

## **The Influence of the Work Environment on Employee Productivity at the North Minahasa District Health Office in the Covid-19 Era**

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### **ABSTRACT**

The work environment is an important factor in creating conducive conditions for employees to carry out their duties. In this era of COVID-19, employees need a healthy, safe and comfortable work environment. A sense of comfort at work will have a positive impact on employees, namely employees will feel satisfied with the work environment provided by the organization. This type of research is carried out using quantitative methods, namely analyzing the influence of the Physical Work Environment and Non-Physical Work Environment on Employee Work Productivity at the Health Office of North Minahasa Regency in the Covid-19 Era. Quantitative research, namely: N Quantitative research can be interpreted as a research method based on the philosophy of positivism, used to examine certain populations or samples, data collection using research instruments, data analysis is quantitative/statistical, with the aim of testing hypotheses. The hypothesis is rejected, where the physical environment and non-physical environment no significant effect on the productivity of Health Service employees North Minahasa Regency. Although partially there is an influence that is not Significant but simultaneously these two variables have a significant effect significant to the productivity of Minahasa District Health Office employees North.

**KEYWORDS:** work environment, covid-19, organization.

### **INTRODUCTION**

Corona Virus Disease 2019 (Covid 19) became a global pandemic that caused changes in various fields such as education, social, culture, and trade. There are many new habits that must be carried out by everyone to avoid the spread of this virus, the COVID-19 pandemic has prompted a new policy for the North Minahasa Regency Government regarding its work environment to maintain social distancing, both for employees and for the community, the existence of standards and work procedures that more and more related to the implementation of the covid 19 prevention protocol. However, awareness of the importance of this policy for the common good, makes the negative impact not drag on. The positive impact, employees become more focused at work (don't talk much with colleagues), pay more attention to the health of themselves and others, the creation of new habits for a healthier and cleaner life. (Sutrisno, 2020) states that the work environment has an impact on employee work conditions and productivity.

According to Mardiana (2005), the work environment is an environment where employees do their daily work. The work environment is a very important component when employees carry out work activities.

By paying attention to a good work environment or creating working conditions that are able to provide motivation to work, it will have the effect of increasing work productivity. The work environment is everything that is around the workers that can affect him in carrying out the tasks assigned. (Nitisemito & Alex, 2001). The work environment is also one of the things that affect the implementation of employee duties optimally so that it needs to be considered, which includes the work atmosphere, co-worker relations, and the availability of work facilities (Arianto & Kurniawan, 2020). According to (Sedarmayanti, 2017) the work environment is the entire toolkit and materials faced, the surrounding environment in which a person works, work methods, and work arrangements both as individuals and as groups. Sedarmayanti stated that broadly speaking, the work environment is divided into 2, namely: Workplace environment/physical working environment, and Non-Physical Working Environment. According to (Sedarmayanti, 2017) the physical work environment is all physical conditions that exist around the workplace that can affect employees both directly and indirectly, while the non-physical work environment is all circumstances that occur related to work relationships, as well as relationships with employees. subordinate.

The work environment is an important factor in creating conducive conditions for employees to carry out their duties. In this era of COVID-19, employees need a healthy, safe and comfortable work environment. A sense of comfort at work will have a positive impact on employees, namely employees will feel satisfied with the work environment provided by the organization.

Changes in the work environment carried out by the Health Office of the North Minahasa Regency in the early days of COVID-19 must really go through a decision-making process by considering employee comfort, because if employees are not comfortable, the work results will not be optimal and will reduce employee productivity. The decrease in work productivity will have an impact on the work achieved by the employee.

According to Hasibuan (Prasetyo and Wahyudin, 2006) that productivity work is a measure of the work or performance of a person with the input process as input and output as output which is an indicator of employee performance in determining how to achieve high productivity in an organization. Employee productivity usually increases if the employee is always present at the company, works well, wants to work hard, is never absent or absent from work, and the employee is never on leave. Employee productivity can also decrease if the employee can't compete with other employees, is often absent, works carelessly and he even goes out of work. .

The North Minahasa District Health Office is one of the agencies that plays an important role during the COVID-19 pandemic. Central Government policy as outlined in the Decree of the Minister of Health Number HK.01/Menkes/328/2020 dated May 20, 2021 regarding Guidelines for the Prevention and Control of Corona Virus Disease 2019 (Covid-19) in Office and Industrial Workplaces in supporting business continuity in this situation. The pandemic is the basis for maintaining the safety of employees and the public. The policies established related to changes in the physical and non-physical work environment include standards and procedures for using masks and gloves, not in contact with colleagues or the public, require frequent hand washing for employees and spraying of disinfectants in the workspace and the obligation to provide hand sanitizers for employees and the public who come to the Health Office and health service facilities such as Puskesmas / Pustu / Polindes and may not serve anyone who does not use a mask. The changes that occur have a negative

impact on employees, namely a little feeling of being burdened because of the large workload, while not being supported by adequate facilities and infrastructure. For example, the unavailability of infrastructure which is the main requirement during the COVID-19 period, such as a disinfectant sprayer, table divider glass, hand washing facilities, infrared thermometers/thermometers, not to mention the pandemic changing habits. of the number of employees who usually come in at once, some enter in the morning and part in the afternoon (groups), and for those who are sick they are obliged to work from home (WFH). The grouping of employees who come to work is intended to reduce the lack of contact with one another as recommended by the government. These things cause employees to sometimes feel uncomfortable at work for fear of being exposed to COVID-19, attendance that is arranged per group results in a lack of coordination and communication between employees. Changes in the work environment have an impact on decreasing the level of employee productivity. As a result, there is a decrease in employee productivity which results in difficulties in carrying out their work. The grouping of employees who come to work is intended to reduce the lack of contact with one another as recommended by the government. These things cause employees to sometimes feel uncomfortable at work for fear of being exposed to COVID-19, attendance that is arranged per group results in a lack of coordination and communication between employees. Changes in the work environment have an impact on decreasing the level of employee productivity. As a result, there is a decrease in employee productivity which results in difficulties in carrying out their work. The grouping of employees who come to work is intended to reduce the lack of contact with one another as recommended by the government. These things cause employees to sometimes feel uncomfortable at work for fear of being exposed to COVID-19, attendance that is arranged per group results in a lack of coordination and communication between employees. Changes in the work environment have an impact on decreasing the level of employee productivity. As a result, there is a decrease in employee productivity which results in difficulties in carrying out their work. attendance that is arranged per group results in a lack of coordination and communication between employees. Changes in the work environment have an impact on decreasing the level of employee productivity. As a result, there is a decrease in employee productivity which results in difficulties in carrying out their work. attendance that is arranged per group results in a lack of coordination and communication between employees. Changes in the work environment have an impact on decreasing the level of employee productivity. As a result, there is a decrease in employee productivity which results in difficulties in carrying out their work.

Work productivity according to Siagian in Agustin (2014) is the ability to produce goods/services from various resources and capabilities possessed by each worker/employee. In general, productivity can be defined as the ability to improve employee performance in terms of the resources owned by each individual. Hasibuan (2015:) employee work productivity is the comparison between the results achieved with the participation of the workforce per one time. The participation of the workforce here is the use of resources as well as efficiency and effectiveness. Based on some of these references, Agustin's research (2014) on work productivity can be concluded that productivity is an increase in work output which is influenced by the ability of employees (input) and produces a product or service (output).

## RESEARCH METHODS

This type of research is carried out using quantitative methods, namely analyzing the influence of the Physical Work Environment and Non-Physical Work Environment on Employee Work Productivity at the Health Office of North Minahasa Regency in the Covid-19 Era. According to Sugiyono (2011). Quantitative research, namely: N Quantitative research can interpreted as a research method based on the philosophy of positivism, used to examine a particular population or sample, data collection using research instruments, quantitative/statistical data analysis, with the aim of testing hypotheses.

## RESULTS

### Descriptive Analysis of the Physical Work Environment

An overview of respondents' assessment of the Physical Work Environment, from the distribution shown in the attachment, first grouped into class intervals. This grouping is taken according to the lowest value to the highest value. From these data, an empirical range is obtained between 30 to 50 with a range of 20. Then from the results of data analysis, it is obtained an average score (mean) of 40.18, median of 45, mode of 40. The arrangement of the frequency distribution according to the Sturges rule For non-physical work environment variable data obtained 4 class intervals and class length 5, whose frequency distribution is shown in the following table:

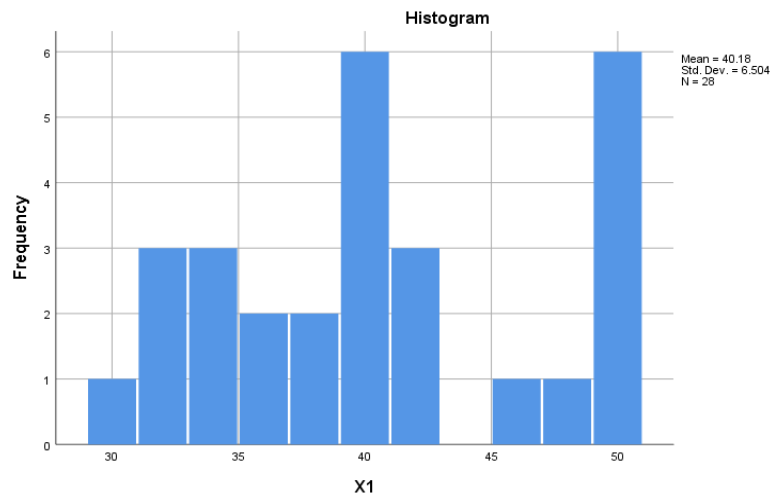
**Table 4.2. Frequency Distribution of Physical Work Environment (X1)**

class number	Class interval	Frequency		Frequency	
		Absolute	%	Cumulative	%
1	30-34	7	25.00	7	25.00
2	35-39	5	17.86	12	42.86
3	40-44	8	28.57	20	71.43
4	45-50	8	28.57	28	100.00
		28	100.00		

Source: Processed from research results

Based on the table above, it can be seen that the average score is 40.18 as many as 8 respondents or 28.57%, the score is below the average from the first class number to the second class number as many as 12 respondents or 42.9% and the score above the average of the fourth class number as many as 8 respondents or 28.57%. The general description of respondents' assessments of the Physical Work Environment can be seen from the distribution of data shown in the table appendix 2.

To further clarify the presentation of the variable frequency distribution of the physical work environment, it is also presented in the form of a histogram as shown in the following graph:



Graph 4.1

## Physical Work Environment histogram graph

This graph shows that the physical work environment data is normally distributed.

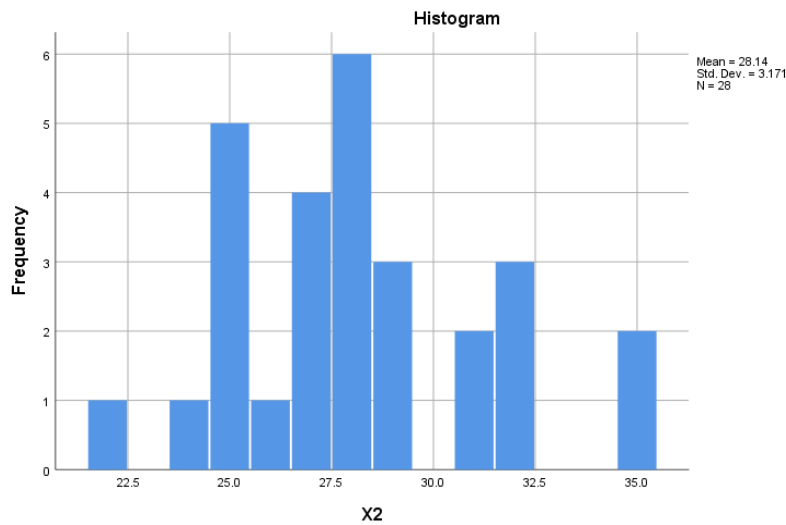
Descriptive Analysis of Non-Physical Work Environment An overview of respondents' assessment of the Physical Work Environment, from the distribution shown in the attachment, first grouped into class intervals. This grouping is taken according to the lowest value to the highest value. From this data, an empirical range is obtained between 22-35 with a range of 13. Then from the results of data analysis, it is obtained an average score (mean) of 28.14, a median of 31.5 and a mode of 28. The arrangement of the frequency distribution according to the rules Sturges for non-physical work environment variable data obtained 3 class intervals and class length 5, whose frequency distribution is shown in the following table

**Table 4.3. Frequency Distribution of Non-Physical Work Environment (X2)**

class number	Class interval	Frequency		Frequency	
		Absolute	%	Cumulative	%
1	22-26	8	28.57	8	28.57
2	27-31	15	53.57	23	82.14
3	32-35	5	17.86	28	100.00
		28	100.00		

Source: Processed from research results

Based on the table above, it can be seen that the average score is 28.14 as many as 15 respondents or 53.57%, the score is below the average of the first class number as many as 8 respondents or 28.57% and the score is above the average. the average of the third class number is 5 respondents or 17.86%. An overview of respondents' assessments of the non-physical work environment can be seen in the table in Appendix 3. The presentation of the variable frequency distribution of the non-physical work environment can also be presented in the form of a histogram as shown in the following graph:



Graph 4.2

## Histogram Graph of Non-Physical Work Environment

From this graph, it shows that the non-physical work environment data is normally distributed. Productivity Descriptive Analysis General description of respondents' assessment of the Physical Work Environment, from the distribution shown in the attachment, first grouped into class intervals. This grouping is taken according to the lowest value to the highest value. From this data, an empirical range is obtained between 22-35 with a range of 19. Then from the results of data analysis, it is obtained an average score (mean) of 67.54, Median 73 and mode 64. The arrangement of the frequency distribution according to the Sturges rule for variable data The non-physical work environment has 4 interval classes and 5 class lengths, whose frequency distribution is shown in the following table

Table 4.3. Productivity frequency distribution

class number	Class interval	Frequency		Frequency	
		Absolute	%	Cumulative	%
1	61-65	12	42.86	12	42.86
2	66-70	10	35.71	22	78.57
3	71-75	4	14.29	26	92.86
4	76-80	2	7.14	28	100.00
		28	100.00		

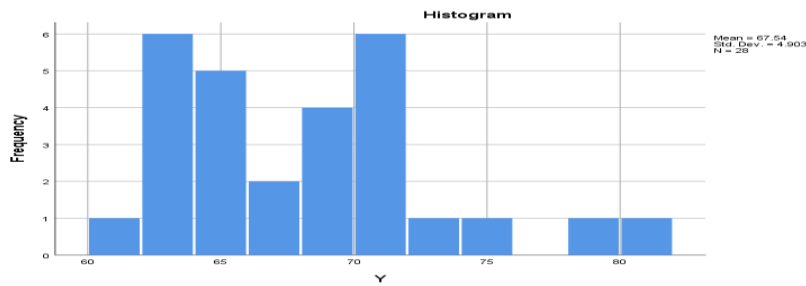
Source: Processed from research results

Based on the table above, it can be seen that the average score is 67.54 as many as 10 respondents or 35.71%, the score is below the average of the first class number as many as 12 respondents or 42.86% and the score is above the average. the average of the third and fourth class numbers as many as 6 respondents or 21.43%.

An overview of respondents' assessments of the non-physical work environment can be seen in the appendix table 4

The presentation of the variable frequency distribution of the non-physical work environment can also be presented in the form of a histogram as shown in the following graph:





Graphics 4.3

Productivity histogram graph

This graph shows that the productivity data is normally distributed.

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.549a	.301	.245	4.260

a. Predictors: (Constant), X1, X2

**Test results Reliability of the Questionnaire/Questionnaire Variables X1, X2 and Y+**

Table 4.4. Test results on the number of samples in filling out the questionnaire/questionnaire

Variable	N	%
X1	28	100
X2	28	100
Y	28	100

The results above provide information about the number of samples or respondents analyzed with the symbol (N). From the data above, it can be seen the results of the SPSS Version 25 analysis program, where it was stated that the reliability test on the questionnaire on 28 samples was declared valid 100% or all questionnaires/questionnaires were answered..

Table 4.5. Reliability Statistics Results per variable

Variable	Cronbach's Alpha	N of Items
X1	0.916	10
X2	0.770	7
Y	0.866	16

This second output table is used as a basis for making decisions whether all questions in the questionnaire are reliable or not. If you look at the table above, there is a column N of Items, which means the number of items or items in the questionnaire. In the table there are 10 for the X1 variable, 7 for the X2 variable and the Y variable, there are 16 questions.

For the numbers or output results in the red box, the value of Cronbach's Alpha for all items on the X1 variable is 0.916, X2 is 0.770 and Y is 0.866. Because the results of the output of the three variables above were found to be > 0.60, it can be concluded that all question items on the questionnaire were consistent or reliable.

**Results of t test and F . test**

T test is one of the research hypothesis testing in simple linear regression analysis and multiples (multiple) linear regression analysis. The T test aims to determine whether the

independent variable or independent variable (X) partially (alone) has an effect on the dependent variable or dependent variable (Y).

Table 4.6. T-Test Results from SPSS

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	51.157	8.008		6389	.000
	X2	-.022	.579	-.014	-.039	.969
	X1	.423	.282	.562	1,499	.147

a. Dependent Variable: Y

From the SPSS version 25 output table, "Coefficients" above, we will do a test to find out whether the X1 and X2 variables partially have an effect on the Y variable.

Where H1: Effect of X1 on Y and H2: Effect of X2 on Y.

**Basis for decision making Partial t test in Regression analysis.**

To test the research hypothesis above, we must first know the basis for decision making in the partial t test. In this case, there are two references that we can use as a basis for making decisions, first by looking at the significance value (Sig), and secondly comparing the t-count value with the t-table.

Based on Significance Value (Sig.)

1. If the value of Significance (Sig). < probability 0.05 then there is an effect of the independent variable (X) on the dependent variable (Y) or the hypothesis is accepted.
2. If the value of Significance (Sig). > 0.05 probability then there is no effect of the independent variable (X) on the dependent variable (Y) or the hypothesis is rejected.

Based on the comparison of the value of t count and t table

1. If the value of t arithmetic > t table then there is an influence of the independent variable (X) on the dependent variable (Y) or the hypothesis is accepted.
2. If the value of t count < t table, then there is no effect of the independent variable (X) on the dependent variable (Y) or the hypothesis is rejected.

**H1: Effect of X1 on Y**

The first t-test was conducted to determine whether there was an effect of X1 on Y in table 2 above. Based on the significance value (Sig.)

From the results in the SPSS "Coefficients" output table above, it is known that the significance value (Sig) of the X1 variable is 0.147. Because the value of Sig. 0.147 > probability 0.05. Then it can be concluded that H1 or the first hypothesis is rejected. This means that there is no effect of the X1 variable on the Y variable.

**H2: Effect of X2 on Y**

The first t-test was conducted to determine whether there was an effect of X2 on Y in table 2 above.



Based on the significance value (Sig.)

From the results in the SPSS "Coefficients" output table above, it is known that the significance value (Sig) of the X2 variable is 0.969. Because the value of Sig.  $0.969 > 0.05$  probability. Then it can be concluded that H2 or the second hypothesis is rejected. This means that there is no effect of the X2 variable on the Y variable.

### H3: Effect of X1 and X2 on Y

Perform the F test to find out whether the variables X1 and X2 simultaneously (together) affect the Y variable. The F test in multiple linear regression analysis lies in the meaning of the influence given by the X variable to the Y variable, whether it is separate or combined. The t-test is useful for knowing the effect of variable X partially (alone) on variable Y. While the F test aims to determine the effect of variable X simultaneously (together or in combination) on variable Y.

The F test has an effect or no effect on the variables X1 and X2 simultaneously on the Y variable.

There are two ways that can be used as a reference or guideline for testing the hypothesis in the F test. The first is to compare the significance value (Sig) or the probability value of the Anova output. The second is to compare the calculated F value with the table F value.

#### Based on the Significance Value (Sig.) of the Anova output output

1. If the value of sig.  $< 0.05$  then the hypothesis is accepted. Then it means that the variable X1 and variable X2 simultaneously affect the variable Y.
2. If the value of sig.  $> 0.05$  then the hypothesis is rejected. Then it means that the variable X1 and variable X2 simultaneously affect the variable Y.

#### Based on the comparison of calculated F values with F table

1. If the calculated F value  $> F$  table, then the hypothesis is accepted. Then it means that the variable X1 and variable X2 simultaneously affect the variable Y.
2. If the calculated F value  $< F$  table then the hypothesis is rejected. Then it means that the variable X1 and variable X2 simultaneously affect the variable Y.

Table 3. F test results from SPSS

#### ANOVA<sup>a</sup>

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	195,357	2	97,678	5.383	.011b
	Residual	453.607	25	18,144		
	Total	648,964	27			

a. Dependent Variable: Y

b. Predictors: (Constant), X1, X2

#### 1. Based on the Significance Value (Sig.) of the Anova output output

Based on the SPSS version 25 output table above, it is known that the value of sig. is 0.011. Because the value of Sig.  $0.011 < 0.05$ , then according to the basis of decision making in the

F test, it can be concluded that the hypothesis is accepted or in other words the X1 and X2 variables simultaneously affect the Y variable.

## 2. Based on the comparison of calculated F values with F table

Based on the calculated F value is 5.383. Because the calculated F value is  $5.383 > F$  table 3.37. So as the basis for decision making in the F test, it can be concluded that the hypothesis is accepted or in other words the X1 and X2 variables simultaneously affect the Y variable.

## C. Discussion

The COVID-19 pandemic has prompted new policies on the physical and non-physical work environment at the North Minahasa District Health Office. At the beginning of the pandemic, everything felt very inadequate due to limited funds, the government even had to issue several regulations regarding the addition of standards and procedures related to this non-natural disaster. The changes that occur have a negative but also positive impact on employees. Starting from the lack of availability of personal protective equipment (PPE), table dividers, spatial arrangements which, when adjusted to the Covid-19 regulations, almost do not meet the standards, to the limited working relationship between fellow employees and even the relationship between leaders and subordinates as a result of the policy of limiting direct contact. .

Regulations limiting distance and direct contact result in relationships between co-workers, or working relationships between leaders and subordinates often encounter obstacles and affect work productivity. For example, in the case of work that requires close contact with the community or with other parties. There are some things that might be resolved by coordinating through social media such as whatsapp, but there are also many tasks that must be done by direct contact between fellow co-workers, or between leaders and subordinates.

The North Minahasa District Health Office is the backbone to prevent the spread and at the same time eradicate COVID-19. Even though not all employees are directly involved in handling this situation. The government has formed the COVID-19 Task Force for North Minahasa Regency which involves several related agencies such as the Regional Disaster Management Agency, the Food Service, the Social Service which is responsible for handling in the context of prevention efforts such as disinfection for all public facilities, providing food assistance for the community and Tracing is being carried out for people who are suspected of being positive for COVID-19 in all areas of the North Minahasa Regency government. And currently, together with the TNI and POLRI, they are trying to carry out vaccination activities to increase immunity against the COVID-19 virus.

Based on the measurement results of multiple linear regression analysis T, it is known that the independent variables of the physical and non-physical environment through the T test have no significant effect on productivity, but with the F test the independent variables X1 and X2 have a positive and significant effect on the Y variable. to the physical and non-physical environment is to answer agree, as well as to the response to the variable Y (productivity).

Results This further strengthens research (Sutrisno, 2020) which states that the work environment has positive and negative impacts on the conditions and productivity of employees.

## CONCLUSION

Based on the results of the analysis and discussion that have been presented in the previous section, it can be concluded that:

- 1) The hypothesis is rejected, where the physical environment and non-physical environment physical has no significant effect on the productivity of Service Employees Health of North Minahasa Regency.
- 2) Although there is a partially insignificant effect, but simultaneously these two variables have a significant effect on the productivity of the employees of the North Minahasa District Health Office

Based on the conclusions drawn, it is recommended:

- 1) Special attention is needed to the physical environment and the non-physical environment at the North Minahasa District Health Office in order to support a constructive organizational culture in order to increase productivity.
- 2) Further research is needed related to the efforts that can be made by the leadership in increasing employee productivity in all lines of government organizations
- 3) Due to the influence of limited research and time constraints, the authors suggest that in the future there are those who can research about other factors that affect employee productivity.

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