Research article

The Effect of Work From Home on Teachers' Performance

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Abstract.
This study analyzed the influence of work from home and work environment on the performance of primary school teachers using online media as the intervening variable in the Lamongan Regency of Indonesia. This research used a quantitative approach by distributing questionnaires to the study participants that comprised all elementary school teachers registered with the *Dapodik*, Lamongan Regency. The sample was determined using a simple random sampling method and data were processed using the PLS. The convergent validity in the measurement model could be seen through the cross-loading values in the results. A measurement item was said to be valid if its cross-loading value was >0.7, and that value was greater than the cross-loading values of other constructs. The R-Square value of the performance was 0.384. Therefore, 38.4% of teachers' performance was affected by WFH, work environment, and online media while the remaining 61.6% was influenced by other variables outside the studied model. Likewise, the R-Square value for online media was 0.294, this explains that online media was relatively affected by WFH and work environment (29.4%) but largely by other variables outside the studied model (70.6%).

Keywords: WFH, work environment, performance, online media

1. Introduction

COVID-19 viruses had been brought a seriously impact to all aspects of life for Indonesian society. One of the ways to reduce a risk of *COVID-19* spreading is by doing the restricted activities outside. It is such a tight rule for workers to do all their duties at home that is why this pandemic creates a new culture environment, called work from home. According to Crosbie & Moore [1], work from home refers to paid working in a long-distance mode, although there are still many undone duties that can be accomplished at home .

Since March 2021, the president of Joko Widodo had been suggesting the implementation of work from home as long as a widely spreading of *COVID-19* in Indonesia [2]. Duties that are done during a pandemic cause changing in work culture which every

job needs adjustments. Before an attack of pandemic outbreak, most of the work who the society did was done via face-to-face or a direct interaction, both working as an individual or a teamwork.

One of the professions that implemented inwork from home is the teaching profession (teachers) as an alternative based on the advice of the Indonesian government to carry out the distance learning activities and minimize the spread of *COVID-19*. Since *COVID-19*outbreak, teachers are designed to innovate in the learning through work from home, especially if work from home is applied to the elementary students. They generally learn a direct or face-to-face learning, but many of them don't understand the subject matters in depth.Moreover, this is done via online, the question here is whether Work From Home (WFH) and the Work Environment Affect the Performance of Elementary Teachers through the media of the university applied to elementary school students. As stated by [3], online media greatly impacts to the performance of teachers in teaching, four skills (professionalism) of teachers, mastery of materials and teacher attitudes are tested "forcefully" when the *COVID-19* pandemic occurs.

Performance is a benchmark for teachers in doing the teaching and learning process via online. Meanwhile, performance measurement is the process of an organization establishing the parameters of results to achieve programs, investments, and acquisitions made [4].

In addition to Work From Home, the work environment also affects the performance of teachers in the teaching and learning process. During the *COVID-19*, the teachers' work environment was moved which was originally done in the classroom and currently moved in their respective homes, this causes the teachers' concentration in teaching that it has to be divided and can't be focused in one direction because of the family at home.

Besides, online media is one of the learning solutions in the pandemic period, the *COVID-19* outbreak urges distance education testing almost that has never been done simultaneously before [5]. For all elements of education, namely learners, teachers to parents. Considering that during the pandemic, time, location and distance are big problems today [6]. According to, Mu'ah et al. [4],online is a distance learning process with connected to a network (online), but this is considered as less effective and efficient.

Work from home culture has various advantages as well as disadvantages for teachers in carrying out online of teaching and learning activities. Therefore, based on the various reviews above, this study aims to examine the title "The Influence of Work From Home (WFH) and the Work Environment primary school teachers' performances through Online Media as the interveningvariable".

2. Methods

The method used for this research is a descriptive method verified with a quantitative approach. According to Sugiyono [7], he states that "descriptive methods are statistics that are used to analyze data by describing or describing data that has been collected without intending to make conclusions that apply to the public."This research was conducted in elementary schools (SD) with the number of 200 teachers spread throughout elementary schools in Lamongan sub-district during the running time of this study from October to December.

3. Population

According to Sugiyono [7], the definition of population is as follows: "Population is the area of generalization consisting of; Objects / subjects that have certain qualities and characteristics set by the researcher to be studied and then drawn conclusions" The population in this study are elementary school teachers in Lamongan Subdistrict.

4. Sample

The sampling technique used is a random sampling using the simple random sampling method that provides the same opportunity that is unlimited in each element of the population to be selected as a sample regardless of gender, employee status or position.

In this study the [4] determination of the number of samples refers to the theory of Slovin [8] by the number of populations known with certainty as follows:

n = N

$1 + Ne^2$

Which n = the number of sampling

N = population

E = error

From the slovin formula above, if the population is 200 and the number of tolerances is only 5%, and then the number of samples to be used is as much as:

$n = \dfrac{200}{1+200(0.05)^2}$

$n = \dfrac{200}{3.00}$

n = 67

From the formula above, the sample obtained is by 67 respondents.

5. Data Collection Techniques

This study only uses smart models - PLS and proces with Smart PLS3, to evaluator the research mode. Evaluation of PLS models is done by evaluating measurement models (outer models) and structural models (iner models). The purpose of PLS is to assist researchers for predictive purposes. The estimated parameters obtained with PLS can be categorized into three.It reflects the path estimates that connects to the laten variable and it is indication (loader). Third, it deals and parameter locations (regres constantly value) on latent indicate and variables. To obtainable theses three estimation, PLS use a 3-step iteract processig and very iterations stages product an estimation.The first stages, product a weight estimation, on second stages product estimatios for inner model and outer model, and the third stages product estimated means and located[9] .

6. Results and Discussions

6.1. Measurement Model (Outer Model)

The results of the study on the outer model are used to measure the validity and reliability of the research model, so as to show the relationship between manifest variables and measurement items to latent variables in the study.Convergent validity in the measurement model can be seen through the cross-loading value in the results of the analysis. A measurement item is said to be valid if it has a cross loading value of more than 0.7 and that value is greater than cross loading on other constructs. The cross-loading grade of the outcome of this research is shown in the following table:

Based on the above, it is known that the cross-loading value is more than 0.7 and the value is greater than the cross-loading value on other constructs. Thus, it can be stated in this study has had a good convergent validity.

Table 3 above shows the composite reliability, cronbach's alpha, and AVE values. The latent variable is said to be reliable if it has a value of more than 0.70 for the value of composite reliability and cronbach's alpha, and more than 0.50 for the value of AVE. It can be seen from the table above that the values of composite reliability and cronbach's alpha in all latent variables show values over 0.70 and AVE in all variables showing more than 0.50.

TABLE 1: Partial Least Square Assessment Criteria (PLS).

Criteria	Explanation
Evaluation of Structural Models	
R^2 for endogenous latent variables	R2 results of 0.67, 0.33 and 0.19 for endogenous latent variables in structural models identify that the "good", "moderate" and "weak" models
Estimation track coefficient	The estimation values for track relationships in structure models should be significance. This significance values can be gained by the bootstraps proceeds.
f^2 for influence size	F2 values of 0.02, 0.15 and 0.35 can be interpreted as to whether latent variable predictors have weak, medium or large influences at the structural level.
Prediction Railefasi(Q^2 and q^2)	Blindfolding procedure used to calculate: $Q2 = 1 - \frac{\sum_D E_D}{\sum_D O_D}$ D is omissiondistance, E are count of squares of prediction errors, and O are count of squares of observation. Q2 valued above zero provided evident that the model has estimation relevance (Q2 below zero identifies the model as less estimation relevance. In relation to f2, the relative impact of structural models on latent dependent variable measurements can be assessed by $q^2 = \frac{Q2_{included} - Q2_{excluded}}{1 - Q2_{included}}$
Evaluation of reflexive measurement models	
Loaded factor	Loaded factor values have be above 0.70
Composite Reliability	*combination dependability conjecture inside consistence and its values shoulder be over 0.60*
Average Variance Extracted (AVE)	Average variance extracted (AVE) value should be above 0.50
discriminatory Validations	The airdate radix values of AVE have to greater till the correlation values midst hiden variables.
Cross Loading	It is other measur of discriminantory validations. It is intended lest any blocked of the indicator haste a sublime loading for any hidden variable even compared to the indicator for others hidden variables.
Evaluation of formative measuremen models	
Significance of integrity values	The estimated value for formative measurement models should be significant. This level of significance is assessed by the bootstrapping procedure.
Multicollinearity	Manifest variables in a block must be tested for whether there is a multicoil. Variances inflationary factory (VIF) values mey be late to verify this. VIF prestige over 10 identify multicoil

6.2. Structural Model (Inner Model)

The results of the study on the inner model are used to measure the level of accuracy of the model in the overall research by being formed through several variables along with the question items contained in it. The evaluation of the inner model consists of R-Square (R2) and Q-Square predictive relevance values.

Table 2: Research Results.

Variable	Work Environment	Performance	WFH	Online Media
X1.1	0.387	0.467	**0.851**	0.434
X1.2	0.320	0.282	**0.837**	0.317
X1.3	0.234	0.287	**0.780**	0.232
X1.4	0.421	0.529	**0.846**	0.469
X1.5	0.344	0.448	**0.920**	0.385
X1.6	0.306	0.421	**0.874**	0.475
X1.7	0.341	0.412	**0.953**	0.309
X2.1	**0.799**	0.330	0.348	0.308
X2.2	**0.833**	0.289	0.345	0.363
X2.3	**0.832**	0.306	0.334	0.365
X2.4	**0.852**	0.474	0.330	0.459
X2.5	**0.930**	0.417	0.323	0.461
X2.6	**0.828**	0.439	0.387	0.402
X2.7	**0.953**	0.479	0.468	0.372
X2.8	**0.949**	0.353	0.242	0.303
X2.9	**0.899**	0.275	0.232	0.387
X2.10	**0.709**	0.456	0.504	0.405
Y.1	0.331	**0.886**	0.488	0.427
Y.2	0.367	**0.869**	0.484	0.418
Y.3	0.337	**0.824**	0.377	0.399
Y.4	0.309	**0.868**	0.431	0.532
Y.5	0.327	**0.905**	0.446	0.389
Y.6	0.328	**0.866**	0.387	0.372
Y.7	0.298	**0.897**	0.440	0.442
Z.1	0.367	0.342	0.499	**0.715**
Z.2	0.448	0.355	0.347	**0.833**
Z.3	0.363	0.383	0.324	**0.823**
Z.4	0.330	0.422	0.344	**0.847**
Z.5	0.353	0.324	0.301	**0.742**
Z.6	0.268	0.478	0.354	**0.835**

Table 3: Research results.

	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
WFH	0.759	0.861	0.675
Performance	0.957	0.964	0.769
Work Environment	0.905	0.927	0.719
Online Media	0.897	0.920	0.622

_TABLE 4: R-Square Value (R2).

	R Square
Performance	0.384
Online Media	0.294

Based on Table 4 above, it is known that the R-Square value at performance is 0.384. The value can be interpreted that performance can be explained by WFH, work environment, and Online Media by 38.4% and the over 61.6% is explained by other variables outside the model studied.The R-Square value for Online Media is 0.294, the value can be interpreted that Online Media can be clarification by WFH and the work environment 29.4% and the over 70.6% is clarification by other variables outs then models studied. Q-Square prognostic intercourse is latre to measured how right then values by sighting made so as to provide results to the research model.Q-Square values range from 0<Q2<1, with known as R-Square values, Q-Square can be calculated with the following formulas:

Information:

Q2 : Predictive relevance

R21 : R-Square performance

R22 : R-Square Online Media

The results of these calculations can be shown that Q2 is worth 0.435. The value suggests that the diversity of data generated from the structural models studied in the study is moderate because it is close to a value of 1.

7. Hypothesis Test

Hypothesis testing is based on the results of path analysis calculations that are able to provide information to researchers about the direct influence of independent variables on dependent variables in a path. Significance testing in this study was conducted by comparing t-statistical values on bootstrapping test results with t-tables (1.96).If the value of the t-statistic is greater than the t-table then the hypothesis is accepted, and conversely if the t-statistic is smaller than the t-table then the hypothesis is rejected. In addition, it can also use the value p-value, if the value p-value is less than 0.05 then the hypothesis is accepted and vice versa. These results can be seen in table 5:

Based on Table 5. The results of the test of path coefficients, t-statistics cum p-values on answers this hypotheses in study, am take:

Table 5: Hypothesis Test Results of Direct Influence.

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
WFH Online Media	0.230	0.235	0.101	2.269	0.024
WFHPerformance	0.242	0.241	0.091	2.652	0.008
Work Environmen-tOnline Media	0.269	0.270	0.077	3.481	0.001
Work Environment Performance	0.259	0.261	0.092	2.823	0.005
Online MediaPerformance	0.229	0.231	0.098	2.343	0.020

** = insignificant

WFH to online media have a absolute weighted trail coefficient of 0.230, t-statistics of 2.269 (> 1.96), along p-value of 0.024 (<0.05), whom way it hypothesis 1 am answhered. Then WFH have a absolute and significant impact on online media

The working environment for Online Media have a absolute trail coefficients on 0.269, is a t-statistic on 3,481 (>1.96), and then p-value of 0.001 (<0.05), whom way hypothesis 2 on answhered. well, that mey be deduce until the work environment haste a absolute and significantly impact on Online Media.

WFH to Performance have a absolute trail coefficients on 0.242, t-statistics on 2,652 (<1.96), and that a p-value of 0.008 (<0.05), whom way hypothesis 3 on answhered. well, that mey be deduce until the WFH haste a negative and positively impact on Performance.

The working towards performance have a positively trail coefficient on 0.259, t-statistics on 2,823 (>1.96), and than p-value of 0.005 (<0.05), whom way hypothesis 4 on answhere, well that mey be deduce until the work environment haste a positively and significants impact on performance.

Online media to performance haste a positively trail coefficient of 0.229, t-statistics of 0. 2,343 (<1.96), and p-value of 0.020 (<0.05), meaning hypothesis 5 positively am answhered. well,that mey be deduce until online media haste a negative and positive impact on performance.

Indirect influence testing is done by testing the role of mediation used in this study and look at the nature of mediation resulting from this study. The results of this indirect mediation test can be seen in the table below.

From the table 6 above, it can be seen the results of the role testing by looking at the weights of the path coefficients, t-statistics, and p-values as answers to the hypotheses studied, including the following:

TABLE 6: Hypothesis Test Results of Indirect Influences

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (IO/STDEVI)	P Values
WFH Online MediaPerformance	0.070	0.071	0.033	2.095	0.037
Work EnvironmentOnline MediaPerformance	0.047	0.049	0.033	1.433	0.153**

** = not mediation

The indirect influence of WFH on performance through online media holds a column coefficient of 0.070; t-statistics on 2,095 (>1.96); and then p-value of 0.037 (<0.05), then hypothesis 6 is answhered. Which means that online media mediate the effect of WFH on performances

The indirect influence on the work environment on performances through online media haste a lane coefficients value on 0.047; t-statistical values of 1,433 (<1.96); and p-values on 0.153 (>0.05), meaning hypothesis7 is rejected. It can be concluded that online media does not mediate the influence of the work environment on performance.

8. Conclusion

So, am mey be stated lest all sub-variables in these study already own nice convergent legality. When the composite value is reliability, cronbach's value is alpha, more than 0.70 and the AVE is more than 0.50. The latent variable is said to be reliable.

WFH towards Online Media haste a positively weighted lane coefficients on 0.230, t-statistics on 2,269 (>1.96), and then a p-value of 0.024 (<0.05), whom way lest hypothesis 1 accept. It, mean that WFH haste a absolute and significantly impact on online media.

The working environment for Online Media haste a positive weighted lane coefficients on 0.269, a t-statistic on 3,481 (>1.96), and than a p-value of 0.001 (<0.05), whom way last hypothesis 2 is accept. Which mean that work environment hasta positively and significan impact on Online Media.

WFH on Performance hasta a positively weighted lane coefficients on 0.242, the t-statistic is 2,652(<1.96), and p-value of 0.008 (<0.05), whom way last hypothesis 3 is acept. well she can be conluded that WFH has a absolute and positively impact on performanced.

The working towards performance pocketed a positivefly weighted lane coefficients as much as 0.259, t-statistics as much as 2.823(> 1.96), and p-value of 0.005 (<0.05),

whom way last hypothesis 4 is accept. Well she can be the work environment hasta a positively and absolute impact on performanced.

Online media to performance holds a positively weighted lane coefficients as 0.229, t-statistics on 0.2,343 (<1.96), and a p-value on 0.020 (<0.05), whom way last hypothesis 5 is accept. Well she can be online media has a significant and positively impact on performance .

The indirect influence of WFH on performance through Online Media has an estimated path coefficient value of 0.070; t-statistical value of 2,095 (>1.96); and a p-value of 0.037 (<0.05), meaning hypothesis 6 accepted. This means that online media mediates the influence of WFH on performance.

The indirect influence of the work environment at performanced through online media has an estimatied path coefficient of 0.047; The t-statistical value 1,433 (<1.96); and p-value of 0.153 (>0.05), which hypothesis 7 was condemnet, well she can be online media does not mediate the influence of the work environment on performance.

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