

Influence of WFH and Job Stress on Employee Productivity in Indonesia during Covid-19 Pandemic

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Abstract

The Covid-19 pandemic is a disaster experienced by the world, including Indonesia. Companies need to make policies so that their business processes can continue to run, one of which is through work from home and knowing the job stress experienced by employees and their impact on employee productivity. The objective of this research was to investigate influence of work from home and job stress to employee productivity in Indonesia during Pandemic Covid-19. The researcher used to work from home and job stress as independent variable, then employee productivity as dependent variable. Quantitative research with this type of associative research is used to determine the effect between variables. This research uses multiple regression analysis. The finding of this research are the quality of work from home, job stress, and employee productivity in Indonesia during Pandemic Covid-19 are good. Simultaneously, work from home and job stress have significant influence on employee productivity in Indonesia during the pandemic covid-19. While partially, work from home has positive and significant influence on employee productivity and job stress has negative and significant influence on employee productivity in Indonesia during the pandemic covid-19.

Keywords: work from home; job stress; employee productivity; covid-19 pandemic.

1. Introduction

The Covid-19 pandemic is a disaster experienced by the world, including Indonesia. Covid-19 is a new type of virus that has spread to various parts of the world, causing the outbreak of the 2019 corona virus disease. The World Health Organization (WHO) has also determined the COVID-19 pandemic since March 11, 2020. This situation forces the world, including the Indonesian government to take various decisions to protect its citizens from the spread of this virus. This was conveyed by the President of the Republic of Indonesia at a press conference at the Presidential Palace on March 16, 2020, namely that the policy of studying from home, working from home, and worshipping at home needs to continue for us to intensify to reduce the level of the spread of Covid-19. This policy is certainly not automatically accepted by all Indonesians, including by companies in various industrial sectors in implementing work from home, because not all jobs can apply working from home. It can affect productivity by employee changing system.

The Minister of Industry of the Republic of Indonesia, Agus Gumiwang Kartasasmita, on April 2, 2020 in Jakarta, stated, "Some industries have decreased their capacity (production) by almost 50%, except for the medical equipment and medicine industries. We continue to encourage the industry to operate as usual, but with strict health protocols so as to avoid the Covid-19 outbreak", this shows that during the Covid-19 pandemic it reduced company

productivity even though every company expects productivity to be maintained well. Mathis and Jackson (2006) defined productivity as a measure of the quantity and quality of workers completed, taking into account the cost of the resources used. In this Covid-19 pandemic different effort by the company to be able to maintain employee productivity remains good, that one of them by following the directives of the government, namely the adoption of working from home. Jakarta, among them on May 6, 2020, 3,964 companies have implemented working from home, including state-owned companies.

Working from home is actually a flexible work concept in work-life balance, however this has to be implemented by almost as wide as companies in Indonesia and even the world. Crosbie & Moore (2004) suggests that working from home is a term working remotely, rather work from home, so workers do not need to come to the office and face to face with the other workers. According to Baker E., Avery CG, and Crawford J. (2007) the application of a working life balance is able to increase productivity. Agung Minto Wahyu and Mochammad Sa'id (2020) argue that working from home is one of the strategies used to maintain productivity. Farrell Kathleen (2017) suggests that the application of working from home can be indicated by a flexible work environment, stress management, closeness to family, travel time, health and work balance, high creativity and productivity, and separating homework and office and self-pressure.

As stated by Farrell Kathleen (2017), one that affects productivity in relation to working from home is stress disorder or job stress. Robbins and Judge (2013) suggests that job stress is a dynamic condition in which an individual is faced with the opportunities, demands or resources related to what is in the desire by individuals and result in view of the uncertain and important. Timah (2014) suggested that job stress is related to and affects employee work productivity. This job stress is experienced by employees due to various conditions that occur in the internal environment related to their work and personal conditions, as well as conditions that occur in the external environment, namely various worries about the impact of the Covid-19 pandemic.

Based on the background mentioned above study, the researchers intend to examine influence of working from home and job stress on employee productivity in Indonesia during Covid-19 pandemic, especially in state-owned enterprises.

Based on the research background, the problem identification is that the company experienced a decrease in employee productivity during the Covid-19 pandemic, the implementation of working from home in the company has not been optimal, and the job stress felt by employees has increased.

Based on the background and problem identification, the problem formulation is as follows:

- a. How working from home, job stress, and employee productivity at state-owned companies in Indonesia during the COVID-19 pandemic.
- b. How does influence of working from home and job stress on employee productivity at the state-owned company in Indonesia during the 19th pandemic covid either simultaneously or partially.

2. Literature Review

2.1. Working from Home

Crosbie & Moore (2004) explained definition, work from home are working remotely, rather work from home, so that workers do not need to come to the office face to face with the other workers. Working from home means work getting remuneration done primarily from home (at least 20 hours per week). Working from home will provide flexible time for workers to provide a balance of life for employees, on the other hand it also provides benefits for the company.

Mustajab (2020) suggested changes in the organization in assigning tasks and responsibilities to employees by "prohibiting" employees from working in offices and gathering in rooms, so employees have to work at home, this is called work from home (WFH) or work from home. To help implement working from home, Lockett & Mumford (2009) argued that workers and employers need to do several things, namely:

- a. Be flexible
- b. Communicate regularly with your boss
- c. Make sure that you are easy to contact
- d. Make sure that you and your boss agree on what work to do at home
- e. Set specific time for work and stick to them

2.2. Job Stress

Gibson et al. (2012) suggested that job stress is an adjustment response mediated by individual differences and / or a psychological process which is a consequence of any action from outside (the environment), situation, or event that determines psychological demand. and or physical excess to someone.

Ivancevich and Matteson (in Luthans, 2011) defined that job stress as an adaptive response that is linked by individual differences and psychological processes that are a consequence of actions, situations or external (environmental) events that place excessive psychological and or physical demands on a person.

2.3. Employee Productivity

Wexley & Yukl (1977) suggested that employees who do a certain job will certainly get results. The result is the output of a work activity. productivity closely as a way of achievement of the production level.

Siagian (2014) defined employee productivity is the ability to produce goods / services from various resources and abilities possessed by each worker / employee

Dale Timpe in Sedarmayanti (2001) mentions the general characteristics of employee productivity, namely:

- a. Smart and can learn quickly.
- b. Professionally / technically competent
- c. Creative and innovative
- d. Understand work
- e. Learn smart
- f. Always make improvements
- g. Considered valuable by supervisors.
- h. Have a good track record
- i. Always improve

2.4. Theoretical Framework

This theoretical framework explained the influence of working from home and job stress on employee productivity at the state-owned company in Indonesia during the Covid-19 pandemic.

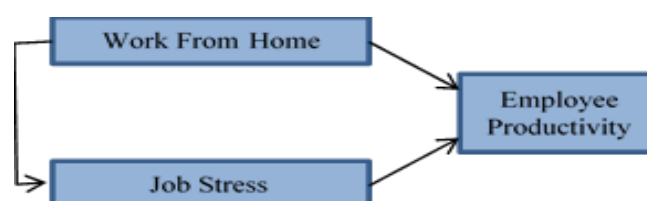


Figure 1. Theoretical Framework

2.5. Research Hypothesis

Based on the theoretical framework above, the hypothesis was formulated:

- a. There is influence of work from home to employee productivity.
- b. There is influence of job stress to employee productivity.
- c. There is influence of work from home and job stress to employee productivity.

3. Method

The method used in this research is quantitative method with the type of research used in this research is associative research, the research aims to investigate the influence or relationship between two or more variables.

This study uses two types of data, namely primary and secondary data. Primary data obtained through interviews and questionnaires. Meanwhile, secondary data is obtained through various studies on news articles and written reports.

This study population numbers cannot be known for sure, so that the sample used in this study so that the formula used to calculate a formula Lemeshow is as follows:

$$n = \frac{z^2_{1-\alpha/2} P(1-p)}{d^2}$$

n : number of sample

$Z^2_{1-\alpha/2}$: normal standard value (if α : 0.05, then Z: 1,960)

P(1-P) : estimated population proportion (if P:0,5, then P(1-p):0,5)

d : tolerable deviation (10%)

So that the minimum number of samples obtained is 96 people, but in this study using 100 samples, namely the sampling technique used is the quota sampling technique.

This study uses analytical methods statistical descriptive is to analyze the data descriptive data has been collected from the respondents on the items in questionnaire. As well as inferential statistical analysis to show influence and association between variables in this research model.

The data analysis technique used in this study is Multiple Regression Analysis with the intention of examining the effect of the independent variables on the dependent variable. Variables in this study consisted of:

- a. The independent variables are work from home (X_1) and job stress (X_2).
- b. The dependent variable is employee productivity (Y).

To prove the hypothesis that has been formulated, it is necessary to the hypothesis test either simultaneously or partially, namely as follows:

1. The simultaneous hypothesis test is formulated as follows:

$$H_0: P_{YX1} = P_{YX2} = 0$$

There is no effect of work from home and job stress on employee productivity.

$$H_a: \text{There is a minimum of } P_{YX1X2} \neq 0$$

There is an effect of work from home and job stress on employee productivity

2. The partial hypothesis test is formulated as follows:

$$H_0: P_{YX1X2} = 0$$

Ha: $P_{YX_1X_2} \neq 0$

Hypothesis 1:

Ho: There is no partial influence of work from home on employee productivity.

Ha: there is a partial influence of work from home on employee productivity.

Hypothesis 2:

Ho: There is no partial influence job stress on employee productivity.

Ha: There is a partial influence of job stress on employee productivity.

4. Results and Discussion

The result of the validity test that have been carried out show that all the realities contained in the Work from Home (X_1), Job Stress (X_2), and Employee Productivity (Y) variables are valid. This is known from the results of data processing conducted by the author. These results indicate that all questions (r count) are greater than r table. Then, the question deserves to be distributed to 100 respondents.

The results of the reliability test that have been carried out show the Work from Home (X_1), Job Stress (X_2), and Employee Productivity (Y) are declared reliable because the criteria for the Cronbach Alpha reliability test are more than 0.6.

4.1. Analysis Research with Descriptive Statistics

The results of descriptive analysis are used to provide an overview of the percentage of employees' perceptions of work from home, job stress, and employee productivity. The perception measurement is done by using questionnaire data collection technique, each of which is accompanied by five answer choices that must be selected and assessed according to the respondent. From the answers collected, an assessment category was compiled for each variable, namely as follows:

Table 1. Interval Scale of Variable's Statement

| Average | Interpretation |
|-------------|----------------|
| 1,00 – 1,79 | Worst |
| 1,80 – 2,59 | Bad |
| 2,60 – 3,39 | Good enough |
| 3,40 – 4,19 | Good |
| 4,20 – 5,00 | Very Good |

Data processed, 2020

Based on this grouping, a description of the research variables is obtained as in Table 2.

Table 2. Descriptive statistics of Work from Home, Job Stress, and Employee Productivity

| Variable | Average Score | Criteria |
|-----------------------|---------------|----------|
| Work From Home | 3,75 | Good |
| Job Stress | 3,83 | Good |
| Employee Productivity | 3,42 | Good |

Data processed, 2020

The results of descriptive statistics showed that during the covid-19 pandemic implementation work from home are reviewed through the environmental work that is

flexible, stress work more severe that it interferes with the employee, closer relationship between employees and their families, saving for transportation cost in order to complete the work, living with better health conditions for employees, a balance of work employees, increasing ability and creativity, higher employee productivity, the ability of employees in separate between homework and employment offices as well as the ability to keep on the pressure themselves on state-owned enterprises better .

Job stress is viewed from employee experience of increased heart rate, increased blood pressure, headaches, stomachaches, tension, anxiety, boredom, and irritability, absences from online meetings/forums, changing eating habits, difficulty sleeping, and unsettled speech. It is rarely experienced so that the job stress experienced by employees is in the good category, meaning that it will not cause negative things that are detrimental to employees and the company.

And employee productivity is reviewed through abilities and skills, works in accordance with applicable regulations/procedures (professional), my work is accurate, completes, works before or within the specified time limit , has never made a mistake in completing work, always tries day this is better than the previous day, work in trying to accomplish today is better than yesterday, made various efforts to improve the ability to work, pay attention to the challenge of what has the potential to emerge and be faced, pay attention to set an expectation of what is to be achieved, and always check the work I have done and still addressing both categories despite the score in span both categories is low.

4.2. Analysis Research with Inferential statistical

Based on the results of data processing for multiple linear regression using SPSS, hypothesis testing can be carried out either simultaneously or partially.

Table 3. Anova

| ANOVA ^b | | | | | | |
|--------------------|------------|----------------|----|-------------|-------|-------------------|
| Model | | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | 424,713 | 2 | 212,356 | 7,792 | ,001 ^a |
| | Residual | 2643,623 | 97 | 27,254 | | |
| | Total | 3068,335 | 99 | | | |

a. Predictors: (Constant), Job Stress (X2), Work From Home (X1)
b. Dependent Variable: Employee Productivity (Y)

Data processed, 2020

With a value of α of 0.05, the obtained value of F table is 3,09. Meanwhile, based on the Anova test, the calculated F count is 7.792, which means that it is greater than F table, then H_0 is rejected and H_1 is accepted. The basis for decision making is also supported by significance values. Based on the calculations, a significance value of 0.001 is obtained which is smaller than 0.05, meaning that it can be decided to reject H_0 and accept H_1 . So it can be concluded that work from home and job stress simultaneously or together have a significant effect on employee productivity at state-owned companies in Indonesia during the Covid-19 pandemic.

While the influence of work from home and job stress on employee productivity can showed from the result of SPSS in a model summary in Table 4 in particular the numbers R Square.

Table 4. Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | ,372 ^a | ,138 | ,121 | 5,22052 |

a. Predictors: (Constant), Job Stress (X2), Work From Home (X1)

Data processed, 2020

R Square is 0.138, this shows that the work from home and job stress effect of 13.8% against the employee productivity in state-owned enterprises in Indonesia during the covid-19 pandemic. While the remaining 86.2% was caused by other variables outside the research model.

Partial Hypothesis Testing

Partial testing to see the significance of the influence of the independent variables (work from home and job stress) partially on the dependent variable (employee productivity), then the t test is carried out. The hypothesis proposed is that work from home (X_1) has a significant effect on employee productivity and job stress (X_2) has a significant effect on employee productivity.

The test statistic used is the test statistic t, where the value t count can be seen in Table 6. With the sample 100 and the error level of 0.05 (5%) as well as degrees of freedom 97, conducted tests on two sides, figures obtained t table is 1,984. Hypothesis decision-making provisions are based on the t test, namely if the value of t count > t table or t count < - t table, then H_0 is rejected or vice versa H_1 is accepted.

Table 5. Calculation of the t test

| Model | Unstandardized Coefficients ^a | | Standardized Coefficients | t | Sig. |
|-------|--|------------|---------------------------|-------|--------|
| | B | Std. Error | Beta | | |
| 1 | | | | | |
| | (Constant) | 18,200 | 5,225 | | |
| | Work From Home (X1) | ,576 | ,167 | ,332 | 3,443 |
| | Job Stress (X2) | -,201 | ,076 | -,254 | -2,635 |

a. Dependent Variable: Employee Productivity (Y)

Data processed, 2020

Based on Table 5, note that the value of t count of variable work from home amounted to 3.443, which means much higher than t table amounted to 1.984, so that H_0 is rejected. That is, it can be deduced that the work from home affects positively and significantly to employee productivity. This is also supported by the significance value of the work from home variable of 0.001 which is smaller than the 0.05 significance level. The influence of the work from home variable on employee productivity can be seen from the regression coefficient or from the standard value of the beta coefficient, namely 0.183 which results an effect of 18.3 %

The value of t count variable job stress is equal to -2.635, is smaller than the value of t table amounted to -1.984, so that H_0 is rejected. This is also supported by the significance value of the job stress variable of 0.01 which is smaller than the 0.05 significance level. So it can be concluded that job stress has a negative and significant effect on employee productivity. The magnitude of the influence of the job stress variable on employee productivity can be seen from the regression coefficient or from the standard value of the beta coefficient, namely -0.254 which produces a negative effect of 25.4 %. This is in line with the research conducted by Nurhani, Wibowo, and Budi Santoso (2020) that job stress affects employee productivity.

5. Conclusion

Based on the results of data processing and analysis, the following conclusions can be drawn:

- a. Work From Home as measured through a work environment that is flexible, stress work more severe that it interferes with the employee, closer relationship between employees with family, saving transportation cost in order to complete the work, better health conditions for employees, work balance employee, enhancing the ability and creativity, creation work productivity of employees higher, the ability of employees in separate between homework and the work of the office as well as the ability to keep on the

- pressure themselves are good, meaning that the application work from home for employees of state-owned enterprises during the during the covid-19 pandemic is good.
- b. Job stress in terms of employee experience of increased heart rate, increased pressure in the direction, experiencing headaches, stomach aches, tension, anxiety, boredom, and irritability, absence of online meetings/ forums, changing eating habits, difficulty sleeping, and speak not calm rarely experienced that job stress can be managed either by the employees of state-owned enterprises during the covid-19 pandemic is good.
 - c. Employee productivity that in reviewing through capacity and skill, to work in accordance with the provisions / procedures applicable (professional), my work with accurate finishing, work before or corresponding prescribed time limit, never made a mistake in finishing job, always trying today is better than yesterday, working on accomplish today better than yesterday, making various efforts in increase employability, pay attention to the challenge of what potentially appear and be faced , pay attention to set an expectation about what will be achieved, and always re-checking the work that has been done is good, meaning that the employees of state-owned companies during the Covid-19 pandemic are good.
 - d. Work from home and job stress simultaneously or together influence significantly on employee productivity in state-owned enterprises in Indonesia during the Covid-19 pandemic.
 - e. Work from home had a positive and significant influence on employee productivity at state-owned companies in Indonesia during the covid-19 pandemic.
 - f. Job stress had a negative and significant influence on employee productivity at state-owned companies in Indonesia during the Covid-19 pandemic.

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