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## Remote Work Culture and Management Efficiency during Pandemic at University of Calabar Teaching Hospital, Calabar, Cross River State, Nigeria

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### **Abstract:**

*The study examined remote work culture and management efficiency during pandemic at University of Calabar Teaching Hospital, Calabar. Remote work productivity and work-life balance were considered due to change in work structure. Two research questions and hypotheses were respectively formulated and Job-demand resource (JD-R) theory was adopted to guide the study. Survey research design was used, the study population was 1,155, sample size of 297 staff was determined using Taro Yamane sampling formula. A 21-item structured questionnaire facilitated the collection of data with a pilot study conducted to determine potential weakness in the research instrument. The research instrument was developed, validated and tested for reliability using test-retest method. Data were analyzed using simple percentage and histogram to show Normality while exploratory factor analysis (Principal Component Analysis) and regression analysis were used to test the hypotheses using SPSS version 23. Findings revealed that stable and increasing efficiency of employees is achieved with remote work culture at University of Calabar Teaching Hospital, Calabar. Sustainable productivity is enabled by equipping the employee with better technological tools for effective task performance. The implication of the finding was the rejection of the null hypotheses. The study concludes that HR policy is a pivot in aligning new work practice for management efficiency and productivity of University of Calabar Teaching Hospital, Calabar. The study therefore recommends that employees of University of Calabar Teaching Hospital, Calabar should be properly equipped with better remote technological tools for effective task performance through web and video-conferencing for online collaboration. Also, smart policies should be implemented with the right use of technological tools to enable remote work be successful at University of Calabar Teaching Hospital, Calabar, Cross River State.*

**Keywords:** Remote work culture, management efficiency, work-life balance

### **1. Introduction**

Instantaneous change in work structure is enabled by the emergence of Covid-19 pandemic which has disrupted the status quo of many organizational settings across the globe (Hyken, 2021). Many organizations in their traditional office space have now sustained remote work culture for employee contributions towards improved productivity and competitiveness of the organization existing in a complex and dynamic environment. The success of remote working is powered by technological status and capabilities of organization. This affirms that the advancement in ICT capabilities and high-speed internets have brought remote work into global acceptance for organizations to adopt as tool for enhancing productivity of organization in an unstable socio-economic environment (Allen et al., 2015). It is estimated that over 50 percent of office work is predicted to be performed remotely and this is anticipated to be cost saving to workers as technology eliminates constraints in space and time which make it possible for task to be performed without restriction (Harkness, 1977).

Today, ICT being an integral part of office environment has made physical location of work to lose its relevance to remote work culture and continuous increase of telework is overwhelming as an alternative way of organizing work. An analysis shows that in nine countries the efficacy of remote work is performed on 2,000 tasks and 800 jobs (Lund, et al., 2021). These affirmed that pandemic disruption is being addressed as organizations are developing models and aligning with hybrid remote work to overboard the effect of pandemic though it requires well paid and highly educated workforce to drive this innovativeness. With the post pandemic of Covid-19, many organizations have considered work from home policy (WFH Policy) as effective way of running administrative functions of organizations (Wilson, 2021). In Nigeria, this policy is gradually applicable in certain categories of administrative functions and it is expected to compete positively with developed countries which have increasing rate of employee working from home with sustainable productivity to the organizations. Remote work has however helped to reduce informal communication, increase autonomy, freedom of planning, lower work stress, and adequate attention for family and leisure.

The rationale for this study is based on the recognition that Covid-19 pandemic disruption has created room for forced experimentation of remote work by redefining workplace thereby making employee kitchen or home to become their office which was not widely practice and has become an alternative means of enhancing administrative efficiency in organization. Issues such as reduction in work life balance, absent of motivation, poor infrastructural technology need to be addressed when implementing remote work policy in organization. Though Covid-19 pandemic disruption has broken the cultural and technological barriers, remote work has set a structural shift where work takes place among employees. In addition, effective monitoring of remote work productivity has been a challenge to managers because the current pandemic has complicated things among employee and manager, and there is need to develop policies and programme to control employee who love to work remotely and those that are not comfortable with remote work. This study becomes a resource to understand the future of labour force by identifying jobs that can be done remotely in University of Calabar Teaching Hospital, Calabar, and Cross River State.

## 2. Objectives of the Study

- To examine the extent to which remote work productivity affects management efficiency during pandemic at University of Calabar Teaching Hospital, Calabar, Cross River State.
- To determine the extent to which work-life balance affects management efficiency during pandemic at University of Calabar Teaching Hospital, Calabar, Cross River State.

## 3. Literature Review

### 3.1. Remote Work and Management Efficiency

Remote work culture is a digital culture within an organization which enables employees to stay connected through shared experiences, interest and priorities. A strong remote work culture gives employees a sense of belonging that transcends physical boundaries. Remote work has been one way that many organizations have used to response to the effect of pandemic disruption. Over the past five years, remote work has grown by 44 percent in line with the 21<sup>st</sup> century advancement in technology and globalization (Jalagat&Jalagat, 2019). Developed countries such as UK, USA and Germany have increasing attention for remote working which is gradually being recognized in developing countries as a result of pandemic crisis (Bloom, Lemos, Sadun, &Scur, 2014). With the emergence of Covid-19 pandemic, HR professionals has developed remote work spanning the globe for socioeconomic sustainability of organizations. It has altered work conditions across sectors of Nigeria's economy as strategic attention have been shifted to remote work environment where contingencies have forced top HR management to formulate sustainable workplace policies and procedures aimed at limiting human contact in workplace. Though, pandemic has fundamentally limit physical interaction which organizations deem fit by adopting remote work condition to apprehends the potential disaster of Covid-19. This has propelled HR to used remote working to apprehend unprecedented changes arising from pandemic to influence employees' performance.

Conceptually, remote working lacks acceptable definition as the concept is used interchangeably and differently with telecommuting. It is a form of work that is performed in a location away from central office. It entails telecommuting, teleworking from home where workers are separated from each other (Baker, Gayle & John, 2007). Crosbie and Moore (2004) define work from home as paid job that is executed from home within duration of 20 hours per week. This allows socio-economic diversity of experience in performing organizational task. It requires new technology in facilitating communication (Beno, 2018). Though, this concept is not apparently new Covid-19 pandemic has given a unique adaptation of the concept in workplace. Uncertainty arising as a result of Covid-19 has made HR managers to consider remote working conditions as strategic measure to cope with challenges imposed by Covid-19. For instance, most public organizations adopted the decision of allowing certain workforce of the organization to work from home. Though this adjustment has created alternative workspace for employees outside the main work environment, it is associated with challenges such as inability to separate work from family sphere or private life (Chawla, MacGowan, Gabriel &Podsakoff, 2020).

In effort to tackles the spread of Covid-19, green chip organizations such as Google, Amazon, Microsoft, Facebook etc. have establish policies that ensures that workers work from home, this has indicated that virtual interaction has become a replacement for direct job interview. This approach has been emulated by many competitive organizations in various sectors of economies to remain resilience by adopting remote work condition for survival in contemporary pandemic environment in Nigeria. For instance, most HR practices adopt virtual interview portals against in-person interview for recruitment and documentation. This feasibility of remote work for interviewing job seekers via Skype, Zoom etc are HR practice for scheduling interview for job seekers in areas affected by Covid-19 for their safety. These collaboration and communication platform combine video meetings, chat, and application integration and file storage

A Report by Beheshti (2020) affirms that Covid-19 pandemic has accelerated flexible work arrangement i.e. remote work. The flexibility of remote work option has enhanced cutting of cost and equally open opportunities for balancing family responsibility with work. Niel (2016) notes that high level of productivity is associated with people who work from home. Remote working saves money, time and efforts thereby enhance productivity. This support the study by Schermerhorn (2000) which affirms that 91 percent of remote workers are productive as they independently and flexibly accomplished a given task. Obviously, the important of remote working policies is necessary for socioeconomic sustainability of organizations being affected with the pandemic. For instance, the new normal for training employees has taken a new dimension of remote training which experts considers it HR strategy developed to enhance training where

learning and development are challenged with the pandemic crisis (Frary, 2020) This has made many organizations to consider virtual learning to support (Maurer, 2020).

In the words of Arshavskiy (2020) management efficiency is maximized through remote training where comprehensive walkthrough is provided to help employees get acquainted with what they should anticipate from the training. While the old employees are acquainted with the remote work, the new employees may see it as paradigm shift from traditional way of working and have to be coached to make a remote work a success to the organization. Organizational efficiency will be achieved when setting out roles and responsibilities, establishing mentorship rules, and formal identity of those to serve as mentor. Management efficiency is enabled through mentor learner engagement which has to be used for effective performance. Manager must ensure that training programme is issued to employee to understand the aims and objective of the training. Critical attention to what learner does online is necessary for improve performance. Time management in task performance will enhance efficiency when employee who have been trained have dexterity and time management skills in delivering job that is perform remotely

These portrays that remote working is successfully achieved with available technology and communication infrastructure, work expectation, eligibility and duration of remote work, etc. Today, what organizations need to do in the face of Covid-19 is to implement remote work arrangements or policies by outlining guidelines and expectations for working from home.

#### 4.Theoretical Framework

Job-demand resource (JD-R) theory by Evangelia Demerouti was adopted to guide the study. The theory stresses divisibility of working conditions into job demands and job resources in organization (Demerouti et al., 2001); while job demands relate to physical environment, physical workload, shift work, supervisor support, time pressure etc. Job resources on the other hand relates to job control, job security, effective feedback, reward, etc. It theorizes that high job demand result to health impairment and strain; while high job resources result in high level of job performance(Parker, Morgeson, & Johns, 2017). In organization, high job resources increase productivity and enhance motivation (Schaufeli&Taris, 2014). The justifications of this theory are that it enhances time planning skills which are a vital job resource which decreases time pressure thereby resulting in job satisfaction and higher productivity in remote work. in addition, most productive time is utilized by employee based on autonomy and this permits employee to start and finish a given task as a result of significant control on their work situation.

#### 5. Conceptual Framework

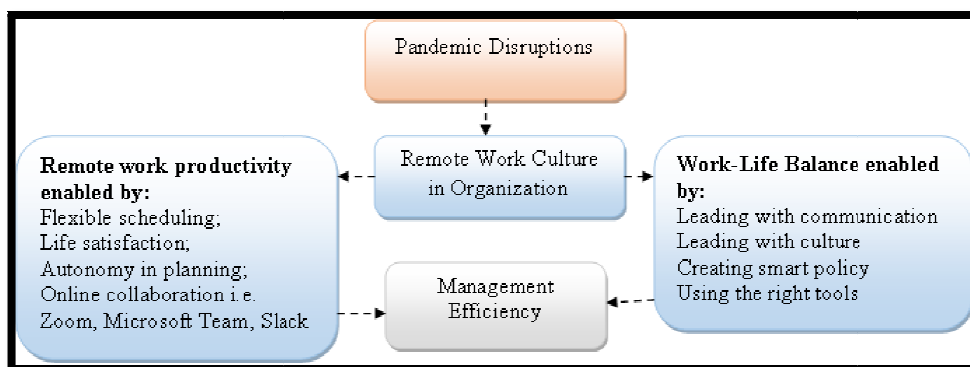


Figure 1: Conceptual Framework

Source: Author 2021

##### 5.1. Remote Work Productivity

Remote work productivity across industries and sectors has risen to 60 percent productivity during the pandemic (Kazi&Hastwell, 2021). This paradigm shift has raised concern about future of work and effective management of remote work productivity. For instance, in line with annual ranking of top 500 corporations by *Fortune*500, over 800,000 employees work virtually, with a transition from 16 percent to 65 percent rise of employee working virtually. This affirms a stable and increasing productivity of employees to the organizations (Kazi&Hastwell, 2021). A cross examination reveals that:

- Employees are willing to give extra efforts in getting job done in their respective organizations and;
- There is quick adaptation to this change (remote work) to promote organizational success.

The elimination of daily commutes to work and in-person meeting has aid workers to get more tasks performed in line with the nature of organizational culture and leadership aimed at sustaining productivity. Alper-Leroux (2020) suggest the need to make remote work a permanent practice in workplace but advised managers to measure remote work productivity based on measuring employee commitment to task instead of monitoring them on virtual meeting or online Zoom-calls during business hours which may be disappointing to manager. This indicates that manager must not place surveillance on employees working remotely in order to get them distracted, and this will aid in preventing toxic culture that make employee feel disempowered with lack of trust, but rather manager should be connecting with employee meaningfully to prevent losing the best employee. Mauree (2020) adds that employees can be trusted with remote work

and get job responsibility done and this is a current reality that Covid-19 pandemic has brought to management knowledge.

Sustainable productivity requires organizations equipping the employee with better technological tools for effective task performance. For instance, visual collaboration technologies are required to overcome declining productivity to organization. This is to sustain remote work practice through effective work policies for continuity in organization based on the notion that workers have proven their capabilities in coping with remote work as a flexible work option which require them to adjust their schedule to sustain organizational productivity (Mauree, 2020).

Akbar, et al. (2020) notes that increased productivity and performance are benefit derived from remote working. This is because it results to fewer interruptions, less politics in the office, absent of noise and less meetings. These enable remote employee to have enough time with less distraction which results to improved productivity. The implementation of this policy allows employee and organization to have strategic focus on pertinent issues objectively without favoritism or bias which may be caused by office environment. Hence, actual performance indicator of productivity is envisaged and measured with remote work compared to coming early to office and going home late.

A study by Golden and Veiga (2008) reveals that teleworking increases employee productivity when considered as new work arrangement. Employees are productive when they are less distracted by co-workers though ICT seems to weaken physical communication among employees. Lupu (2017) reveals that productivity in remote working is as a result of flexible scheduling which enable employee to have autonomy in daily planning of their activities. This covers personal and family activities as need arises and also gives employee the possibility to modify his schedule to suit personal obligations and time to complete assigned task within set time.

Akbar, et al. (2020) identifies factors that increase productivity and this includes life satisfaction and avoidance of commuting to work under rush hours. The attitude and policy of organization significantly contribute to remote work productivity when employee envisaged trust and care from the organization through training, providing adequate resources for task implementation. Hence, productivity is influenced positively because it has not wasted energy, money, time on commuting from home to office. Suitable work space at home is found as source that contributes to remote work productivity. This enables employee to have strong focus to work without interruption by colleagues. In a team environment where team members need help and cooperation to execute task, the use of video calls enhanced task interdependence among teams and this contribute to productivity in organization.

Working from home is attained with technological equipment and this influence productivity. Appropriate technology and logistic supports are efficiency tools that increase productivity. For instance, restrictions on electrical powers, internet network and dissemination of information or work data should be avoided to overcome decrease productivity. Remote work requires varieties of technologies to support work. This requires Web and Video-conferencing tools for online collaboration and sharing of document through Slack, Google Docs, Salesforce Quip etc. strategic remote work technologies that organization preferred may be Zoom, Microsoft Team, Google, Face Time etc. Richardson and Writer (2017) added that with increasing modern technology, remote work is influenced with credibility using of internet through voice mail, or web conferencing and these helps employee to work comfortably and freely at any time.

## 5.2. Work Life Balance

The quality of work-life is influence by the nature of work-life balance which every employee is saddled with the responsibility of balancing family and work responsibilities to achieve organizational goals (Sullivan, 2012). The impact of remote work offers flexible schedule to employee to engage in various activities and still comes out with positive outcomes. This state of control helps employee to meet his daily needs and also implement official responsibility (Courtney, 2020). Studies have identified work life balance as important factor of remote working which give employee enough time to meet life demand (Puleen, Campbell Harmer & Intezari, 2015; Mostafa, 2021). Remote work has broken the boundaries between work and life being enabled by technology, time flexibility and place of execution of task. Therefore, work-life-balance explained the correlation between work and life where conflict and interference exist between work and family, as well as family to work. Hence, the existence of technology enables employee to cope or integrate family related issues and work-life together.

Work-life balance entails reconciling work, family and self-demand of individual and time together and work-life spillover is addressed through remote working (March & Musson, 2008). Mostafa (2021) stresses that remote work creates flexibility which give employees the freedom to harness work and non-work life and ensure that work-life-balance is achieved. This act of integration requires telecommuting and the need for employee to ensure that personal life and professional experience are harnessed as an approach to effective remote working. Organizational concern to enhance work-life-balance is now possible with teleworking where ample opportunities is created for employee to have adequate attention to family members (Ammons and Markham, 2004).

Significant reduction on work-life conflict is enabled with remote work which increases job satisfaction levels of employee.

This equally needs employee to work in a comfortable environment, have rest and spend appropriate time on working (Kazekami, 2020). According to Marx, Mareike and Martin (2021) an imbalance in work and life will result in work-life conflict causing poor performance and burnout, and can caused mental health issues like depression, alcohol consumption and increase in smoking. This implies that work-life balance is not easy of tracking based on setting standard on performance dashboard but employer is expected to give critical attention to how employee is able to balance work commitment with his or her personal activities. This is an ethical act that will enable the bottom-line goals of organization to be achieved.

The responsibility of having employee work-life balance is not a sole responsibility of employee, but managers play a major role in this reality. However, strategic ways of maintaining better work-life balance envisaged are through the following factors:

- Leading with communication: Organizational leaders have to engage in communication to encourage workers in building sustainable work-life balance as a sign of care and in line with the organization value for employee wellness. Employee must be made to know the importance of working hard but not at the expense of their mental health through sustainable communication. The need for communication will create collaboration for task to be performed efficiently and this requires that manager need to lead with good communication tools.
- Leading with culture: Work-life balance must be made to be part of organization culture to demonstrate the effectiveness of organization on employee wellness and work flexibility. The need for organizational culture is to build or help worker have healthy habit to work-life balance.
- Creating smart policy: The need for work-life balance policy is imperative which will help in setting clear expectation of workers on the time frame that they need to be working. For instance, the timeframe must be stated with specific hours and also indicated if there is need to work during weekends in the policy. In addition, building a culture that allows workers to be flexible must be part of the smart policy.
- Using right tools: The ability for employee to work effectively is enabled by technology and managers has to use the right tool such as time tracking and productivity software to have clear insight in understanding employees' workload and set out measures of empowering them. Appropriate tool that suit a given organization must be determined and put to effective use where remote work is adopted as measure for organizational success.

Based on the above notions, Irawanto, Noviantand and Roz (2021) support that employee performance is affected with work-life balance either positively or negatively and any form of imbalance causes low productivity with decreasing performance of employee in organization. Therefore, necessary resources are required to handle contingencies associated with family and work roles, and this would affirm that work-life balance related to employee job satisfaction. Virick et al. (2010) add that workers sense of fulfillment is driven by job satisfaction which facilitates work value achievement as workers adopt remote work-life balance to drive productivity of organization

## 6. Methodology

Survey research design was adopted to elicit relevant information from respondents. The population covers all management staff of University of Calabar Teaching Hospital, 1,155 staff. The sample size of 297 was determined scientifically using Taro Yamane sampling formula. Structured questionnaire was the main source of data and was administered to employees in the studied organization with relevant knowledge on remote work culture. 297 copies of questionnaire were distributed but the research was able to recover 280 copies. This represents 94 percent response rate. Descriptive statistics was used in summarizing data and hypotheses were tested using Exploratory Factor Analysis (Principal Component Analysis) and Multiple Regression analysis. This was done with the aid of SPSS version 23.

## 7. Result

### 7.1. Factor Analysis on Remote Work Culture

The data gathered with the survey instrument were subjected to principal component analysis technique in order to validate the content of each construct in the instrument. Using PCA, the constructs designed to measure remote work culture were extracted under two components based on Eigenvalues greater than 1 and Varimax with Kaiser Normalization rotation method. The Communalities were extracted for each construct and they all had values greater than acceptable level of 0.5. The extractions each had factor loadings greater than 0.5 as seen in Table 1. This satisfies the Rule of Thumb which states that average loading for each construct should be greater than 0.5 (Hair et al, 2010). The table also shows that Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) is greater than 0.5, thus indicating that the sampling is adequate and there is no problem with normality. Bartlett's Test of Sphericity is significant (.000) thus indicating that the variables are suitable for structure detection. Furthermore, the component correlation matrices are greater than the threshold of 0.3. This is acceptable (Hair et al, 2006). Hence, the constructs are valid measures of remote work culture.

From the PCA result, the two components created were named remote work productivity (organizational culture, commutes to work, better tech tools, teleworking and work from home); and work life balance (work balance, work life spillover, employee work life, communication and culture and policy implementation). These were the independent variables for the study.

Constructs	Component			
	1	2		
Organizational culture	.795			
Commutes to work	.543			
Better touch tools	.738			
Teleworking	.670			
Work from home	.864			
Work balance		.855		
Work life spillover		.812		
Employee work life		.701		
Communication and culture		.704		
Policy implementation		.761		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy = 0.528				
Bartlett's Test of Sphericity/ Approx. Chi-Square= 1062.131				
df= 45				
Sig. = .000				
Extraction Method: Principal Component Analysis.				
Rotation Method: Varimax with Kaiser Normalization.				
a. Rotation converged in 5 iterations.				

Table 1: Varimax- Rotated Factor Loadings for Remote Work Culture  
Source: Spss Output, 2021

### 7.2. Factor Analysis on Management Efficiency

The constructs designed to measure management efficiency were extracted under one component based on Eigenvalues greater than 1 and Varimax with Kaiser Normalization rotation method. The Communalities were extracted for each construct and they all had values greater than acceptable level of 0.5. The extraction had factor loadings greater than 0.5 as seen in Table 2. This satisfies the Rule of Thumb which states that average loading for each construct should be greater than 0.5 (Hair et al, 2010). The table also shows that Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) is greater than 0.5, thus indicating that the sampling is adequate and there is no problem with normality. Bartlett's Test of Sphericity is significant (.000) thus indicating that the variables are suitable for structure detection. Furthermore, the component correlation matrices are greater than the threshold of 0.3. This is acceptable (Hair et al, 2006). Hence, the constructs are valid measures of management efficiency.

From the PCA result, the component created stands for management efficiency (remote training, paradigm shift, set out roles and responsibility, mentor-learner engagement and time management). This is the dependent variable of the study.

Constructs	Component			
	1			
Remote training,	.528			
Paradigm shift	.530			
Set out roles and responsibility	.713			
Mentor-learner engagement	.667			
Time management	.548			
Kaiser-Meyer-Olkin Measure of Sampling Adequacy = 0.583				
Bartlett's Test of Sphericity/ Approx. Chi-Square= 37.731				
df= 10				
Sig. = .000				
Extraction Method: Principal Component Analysis.				
Rotation Method: Varimax with Kaiser Normalization.				
a. 1 component extracted.				

Table 2: Varimax- Rotated Factor Loadings for Management Efficiency  
Source: Spss Output, 2021

### 7.3. Reliability of the Instrument

The reliability of the instrument was ascertained with the use of Cronbach Alpha coefficient. The instrument is said to be reliable if a Cronbach Alpha coefficient of 0.7 and above is obtained (Hair, Black Jr., Babin & Anderson, 2014). The instrument was considered to be acceptable, reliable and fit for the purpose of collecting data for the study. The reliability of each construct was obtained during the preliminary analysis. The result is presented in Table 3

S/n	Variables	No of items	Reliability
1.	Remote work productivity	5	0.786
2.	Better work life balance	5	0.638
3.	Management efficiency	5	0.756

Table 3: Cronbach's Alpha Coefficient Reliability Estimate for the Study Instrument

Source: Spss Output, 2021

#### 7.4. Descriptive Statistics of Variables

Table 4 presents descriptive statistics on the responses on remote work culture and management efficiency of University of Calabar Teaching Hospital, Calabar, Nigeria. The report covers data obtained from 280 respondents. Remote work culture was measured by remote work productivity and better work life balance. The mean of all the constructs design to measure remote work productivity were 2.5 and above which indicates a positive response to the questions. The standard deviation which is below 1 shows that up to 68 percent of the spread of the values are clustered around the mean. The variances indicate the spread of data is adequate.

The mean of all the constructs design to measure better work life balance were 2.5 and above which indicates a positive response to the questions. The standard deviation which is below 1 shows that up to 68 percent of the spread of the values are clustered around the mean. The variances indicate the spread of data is adequate.

Management efficiency of University of Calabar Teaching Hospital was measured by; management efficiency is maximized, new employees see remote work, organizational efficiency is achieved, management efficiency is enabled through mentor-learner and Time management enhances employee efficiency. The mean of the all the constructs were above 2.5 which indicates a positive response to the questions. The standard deviation for the first and third constructs (discourage friends and not readily available) which is below 1 shows that up to 68 percent of the spread of the values are clustered around the mean. On the other hand, the standard deviation for the second construct (unattractive business) which is above 1 shows that up to 95 percent of the spread of the values are clustered around the mean. However, the variances indicate the spread of data is adequate.

Item	N	Mean	Std. Deviation	Variance
Remote work productivity				
Stable and increasing productivity of employees is achieved with remote culture of the organizations	280	3.38	.892	.795
The elimination of daily commutes to work and in-person meeting aid workers to sustain productivity.	280	3.14	.766	.586
Sustainable productivity is enabled by equipping the employee with better technological tools for effective task performance	280	3.58	.917	.840
Teleworking increases employee productivity when considered as new work arrangement which make employees to be less distracted by co-workers	280	3.27	.793	.629
Working from home is attained with technological equipment which influence productivity and make organization efficient	280	2.65	.821	.675
Work life balance				
Effectivework-life balance enables employee to balance family and work responsibilities to achieve organizational goals	280	2.98	.931	.867
Work-life spillover is addressed through remote working which serves as tool for effective performance	280	2.57	.796	.633
Employee work-life balance is joined responsibility of employee and manager which play a major role in motivating employee	280	2.85	.809	.654
Leading with communication and culture are strategic ways of maintaining better work-life balance of employees	280	2.84	.733	.537
Effective implementation of smart policy and use of right technological tools enable remote work to be successful in the organization	280	2.93	1.022	1.045

Item	N	Mean	Std. Deviation	Variance
Management efficiency				
Management efficiency is maximized through remote training, which makes employees acquainted with what they should anticipate from the training.	280	2.81	.842	.708
New employees see remote work as paradigm shift from traditional way of working and are coached to make it a success in the organization	280	2.93	.940	.884
Organizational efficiency is achieved when setting out roles and responsibilities, establish mentorship rules, and formal identity of those to serve as mentor.	280	2.92	.777	.603
Management efficiency is enabled through mentor-learner engagement which is used to enhance effective performance.	280	2.96	.917	.814
Time management enhances employee efficiency when employee have been trained to be dexterous in performing task remotely	280	3.35	.751	.564

Table 4: Descriptive Statistics of Remote Work Culture and Management Efficiency

Source: SPSS Output, 2021

### 7.5. Homoscedasticity Test

Homoscedasticity shows that the dependent variable exhibits an equivalent level of variance across the range of predictor variables(s). Ordinary Least Square (OLS) Regression analysis is based on the assumption that variances of the populations from which different samples are drawn are equal. Levene's test of equality of variances was conducted to determine if the variables were homoscedastic. The result showed that the variables satisfy the condition for homoscedasticity as there is equality of variance for all the independent variables.

	Levene Statistic	df1	df2	Sig.
Organizational culture	1.685	1	278	.195
Commutes to work	.961	1	278	.328
Better Tech tools	.400	1	278	.800
Teleworking	1.418	1	278	.235
Work from home	5.425	1	278	.427
Work balance	3.605	1	278	.368
Work-life spillover	.167	1	278	.683
Employee work-life	.902	1	278	.897
Communication and culture	.983	1	278	.322
Policy implementation	.520	1	278	.575
Remote training	3.130	1	278	.762
Paradigm shift	.408	1	278	.658
Set out roles and responsibility	.657	1	278	.350
Mentor-learner engagement	.638	1	278	.505
Time management	.909	1	278	.798

Table 5: Levene's Test of Homogeneity of Variances

Source: SPSS Output, 2021

### 7.6. Linearity Test

As recommended by Hair et al (2010), the variables should be close to the probability plot (p-p) line to ascertain linearity. Figure 1 shows that there is a linear relationship among the variables.

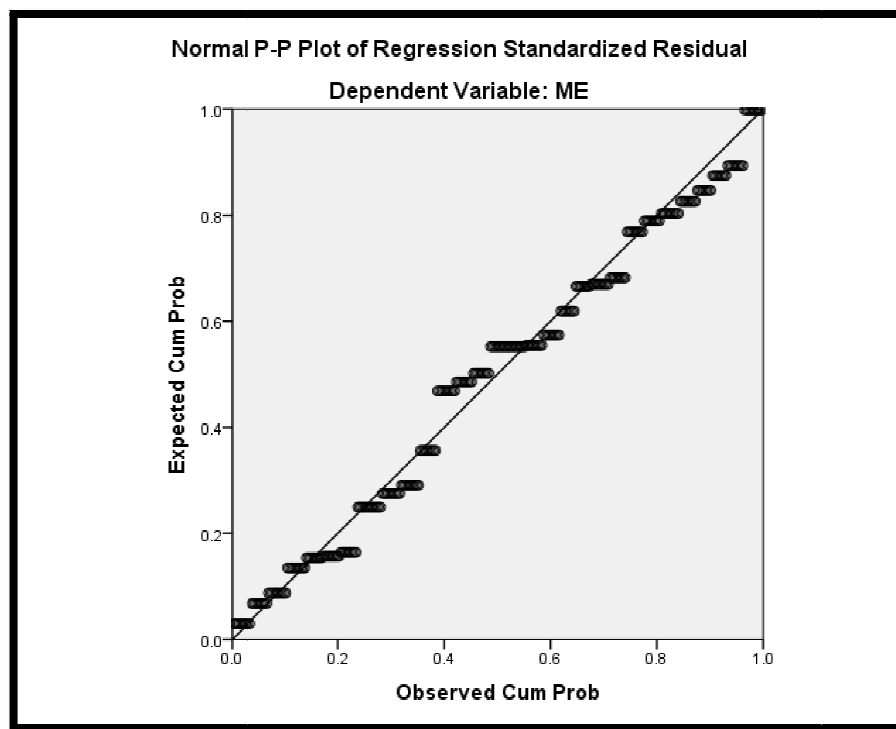


Figure 2

### 7.7. Multicollinearity Test

Multicollinearity test was executed using tolerance value and Variance Inflation Factor (VIF) to see if there are very high intercorrelations or inter-association among the predictor variables. The tolerance is the percentage of the variance in a given predictor that cannot be explained by the other predictors. When the tolerances are close to 0, there is high multicollinearity and the standard error of the regression coefficients will be inflated. The rule of thumb is that tolerance should not be less than 0.1 and VIF should not be greater than 5 (Ringle, Wande& Becker, 2015). The result in Table 4.8 revealed that there were no multicollinearity issues as the tolerance values are above 0.1 and Variance Inflation Factors are less than the threshold of 5.

Variables		Collinearity Statistics	
		Tolerance	VIF
	Remote work productivity	.992	1.008
	Work life balance	.359	2.789

Table 6: Table Showing Multicollinearity Tests Result  
Source: Spss Output, 2021

### 8. Test of Hypotheses

- Ho<sub>1</sub>: Remote work productivity does not significantly affect management efficiency during pandemic in University of Calabar Teaching Hospital, Calabar, Cross River State.
- Ho<sub>2</sub>: Work-life balance does not significantly affect management efficiency during pandemic in University of Calabar Teaching Hospital, Calabar, Cross River State.

Independent variables: Remote work culture and Work life balance

Dependent variable: Management efficiency

Test statistic: Multiple Linear Regression

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.436 <sup>a</sup>	.190	.184	.361

a. Predictors: (Constant), WLB, RWP

Table 7: Multiple Regression Result of Remote Work Culture and Management Efficiency of University of Calabar Teaching Hospital, Calabar

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	8.476	2	4.238	32.547	.000 <sup>b</sup>
	Residual	36.069	277	.130		
	Total	44.546	279			
a. Dependent Variable: ME						
b. Predictors: (Constant), WLB, RWP						

*Table 8: Analysis of Variance (Anova) on Remote Work Culture and Management Efficiency of University of Calabar Teaching Hospital, Calabar*

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.445	.193		7.478	.000
	RWP	.228	.045	.273	5.022	.000
	WLB	.305	.052	.317	5.849	.000

a. Dependent Variable: ME

*Table 9: Coefficients for Remote Work Culture and Management Efficiency of University of Calabar Teaching Hospital, Calabar*

## 9. Interpretation

A multiple linear regression analysis was performed to determine the effect remote work culture in handling pandemic disruption for management efficiency of University of Calabar Teaching Hospital, Calabar. Table 7, 9 and 10 show multiple regression result of the effect of remote work culture in handling pandemic disruption for management efficiency. The regression results revealed an R value of .436, R-square of .190 and adjusted R-square of .184 all these estimates indicated goodness of fit of the data to the model. The value of adjusted R-square (.184) implied that the independent variables (Remote-work productive and Better work life balance) account for 18.4 percent of the management efficiency of University of Calabar Teaching Hospital, Calabar. 81.6 percent of management efficiency was not accounted for by the variables. The two variables- Remote-work productive and Better work life balance both affect management efficiency as seen from their p value which is less than 0.05. The result of the regression requires that we reject the two null hypotheses and accept the alternatives. The results are summarized as follows:

- Remote work productivity significantly affects the handling of pandemic disruption for improved management efficiency in University of Calabar Teaching Hospital.
- Work-life balance significantly affects the handling of pandemic disruption for improved management efficiency in University of Calabar Teaching Hospital.

## 10. Findings

The result of the first hypothesis reveals that remote work productivity significantly affects the handling of pandemic disruption for improved management efficiency in University of Calabar Teaching Hospital (Beta = 0.273,  $P < 0.05$ ). This is in consensus with the finding of Kazi and Hastwell (2021) that stable and increasing productivity of employees to the organizations are achieved through remote work productivity. This is fact based on the notion that employees are willing to give extra efforts in getting job done in their respective organizations and; and there is quick adaptation to this change (remote work) to promote organizational success. Responses from respondents revealed that 82(55%) and 43(31%) respondents with a total of 125(86%) responses, strongly agree and agree that stable and increasing productivity of employees is achieved with remote culture of the organizations. There in the studied organization, remote work culture eliminate daily commutes to work and in-person meeting aid workers to sustain productivity; sustainable productivity is enabled by equipping the employee with better technological tools for effective task performance; teleworking increases employee productivity and make employees to be less distracted by co-workers; and working from home is achieved through technological equipments which influence productivity and make organization efficient

Finding on the second hypothesis indicates work-life balance significantly affects the handling of pandemic disruption for improved management efficiency in University of Calabar Teaching Hospital. (Beta = -0.317,  $P < 0.05$ ). This is in agreement with Sullivan (2012) that the quality of work-life is influence by the nature of work-life balance which every employee is saddled with the responsibility of balancing family and work responsibilities to achieve organizational goals. This is true based on the fact that remote work offers flexible schedule to employee to engage in various activities and still comes out with positive outcomes. Responses from the respondents revealed that 78(53%) and 43(30%) with a total of 121(83%) responses, strongly agree and agree that effective work-life balance enables employee to balance family and work responsibilities to achieve organizational goals. Therefore, in the studied organization, work-life spillover is addressed through remote working which serves as tool for effective performance; employee work-life balance is joined responsibility of employee and manager which play a major role in motivating employee; leading with communication and culture are strategic ways of maintaining better work-life balance of employees in the organization; and effective implementation of smart policy and use of right technological tools enable remote work to be efficient and successful in the organization

## 11. Conclusion and Recommendations

Pandemic disruption requires remote work culture as pathway of achieving organizational result through the implementation of remote work productivity, and better work-life balance to enhance management efficiency for improved performance. Theses affirm that remote work culture in a pandemic driven environment it is a catalyst for organization to be efficient and sustainable towards goals attainment. Hence, HR policy is a pivot in aligning new work practice for management efficiency and productivity of the organization. The study stipulates the following recommendations:

Management of University of Calabar Teaching Hospital (UTCH) should continuously have priority on stable and increasing productivity through remote culture of the organizations. Sustainable productivity should be by equipping employee with better remote technological tools for effective task performance through web and video-conferencing for online collaboration and sharing of document through Slack, Google Docs, Salesforce Quip, Zoom, Microsoft Team, Google, Face-Time etc. To achieve these requires smart HR policies and organizational commitment to coup with the instantaneous change in work structure imposed by the pandemic disruption. This is in conformity with Alper-Leroux (2020) and Golden and Veiga (2008)

Work-life balance should be a continuous practice aligned with organizational policy for sustainable performance of workers for management efficiency. Employee work-life balance should be a joined responsibility of employee and manager to enhance collective motivation for productivity in the organization. Management should strategically lead with communication and culture to maintain better work-life balance of employees. Smart policies should be implemented with the right use of technological tools to enable remote work to be successful in the organization. These however, can be achieved with commitment and resilience toward improving productive efficiency of the organization. This affirms the work of Akbar et al. (2020) and Richardson and Writer (2017).

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