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EXPLORING THE DRIVERS OF WORKING FROM HOME PREFERENCES DURING COVID-19 PANDEMIC AMONG ENGINEERS IN MANUFACTURING COMPANY

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ABSTRACT

COVID-19 pandemic has changed and forced many parties, including individuals and business organizations, to alter their lifestyles, business patterns and working arrangement. Consequently, this situation cause majority of businesses to implement work from home (WFH) to the employees to ensure the business operations can operate continuously and sustainably. This study is conducted to explore the drivers that contributes to working from home preferences during covid-19 pandemic among engineers in manufacturing company. Specifically, this study examines the work environment, work-life balance, job satisfaction and performance, and work from home preferences. This study employed a purposive sampling technique with several

inclusion criteria and was quantitative by using a survey involving 172 engineers in the manufacturing company. The study findings revealed that work environment and work-life balance significantly influence work from home preferences while job satisfaction and job performance are vice versa. This study also highlights the study implications, limitations, and possible future studies.

Keywords: Work environment, work-life balance, job satisfaction, job performance, work from home.

INTRODUCTION

Early year 2020, many organizations around the continent were affected by the COVID-19 pandemic, which has substantially changed everyone's routine life and activities. It also forces everyone to readjust their work life to new norms. At the same time, the government has announced the Movement Control Order (MCO) to restrict movement of people to curb the virus spread in the country. Affect the movement restriction, many government and non-government including business premises are required to close their business activities unless organizations are categorized as essential services and critical manufacturing sectors listed by the government (FMM Institute, 2020). Other economic sectors such as manufacturing, banks, transportation, and other economic sectors also cannot be avoided these negative impacts whereby force them to remodel and restructure their workforce working pattern to accommodate the rules and regulations i.e., Standard Operating Procedure (SOP) and new norms.

To ensure the business's survival, most organizations must remodel and restructure their working pattern via working from home (WFH) to protect stakeholders, including employees and customers. It is due to reducing the face-to-face activities among the crowd on-site and for the organizations help the nation to stop the chain of COVID-19. Subsequently, most organization has developed policies related to work from home plan for their employees, at the same time required to maintain business performance.

Reshma, Aithal, et al. (2015) defined work from home as a type of employment requiring employees to carry out the tasks and

responsibilities remotely from the work station. For example, the employees may work from their home or any suitable location as they prefer to perform the functions and duties. It refers to the individual with a flexible working arrangement. During the MCO restriction, many organizations are forced to shut down and reduce the operating hours and operate in a limited number of on-site employees (Economic Sectors, 2020). Again, the Malaysian government also forced government and private organizations to reduce the number of employees working in offices and production lines to avoid close contact with them (DOSH, 2020). To materialize these rules and regulations and ensure the virus does not spread, the employees are given to WFH if their job nature suits to perform at home. It is because WFH has been the critical enabler in fulfilling the rule of MCO during the COVID-19 pandemic, which requires a company to apply a physical distancing strategy and minimum workforce to avoid virus transmission. Given that, this situation leads most organizations to provide their employees an opportunity to work remotely, i.e. WFH, to comply with the government's instructions.

Despite positive aspects of WFH during COVID-19 and lockdown, the employees can take care of the children, do some house chores, reduce travelling time, and spend more time with family. Consequently, it increases productivity and well-being (Chung et al., 2020). However, bear in mind that the negative impacts of WFH as their working pattern preferences also need to be aware by employees. The possible undesirable impact of WFH that must be met by the employees i.e. feeling disengaged with colleagues due to isolation; social and physical distance and limited internet connection speed and data quota. Furthermore, it reported that WFH employees face problems with working time boundaries and most of the time, end up working beyond the official working hours (Arntz, Sarra & Berlingieri, 2020). This situation contributes to difficulty the employees with small children and tends to be the utmost challenge for WFH. In some circumstances, the employees might feel the WFH low opportunities and fair promotions, bonus and many other incentives due to lack of visibility, compared to being on-site (Aczel et al., 2021). It is aligned with Susilo (2020) WFH makes employees less visible and indirectly creates fear of receiving less recognition for achievements and will negatively influence WFH. Furthermore, Rupiatta and Beckmann (2018), Xiao et al. (2020) and Vyas and Butakhieo (2020) noted that

the studies about work from home are still at seminal stage and need to be explored in the future.

References to the above scenarios, it is crucial to explore the drivers of working from home preferences during the COVID-19 pandemic, particularly among engineers in the manufacturing sector. It is because Malaysia's manufacturing sector continues to play a vital role in the nation's economic transformation. It contributes to the nation's export revenue and job creation to ensure the country's growth despite global economic uncertainties. On top of that, manufacturing engineers are important to be studied due to their important roles to ensure the smooth manufacturing activities in design and operation integrated systems for the high-quality production and economically competitive manufacturing performance (MIDA, 2021). Therefore, the main aim of this study is to investigate the influence of work environment, work-life balance, job satisfaction, and job performance on WFH preference among engineers in the manufacturing company.

LITERATURE REVIEW

The term of WFH is not a new working system in the organization. It was introduced back in 1973, known as "telecommuting" or "telework" (Fujii, 2020). WFH term has been evolving and is also known as flexible workplace, telework, remote work, telecommuting, and e-working. These refers to the ability of employees to perform the job at any setting of their preference that is equipped with all the necessities and facilities to execute the duties, such as internet connections, laptops, and a secure environment that fits the purpose of WFH (Vyas & Butakhieo, 2020). Since 2009, more than one-fifth of German companies have given an option of WFH to the employees. The reason behind this option is to serve the employee's sovereignty in managing their own task is to serve the employee's sovereignty managing their task and consequently increase job motivation, which translates into better work effort. As proven by Rupietta et al. (2016), flexible working arrangements help companies to retain high-skilled and committed employees. Numerous companies are developing various engagement practices. They include virtual team meetings through WebEx and Skype, Google Meet, online learning sessions such as Linked-in Learning, and webinars that significantly help to boost employees' morale and increase their commitment to the company (Chanana et al., 2020).

Past studies related to the WFH, such as Xiao et al. (2021), Putri et al. (2021); Chung et al. (2020), evidenced that various drivers contribute to the employees on WFH preferences. Nevertheless, this study focuses on several drivers that may affect the engineers' WFH preferences. Among the drivers are work environment, -life balance, job satisfaction and job performance.

Work Environment

Brown (2020) defined the work environment as the workplace's physical location setting. In the context of the WFH situation, it refers to the surroundings working environments such as internet connection and printing facilities at home. It involves the location and the direct atmospheres of the setting and surrounding conditions where the employee works, from air quality to welfare and remunerations of employment such as telephone allowance, printing allowance, and medical support. Meanwhile, the workplace refers to the location, space or layout that suits the job requirement for employees to achieve the organizational goals. The facilities that can include in the working environment such as cubicles for the employees to complete the job, chairs, desks, and cabinets that can suit the job requirements. An environment is the direct surrounding of employees. A positive working environment involves better employees surroundings to increase job satisfaction, motivation and engagement to enhance employees' productivity (Sinnappan, 2017).

The work environment can influence WFH preferences in the sense that an employee has a control of environmental factors during WFH. The employees have complete flexibility and autonomy in setting up their work station at home from the brightness level, and temperature level even up to ergonomics and cosmetics preferences such as chairs and desks (Xiao et al., 2021). These flexibilities and autonomy contribute to the positive influence of employees to work at home because it may raise the comfort level during WFH and eventually boost employee output. The study by Xiao et al. (2021) indicated that a good working environment plays an important role in supporting WFH. It boosts positive influence towards employees motivation and increases their preferences to WFH. The dedicated workstation allows the task to be executed comfortably, employees feel more involved in it and can stay longer focused. On top of that, long-run ergonomic work environment can support employees in terms of physical and mental well-being that increase their preference for WFH. In short, a home environment significantly influence 'employees' preference to work from home.

Based on the above reviews, this study hypothesizes that the work environment toward WFH preference is as follows.

H₁: Work environment significantly influences WFH preference during the COVID-19 pandemic among engineers in a manufacturing company.

Work-Life Balance

Based on Putri et al. (2021) defined work-life balance as putting certain weights on personal and work matters and not necessarily equal balance. The work-life balance does not mean an equal balance on both, but rather to the idea that a person has the satisfaction to fulfil both aspects, work, and personal interests. It plays a vital role in determining stress level, employee productivity, and welfare (Wolor et al., 2020). As emphasized by Pui-Yee Wong et al. (2017), many organizations start to recognize the significance of work-life balance in human resource activities such as recruitment strategies, salary and benefits as it covers every aspect of work and family involvement also fair satisfaction.

Work-life balance consists of two main components, i.e., achievement and happiness, and every employee must have both to be successful and satisfied (Bataineh, 2019). The fundamental of work-life balance starts from the personal and work-life conflicts experienced by employees. It includes the individual himself and family factors such as marital status, child and parent relationships, and social life (Jamal & Khatoun, 2017). A work-life balance among employees contributes to the idea of creating a healthy work environment that consequently improves employees' performance (Wolor et al., 2020).

In the context of WFH, leveraging WFH by the organizations could contribute to positive and negative impacts on work-life balance for the employees. However, it depends on the way of work-life balance and exceptional level of individual's life principles, concerns, and priorities. In some circumstances, some employees think the WFH may improve their relationships with their families and spend more quality time in their personal lives. Nevertheless, some employees might face difficulty because of the increased limitations between both aspects. Deery and Jago (2009) demonstrated that flexibility in completing task via WFH create mentally and physically comfortable rules that positively affect work-life balance. It is also important to

acknowledge that the most critical work factors related to work-life balance, such as roles, working hours, and colleagues, potentially influence the employees to choose whether to select the WFH working system or vice versa. In short, work-life balance impacts the employees and may determine the WFH preferences among employees. It is because the work-life balance itself may contribute to the positive and negative impacts on the employees. In short, this study concludes that work-life balance significantly influences the employees' preference to work from home. It can be hypothesized as follow:

H₂: Work-life balance significantly influences WFH preference during the COVID-19 pandemic among engineers in a manufacturing company.

Job Satisfaction

Job satisfaction occurs when the employees feel content, enjoy, and satisfied over or beyond their job. It means that the employees can perform their respective tasks and duties well and are rewarded appropriately (Dziuba et al., 2020). Many studies such as Fogaca et al. (2018); Dziuba, Ingaldi & Zhuravskaya (2020); Davidescu et al. (2020) emphasized that job satisfaction contributes to the impacts on productivity level, work performance, and personal happiness and contentment. It also associates with the employees whenever the job is done and rewarded accordingly. Again, employee job satisfaction has linked with how people feel about the work. The emotion is expressed through how employees feel on the job and relate to their emotional state. It also can be measured on the employee the workplace and the job itself. Also on how much the employees are valued by the job and its rewards (Javed et al., 2014). Satisfied employees would feel happy and motivated and willing to work on assigned tasks that lead to both employees and the organization achieving outstanding results and goals. However, dissatisfied employees are unwilling to perform the tasks and also attempt to escape from the responsibility.

Davidescu et al. (2020) stated that if the organization appropriately implements WFH, it can immensely increase employee satisfaction. By having good and fair WFH policy able to help both parties i.e. employers and the employees attracting and increase loyalty among the skilled and experienced employees that very challenging aspect of human resources practices that need to be maintained by the employers. Leveraging WFH may contribute to increasing the value

of employee's satisfaction in the job. It occurs in the sense that the employers have and fully trust the employees to perform the jobs remotely. It also can be interpreted that the employees appreciate and trust their employees with lesser monitoring and increase employees motivation with greater work effort (Paper, 2016). This scenario is consistent with the study conducted by Fonner and Roloff (2010). The study found a link between remote working and job satisfaction, whereby the number of WFH hours per week boosts employee satisfaction. It implies a linkage between job satisfaction and the WFH preferences of the employees. It may occur in the sense that if the employees feel satisfied about the jobs, it will determine and influence the employees to WFH; hence, positive job satisfaction influence employees' preference for WFH. This study hypothesis is as follow:

H₃: Job satisfaction significantly influences WFH preference during the COVID-19 pandemic among engineers in a manufacturing company

Job Performance

Suharto et al. (2019) define job performance as a function of individual performance on specified and standard activities or tasks as expected in the job description. Again, refer to Fogaca et al. (2018) define performance as an application of skills and expertise in the context of tasks to implement the jobs effectively and efficiently to attain organizational goals. Job performance in this study refers to individual job performance. It refers to an employee-validated behavior intended to achieve the organization's mission, vision, and objective. Individual performance differs from one group to another in organization and can be influenced by one another.

Three key factors may influence job performance, i.e., individual, organizational environment, and job demand. The individual perspective includes the employees' vision, principles, viewpoint, awareness, aptitudes, and style. In terms of organizational environment, it involves beliefs and environment, structure and organizations, diligence, and strategic planning. The last factor is job demand. It includes employees' duties, responsibilities, and job positions. In the context of WFH which the employees perform the job out site, the office potentially reduces employees' expenses and saves traveling time. On top of that, Susilo (2020) emphasized that the WFH working

system allows employees with a sense of freedom and consequently improves employees performance.

Based on Rupietta and Beckmann (2018), individual job performance can influence the employees' performance remotely or away from the office and could increase the employee outputs. It is because WFH allows employees to enjoy a peaceful working environment and higher work effort, as employees tend to have less tea time. By enjoying those advantages of the operational flexibility in scheduling the operating hours create the most productive working hours as long as the employees able to fulfil the job requirement. In contrast to working in the office, the employees should adhere to office hours and rules and regulations even if it is not their preferred time to work.

Similarly, Aropah and Sarma (2021) claimed that WFH also may improve performance by allowing knowledge exchange, best practice sharing, cross-functional collaboration, and inter-organizational participation that eventually accelerate and enhance the quality of product development. It occurs because employees may easily connect across departments via an online communication platform that allows for immediate communication without the need for inefficient face-to-face meetings. Hence, leveraging the WFH working system by the employees improve the job performance. It is aligned to the study by Martínez-Sánchez et al. (2007), which revealed that WFH has significantly and positively influenced employees and organizational performance. The justifications are that WFH and remote businesses have more free time, and more people involved and wider areas in work design and planning rather than a trivial matter that occurs in a face-to-face environment. Consequently, better job performance that employees enjoy during WFH has influenced the employees to work from home. Therefore, this study hypothesized job performance as follows:

H₄: Job performance significantly influences WFH preference during the COVID-19 pandemic among engineers in a manufacturing company.

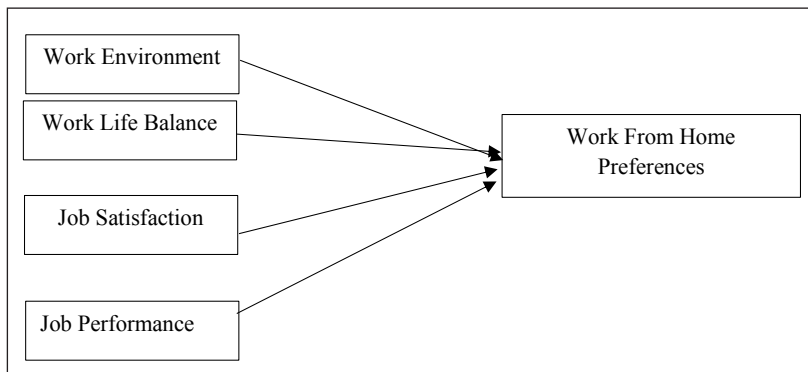
Referring to the above reviews, it can be concluded that most of the studies such as Paper (2016) specifically emphasized on the effects of employee's efforts leveraging work from home. Moreover, the study conducted by Fujii (2020) just looking at the workplace motivation, telework and employee productivity. Other studies conducted just

limited to explore on the impact of working from home during COVID-19 specifically investigates the work and life domains in the Hong Kong (Vyas & Butakhieo, 2020) and Indonesia (Susilo, 2020). In fact, none of the past studies specifically exploring the study on the influence of work environment, work-life balance, job satisfaction, job performance towards work from home preferences in the context of engineers in the Malaysian manufacturing company. Thus, this study is crucial to be conducted in order to close the above gaps.

To summarize, four independent variables linked to the WFH preference. The variables are work environment, work-life balance, job satisfaction, performance, and WFH preferences. The reason for selecting the work environment in this study, as Xiao et al. (2021), is that a good working environment plays an important role in supporting WFH effectively and efficiently. It may boost motivation and increase employee preferences to work from home among the employees. The work-life balance is integrated into this study due to the improvement of quality and lifestyle that benefits the employees (Gajendran & Harrison, 2007). Job satisfaction was investigated in this study based on past study by Fonner and Roloff (2010). It revealed that there is a linkage between the number of WFH hours per week and employee satisfaction. Lastly, job performance, as indicated by Rupiotta and Beckmann (2018), individual job performance has a significant influence on the employees' to perform job remotely or away from the workplace which eventually increase the employee outputs. The research framework of the study depicts in Figure 1.

Figure 1

Research Framework



METHODOLOGY

The main purpose of this study is to explore the drivers, i.e., work environment, work-life balance, job satisfaction, job performance, and WFH preferences. A quantitative approach via online survey was used to examine the posited hypothesis to generate meaningful study findings empirically. Initially, this study involves 250 engineers in one manufacturing companies located in Kulim- Hi-Tech. Upon data collection, the number of returned questionnaires only 150 respondents, representing 60% of the total respondents. The measurement for each variable is adapted and adopted from several past studies, such as for the WFH and work-life balance (Putri et al., 2021), work environment and job satisfaction (Susilo, 2020), and lastly, job performance (Zhang et al., 2020).

The purposive sampling technique used in this study with several inclusion criteria to ensure relevance respondents involved in this study and the accuracy of data collection. Two inclusion criteria have been determined in this study. First, the respondents must be engineers, and second, the respondents must leverage the WFH working system in the organization. On top of that, the study also conducts a pilot test involving 20 engineers to verify the questions' reliability and suitability (Taherdoost, 2017). The reliability test of the pilot test indicates that all variables scored above 0.7 are acceptable, as stated by Taber (2017). Upon data collection, the data was then analyzed using Statistical Package for Society Science (SPSS) Version 26. The analysis used in this study to answer the research objectives are descriptive analysis, reliability analysis, correlation analysis, and multiple regression analysis.

RESULTS

To answer the study objectives, this study employed several analyses for the findings. The analyses will be discussed in this study are descriptive analysis, i.e., demographic analysis, reliability analysis, correlation analysis, and multiple regression analysis.

Demographic Profile

The respondent's demographic information is the descriptive study of this sample. The demographic profile discussed in this study are

gender, age, job position, department, marital status, number of children, marital status, work arrangement, and frequency of WFH. The result of demographic profiles depicts in Table 1 below.

Table 1

Demographic Profiles

Items	Frequency	Percentage (%)
Gender: Male	129	75
Female	43	25
Age: 20 to 29 years old	80	46.5
30 to 39 years old	66	38.4
40 to 49 years old	21	12.2
50 years and above	5	2.9
Position: Fresh Engineer	75	43.6
Intermediate Engineer	44	25.6
Senior Engineer	34	19.8
Lead Engineer	19	11
Department: Process	66	38.4
Maintenance	27	15.7
Operation	42	24.4
Special-Support	37	21.5
Marital status: Single	95	55.2
Married	76	44.2
Others	1	.6
No. of Children: None	109	63.4
1-2	40	23.3
3-4	16	9.3
5 or more	7	4.1
Work arrangement: Part-time work from home	149	86.6
Full-time work from home	23	13.4
WFH frequency: 1-2 times	120	69.8
3-4 times	30	17.4
5-6 times	22	12.8

Based on Table 1, 75% male respondents are compared to female respondents at 25%. The majority of respondents in this study are between 20-29 years old at 46.5% and most among fresh engineers at 43.6%. In terms of the department, marital status, and the number of dependents of the respondents, the majority of them were from process department 38.4%, single at 55.2%, and 63.4% with no of

children respectively. Finally, the work arrangement and WFH frequency are part-time WFH at 86.6% and 69.8% WFH between 1 to 2 times a week.

Reliability Analysis

Table 2 below depicts the reliability results of the study. The variables used in this study consist of 5 constructs i.e., WFH as the dependent variable, and 4 independent variables; work environment, work-life balance, job satisfaction, and job performance. The Alpha value for WFH, work environment, work-life balance, job satisfaction, and job performance are 0.776, 0.727, 0.924, 0.857, and 0.912, respectively. The study shows that WFH and work environment represent very good Alpha values. In contrast, the remaining balance for work-life balance, job satisfaction, and job performance represent excellent Alpha value. The highest Alpha value for this study is work-life balance at 0.924. In short, the Cronbach's Alpha value is greater than 0.7, indicating that the data is reliable for the study.

Table 2

Reliability Analysis

Variables	Cronbach's Alpha	Number of Items	Results
Work from Home	0.776	5	Very Good
Work Environment	0.727	5	Very Good
Work Life Balance	0.924	8	Excellent
Job Satisfaction	0.857	5	Excellent
Job Performance	0.912	5	Excellent

Correlation Analysis

Table 3 indicates the Pearson Correlation Analysis for all variables. The analysis reveals that the work environment has the strongest relationship with WFH at 0.655 for its correlation coefficient value. Next, the work-life balance is the second most robust relationship towards WFH at 0.649 for its correlation coefficient value. Again, job satisfaction represents the third strongest relationship with work from home, which is equal to 0.626 for its correlation coefficient value. Finally, job performance has the weakest relationship towards WFH

at 0.563 for its correlation coefficient value. In short, these variables have a significant relationship to WFH because the p-value (0.000) is lower than the alpha value equal to 0.01.

Table 3

Correlation Analysis

	WFH	Work Environment	Work Life Balance	Job Satisfaction	Job Performance
WFH	1.00				
Work Environment	0.655	1.00			
Work Life Balance	0.649	0.635	1.00		
Job Satisfaction	0.626	0.658	0.760	1.00	
Job Performance	0.563	0.597	0.751	0.647	1.00

** $p < 0.01$

Regression Analysis

Table 4 depicts the relationship between dependent and independent variables. Regression result of R-square used to determine the strength that the dependent variable can explain the independent variable. Based on the data gathered, the R-square value of this study is 0.531. It can be interpreted that 53.1% can be explained by work environment, work-life balance, job satisfaction, and job performance towards WFH, indicating moderate R-square. According to Alhyari (2016), the R-square value $0.5 < r < 0.7$ can be considered a moderate variance effect.

Meanwhile, the F ratio is used to determine the overall fitness of the regression model test. From Table 4 below, the F value is 47.314, which is greater than 1, and the significant value of p is equal to 0.000, which determines the significant value is high when less than 0.05. Thus, it is concluded that the dependent variable affected significantly and positively by most of the independent variables. In terms of Durbin Watson, the test explains whether the assumption of independent error is acceptable. For the Durbin Watson value, if the value is between

0 to less than 2.0, it indicates a positive autocorrelation. In contrast, the value of 2.0 demonstrated that the sample has no autocorrelation. Similarly, if the value is above 2.0 to 4.0, it represents a negative autocorrelation (Dougherty, 2000). Based on this study, the Durbin Watson is 1.622, indicating positive autocorrelation.

Upon F value and R-square evaluation conducted, the Beta coefficients are performed. The Beta coefficient is the degree of change in the outcome variable for every unit of change in the forecaster variable. The beta coefficients can be either positive or negative supported by the t-value with its significance of the t-value as p-value. While the t-test assesses whether the Beta coefficient is significantly different from zero. The Beta value for each of the variables are shown in Table 4. The Beta values are the independent variables for work environment, work-life balance, job satisfaction, and job performance are 0.385, 0.239, 0.129, and 0.035, respectively. The mathematical model for dependent and independent variables on standardized coefficient Beta was computed using multiple regression analysis from data collection where the value 0.977 as a constant below Equation 1.

$$\hat{Y} = 0.977 + 0.385(\text{work environment}) + 0.239(\text{work life balance}) + 0.129(\text{job satisfaction}) + 0.035(\text{job performance}) \quad (1)$$

Finally, P-value was used to measure the compatibility of the data with the null hypothesis. The statistically significant range is expressed as a p-value ranging from 0 to 1. The lower the value, the greater the chance of rejecting the null hypothesis. If $p\text{-value} < 0.05$, it is statistically positive and approves the hypothesis while $p\text{-value} > 0.05$, it is statistically negative, thus rejecting the hypothesis. Reference to this study, two out of four hypotheses are supported. It is due to $p < 0.05$. For the H1, work environment significantly influences WFH preference during COVID-19 pandemic among engineers in a manufacturing company. The study's finding is consistent with the study conducted by Xiao et al. (2021). The study found that flexibility and autonomy contribute to the positive influence of employee to work from home because it may raise the comfort level during WFH that may boost the employee output. Meanwhile H2, work-life balance significantly influences WFH preference during COVID-19 pandemic among engineers in a manufacturing company. The finding of this study aligned with the study conducted by Pui-Yee Wong et al. (2017)

which stated that many organizations recognize the significance of work-life balance in human resource activities. It includes flexible working hours, recruitment strategies, salary and benefits as it covers all aspects of work and family involvement.

However, two hypotheses, i.e. job satisfaction and job performance, are unsupported due to $p > 0.05$. Referring to H3, job satisfaction significantly influences WFH preference during a COVID-19 pandemic among engineers in a manufacturing company is unsupported. This study's finding contradicts the studies conducted by Davidescu et al. (2020). The study claimed that if the organization appropriately implements the WFH, it can immensely increase employee satisfaction. Nevertheless, this study found job satisfaction has not influenced the engineers among manufacturing companies. The plausible justification for the unsupported H3 between job satisfaction and work-from-home preference due to that job satisfaction is no longer a priority to the higher positions such as engineer in that particular organization. This particular group of employees may look at other factors such as quality and output achievement, smooth business activities, and so forth to leverage WFH during the the Covid-19 pandemic (Chung et al., 2020).

The last hypothesis is H4; job performance has a significant influence on WFH preference during the COVID-19 pandemic among engineers in a manufacturing company. This study challenges the study conducted by Rupietta and Beckmann (2018) claimed that individual job performance enables to influence of the employees' to perform jobs remotely or away from the workstation subsequently, could increase employee outputs. The intriguing fact that this study unsupported that particular statement whereby job performance is not the main reason for the engineers to leverage WFH in the context of a manufacturing company. The reason of the unsupported hypothesis is due that the majority of engineers are among Y generation. Based on the demographic profile at 46.5 % of the respondents aged between 20 to 29 years old, this particular group of engineers can be considered energetic and enthusiastic in performing the tasks. Consequently, they do not prefer work away from workplace Workplace and their availability at the workstation is important, contributing to the unsupported hypotheses. The summary of all hypotheses can be referred to in Table 5.

Table 4

Regression Analysis

Variable	β	t	p	R ²	F Δ	Sig F. Δ	Durbin Watson
Model Summary				0.531	47.314	0.000	1.622
Work Environment	0.385	4.698	0.000				
Work Life Balance	0.239	2.787	0.006				
Job Satisfaction	0.129	1.822	0.070				
Job Performance	0.035	0.577	0.565				

p<0.001

Table 5

Hypothesis Test Summary

Hypothesis	Statement	Remarks
H1	H1: Work environment significantly influences WFH preference during the COVID-19 pandemic among engineers in a manufacturing company.	Supported
H2	Work-life balance significantly influences WFH preference during the COVID-19 pandemic among engineers in a manufacturing company.	Supported
H3	H3: Job satisfaction significantly influences WFH preference during the COVID-19 pandemic among engineers in a manufacturing company.	Unsupported
H4	H4: Job performance significantly influences WFH preference during the COVID-19 pandemic among engineers in a manufacturing company.	Unsupported

CONCLUSION

In conclusion, this study aims to explore the drivers working from home preferences during the the Covid-19 pandemic among engineers in a manufacturing company. Four variables are integrated with this study to identify the influence of work environment, work-life balance, job satisfaction, job performance, and WFH preferences among engineers during COVID-19 in a manufacturing company. The result revealed that work environment and -life balance support the hypotheses while job satisfaction and job performance are unsupported.

This study contributes to both practical and theoretical implications. In terms of theoretical aspect, this study enables to explore the empirical findings and enrich the body of knowledge related to the WFH preferences during Covid-19 for the manufacturing company that focuses explicitly on work environment, work-life balance, job satisfaction, and job satisfaction performance. Again, this study can also act as the basis for future study studiesfor researchers, academicians, and HR Practitioners to explore other determinants of WFH preference not investigated in this study, such as integration of internal and external factors of the organization. Meanwhile, in termss of practical implications, the HR practitioners can use the empirical findings to formulate and improve policy related to the WFH system in the organization. Again, by having this study, HR Department and engineers could improve the planning, work schedules, and tasks execution during the COVID-19 pandemic in the sense that identifying factors WFH preferences influence the engineers, particularly in the manufacturing company.

Finally, this study also has its limitation. The small sample size only involving engineers in a manufacturing company located in Kulim Hi-Tech Industrial Park, cross-sectional study whereby the questionnaire distributes only one time, and a quantitative method in nature. following the limited generalization of the findings, future studiescan be further explored by integrating both internal and external drivers that may influence WFH preferences. Moreover, it may also employ mixed methods i.e. quantitative and qualitative or even validate and obtain opinion from experts such as HR practitioners to ensure the future findings are more concrete and holistic.

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