
COVID-19 WORKING FROM HOME IS EQUALLY PRODUCTIVE AS WORKING FROM OFFICE

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ABSTRACT:

COVID -19 lockdown has and continues to shape the world of work. Working from home became popular after the Ghana government put a statewide restriction on people's movement and a full lockdown in Accra, the capital, and Kumasi, the second largest city. The COVID-19 pandemic continues to shape the world of work. It caused many workers in Ghana to work from home for the first time. This study examined the productivity of working from home during the COVID-19 pandemic using one sample t-test. It sampled a total of 355 respondents in the Greater Accra and Greater Kumasi of Ghana to examine their level of productivity. The findings show that COVID-19 inducted working from home is equally as productive as working from office.

Keywords- Lockdown, Pandemic, Productivity, Statewide, Variance.

INTRODUCTION:

Working from Home (WfH) keeps receiving greater attention due to the COVID-19 pandemic and the subsequent lockdowns. Many workers in Ghana were forced to work from home and significant numbers are still working from home. Some corporate organizations are considering the viability of an extended WfH. A typical example is USAID

Ghana and West Africa; whose staff are all still working from home as of March 2022. If jobs could be done from home, it reduces the corporate budget on office rent, transportation, and utility bills.

COVID-19 induced WfH in Ghana was at its peak in April 2020 when the government declared a lockdown in Accra, the capital city; and Kumasi, the second largest city. The government also imposed a nationwide closure of schools, banned all public events, and placed further restrictions on large gatherings. Workers had no option but to stay home. Those whose work could be done from home were given the opportunity to work from home. Life was unbearable for those who could not work from home, as many of them did not have any means of earning income (Adom, Adu-Mensah, & Sekyere, 2020). There were numerous incidents of riots and looting which forced the government to relaxed lockdown restrictions to ease the burden on the informal sector workers and those in the formal sector who could not work from home (Gutiérrez-Romero, 2020).

The World Bank Skills Toward Employment and Productivity (STEP) survey indicates that only six percent of the Ghanaian workforce can work from home (Saltiel, 2020). This low rate of workers who can work from home in Ghana at the moment underscores the fact that most corporates institutions in Ghana are not WfH ready. When workers do not have

computers and Internet access at home, their readiness to work from home is significantly reduced (Bowen & Pennaforte, 2017).

There is a general lack of research information on the productivity of WfH staff in Ghana. WfH is a relatively new phenomenon in Africa, and Ghana in particular (Avorny, 2020). This may be the reason employers are not making significant investments to provide the WfH infrastructure to enable workers work from home. Thus, there is significant loss of productivity when workers are unable to work from home in the event of a lockdown. There are host of benefits when workers are able to work from home and therefore WfH needs to be encouraged. The goal of this study is to determine the productivity of COVID-19-induced WfH in the Ghanaian context. This study examines the productivity of WfH relative to working from office.

LITERATURE REVIEW:

The COVID-19 crisis has stunned our thought and perception of work and it continues to redefine work globally. The world economy has not fully recovered from the shocks of COVID-19 in the midst of threatening waves. According to the International Monetary Fund (IMF), COVID-19 will make close to 90 percent of the world's population economically worse off (Chebly, Schiano, & Mehra, 2020). The shock of COVID-19 lockdown is the worst to hit the globe since World War II (Dabla-Norris, Vitor, & Kalpana, 2020). The continent of Africa has had its fair share of the lockdown shock. Africa has the lowest numbers of workers who can work from home (Saltiel, 2020). For some, the experience of COVID-19 has plunged them into longer working from home hours and more virtual meetings; to others that do not have the option of working from home, it has meant extended unemployment (Chebby et al., 2020).

Ghana's estimated GDP growth was set to plummet from a target of 6.8% to about 2.6% in 2020 (Deloitte, 2020a). A significant chunk of the drop in GDP is as a result of most workers not being able to work from home. WfH productivity has not received much research in Ghana. More research in the field of WfH is needed for the industry and employers to promote the phenomenon of WfH.

2.1 Paradigm Assumptions:

Ontology, epistemology, axiology, and methodology are the essential parts of a research paradigm, according to Vinokumar and Anoop (2019). On an ontological level, the researcher believes in objective and absolute truth. This researcher's worldview is based on the concept that knowledge is formed from experience, evidence, and unbiased facts, causing the researcher's paradigm to shift toward empirical epistemology (Vinokumar & Anoop, 2019). On axiology, this study was carried out in accordance with the ethical criteria of respecting participants, maximizing potential benefits, minimizing harm, and promoting justice, fairness, and equity. The IBM SPSS t-test design and technique meet the standards of a strong research design and mythology. In essence, it is based on theory, the settings are well-defined, and the execution is feasible. This study is also based on the positivist paradigm, which is rooted in the scientific method of inquiry.

2.2 Theoretical Orientation For The Dissertation:

There is a widely held view that COVID-19 induced WfH is not productive. Well-known proponent of WfH and Stanford University scholar Roger Bloom is a recognized proponent of this view. Bloom (2020) argued that as productive as WfH is, divided attention from parents in handling household chores and caring for children on holiday and adult family

members as a result of the pandemic makes COVID-19 induced WfH very unproductive. Thus, the conducive work environment needed for employees to be productive when they work from home is virtually non-existent in the home in the midst of the pandemic. Bloom (2020) further argued that, for workers to be productive, they may need a dedicated home office solely for work with minimal or no disruptions from the home environment as was demonstrated in a 2015 Chinese travel agency study (Bloom, Liang, Roberts, & Ying, 2015).

According to Waizenegger, McKenna, Cai, and Brendz (2020); the COVID-19 induced WfH is totally unlike a regular WfH prior to the pandemic; in that the fear and panic caused by the pandemic has raised stress levels, the work desk at home is usually a make-shift type, and the reduced social contact and physical collaboration with the colleagues could be negative. All these were huge drain on productivity, therefore any marginal rise in productivity is very laudable, and as such, COVID-19 induced work productivity must always be interpreted against the backdrop of its extreme work conditions.

Lawson and Scheid (2020) highlighted some productivity gain of WfH even in the midst of the pandemic. The researchers take a cue from Unilever's 2020 second-quarter earnings which recorded 41 percent increase in overall productivity, a 20 percent increase in internal collaboration time, 19 percent increase in external meeting time and employee well-being score going up by 14 percent. All those successes chalked by a chunk of WfH staff. Rani, Curtis, and Reddy (2020) maintained that WfH is productive when they evaluated responses from a sample of the Indian population. Proponents of the theory of COVID-19 induced WfH fostering productivity further suggests that, the majority of WfH workers are coping well with the changes and about 75 percent of employees have improved

productivity on individual tasks such as analyzing data or writing presentations since the pandemic began (Lawson & Scheid, 2020).

In between all the opposing views, is the view that the WfH productivity cannot be easily determined. WfH suits some type of work and works against other types of work. Proponents of this theory maintain that WfH has both positive and a negative effect on productivity depending on the nature of work (Bao, Li, Xia, Zhu, Li, & Yang, 2020).

Some theories of work such as organizational adaptation theory, labor process theory, and situational theory; related to the construct that are being measured to ascertain the productivity will be tested and further extended to a WfH context where possible. This will show how this study complements existing theories and where deviations from well-known theories in the context of WfH occur. These theories are all well tested and grounded in extant literature that will help explain the findings of this research. These theories might not necessarily relate to WfH; however, its applicability could be extended to explain some of the findings of this research.

2.3 Synthesis / Critique Of Previous Research

Most research findings exist on the concept of WfH and its productivity in developed countries. However, the concept of WfH has not received much attention in Africa in general and Ghana in particular. The most important determinant of growth and living standard is productivity. Baily and Montalbano (2016) defined productivity as the efficiency of converting input to output; employee productivity is the judicious use of existing resources within an organization for an efficient production.

Throughout history, measuring labor productivity has been a standard of determining human capital (Chebly et al,

2020). The output per hour has long been the simplest measure of productivity (Baily & Montalbano, 2016). In the recent context of the COVID-19 pandemic, WfH gained a lot of importance for a large share of employees since it remained the only viable option to stay productive and protective (Bonacini, Gallo, & Scicchitano, 2020); and uncertainty about the duration of the pandemic and future contagion waves, led some companies to view WfH as the 'best strategy'. During the heat of the pandemic and the subsequent lockdown in the US, Bick, Blandin, and Mertens (2020) documented that 32.2 percent of the US workforce worked from home in May 2020 compared to 8.2 percent that worked from home in February 2020. The researchers surveyed about 2000 respondents online and found that 71.7 percent of the workforce actually did work from home in May 2020.

Working from home is catching on with the world of work, and Ghana has not been left out. However, data on the size of the WfH population in Ghana is currently not available, as much research has not been geared towards it. The rapid spread of the Corona virus has convinced employers that that future of work is WfH (Bai, Brynjolfsson, Jin, Steffen, & Wan, 2020).

A survey by Gartner indicates 74 percent of organizations are determined to shift some employees to remote work permanently (Lavelle, 2020). Various aspects of the COVID-19 induced WfH have been studied. Notable among the areas of study is gender balance, time use, behavior, productivity and psychological impacts. In an early look, at the US data on COVID-19 induced WfH, Brynjolfsson et al. (2020) found that of the employed for pre-COVID-19, about half were working from home in April and May of 2020. This underscores the rising popularity of working from home amidst the pandemic. Once businesses and individual invest in WfH

infrastructure, WfH will likely continue beyond the pandemic.

2.4 COVID-19 Induced Work From Home And Productivity:

Performance effects of working from home have received little attention in the extant literature (Rupietta & Bechmann, 2017). Opinions are divided on the productivity of COVID-19 induced WfH. A higher WfH productivity is sometimes unfeasible because certain aspects of an employee's tasks could only be performed in the office (Morikawa, 2020). A typical example is when an employee has to work with classified data that cannot be made available on an unclassified home network. Businesses and educational institutions are resorting to the use of high technology to continue service delivery and production. During the peak of the COVID-19 pandemic, the use of technology in the delivery of educational services increased by around 12.5% and is set to rise further (Frey et al., 2020). WfH improves self-esteem even though household duties may interfere with work hours (Song & Gao, 2018). WfH employees spends less minutes off in a day, work more days in a month comparatively, and spends less time in a day on unproductive ventures (ApolloTechnical, 2020).

COVID-19 continues to rock havocs in the Ghanaian educational sector. During the peak of the pandemic, most tertiary educational institutions in Ghana run online with the rising use of conducive social media for teaching and learning (Hanuku, 2020). University administrators and staff in Ghana were force to shift from a permanent office-based work to a blend of teleworking during the pandemic (Anane, Addo, Adusei, & Addo, 2020).

Nandini, Lakshmanan, and Gheena (2020) surveyed 100 persons in India during the early days of the COVID-19 pandemic and

found that Indians know how to be productive during times of isolation. Isolation, according to the researchers, can motivate people to be more creative and productive, as well as learn new abilities. There is a gradual change in the mindset of employers towards WfH productivity. Based on productivity metrics that can be accurately measured, CEOs and CFOs have found that employees are equally as productive at home, as they were in the office (Faulds & Raju, 2020). A more flexible work environment results in productivity gains for employers as employees could be productive at different hours. Sales employees working from home have a lot more sales interactions with individual salespeople generating more prospects even though their conversion rates may be a little bit less, thus being more productive working from home according to Faulds and Raju (2020).

Nedlund (2020), however, is of the opinion that the lack of full supervisor oversight associated with WfH is a possible drain on productivity; while Gorlick (2020), has hinted that the global COVID-19 induced WfH could actually generate a productivity plummet. He takes a cue from Stanford economist Nicholas Bloom who has also predicted doom for the COVID-19 induced WfH (Bloom, 2020). Thus, opinions on the productivity of the WfH phenomenon are divided. This could be partly due to the mostly subjective nature of reporting employee productivity for most work tasks.

However, Gibbs, Mengel, and Siemroth (2021) had a different perspective on WfH productivity. They tracked the WfH productivity of over 10,000 trained individuals at a large Asian IT services company using activity tracking data rather than survey data. They looked at work time and production and found that productivity had dropped by 10% to 25% across a variety of productivity parameters. Lee and Tipoe (2020) also

examined the productivity and time use of a sample of 1,036 UK citizens in May 2020 during the heat of the lockdown. Respondents were asked to fill daily time use diaries. The researchers noted that self-reported productivity during the lockdown period dropped by 2-4 percentage points as a result of the population spending more time on mass media consumption, sleeping, and household related activities. It was also further discovered that during the lockdown, individual time constraints increased significantly and therefore called for employer support to help employees shifting to WfH. The findings look strange as employees were spending more time on non-productive ventures. Fatigue and anxiety from the stress of the pandemic and the lockdown might have induced the workers to distress at home. The findings highlight the role of national cultural dynamics in WfH productivity (Tarhini, 2018).

In addition, in a bid to identify the influence of WfH on the behavior and productivity of lecturers and educational staff of Indonesia during a COVID-19 lockdown, Sirait and Murdianingrum (2020) sampled 96 respondents for a quantitative study. The researchers established that the impact of WfH as policy implementation does not influence a change in the technology-mediated behavior of lecturers and educational staff. However, WFH has a partial or competitive effect on productivity because of the mediating variable (technology). Though Indonesia is a developing country with a lot in common with Ghana, the convenient sampling used in the research could make it difficult to generalize the findings to an entire population (Ross & Bibler-Zaidi, 2019).

Morikawa (2020) examined the prevalence, frequency, and productivity of COVID-19 induced WfH of Japanese workers in June 2020 by evaluating responses from 5,105 respondents in a follow-up survey from the researcher's previous research. The researcher

noted that only 32 percent of the entire labor force of Japan practiced WfH during the pandemic; and that 3.8 percent, 14.2 percent, and 82.0 percent has higher, equal to, or lower productivity respectively. The researcher's measures of productive were restricted to the subjective comparison of the workers' office and home productivity.

An empirical study of the productivity of the Indian workforce in COVID-19 induced WfH by Rani et al (2020) found evidence in support of worker's productivity. The researchers examined the productivity and motivation of Indian employees in the midst of the COVID-19 pandemic. The researchers sampled 613 working professionals from multi-national organizations and used snowball sampling technique and descriptive statistics to analyze the findings. The researchers concluded that 50% of the workforce sampled agreed to an increase in their productivity. The developing nature of the Indian economy and the inadequate Internet infrastructure is almost the same as that of Ghana (Country Comparison, 2020).

Change is what brings opportunity and the greater the magnitude of the change, the more advantageous for firms that can respond quickly to the changes (Setili, 2018). Thus, business ought to seize the least opportunity offered by the pandemic and its aftermath to spearhead innovations. Under the circumstances of COVID-19 induced WfH, this study presents novel observations about the general productivity of WfH. As the quantitative evidence on WfH and its productivity has been limited in Ghana, this study contributes to the literature and business policy making for tackling the effects of the COVID-19 pandemic (Garrote, Gomez, Ozden, Rijkers, Viollaz, & Winkler, 2021).

2.5 COVID-19 Induced Work From Home And Productivity In Ghana:

Saltiel (2020) has indicated that only six percent of Ghanaian could work from home. Data on the size of WfH population in Ghana is not readily available, as much research has not gone into that area. No comprehensive study has however estimated the size of the Ghana WfH population. However, the COVID-19 pandemic and the subsequent lockdown forced the number of Ghanaians working from home to shoot up significantly (Avorny, 2020). A significant number of workers worked from home and some are still continuing to work from home. To ensure that the government of Ghana business does not come to halt, 20,000 public sector workers worked from home in April 2020, whilst the government was creating the necessary platform to allow 300,000 public workers to work from home (Larnyoh, 2020).

Owusu-Fordjour, Koomson, and Hanson (2020) studied the impact of WfH on teaching and learning in Ghana by sampling 214 respondents. The researchers concluded that the challenges far outnumber the benefits. The limited access to Internet and technical problems with online connectivity is a major drain when working from home. The study, however, did not evaluate the problem from the perspective of the tutors and lecturers who were providing the teaching. Productivity would have been best measured from the perspective of tutors and lecturers who are salaried workers of the educational institutions sampled.

Several anecdotal accounts have hinted of COVID-19 induced WfH in Ghana being productive. COVID-19 has promoted digital transformation, which is the use of modern technology to improve performance and reach of organizations (Magazine Ghana, 2020). Avorny (2020) has sanctioned the productivity of working from home in Ghana, arguing that it is a great and fast way to get the

youth employed, an inexpensive way for companies to expand; and further provided useful guidelines for staying productive such as maintaining daily schedules, avoiding distractions, setting boundaries, and managing burnouts.

The Ghana Psychological Association (2020) has also sanctioned that COVID-19 induced WfH is productive. The association, however, is of the view that COVID-19 induced WfH is not normal and as such, workers may need extra support to cope with productivity in the midst of the pandemic. To stay productive in a typical COVID-19 induced WfH environment, workers must accept and come to terms with the uncertainty and the temporary nature of the phenomenon. At the peak of the pandemic, 90 percent staff of MTN, Ghana's largest mobile network provider; worked from home and no productivity losses were encountered (Ghana News Agency, 2020).

The United Nations (UN) office in Ghana, where the first case of COVID-19 infection was discovered, closed its doors and the staff were empowered to work from home to ensure continuity (Prah, 2020). The United Nations Fund for Population Activities (UNFPA) has also reported consistent productivity with its WfH staff since the beginning of the lockdown (UNFPA, 2020). Appiahene (2020) stated that the COVID-19 induced WfH is associated with low productivity though he admitted his position is currently not backed by scientific research. This research is thus coming on time to contribute the body of knowledge on the productivity of WfH in Ghana.

METHODOLOGY:

3.1 Research Design And Respondents

Demography:

This is statistical research intended to explore the phenomenon of WfH productivity among Ghanaian workers. This study made use of qualitative data from an online survey. The

online responses were mostly Likert items measured on a five-point Likert scale ranging from strongly disagree to strongly agree. Data for the study was gathered from workers in Ghana's Greater Accra and Ashanti regions who worked from home during the lockdown. For the purposes of this study, an employee is a person with recognized rights and obligations who works part-time or full-time under an oral or written, express or implicit contract of employment (Aliyu, 2019). Using a nonprobability snowball sampling technique, 355 COVID-19 induced WfH participants were sampled using a semi-structured questionnaire. Data was collected for one month, from January 22nd to February 22nd, 2021. The data collection techniques used in this research is an online survey, where questionnaires were sent out to participants. The online survey has an added advantage of being free from the biases of an interviewer (Formplus, 2020).

On the demography of respondents, responses from 216 males and 139 females were analyzed. The predominant age range of the respondents was age 30 to 39; which represented 47.61 of the respondents. On geographic location; majority of respondents; 60.85% were located in Accra, the capital of Ghana. Accra was the worse city affected by the COVID-19 pandemic. The general services work category dominated the list of respondents at 31%, followed by education, which recorded 17%. On job role, most of the respondents sampled were managers. The highest work experience range of respondents on their current job was 11-15 years. Thus, most of the respondents had stayed on their job long enough to gain enough experience to stand a better chance to be productive with WfH.

3.2 Research Questions And Hypotheses:

The study's research question was: Is working from home in Ghana more productive than working from a corporate office?

From the research questions, a null and alternative hypothesis was formulated to guide the researcher to address the key critical questions that relates to WfH productivity.

HO¹: There is no significant difference between the productivity of WfH and working from the corporate offices.

HO²: There is a significant difference between the productivity of WfH and working from the corporate offices.

DATA ANALYSIS:

A one-sample t-test was used to test null hypotheses. Subjective productivity reporting was used due to the difficulties of obtaining objective measurements (PHE, 2015). The questionnaire for the productivity experience variable (POE2) was adopted from Public Health England's 2015 study of measuring employee productivity in relation to WfH productivity. The question was "Suppose your productivity in the workplace is 100, how do you evaluate your work productivity at home? Please answer this question considering all your tasks." There was an additional note that "If your productivity at home is higher than that in the workplace, please answer with a figure higher than 100." However, it should be noted that an employee's productivity under WfH conditions was measured relative to his or her own productivity at the corporate office, not in contrast to his or her peers. Therefore, the figure is unaffected by reporting biases such as the degree of overconfidence or under confidence. Since this productivity metric is subjective, there was bound to be some calculation error in the true productivity (Pells, 2018). Respondents reported their quantitative subjective productivity figures; preferably from 0% to 200%. The reporting was, however,

based on the assumption that their office productivity was 100% to provide the respondents a useful baseline for comparison (PHE, 2015).

One sample of t-test of the measured variable POE2 was conducted in SPSS. The test assumed a relative productivity of 100% for working from office. The crux of the test was to determine if the subjectivity and self-reported productivity of WfH by respondents is significantly different from the relative 100% value (supposedly) of working from office. The result of the test is shown in Table 1. The test results show that at 99% confidence interval, the productivity of COVID-19 induced working from home for Ghanaian workers is not significantly different from working from the office ($p = .888$).

Table 1 One Sample t-Test for WfH Productivity (POE2)

| One-Sample Statistics | | | One-Sample Test (Test Value = 100) | | | | | | | |
|-----------------------|------|----------------|------------------------------------|-------|-----|-----------------|-----------------|---|-------|-----|
| N | Mean | Std. Deviation | Std. Error Mean | T | Df | Sig. (2-tailed) | Mean Difference | 99% Confidence Interval of the Difference | | |
| | | | | | | | | Lower | Upper | |
| PO | 35 | 99.7 | 27.522 | 1.461 | .14 | 3 | .888 | - | 3.98 | 3.5 |
| E2 | 5 | 94 | | | 1 | 4 | | 9 | | 77 |

From Table 1, the p-value is not significant ($p = .888$). We thus, fail to reject the null hypotheses; meaning that at 99% confidence interval, that there is no significant difference between the productivity of COVID-19 induced WfH and working from the corporate offices.

This highlights the fact that, the COVID-19-induced WfH was just as productive as working from the office, supporting the organizational adaptation theory, which states that companies will adjust their structures or processes in whole or in part to cope with a changing environment (Cameron, 1984 as cited

in Heuvel, Demerouti, Bakker, Hetland, & Schaufeli, 2020).

To better understand the relationship between working from home and productivity, I looked to the situational theory, labor process theory, and the organizational adaptation theory of Cameron (1984) as cited in Heuvel, Demerouti, Bakker, Hetland, & Schaufeli (2020) and Puna (2017). These theories provide information on the key factors within WfH that may impact how employees perform on their jobs to stay productive. The situational theory describes this practical business continuity approach where organizations react to and respond to the pressures of the moment (Felstead, Jewson, Phizacklea, & Walters, 2002 as cited in Jaiswal & Arun, 2020).

COVID-19 induced WfH was equally as productive as working from office is in support of the organizational adaptation theory, which affirmed that organizations will change their structures or methods in whole or in part to cope with a changing environment (Puna, 2017). The COVID-19 pandemic was a pandemic like no other the world has seen in recent times. It created a new normal for the world of work. The fast pace at which workers adjusted to work from home, especially when most workers were working from home for the first time, is best explained by the adaptation theory. To further understand the relationship, I looked to labor process theory (LPT) as elaborated by Donnelly and Johns (2021) to explain the comparative productivity of WfH. Managers use LPT to try to control the way work is structured, the tempo of work, and the duration of labor, all of which are important factors in profitability.

CONCLUSION:

Workers in Ghana being equally as productive working from home compared to working from office come close the U.S. WfH staff who were 5% more productive according

to the works of Barrero et al (2020). Ghanaians WfH staff might not have been able to catch up with productivity as a result of WfH being a relatively new phenomenon in Ghana. More than 70% of the respondent surveyed had barely ever worked from home. The important problems in the future will be how to address technological issues and boost human-computer interaction to increase productivity, as well as how to support on-site work and lab-based tasks to improve WFH viability. To continue operating profitably, businesses must continue to innovate and adapt to the evolving pandemic-oriented business atmosphere. Things have changed; most firms can now be run entirely from home and remain productive. To remain competitive, employers must fully utilize the opportunities offered by WfH options and save on exorbitant rent, utilities, and transportation costs for their employees.

According to Kiburz (2017), remote work's influence on job performance has been inconsistent in the existing literature. The findings in this study are in line with previous research in WfH, self-managed working time, and productivity, e.g. (Jaiswal & Arun, 2020; Beckmann, Cornelissen & Kräkel, 2015, Barrero et al 2020), and with the labor process theory, which contends that capital owners and managers attempt to control the organization of work in order to maximize the value they can extract from human resources (Donnelly & Johns, 2021). As a result, this finding adds to existing research literature on WfH productivity by validating this relationship among WfH staff in the Ghanaian context as the majority of previous studies were conducted in western countries.

Working from home has savings for the employer and laxity for the employees. However, productivity measure is mostly purely subjective, performance based, and meeting targets; line managers will then have a daunting task in managing subordinates

remotely (TV3 Ghana, 2020). To make the best of the WfH experience, employees must be trained and well-resourced to execute their assigned tasks from home. Employers must fully take advantage of this initiative and save on excessive rent, utilities, and transportation cost to staff to stay competitive.

In summary, the results of this research suggest that the null hypotheses are strongly supported; validating that WfH is productive. Most businesses required their staff to work from home in order to withstand the impending economic downturn. The COVID-19 pandemic has created a new normal in the world of work. Some employees in Ghana and other parts of the world are still working full-time from home. The pandemic has proven to the world that WfH or teleworking has little to do with pretending to work whilst watching television. WfH is indeed productive. In the case of the respondents sampled in Ghana, WfH is indeed as productive as working from the office. Employers are to allow more WfH options for staff. The starting point is to channel a chunk of the ICT budget into equipment and gadgets that are WfH friendly. A typical example will be to develop and implement an ICT policy to switch from the use of office desktop computers to laptops and mobile computing devices. WfH is productive and saves employees the hustle of commuting to work and could save employers the cost of expensive office space and utility bills.

REFERENCES:

- 1) Adom, D., Adu-Mensah, J., & Sekyere, P.A. (2020). Hand-to-mouth work culture and the COVID-19 lockdown restrictions: experiences of selected informal sector workers in Kumasi, Ghana. *Research Journal in Advanced Humanities*, 1(2), 45-63. Retrieved from <https://www.royalliteglobal.com/advanced-humanities/article/view/237>
- 2) Aliyu, A. U. L. (2019). Effect of employee participation in decision making in an organization performance. *International Journal of Economics & Business*, 3(2), 255–259.
- 3) Anane, G. K., Addo, P. K., Adusei, A., & Addo, C. (2020). Educational administration. *Commonwealth Council for Educational Administration and Management (CCEAM)*, 48(1), 93–102. <https://doi.org/10.1080/00071005.1982.9973611>
- 4) Appiahene, P. (2020). COVID-19 pandemic and the Ghanaian Information Technology (IT) industry. Retrieved from <https://www.modernghana.com/news/999605/covid-19-pandemic-and-the-ghanaian-information.html>
- 5) ApolloTechnical (2020). Surprising working from home productivity statistics (2020). <https://www.apollotechnical.com/working-from-home-productivity-statistics/#:~:text=Several%20studies%20over%20the%20past,and%20are%2047%25%20more%20productive.>
- 6) Avorny, S. (2020). Why working from home should be encouraged in Ghana. Retrieved on 3rd September, 2020 from <https://circumspecte.com/2020/03/working-from-home-remote-work-in-ghana/>
- 7) Bai, J., Brynjolfsson, E., Jin, W., Steffen, S., & Wan, C. (2020). The future of work: Work from home preparedness and firm resilience during the COVID-19 pandemic. Working Paper. Massachusetts Institute of Technology.
- 8) Baily, M. N., & Montalbano, N. (2016) Why is US productivity growth so slow? Possible explanations and policy responses. The Brookings Institution. Retrieved from <http://www.nomurafoundation.or.jp/wordp>

- ress/wpcontent/uploads/2016/12/20161116_M_Baily-N_Montalbano.pdf
- 9) Bao, L., Li, T., Xia, X., Zhu, K., Li, H., & Yang, X. (2020). How does working from home affect developer productivity? - A case study of Baidu during COVID-19 pandemic. ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering (ESEC/FSE). Sacramento, CA: ACM.
- 10) Barrero, J. M., Bloom, N., and Davis, S. J. (2020). "60 million fewer commuting hours per day: How Americans use time saved by working from home," University of Chicago, Becker Friedman Institute for Economics Working Paper.
- 11) Beckmann, M., Cornelissen, T., & Kräkel, M. (2017). Self-managed working time and employee effort: Theory and evidence. *Journal of Economic Behavior and Organization*, 133, 285–302. <https://doi.org/10.1016/j.jebo.2016.11.013>
- 12) Bick, A., Blandin, A., & Mertens, K. (2020). Work from home after the COVID-19 outbreak. CEPR Discussion Paper No. DP15000, Available at SSRN: <https://ssrn.com/abstract=3650114>
- 13) Bloom, N., Liang, N., Roberts, J., & Ying, Z. J. (2015). Does working from home work? Evidence from a Chinese experiment. *Quarterly Journal of Economics* 130(1): 165-218.
- 14) Bloom, N. (2020). Stanford's professor on the new remote work economy: A 'productivity disaster' and 'ticking time bomb for inequality'. <https://www.cnbc.com/2020/10/07/stanford-professor-not-optimistic-about-work-from-home-economy-ticking-time-bomb-for-inequality.html>
- 15) Bonacini, L., Gallo, G., & Scicchitano, S. (2020). Working from home and income inequality: Risks of a 'new normal' with COVID-19. *Journal of Population Economics*, 34(1), 303–360. <https://doi.org/10.1007/s00148-020-00800-7>
- 16) Bowen, T., & Pennaforte, A. (2017). The impact of digital communication technologies and new remote-working cultures on the socialization and work-readiness of individuals in WIL programs: Global perspectives on the future. In *International Perspectives on Education and Society* (pp. 99–112). <https://doi.org/10.1108/S1479-367920170000032006>
- 17) Chebly, J., Schiano, A., & Mehra, D. (2020). The value of work: Rethinking labour productivity in times of COVID-19 and automation. *American Journal of Economics & Sociology*, 79(4), 1345–1365. <https://doi.org/10.1111/ajes.12357>
- 18) Country Comparison (2020). Country comparison Ghana vs India. <https://countryeconomy.com/countries/compare/ghana/india>
- 19) Deloitte (2020a). Economic impact of the covid-19 pandemic on the economy of Ghana Summary of Fiscal Measures and Deloitte views. Retrieved from https://www2.deloitte.com/content/dam/Deloitte/gh/Documents/about-deloitte/gh-economic-Impact-of-the-Covid-19Pandemic-on-the-Economy-of-Ghana_06042020.pdf
- 20) Donnelly, R., & Johns, J. (2021). Recontextualising remote working and its HRM in the digital economy: An integrated framework for theory and practice. *The International Journal of Human Resource Management*, 32(1), 84–105. <https://doi.org/10.1080/09585192.2020.1737834>
- 21) Gutiérrez-Romero, R. (2020). Conflict in Africa during COVID-19: Social distancing, food vulnerability and welfare response. Centre for Globalisation Research (GCR) Working Paper Series, School of Business

- and Management, Queen Mary University of London, London, UK., May.
- 22) Hanuku, E. A. (2020). COVID-19: Online learning experience of college students: The case of Ghana. *International Journal of Multidisciplinary Sciences and Advanced Technology*, 1(2), 54-62.
- 23) Heuvel, M. van den, Demerouti, E., Bakker, A. B., Hetland, J., & Schaufeli, W. B. (2020). How do Employees Adapt to Organizational Change? The Role of Meaning-making and Work Engagement. *The Spanish Journal of Psychology*, 23, 1-16. <https://doi.org/10.1017/SJP.2020.55>
- 24) Dabla-Norris, E., Vitor G., & Kalpana, K. (2020). Preparing for an unknown world. Washington, DC: International Monetary Fund. <https://www.imf.org/external/pubs/ft/fandd/2020/06/the-internationalorder-post-covid-19-dabla.htm>
- 25) Faulds, D. J., & Raju, P. S. (2020). The work-from-home trend: An interview with Brian Kropp. *Business horizons*, 10(16). Advance online publication. <https://doi.org/10.1016/j.bushor.2020.10.005>
- 26) Formplus Blog (2020). What is primary data? + [Examples & Collection Methods]. <https://www.formpl.us/blog/primary-data>
- 27) Frey, C. B., Ainley, J., Curmi, E., Garlick, R., Pollard, M., Chen, C., ... Pritchard, W. H. (2020). Technology at work: A new world of remote work. Citi GPS: Global Perspectives & Solutions. Retrieved from https://www.oxfordmartin.ox.ac.uk/downloads/reports/CitiGPS_TechnologyatWork_5_220620.pdf
- 28) Garrote S. D., Gomez P. N., Ozden, C., Rijkers, B., Viollaz, M., & Winkler, H. (2021). Who on Earth Can Work from Home? *World Bank Research Observer*, 36(1), 67-100. <https://doi.org/10.1093/wbro/lkab002>
- 29) Ghana News Agency. (2020). No COVID-19 induced job losses at MTN Ghana. Retrieved from <https://newsghana.com.gh/no-covid-19-induced-job-losses-at-mtn-ghana/>
- 30) Ghana Psychological Association. (2020). COVID-19 and the world of work. Retrieved from <https://www.Ghanapsychologycouncil.org.gh/wp-content/uploads/fdownload/news/COVID-19/COVID-19%20&%20WORK%20II.pdf>
- 31) Gibbs, M., Mengel, F., & Siemroth, C. (2021). Work from home & productivity: Evidence from personnel & analytics data on IT professionals. In SSRN Electronic Journal. University of Chicago, Becker Friedman Institute for Economics Working Paper No. 2021-56. <https://doi.org/10.2139/ssrn.3843197>
- 32) Gorlick, A. (2020). The productivity pitfalls of working from home in the age of COVID-19. Retrieved from <https://news.stanford.edu/2020/03/30/productivity-pitfalls-working-home-age-covid-19/>
- 33) Jaiswal, A., & Arun, C. J. (2020). Unlocking the COVID-19 Lockdown: Work from Home and Its Impact on Employees. <https://doi.org/10.21203/rs.3.rs-34556/v1>
- 34) Kiburz, K. M. (2017). A closer look into remote work: Examining resources within remote work arrangements with outcomes of job performance and work-family conflict. (Unpublished Doctoral Dissertation). University of South Florida, Florida. <http://ovidsp.ovid.com/ovidweb.cgi?T=JS&PAGE=reference&D=psyc14&NEWS=N&AN=2016-58400-081>
- 35) Larnyoh, M. T. (2020). 300,000 public sector workers in Ghana to work from home. Retrieved from <https://www.pulse.com.gh/bi/strategy/300000-public-sector-workers-in-ghana-to-work-from-home/1rcvndv>
- 36) Lavelle, J. (2020). Gartner CFO survey reveals 74% intend to shift some employees

- to remote work permanently. Gartner Newsroom Press Release. Retrieved from <https://www.gartner.com/en/newsroom/press-releases/2020-04-03-gartner-cfo-survey-reveals-74-percent-of-organizations-to-shift-some-employees-to-remote-work-permanently2>
- 37) Lawson, T., & Scheid, L. B. (2020). Work-from-home productivity gains seen evaporating as pandemic grinds on. S & P Market Intelligence. <https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/work-from-home-productivity-gains-seen-evaporating-as-pandemic-grinds-on-60119373>.
- 38) Lee, I., & Tipoe, E. (2020). Time use and productivity during the COVID-19 lockdown: Evidence from the UK. Retrived from <https://covid-19.iza.org/wp-content/uploads/2020/11/Time-use-and-productivity-during-the-COVID-19-lockdown.pdf>.
- 39) Magazine Ghana. (2020). What will the long-term effect of Covid-19 be on digital transformation? Retrieved from <https://www.regus.com.gh/work-ghana/what-will-the-long-term-effect-of-covid-19-be-on-digital-transformation/>
- 40) Morikawa, M. (2020). Productivity of working from home during the COVID-19 pandemic: Evidence from an employee survey. Research Institute of Economy, Trade and Industry (RIETI) Discussion papers 20073
- 41) Nandini, P., Lakshmanan, G., & Gheena, S. (2020). Being productive in complete isolation - a survey. European Journal of Molecular and Clinical Medicine, 7(1), 1322–1329.
<https://www.embase.com/search/results?subaction=viewrecord&id=L2010164720&from=export>
- 42) Nedlund, E. (2020). Employees clock in more downtime when working from home. Ebn.Benefitsnews.Com, N.PAG. <https://www.benefitnews.com/news/employees-clock-in-more-downtime-when-working-from-home#:~:text=Remote%20employees%20average%20two%20hours,their%20daily%20downtime%20at%20work>.
- 43) Owusu-Fordjour, C., Koomson, C. K.; Hanson, D. (2020). The impact of COVID-19 on learning: The perspective of the Ghanaian student. European J. Educ. Stud. 2020(7), 1–14.
- 44) Pells, S. (2018). Productivity Measurement in the Digital Age. Policy Quarterly, 14(3), 52–57.
<https://doi.org/10.26686/pq.v14i3.5103>
- 45) PHE - Public Health England (2015). Measuring employee productivity – topic overview. Retrieved on 26th March 2021 from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/454172/20150318_-_Productivity_-_V3.0_FINAL.pdf
- 46) Prah, C. (2020). UN in Ghana: Our doors are still open virtually amidst COVID-19. Retrieved from <https://ghana.un.org/en/46864-un-ghana-our-doors-are-still-open-virtually-amidst-covid-19>.
- 47) Puna, A. (2017). Organizational adaptation theory. Retrieved 3/7/21 from <https://bizfluent.com/facts-7533511-organizational-adaptation-theory.html>
- 48) Rani, S., Curtis, P., & Reddy, J. (2020). A Study on Work from Home , Motivation & Productivity of Employees in Indian Population during COVID-19 Pandemic. Research Gate, 1–14.

- 49) Ross, P. T., & Bibler-Zaidi, N. L. (2019). Limited by our limitations. *Perspectives on Medical Education* 2019 8:4, 8(4), 261–264. <https://doi.org/10.1007/S40037-019-00530-X>
- 50) Rupiatta, K., & Bechmann, M. (2017). Working from home: What is the effect on employees' effort? WWZ Working Paper, No. 2016/07, University of Basel, Center of Business and Economics (WWZ), Basel. <http://hdl.handle.net/10419/162183>
- 51) Saltiel, F. (2020). Who can work from home in developing countries? *COVID Economics*, 7, 104 –118. http://econweb.umd.edu/~saltiel/files/wfh_mostrecent.pdf
- 52) Setili, A. (2018). Growth is everyone's job: Seven rules for making the companywide mind-set shift. *Leader to Leader*, 2018(88), 50–55. <https://doi.org/10.1002/ltl.20358>
- 53) Sirait, A., Murdianingrum, S. L. (2020). Impact of work from home policy on behaviour and productivity of lecturers and education staff. *Proceeding on Economic and Business Series (EBS)*, 1(1), 10-19
- 54) Song, Y., & Gao, J. (2018). Does telework stress employees out? A study on working at home and subjective well-being for wage / salary workers. *IZA Discussion Paper*, (11993), 2.
- 55) Tarhini, A. (2018). The effects of individual-level culture and demographic characteristics on e-learning acceptance in Lebanon and England: A structural equation modelling approach. (Unpublished doctoral dissertation). Brunel University, Brunel.
- 56) TV3 Ghana. (2020). Many employees are already becoming used to working from home after the COVID-19 induced lockdown, but for how long will this continue? Is it something that is here to stay? Retrieved from <https://www.facebook.com/watch/?v=889621654890026>
- 57) UNFPA. (2020). Intricacies of working from home. <https://ghana.unfpa.org/en/news/intricacies-working-home>
- 58) Vinokumar, M. V., & Anoop, A. K. (2019). Review on comparability of 'classical' and 'contemporary' research methods in the context of Ayurveda. *Journal of Ayurveda and Integrative Medicine*, 2019. <https://doi.org/10.1016/j.jaim.2019.02.005>
- 59) Waizenegger, L., McKenna, B., Cai, W., & Brendz, T. (2020). An affordance perspective of team collaboration and enforced working from home during COVID-19. *European Journal of Information Systems*, 29(4). <https://doi.org/10.1080/0960085X.2020.1800417>.