The Effect of Work From Home and Stress Management on Employee Productivity During the Covid-19 Pandemic

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ABSTRACT *: Beginning of 2020 has brought many changes in human life when the Covid 19 pandemic happened, including the way employees work. This study purposes determining the effect of implementing work from home and stress management on employee productivity during the pandemic of covid 19. This study using quantitative approach and an explanatory survey, which is used to explain the effect between variables, where data is collected by questionnaire. The questionnaires were distributed to private employees in Jakarta who work from home using incidental sampling method. The techniques of data analysis are multiple linier regression and the hypothesis are tested with t test and f test. From t test founds that work from home positively effect on employee productivity, so does management stress variable. And from the f test founds that work from home and stress management effect simultaneously on employees productivity during the covid-19pandemic.*

KEYWORDS -*employee productivity,stress management, work from home*

I. INTRODUCTION

In early 2020, WHO officially reported that the emergence of the Covid-19 virus was a global pandemic. All countries in the world, including Indonesia, are trying to start implementing health protocols to prevent the spread of the virus. In line with that, the President of the Republic of Indonesia implemented a policy of working from home as a form of preventing the increase in virus transmission among employees in the workplace.

Working from home is part of the concept of telecommuting or working remotely. One of the challenges of implementing remote work is maintaining employee productivity while working from home. From a survey conducted by the Institute for Corporate Productivity by Lykins (2020), it was found that at the beginning of the implementation of work from home 96% of 518 respondents from various companies, both local and multinational in America, experienced a decrease in work productivity. According to the CEO of this research institute, the high impact on work productivity is caused by a sudden change in work rhythm, coupled with all the stressors and constraints that accompany it. Research by Mustajab, et al. (2020) which was conducted qualitatively also mentioned the same thing, at the beginning of the pandemic, he found that most employees experienced a decrease in work productivity by implementing work from home.

Research by Mungkasa (2020) states that implementing work from home will cause difficulties at first, but over time slowly employees will adapt or make adjustments. Likewise, McCallum (2020) from his research revealed that a few weeks after the implementation of work from home due to the Covid 19 pandemic, there was an increase in work productivity.This pandemic has been going on for quite a while where it has been more than a year, it is necessary to know the impact of implementing work from home on work productivity at this time.

Brooks et al., (2020) mention the impact of limiting activities outside the home can have a negative psychological impact on employees, such as boredom, loss of freedom, anger, confusion, as well as other stressors such as worry, anxiety, fear of being infected with the virus,the feeling of uncertainty due to how long the pandemic will last, and also frustrating. Stressor is something that causes stress to someone (Marwansyah, 2019).Robbins and Judge (2015) state that stress can cause physiological symptoms such as headaches, psychological symptoms such as anxiety and procrastination, and behavioral symptoms such as changes in productivity.For this reason, in managing various stresses and anxieties that arise, employees need to have stress management skills, so as to minimize the psychological impact or other negative behavior that may arise.Hakim&Sugiyanto (2017) mention stress management is a technique in controlling and minimizing stress, because stress is a serious matter that must be handled properly so that it does not cause bad behavior, cause conflicts or absenteeism problems that cause productivity to decrease.

From the explanation above, research related to employee work productivity currently needs to be carried out, where work from home is an effort that is applied to minimize virus transmission but besides that there are impacts caused by it, and stress management needs to be considered because it can encourage better work productivity in employeesduring the pandemic of Covid-19.This study aims to determine the effect of work from home and stress management on employee productivity during the Covid-19 pandemic. There are many studies on work stress, but research on stress management is still very limited, so this study uses a

combination of variables that are still quite rare, those are work from home, stress management and work productivitywhich can be used as references in further studies.

II.   LITERATURE REVIEW

2.1 Work From Home

The term work from home itself is actually a derivative of the previously existing terms related to working remotely. The term remote work itself first appeared with the term telework. Over time, new terms emerged such as telecommuting, electronic homework, flexiwork, and so on. Remote work is work that is carried out by an employee at a certain time, at a location away from the office and uses telecommunications media as a work tool (Huuhtanen, 1997).Working remotely (either from home or from other locations outside the office) is actually an arrangement of flexibility in working (work flexibility), whether it is done all day or only part of the time (Mungkasa, 2020).

Work from home is part of the concept of telecommuting or working remotely. And Thompson, et al. (2015) argues that work from home is one type of work flexibility option.Heathfield (2021) states that remote working scheme provides flexibility in managing time (flexible schedule) and managing places or locations to work remotely (telecommuting), either from home or other locations. In measuring the effectiveness of work from home according to Marasigan (2020) it can be seen from the following factors : 1)Tendency to work remotely :personal tendency to work from home, 2)Supervision : related to employee supervision, 3)Reorganization :related to work arrangements by employees, and 4)Work-life balance : work-life and personal life.

2.2 Stress Management

Stress management is the ability of an employee to react and manage stress so that it can encourage it to reach the optimum point in performance (Selye, 2013).Hakim &Sugiyanto (2017) mention stress management is a technique in controlling and minimizing stress, because stress is a serious matter that must be handled properly so that it does not cause bad behavior, cause conflicts or absenteeism problems that cause productivity to decrease.The better stress management a person has, the more resistant they are to sources of stress or stressors that arise (Leyden, 2013).In other words, stress management is a person's ability to deal with an unpleasant or stressful situation, which is to actively and positively deal with stress so that it does not have a negative impact on health and behavior.

Effective stress management will be useful for increasing productivity, reducing turnover, reducing absenteeism, and increasing spirit at work (Marwansyah, 2019).Davis and Newstrom in Mangkunegara (2017) state that there are four approaches to managing work stress, including1) social support: approach with activities aimed at providing social satisfaction to employees, such as joking, chatting, playing games 2) meditation: an approach by concentrating on the nature of the mind,, relaxing the muscles, calming oneself and the mind3) biofeedback: approach with medical guidance, such as consultation with doctors, psychiatrists and psychologists 4) personal health program: preventive approach before stress occurs, through regular health check-ups, muscle relaxation, attention to body nutrition, and exercise.

2.3 Productivity

Work productivity is a measurement of the quantity and quality of the work that has been completed, taking into account the resources used (Mathis and Jackson, 2006). According to Sinungan (1997) work productivity is the amount of output produced by a person as a whole in a unit of work time, which is carried out effectively in achieving work results or performance and using efficient inputs.

Sutrisno (2011) to find out the existence of work productivity can be seen from indicators such as: employee work ability, work achieved, spirit of work, self-development, quality of work and efficiency. Simamora(2004) mentions indicators in work productivity, those are 1) work quantity :related to the amount of output produced 2) quality of work : related to the quality of work 3) timeliness : related to completing work on time.

III. HYPOTHESES AND RESEARCH MODEL

Research by Mustajab, D. et al (2020) which was conducted qualitatively at the beginning of the Covid 19 pandemic found that most employees experienced a decrease in work productivity by implementing work from home. Meanwhile, McCallum, E. (2020) revealed that a few weeks after the implementation of work from home due to the Covid-19 pandemic, there was an increase in work productivity. The difference in the results of this study could be due to changes in rhythm and work schemes that occurred suddenly at the beginning of the Covid 19 pandemic, coupled with stressors and other obstacles that accompanied the early implementation of work from home. Considering that the pandemic of Covid-19 has lasted more than a year, where over time employees have begun to adapt and get used to working remotely, therefore working from home should have a positive influence on employee productivity, so the hypothesis in this study is:

H_1: Work from home has a positive effect on employee work productivity during the Covid-19 pandemic.

Everyone has stressors that can arise due to various factors. The policy of working from home brings impacts and pressures that cause work stress for employees. Good stress management can prevent the emergence of negative behavior of an employee. Conversely, employees who are not able to control stress can cause negative behavior such as loss of motivation to decreased work productivity (Hakim and Sugiyanto, 2017). Based on this, with the ability to manage stress well, work productivity will be maintained and even increased, so the second hypothesis of this research is:

H_2: Stress management has a positive effect on employee work productivity during the Covid-19 pandemic.

From the explanation above, it can be seen that the effectiveness of implementing work from home by employees and the ability to manage stress affect employee productivity. The research model that approaches is the research of Shabuur and Mangundjaya (2020) which states that the ability to manage stress and flexibility working options positively effect on work productivity, so the third hypothesis in this study is:

H_3: Work from home and stress management effect simultaneouslyon employee work productivity during the Covid-19 pandemic.

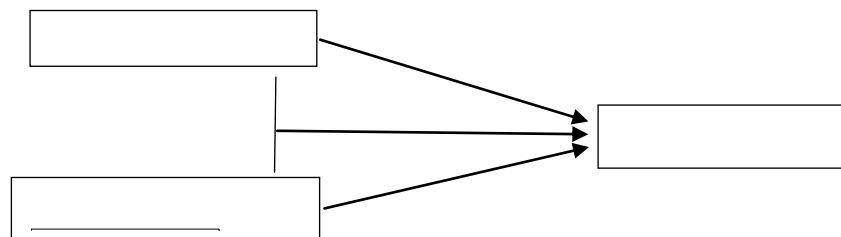Based on the explanation above, the research model is as follows :

Figure 1. Research Model

IV. METHODOLOGY

This research approach is quantitative, which is an explanatory survey. Work from home and stress management are independent variables, while work productivity is the dependent variable. Data were collected by distributing questionnaires to private employees in Jakarta who applied work from home using incidental sampling technique. The determination of the sample is carried out using Roscoe's theory, where the minimum number of samples is 10 times the number of variables being studied (Sugiyono, 2019). The respondents of this study were 120 people.

This research consists of three variables, including:

1. Working from home as independent variable (X_1). The measurement of this variable uses the work from home indicator according to Marasigan (2020) in measuring this variable, namely Propensity to work remotely, Supervision, Reorganization, Work-life balance.

2. Stress management as independent variable (X_2). The measurement of this variable uses a stress management approach according to Davis and Strom (1989), consisting of 4 factors, namely: social support, meditation, biofeedback, personal health programs.

3. Work productivity as dependent variable (Y). The measurement of this variable uses indicators of work productivity according to Simamora (2004) which consists of work quality, work quantity, and timeliness.

The questionnaires were tested for validity and reliability before being distributed. And then, to analyzethe data using multiple linear regression, starting with the classical assumption test at first. While testing the hypothesis, partial testing using the t test and simultaneous testing using the f test.

V. RESULT AND DISCUSSIONS

5.1 Validity and Reliability Test

From the validity test, 16 items of valid statements were obtained from the work from home variable, 11 items from the stress management variable and 7 items from the work productivity variable with the value of r count > r table. From the reliability test, it is known that all variables have Cronbach's Alpha values above 0.7, so that the research instrument is declared reliable or can provide consistent and reliable results.

5.2 Classic Assumption Test

The fulfillment of the requirements for the regression model is obtained by testing the classical assumption, where the data is normally distributed, and is free from multicollinearity and free from heteroscedasticity.

Normality test is using the Kolmogorov-Smirnov test, if the significance is > 0.05 it means that the data is normally distributed. From this test, it was found that the significant value of the work from home variable was 0.200, the stress management variable was 0.200 and the work productivity variable was 0.074. The three

variables have a significant value above 0.05, so it is found that the conditions for normal distribution have been met in the data for the three research variables

Furthermore, multicollinearity is shown from the Tolerance and VIF values, when the Tolerance value is above 0.1 and the VIF is less than 10, so the data is free from multicollinearity, this is a requirement that must be met. The requirement of a good regression model is that there is no multicollinearity (Priyatno, 2013). The results of the multicollinearity test found that the Tolerance score of the two independent variables was 0.681 above 0.1 and the VIF was both 1.469 below or less than 10, so that the conditions for being free from multicollinearity problems were met.

While the heteroscedasticity test is seen from the pattern of dots on the scatterplots. From the heteroscedasticity test, the points are randomly distributed, no particular pattern is formed, the points are below and above the zero point on the Y line, this indicates that the data is free from heteroscedasticity.

5.3 Multiple Linier Regression

To predict the dependent variable when the independent variable is decreased or increased in this research is using multiple linear regression analysis. The independent variables are work from home and stress management, while work productivity is the dependent variable, the results are:

Table 1. Multiple Linier Regression Result

Independent Variable	Regression Coefficient	Constanta
		5.802
Work from home (X_1)	0.239	
Manajemen stress (X_2)	0.174	

Theresult abovefounds that the multiple linear equations are : $Y = 5.802 + 0.239\ X1 + 0.174\ X2$. The constant value is 5.802, indicating that if the variable (X) work from home and stress management is 0 (zero), then work productivity will be worth 5.802.The regression coefficient of the work from home variable is 0.239, indicating that if there is an increase in the work from home variable (X1) by one unit and constant in the other independent variables, there will be an increase in work productivity of 0.239. This is in line with research by Bloom, (2014), he revealed that work from home increases employee productivity, because it is seen as giving employees flexibility in managing time and feeling less pressure when working. In addition, Mungkasa (2020) mentions that working from home is a hassle at the beginning of implementation, but over time employees will adjust. This shows that with the passage of time when the pandemic has occurred, it is enough, so employees are more able to adapt to current conditions so that work productivity is created.While the coefficient value of the stress management variable is 0.174, it shows that if the stress management variable (X2) increases by one unit and is constant in the other independent variables, work productivity will increase by 0.174. Like the research by Matin, et al (2014) where he mentioned a positive relationship between stress management and work productivity. So that stress needs to be managed properly, with good stress management employees will feel comfortable so they can work more productively.

Table 2. Determination Coefficient

Model	R	R Square	Adjusted R Square
1	.688	.473	.464

The percentagecontribution of the independent variables simultaneously on the dependent variable is shown in the value of the coefficient of determination (R^2). The R Square was 0.472 or 47.2%, meaning that the work from home and stress management variables simultaneously affected employee work productivity during the Covid-19 pandemic by 47.2%.

5.4 T Test and F Test

The hypothesis was tested by t test and f test. The t test is to partially determine the effect of the independent variable on the dependent variable, from the test it is found that:

Table 3. T Test

Independent Variable	t	Sig.
Work from home (X_1)	6.802	.000
Manajemen stress (X_2)	2.478	.015

With $\alpha = 5\%$, df = n – k - 1 = 120 – 2 - 1 = 117 and for the two-party test, we get t table = 1.98045 and - 1.98045. The result show that the work from home variable t count = 6.802 > t table = 1.98045 and the value

of sig. 0.000 is less than 0.05 or 0.000 <0.05, indicating the rejection of H_0 and acceptance of H_1, meaning that from the test it is known that working from home positively influence on work productivity during the current covid-19 pandemic. While the stress management variable has t count = 2,478 > t table = 1,98045 and sig value. 0.015 <0.05 indicates that the second hypothesis of this research is stated that Ho is rejected and H_2 is accepted, meaning that stress management positively effect on employee work productivity.

Furthermore, simultaneously the effect of the independent variables on the dependent variable is known from the f test, the test results are found:

Table 4. F Test

Model		df	F	Sig.
1	Regression	21	52.472	.000
	Residual	117		
	Total	119		

With α = 5%, df_1 = k –1 = 3 - 1 = 2 and df2 = n – k = 120 - 3 = 117 it is known that f table = 3.07. Based on the test results above, it was found that f arithmetic = 52.472 > f table = 3.07 and the value of sig. 0.000 < 0.05, it is found that the third hypothesis of this study is stated that Ho is rejected and H_3 is accepted, meaning that work from home and stress management simultaneously effect on work productivity during this covid-19 pandemic.

VI.   CONCLUSION

From the previous discussion, it can be concluded that partially work from home and stress management positively effect on employee productivity during the covid-19 pandemic. And simultaneously, the work from home and stress management variables simultaneously have an effect on employee productivity while working during pandemic of Covid -19. It appears that even though they work remotely from home, employees are still trying to carry out and complete their job responsibilities well. Over time, the pandemic of the covid 19 virus that has occurred for quite a long time has made employees accustomed to and able to adapt to changes in the way they work. In addition, the importance of the ability to manage stress needs to be considered because from this research it is known that stress management has a positive influence on work productivity.

Therefore, it is recommended that employees can manage time and be disciplined in completing work from home, and the company continues to carry out supervision and communication with employees to ensure employees work from home properly. Then, considering that the Covid-19 pandemic is still ongoing, which allows employees to feel bored or depressed with the situation, it is hoped that employees will be able to arrange between resting, working and relaxing hours as well as chatting with friends or family so that they are physically and mentally healthy. When employees can manage stress well, employees can do their jobs more productively.

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