

EFFECT OF WFH IMPLEMENTATION ON EMPLOYEE PERFORMANCE; WITH WORK MOTIVATION AND JOB SATISFACTION AS MEDIATION VARIABLES AND INFORMATION TECHNOLOGY CAPABILITY AS MODERATING VARIABLES (Study on Administrative Employees of Universitas Brawijaya)

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ABSTRACT

The coronavirus disease (COVID-19) pandemic, which spread from March 2020 to April 2022, is very concerning. The government is making various efforts to reduce the spread of the virus, including implementing "social distancing" by limiting visits to crowded places and direct contact with other people. One of the methods used to implement social distancing is through working from home or "Work From Home" (WFH). This study aims to empirically test and prove the effect of WFH on employee performance where the variables of employee motivation and job satisfaction act as mediating variables and information technology capability variables as moderating variables. This research is a quantitative study with individual analysis units on 221 administrative staff from each faculty at Universitas Brawijaya through distributing questionnaires. The number of returned questionnaires was 95%. The data were analyzed using Structural Equation Modeling (SEM) based on Partial Least Square (PLS). The results of the study found that: WFH has no direct effect on employee performance; WFH affects employee performance as Employee Job Satisfaction is mediation; Employee Motivation does not mediate the effect of WFH on Employee Performance; also IT Capability does not moderate the effect of WFH on Employee Performance.

Keywords: *work from home, employee performance, employee motivation, employee job satisfaction, it capability*

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INTRODUCTION

The coronavirus disease (COVID-19) pandemic, which spread from March 2020 to April 2022, is very concerning. The government is making various efforts to reduce the spread of the virus, including implementing "social distancing" by limiting visits to crowded places and direct contact with other people. One of the methods used to implement social distancing is through working from home or "Work From Home" (WFH). Work from home or teleworking during the Covid-19 crisis has been used by companies to ensure the safety of their employees and to provide continuity of economic activities (Belzunegui-Eraso & Erro-Garcés, 2020).

The concept of working from home is not new in the workplace. Work from home or better known as telecommuting or teleworking was first introduced by Niles JM in 1973 (Nilles, 1988). Telecommuting refers to the partial or total substitution of telecommunications, with or without the aid of a computer. Telecommuting includes all substitution of telecommunications and information technology for work. Telework has been defined as a flexible work arrangement in which workers work in locations, away from the head office or production facilities, without personal contact with coworkers, but with the ability to communicate with coworkers using information and communication technologies (Di Martino & Wirth, 1990).

Telework, also known as work from home or mobile working, has attracted renewed attention due to the spread of Computer Information Technology which makes it possible to work wherever possible and practical (Kurland & Bailey, 1999). Telecommuting refers to working at home or at another location of the employee's choosing that is away from the workplace at least 2 days a week on a computer connected to the office (Robbins et al., 2019).

The question is: is it true that WFH practices can fulfill two company goals, namely being able to reduce the spread of Covid-19 and at the same time maintain good employee performance?

From several previous research results related to WFH, it turned out that 2 different results were found. Augustine & Alexander, 2022; Ariska, 2021; Sriyaningsih, G & Said, 2021; (Wirapratama & Dahesihari, 2022) stated that implementing WFH reduced employee performance. The decline in employee performance is caused by 3 reasons:

- There is an uncomfortable working environment at home
- Unstable internet connection
- Quickly feel tired because you have to stare at laptops and cellphones continuously

Meanwhile, some other researchers said different things related to the impact of Covid-19 on employee performance. Arif & Aji, 2022; Decky, 2021; Saroni et al., 2022; EM. Sormin et al., 2021 state that implementing WFH improves employee performance. The increase in employee performance is due to several reasons:

- Pleasant work-at-home environment
- Working time efficiency (commuting to work); and efficiency of transportation costs
- More flexible working time
- More time for family (maintain the balance of time distribution for work and family)

From these two facts, it means that there is a problem with employee performance that is not yet clearly associated with WFH which is also a research gap.

The inconsistent research results mean that it is a research gap. Researchers seek to fill research gaps based on previous studies and theoretical support. Several previous studies ((Martanti et al., 2021); (Sriyaningsih et al., 2022); (Saroni et al., 2022); (Sanrang et al., 2022); Sultan, et.al., 2021; (Fadzilah et al., 2021); (Bawono & Setyadi, 2021) stated that WFH carried out by employees would increase employee motivation and employee job satisfaction. WFH which is reflected in the form of a pleasant work environment at home and also closeness to family, as well as more efficient use of time will motivate employees to work better (in the form of WFH training, awards, and health is maintained) and job satisfaction remains high (communication which remains good, perks). By the theory of employee motivation and the theory of employee job satisfaction.

The theory of motivation from Maslow proposed by (Uysal et al., 2017) follows the plural theory, that is, a person behaves or works because there is an urge to fulfill various needs. Maslow argues, the needs that humans want are tiered. The satisfaction theory was developed and put forward by Frederick Herzberg (Regen et al., 2022). Herzberg distinguished job satisfaction and dissatisfaction and is not a continuous variable. There are two characteristics of work, namely satisfies or motivators (situations that are a source of job satisfaction, namely work that is interesting, full of challenges, there are opportunities for achievement, opportunities to get awards and promotions) and dissatisfies or hygiene factors (situations that

are a source of dissatisfaction, namely salary, supervision, interpersonal relationships, working conditions, and status).

Furthermore, it is said that good employee motivation improves employee performance (Kuswati, 2020); (Bawono & Setyadi, 2021). Other researchers have proven that increasing job satisfaction will also increase employee performance (Sultan et.al, 2021; (Fadzilah et al., 2021). Final (Antoni et al., 2020); (Liao et al., 2020) added that WFH will improve employee performance if it is strengthened by IT mastery capabilities.

Based on support from the 3 research groups and also theoretical support (HRM, employee work motivation theory, employee job satisfaction theory), researchers included 3 new variables with two variable positions, namely employee motivation and employee job satisfaction as mediations for the effect of WFH practices on employee performance, while employees' IT capabilities moderate the effect of WFH practices on employee performance.

The results of the study which stated that WFH affects employee performance increased to be something of interest to researchers, because currently many companies, especially those engaged in services including educational services, are implementing WFH as a way to prevent the spread of Covid-19. For this purpose, Universitas Brawijaya (UB) and its administrative staff are used as research sites based on the following considerations:

1. UB implemented the WFH system during the pandemic
2. UB is one of the biggest universities in Malang City
3. The highest number of administrative staff is in Malang City (Table 1.2)
4. Administrative staff carry out work activities every day regularly
5. From the results of preliminary interviews with the Head of Administration (KTU), 44% of the faculties at UB stated that WFH increased employee performance, while the rest experienced a decline and no significant changes.

Table 1.2 Data on the Number of Employees of several Universities in Malang

University Name	Year	Number of employees	Source
Malang State University	2020	1043	https://um.ac.id/akademik/sarana-umum
Universitas Brawijaya	2022	1440	the data is calculated by the researcher
Malang Muhammadiyah University	2020	660	https://staff-site.umm.ac.id/karyawan/hal/55.html
UIN Maulana Malik Ibrahim Malang	2015	419	https://hk.uin-malang.ac.id/wp-content/uploads/2020/10/Appendix-7.1.1-Strategic-Plan-of-UIN-Maulana-Malik-Ibrahim-Malang-2018.pdf

Source: Processed Data (2022)

Interview results obtained from KTU at UB: 44.44% answered that there was an increase in the performance of administrative employees in the faculty, 33.33% answered that there was

a decrease in employee performance, while 22.22% answered that there was no significant change in employee performance. From the results of these interviews, it can be concluded that there is no clear opinion regarding whether WFH increases, decreases, or does not increase employee performance. Given the fact that the results of previous research and previous interviews about the effect of WFH on employee performance vary, there is still no clear data stating whether WFH affects employee performance positively or negatively and when does it have a positive or negative effect? With this variation in the results.

METHOD

Data collection technique

Questionnaire

According to (Sekaran & Bougie, 2017), the questionnaire is a data collection method, the instrument is called according to the name of the method. The form of the questionnaire sheet can be in the form of some written questions, the purpose of which is to obtain information from the respondent about what he has experienced and knows.

Interview

According to (Sugiyono, 2018), Interviews are used as a data collection technique if the researcher will carry out a preliminary study to find problems that must be studied, and also the researcher wants to know things from respondents that are more in-depth and the number of respondents is small/small.

Characteristics of Respondents

From a total of 221 questionnaires distributed to respondents who were sampled, 200 (91%) questionnaires were retrieved that met the requirements for analysis. Respondents in this study were administrative employees from each faculty at Universitas Brawijaya. Administrative permanent employees here are subordinates to KTU or the Head of Administration which consists: General Affairs, Student Affairs, Personnel, and Finance Sections. Respondent characteristics are intended to provide an overview of the state of the data that has been collected through research questionnaires. Description of the general description of the characteristics of respondents based on gender, age, last education, and years of service of administrative employees of the University of Brawijaya:

Table 5.1 Characteristics of Respondents

Gender		
	Amount	Percentage
Man	87	43.5%
Woman	113	56.5%
Age/Age		
	Amount	Percentage
<25	2	1%
25-39	109	54.5%
40-50	63	31.5%
>51	26	13%

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Total	200	100%
Last education		
	Amount	Percentage
DI/DII/DIII	26	13%
DIV/S1	129	64.5%
S2	16	8%
SMA/equivalent	26	13%
Middle school/equivalent	3	1.5%
Years of service		
	Amount	Percentage
< 5 years	18	9%
5 - 10 years	48	24%
> 10 years	134	67%

Source: Processed data, 2023

The character of the respondents (gender) based on Table 5.1 can be seen that the number of female or female respondents is greater than that of male or male respondents with a percentage of 56.5% while the percentage of males is 43.5%. Based on these data it is known that the majority of administrative employees are women or girls.

Based on Table 5.1 it can be seen that the number of respondents aged 25 to 39 years has the highest percentage, namely 54.5%. The second largest number are those aged 40 to 50 years with a percentage of 31.5%. Age over 51 years has a percentage of 13%. The remaining 1% is under 25 years. Based on these data it is known that the majority of administrative employees are aged 25 to 39 years, which is a high productive age.

From the educational characteristics, it can be seen that the number of respondents with the last Diploma IV or S1 education has the highest percentage, namely 64.5%. For the second highest rank, the last education was Diploma I/II/III and High School/equivalent with a percentage of 13%, and the last education was Masters with 8%. The remaining 1.5% is junior high school/equivalent. Based on these data it is known that the majority of administrative employees are educated at tertiary institutions (85%).

For years of service, the number of respondents with more than 10 years of service has the highest percentage, namely 67%. The second highest order is 5 to 10 years with a percentage of 24%. With less than 5 years of service, the percentage is 9%. Based on these data it is known that the majority of administrative employees at Universitas Brawijaya have worked for more than 10 years, and have become permanent employees.

HYPOTHESIS TESTING

H1: Work From Home Has a significant positive effect on Employee Performance

The first hypothesis tests whether Work From Home has a positive effect on Employee Performance. The test results show that the beta coefficient value of Work From Home on Employee Performance is 0.137 and the t-statistic is 1.958. From these results, it is stated that the t-statistic is not significant. because it is less than 1.96 with a p-value of more than 0.05 so

the first hypothesis is rejected. This proves that Work From Home is proven to be insignificant to Employee Performance through direct influence.

H2. Work From Home has a significant positive effect on Work Motivation

The second hypothesis tests whether Work From Home has a positive effect on Employee Motivation. The test results show that the beta coefficient value of Work From Home on Employee Motivation is 0.544 and the t-statistic is 10.100. From these results, it is stated that the t-statistic is significant. because >1.96 with a p-value <0.05 so the second hypothesis is accepted. This proves that Work From Home is proven to have a significant positive effect on Employee Motivation.

H3. Work From Home has a significant positive effect on Job Satisfaction

The third hypothesis tests whether Work From Home has a positive effect on Employee Job Satisfaction. The test results show that the beta coefficient value of Work From Home on Employee Job Satisfaction is 0.439 and the t-statistic is 5.532. From these results, it is stated that the t-statistic is significant. because >1.96 with a p-value <0.05 so the third hypothesis is accepted. This proves that Work From Home is proven to have a significant positive effect on Employee Job Satisfaction.

H4. Employee Motivation has a significant positive effect on Employee Performance

The fourth hypothesis tests whether Employee Motivation has a positive effect on Employee Performance. The test results show that the beta coefficient value of Employee Motivation on Employee Performance is 0.058 and the t-statistic is 0.583. From these results, it is stated that the t-statistic is not significant. because it is less than 1.96 with a p-value of more than 0.05 so the fourth hypothesis is rejected. This proves that Employee Motivation does not affect on Employee Performance.

Table 5.12. Hypothesis Testing Results

hypothesis	Connection	Path Coefficient	t-statistics	p-values	Information
1	X – Y	0.137	1958	0.050	Not significant
2	X – M1	0.544	10,100	0.000	Significant
3	X – M2	0.439	5,532	0.000	Significant
4	M1 – Y	0.058	0.583	0.560	Not significant
5	M2 – Y	0.284	2,613	0.009	Significant
6	X – Z – Y	-0.051	1.172	0.241	Not significant
7	X – M1 – Y	0.032	0.566	0.572	Not significant
8	X – M2 – Y	0.125	2,503	0.012	Significant

Source: Processed data, 2023

H5. Job satisfaction has a significant positive effect on employee performance

The fifth hypothesis tests whether Employee Job Satisfaction has a positive effect on Employee Performance. The test results show that the beta coefficient value of Employee Job Satisfaction on Employee Performance is 0.284 and the t-statistic is 2.613. From these results, it is stated that the t-statistic is not significant, because > 1.96 with a p-value < 0.05 so the fifth hypothesis is accepted. This proves that Employee Job Satisfaction has a significant positive effect on Employee Performance.

H6. IT Capability moderates the effect of Work From Home on Employee Performance

The sixth hypothesis tests whether IT Capability moderates the effect of Work From Home on Employee Performance. The test results show that the beta coefficient value of IT Capability moderates the effect of Work From Home on Employee Performance at -0.051 and the t-statistic is equal to 1.172. From these results, it is stated that the t-statistic is not significant, because it is less than 1.96 with a p-value of more than 0.05 so the fifth hypothesis is rejected. This proves that IT Capability does not moderate the effect of Work From Home on Employee Performance.

H7. Work Motivation mediates the effect of Work From Home on Employee Performance

From the results of the indirect effect test in Table 5.16, it is known that the effect of Work From Home (X) on Employee Performance (Y) is not mediated by Employee Motivation (M1) and has a significance value of 0.572 which is classified as above 0.051 and a t-statistic of 0.566 (less than 1.96), therefore it can be said that Employee Motivation (M1) does not mediate the effect of Work from Home (X) on Employee Performance (Y), so hypothesis 7 (H7) is rejected. From the direct effect, it is known that Work From Home (X) has an insignificant effect on Employee Performance (Y). So it can be concluded that employee motivation does not mediate the effect of Work From Home on Employee Performance, it has no mediation effect, because the direct effect has an insignificant effect.

H8. Job satisfaction mediates the effect of Work From Home on Employee Performance

From the results of the indirect effect test in Table 5.16, it is known that the effect of Work From Home (X) on Employee Performance (Y) is mediated by Employee Job Satisfaction (M2) which has a significant value of 0.012 which is classified as below 0.051 and a t-statistic of 2.503 (> 1.96), therefore it can be said that Employee Job Satisfaction (M2) mediates the effect of Work from Home (X) on Employee Performance (Y), so hypothesis 8 (H8) is accepted. From the direct effect, it is known that Work From Home (X) has an insignificant effect on Employee Performance (Y). So it can be concluded that Employee Job Satisfaction mediates the effect of Work From Home on Employee Performance and has a full mediation effect, because there is no significant direct effect and a significant indirect effect.

RESULTS AND DISCUSSION

1. Effect of Work From Home on Employee Performance

The results in this study are in line with the results of the study (Martanti et al., 2021) (Sriyaningsih et al., 2022); Ibadhi and Tambunan, 2022; Tambunan and Sihombing, 2022, where the effect of working from home does not affect employee performance. The use of the same indicators can also affect research results, where Tambunan and Sihombing (2022) use several indicators, namely: flexible work environment, stress disorder, closeness to family, travel time, health, and work balance. So that it can also affect the results of this study.

From the results of the data analysis conducted, it is known that the assessment of the work-from-home variable indicator is lower than the employee performance indicator, this indicates that administrative employees feel that work-from-home is not an aspect that directly affects their performance. Besides that, high creativity and productivity are indicators of the work-from-home variable with the lowest rating. This means that administrative employees are less able to create innovative ideas in their work when working from home. And they also cannot increase their work created while working from home.

Effect of Work From Home on Employee Motivation

The results in this study are in line with the results of the study Zamani et al., (2021); where the effect of work from home has a significant positive effect on employee motivation. This is due to the use of the same indicators as previous studies, namely; self-actualization, esteem, social, safety, and physiological. Where it affects the results of the questionnaire that has been distributed. From the results of the data analysis conducted, it is known that the assessment of the work-from-home variable indicator is lower than the employee work motivation indicator. This indicates that according to administrative employees, the work-from-home factor is not the only aspect that influences their work motivation. In addition, a sense of security is an indicator of employee motivation with the highest rating. According to the majority of administrative employees, work safety when working from home has been taken into account. The condition of the workroom used by administrative employees when they are at home is quite safe. And also work safety when at home is well managed.

Effect of Work From Home on Employee Job Satisfaction

The results in this study are in line with the results of research by (Sultana et al., 2021); where the effect of working from home is positively significant on employee job satisfaction. This is due to the use of the same indicators as previous studies, namely; extrinsic and intrinsic factors. Where it affects the results of the questionnaire that has been distributed. From the results of the data analysis conducted, it is known that the assessment of the work-from-home variable indicator is lower than the employee job satisfaction indicator. This indicates that according to administrative employees, the work-from-home factor is not the only aspect that influences their job satisfaction. Besides that, an extrinsic factor is an indicator of employee job satisfaction variable with the highest rating. According to the administrative employees, the benefits provided are by the work they do with the output of job satisfaction. The physical working conditions of the administrative employees are sufficient for them to be satisfied with their jobs. Administrative employees feel that their relationship very good with their colleagues even though they are working from home but can still make them feel satisfied.

Effect of Employee Motivation on Employee Performance

The results in this study are not in line with the results of (Okoth & Florah, 2019); where the effect of work from home has a significant positive effect on employee job satisfaction, whereas in this study the results showed that employee motivation had no significant effect on employee performance. This is due to several factors, one of which is the difference in objects and also the large number of respondents who may have forgotten the work-from-home system because they have started to enter the office. This is in line with (Pristiyono et al., 2020) where motivation cannot improve employee performance. Causes internet costs and communication with colleagues to be even more complicated because they have to rely on data packages, irregular stress because there are demands that must be made due to the Covid-19 situation. From the results of the data analysis conducted, it is known that the assessment of the variable indicator of employee motivation is lower than the employee performance indicator. This indicates that according to administrative employees, employee motivation is not the only aspect that influences their performance. In addition, a sense of security is an indicator of employee motivation with the highest rating. The feeling of security when doing work from home makes the performance of administrative employees increase.

The Effect of Employee Job Satisfaction on Employee Performance

The results in this study are in line with the results of research by (Al-Ali et al., 2019) and several previous studies; where the effect of working from home is positively significant on employee job satisfaction. This is caused by the indicator equation used. From the results of the data analysis conducted, it is known that the assessment of the variable indicators of employee job satisfaction is lower than the employee performance indicators. This indicates that according to administrative employees, employee job satisfaction is not the only aspect that influences their performance. Besides that, an extrinsic factor is an indicator of employee job satisfaction variable with the highest rating. The existence of appropriate benefits, good physical working conditions, good relations with co-workers, and also good boss behavior even though they are working at home make employee job satisfaction increase so that it can affect their performance.

The Role of Information Technology Capability in Moderating Employee Performance

The results of this study are in line with (Sriyaningsih et al., 2022); Ibadhi and Tambunan, 2022; Tambunan and Sihombing, 2022, where their opinion regarding Information Technology cannot moderate work from home on employee performance. The benefits of technology will be limited if the ability to run the technology is also limited so the benefits that can be felt by each individual will also be different depending on how much they can operate and utilize technology. The results obtained show that IT capability does not moderate the effect of working from home on employee performance. This states that IT Capability weakens the effect of working from home on employee performance. The fact that occurs in the field is that there is a different system when working from home and sudden changes make employees have to adapt quickly to the new system, so the adaptation that is required quickly has not been able to improve employee performance when at home, unlike when employees work in the office.

The Mediating Role of Employee Work Motivation on the Effect of Work From Home on Employee Performance

This is in line with research from (Hasyim, 2023) that employee motivation does not mediate work from home on employee performance. The results obtained are employee

motivation that does not mediate work from home on employee performance. This is following the statement in the previous discussion that employee motivation has no significant effect on employee performance. In addition to the factors mentioned above, other factors that influence one of them are the lack of rewards given when working from home, so administrative employees are less motivated when working at home.

The Mediating Role of Employee Job Satisfaction on the Effect of Work From Home on Employee Performance

Based on the direct effect test conducted in this study, it is known that the work-from-home variable has a positive and insignificant effect on the performance of administrative employees, and the indirect effect of work-from-home on employee performance is moderated by job satisfaction. employees also have a significant effect. Based on the causal step approach by (Baron & Kenny, 1986), it is concluded that employee job satisfaction is very capable of mediating partially (partial mediation) on the effect of working from home on the performance of administrative employees at Universitas Brawijaya. If the work-from-home variable increases and the job satisfaction of administrative employees also increases, then their performance will increase. This result is in line with previous research, namely Sultana, et al. (2021), because the results say that it has a significant positive effect. This could have been influenced by the factors used for indicators in making the questionnaire.

CONCLUSION

Based on the results of research and discussion of the effect of working from home on employee performance which is mediated by employee motivation and job satisfaction and moderated by IT capability, the following conclusions can be drawn: Working from home is not able to improve employee performance when viewed from a direct influence. However, with the role of mediating job satisfaction, implementing work from home can improve employee performance. Working from home can significantly increase employee motivation. This shows that the higher work from home is implemented, the higher the employee's work motivation. Working from home has a high influence on employee motivation. Working from home can significantly increase employee job satisfaction. This shows that the higher work-from-home is implemented, the higher employee job satisfaction. Working from home has a fairly high influence on employee performance.

Employee motivation is not able to improve employee performance directly. Employee motivation has a relatively small effect on employee performance so it is not able to improve employee performance in this study. Employee job satisfaction can improve employee performance significantly. This shows that the higher the employee's job satisfaction is applied, the higher the employee's performance. Employee job satisfaction has a fairly high influence on employee performance. IT Capability is unable to moderate work from home on employee performance. This shows that IT capability weakens the effect of working from home on employee performance. Employee work motivation is not able to mediate work from home on employee performance. This shows that working from home is not able to improve employee performance through employee motivation. Employee work performance can mediate work from home on employee performance. This shows that working from home can improve employee performance through employee job satisfaction.

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