

# Evaluating the Impact of “Work From Home Policy” on Job Performance (Study Case in Indonesia)

Komunitas: International Journal of Indonesian Society and Culture  
13(1) (2021): 39-50  
DOI:10.15294/komunitas.v13i1.28436  
© 2021 Semarang State University, Indonesia  
p-ISSN 2086 - 5465 | e-ISSN 2460-7320  
<http://journal.unnes.ac.id/nju/index.php/komunitas>

UNNES JOURNALS

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Received: January 12, 2021; Accepted: March 1, 2021; Published: March 30, 2021

## Abstract

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 in Indonesia. A total of 713 valid respondents who answered the questionnaire came from employees in Indonesia, which were obtained from online social media. The data were tested for validity and reliability with SPSS 25.0 software, then the model was analyzed using Structural Equation Model (SEM) using AMOS 23.0 software. Based on statistical data processing it is known that working from home employees experience greater work motivation so that it can improve job performance, but it has no relationship with job satisfaction and work environment. 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 Work from Home policy. The original contribution of this study lies within its questionnaire that has been attuned to changes caused by Work from Home policy. This paper offers an important contribution on how the perception of work from home implication to job performance in human resources management academic.

## Keywords

work from home; job performance; work motivation; job satisfaction; work environment

## INTRODUCTION

Innovations in telecommunications technology increase the possibilities of working from the home. Implications of work-at-home arrangements for the individual's quality of working life are discussed. Included are discussions on several major aspects of the work experience relevant to quality of working life, analyses of the differences along these aspects between working at home and working at a normal workplace, and speculation about the possible consequences for the individual of the transfer of jobs from

employers' premises to 'employees' homes (Shamir, B., & Salomon, I., 1985). 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. Home-based work also allows employees

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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. 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). 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. 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). 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. 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.

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 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. 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 work performance and answer how it affects employee performance by using the mediating variables of work environment, job satisfaction and work motivation. This new model will make a significant contribution to the knowledge of business people, especially the Indonesian government, who need to measure the work from home policy. It can also serve as fundamental input for governments and companies to decide whether to assess work from home policies or look for other alternatives. The original contribution of this study lies in its questionnaire which has been adapted to changes caused by the Work

from Home Policy, as well as in data processing methods.

**Relationships among Research Concepts**

Based on these previous studies, the researcher synthesized the similarities and differences in variables between previous studies. The aim of this research is analyzing the influence of work from home on work environment, job satisfaction, work motivation, and their implication to job performance. Table 1 show adaptation of the relationship between variables based on previous research.

**Job Performance Theory**

Javed, Baloch, and Hassan (2014) defined job performance as generally referring to whether a worker carries out his/her duty well or not. Aguinis (2009) also indicated

**Table 1.** Adaptation of variables from previous research

Independent Variable	Dependent Variable	Researchers
Work from Home	→ Work Environment	Gajendran & Harrison, (2007) Easton, S., & Van Laar, D. (2018) Baltes et al., (1999) Allen, Golden & Shockley (2015) Schall, M. A. (2019)
Work from Home	→ Job Satisfaction	Dalkrani, M., & Dimitriadis, E. (2018) Madell (2019) Virick et al., (2010) Akhmetshin et al., (2018)
Work from Home	→ Work Motivation	Olafsen, A. H., et al., (2018) Shockley & Allen, (2012) Zhu, Y. Q. et al., (2018) Zhang, (2016)
Work Environment	→ Job Performance	Javed, A., et al., (2019) Jacobo, B., (2020) Belzunegui-Eraso, A., (2020) Loan, L. (2020).
Job Satisfaction	→ Job Performance	Guzmán, S. A. et al., (2018) Gul, H., et al., (2018) Khan et al., (2016) Al-Mansoori, S. S. (2018)
Work Motivation	→ Job Performance	Breaugh, J., Ritz, A., & Alfes, K. (2018) Steinbauer, R. Et al., (2018) Riyadi, S. (2020)

that "the definition of performance does not include the results of an employee's behavior, but only the behaviors themselves". Performance refers to the behavior or actions of employees, not the production or the outcome of their work. In another study, performance is considered as a function of an individual ability/skill/effort in a given situation (Lawler & Porter, 1967). Job performance also is "the total expected value to the organization of discrete behavioral episodes that an individual carries out over a standard period" (Motowidlo, S. J., & Kell, H. J., 2012). Task performance and contextual performance are two components to measure employee job performance (Kahya, 2009). In terms of the hospitality industry, the job performance of employees is categorized as when workers apply their specific knowledge and skills to accurately conduct their tasks according to the standard service procedures of accommodation establishments. Employees perform various tasks within the organization, primarily providing guests with functions such as accommodation services, catering services and other additional services and jobs related to features such as finance, accounting, marketing, sales and personnel. All these activities performed by the staff are related to the organization's goals.

#### *Work from Home à 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; Allen, Golden & Shockley, 2015). Their personal needs and taste can be fulfilled because they can customize their own working area according to their personality (Gajendran & Harrison, 2007; Easton, S., & Van Laar, D., 2018).

#### *Work from Home à 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 (Schall, M. A., 2019; Dalkrani, M., & Dimitriadis, E., 2018). 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 amount 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; Madell, 2019).

*Work from Home à 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 location 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 fulfillment of personal life (Akhmetshin et al., 2018; Olafsen, A. H., et al., 2018; Shockley & Allen, 2012; Zhu, Y. Q. et al., (2018).

#### *Work Environment à Job Performance*

The positive influence of work environment on job performance is corroborated by previous studies (Javed, A., 2019; Zhang, 2016; Jacobo, B., 2020; Belzunegui-Eraso, A., 2020). An enjoyable, healthy, safe and optimal work environment can help employees to produce better performance (Belzunegui-Eraso, A., (2020). It is important for compa-

nies to enhance their work environment in order to achieve organizational goals. Javed, A., (2019) 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.

*Job Satisfaction à Job Performance*

The argument that job satisfaction highly influences employee performance has been confirmed by previous research (Loan, L., 2020; Guzmán, S. A. et al., 2018; Gul, H., et al., 2018; 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.

*Work Motivation à Job Performance*

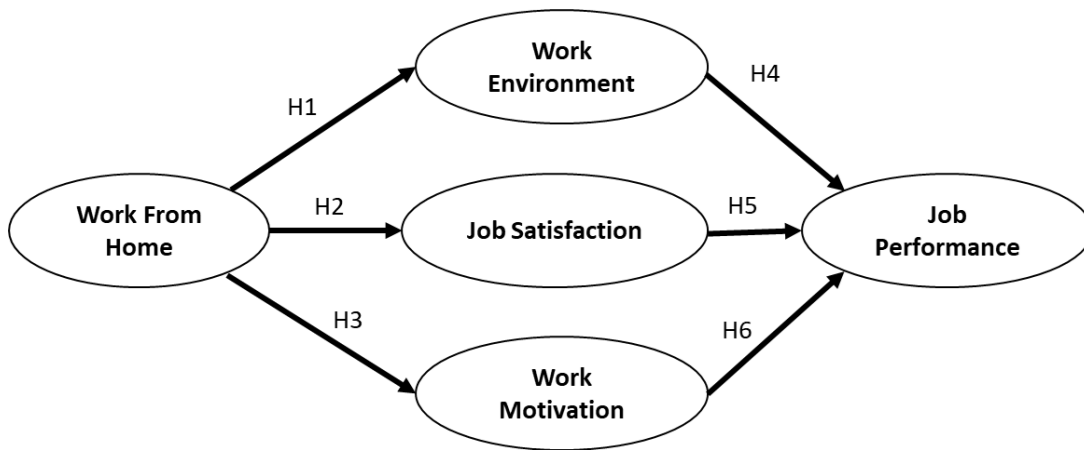
It is an effective choice to enhance employees' performance by increasing their mo-

tivation with respect to both personal and organizational goals (Steinbauer, R. Et al., 2018). 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 (Breugh, J., 2018). The positive contribution of work motivation to job performance has also been suggested by Al-Mansoori, S. S. (2018) and Riyadi, S. (2020), 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.

*Research Hypothesis*

In line with the results of previous studies, this research posits the following hypotheses:

Based on the literature review above,



**Figure 1.** Hypothetical Model

the following hypotheses are proposed:

- Hypothesis (H1). Work from home has a positive and significant effect on Work Environment
- Hypothesis (H2). Work from home has a positive and significant effect on Job Satisfaction
- Hypothesis (H3). Work from home has a positive and significant effect on Work Motivation

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

- Hypothesis (H4). Work Environment has a positive and significant effect on Job Performance
- Hypothesis (H5). Job Satisfaction has a positive and significant effect on Job Performance
- Hypothesis (H6). Work Motivation has a positive and significant effect on Job Performance

- Hypothesis (H6).  
Work Motivation has a positive and significant effect on Job Performance

veral tests were performed to establish Content Validity, Construct Validity and Reliability of the research instrument.

## METHOD

For this study, the instrument’s development was based on an extensive literature review and all the items which have been used in previous relevant studies were adopted. Se-

### Questionnaires

To measure the variables in this study, indicators were selected from previous studies, which were then adapted to suit them, which is shown in Table 2.

**Table 2.** Measurement Scales Questionnaires

Work from Home (WFH)	Work Environment (WE)	Job Satisfaction (JS)	Work Motivation (WM)	Job Performance (JP)
Easton, S., et al., (2018, p.49)	Dalkrani, M., et al., (2018, p.19)	Easton, S., et al., (2018, p.49)	Olafsen, A. H. et al., (2018, p.183)	Chong, S. C. et al., (2020, p.73-74)
My current working hours / patterns suit my personal circumstances	The company has a good work-force.	WE1 I have a clear set of goals and aims to enable me to do my job from home	JS1	The tasks I have to do at work are in line with what I really want to do at home
My line manager actively promotes flexible working hours / patterns	The business that I work is known as a good employer locally	WE2 I have the opportunity to use my abilities at work from home	JS2	I do in my work from home is exciting
My employer provides adequate facilities and flexibility for me to fit work in around my family life	The working conditions are satisfactory	WE3 I am encouraged to develop new skill	JS3	I really master my tasks at my job, doing from home
I feel fairly satisfied with my present job during work from home	Communication in the business that I work ranges to satisfactory levels	WE4 I am satisfied with the career opportunities available for me here	JS4	I believe in my ability to handle most upsetting problems even work from home
				Finding improved ways to do things, during work from home
				I finish my job responsibilities well without any significant problems even if I work from home
				Working to implement new ideas in the workplace, during work from home

As a measuring tool for the variables above, an identification code is made for each indicator, and it is measured by a 6-point Likert scale, namely:

- 1 = Strongly Disagree
- 2 = Disagree
- 3 = Slightly Disagree
- 4 = Slightly Agree
- 5 = Agree
- 6 = Strongly Agree

### Data Analysis

A total of 713 participants provided feedback on the online questionnaire, the characteristics of the respondents are shown in the Table 3.

**Table 3.** Respondent Characteristics

Item	Description	Frequency	Percent (%)
Current Job	Private employees	409	57.4
	PNS / BUMN employees / TNI / Polri	156	21.9
	Teacher / Lecturer	109	15.3
	Marketing Project Based	23	3.2
	Others	16	2.2
	Total	713	100
Age	26 - 35 Years	219	30.7
	46 - 55 Years	201	28.2
	36 - 45 Years	151	21.2
	18 - 25 Years	113	15.8
	> 55 Years	29	4.1
	Total	713	100.0
Gender	Male	476	66.8
	Female	237	33.2
	Total	713	100.0
Last Education	Diploma / Bachelor degree	453	63.5
	Masters / Doctoral	171	24.0
	Senior High School	85	11.9
	Junior High School	4	0.6
	Total	713	100.0
Current Location	DKI Jakarta	225	31.6
	Jawa Timur	136	19.1
	Jawa Barat/ Banten	135	18.9
	Jawa Tengah/ Yogyakarta	97	13.6
	Sumatera	64	9.0
	Bali/Kalimantan/Sulawesi/Papua/Others	56	7.9
	Total	713	100.0

**RESULTS**

To ensure that the questionnaire was applied to this study, reliability analysis and validity analysis were conducted using SPSS 25.0. Then the methods of structural equation modeling (SEM) were chosen to analyze the data. The type of data analysis has been widely applied in various fields (Su and Yang, 2010). Compared with other methods, the greatest advantage of SEM is the ability to simultaneously measure the relationship between potential variables in the case of errors (Hair, 2006). Thus, the hypothesis of the relationships between the six variables was verified by using the computer program AMOS 23.0 to estimate path coefficients.

*Validity & Reliability Analysis*

Statistical Package for the Social Sciences (SPSS) software was used to find Cronbach's Alpha reliability analysis and factor analysis. A test of Convergent Validity: Convergent Validity is believed to be acceptable when all item loadings are more than 0,5 (Wixom and Watson, 2001). The reliability of the all constructs is satisfied when Cronbach's 'α' coefficient is over 0.7 for all the constructs (Nunnally, 1978). Table 4 presents Validity & Reliability values and fit indices for the constructs of the model.

As shown in the table 4 all the indices are greater than 0,7 except from the index of work motivation which is marginally accepted, and all items that have load greater than 0,5. Finally, a validity and reliability test on all items were declared valid and reliable.

**Table 4.** Result of Validity & Reliability Analysis

No	Variable	Indicator	Validity >0.5		Reliability > 0.7	
			Value	Remarks	Cronbach's Alpha	Remarks
1	Work from Home	WFH1	0.670	Valid	0.701	Reliable
2		WFH2	0.764	Valid		
3		WFH3	0.747	Valid		
4		WFH4	0.725	Valid		
5	Work Environment	WE1	0.738	Valid	0.726	Reliable
6		WE2	0.743	Valid		
7		WE3	0.773	Valid		
8		WE4	0.710	Valid		
9	Job Satisfaction	JS1	0.751	Valid	0.718	Reliable
10		JS2	0.803	Valid		
11		JS3	0.751	Valid		
12		JS4	0.637	Valid		
13	Work Motivation	WM1	0.782	Valid	0.698	Reliable
14		WM2	0.808	Valid		
15		WM3	0.778	Valid		
16	Job Performance	JP1	0.775	Valid	0.782	Reliable
17		JP2	0.807	Valid		
18		JP3	0.776	Valid		
19		JP4	0.752	Valid		

#### Confirmatory Factor Analysis

CFA is a measurement model part of SEM and is mainly used to test whether the structure of the scale fits the actual data (Spicer, 2005). Initially, the measurement model in which the six variables were connected with double-headed arrows was completed used AMOS 23.0. However, Table 5 shows that the fit indexes of the model were unreasonable. Therefore, some items with low factor loadings were deleted (Wang, J., et al, 2019).

To get the fit model, the initial indicator is 19 items, deleted 7 items (WFH2, WE1, WE2, WM1, JS2, JS4 dan JP4). In this study, 12 indicators were found for the fit model, shown in Figure 2.

Then, the CFA model with 12 items was retested and yielded a suitable fit ( $P \geq 0.050$ ). Table 6 describes the CFA model was adjusted to a fit model

**Table 5.** CFA - Initial Model (19 Items)

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	67	434.702	142	.000	3.061
Saturated model	209	.000	0		
Independence model	38	4014.428	171	.000	23.476

**Table 6.** CFA - Model Fit (12 Items)

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	46	60.407	44	.051	1.373
Saturated model	90	.000	0		
Independence model	24	2012.489	66	.000	30.492



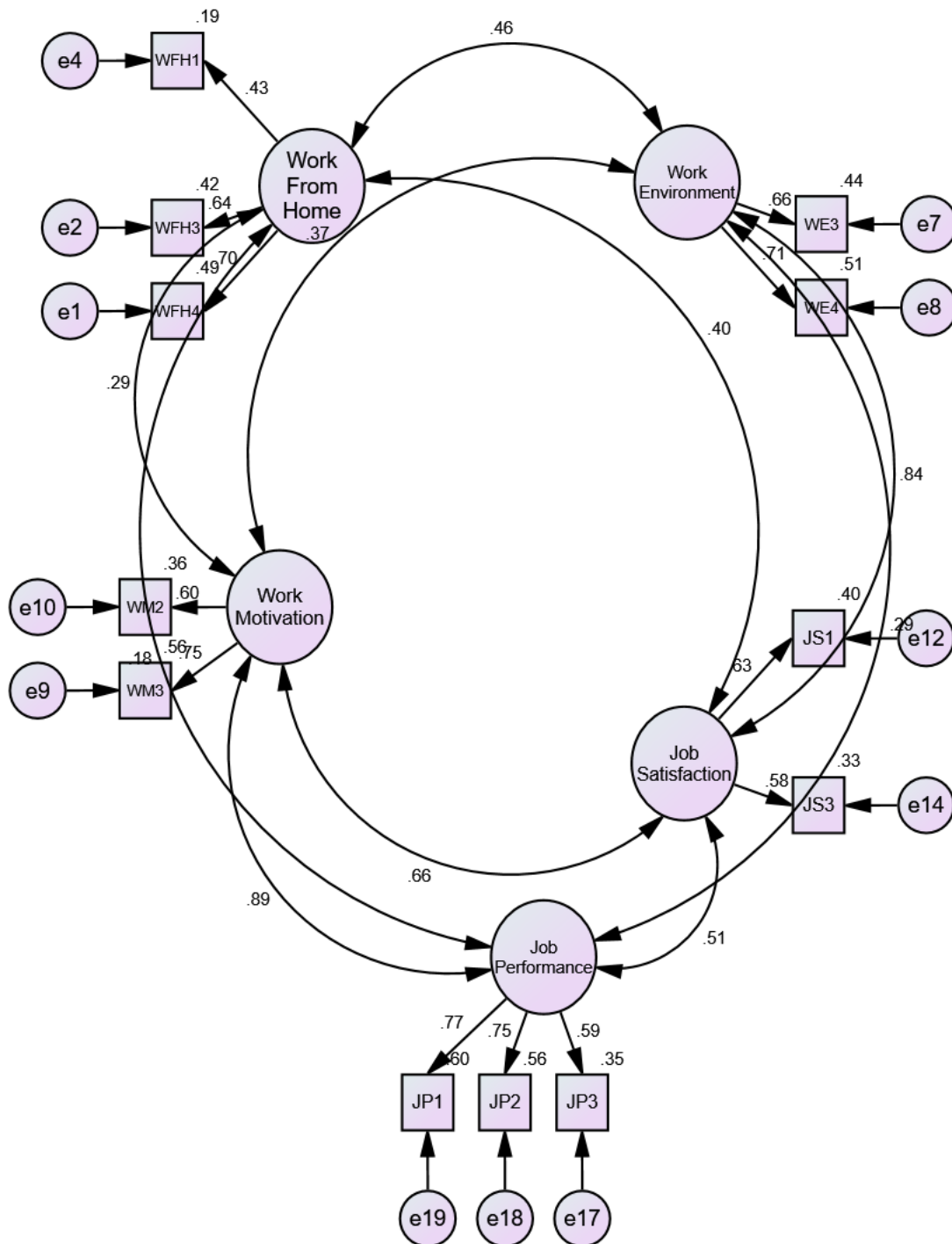


Figure 2. The goodness of Fit CFA Model

*SEM and Hypothesis Testing*

Based on the previous hypothesis, the initial structural model with a null correlation among errors was tested using maximum likelihood (ML). The fit index of the final structural model satisfied conformity ( $CR \geq 1.98$ ), Figure 3 shows the standardized path

coefficients of the final structural model, which was used to verify the previous hypothesis.

Finally, table 7 presents the standardized Critical Ratio of the variables from which we can conclude that all Independent Variables positively effect on the dependent variable ( $CR > 1.98$ ).

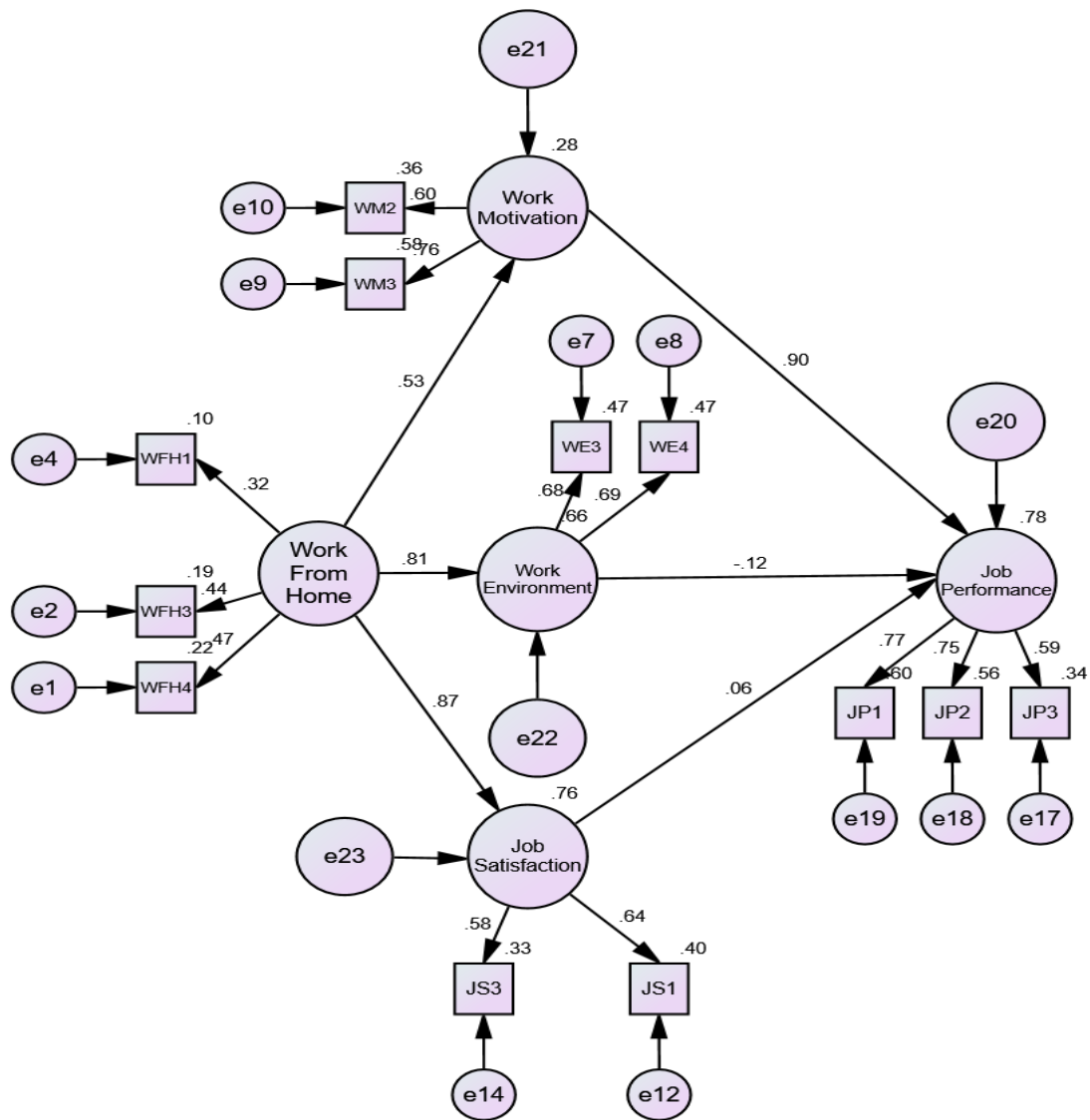


Figure 3. Standardized path coefficients of the final structural model

Table 7. Hypothesis Test Result - Critical Ratio (CR)

	Hypothesis	Estimate	S.E.	C.R.	P	Result
Work_Environment	<- Work_From_Home	1.188	.139	8.517	***	Accepted
Work_Motivation	<- Work_From_Home	.880	.118	7.485	***	Accepted
Job_Satisfaction	<- Work_From_Home	1.237	.145	8.549	***	Accepted
Job_Performance	<- Work_Motivation	.928	.088	10.517	***	Accepted
Job_Performance	<- Work_Environment	-.144	.101	-1.435	.151	Rejected
Job_Performance	<- Job_Satisfaction	.073	.113	.645	.519	Rejected

**H1** There is a positive relationship among work from home and work environment (CR = 8.517).

**H2** There is a positive relationship among work from home and work motivation (CR = 7.485).

**H3** There is a positive relationship among

work from home and job satisfaction (CR = 8.549).

**H4** There is a positive relationship work motivation home and job performance. (CR = 10.517).

**H5** There is not supported relationship work environment and job performance. (CR

= -1.435).

**H6** There is not supported relationship job satisfaction and job performance. (CR = 0.645).

## DISCUSSION & LIMITATION

The main objective of this study is to analyze the effect of working from home on work performance in Indonesia. The results of the analysis show that working from home greatly affects the work environment, work motivation and job satisfaction. Work motivation positively affects job performance when working from home. However, work environment and job satisfaction non-significance to job performance when working from home. Finally, this study prove the positive relationship of “work from home” with the “work motivation” and positive implication to “job performance”. This study is focused on an online random survey of employees in Indonesia, so that future researchers can investigate by conducting interviews with companies that implement a permanent work from home policy. The recording and recognition of employee proposals for being more satisfied is another future subject of research arising from this study.

## CONCLUSION

Findings of the study reveal that working from home in Indonesia able to improve job performance. This policy able to continued into a permanent policy, it is very positive in contributing to job performance. However, the work environment will be improved, such as infrastructure and facilities needed for employees related to work from home. This policy study will increasingly gain interest from sociologists to reveal insights sociological contribution to the improvement of job performance during a pandemic.

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