Revealing the Effect of Work-From-Home on Job Performance during the Covid-19 Crisis: Empirical Evidence from Indonesia

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Abstract

This study aims to determine the effect of work-from-home on job performance. It proposes work environment, job satisfaction and work motivation as mediating variables, and answers how work-from-home affects employee performance through them. The study has implications for business practitioner who intend to measure the effectiveness of their work-from-home policies. This is especially pertinent during the coronavirus crisis. The original contribution of this study lies within its questionnaire that has been attuned to changes caused by COVID-19. Data collection was completed by distributing an online questionnaire to workers in Indonesia. The questionnaire with a Likert scale was sent to approximately 2720 employees by email and a link was also shared on social media. The survey attracted 330 respondents. To answer the research questions, this study used structural equation modelling. The output revealed that working from home, employees experienced greater enjoyment, satisfaction and motivation thus enhancing job performance. While the validity of this research is constrained in scope to how these benefits are manifested in Indonesia, there may be external validity among other countries affected by COVID-19.

Keywords: *Performance appraisal, Strategic human resource management, Information technology*

Introduction

COVID-19 has recently become a deadly global issue. Governments around the world are forced to take action to slow the spread of the virus. One of the policies is social distancing. As a consequence of this policy, schools, workplaces, tourist attractions, and even some public transportation have been closed indefinitely. Many companies have followed government regulation to work from home. However, until now the effect of work-from-home on job performance of employees remains debatable (Allen, Golden & Shockley, 2015), thus creating a research gap. Researchers have argued that workers can work at home by utilizing video conference platforms for communication. It can make them feel safe from the risk of contracting the coronavirus. Home-based work also allows employees to be more flexible in making appointments and running errands. Furthermore, they don't need to spend time or money on commuting. Office workers who work from home have increased autonomy. This refers to the extent to which a job allows one to make decisions around the method of how to complete the work. Another benefit of working from home is the chance for employees to modify or choose their own workplaces. Allen, Golden & Shockley (2015) argue that telecommuting will work well when the nature of the job is portable, or it can be done online. Therefore, job performance in a telecommuting environment is heavily affected by the characteristics of the job itself.

However, researchers like Madell (2019) argued that work-from-home also has disadvantages—such as lack of supervision—and therefore the likelihood of miscommunication increases. Other disadvantages are that it offers no physical separation between work and personal time, and finally, home may be a boring work environment. These disadvantages can create uncertainty impacting on job satisfaction, and lack of satisfaction can lead to lower performance among employees, as gauged by the company's key performance indicators. It is generally understood that employee performance plays a crucial role in company success and an employee who is satisfied with his or her work performs better than one who is not satisfied (Khan et al., 2016). The work-from-home discussion is always related to electronic communication. Despite its convenience and accessibility in the modern era, many studies (Marshall et al., 2007; Zhang, 2016) have shown evidence of its relative weakness when compared to face-to-face communication. The main weakness of electronic communication is the level of its information richness, which is defined as the extent to which a medium of communication can create heterogeneity of information content between different frames of reference (Nisar, Prabhakar & Strakova, 2019). Besides electronic communication, working from home also creates a feeling of isolation among employees. The perception of being isolated is mainly caused by less interaction among employees and their co-workers, supervisors, and manager. Employees may not get recognition and support when needed and this may lead to employee dissatisfaction, as their social needs cannot be fulfilled by working from home (Marshall et al., 2007).

Another negative consequence of work-from-home policies is a feeling of receiving less recognition for achievements (Zhang, 2016). Employees find it more difficult to exhibit their work ethic and have achievements recognized by their manager when all communication is conducted electronically. The limitation exists because when employees work from home, they usually submit their work when it is ready, but their manager does not see the process involved in producing a deliverable; some employees may work overtime but their work is only judged by the result, not by the difficulties that employees overcame during the process. The last change is work-life balance. When employees work from home, it is nearly impossible for them to separate work from family time, especially during the coronavirus

pandemic because all family members are at home and have the freedom to structure their own activities. Zhang (2016) contends that when the boundary is blurred, employees are exposed to numerous disturbances by family matters, preventing them from focusing on their work and fulfilling their role in their organization completely. It is also highly probable that family problems can influence their mood at work when everything happens in the same place and time.

Governments around the world responded to COVID-19 by implementing the work-from-home policy to reduce the transmission of the virus from one person to another. People were also asked to do social distancing in all daily activities. Indonesia, as the most densely populated country in Southeast Asia, is home to about 136 million workers (Central Bureau of Statistics Indonesia, 2019). As Indonesia is a seriously affected country, the government took the initiative to implement work-from-home policies in affected cities. The debate about the effectiveness of working from home made companies reluctant to implement the program; therefore, scholars have been urged to study the benefits of it.

Some previous studies (Marshall et al., 2007; Zhang, 2016) related to virtual office and telecommuting already exists; nevertheless, a work-from-home policy during the COVID-19 crisis is not exactly the same as telecommuting. The biggest difference is in its limitations on work locations. While telecommuters can work in other comfortable areas such as coffee shops, people can only work in their home during the pandemic. Thus, they will also be distracted by family matters because isolation does not only affect employees; it affects all family members. The widespread implementation of work-from-home will allow researchers not only to gather data from companies that are ready for telecommuting, but also more importantly from those companies that are not ready for it and are still struggling to adapt. Moreover, there is little research on this topic from an Indonesian perspective, especially from the perspective of employees.

This study aims to assess the effect of working from home on job performance and answer how it affects employee performance by using work environment, job satisfaction and work motivation as mediating variables. The new research model will contribute significantly to business practitioners' knowledge, especially the government of Indonesia who needs to measure the effectiveness of their work-from-home policy during the pandemic. It can also serve as fundamental input for governments and companies to decide whether to promote work-from-home policies or seek other alternatives. The original contribution of this study lies in its questionnaire that has been attuned to changes caused by COVID-19.

Literature Review

Job Performance Theory

According to Boyatzis (2008), the founder of the theory of action and job performance, performance in an organization is influenced by three main factors: individual, organizational environment, and job demand. The first factor is individual, which consist of the vision, values, philosophy, knowledge, nature, competencies, career path, style and interests of the workers. The second factor is the organizational environment, which consists of the culture and climate, structure and systems, industrial maturity, organizational strategic position, core competencies and the greater context. The third factor is the job demand, which consist of duties, functions and roles of each member in the organization. The theory of action and job performance indicated that the best performance (best fit) can be realized through the components of individual factors, the environment and the roles and tasks carried out by human

resources, including leaders in an organization (Boyatzis, 2008). Value, trait, style and knowledge supported by the organizational environment can push a leader to fulfil their role in completing tasks and functions aimed towards achieving the best organizational performance. A workforce that has skills and knowledge can influence organizational performance positively. This underpins the theory of this research. The author chose work motivation as the individual factor of job performance and work environment as the organizational environment factor of job performance while job demands was not considered to fit the context of this research because the work-from-home employees had already been recruited before the policy was imposed. Therefore, there is no change to the employee's job description before and after the policy was imposed.

Work from Home and Work Environment

Previous studies suggest that telecommuting positively affects work environment and is considered the most relevant literature to form a hypothesis for this research. Researchers argued that working from home can create a more flexible work environment because employees feel free to arrange their own work schedule and workplace environment (Baltes et al., 1999). Their personal needs and taste can be fulfilled because they can customize their own working area according to their personality (Gajendran & Harrison, 2007). In line with the results of previous studies and the extant literature, this research has posited the following hypothesis:

H1. Working from home has a positive and significant effect on Work Environment

Work from Home and Job Satisfaction

Previous studies also suggest that telecommuting can increase job satisfaction. When employees work from home, they don't need to spend time, money and energy on going to the office or on business trips. They also enjoy not having to wear formal attire during working hours, which allows them a greater match between their work self and true persona. Telecommuters were less stressed and therefore less likely to change jobs leading to lower staff turnover; they are also more satisfied with their daily job activities (Gajendran & Harrison, 2007). Moreover, another study suggested that the relationship between telecommuting and job satisfaction is curvilinear, meaning that its effect will be positive at a lower level of telecommuting (around 15.1 hours per week). But when employees spend a large among of time telecommuting, their satisfaction can decrease due to a feeling of social and professional isolation. The curve is flatter for jobs that are highly independent (Virick et al., 2010). In line with the results of previous studies, this research posits the following hypothesis:

H2. Working from home has a positive and significant effect on Job Satisfaction

Work from Home and Work Motivation

When employees work from home, their work motivation becomes higher because of two primary reasons: productivity and personal life. Employees find it easier to increase their productivity because when they telecommute, they can avoid traffic jams and transportation expenses, and they can even live in a cheaper locations such as a suburb, even if it is not close to their office. They also have a chance to take care of private affairs during working hours, enabling them to seek higher fulfilment of personal life (Shockley & Allen, 2012). In line with the results of previous studies, this research posits the following hypothesis:

H3. Work from Home has a positive and significant effect on Work Motivation

Work from Home and Job Performance

Telecommuters have the ability to modify and customize their own work environment; therefore, it can increase their job performance. Working out of their office can also eliminate the time and cost they need to spend on work. It also creates a feeling of freedom that makes employees satisfied, and therefore it affects their job performance (Gajendran & Harrison, 2007). Employees with higher levels of telecommuting tend to have higher work motivation than those who have lower levels of telecommuting. Thus, it can increase their performance (Caillier, 2016). In line with the results of previous studies, this research posits the following hypotheses:

H4. Working from home has a positive and significant effect on Job Performance

H10. Work Environment mediates the effect of working from home on Job Performance

H11. Job Satisfaction mediates the effect of working from home on Job Performance

H12. Work Motivation mediates the effect of working from home on Job Performance

Work Environment and Job Satisfaction

In general, every employee wants a good work environment. A function of having a good work environment is increasing the job satisfaction of employees (Bakotic & Babic, 2013). Kreitner and Kanicki (2012) suggest that work environment is an important determinant of job satisfaction. Employees will tend to maintain their presence in a work environment that they think can provide peace of mind at work. Therefore, a better work environment can make employees more satisfied with their jobs. Moreover, the findings of Jain and Kaur (2014) also concluded that a good work environment could increase job satisfaction. Job satisfaction can be achieved by improving the psychological, social and physical elements of a work environment (Agbozo et al., 2017). In line with the results of previous studies, this research posits the following hypothesis:

H5. Work Environment has a positive and significant effect on Job Satisfaction

Work Motivation and Job Satisfaction

Ahluwalia and Preet (2017) argued that high motivation can assist workers in achieving work satisfaction. There are two types of motivation that exist in a workplace: intrinsic and extrinsic motivation. Intrinsic motivation arises from inside the individual and there is no need for stimulation from the company or other people. The individual has their own personal reasons to feel motivated and the factors involved in intrinsic motivation are different for each, extrinsic motivation arises outside the individual and requires intervention from a company to stimulate the motivation. This could include a reward, bonus, free lunch or other incentives. A study by Raziq and Maulabakhsh (2015) revealed that work motivation was strongly correlated with job satisfaction. Furthermore, they also suggested that it is important for companies to understand how to motivate their employees because it can increase employee happiness and job satisfaction, eventually leading to performance gains. In line with the results of previous studies, this research posits the following hypothesis:

H6. Work Motivation has a positive and significant effect on Job Satisfaction

Work Environment and Job Performance

The positive influence of work environment on job performance is corroborated by previous studies (Jayaweera, 2015; Muchtar, 2017). An enjoyable, healthy, safe and optimal work environment can help employees to produce better performance (Muchtar, 2017). It is important for companies to enhance their work environment in order to achieve organizational goals. Jayaweera (2015) found that having a good work environment can increase employees' motivation and performance in the hotel industry. Furthermore, the research also revealed that job satisfaction mediates the positive relationship between work environment and job performance. In line with the results of previous studies, this research posits the following hypotheses:

H7. Work Environment has a positive and significant effect on Job Performance

H13. Job Satisfaction mediates the effect of Work Environment on Job Performance

Job Satisfaction and Job Performance

The argument that job satisfaction highly influences employee performance has been confirmed by previous research (Muslih, 2012; Khan et al., 2016). If job satisfaction is not achieved, then employee performance will be poor, as their productivity will be negatively affected. On the contrary, satisfied employees are motivated to perform their duties to the best degree possible. In line with the results of previous studies, this research posits the following hypothesis:

H8. Job Satisfaction has a positive and significant effect on Job Performance

Work Motivation and Job Performance

It is an effective choice to enhance employees' performance by increasing their motivation with respect to both personal and organizational goals (Alhassan et al. 2013). The increase in work motivation of employees is an influential factor in increasing work efficiency and productivity, which is widely understood as a characteristic of good job performance (Raziq and Maulabakhsh, 2015). The positive contribution of work motivation to job performance has also been suggested by Muchtar (2017), who previously conducted research to examine the effect of work environment and work motivation on performance. He further suggested that job satisfaction mediates the effect of work motivation and environment on job performance. Organizational goals have a higher chance of being achieved when employees are highly motivated to do their job. Therefore, companies should pay close attention to it. In line with the results of previous studies, this research posits the following hypotheses:
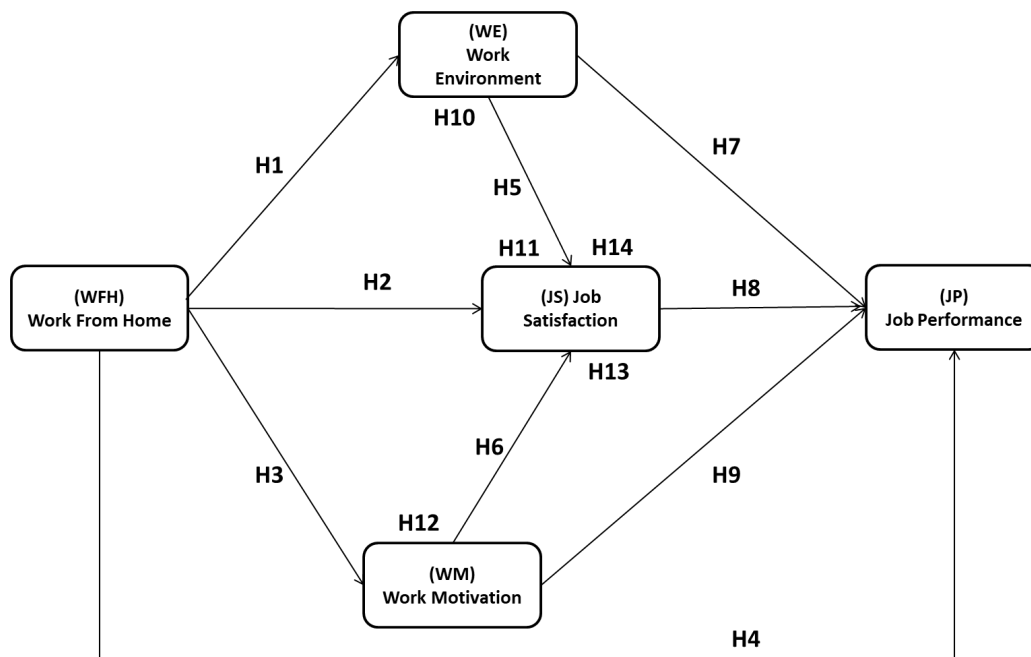
H9. Work Motivation has a positive and significant effect on Job Performance

H14. Job Satisfaction mediates the effect of Work Motivation on Job Performance

Conceptual framework

The conceptual framework is a systematic description of the relationship of the variables under study. The conceptual framework of this study is as follows:

Figure 1. Conceptual Framework

Source: Author (2020)

Based on the literature review above, the following hypotheses are proposed:

H1.   Work from home has a positive and significant effect on Work Environment

H2.   Work from home has a positive and significant effect on Job Satisfaction

H3.   Work from home has a positive and significant effect on Work Motivation

H4.   Work from home has a positive and significant effect on Job Performance

H5.   Work Environment has a positive and significant effect on Job Satisfaction

H6.   Work Motivation has a positive and significant effect on Job Satisfaction

H7.   Work Environment has a positive and significant effect on Job Performance

H8.   Job Satisfaction has a positive and significant effect on Job Performance

H9.   Work Motivation has a positive and significant effect on Job Performance

H10.   Work Environment mediates the effect of Work from home on Job Performance

H11.   Job Satisfaction mediates the effect of Work from home on Job Performance

H12.   Work Motivation mediates the effect of Work from home on Job Performance

H13.   Job Satisfaction mediates the effect of Work Environment on Job Performance

H14.   Job Satisfaction mediates the effect of Work Motivation on Job Performance

Methodology

The research used a quantitative causal approach to measure the effect and significance of independent variables on dependent variables. Inferential statistics procedures were used to conduct this research, meaning that this research aims to answer research questions by collecting and analysing a sample and generalizing the results to explain a population. Data collection was conducted by distributing an online questionnaire to workers in Indonesia. Assuming that respondents have experience in and the ability to work from home, it is justifiable to believe that they have internet access and thus the questionnaire was distributed and filled out online. Therefore, the sampling method was purposive sampling because it was intended for those who had access to internet and had direct experience of working from home as a consequence of the coronavirus pandemic in 2020. The questionnaire link was distributed by utilizing social media to help gather respondents. A 5-point Likert scale was used to measure the responses, evaluated accordingly: 1 = strongly disagree; 2 = disagree; 3 = neutral; 4 = agree; 5 = strongly agree. The questionnaire successfully attracted 330 respondents. After removing invalid and missing responses, 316 valid and reliable responses were kept and analyzed further.

Table 1. Questionnaire Items

Variable	Item	Statement
Work from Home	WHF 1	I spend all of my time at home during my work
	WHF 2	I always communicate with other people remotely for my work
	WHF 3	I use internet technology to do my work as much as possible
	WHF 4	I work outside of the physical presence of my colleagues
	WHF 5	I do not do any physical travel at all to start and finish my work
Work Environment	WE1	My workspace is fully shared with family members or other people who are not my colleagues
	WE2	I have the freedom to personally arrange my workspace without the intervention of my company
	WE3	My work success is heavily reliant on my internet connection
Job Satisfaction	JS1	I am satisfied to do my job without risking my safety from the COVID-19 virus
	JS2	I am satisfied with being appropriately recognized for performing my duties while the economy is down, and many people are fired during the COVID-19 pandemic
	JS3	I am satisfied with my chance to get promotion from my job during the COVID-19 pandemic
	JS4	I am satisfied to receive my salary during the COVID-19 pandemic
Work Motivation	WM 1	My company gives me a salary while staying safe from infection of COVID-19
	WM 2	My company gives me the freedom to fully arrange my work schedule
	WM 3	My company allows me to work independently without supervision
	WM 4	I can work more efficiently because I do not need to travel to the office
	WM 5	My company has been loyal to me while the economy is down, and many people are losing their jobs
	WM 6	My company gives me opportunities to get promoted while staying safe from infection of COVID-19

	WM 7	My job gives me the chance to develop myself so that I am not bored during the COVID-19 crisis
Job Performance	JP 1	I have accomplished all of my duties according to the key performance indicators of my company even if I work from home
	JP 2	I finish my job responsibilities well without any significant problems even if I work from home

Source: Author (2020)

Bentler & Chou (1987) stated that the minimum sample size should be at least 5 respondents per variable. In this research there are a total of 5 variables employed. Therefore, the minimum sample size in this research should be 25 respondents. Furthermore, Sideridis et al. (2014) indicated that a sample size of 50 respondents is associated with satisfactory fit for a model that involves 4 latent variables. With a total of 316 respondents involved in this research, the minimum sample size has been met.

In order to avoid measurement errors that produce a spurious relationship, the number of analyzed data was also determined based on the 10 times rule; this principle states that the minimum amount of data should be 10 times the maximum number of inner or outer model links pointing to any latent variable in the model, which in this research was 9. Therefore, the minimum sample size should be 90 (Hair et al., 2017). Moreover, based on the power tables provided by Hair et al. (2017) for a statistical power of 80%, for a maximum of three arrowheads pointing toward the construct, at the significance level of 5% and minimum R^2 of 0.10, the minimum data recommended for analysis is 166. The total data of 316 respondents in this study has met the requirement from the 10 times rule and G power analysis. Therefore, this study satisfies the recommendation on sample size for PLS-SEM analysis.

In order to answer research questions, this study used structural equation modelling which has two required steps, namely Explanatory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA). SPSS and AMOS software were utilized to help with the required analyses. The first step after data collection was to assess the validity and reliability of the measurement model.

Table 2. Sample Representativeness Test

	Test Statistics			
	Gender	Age	Education	Occupation
Chi-Squared	0.000[a]	0.002[b]	0.185[c]	0.011[b]
df	1	5	3	5
Asymp. Sig.	0.983	1.000	0.992	1.000

a.0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 86.7
b.0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 5.6
c.0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 28.7
d.0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 17.0

Source: Author (2020)

The representativeness of the sample in this research was confirmed from the results presented in the table above. It is the results of Chi-squared tests in all four categories (p-value gender = 0.983, p-value age = 1.000, p-value education = 0.992 and finally p-value occupation = 1.000). All the P-values (Asymp. Sig) are more than 0.05, indicating that the sample proportion across the characteristics of gender, age, education and occupation, is not significantly different. Therefore, because the sample in this research was shown to be representative, the conclusions and recommendations of our research is generalizable.

Table 3. Validity and Reliability Statistic

Construct	CR	AVE	α	MSV	MaxR(H)
Job Satisfaction	0.888	0.669	0.82	0.280	0.921
Work Environment	0.825	0.612	0.87	0.102	0.832
Work Motivation	0.875	0.512	0.88	0.104	0.923
Job Performance	0.709	0.538	0.71	0.280	0.610
Work from Home	0.804	0.555	0.80	0.112	0.820

Source: Author (2020)

Barlett's Test of Sphericity and Kaiser-Meyer-Olkin (KMO) method (Coakes & Steed, 2009) were used to perform the Explanatory Factor Analysis (EFA). In order to examine how well the test measures what needs to be measured, data needs to be tested for construct validity. The result shows a KMO value of 0.830 and all standardized factor loadings are above 0.5. These results indicate that data construct validity has been achieved. The average variance extracted (AVE) of each variable is above 0.5 which becomes the minimum requirement for having convergent validity (MacKenzie et al., 2011).

Table 4. Discriminant Validity

Construct	1	2	3	4	5
Job Satisfaction	**0.818**				
Work Environment	0.261	**0.782**			
Work Motivation	0.081	0.178	**0.716**		
Job Performance	0.529	0.320	0.240	**0.662**	
Work from Home	0.335	0.306	0.323	0.309	**0.675**

Source: Author (2020)

The diagonal values in the table above represent the square root of the AVE. All construct correlations are lower than the square root of AVE values, therefore discriminant validity is also confirmed. Meanwhile, all composite reliability scores and Cronbach's Alpha values of each variable exceed 0.7 which indicates that the data has passed the reliability test according to Hair et al. (2010). Therefore, it can be concluded that the measurement model and data have passed validity and reliability tests.

The next output of confirmatory factory analysis is Goodness-of-fit indices. Goodness-of-fit measurement aims to see how fit the proposed model is to answer the research questions and it was set as a requirement before doing path analysis. The model was proven fit according to the requirement of Hair et al. (2010) as follows:

Table 5. Model Fit Evaluation

Model Fit Index	Recommended Value	Analysis Result	Decision
CMIN/DF	4.00 or below	2.00	Passed
RMSEA	0.07 or below	0.05	Passed
CFI	0.90 or above	0.94	Passed
GFI	0.90 or above	0.91	Passed
TLI	0.90 or above	0.93	Passed
IFI	0.90 or above	0.94	Passed

Source: Author (2020)

After the model passed confirmatory factor analysis, path analysis was executed to gather information from the collected data. The table below presents the results of path analysis, the final step in structural equation modelling.

Result

Descriptive Statistics

Table 6. Descriptive Statistics

Variable	Mean	S.D.	α	1	2	3	4
Work Motivation	3.36	0.64	0.88	1			
Job Satisfaction	3.75	0.72	0.82	.101	1		
Work from Home	3.70	0.58	0.80	.307**	.319**	1	
Work Environment	3.78	0.78	0.87	.152**	.267**	.253**	1
Job Performance	3.77	0.73	0.71	.200**	.411**	.226**	.239**

Source: Author (2020)

The table above presents descriptive statistics of collected data from all respondents. The mean for each question is around 3 which indicates that there were equally respondents who agree and disagree with the statement, including those respondents who prefer to remain neutral. The data was collected from 316 respondents and each mean is higher than its standard deviation, indicating that there are no outliers in the data.

Table 7. Background of Respondent

Gender	%	Age	%	Education	%	Occupation	%
Male	40.5	17-25	26.3	High school/below	9.2	Marketing	32.6
Female	59.5	26-33	27.2	Diploma	4.4	HR	42.4
		34-42	19.3	Bachelor	70.6	IT	7.6
		43-50	18.7	Masters/Doctorate	15.8	Design	0.3
		51-58	6			Teacher	3.2
		>58	2.5			Others	13.9
Total	100		100		100		100

Source: Author (2020)

The table above explains the background of respondents in more detail in order to provide information about the gender, age, highest level of education and occupation of all respondents who participated in this research. The proportion of male to female respondents is almost equal. Furthermore, it can be seen from the table below that there are more young respondents than old ones. This is because younger people are more familiar with technology in Indonesia. As per education level, 70.6% of respondents hold a bachelor's degree. As for occupations, most of the respondents work in marketing or human resources, followed by information technology, design or creative, teachers and others.

Hypothesis Testing

Table 8 indicates that seven hypothesis tests resulted in significant and positive effects; the significance can be seen from both the critical ratio (CR) and P value. When the critical ratio or t value > 1.96 and P

value < 0.05, the effect is significant. P value *** means that its significance equals P < 0.001. The further explanation of each path analysis can be found in the discussion section below.

Table 8. Path Analysis Result

Path	Estimate	S.E.	C.R.	P
1. Effect of work from home on work environment	.400	.090	4.428	***
2. Effect of work from home on work motivation	.260	.059	4.426	***
3. Effect of work from home on job satisfaction	.401	.100	4.026	***
4. Effect of work environment on job satisfaction	.187	.070	2.665	.008
5. Effect of work motivation on job satisfaction	-.072	.108	-.664	.507
6. Effect of work environment on job performance	.121	.061	1.978	.048
7. Effect of job satisfaction on job performance	.333	.061	5.428	***
8. Effect of work motivation on job performance	.203	.096	2.119	.034
9. Effect of work from home on job performance	.056	.086	.649	.517

Source: Author (2020)

Table 9. Mediation Analysis Result

Model	CMIN/DF	RMSEA	CFI	GFI	TLI	IFI
Path 1: Work Environment mediates Work from Home and Job Performance						
1. Partial Mediation Model	2.00	0.05	0.94	0.91	0.93	0.94
2. Direct Model	2.13	0.06	0.94	0.90	0.91	0.92
3. Full Mediation Model	2.00	0.05	0.94	0.91	0.93	0.94
Path 2: Job Satisfaction mediates Work from Home and Job Performance						
1. Partial Mediation Model	2.00	0.05	0.94	0.91	0.93	0.94
2. Direct Model	2.12	0.05	0.90	0.90	0.92	0.91
3. Full Mediation Model	2.00	0.05	0.94	0.91	0.93	0.94
Path 3: Work Motivation mediates Work from Home and Job Performance						
1. Partial Mediation Model	2.00	0.05	0.94	0.91	0.93	0.94
2. Direct Model	2.50	0.07	0.92	0.89	0.92	0.93
3. Full Mediation Model	2.00	0.05	0.94	0.91	0.93	0.94
Path 4: Job Satisfaction mediates Work Environment and Job Performance						
1. Partial Mediation Model	2.00	0.05	0.94	0.91	0.93	0.94
2. Direct Model	2.01	0.05	0.93	0.91	0.93	0.93
3. Full Mediation Model	2.32	0.06	0.93	0.90	0.92	0.92
Path 5: Job Satisfaction mediates Work Motivation and Job Performance						
1. Partial Mediation Model	2.00	0.05	0.94	0.91	0.93	0.94
2. Direct Model	2.43	0.07	0.94	0.90	0.93	0.94
3. Full Mediation Model	2.00	0.05	0.94	0.91	0.93	0.94

Source: Author (2020)

In order to test the mediation effect between variables, this research employed a sequential chi-square difference test (Anderson & Gerbing, 1988). The mediator role was assessed by comparing three models that were comprised in this study. Model 1, i.e. partial mediation model, is a baseline model of how all paths exist. Model 2, i.e. direct model, means there is no mediation effect when the path between mediating and independent variables was deleted. Model 3, i.e. full mediation model, implies

a full mediation occurs when the direct path between dependent and independent variables was deleted. Table 8 below explained that for paths 1, 2, 3 and 5, the chi-square value between model 1 and 2 is significant. The Principle of parsimony suggests that model 3 will fit the best for paths 1, 2, 3 and 5. It indicates that full mediation exists in those paths whereas for path 4, the chi-square value between model 1 and 3 is significant. Therefore, model 2 is accepted and indicates that there is no mediation effect in path 4.

Discussion

The effect of Work from Home on Work Environment

The analysis produced results that work-from-home significantly and positively affected work environment with a p-value of 0.001 < 0.05 and a critical ratio of 4.428 > 1.96. The positive and significant relationship indicates that by working from home, employees find a better work environment. Therefore, one way to improve the work environment is to promote work-from-home policies. This finding is in line with previous studies which confirmed a strong correlation between the two variables. It indicates that employees who work from home feel more comfortable with their new work environment. They can be with their family while working and eliminate the cost of commuting. The opportunity to be with their family is precious, especially for those busy workers who reside in the capital city. It creates a feeling that they work in a customized work environment that is adjustable to their own personal taste and way of living.

The effect of Work from Home on Job Satisfaction

The analysis produced results demonstrating that work-from-home significantly and positively affected job satisfaction with a p-value of 0.001 < 0.05 and critical ratio of 4.026 > 1.96. The positive and significant relationship indicates that by working from home, employees feel more satisfied. Therefore, to improve employee satisfaction it is important for policymakers to promote work-from-home. This finding is in line with previous studies which confirmed a strong correlation between the two variables. Working from home makes employees feel satisfied. The development of technology adoption in today's workplace proves that the internet has rendered distance no longer a barrier to good supervision and recognition. Communication is clear and easy, especially because there are many mobile applications and software that can be utilized for such purpose.

The effect of Work from Home on Work Motivation

The analysis produced results demonstrating that work-from-home significantly and positively affected work motivation with P value of 0.001 < 0.05 and critical ratio of 4.426 > 1.96. The positive and significant relationship indicates that by working from home, employees work motivation increases. Therefore, to increase work motivation it is important for policy makers to promote work-from-home. This finding is in line with previous research which confirmed a strong correlation between the two variables.

The effect of Work from Home on Job Performance

The analysis produced results demonstrating that work-from-home did not significantly and positively affect job performance with a p-value of 0.517 > 0.05 and critical ratio of 0.649 < 1.96. The non-significant relationship indicates that working from home does not necessarily increase or decrease job

performance of employees. Therefore, promoting a work-from-home policy is not the right choice to increase the job performance of employees. This finding is not in line with previous studies which confirmed a strong correlation between the two variables. It proves that the relationship between work-from-home and job performance is not direct; workers need to achieve a certain level of job satisfaction first before their job performance increases.

The effect of Work Environment on Job Satisfaction

The analysis produced results demonstrating that work environment significantly and positively affected job satisfaction with a p-value of 0.008 < 0.05 and critical ratio of 2.665 > 1.96. The positive and significant relationship indicates that an improved work environment results in higher job satisfaction. Therefore, to increase employees' job satisfaction it is important for policymakers to improve work environments. This finding is in line with previous studies which confirmed a strong correlation between the two variables.

The effect of Work Motivation on Job Satisfaction

The analysis produced results demonstrating that work motivation did not significantly and positively affect job satisfaction with a p-value of 0.507 > 0.05 and critical ratio of -0.664 < 1.96. The non-significant relationship indicates that increasing work motivation does not necessarily increase or decrease job satisfaction. Therefore, company's efforts to increase work motivation is not the right strategy to increase job satisfaction. This finding is not in line with previous studies which confirmed a strong correlation between the two variables. Further investigation is required to explain this result; however, the author believes that in the midst of the coronavirus pandemic, employees have put aside their original motivation and feel grateful that they can still perform their job safely. Therefore, they feel satisfied.

The effect of Work Environment on Job Performance

The analysis produced results demonstrating that work environment significantly and positively affects job performance with a p-value of 0.048 < 0.05 and critical ratio of 1.978 > 1.96. The positive and significant relationship indicates that improving the work environment will help employees to increase their job performance. Therefore, to increase employees' job performance it is important for policymakers to improve work environments. This finding is in line with previous studies which confirmed a strong correlation between the two variables.

The effect of Job Satisfaction on Job Performance

The analysis produced results demonstrating that job satisfaction significantly and positively affects job performance with a p-value of 0.001 < 0.05 and critical ratio of 5.428 > 1.96. The positive and significant relationship indicates that increasing employees' job satisfaction will lead to better performance. Therefore, to increase employees' job performance it is important for policymakers to improve job satisfaction. This finding is in line with previous studies which confirmed a strong correlation between the two variables.

The effect of Work Motivation on Job Performance

The analysis produced results demonstrating that work motivation significantly and positively affects job performance with a p-value of 0.034 < 0.05 and critical ratio of 2.119 > 1.96. The positive and

significant relationship indicates that increasing work motivation will lead to an increase in job performance. Therefore, to increase job performance it is important for policymakers to increase employees' work motivation. This finding is in line with previous studies which confirmed a strong correlation between the two variables.

Work Environment mediates Work from Home and Job Performance

The analysis produced results demonstrating that the chi-square value between model 1 and model 2 is significant. Therefore, model 3 is accepted, indicating that work environment fully mediates the effect of work from home on job performance. It is important to consider the appropriateness of the employees' work environment at home when employers and other stakeholders pursue working-from-home policies. This finding is in line with previous studies which confirmed a strong mediation effect from work environment on the relationship between work from home and job performance.

Job Satisfaction mediates Work from Home and Job Performance

The analysis produced results demonstrating that the chi-square value between model 1 and model 2 is significant. Therefore, model 3 is accepted, indicating that job satisfaction fully mediates the effect of work from home on job performance. It is important to consider job satisfaction when employers and other stakeholders want to increase job performance by proposing work-from-home because job satisfaction is a prerequisite for increasing job performance. This finding is in line with previous studies which confirmed a strong mediation effect from job satisfaction on the relationship between work from home and job performance.

Work Motivation mediates Work from Home and Job Performance

The analysis produced results demonstrating that the chi-square value between model 1 and model 2 is significant. Therefore, model 3 is accepted, indicating that work motivation fully mediates the effect of work from home on job performance. It is important to consider work motivation when employers and other stakeholders want to increase job performance by proposing work-from-home. This finding is in line with previous studies which confirmed a strong mediation effect from work motivation on the relationship between work from home and job performance.

Job Satisfaction mediates Work Environment and Job Performance

The analysis produced results demonstrating that the chi-square value between model 1 and model 3 is significant. Therefore, model 2 is accepted, indicating that job satisfaction does not mediate the effect of work environment on job performance. This finding suggests that work environment can lead to increased job performance directly without job satisfaction. This finding is not in line with previous studies which confirmed a strong mediation effect from job satisfaction on the relationship between work environment and job performance. Therefore, further research is required to reconfirm this result. A well-designed work environment may increase output and productivity even if employees don't feel satisfied with their work. There could be other factors that motivate them to work regardless of their job satisfaction.

Job Satisfaction mediates Work Motivation and Job Performance

The analysis produced results demonstrating that the chi-square value between model 1 and model 2 is significant. Therefore, model 3 is accepted, indicating that job satisfaction fully mediates the effect

of work motivation on job performance. It is important to consider job satisfaction when employers and other stakeholders want to increase job performance by increasing work motivation. This finding is in line with previous studies which confirmed a strong mediation effect from job satisfaction on the relationship between work motivation and job performance.

Conclusion and Recommendation

This study has made a decisive contribution to the research into the implications of working from home on job performance. While previous research had been inconclusive, the current study demonstrated that working from home increasing employees' enjoyment, job satisfaction and motivation. Job satisfaction then becomes an important determinant of job performance, that is employees must be satisfied first before they perform better to achieve organizational goals. In the context of COVID-19, while companies may have to deal with a number of difficulties such as supervision and communication, work-from-home became the only option. Companies can adapt to this situation by assessing their employees' performance on progress made on tasks instead of their visible presence and availability for communication. It can also enhance employees' individual skills related to their job description. It is recommended that policymakers such as companies and governments promote and regulate any work-from-home program to benefit not only employees, but also to companies. Since the internet is a primary need in the context of such a program, the internet industry should be given incentives, so it becomes more affordable and able to reach rural areas. While the validity of this research is constrained in scope to how benefits of a work-from-home scheme manifested in Indonesia, there may be implications for other countries that are affected by COVID-19.

Research Limitations

This study has a limited scope of research. Indonesia was the only country involved in this research due to the author's limited resources. The collected data was analysed without using control variables such as age, culture, technology adoption, education, income, industry and others that may influence the result of the analysis. Further investigation of how differences in age, culture, education, income, industry and other factors may affect the job performance of people who work from home may provide further insights into the phenomenon. Further studies could also widen the scope of research by collecting data from other countries, because the effect of COVID-19 on work-from-home policy implementation does not only apply to Indonesia.

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