effect on the Job Satisfaction. at PT. Razza Prima Transformer Medan.

2. Communications has a positive and significant effect on the Job Satisfaction. at PT. Razza Prima Transformer Medan.
3. Physical Work Environment, and Communications have a positive and significant impact on the Job Satisfaction. at PT. Razza Prima Transformer Medan.

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