

A Study of Employee Productivity on Work From Home during Covid-19: Evidence from Telecommunication Industry Professionals

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Abstract: The spread of the COVID-19 Pandemic has prompted a large number of workers to stay at home. This has sparked a quest for alternative employment arrangements for both corporations and employees. Many companies have been compelled to implement rules encouraging employees to work from home despite their readiness to shift work from office to home. With the onset of a new challenging moment, productivity challenges affecting knowledge workers' productivity while using WFH methods are becoming increasingly evident. Productivity in Sri Lanka's telecommunications industry is directly affected by work-life balance (WLB) and the mediating effect of WFH on productivity through work-life balance (WLB) and job satisfaction. In response to the COVID-19 Pandemic, questionnaires were distributed to 60 employees who had previously worked for the World Food Programme (WFH) and worked in Sri Lanka's telecommunication industry. The results were quantitatively analysed through regression analysis. The results revealed that WFH positively influences total productivity when it comes to job satisfaction. The study further revealed working from home could cause a detrimental effect on one's work-life balance. Future research could expand and deepen the scope of the model described in this study by including additional variables that potentially affect productivity in WFH setups or applying the model to other sectors. During the Pandemic, ABC telecommunications was one of the first Sri Lankan companies to let employees work from home. As a result of this approach, the company now has a higher service level that differentiates it from the competition. It is possible to work from home during covid-19, which allows employees with a significant deal of flexibility in planning their work, whilst working at home.

Keywords: Work from Home, COVID-19 Pandemic, Productivity, Work-Life Balance, Job Satisfaction, Telecommunication Industry, Sri Lanka

1. Introduction

The world has transformed due to the covid-19 epidemic, introducing new social behaviors and ways of life (Mehta, 2021). A global pandemic affects the dynamics of office culture by impacting the entire system of a company (Chattopadhyay, 2021). Organizations have been forced to adjust their functional status queue due to the COVID-19 epidemic, resulting in the new work from home (WFH) model (Mehta, 2021). WFH is becoming a more prevalent practice, and it is a vital aspect of the future of work (Galanti, Guidetti, Mazzei, Zappalà, & Toscano, 2021). The workplace notion is changing away from physical locations and toward work-from-home (WFH) or telecommuting. Employees do not have to commute to their place of employment (Chattopadhyay, 2021). This is a significant change for most firms.

Employee productivity and performance are required for an organization to fulfill its goals and ambitions. In many businesses, low workplace productivity is a significant issue. Employee productivity may be low due to a lack of motivation or boredom in the workplace. Another factor contributing to the company's lack of productivity is its employees' lack of inventiveness.

In this era of uncertainty brought on by the COVID-19 pandemic, every organization must constantly focus on sustaining and enhancing productivity, particularly in telecommunications (Irawanto, Novianti, & Roz, 2021). Couch, O'Sullivan, and Malatzky (Tanveer & Garg, Indian journal of surgical oncology) consider productivity a critical component of organizational performance. Productivity boosts an organization's total efficiency, which improves its overall performance (Tanveer & Garg, Indian journal of surgical oncology) Many organizations are compelled to use WFH, especially in the event of a pandemic. It's critical to figure out if working from home affects productivity (Kniffin et al., 2020; Thorsten son, 2020). Many firms that implement WFH methods are motivated by the possibility of improved work-life balance for their personnel (WLB). The increase in WLB will result in an improvement in production (Kramer & Kramer, 2020). Initially, the WFH concept was introduced as a part of flexible working arrangements that may help employees with their WLB (Kramer & Kramer, 2020). This study refers to employee productivity as knowledge worker productivity. Not only is it more relevant to the 21st century, but the work characteristic of knowledge workers is more known to work in remote sites that are inherently suitable with the WFH concept (Garrote Sanchez, et al., 2021).

Work-Life Balance

Work-Life Balance (WLB) can be defined as satisfaction and good functioning at work and home with the minimum role of conflict and described WLB as an acceptable level of competition between work and nonwork demands, usually involving managing competing demands for resources. Those are definitions from

the situational perspectives that are often deemed more relevant rather than formulating one size fit all model and description as terminology of WLB is very diverse among scholars depending on their idealism about the term 'balance' in the WLB (Tejero, Seva, & Fadrilan-Camacho, 2021). The situational perspective focuses more on evaluating individual actions within the situational WLB becomes more crucial as the arrival of new workers into the workforce demands a greater priority seeking a balance of work and the rest of life (saacs, 2016). There's also a growing concern in the community as the conflict between work demands and central life increase resulted in reduced quality of life (Golden, 2020).

Job Satisfaction

Despite its popularity in the management profession, there is no universal agreement on what constitutes job satisfaction (Arnold, et al., 2016). Employment satisfaction is defined as a pleasurable or positive emotional state of employees toward their job experience when they evaluate the expectations, according to an early report by (Fassoulis & Alexopoulos, 2015). While previous researchers focused on work's adequate reflection, later researchers saw job satisfaction as an attitude (Fassoulis & Alexopoulos, 2015). According to (Fassoulis & Alexopoulos, 2015), job satisfaction is described as a person's attitude and feelings toward their work. Negative attitudes imply discontent with the job, while positive attitudes reflect job satisfaction. job satisfaction from an attitude perspective is an employee's attitude towards work, organizational rewards, and the social, organizational, and physical environment in which work is performed. We can see how extrinsic factors like corporate rewards influence job satisfaction to construct from this formulation.

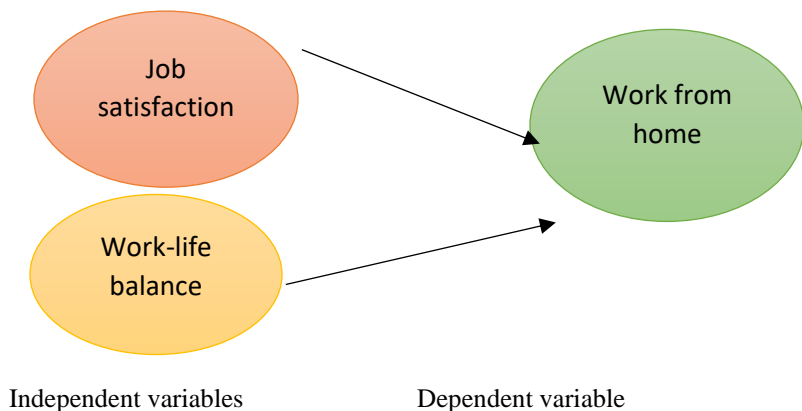
2. Methodology

Employee productivity was determined using statistical analytic methods. To obtain data, the researcher employed a quantitative approach and distributed self-administered questionnaires. Employees in Sri Lanka's private telecommunications industry were chosen as the population for the descriptive research design. The study population consisted of private sector telecommunication supplier enterprises, with a sample size of 55 employees out of 60. According to Morgan's theory, 55 employees were selected at random from a group of people. As a result, a simple random sample methodology was utilized as one of the probability sampling methods. The questionnaire was graded on a five-point Likert scale, and the data were analyzed and evaluated using SPSS version 20.

In addition, the hypotheses of the study were stipulated based on the preliminary findings as follows. H1. Work From Home has a positive impact on Work-Life Balance.H0 work from Home does not impact work-life balance.H1 Job

satisfaction has a positive impact on work-life balance, H0 Job satisfaction does not have a positive impact on work-life balance

**Figure 1 Conceptual Frame work
Author’s construct,2021**



3. Results

The entire data collection process was conducted on the private sector telecommunications sector, which has practised the Work from the home process for the last two years due to the covid-19 pandemic. As per the population, 60 of the Executive level employee of Head office at ABC organization was selected. Among them, 52 Executive responses were gathered as the sample.

The initial part of the questionnaire was allocated for the demographical factors in the study. Gender, age, occupied position, and Work from Home experiences are the factors included in the questionnaire. According to figure 3.1, all 52 respondents participated in the research, and most were Male. They represent 67.3%, whereas female representation was only 32.7 % in the entire study.

**Figure 3.2 The Gender of the responders
(researcher’s construct,2021)**

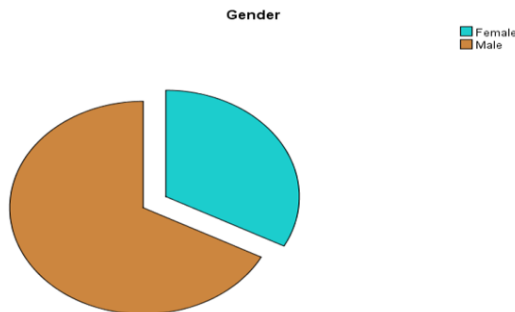


Figure 3.2 showcases the respondents' age and the majority of the participants were between the ages of 31-40, and they represented 67.3% of the entire sample. Moreover, 21.2% of the respondents were from 41-50 age. However, the few participants were aged from 18-30, representing 11.5% of the sample.

Figure 3 3.2 The Gender of the responders (Researcher's construct,2021)

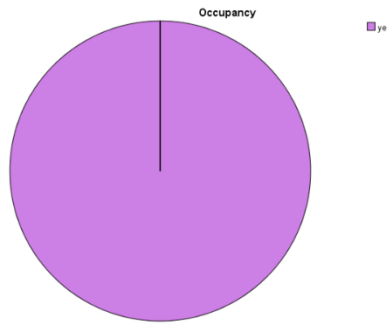
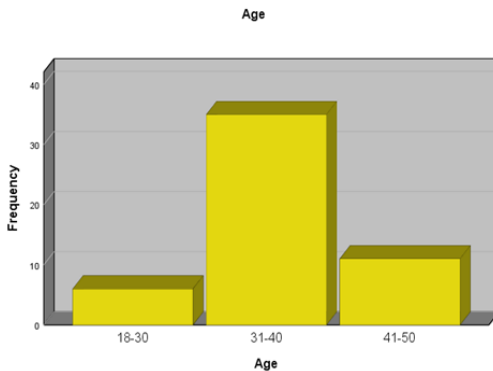
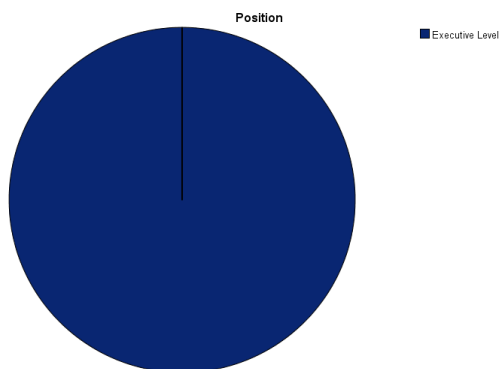


Figure 4.3 Previously occupied or currently occupied in Work from home environment (Researcher's construct,2021)



Furthermore, all the study participants have been previously working or are currently working at a Work from home environment.

**Figure 5 The Position Holds in the organization
(researcher’s construct,2021)**



As per the data analysis report, all of the study participants were executive-level employees of ABC telecommunication company.

The method to analyze the characteristics of determination scales and the items that constitute the scales in research is called a Reliability analysis. This classification determines various commonly accepted scale reliability standards which contribute for the relations among single items within the scale (Rosaroso, 2015).

Reliability Statistics

Cronbach's Alpha	N of Items
.843	3

**Table 3.1 The reliability Statistic
(researcher’s construct,2021)**

As per Taber (2018), the alpha values between 0.94-0.91 are considered strong, and 0.90-0.81 are reliable. Moreover, any value greater than 0.7 is regarded as the acceptable range of alpha values. Finally, any value less than 0.6 is considered weak or low value. According to the Table 3.1, the Cronbach's Alpha value is 0.843, which indicates the data collected from all variables is reliable as the value is > 0.7.

Correlation interpretation is a scientific method implemented to determine the strength of the linear connection linking couple variables and calculating its relationship. Therefore, correlation analysis determines the stage of variation in

one variable, the difference in the opposite. An excellent relationship leads to a correlation between the two variables, whereas a weak relationship indicates poorly correlated variables. (Asuero, Sayago, & González, 2007).

The value of the correlation coefficient ranges from +1 to -1. A correlation with a value of 1 shares a lot of similarities. As the association between two variables significance decreases, the correlation between two variables becomes less efficient. If the correlations prediction is 0, there appears to be no correlation between the variables. The coefficient sign indicates how the link is adjusted; a + sign indicates a positive association, while a - sign indicates a negative relationship. (Y, 2013). In the study, the correlation analysis is interpreted using the Pearson correlation analytical method.

Correlations

		Work from Home	Job satisfaction
Work from Home	Pearson Correlation	1	.520**
	Sig. (2-tailed)		.000
	N	52	52
Job satisfaction	Pearson Correlation	.520**	1
	Sig. (2-tailed)	.000	
	N	52	52

** . Correlation is significant at the 0.01 level (2-tailed).

Table 3.2 The correlation analysis between Work From Home and Performance (researcher’s construct,2021)

As per the above table 3.2, there is a strong positive relation between WFH and Job satisfaction based on the "r" value (0.520). Furthermore, the two variables have a significant relationship as the p-value is 0.000 (p=0.000<0.001).

Correlations

		Work from Home	Work-life Balance
Work from Home	Pearson Correlation	1	.570**
	Sig. (2-Tailed)		.000
	N	52	52
Work life Balance	Pearson Correlation	.570**	1
	Sig. (2-tailed)	.000	
	N	52	52

** . Correlation is significant at the 0.01 level (2-tailed).

Table 1.3 The correlation analysis between Work From Home and Work from home (Researcher’s construct,2021)

As per the results indicated in the correlation table 3.3, there is a strong positive correlation among Work from home and WLB based on the "r" value (0.570).

Furthermore, the two variables have a significant relationship as the p-value is 0.000 ($p=0.000<0.001$).

The dependent variable in this study is Work from home, and the R-value is applied to determine level of impact on the said dependent variable. In the model summary table, the R column represents the multiple correlation coefficient of the study. The coefficient measurement is shown by the "R Square" line, which represents the percentage of variation interpreted by every independent variable on the dependent variable. Finally, R2 denoted that the linear regression model was accurate. (Tonidandel & LeBreton, 2010). This illustration exhibits wherewith deviation in the variable is unanimously defined.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.520 ^a	.270	.255	.40417

a. Predictors: (Constant), Job Satisfaction

Table 3.4 The Model Summary Table of Work From Home and job satisfaction (Researcher’s construct,2021)

The Table 3.4 depicts R2 as 0.270, which indicates that only 27% of the total variance in Work from home has been explained in the study.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.570 ^a	.325	.311	.38868

a. Predictors: (Constant), Work-life Balance

Table 3.5 The Model Summary Table of Work From Home and Stress (researcher’s construct,2021)

The Table 3.5, the R2 value was obtained as 0.325, which indicates that only 32.5% of the total variance in Work from home has been explained in the study. The entire model fit for the data set is displayed in The ANOVA table. Moreover, the ANOVA table’s weight value was 0.000 , thereby signifying a statistically significant data set at 0.05.

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.020	1	3.020	18.488	.000 ^b
	Residual	8.168	50	.163		
	Total	11.188	51			

a. Dependent Variable: Work from Home

b. Predictors: (Constant), Job Satisfaction

Table 3.6 The Anova of Work From Home and Performance (Researcher’s construct,2021)

The Table. 3.6 portrays the entire regression model that fits well with the data. Moreover, the significant level of the procedure is denoted as 0.000, in which $p=0.000<0.05$. Therefore, the Work from home was proven to have a statistically significant impact on Job Satisfaction.

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.634	1	3.634	24.058	.000 ^b
	Residual	7.554	50	.151		
	Total	11.188	51			

a. Dependent Variable: Work From Home
 b. Predictors: (Constant), Work Life Balance

Table 3.7 The Model Summary Table of Work From Home and work-life balance (Researcher’s construct,2021)

The Table. 3.7 further demonstrate that the entire regression model fits well with the data. In addition, the significant level of the procedure was denoted as 0.000, which got a value of $p=0.000<0.05$. Therefore, it could be proven that Working from home could exert a statistically significant impact on work-life balance.

The Coefficient table contains every indicator of the model's application. The required improvement of the dependent variable with the research independent variable is described by Anova coefficient or B measures. (B, 2009)The Coefficient table contains every indicator of the model's application. The required improvement of the dependent variable with the research independent variable is described by Anova coefficient or B measures. (Joris Van Loco, 2002).

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.470	.166		14.893	.000
	Job Satisfaction	.210	.049	.520	4.300	.000

a. Dependent Variable: Work From Home

Table 3.8 The Coefficients Table of Work from Home and Job satisfaction (researcher’s construct,2021)

Table 3.8 further implies the influence of Job Satisfaction on Work from home. Moreover, a 5% threshold value was obtained as the significant level was measured as > 0.05 . This influence could be considered as a significant impact as $p=0.000$. The equation was derived as follows.

$$Y = a + b$$

$$\text{Work from Home} = 2.470 (\text{Constant}) + 0.210 (\text{Job Satisfaction})$$

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.510	.139		18.006	.000
	Work life Balance	.208	.042	.570	4.905	.000

a. Dependent Variable: Work From Home

Table 3.9 The Coefficients Table of Work from Home and Work-life balance (Researcher’s construct,2021)

Table 3.9 demonstrates the impact of Work-life Balance on Work from home. Moreover, a 5% threshold value was obtained as the significant level was measured as > 0.05. Thus, this influence could be considered as a significant impact as p=0.000. The equation was derived as follows.

$$Y = a + b$$

$$\text{Work from Home} = 2.510 (\text{Constant}) + 0.208 (\text{Work from Home})$$

4. Discussion and Conclusion

As per the result of the study, both independent variables have shown a significant relationship with the dependent variable Work From Home (WFH).

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.581 ^a	.338	.310	.38892

a. Predictors: (Constant), Job satisfaction, Work-life balance

Figure 4.1 The entire model summary Table (based on spss analysis the researcher developed,2021)

The model summary of the variables is shown in the Table 4.1. Job satisfaction and work-life balance were the independent variables, their impact on the dependent variable Work From Home was analysed. The R-value of 0.581 indicates that the Constancy is quite high. Furthermore, as evidenced by the R square value of 0.338 with a 33.8 percent impact, it was proven that all independent variables essentially exert an influence on the dependent variable, Work From Home. Thus, it was revealed that the data collection was reasonably well-fitting, as per the results discussed from the data analysis.

The results further indicated that both variables have significantly made a strong positive relationship with the dependent variable, Work From Home. A study conducted by Fapohunda (2014) also indicated such a positive relationship of Work From Home with Work-life-Balance. Moreover, a research conducted by

(Bhattarai, 2020) demonstrated agreeable results with the current study as a positive impact of Work From Home on job satisfaction was revealed. Due to covid-19 pandemic situation, the entire globe is undergoing economic and social consequences (Suppawittaya, Yiemphat, & Prachayapong, 2020). This has caused major operational process changes in the telecommunication sector as they had to shift to Work From Home procedures to ensure the organization's functional continuity. It's essential to maintain a good communication and network among the management and the employees to feel included and informed. Moreover, the management must schedule Work without employee burnout as it could negatively impact on organizational productivity.

Implications for future research studies could be recommended that more independent factors such as Environmental factors, Psychological factors and technological factors would provide in-depth evaluation on employee productivity. One of the limitation of the study was the less number of participants. Hence, more time could have spent on the research to reach a wider sample to obtain more accurate data. The survey was distributed through social media platforms, thus, quick responses could not be collected as constant reminders had to be made given the time constraints on the collection of data.

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