Impact of Work From Home Policy on Behavior and Productivity of Lecturers and Education Staff

Afni Sirait, Sri Luna Murdianingrum

Universitas Pembangunan Nasional Veteran Yogyakarta
afni.sirait@upnyk.ac.id[1], sriluna@upnyk.ac.id[2]

Abstract

Policy Work From Home *(WFH) is enforced within the FEB UPN "Veteran" Yogyakarta is one manifestation of breaking the COVID-19 virus chain. This research purpose is to identify the influence of WFH on the behavior and productivity of lecturers and education staff during this policy. This research is something new in education. The productivity assessment of the implementation of this policy has never be analyzed. This study uses quantitative methods with a number of respondents, 96 respondents. The data was collected using a questionnaire, then tested the validity, reliability, and evaluation of the model structure using data analysis tools SmartPLS 3.0.0. The results of data processing explained that there was no relationship between WFH and technology-mediated behavior (P-Value = 0.297; T-Statistic = 1.043). A different yield of WFH data processing with productivity. It was found positive and significant influence but mediated partially competitive by technology. The path coefficient value of the direct relationship between WFH and productivity is 0.206 (P-Value 0.034; T-Statistic = 2.132), that the indirect relationship between WFH and productivity is mediating by the technology of 0.353. The limitation of this research is that it is only carried out in the FEB environment, not yet in a comprehensive manner at the "Veteran" National Development University, Yogyakarta.*

Keywords: Productivity, Behavior, Work From Home

I. INTRODUCTION

The economies of several industries experienced a drastic decline. The industries that experienced a significant turnover occurred in the tourism and aviation industries. Dcodeefc.com (2020) analyzed the category of the highest potential for failure to the highest potential for the success industry due to the Covid-19 pandemic.

The virus is called SARS-CoV 2 or Covid-19/Coronavirus and stated that WHO declared Covid-19 a pandemic on March 11, 2020. This virus spread and first attacked in Wuhan-China in December

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2019. This virus has shaken the economy in China, in particular, Wuhan, and almost made Wuhan a dead city. The policies were carried out by the Chinese government in overcoming this problem by conducting supervision and control over the use of masks and washing hands. The Chinese government also implements workload management in industrial and school activities. Even schools are encouraged to do online learning (Technology, 2020). The results of research conducted by (Frey et al., 2020) stated that during the COVID-19 pandemic, the use of technology in the education industry increased by around 12.5% and will continue to rise. Rapp, Tirassa, & Tirabeni (2019), in their research, explain that human and computer interactions design a lot of technology used to support changes in human behavior. Technology makes it easier for humans to move and fulfill their needs.

Erickson, Moulton, & Cleary (2018)issued a review stating that the use of technology at Work hurts employees. The use of technology that can be used anywhere and anytime increases employee working hours more than it should. Even workplace conditions that are too dependent on technology have caused some employees to become addicted and unable to escape from it. Rupietta & Beckmann (2018)stated that employees who work from home have the freedom to independently schedule their Work and have high motivation from within. Companies like Google and several other companies use the WFH method to increase the creativity, innovation, and performance of their employees.

The Indonesian government is doing almost the same thing as the Chinese government to tackle the spread of this virus by issuing Presidential Decree No. 7 of 2020 concerning the Task Force for the Acceleration of Handling Coronavirus Disease 2019. This Task Force was also supported by President Joko Widodo's speech on March 15, 2020. The speech explained that educational institutions ranging from elementary schools to tertiary institutions made policies to learn from home, making part of the ASN works from home by creating online interactions, delaying activities that involve many people, and improving services in the health sector for testing and healing Covid-19 patients.

The success of the task force and carrying out its duties according to the President's speech on March 15, 2020, UPN "Veteran" Yogyakarta issued Circular Number 10/UN62/KP/2020 concerning Adjustment of Employee Work Systems in the Yogyakarta "Veteran" National Development University. One of the contents of the circular mentions the implementation of Tri Dharma activities and supporting Tri Dharma Higher Education using an online system (online).

Educational institutions, as one of the public services, are expected by the government to be able to use technology platforms to carry out learning and Work from home. Figure 1 presents that the education industry is one of the industries that is affected and has the potential for failure. The Faculty of Economics and Business, UPN "Veteran" Yogyakarta, as a government agency, faces challenges in carrying out its duties and functions. This challenge is not only from the government but also to the community as *stakeholders.*

The Faculty of Economics and Business, as one of the faculties at UPN "Veteran" Yogyakarta, carries out its duties and functions by using technology or based on online/online. This starts with conducting the Mid-Semester Examination on March 17, 2020, online until lectures after Mid-Semester. Thesis consultation or guidance also uses the same thing between lecturers and students. The appeal to Work from home or Work From-Home (WFH) is applied obediently by the academic community in the FEB UPN "Veteran" Yogyakarta.

This research makes a positive contribution to the institution as additional consideration for stakeholders for planning preventive actions in facing uncertain conditions in the future, especially with academic services. Contribute to science and the world of education in measuring the

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productivity of lecturers and education personnel so that they have clear basics and standards, especially in the current conditions of learning and working from home.

The background described above underlies researchers to research the impact of policies implemented on academic behavior and performance as an impact of policy implementation by agencies. Behavior and performance are important concerns considering the duties and responsibilities of lecturers and educators of FEB UPN "Veteran" Yogyakarta as public servants.

II. LITERATURE REVIEW

II.1. Work-From-Home (WFH)
Mungkasa (2020)explained that working from home or Work from home is the responsibility of Work performed by an employee for a certain period outside the office with the help of technology. The remote working categorization is divided into three categories. First, workers who work telecommuting. Second, the Work is carried out in the satellite office and third in mobile Work.

MacRae & Sawatzky (2020) explain that remote Work is a new working method that is currently being developed. The development of this work method is due to the use of technology, not knowing demographics, the flexibility of employees related to improved productivity, job satisfaction, and agreed work contracts.

II.2. Behavior
Longino & Longino (2015) define behavior as something or someone's actions that can be observed, measured, and repeated. This behavior can be measured using the target behavior that can be set for the assessment.

Navrátil, Hladká, David, & Duspivová (2017) explain that *Work From Home* has criteria in its implementation. WFH is a working trend that is flexible by working hours determined by the organization. Apart from being flexible, WFH also provides freedom in working hours and work processes that use technology. Terms that are often referred to in addition to WFH, such as *remote Work, homeworking/home office, home-based Work, teleworking*, and others.

Nordin, Mohd Baidzowi, & Razak (2016) states that working at home helps employees lead a balanced life without being constrained by office hours and free scheduling. Life balance is obtained from reduced stress loads, reduced transportation costs, and no reduced responsibility to the family. The use of technology helps employees in Malaysia to work from anywhere.

The results of research by Saludin, Karia, & Hassan (2020) conducted the same study in Malaysia. The study concluded that WFH is a solution to having a balanced life and recognition. The results of this study also provide a *framework* that explains the factors that trigger the realization of WFH and the basic requirements that organizations must have in their implementation. The triggering factors are management, competition, nature of Work, attitudes, *Internet Communication Technology* (ICT), knowledge, employee desires, and costs. Requirements that must be met by organizations such as *space*, employee status, nature of Work, working hours, *communication*/ ICT, reward systems, employee homework, cost savings, and legal issues.

II.3. Productivity
Yilma Goshu, Kitaw, & Matebu (2017) explain that productivity is the concept of using existing resources within the company by considering the effectiveness in their allocation. Gordon & Gretton (2015)explain that good productivity growth comes from hard work and long working hours.

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Productivity is generated from workers or employees who work "*smart*." Productivity does not indicate how much the amount of output is produced but how resources are processed effectively used to produce output.

Mautz (2018) states that the extraordinary productivity of telecommunicators who work at home all day long. Employees who work at home are much more productive than employees who have to go to the office, arrive late, or arrive early, which turns out to be distracting employees. The study, which was carried out for nearly two years, also explains that fewer employees take time off, reducing carbon emissions from motorized vehicles, saving companies about $ 2,000 per employee by reducing the number of office space to rent.

The same research was conducted by Dr. Revenio C. Jalagat & Jalagat (2019), who explains that trends and methods of working from home are currently developing. This trend is developing because of several benefits such as increased productivity, flexibility, internet access, cost savings, a better environment, and a good impact on the environment. The survey conducted by TOPCONTENT (2019) found 13 developed countries that have successfully implemented the working from the home method.

A survey conducted by the Global Research Study (2020) shows that more than 72% of employees have experienced a change in work location due to the COVID-19 pandemic. The results of this survey concluded four important things that are happening at this time. First, workers feel that productivity is increasing compared to usual. Second, workers use technology as assistants who help Work. Third, there are additional personal costs while running WFH. Fourth, the comfort of working at home raises the desire for WFH to be enforced forever.

II.4. Work From Home (WFH), Behavior, and Productivity

Doing Work from home improves one's self-welfare even though you will do homework simultaneously (Song & Gao, 2018). A survey conducted by an economic platform explained that employees who work at home spend just 22 minutes a day off. They also work 14 - 16.8 more days a month compared to employees who work in offices. Employees who work at home only spend 27 minutes a day on unproductive activities (Beauregard, Basile, & Canonico, 2013).

Timsal & Awais (2016)explained that WFH has a positive impact on the company. The impact for employees is that those who usually leave for the office earlier to avoid congestion no longer need to worry about it; their stress levels are reduced due to the office environment and their increased creativity. The impact obtained by the organization is that the recruitment of reliable top management positions is no longer limited by geography and even the possibility of recruiting employees from competitors in similar industries, saves operational costs, and, most importantly, helps create a balance of life and work for employees.

In general, Timsal & Awais (2016)stated that the benefits of WFH are:

1 Feeling a more flexible environment because you can set your hours;
2 Apart from stress disorders, for example, professional conflicts that occur in the office;
3 No distance to home and family
4 Have better health and a more balanced work-life
5 The long term provides increased productivity and creativity.
6 Based on the existing review literature, the proposed hypothesis is presented as follows.

H1: Work-From-Home (WFH) has a positive impact on the behavior of faculty and academic staff mediated technology.

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H2: Work-From-Home (WFH) has a positive impact on the productivity of lecturers and educational staff mediated by technology.
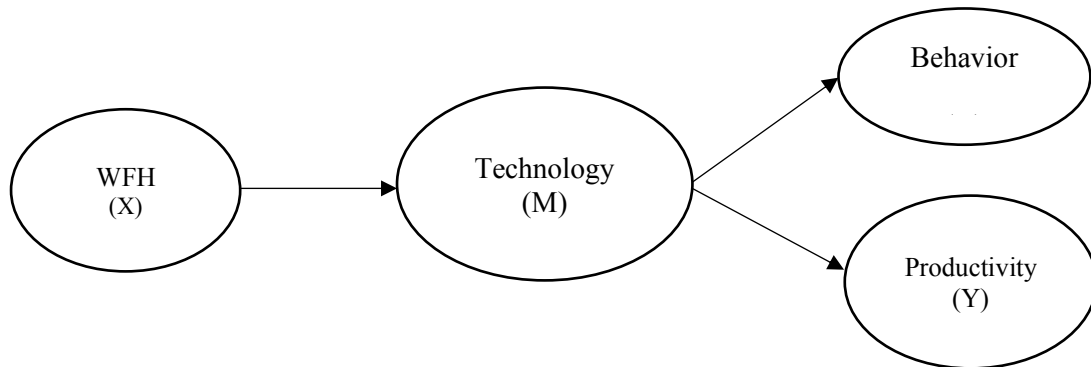

Figure 1. Hypothesis Schema

III. RESEARCH METHODS

Apuke (2017) explains that research with quantitative methods is carried out to test hypotheses and test the significance and insignificance of the variables used. The design of this study used exploratory techniques using data analysis tools SmartPLS 3.0.0. The purpose of using this analysis tool is because it is exploratory or extends to existing theories. The variables used in this study consisted of 2 endogenous variables (behavior and productivity), one exogenous variable (WFH), and one mediating variable (technology). Data testing is done by testing the validity (test *loading factor,* AVE value, *discriminant validity,* and *cross-loading*) and reliability (calculating *composite reliability* and *Cronbach's alph*a). Furthermore, the model structure test is carried out using analysis *R-Square, Path Coefficients, T-statistic, Predicted Relevance*, and *Model Fit*.

The population and sample of this study were 120 lecturers and educators at the Faculty of Economics, and Business UPN "Veteran" Yogyakarta, with a total of 96 questionnaires returned. The assessment indicators in the questionnaire use a Likert scale of 1-7 for the Behavior assessment variables. Assessment indicators for WHF, technology, and productivity variables use a Likert scale of 1-5.

IV. RESULT AND DISCUSSION

IV.1. RESULTS
The questionnaire used refers to the questionnaire prepared by the Global Workplace Analysis, which is then replicated and adjusted to the conditions in the study sample. The questionnaire was distributed to 120 respondents, and the questionnaire was returned with a total of 96 questionnaires. The metadata of the 96 questionnaires consisted of 48 women and 48 men. The results of the survey data from the distributed questionnaires are presented as follows. Testing the validity and reliability of data for the variables defined in this study. The validity test was done by testing the *loading factor,* AVE value, *discriminant validity*, and *cross-loading*. Test the validity of the endogenous variable productivity using the *loading factor* shows that there are five indicators (P6, P8, P13, P14, and P15). The validity test on the endogenous behavioral variables obtained three indicators (Per1, Per2, and Per3). Testing the *composite reliability coefficient* value must be greater than 0.70, and the

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Average Variance Extracted (AVE) value must be greater than 0.50. The test results of the *composite reliability coefficient are* presented as follows.

Table 1. Composite Reliability Coefficient, Cronbach's Alpha, and AVE Value

	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Behavior (Y)	0.869	0.880	0.717
Productivity (Y)	0.943	0.946	0.661
Technology (M)	0.918	0.922	0.710
WFH (X)	0.967	0.871	0.794

Source: Processed Data

Testing *Discriminant validity* is done to test the validity of the variables used in value must be greater than 0.70). The results of testing are *discriminant validity* presented in the following table.

Table 2. Discriminant Validity

	Behavior (Y)	Productivity (Y)	Technology (M)	WFH (X)
Behavior (Y)	0.847	0.000	0.000	0.000
Productivity (Y)	0.555	0.813	0.000	0.000
Technology (M)	0.472	0.779	0.843	0.000
WFH (X)	0.347	0.559	0.527	0.891

Source: Processed Data

The model test value is 0.726 or 72.6%, which is obtained from the NFI value. The R-Square value for the endogenous variable behavior was 0.236, the endogenous variable productivity was 0.637, and the mediating variable was 0.277. The P-value for H1 is 0.297, and H2 is 0.034. The T-Statistic H1 is 1.043, and H2 is 2.132. The results of processing the model structure are presented in the following figure. The path coefficient values for each hypothesis are 0.136 and 0.206. The value of *indirect effects* for H1 = 0.211 and H2 = 0.353.
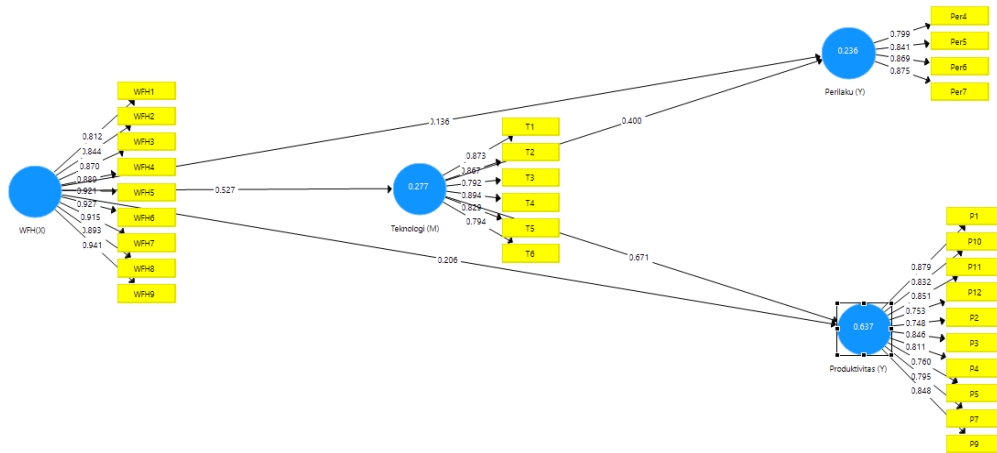
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Figure 2. Structure Model Testing

IV.2. DISCUSSION

The results of data processing in the analysis section above serve as material for discussion in this section. This discussion will begin with a summary of the hypothesis results that are presenting in the following table.

Table 3. Summary of Hypothesis Results

Hypothesis	Prediction	Variable	Path Coefficient	P-Value	T-Statistic	Significant	Result
H_1	+	XMY	0.136	P = 0.297	T <1.96	Not Significant	Not Supported
H_2	+	XMY	0.206	P = 0.034	T> 1.96	Significant	Supported

Source: Processed Data

The first hypothesis is building from literature formulated in the sentence *Work From Home* (WFH) has a positive effect on the behavior of lecturers and education staff mediated by technology is not accepted / not supported. Based on the results of tests carried out, the T-statistic value is less than 1.96, which means there is no significant influence between the variables.

The second hypothesis is formulating in the sentence *Work From Home* (WFH) has a positive effect on the productivity of lecturers and education staff mediated by technology accepted/supported. Based on the results of tests carried out, the T-statistic value is more than 1.96, which means positive influence. P-value is less than 0.1, which means a positive impact.

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Table 4.Direct and Indirect Effect Test Results H_2

	Direct Effect		Indirect Effect	
	Path coefficient	T-statistic	Path Coefficient	T-Statistic
X-Y	0.206	T> 1.96		
X-M-Y			0.353	T> 1.96

Source: Processed Data

Direct and indirect testing only carried out for H2 because H1 did not support or unaccepted from the test results. The directing test of the path coefficient test results for exogenous variables to endogenous variables is smaller than the indirect test. Wong & Kwong-Kay (2016) explain that mediating variables used to see the direct and indirect effects of endogenous and exogenous variables in data processing using PLS.

Based on the results of hypothesis testing and the explanation above, the mediating variable in the second hypothesis only mediates partially competitively. This condition explains that there may be other factors that support the productivity of lecturers and education staff besides technology. The results of this test supported the initial aim of the researchers to determine the impact of WFH policies on changes in behavior and productivity for lecturers and education staff in the FEB UPN "Veteran" Yogyakarta. Find that the technology used during WFH did not affect behavior change. Technology has a partial effect on increasing the productivity of the implementation of duties and responsibilities for public services.

V. CONCLUSIONS AND FURTHER RESEARCH

The result of the processing and analysis of the research findings is the first impact of WFH as policy implementation doesn't change the behavior of lecturers and education staff mediated by technology. Second, WFH has a partial or partial competitive effect on productivity because of the mediating variable (technology).

This partially competitive effect of technology can be used as a basis for management to replace other factors that will fully support increased productivity. This productivity becomes necessary if the online study policy implementation in the 2020/2021 Academic Year. Lectures and online services are needed to maintain their quality optimally because of the duties and responsibilities of institutions as public servants in the field of educational services.

Further research should be using qualitative methods with the type of case study. The findings from this research are using as a reference for obtaining depth of research results. This method can dig deeper into other important factors that will help increase the productivity of lecturers and education staff.

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