THE EFFECTS OF ORGANIZATIONAL ROLE AND FLEXIBLE WORK ON WORKERS' HEALTH AND JOB SATISFACTION

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FACULTY OF ENGINEERING
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ABSTRACT

This paper is a study on the health impacts associated with working from home due to the COVID-19 pandemic. It aims to assess factors relating to flexible work dynamic and role of organizations in affecting workers' health and job satisfaction. The model of this research is comprised of four factors related to physical and mental health, job satisfaction, organizational role, and flexible work arrangement. From these factors, the study attempts to find direct links between the variables. The study is particularly important during the COVID-19 pandemic as many businesses and organizations aim to measure effective work arrangements currently and moving forward. The instrument used in this research is a questionnaire that was distributed to general workers from different parts of the world. There were 32 valid participants that took part in the study, rating their responses on a Likert scale. To answer the research questions, this study used statistical analysis using SPSS and SmartPLS to test the proposed hypotheses. The results show that flexible work arrangement positively affects workers' job satisfaction and physical and mental health at $\beta = 0.156$ and $\beta = 0.585$ respectively. In addition, the role of organizations was found to positively correlate with increased job satisfaction, at $\beta = 0.623$, but not with physical and mental health at $\beta = -0.144$. Although the study produced acceptable reliability and validity values, the validity is constrained within the small sample size.

Keywords: work from home, job satisfaction, organizational role, COVID-19

THE EFFECTS OF ORGANIZATIONAL ROLE AND FLEXIBLE WORK ON WORKERS' HEALTH AND JOB SATISFACTION

ABSTRAK

Makalah ini adalah kajian mengenai kesan kesihatan yang berkaitan dengan bekerja dari rumah disebabkan pandemik COVID-19. Ini bertujuan untuk menilai faktor-faktor yang berkaitan dengan dinamik kerja yang fleksibel dan peranan organisasi dalam mempengaruhi kesihatan pekerja dan kepuasan kerja. Model penyelidikan ini terdiri oleh empat faktor-faktor yang berkaitan dengan kesihatan fizikal dan mental, kepuasan kerja, peranan organisasi, dan pengaturan kerja yang fleksibel. Dari faktor-faktor ini, kajian ini berusaha mencari hubungan langsung antara variable-variabel. Kajian ini khususnya penting semasa pandemik COVID-19 kerana banyak perniagaan dan organisasi bertujuan untuk mengukur pengaturan kerja yang berkesan pada saat ini dan pada masa depan. Instrumen yang digunakan dalam penyelidikan ini adalah soal selidik yang diedarkan kepada pekerja am dari berbagai negara. Terdapat 32 orang peserta yang sah yang telah menyertai kajian ini, yang telah menilai respons mereka pada skala Likert. Untuk menjawab persoalan-persoalan kajian, kajian ini menggunakan analisis statistik menggunakan SPSS dan SmartPLS untuk menguji hipotesis-hipotesis yang dicadangkan. Hasil kajian menunjukkan bahawa pengaturan kerja yang fleksibel mempengaruhi secara positif kepuasan kerja dan kesihatan fizikal dan mental pekerja pada masing-masing $\beta = 0.156$ dan $\beta = 0.585$. Selain itu, peranan organisasi didapati berkorelasi positif dengan peningkatan kepuasan kerja, pada $\beta = 0.623$, tetapi tidak positif dengan kesihatan fizikal dan mental pada $\beta = -0.144$. Walaupun kajian menghasilkan nilai kebolehpercayaan dan kesahan yang dapat diterima, kesahannya dibatasi dalam ukuran sampel yang kecil.

Kata kunci: kerja dari rumah, kepuasan kerja, peranan organisasi, COVID-19.

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CHAPTER 1: INTRODUCTION

The COVID-19 pandemic became a global crisis that has caused major economic, social, and health impacts to the entire world. Governments around the world sought to take drastic actions to control the rapid spread of the disease and to ensure the health of the people. This meant that they had to introduce policies enforcing social distancing, movement control, and work from home orders. As a result, many companies, schools, and various workplaces were forced to operate remotely from home in compliance with the policies and regulations. Other places were simply shut down if they were deemed unessential or if they could not sustain the economic burden. The only places that continued regular operation were health centers, restaurants, and other essential services. This was an unprecedented situation that brought major changes to people's work and daily lives.

1.1 Background

Working from home or telecommuting is not a very common work dynamic to many people and can cause many challenges to the workers' health and well-being. Before the pandemic, people worked in their work locations which would ideally be set up properly for the purpose of working, such as in an office using a computer. In that environment, the organization would typically provide proper working conditions to ensure the physical and mental health and well-being of the worker and boost productivity. In addition, people socialized both with their colleagues in the workplaces for professional and social purposes, as well as after work with their friends and family in restaurants and social gatherings.

However, this has not been the case for many people since the start of the pandemic. Many people around the world have had to work from home in compliance with the policies put by governments to combat the COVID-19 pandemic. This meant that they

were no longer able to use the work environment at the workplace, and easily communicate with their co-workers for social and work purposes. Furthermore, the social aspect of people's lives is much more restricted due to the movement control orders. This meant that people were no longer able to socialize at work with their coworkers or outside of work with their friends and families.

Of course, many people have already been working from home long before the COVID-19 pandemic. Remote working has been popular especially since the emergence and widespread use of the internet and telecommuting. However, this was before the implementation of social distancing and movement control policies in response to COVID-19 pandemic. This is an important distinction, as remote workers were not restrained in their homes and prevented from socializing. The implication of this is that workers working from home during the COVID-19 pandemic are forced to remain at home after work, limiting their socializing and entertainment options.

1.2 Problem Statement

During the COVID-19 pandemic, many people had to work from home using online telecommuting. This is in compliance with the government policies that restricted movement to combat the COVID-19 pandemic. This has led to several implications related to workers' health and job satisfaction that are affected by the change in their work arrangement.

When working at the office, workers can communicate with their co-workers which could be helpful for completing their work. They can also benefit from the social aspect, share work responsibility, help each other, and other aspects from their organizations. However, working from home can have its benefits for workers' health and job satisfaction. This includes having more time to spend with the family, less time to commute to work, and the feeling of comfort working at home.

After the pandemic, many organizations may go back to having their workers work at the workplace. This might neglect the benefits of working from home, and whether having a flexible work arrangement can improve workers' physical and mental health and job satisfaction. In addition, it is important to assess whether having a flexible work arrangement will result in losing some of the benefits provided by the organization. To maximize worker's health and job satisfaction, the organizational role is essential for workers despite their working arrangements.

Therefore, this study aims to examine the effects of flexible work arrangements and the role of organizations on workers' physical and mental health and job satisfaction.

1.3 Objective of Study

The aim of this study is to assess the effects of flexible work arrangements and the role of organizations on job satisfaction and physical and mental health.

Understanding the effects of both organizational role and flexible work arrangement can reveal whether they positively influence workers' job satisfaction and physical and mental health. This understanding can be key in achieving optimum work dynamics, and improving working conditions

The objectives of this study are as follows:

1. To test whether working from home has a positive effect on job satisfaction and physical and mental health of employees working from home due to the COVID-19 pandemic
2. To statistically measure the significance of impact organizational role and flexible work arrangements have on job satisfaction and physical and mental health

1.4 Significance of Study

The findings of this study could benefit many workers and organizations in creating healthy and productive working conditions. This is especially important This is important ensure workers' physical and mental health, and to maximize job satisfaction for better productivity. The COVID-19 pandemic can be an opportunity to conduct research for the betterment of workers and working environments. This research can contribute to a wide area related to work arrangement design and optimizing the workspace for the safety and health of the worker. It can also be important for the enhancement of any future adverse circumstances that threaten the workers' health and well-being.

1.5 Scope and Limitations

This study focuses on the effects of organizational role and flexible work on remote workers during the COVID-19 pandemic. Data collection is done using an online questionnaire, which received 32 respondents mainly from Malaysian workers. The effects are measured based on mental and physical health of the workers, and their job satisfaction when working from home. Bias and influence by lockdown policies could affect the responses and influence the analysis of the study. For the instrument, the Likert scale was used, which lacks the flexibility for undecided or situational answers. This method has been used in social studies related to social sciences and is comprised of five-point scale. Studies have found the effectiveness of using this scale with the midpoint of the scale being "neutral" in the analysis of data related to social sciences (Armstrong, 1987). Due to the pandemic restrictions, it was difficult to obtain larger sample size, and conduct the study on a larger scale. Additionally, the study was confined within the resource available online due to limitations in accessing external facilities.

CHAPTER 2: LITERATURE REVIEW

Literature on the topics related to workers' health and job satisfaction have several areas of research. These can be categorized into themes which relate to role of organizations and flexible work arrangements.

2.1 Flexible Work Arrangement

There are several terms that have been used to refer to the use of technology for working remotely. The term "remote working" was defined as "a flexible work arrangement whereby workers work in locations, remote from their central offices or production facilities", and further added "the worker has no personal contact with co-workers there, but is able to communicate with them using technology" (Di Martino & Wirth, 1990). Since the advancement and wide usage of information communication technologies (ICTs), remote working has seen great popularity as a viable option of working. "Remote working" has also been termed "teleworking", "flexible work arrangement", and "telecommuting" (Allen et al., 2015). This form of communicative arrangement is non-conventional compared to the standard in person dynamic, and presents its ow

n challenges to workers, employers, and organizations (Rasmussen & Corbett, 2008). For challenges at home, it has been argued that social division and gender norms have an effect on productivity (Chattopadhyay, 2021). Other challenges of working from home include family obligations and home matters (Trougakos et al., 2020).

2.2 Role of Organizations

Masuda et al. (2017) discussed the effectiveness of organizations offering workers flexible work options, and that it contributes to more engagement in their work. The role of organizations in providing and managing flexible work options includes flexible

work schedule, which gives the worker more freedom to work from their preferred location (Hill et al., 2001). There are obstacles that organizations face in providing flexible work options, including increases in cost and less supervision, which might not benefit the worker (Kelliher & Anderson, 2008). On the other hand, increased productivity, autonomy, and job satisfaction compensate for the downsides (Russell et al., 2009). The idea of perceived organizational support has been studied to assess the degree of perceived appreciation and care by the organization towards the worker (Eisenberger et al., 1997). A similar concept is perceived social support, which refers to the degree to which a worker perceives the provision of support by the supervisor and co-workers (O'Driscoll, 2000). These two concepts were shown to be predictors of workers' well-being and require a specific management approach to maximize productivity (Bosua et al., 2013). Social support, job autonomy, and lower workload were shown to correlate with reduced loneliness and other working challenges (B. Wang et al., 2020).

2.3 Job Satisfaction

Supervisor support has been linked to lower stress levels and higher job satisfaction (Babin & Boles, 1996). Another factor affecting telework performance and attitude is trust, which was found to be key for effective work (Baker et al., 2006). One aspect that is linked to job satisfaction is social interaction with co-workers (Sims Jr et al., 1976). This may conclude that the opposite effect would be true, and that working from home would result in less job satisfaction. The role of organizational support has been argued to be key in increasing worker satisfaction, contributing to their wellbeing when working from home. Overall quality of life has been shown to improve for some people and impair for others when working from home due to the pandemic (Weitzer et al., 2021).

2.4 Physical Aspects

Working from home can have challenges related to the physical work office and the ergonomic aspects that define the workstation. Many people may not have a dedicated workstations at home, and resort to sharing it with other members in the household (Bouziri et al., 2020). In addition, many people work in different places in the house at different times, or work in temporary settings, such as a kitchen table, kitchen counter, sofas, or in the bed (Bouziri et al., 2020). Some studies have demonstrated that working from home can lead to longer time spent sitting due to the availability of all work-needs through the computer as workers don't need to walk to meet their colleagues and the lack of need to travel to work which allows more time to sit (DeFilippis et al., 2020; Kaur & Sharma, 2020). Prolonged sitting, workspace sharing, and improper physical body movement have been linked to pain, discomfort, and stress (Baradaran Mahdavi & Kelishadi, 2020). The work environment encompasses variables such as air conditioning, ventilation, and heating, which are important conditions for an ideal indoor environmental quality (IEQ) state. When working in an office, these conditions are usually met to facilitate proper work conditions. However, many WFH individuals neglect some of those conditions, resulting in negative physical and mental health impacts, and affect work performance (Mahbob et al., 2011). Some people reported severe discomfort in their back and shoulder as a result of their work setup at home (Gerding et al., 2021). This was backed up by Bahar ÖZdemİR (2021) who found that lower back pain increased among workers who already complained when working from the workplace.

2.5 Positive Mental Health Aspects

It has been shown that telecommuting has a positive association with the sense of well-being. Some studies have demonstrated that working from home is found to reduce the risk for stress and depression (Anderson et al., 2015; W. Wang et al., 2020). W.

Wang et al. (2020) further finds expands, finding a positive association between teleworking and the sense of well-being and fewer adverse effects related to work on well-being. This was dependent on the personality type of the teleworker, with those who were open to the idea of working from home reporting more positive feelings. Furthermore, Working from home has the advantage of having more family time, which is important especially for new mothers who don't need to travel to work and instead spend the time at home with her child (W. Wang et al., 2020).

Some authors have argued the importance of the worker's control over their work arrangement. Essentially, whether the employee is given the option rather than being forced to work from home has been shown to be a key factor in the well-being of the worker. That way, the employee has the flexibility to manage their work schedule, which has been linked to a positive mental health impact (Anderson et al., 2015; W. Wang et al., 2020). Other authors have also found that employees who have control over their work time are more satisfied and have less worries over their work (Biron & Veldhoven, 2016).

2.6 Negative Mental Health Aspects

WFH may be linked with negative mental health effects due to the constraints experienced by the individual and lack of social interaction. Shepherd-Banigan et al. (2016) describes psychological isolation as the feeling of disconnect from others and the lack of desire for social interaction. It has been found that failing to meet social and emotional needs can lead to anxiety, psychological isolation, and depression, and can hinder social interactions and maintaining relationships with co-workers (Shepherd-Banigan et al., 2016). Negative impacts on mental health were linked with diet, exercise, co-worker interaction, work environment at home, and changes in working hours (Xiao et al., 2021).

2.7 COVID-19 Considerations

Many studies have found common themes related to workers' health and productivity during the pandemic. Mari et al. (2021) examined the psychological state of workers of different professions and found that readjustment of working methods and implementation of "smart work" mode improve mental health. Other studies have focused on stress levels during the pandemic and found that more than half the studied cases had mild stress symptoms and the sense of apprehension due to the COVID-19 pandemic (Zhang & Ma, 2020). Some studies found working from home decreased work motivation, but found advantages such as flexibility in work hours and completion, less cost spent on transport, and lower stress level (Purwanto et al., 2020). Similarly, depression, sleep disruptions, and insomnia, headaches, and digestive issues were symptoms found in among university students (Majumdar et al., 2020). Other studies found parents have worries about their children's health, and reduced intimacy in relationships which affected parenting and family affairs (Goldberg et al., 2020).

2.8 Theory and Hypotheses

Based on the reviewed literature, the factors linking job satisfaction and physical and mental health with flexible work and organizational role provide the hypotheses:

Hypothesis 1: Flexible work arrangement has a positive effect on physical and mental health

Hypothesis 2: Flexible work arrangement has a positive effect on job satisfaction

Hypothesis 3: Organizational role has a positive effect on physical and mental health

Hypothesis 4: Organizational role has a positive effect on job satisfaction

CHAPTER 3: METHODOLOGY

This study uses a quantitative approach to examine the effects that the variables have on other variables. This method aims to examine the relationship between variables acting as independent variables and variables acting as dependent variables and test the associated hypothesis. In this study, a set of questions are included in a questionnaire that was distributed online to workers working from home. The questions included in the questionnaire are related to the desired work arrangement, job satisfaction, the organizational role in supporting the worker, and an assessment of the mental and physical states of the teleworker. Most of the respondents are from Malaysia where the study was conducted, however, the study is geographically indiscriminate, and it also includes participants from other parts of the world. The main criterion for a selected participant is characterized by their work arrangement being conducted at home rather than their workplace due to the COVID-19 pandemic.

3.1 Research Structure

After receiving the responses from the participants, the items are divided into four constructs which are used to test the proposed hypotheses. This research uses a quantitative approach to assess people's physical and mental health and job satisfaction. After that, the variables will be linked to paths leading to two dependent variables that are related to the work and the variation of the organizational role. After conducting the study and analyzing the data, some takeaways related to work burnout and the sense of isolation can provide improvements on work arrangements going forward post the pandemic.

The model of this study consists of four variables. Two of the four variables are independent, or variables that are analyzed for their effects. The other two variables are dependent, or variables that represent the outcomes to be studied.

The first variable is the measure of the effects a flexible work arrangement has and assess the workers' opinion based on their experience as a result from working from home. The second variable is the organizational role, including various types of support from the organization provided to the employee. These two variables are independent and are assessed for their effects on the following dependent variables. The third variable is the physical and mental health of the worker because of their work arrangement, work environment, and social habits. The fourth variable is job satisfaction measured by factors related to job duties, fun, and supervisor attitude.

3.2 Research Framework

After conducting literature review and assessing the data collected, the research framework can be designed using the following hypotheses.

Table 3.1 Proposed Alternative Hypotheses

Hypothesis	Statement
H1	Flexible work arrangement has a positive effect on physical and mental health
H2	Flexible work arrangement has a positive effect on job satisfaction
H3	Organizational role has a positive effect on physical and mental health
H4	Organizational role has a positive effect on job satisfaction

These hypotheses are the alternative hypotheses that will be studied to find any exceptions to disprove the null hypotheses. The null hypotheses corresponding to the alternative hypotheses can be interpreted as: "There is no positive effect between the two variables". This is a one-tailed test which aims to find evidence for positive correlation between the variables (Banerjee et al., 2009).

An illustration of the hypotheses of the direct relationships between the four constructs can be viewed in Figure 3.1. Each path represents the relationship affected directly by one variable onto another.

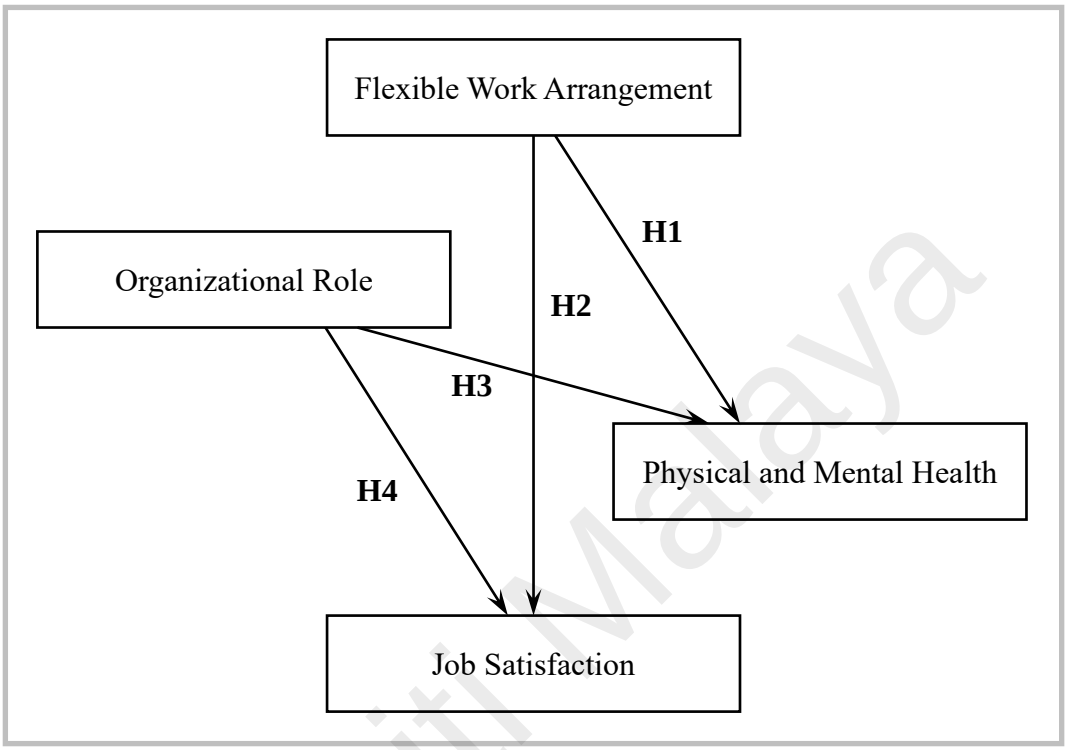

Figure 3.1 Hypothesis Model for Direct Effect

3.3 Analysis

The data collected in this study is compiled and imported in the computer software SmartPLS. This software was developed by Gudergan et al. (2008), and is one of the most prominent applications for performing a Least Squares Structural Equation Modeling (PLS-SEM) (Wong, 2013). This software composes and analyzes data using partial squares structural equation modelling (PLS-SEM). After building the model of the proposed variables and linking them to the study items, the software can run a path analysis. The first analysis performed in the software is the PLS Algorithm which produces the factor loadings of each of the items, R-Square values for each variable, and regression weights of the variables in relation to one another. To analyze the significance of the regression weights, a second analysis is performed using the

bootstrapping function in the software. This function produces t-statistic of the links between the variables.

After conducting the analysis, the software produces a report containing the sample means, standard deviation, t-statistic, and p-value. These statistics will be used to test each hypothesis based on the significance level.

3.4 Instruments

This study uses a questionnaire consisting of 28 items relating to each of the variables. Measurement of the flexible work arrangement was based on the model developed by Albion (2016), which uses a questionnaire on flexible work options to measure workers' attitudes towards flexible work options. The items include: "Working more flexible hours is essential for me to attend to family responsibilities" and "Flexible working arrangements help me balance life commitments". Measurement of the organizational role was based on the model developed by Rhoades and Eisenberger (2002), which was made based on 70 studies related to employees' perception of being valued by their organizations. The construct includes items relating to job involvement, desire to remain with the organization, and organizational commitment. Measurement of the physical and mental health was based on the model recommended by Oakman et al. (2020). The model includes items relating to self-reported health, depression, quality of life, and happiness. Measurement of the job satisfaction was based on the model used by Jain and Kaur (2014). The model includes items relating to general work environment, problems faced by employees, attitude of supervisor, and equality of division of work between co-workers.

The responses are measured using the Likert scale, presenting 5 option points for each question. Each participant would indicate the degree of agreement with each

statement (on a scale between 1: strongly disagree to 5: strongly agree). The items are divided into four themes, which form the four constructs used in this study.

3.5 Reliability, Validity, and Significance

The null hypotheses state that there is no positive correlation between the studied variables. The null hypothesis is the default hypothesis and is assumed to be correct until sufficient evidence is found to support the alternative hypothesis and to reject the null hypothesis. The alternative hypotheses can't be proven to be true, and instead, the study aims to either reject the null hypotheses or fail to reject the alternative hypotheses.

Measuring the degree to which the instruments of the study produce consistent results is done by using internal consistency. This method measures the reliability of the instrument and is done by comparing different items in the survey to examine the degree of producing similar results. These items are measured for the consistency of the pairs of items to find the overall reliability of the instrument.

The level of significance (α) is equal to 0.05. This is the probability of wrongly rejecting or disproving the null hypothesis H_0, which is known as the type 1 error. The p-value is calculated using the SmartPLS software after performing the calculations of the model. If the calculated p-value is less than the level of significance ($\alpha = 0.05$), the null hypothesis will be rejected and the proposed alternative hypothesis will be accepted (Garson, 2016). For the t-statistic, the value should be greater than or equal to 1.645 to be considered acceptable at the confidence level of 0.05 (Garson, 2016).

Using the software IBM SPSS Statistics, the data collected is compiled and plotted into the software for analysis. Based on the participants responses, the software calculates the factor loadings for each of the items, with a value greater than 0.50 being acceptable (Ghozali & Latan, 2015; Henseler et al., 2012). The software calculates the

convergent validity using the average variance extracted (AVE) method. This method is a measure of the amount of variance found by a construct in relation to the amount of variance due to error in measurement. A value should be greater than 0.50 to be considered acceptable for the average variance extracted (Chin, 1998; Höck & Ringle, 2006). For reliability, the software calculates the internal consistency by the measure of composite reliability (CR). Depending on the purposes of the research, composite reliability should meet specific thresholds, with a value greater than 0.60 being acceptable for exploratory purposes (Chin, 1998; Garson, 2016; Höck & Ringle, 2006). In addition, to measure how closely related the items are as a group in each construct, Cronbach's Alpha (CA) is calculated, with a measurement greater than 0.70 being acceptable (Bland & Altman, 1997; DeVellis, 2016; Nunnally, 1994).

The R-square is used to represent the proportion of the variance for a variable that is explained by another variable in a regression model. This measurement is calculated to explain how much the variance of one variable explains the variance of another. Generally, values of 0.75, 0.50, and 0.25 are considered substantial, moderate, and weak respectively (Mooi & Sarstedt, 2011).

The p-value is then calculated and used to test the hypotheses. If the p-value is calculated to be less than α, the null hypothesis will be rejected, and the alternative hypothesis is accepted (Wasserstein & Lazar, 2016). This is because the lower the p-value, the less likely the studied group to be the same. If the p-value is greater than α, the null hypothesis is failed to be rejected (Wasserstein & Lazar, 2016).

CHAPTER 4: RESULTS

There were 32 participants that have completed the survey for this study. Samuels (2015) recommends that a number between 30 and 50 is a minimum acceptable sample size for making statistical conclusions for a quantitative research, All the required items were successfully answered by the participants. The general demographics of the participants include two components, age, and gender. The descriptive statistics of the respondents are shown in Table 4.1.

Table 4.1 Age and Gender of the Participants

Participant Characteristic	Percentage
Age	
Less than 25 years	5.88%
25 to 29 years	29.41%
30 to 34 years	14.71%
35 to 39 years	23.53%
40 to 44 years	20.59%
More than 45 years	5.88%
Gender	
Male	55.88%
Female	41.18%
Other / Rather not say	2.94%

The data and the frequency statistics were compiled and analyzed using the software SPSS. Most of the participants were in their late twenties, late thirties, and early forties. In terms of gender, male participants are slightly more than female participants. However, the distribution of the participants is even from a subjective point of view.

4.1 Path Analysis

The relationship model can be seen in Figure 4.1. Using the software SmartPLS, the model is built by creating the four variables, and linking them to the corresponding items from the questionnaire data. The factor loading is greater than 0.50 for all the items, which meets the acceptable threshold.

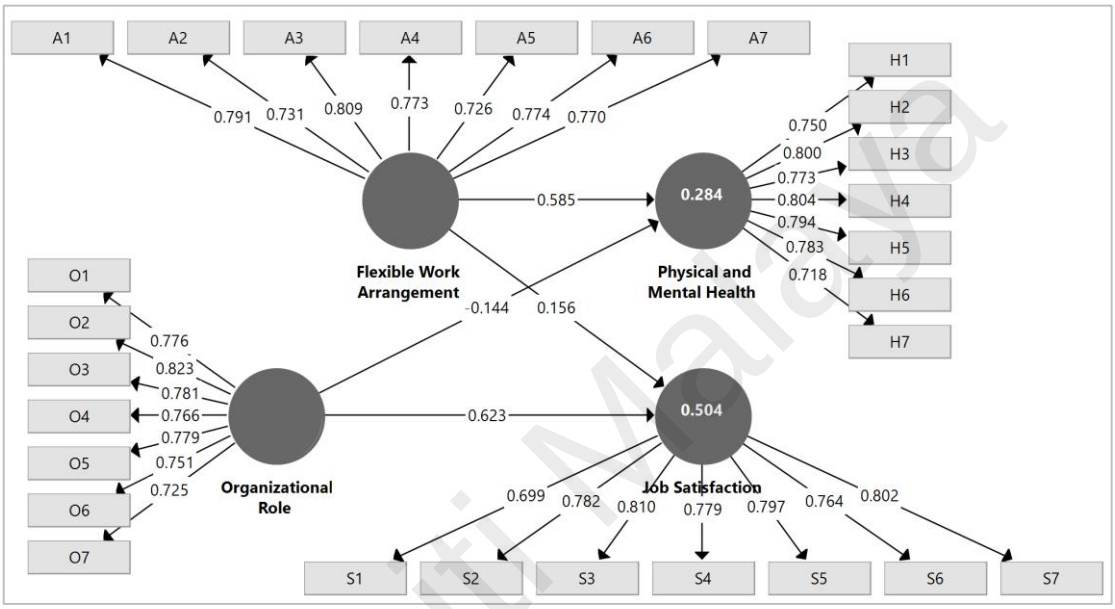

Figure 4.1 Relationship Model of the Constructs

Using the SPSS software, the measurements in Table 4.2 were calculated using the Reliability Analysis function. The measurements include convergent validity, internal consistency, and reliability. The average variance extracted (AVE) have values greater than 0.50 for all the four variables. This meets the recommended value and can be used to explain how much variation in the items can be explained by the corresponding construct. The composite reliability (CR) was calculated to analyze the correlations between the different items within each construct. Each of the constructs have a composite reliability value greater than 0.70. From these measurements, Cronbach's Alpha (CA) was calculated to measure how closely related each set of items are as a group. Each of the constructs have a value greater than 0.60 for Cronbach's Alpha.

Table 4.2 Validity and Reliability Measurements

Variable	Item	Convergent Validity		Internal Consistency	Reliability
		Factor Loading	Average Variance Extracted (AVE)	Composite Reliability (CR)	Cronbach's Alpha (CA)
		> 0.50	> 0.50	> 0.70	> 0.60
Flexible Work Arrangement	A1	0.791	0.588	0.877	0.883
	A2	0.731			
	A3	0.809			
	A4	0.773			
	A5	0.726			
	A6	0.774			
	A7	0.770			
Physical and Mental Health	H1	0.750	0.615	0.889	0.887
	H2	0.800			
	H3	0.773			
	H4	0.804			
	H5	0.794			
	H6	0.783			
	H7	0.718			
Organizational Role	O1	0.776	0.617	0.889	0.889
	O2	0.823			
	O3	0.781			
	O4	0.766			
	O5	0.779			
	O6	0.751			
	O7	0.725			
Job Satisfaction	S1	0.699	0.600	0.882	0.890
	S2	0.782			
	S3	0.810			
	S4	0.779			
	S5	0.797			
	S6	0.764			
	S7	0.802			

From these measurements, the validity, reliability, and internal consistency indicate values exceeding the minimum acceptable requirements for all four variables. After performing the PLS Algorithm in SmartPLS, the R-Square values in Table 4.3 are calculated. Physical and mental health has a moderate R-square value of 0.284, which can be used to interpret that 28.40% of the data fit the regression model. For job satisfaction, the R-square is 0.504, which meets the standard for regression analysis.

Table 4.3 R-Square Values

Variable	R-Square
Physical and Mental Health	0.284
Job Satisfaction	0.504

The regression weights in Table 4.4 show that some variables have stronger effects towards certain variables than others. Organizational role has the strongest effect on job satisfaction at a regression weight of 0.623. Flexible work arrangement has a strong effect on physical and mental health at a regression weight of 0.585. On the other hand, the regression weight between organizational role and physical and mental health is low at -0.144

Table 4.4 Regression Weights Between Variables

	Physical and Mental Health	Job Satisfaction
Flexible Work Arrangement	0.585	0.156
Organizational Role	-0.144	0.623

4.2 Bootstrap Path Analysis

To test the significance of the regression weights, a bootstrap test is performed on SmartPLS, and the t-statistic values are calculated using the bootstrap function as shown in Figure 4.2.

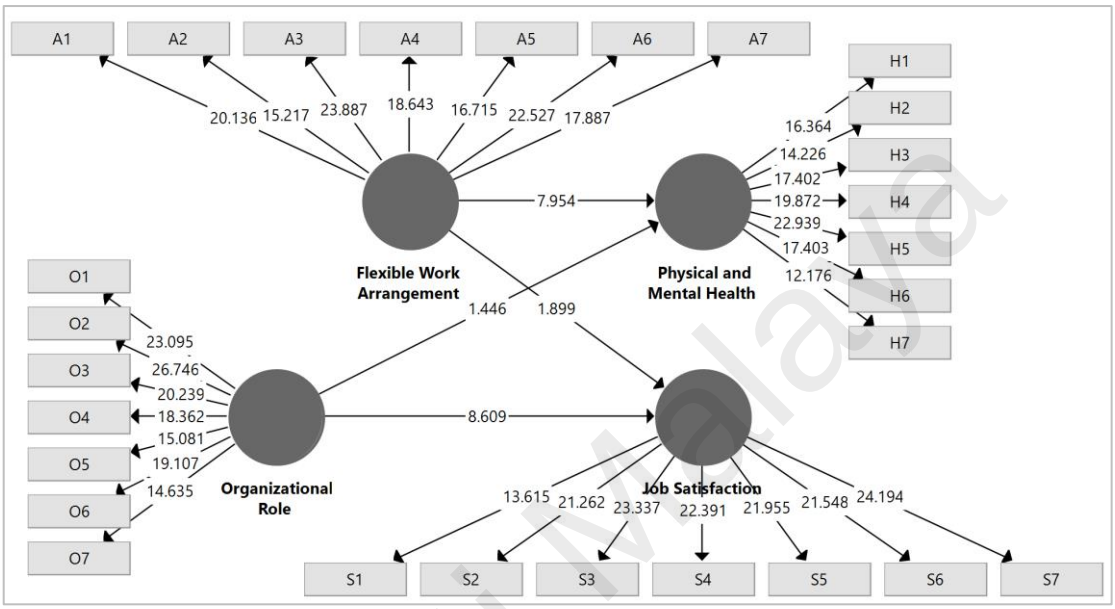

Figure 4.2 Relationship Bootstrap Model of the Constructs

4.3 Direct Effect

The values linking the variables show the t-statistic for direct effect. These values are statistically calculated from the factor loadings of the four constructs based on the relationship paths between them. As demonstrated in Table 4.5, the t-statistic and p-values are shown for the four direct path relationships. Three of the direct relationships meet the requirement of the p-value of less than 0.05, and all three relationships also meet the requirements for the t-statistic value of greater than 1.645. As a result, the hypotheses that correspond to the relationships that meet the requirements are concluded to be accepted, and the ones that do not meet the requirements are concluded to be rejected.

Table 4.5 Hypothesis Testing for Direct Effect

Relationship	Original Sample (O)	Sample Mean (M)	T Statistics (|O/STDEV|)	P Value	Result
Flexible Work Arrangement → Physical and Mental Health	0.585	0.605	7.954	0.000	H1 Accepted
Flexible Work Arrangement → Job Satisfaction	0.156	0.156	1.899	0.029	H2 Accepted
Organizational Role → Physical and Mental Health	-0.144	-0.154	1.446	0.074	H3 Rejected
Organizational Role → Job Satisfaction	0.623	0.634	8.609	0.000	H4 Accepted

The accepted hypotheses have high sample mean (M) values of 0.605 for H1, 0.156 for H2, and 0.634 for H4. This indicates significant direct effect between the two variables of each relationship. These three relationships show p-values below 0.05, which are 0.000 for H1, 0.029 for H2, and 0.000 for H4. The t-statistic values are greater than 1.645 for the three hypotheses. Therefore, the three hypotheses are concluded to be accepted. For H3, the p-value is 0.074, which is greater than 0.05, and the t-statistic value is 1.446, which is less than 1.645. Therefore, H4 is rejected.

The results of this study show similar trend with studies linked to workers' health and job satisfaction. Furthermore, the results provide statistical links which are less prevalent in existing research of similar area.

CHAPTER 5: DISCUSSION

The results of this study provide statistical measurements that were used for hypothesis testing. The four hypotheses have been analyzed using SmartPLS software and provide consistent measurements and acceptable validity and reliability values. The age and gender of the participants show standard ratio of almost equal values. For age, most of the participants were between the ages 25 and 44, at 88.24%. This is the demographic that is most expected to be full-time employees, especially of an office reliant work. From the statistical analysis, the four hypotheses are to be discussed for any themes that could provide valuable insights.

5.1 Flexible Work Arrangement and Physical and Mental Health

The first hypothesis (H1) was accepted through the method of statistical analysis. The calculations reveal that flexible work arrangement has a positive and significant effect on physical and mental health. From the statistical analysis, the significant effect has a value $\beta = 0.585$ and a value for t-statistic = 7.954.

Working from home has been shown to improve people's mental health effects and reduce stress and depression (Henke et al., 2016). There are many factors that could play a role in this effect, such as getting more sleep, the lack of need to commute to work, and spending more time with family (Anderson et al., 2015). These factors are increasingly recognized by a lot of organizations because of the effect they have on reducing the work-family conflicts. By providing workers the option to change their working hours, it gives them more freedom to balance their work around family matters (Kim, 2020). These findings are consistent with the result of this study and show strong mental health improvement when working from home. There are possible negative mental health effects from working from home, such as the feeling of isolation and burnout (Shepherd-Banigan et al., 2016). It is possible that the positives outweigh the

negatives, and most people benefit mentally from working from home. This study could also explain the distinction between burnout from staying at home due to emergency policies and burnout from working at home with the ability to freely go out after work. This is because the construct items measuring the mental impacts are focusing on work-related issues, which could explain the positive effects found by this study. Similarly, physical health could be explained by the overall positive health effect experienced by the worker. Positive mental health has been shown to correlated with positive physical health, as people have the motivation to exercise, eat healthy food, and sleep better (Xiao et al., 2021).

5.2 Flexible Work Arrangement and Job Satisfaction

The second hypothesis (H2) was accepted through the method of statistical analysis. The calculations reveal that flexible work arrangement has a positive and significant effect on job satisfaction. From the statistical analysis, the significant effect has a value $\beta = 0.156$ and a value for t-statistic = 1.899.

Job satisfaction is one of the areas many organizations are interested in as it affects their employees and their productivity. Measuring job satisfaction for teleworkers involves how well they handle their work duties, communicate with their workers, and manage their work-life balance. Studies have shown job satisfaction was influenced by having a comfortable work environment at home, including an office setup and a dedicated work room (Davis et al., 2020). Furthermore, workers were found to be more likely to assume a flexible work arrangement if they are given the opportunity to work flexibly (Kelliher & Anderson, 2010; Khan et al., 2020). This could be a key factor, as being forced to work from home might produce the opposite outcome. Additionally, working from home with ability to go out after work can be a key factor in achieving job satisfaction. Like in H1, workers might prefer working in the office if it is the only

chance for them to leave their home. This could explain the relatively weaker statistical measurements of this hypothesis compared with H1 and H4. However, this is still ultimately a possible explanation, as there is no solid evidence that suggests the existence of this correlation.

5.3 Organizational Role and Physical and Mental Health

The third hypothesis (H3) was rejected through the method of statistical analysis. The calculations reveal that organizational role does not have a positive and significant effect on physical and mental health. From the statistical analysis, the significant effect has a value $\beta = -0.144$ and a value for t-statistic = 1.446.

Organizational role includes social and psychological support for the workers, which are vital aspects that are missing during the pandemic. However, the findings do not show positive correlation on physical and mental health. Some studies have found that social isolation was linked to an increase in psychological strain (Cooper & Kurland, 2002). Furthermore, organizational support has been viewed as a method of social interaction between co-workers through virtual meetings. This has been found to reduce the sense of isolation experience by the worker (Mann & Holdsworth, 2003). These findings contradict the result of this study, which can be linked to several factors. One factor is the current circumstances during the COVID-19 pandemic could influence people's perception of organizational role. Whether a worker works from home or at the workplace, organizational role in providing support and a suitable work environment is influential regardless of the circumstances. However, it could be that people's physical and mental health is less likely to be influenced by organizational role given the circumstances. It is possible that factors, such as the psychological state of the worker, and how they handle staying at home and manage their physical and mental health are substantial and are perceived to be uninfluenced by the support from their organization.

Another factor could be that it is possible that organizational role has not been influential and supportive enough for the participants. This could be due to losses endured by the organizations, which might lead to cutting down losses, laying off workers, or putting more pressure on their workers. It has been shown that employees might have the feeling of obligation toward their organization, and the fulfillment of expectation, which can lead to the sense of negligence (Rhoades & Eisenberger, 2002).

5.4 Organizational Role and Job Satisfaction

The fourth hypothesis (H4) was accepted through the method of statistical analysis. The calculations reveal that organizational role has a positive and significant effect on the job satisfaction. From the statistical analysis, the significant effect has a value $\beta = -0.623$ and a value for t-statistic = 8.609.

Aspects relating to supervisor attitude, co-worker interaction, and availability of help are important in achieving job satisfaction. During the COVID-19 pandemic, many people had to work from home, and the organizational role in satisfying their workers involves new and innovative measures, such as providing necessary support, assuring job security, and not overloading the workers. It was argued that insufficient organizational social support has an effect in reducing job satisfaction and increasing mental strain (Haines III et al., 2002). On the other hand, the lack of support and social interaction with co-workers could be an important factor that people lack when working from home. It was argued that the lack of social interactions between co-workers hinders workflow, which could put more pressure on workers to perform their tasks (van der Lippe & Lippényi, 2020). However, this could be proof of the significance of organizational role in preventing this, as a strong organizational support structure would maintain communications between co-workers and facilitate workflow.

CHAPTER 6: CONCLUSION

Due to the spread of COVID-19, many people had to follow policies enforcing workers to work from home. Many studies have argued for the benefits of working from home, and whether it should be more common due to its benefits. Additionally, many organizations aimed to improve their employees' working conditions to increase their satisfaction and to boost productivity. The participants took part in analyzing the effects of organizational role and flexible work arrangements on both job satisfaction and physical and mental health. The statistical analysis has shown that 28.40% of physical and mental health can be attributed to flexible work arrangement and organizational role, while job satisfaction had higher rate of attribution at 50.40%. Furthermore, the positive effect of organizational role on job satisfaction was the most significant effect at $\beta = 0.623$, followed by the effect of flexible work arrangement on physical and mental health at $\beta = 0.585$. On the other hand, flexible work arrangement was found to have moderate positive impact on job satisfaction at $\beta = 0.156$, while organizational role was found to have no positive impact on physical and mental health at $\beta = -0.144$. These factors lay the foundation for improving workers' health and job satisfaction and can be vital in shaping work dynamics.

The implications of the COVID-19 pandemic on workplace changes can be valuable areas of study for the improvement of working conditions. These improvements include investing into the expansion of the work medium beyond the customary work schedule. This is especially relevant with the prevalence of technology and ease of virtual communications, which provide substitute means for co-worker interaction, work collaboration systems, and increased job involvement. With the continued provision of worker support and ensuring the sense of job security, worker happiness and satisfaction could reveal pivotal trajectory towards enhanced productivity. Job satisfaction is often

overlooked at the expense of aspects such as productivity or performance. With the results of this study, job satisfaction may gain more attention and further research to achieve better conditions for the worker. Similarly, physical and mental health is important, although more extensively researched. With the regulations in response to the COVID-19 pandemic, organizational role and flexible work arrangement are not aspects that are often researched for their impacts on workers' health, and this study could add contribution to this area.

This study was reliant on participant responses and limited by the relatively small sample size. The participants' culture, industry, income level, level of education, and technological proficiency are among factors that were not measured, which could influence the outcome of the results. Furthermore, the time and resource constraint of the study were also limited. Further research could enhance the scope of the study to include studies on specific industries, location, type of work, or measure of productivity. In addition, studies conducted on an organizational scale post the pandemic can created large scale case study experiment and provide more precise measurements.

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