



Impact of the Work Environment and Workload During the Covid-19 Pandemic on Teacher Performance (Case Study at SMA Negeri Kab. Tangerang)

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Abstract: This study examines how during the Covid-19 pandemic, changes in the work environment and workload have an impact on teacher performance. The scope of the research was conducted on teachers of physics, chemistry, and biology at SMA Negeri Kab. Tangerang, which was accredited A with a population of 123 and obtained 94 samples through the random sampling technique. The data used is primary data through the distribution of questionnaires to respondents after testing the quality of the instrument, namely the validity and reliability test. Test the quality of the data using the classical assumption test and hypothesis testing with multiple linear regression. The results showed that the work environment 39.7% had a significant impact, the workload 62.7% had a significant impact, as well as the work environment and workload simultaneously 80.9% had a significant impact.

Keywords: Work Environment, Workload, Teacher Performance

INTRODUCTION

Since the Covid-19 pandemic, crises in various sectors in society have also spread to the education sector. In the field of education, in order to survive, quality resources are needed. One of the important organizational assets that must be managed carefully is human resources so that they are in line with the needs of the organization (Larasati, 2018). In line with these conditions, the work environment has changed, one of which is caused by the implementation of the learning process carried out in various education centers. As at the level of high school (SMA) State. This is related to the Implementation of Restrictions on Community Activities (PPKM) and the SKB 4 Ministers must comply with strict health protocols. Of course, this requires schools to have standards and work procedures related to health protocols (Prokes). Such as the availability of adequate health facilities and infrastructure in the process of work activities, distance restrictions and so on. The addition of

these new standards and work procedures will certainly change the work environment. The work environment affects teacher performance (Priyono et al., 2018).

In addition to the changing work environment, the workload also changes directly. Where learning activities are still limited to 50% student capacity, so teachers must carry out new learning activities. For example, teachers carry out learning activities with a blended learning process. These activities are carried out through two activities at once, namely learning through virtual classes via online and direct classroom learning activities. The main thing that the teacher must pay close attention to is the process that students apply to comply with health standards. Of course, this increases the burden on the teacher. Meanwhile, one of the factors that affect teacher performance is the workload experienced. Teacher performance is more effective if the workload is also effective, and vice versa, teacher performance is lower if the workload is not effective (Prabowo, 2020). For this reason, schools must consider the workload of teachers, because too much workload experienced can have an impact on inefficient teacher performance.

As an educational institution at the state high school (SMA) level that implements government regulations in the province of Banten, the school data spread across each district is shown in the following table.

Table 1. Distribution of Schools in Banten Province

City	Total
Kab. Tangerang	32
Kab. Serang	27
Kab. Pandeglang	20
Kab. Lebak	42
Kota Tangerang Selatan	12
Kota Tangerang	15
Kota Serang	8
Kota Cilegon	5

Source: <https://dapo.kemdikbud.go.id/sp/1/280000>

From the table, it is known that the Tangerang district is the area with the 2nd largest number of public schools that needs to be observed how the conditions of the work environment and workload experienced by teachers are. Due to the Covid-19 pandemic, work activities have changed. The indications of the changing work environment and workload should be studied further. This is because the work environment and workload are factors that have implications for teacher performance. Thus, this study wants to examine how the impact of the work environment and workload during the Covid-19 pandemic on teacher performance with a case study on State High School (SMA) teachers in the Tangerang district.

LITERATURE REVIEW

Work environment

The work environment as an important part in an organizational management process to be able to realize maximum performance. Because the work environment has a direct impact that can be felt by all members of the organization. In carrying out their duties, the work environment as the environment around workers can affect the work process (Afandi, 2018). This is because the work environment is an environment where employees carry out daily work activities. The most productive level of employee performance can be encouraged by creating a pleasant work environment (Rahadi, 2010).

The dimensions of the work environment according to Sedarmayati (2016) can be classified into two, namely the physical work environment and the non-physical work environment. Then the indicators of the physical work environment include all physical conditions in the workplace including: (1) lighting or light, (2) noise, (3) air circulation, (4) color planning, (5) workspace arrangement, (6) comfortable work space, (7) office space temperature, and (8) safety at work. Meanwhile, non-physical work environment indicators include: (1) working relations with superiors and (2) relationships among co-workers.

Workload

Theories regarding workload are defined differently according to experts. This is because of the differences that lie in each of the different job boundaries. Workload as a series of tasks assigned to the workforce or employees to be completed on time (Munandar, 2014). According to another opinion, this definition of workload relates to a series of activities that must be completed within a certain time by an organizational unit (Paramitadewi, 2017).

The workload can be observed through emerging indicators. According to Koesomowidjojo (2017), there are three indicators regarding workload, namely: Working conditions include: (1) the number of jobs, (2) the work is quite difficult, and physical activity at work. Use of working time and targets to be achieved.

Teacher Performance

Performance is a level and capacity of each individual in achieving the job requirements they have (Chandra et al, 2016). Performance as a performance of the work done within a certain time. Regarding this, the performance of each teacher is basically an individual thing, this is because the level of competence possessed by each teacher is also different. As the regulation of the Minister of National Education of the Republic of Indonesia No. 35 of 2010 which regulates technical instructions for the implementation of teacher functional positions and their credit numbers. Where is the teacher's performance as a result of the assessment of the process and the results of the achievement of the teacher's work in carrying out the tasks carried out. So that to be able to produce maximum performance, a teacher must have good competence as well.

Performance appraisal is a very crucial thing. The results of the performance appraisal can ultimately influence the policy direction of an organization. The contribution of the results of the performance appraisal as a useful aspect for organizational strategy and planning (jeky et al, 2018). For this reason, the assessment of teacher performance must of course be taken seriously. The teacher's performance can be seen from several aspects. According to the Ministry of National Education (2008), these aspects are as follows:

- 1) Quality of work, where this aspect relates to the results of the quality of work
- 2) Promptness, this aspect relates to completing work on time
- 3) Initiative, this aspect is related to the initiative in completing the work
- 4) Capability, this aspect is related to performance in completing work
- 5) Communication, this aspect is related to fostering good cooperation with other parties.

From the explanation above, we can understand that teacher performance plays an important role in determining the realization of the vision and mission plan of school institutions. So that an educational institution needs to manage teachers well to be able to have competencies, skills, and abilities that can later be applied to work effectively and efficiently.

Framework Theory

Through literature review and previous research, the framework of thought in this research is described as follows:

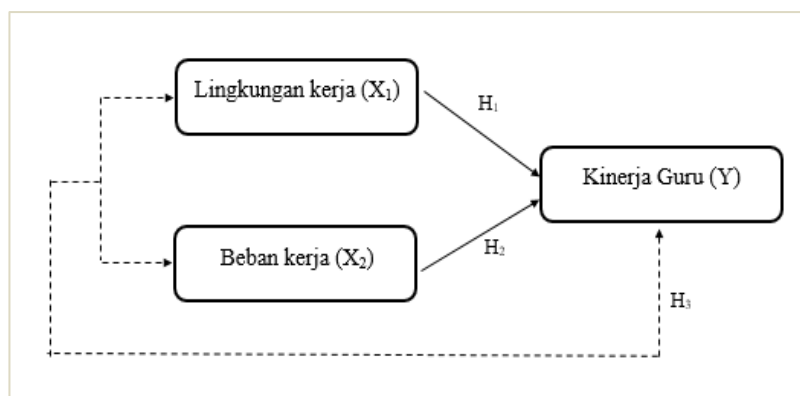


Figure 1. Framework Theory

Note:
 ———→ partially
 - - - -> simultaneously

Hypothesis

With the elaboration of the framework that has been described previously, the hypotheses proposed in this study are as follows:

a) The Effect of the Work Environment on Teacher Performance

In the process of carrying out work activities, a good work environment is needed by employees so that employees can carry out work activities comfortably. Work environment The work environment affects teacher performance (Priyono et al., 2018). So that the proposed hypothesis is:

H₁: The work environment has an impact on teacher performance

b) The Effect of Workload on Teacher Performance

Workload as a series of activities within a certain period of time that must be completed by an organizational unit (Paramitadewi, 2017). One of the factors that affect teacher performance is the workload undertaken. This means that if the teacher's workload is effective, the teacher's performance will also be better. Likewise, if the teacher's workload is not effective, it will also have an impact on the ineffectiveness of teacher performance (Prabowo, 2020). From this description, the proposed hypothesis is as follows:

H₂: workload has an impact on teacher performance

c) The Influence of Work Environment and Workload on Teacher Performance

Work environment and workload as factors that have a role in influencing teacher performance. This is in accordance with previous research where simultaneously the work environment and workload affect teacher performance (Abdul Jali, 2019). Thus, the proposed hypothesis is:

H₃: work environment and workload have an impact on teacher performance

Data source

Sources of data needed in this study obtained from primary data and secondary data. The primary data was obtained from respondents' responses to the variables studied through the distribution of questionnaires. While secondary data was obtained from the official dapodik website to find out about the state of the school object of research such as school accreditation, the number of teachers, and so on.

Research Variable Indicator

- a) work environment The physical work environment includes: (1) lighting or light, (2) noise, (3) air circulation, (4) color arrangement, (5) comfortable workspace arrangement

- and (6) room temperature. The non-physical work environment consists of: (1) relationships with superiors and (2) relationships with colleagues.
- b) Workload The working conditions are: (1) the number of jobs, (2) the work is quite difficult. The use of working time, namely: (3) work time and rest time, as well as targets that must be achieved, namely: (4) satisfaction at work.
 - c) Teacher performance Quality of work is the result of the quality of work, (2) Prompness is completing work on time. (3) Initiative, namely the initiative to complete work, (4) Capability, namely the performance of completing work and (5) Communication, namely the ability to foster good cooperation with other parties.

RESEARCH METHODS

In this study, the method used is quantitative analysis. Where the quantitative method as a research method based on the philosophy of positivism, is used to examine certain populations or samples, data collection uses research instruments, data analysis is quantitative or statistical, with the aim of testing the applied hypothesis (Sugiyono, 2019).

The object of this research is the teacher at the State High School (SMA) Kab. Tangerang is an A-accredited school, where a total of 17 schools that meet these qualifications. The population observed was all teachers belonging to the Natural Sciences cluster, namely physics teachers, chemistry teachers, and biology teachers with a total population of 123 teachers. Through the random sampling technique, obtained 94 teachers to be used as research samples. The research data observed were primary data through the distribution of questionnaires. The list of questions relates to observed variables such as work environment, workload, and teacher performance. The research questionnaire statement was made based on a Likert scale with a rating scale of 1-7 and was given a score

Before being used, the instrument was tested first through a limited number of 30 respondents outside the research sample who had similar characteristics. Then the quality of the instrument was tested using validity and reliability tests. Then the research data analysis was tested through classical assumption test and hypothesis testing. Where the classical assumption test used includes the normality test of the data, the skedastisity test, the multicollinearity test, the multiple linear regression test, and the coefficient of determination test. Meanwhile, the research hypothesis test used t-test and F-test. The data obtained were analyzed using SPSS software on Windows 10.

FINDINGS AND DISCUSSION

After doing research with the steps that have been described previously. The results of the findings in this study are explained thoroughly as follows:

Instrument quality test

The instrument quality test consists of a validity test and an instrument reliability test. The results of the quality test of the instrument are shown in the following table:

Table 1. Validity test

Variable	Item	α	r_{table}	r_{count}	Ket.
Work environment (X_1)	X1.1	0,05	0,374	0,381	Valid
	X1.2	0,05	0,374	0,391	Valid
	X1.3	0,05	0,374	0,495	Valid
	X1.4	0,05	0,374	0,494	Valid
	X1.5	0,05	0,374	0,398	Valid
	X1.6	0,05	0,374	0,510	Valid

	X1.7	0,05	0,374	0,441	Valid
	X1.8	0,05	0,374	0,410	Valid
	X1.9	0,05	0,374	0,429	Valid
workload (X ₂)	X2.1	0,05	0,374	0,631	Valid
	X2.2	0,05	0,374	0,631	Valid
	X2.3	0,05	0,374	0,378	Valid
	X2.4	0,05	0,374	0,494	Valid
Teacher performance (Y)	Y1	0,05	0,374	0,375	Valid
	Y2	0,05	0,374	0,407	Valid
	Y3	0,05	0,374	0,502	Valid
	Y4	0,05	0,374	0,428	Valid
	Y5	0,05	0,374	0,425	Valid

Source: SPSS output data

In the test results in Table 2. above, it can be understood that the value of r-count Larger than r-table where the value of r-table is 0.374. Thus, each statement item in the questionnaire is declared valid.

Reliability test aims to find out how the consistency of each answer on the questionnaire regarding the variables of work environment, workload, and teacher performance. The results of the instrument reliability test are shown in the following table:

Table 2. Reabilty test

Cronbach's Alpha	N of Items
,823	18

Source: SPSS output data

Based on the test results in table 2 it can be seen that the value of Cronbach's alpha is 0.823. So the test results show that all the questionnaire items are reliable.

Classical Assumption Test

Normality test

The following shows the results of the normality test of research data carried out using the Kolmogorov Smirnov Test analysis in the following table:

Table 3. One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		94
Normal Parameters ^{a,b}	Mean	,0000000
	Std. Deviation	1,07491126
Most Extreme Differences	Absolute	,084
	Positive	,084
	Negative	-,075
Test Statistic		,084
Asymp. Sig. (2-tailed)		,097 ^c

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

Source: SPSS output data

The table above shows the results of the normality test with a significant value of = 0.097. This value is greater than = 0.05, so based on the test results it can be concluded that the research sample data is normally distributed.

Heteroscedasticity test

Heteroscedasticity test was carried out to test whether there was an inequality of variance from the residuals for all observations in the linear regression model. To find out whether there are symptoms of heteroscedasticity, it can be done by using the scatterplots test to test whether the data has heteroscedasticity. The results of the heteroscedasticity test are as follows:

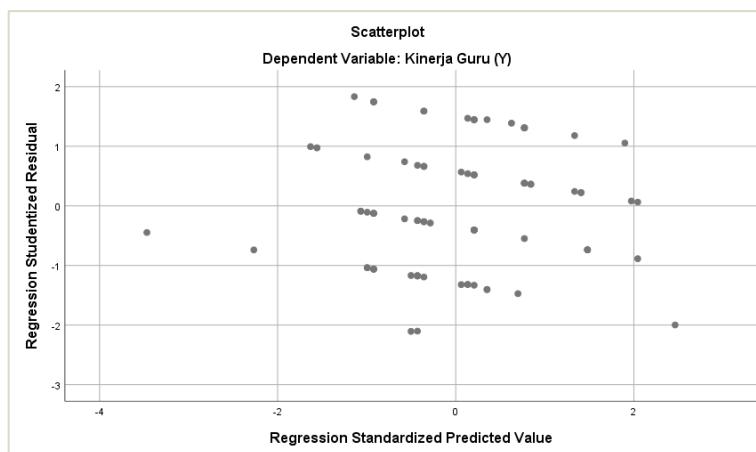


Figure 1. Heteroscedasticity

By observing the test results shown in the picture above, it is known that the points spread randomly and do not form a certain pattern. This shows that there is no symptom of heteroscedasticity in the research data.

Multicollinearity test

Multicollinearity test was conducted to identify the presence or absence of a strong intercorrelation between the independent variables of the study. A good regression model is characterized by the absence of intercorrelation. How to identify multicollinearity symptoms can be done by using tolerance and VIF (Variance Inflation Factor) values. Here are the results of the analysis::

Table 5. Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	1,021	1,144		,892	,375		
Lingkungan kerja (X1)	,397	,052	,387	7,643	,000	,816	1,225
Beban Kerja (X2)	,627	,048	,663	13,083	,000	,816	1,225

a. Dependent Variable: Kinerja Guru (Y)

Source: SPSS output data

The table above shows the results of the multicollinearity test with a tolerance value greater than > 0.01 and a VIF value less than < 10.00. This shows that there are no symptoms of multicollinearity in the research data.

Multiple Linear Regression Test

The results of multiple linear regression tests between work environment and workload variables as independent variables, on teacher performance as the dependent variable are shown in the following table:

Table 6. Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics		
	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
(Constant)	1,021	1,144		,892	,375		
Lingkungan Kerja (X1)	,397	,052	,387	7,643	,000	,816	1,225
Beban Kerja (X2)	,627	,048	,663	13,083	,000	,816	1,225

a. Dependent Variable: Kinerja Guru (Y)

Source: SPSS output data

In the table above, the constant values and the values of each independent variable are obtained. So that the linear regression equation can be formulated as follows::

$$Y = 1,021 + 0,397 X1 + 0,627 X2$$

Note:

- X1 = Lingkungan kerja (work environment)
- X2 = Beban kerja (workload)

Through the regression equation above, it can be seen that the relationship is interpreted as follows:

- 1) The constant value of 1.021 is a condition when the performance variable has not been influenced by the work environment variable (X1) and the workload variable (X2) or in a constant state, the teacher's performance is positive.
- 2) b1 (regression coefficient value X1) 0.397 means that if the work environment (X1) increases, while other variables remain (constant), the teacher's performance will also increase.
- 3) b2 (regression coefficient value X2) 0.627 means that if the workload of teachers increases (X2 increases, while other variables remain (constant) then teacher performance will also increase.

Test the coefficient of determination

The coefficient of determination test was conducted to identify the level of variability of the independent variables studied. The value of the coefficient of determination is indicated by R square (R²). The following is the result of the test in the following table

Tabel 7. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
	,900 ^a	,809	,805	,403

a. Predictors: (Constant), Beban Kerja (X2), Lingkungan kerja (X1)

Source: SPSS output data

The value of the coefficient of determination test results above is obtained at 0.809. This gives an interpretation that the variability of the work environment and workload variables is able to explain the teacher's performance with a percentage of 80.9% while the remaining 19.1% is explained by the variability of other variables not examined in this study.

Hypothesis test

Hypothesis testing aims to identify whether the obtained regression equation can be justified or not. If the test results show a significant value, then the equation can be used to predict the Y variable and can prove the proposed hypothesis. The hypothesis testing either partially using the t-test or simultaneously using the F-test can be explained as follows:

Partial hypothesis testing (t-test)

Partial hypothesis testing was conducted to identify each independent variable on the dependent variable separately. The test results can be seen through the t-count value and its significance as well as by t-table. The results of the work environment test are shown in the following table:

Tabel 8. Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1,021	1,144		,892	,375
Lingkungan kerja (LK)	,397	,052	,387	7,643	,000
Beban Kerja (BK)	,627	,048	,663	13,083	,000

a. Dependent Variable: Kinerja Guru (Y)
Source: SPSS output data

Through the above analysis, it can be seen that the t-count value for the work environment variable is 7.643 with a significance value of 0.000. At the significance level of 0.05 and df = 91, the t-table value is 1.986. Because the value of t-count = 7.643.> the value of t-table = 1.986, it can be concluded that there is a significant influence between the work environment variables on teacher performance. This means that the hypothesis (H1) is accepted..

While testing the results of the t-count the impact of workload on teacher performance can be seen in the following table:

Tabel 9. Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1,021	1,144		,892	,375
Lingkungan kerja (LK)	,397	,052	,387	7,643	,000
Beban Kerja (BK)	,627	,048	,663	13,083	,000

a. Dependent Variable: Kinerja Guru (Y)
Source: SPSS output data

From the test results above, it can be seen that in the workload variable, the t-count value is 13.083 with sig. 0.000. At the significance level of 0.05 and df = 91, the t-table value is 1.986. Because the value of t-count = 13.083.> t-table value = 1.986, it can be concluded that there is a significant influence between the workload variables on teacher performance. This means that the hypothesis (H2) is accepted.

Simultaneous hypothesis testing (F-test)

Simultaneous hypothesis testing through the F-test was used to identify a significant influence between the work environment and workload on teacher performance. The test results are shown in the following table:

Tabel 10. ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	62,822	2	31,411	193,201	,000 ^b
Residual	14,795	91	,163		
Total	77,617	93			

a. Dependent Variable: Kinerja Guru (Y)

b. Predictors: (Constant), Beban Kerja (X2), Lingkungan kerja (X1)

Source: SPSS output data

Through the output results above, it can be seen that the F-count value is 193.201 with a sig. 0.000 < $\alpha = 0.05$. Provide an interpretation that jointly the work environment and workload have a significant effect on teacher performance. This means that the hypothesis (H3) is accepted.

CONCLUSION AND RECOMMENDATION

Conclusion

The results of research related to the impact of the work environment on teacher performance can be proven by the t-test of 7.643 and the value of sig. 0.000. The percentage of this variable is 39.7% while the rest is influenced by other factors. The results of research related to the impact of workload on teacher performance can be proven by the t-test of 13,083 and the value of sig. 0.000. The percentage of this variable is 62.7% while the rest is influenced by other factors. The results of the F-test can prove that the work environment and workload together have a positive and significant impact on teacher performance with an f-count value of 0.809 and sig. 0.000. The percentage of variable variability is 80.9% while the remaining 19.1% is explained by other variables not examined in the study.

Recomendation

1. The work environment can affect teacher performance, by paying attention to safety and comfort, supporting facilities can make maximum performance, therefore the school must pay attention to a comfortable environment.
2. The appropriate workload can improve teacher performance, thus the workload needs to be considered by the school as a consideration so that teachers can carry out their work to the maximum.
3. It is hoped that further research will examine the variables that can affect teacher performance.

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