



(RESEARCH ARTICLE)



Impact of working from home on employee productivity in post COVID 19 era: The moderating role of organizational support

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World Journal of Advanced Research and Reviews, 2024, 23(01), 340–358

Publication history: Received on 25 May 2024; revised on 01 July 2024; accepted on 04 July 2024

Article DOI: <https://doi.org/10.30574/wjarr.2024.23.1.2022>

Abstract

The purpose of the study is to review the impact of working from home on employee productivity in post COVID-19 era, the moderating role of organization support. The descriptive survey design is adapted for this research to explore the impact of COVID-19 on employee productivity while seeking further knowledge on organizational support in post COVID-19 era. The structure of this research is flexible, therefore the necessity to adopt the qualitative research approach. Data was obtained through a survey with a questionnaire. Sample size is approximately 203 consisting of employees from both the private and public sector organization in some part of Accra, basically Accra central. The study employed the use of the Cronbach Alpha to measure the reliability of the scale adopted. Thus, in the context of the study, the high Cronbach's Alpha values suggest that the survey items for measuring employee productivity, organizational support, and flexible work hours were well-designed and highly reliable. Therefore, the findings of the study are likely to be trustworthy and reproducible. This relationship implies that as opportunities for flexible work schedules increase, so does the level of productivity among employees. However, this study also emphasizes that employee productivity is not simply a matter of offering flexible work arrangements. The role of organizational support emerges as crucial, as shown by its substantial positive impact on employee productivity. In conclusion, this research offers compelling evidence that flexible working hours and organizational support are key ingredients in the recipe for enhanced employee productivity. The studies recommends further research is needed to uncover the intricacies of these relationships and to broaden our understanding of the dynamics of modern work environments.

Keywords: COVID-19; Work from Home; Employee Productivity; Moderating role and Organizational Support

1. Introduction

The infectious disease known as Coronavirus disease (COVID-19) is caused by a coronavirus, as stated by the World Health Organization (WHO, 2020). On March 11, 2020, the World Health Organization (WHO) officially designated the COVID-19 outbreak as a pandemic (WHO, 2020). According to the World Health Organization (WHO, 2021), the global tally of confirmed COVID-19 cases as of 5 May 2021 stands at 153,954,491, with a total of 3,221,052 reported deaths. The COVID-19 pandemic has had a significant impact and is purported to have transformative effects on future work patterns (Ford et al., 2020). The implementation of company and industry shutdowns worldwide in response to the

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COVID-19 pandemic has resulted in the emergence of numerous distinctive issues for both employees and employers (Kniffin et al., 2020).

Since the onset of the COVID-19 epidemic, organizations, both public and private, have implemented several policies pertaining to the workplace on a global scale. Certain organizations required their employees to work remotely due to company policies or government-imposed national lockdowns (Sandford, 2020). Conversely, other employees were afforded the choice between three alternatives: working remotely from home (WFH), working at the physical office, or adopting a hybrid working arrangement (HW) (Ford et al., 2020).

According to a study conducted by Bernstein et al. (2020), a decline in productivity was observed among white collar employees immediately following the implementation of lockdown measures. A decline in productivity can be anticipated in instances of significant transformations, such as the implementation of a lockdown. The decline in productivity was subsequently mitigated within a span of few months, resulting in an average increase of 10 to 20% in the employees' working hours.

According to Deighton (2020), Microsoft is reportedly in the process of developing solutions aimed at assisting employees who experience a lack of the typical commute time between their residence and the workplace. This is being achieved by incorporating a virtual commute feature into their calendars. According to a study conducted by Bao et al. (2020), examining the remote work arrangements of Baidu employees amidst the COVID-19 pandemic, it was observed that the rise in productivity was not uniformly distributed and did not yield beneficial outcomes for all individuals.

Extensive study in the fields of psychology and organizational behavior has been conducted to explore the relationship between organizational culture and climate, as well as employee commitment and outcomes such as work satisfaction, performance, and productivity. In the context of this article, organizational culture is defined as the collective set of ideas, values, practices, and artefacts that are commonly understood by employees inside an organization (Huff, 2014). This culture serves as a guiding force for both employees and management on a daily basis. This can be expressed in layman's terms as the established practices within an organization (Deal & Kennedy, 2000).

Organizational commitment is a well-recognized concept that refers to the psychological bond that employee forms with their organization. This bond influences a person's decision to remain employed with the organization and their willingness to actively contribute to its achievements (Yousef, 2017). The research conducted by Porter and Smith (1970) as well as Mowday et al. (1979) has established a clear connection between an employee's commitment to an organization, their belief in its values and aims, and their willingness to exert additional effort for the organization's success.

According to Luthans et al. (2008), the psychological contract serves as a mediator between the organizational climate and employee performance, in addition to its association with job satisfaction and heightened commitment to the organization. Mowday et al. (2013) emphasized the significance of the psychological contract established between an employee and the organization. This contractual agreement encompasses various aspects, including financial remuneration (such as compensation and benefits) as well as non-financial incentives (such as psychological fulfilment and continued affiliation with the organization), which serve to motivate and reward the employee.

1.1. Problem Statement

The existing body of research examining the effects of COVID-19 lockdowns on productivity is still in its early stages. Extensive literature has been produced regarding the ramifications of the pandemic. However, the existing body of work primarily comprises articles published in popular media and magazines, as well as specialized medical journals that have focused on elucidating the characteristics of novel virus strains. There is a scarcity of scholarly literature regarding the consequences of Post COVID-19 effects and the influence of remote work on organizational productivity. The primary objective of this study is to investigate the impact of organizational support on the advantages associated with remote work arrangements during the global pandemic.

A substantial body of literature exists that examines the problems and disadvantages associated with remote labor during the epidemic. There is a scarcity of research that specifically examines the impact of organizational factors on remote work arrangements within the ongoing epidemic. This study will not solely focus on remote work arrangements. In this study, equal emphasis will be placed on investigating the impact of working from home and the function of organizational support. The authors conducted a comprehensive analysis of the existing literature, spanning over a year into the epidemic. However, they did not come across any substantial research articles that thoroughly examined the

effects of remote work on productivity in the post-COVID-19 era, specifically considering the mediating influence of organizational support.

Although there is ample literature discussing the significance of organizational factors in the productivity of IT employees, there is a dearth of research on the effects of remote work on productivity in the post-COVID-19 era. Furthermore, the role of organizational support as a mediator in this context is even less explored, particularly during the lockdowns, both globally and within the Ghanaian context. Hence, it is imperative to conduct an extensive investigation on the influence of remote work on employee efficiency, with a particular focus on the significance of organizational assistance in the aftermath of the COVID-19 pandemic.

1.2. Research Objective

The main objective of the study is to review the impact of working from home on employee productivity in post COVID-19 era. The mediating role of organizational support.

The specific objectives include the following;

- To assess the relationship between working from home and employee productivity.
- To evaluate the effect of organizational support on employee productivity.
- To examine the moderating role of organizational support on working from home on employee productivity.

2. Literature Review

The COVID-19 pandemic has compelled numerous institutions to implement remote work practices, regardless of their preparedness. The occurrence of remote work has been amplified as a result of the pandemic, alongside the rapid advancement of digitalization, the implementation of home confinement measures, the adoption of work from home (WFH) policies, and the closure of kindergartens and schools. The relevance of conditions that impact the productivity of knowledge workers during the adoption of new work-from-home practices has been growing as firms adjust to the period of the "new normal."

2.1. Working from Home

Prior to the pandemic, numerous research in the economics and management literature have examined the consequences of work-from-home (WFH) arrangements inside individual organizations. According to a study conducted by Bloom, Liang, Roberts, and Ying (2015), a randomized controlled trial conducted in a Chinese call-center revealed substantial improvements in worker productivity subsequent to the implementation of work-from-home (WFH) arrangements, which allowed workers to choose this option. This study provides a comprehensive analysis of the potential advantages of remote work arrangements. However, caution should be exercised when generalizing these findings to occupations that are characterized by less standardized and routinized tasks, typically seen among knowledge workers. Choudhry, Foroughi, and Laron (2020) conducted an experiment wherein patent examiners from the United States Patent and Trademark Office were given the option to work from home (WFH). The study revealed notable advantages associated with WFH. Patent examiners, meanwhile, generally operate autonomously.

Hence, the current level of knowledge regarding the potential advantages of remote work for occupations that require a greater emphasis on collaboration and coordination, particularly for managers, remains limited. The extent to which pre-pandemic studies may be extrapolated to comprehend the impact of working from home (WFH) in emergency circumstances, such as those imposed by the pandemic (e.g., school closures, business interruptions), remains uncertain. According to a recent study conducted by Birkinshaw, Cohen, and Stach (2020), a group of 150 knowledge workers who were compelled to operate remotely due to the COVID-19 pandemic had certain advantages in terms of productivity. However, the study also highlighted certain apprehensions over the long-term efficacy, creativity, and personal resilience of these individuals.

The concept of working from home (WFH) has garnered significant attention in academic studies since the early 2000s. This approach has been widely embraced by numerous prominent technological organizations due to the various advantages it provides to their staff (Ford et al., 2020). However, its prominence began to increase with the onset of the COVID-19 epidemic in 2019, since working from home (WFH) became mandatory for several professionals worldwide as a preventive measure against the spread of the pandemic.

In light of the pandemic, various measures such as partial or complete lockdowns and travel restrictions have been implemented, leading researchers to shift their attention towards remote work. This is mostly owing to the fact that professionals are no longer able to engage in unrestricted work practices. A poll titled "The Future of Work is Remote" was done by GitLab (2020) in the start of 2020. The survey gathered data from 3000 professionals in the IT sector who held various positions such as managers, associates, assistants, and directors, all of whom worked remotely. Based on the findings of the survey, it was observed that a majority of the employees experience reduced travel and perceive an increase in their productivity and efficiency levels. Furthermore, a significant majority of individuals hold the belief that remote work is the forthcoming trend (GitLab, 2020).

Based on a study done in 2020, Kniffin et al. (2020) found that 229 human resources departments observed a significant projected rise in the prevalence of remote work in the post-pandemic era. The rise in remote work is purportedly supported by advancements in connectivity and communication technology (Kniffin et al., 2020). These technologies include virtual private networks, cloud computing, and online meeting software (Bao et al., 2020).

2.2. Organizational Support

The work organization, being a nonliving entity, lacks inherent personality or motives. Nevertheless, according to Levinson's (1965) argument, individuals tend to anthropomorphize influential institutions, such as the organizational structure. Levinson posits that the personification of an organization can be attributed to several distinct characteristics. Firstly, the organization assumes responsibility for the actions carried out by its agents. Secondly, the organization maintains a sense of continuity through its established culture and norms. Lastly, the organization wields significant power through its agents, thereby exerting influence over individual employees. According to Eisenberger et al. (1986), the Organizational Support Theory suggests that employees perceive the organization as a sentient being with a defined goal and deliberate actions. Employees develop Perceived Organizational Support (POS) as a result of receiving favorable treatment from the organization, which in turn aids in predicting future treatment.

Continuance commitment can be understood as a form of work engagement. According to Bakker et al. (2008), the concept under consideration is delineated as a constructive and gratifying psychological condition characterized by vigor, devotion, and immersion. Hence, employees exhibit a sense of pride in their association with the organization, as evidenced by their strong affiliation, high levels of job satisfaction, enhanced work performance, reduced turnover rates, elevated positive mood, heightened enthusiasm, willingness to assist others, and accumulation of resources that serve to mitigate workplace stressors. Organizational support within an organization is facilitated through the implementation of human resource management policies, the initiation of top management initiatives, and the degree of leaders' endorsement of employee contributions. The significance of organizational support extends beyond conventional work environments inside an organization. The significance of remote work in the WFH setting has been substantiated due to its positive impact on employee happiness, alleviation of psychological strain and concerns regarding isolation, and enhancement of employee affiliation with the organization.

2.3. Employee Productivity

The primary concern within an organization is in the level of staff productivity. This finding prompted researchers to conduct further investigations (Shekrkon, 2001). According to Motowildo (2003), productivity is defined as the overall performance expected by an organization from the individual behavioral patterns exhibited by each worker within a specified timeframe. The significance of employee attitudes to management lies in their ability to shape the conduct of workers within the organizational context. The prevailing viewpoint claims that "employee satisfaction is positively correlated with employee productivity." The presence of a contented workforce can contribute to the establishment of a positive organizational climate, hence enhancing overall performance. Therefore, the achievement of optimal performance levels through the enhancement of productivity and efficiency has consistently been a paramount objective within organizations.

According to the Cambridge Dictionary (n.d.), the concept of productivity is characterized as the measure of the pace at which an individual, organization, or nation carries out valuable tasks. However, Wagner and Deissenboeck (2019) argue that there is no universal consensus on the precise definition of productivity. Nevertheless, it is generally acknowledged that productivity pertains to the relationship between output and input. In contrast, Ramírez and Nembhard (2004) argue that in addition to output and input, productivity encompasses various dimensions, including overall project success, innovation, cost and profitability, timeliness (adherence to deadlines), customer satisfaction, quality, efficiency, and effectiveness.

In addition to its conceptualization and substance, the measurement of productivity is a topic that elicits considerable scholarly discourse. Measuring employee productivity presents challenges due to the variability of jobs, the potential

for differing approaches among individuals, and the absence of standardized production time benchmarks. There may be several limitations associated with the measurement of staff productivity. Jaspan and Sadowski (2019) argue that the act of evaluating productivity has the potential to negatively impact overall productivity due to the potential creation of a morale issue among individuals. Employees possess attitudes regarding several facets of their employment, their professional trajectories, and the entity they are affiliated with.

In this manner, it is possible to align the amount of job happiness with a suitable degree of staff productivity. The study further suggests that it is advisable to promote advancement opportunities in career progression and professional development, such as providing in-house training. This approach can enhance the quality of service and delivery, as well as foster the practice of job development and job enrichment inside the workplace.

2.4. Effect of Working from home on Employee Productivity

The demand for work arrangements and practices that prioritize employees and offer personalized options for temporal and spatial flexibility in work processes, which may accommodate evolving personal demands and environmental circumstances, is consistently on the rise. Numerous studies have been conducted to examine the advantages and difficulties encountered by professionals in the context of remote employment. In a study conducted by Bao et al. (2020), developers were surveyed to gather their perspectives on the effects of working from home (WFH) on their productivity. Several participants expressed enthusiasm and a sense of invigoration associated with the experience of working remotely. The individuals asserted that their ability to concentrate on their tasks improved in the absence of disruptions from their coworkers. Additionally, it was noted that they incur lower commuting costs, resulting in time savings that can be allocated towards additional job tasks. Furthermore, the authors asserted that they experienced enhanced work-life equilibrium when engaging in remote work (Bao et al., 2020). According to Ford et al. (2020), it is asserted that the various benefits have a beneficial impact on productivity, such that if an individual reports experiencing a benefit, their productivity is subsequently enhanced.

According to Ford et al. (2020), the primary factors that exert the most significant impact on productivity are improved focus, a conducive work environment, and reduced distractions or interruptions. Additional benefits can be observed in terms of enhanced work efficiency, effective coordination of work and personal commitments, integration of work and learning activities, stress reduction, time and cost savings, the ability to work while considering one's health status, the opportunity to earn based on individual needs, increased employee loyalty, and a decrease in unemployment.

2.5. Effect of Working from home on Organizational Support

The subject of leadership is a captivating area of study that exerts a direct influence on the behaviors exhibited by communities, groups, and individuals that follow a leader. This research paper aims to examine the impact of the situational leadership style that has emerged as a result of the COVID-19 pandemic on work arrangements. The selection of this subject matter was motivated by the significance of perceived organizational support and its influence on individual performance inside organizations. Many companies are lacking an effective leadership style that can drive them towards the required level of productivity. Organizations are lacking the requisite management practices that have the potential to impact employee productivity. The implementation of remote work arrangements has emerged as a highly diverse outcome of work organization during the pandemic, owing to its widespread and unparalleled adoption.

The convergence of the pandemic, rapid digitization, and widespread home confinement has compelled numerous organizations to swiftly adapt new methods pertaining to the execution of work. In numerous instances, remote work occurred inside an unstructured virtual work environment, emerging naturally as an integral component of the continuing workflow. While workers faced challenges in maintaining focus, organization, and time management for both work and personal responsibilities, employers had to intervene by using traditional work schedules to achieve a better equilibrium between work and home activities. Consequently, the telework concept, which had not garnered much attention prior to the epidemic, was introduced. The concept of telework is characterized by its vast and intricate nature, as it currently lacks a universally agreed-upon definition.

This encompasses several forms of remote work, such as telecommuting, virtual work, mobile telework, and remote work. Telework, often known as telecommuting, can be defined as the practice of organizing and executing work tasks utilizing information technology, within the framework of an employment arrangement where the work is conducted remotely, outside of the employer's physical premises. The prevailing circumstances suggest that, among several measures, it is advisable for management to enhance the communication system with their employees and establish a conducive work environment to foster increased production. Consequently, the implementation of remote work policies has had a significant impact on the conventional work structures of organizations that previously emphasized office-based operations.

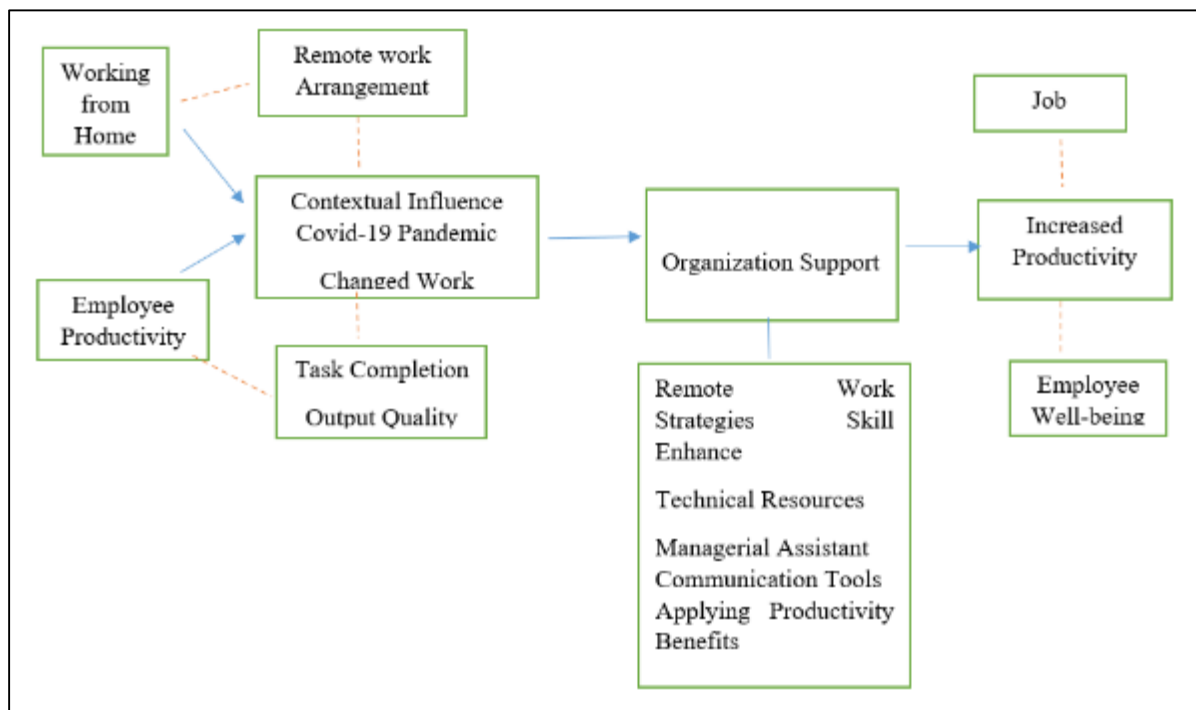
2.6. Effect of Organizational Support on Employee Productivity

Hence, the topic of job satisfaction holds significant importance for organizations as it is widely acknowledged that contented employees are associated with high levels of performance, whereas dissatisfied people tend to exhibit poorer performance. Effective employee productivity is influenced by various factors, such as the fundamental elements of pay, work, supervision, promotion, co-workers, and work environment. Additionally, the demographic attributes of employees and the wider social, organizational, and human contexts that make up the entirety of the work environment also play a significant role in determining productivity (Shah and Jalees, 2004; Sattar et al., 2010). According to the work of Dessler (1978) as referenced in Mbah and Ikemefuna (2012), the concept of job satisfaction can be defined as the level of fulfilment of needs that individuals obtain from their employment experiences. The individual expresses confidence in the capacity of employees within an organizational context to possess aspirations and experience job satisfaction, while also harboring the expectation that their requirements will be fulfilled. Furthermore, it has been observed that employees who experience satisfaction in their work environment tend to exhibit enhanced levels of performance inside organizations.

Organizations prioritize employee satisfaction as it is believed to enhance productivity and efficiency. Consequently, research is being undertaken to investigate various aspects of job satisfaction, such as work, pay, supervision, promotion, co-workers, and the demographic factors that influence overall workforce satisfaction (Shah & Jalees, 2004; Saifuddin et al., 2010; Sattar et al., 2010). The optimization of work policies to create a more favorable environment for employees is crucial, since it directly impacts their productivity and effectiveness as workers.

2.7. The conceptual model

The Impact of Working from Home on Employee Productivity with Organizational Support.



Source: Author's construct

Figure 1 The Impact of Working from Home on Employee Productivity with Organisational Support

3. Research Methodology

3.1. Research Design

The research would employ a descriptive survey design. This study aims to evaluate the effects of Post COVID-19 and its influence on employee productivity, with a specific focus on the moderating function of organizational productivity. According to Saunders, Lewis, and Thornhill (2007), individuals generally see the survey approach as authoritative because to its relative ease of explanation and comprehension.

3.2. Research Approach

The research approach employed in this study was a quantitative methodology. The purpose of research is to advance society by expanding our understanding and knowledge. The expectation is that the intended recipients will apply their discoveries in practical contexts. Consequently, the chosen methodology should not be overly inflexible. The decision-making process should be informed by the philosophical assumptions that the researcher holds, their personal experiences, and the intended audience for the study.

3.3. Population of the Study

This study examines the moderating influence of organizational support on employee productivity in the post-COVID-19 period. Validity assessments are ensured through the utilization of primary data gathering methods, namely employing a questionnaire. The sample technique employed in this study is a random sampling technique, taking into account the geographical framework of the Greater Accra region. The survey instrument was disseminated to a total of 203 specifically selected participants from various public and private institutions located in the suburban areas of Accra.

3.4. Data Collection Procedure

The research study utilized a simple random sampling procedure to pick a sample of 203 individuals from the entire population of working-class individuals residing in the Greater Accra Metropolitan Assembly. The questionnaire consisted of four sections, with the initial section designed to gather demographic information such as gender, age, education level, work experience, and job characteristics.

The subsequent sections encompass inquiries pertaining to the study's objectives, namely examining the diverse environmental, functional, and psychological aspects that might influence employee productivity. The study incorporated the factors of employee performance, organizational support, and flexible working hours based on existing empirical literature. The questionnaires were designed to assess respondents' agreement or disagreement with the presented statements using a rating scale ranging from 1 to 7.

3.5. Data Source

The data were collected from a combination of primary and secondary sources through a range of methodologies. In order to effectively achieve the objectives of a research study, it is crucial to carefully consider the research questions and define the necessary data. Additionally, it is important to have a well-organized system for managing the data, hence increasing the likelihood of successful outcomes in the research endeavor.

Primary data refers to original information that is collected firsthand by researchers for a specific research purpose. The primary data source was gathered by utilizing a customized questionnaire. A range of interrogation strategies were employed to obtain primary data from the interview participants. The research incorporated open-ended questions as part of its questionnaire. Closed-ended questions are designed to limit the range of responses from participants, so facilitating an objective framework for conducting comparative research. In order to facilitate the process of analysis, closed-ended questions are presented to interviewees along with alternative options and explicit directions. The purpose of the open-ended questions is to allow respondents the opportunity to freely express their opinions without any limitations.

3.6. Measurement Instrument

The primary method employed for data collection was the administration of questionnaires. The study utilized three measures that assessed Employee Productivity, as derived from the work of Afshinpour et al. (2013). Two studies have been conducted on the topics of organizational assistance, specifically Armeli's study in 1998, and flexible working hours, as explored by Ashoush et al. in 2015. Each variable is associated with around 5 to 10 questions. The survey was structured into four distinct sections. The first portion, labelled as "A," focused on demographic information. Sections B, C, and D addressed inquiries pertaining to employee productivity, organizational assistance, and flexible working hours, respectively. This study aims to validate the responses obtained from the questionnaire, which utilizes a Likert scale ranging from 1 to 7. In this scale, 1 represents a severe disagreement, while 7 indicates a strong agreement.

Table 1 Measurement items

Construct	Items	Source
Situational Leadership	9	<i>Afshinpour, et al., (2013).</i>
Perceived Organizational Support	10	Armeli et al., (1998)
Flexible Work Arrangements	10	Ashoush, et al., (2015)

3.7. Methodological rigor/validity & reliability

Locke (2014) posits that methodological rigor encompasses the characteristic of being very careful and comprehensive at all stages of the research endeavor, hence contributing to the study's resilience and reliability. Trustworthiness is a significant consideration in qualitative research. The determination of these criteria was explored in regard to the current study, encompassing four distinct factors.

The concept of credibility refers to the perceived trustworthiness and reliability of a source of information. The credibility of a study is contingent upon the extent to which the research findings accurately reflect the participants' initial opinions and provide believable information obtained from the original data. The researcher achieved this objective by actively interacting with the subjects in order to cultivate familiarity, build a sense of trust, and gather comprehensive data. During the course of the study, the collection of data was meticulously recorded, and member checks were employed as a means to guarantee the precision and reliability of the information obtained.

The concept of transferability refers to the extent to which research findings or conclusions can be applied. The concept that pertains to the extent to which the outcomes of qualitative research can be extrapolated to different contexts or settings, involving a larger number of participants, is commonly known as generalizability. By providing detailed descriptions, the researcher facilitates the process for a prospective user to assess the transferability of the product. This study achieved its objectives by implementing many measures, including the establishment of protocols for data collecting, explicit criteria for participant selection and exclusion, rules for conducting interviews, and the provision of relevant information pertaining to the study within this chapter.

The concept of dependability refers to the quality or characteristic of being reliable, trustworthy. This encompasses the durability of research findings over an extended period. Dependability encompasses the assessment made by participants on the validity of the study's findings, interpretations, and recommendations, ensuring that they are all substantiated by the data obtained from the study's participants. The researcher in this study maintained an audit trail, documenting the research process from its inception to the creation and reporting of findings. This practice is discussed in detail in the present chapter, serving as a mechanism to ensure the dependability of the study. This statement highlights the degree to which the conclusions drawn from the study may be corroborated by other scholars.

4. Data Analysis

An overview of the data analysis process and the subsequent interpretation of the obtained results. A total of 203 respondents were included in the data collection process. The study was conducted utilizing IBM SPSS v.25, which included the presentation of demographic information, descriptive statistics, and inferential statistics.

4.1. Demographic of Respondents

The demographic characteristics of the respondents is indicated in table 2. The demographic characteristics considered for the study were the gender, highest level of education, years of experience, age and job position. Examining the gender distribution, the sample was nearly evenly split. Women slightly outnumbered men, making up 52.2% of the sample, whereas men represented 47.8%. This balanced inclusion ensures that the experiences and perceptions of both genders are given equal weight, shedding light on how remote work and organizational support influence productivity across genders. The educational background of the participants, which is skewed towards higher education qualifications, is notable. The majority, or 72.9%, of participants have a higher-level education, Bachelor's Degree or above. Of these, 40.4% hold Bachelor's Degrees and 32.5% have Master's Degrees. This indicates that the sample majorly consists of individuals in professional roles, for which remote work is often more feasible.

In terms of experience, the study majorly features individuals in the early and middle stages of their careers. Specifically, 40.4% of participants have 0-2 years of experience and 45.8% have 3-5 years. A smaller segment (11.8%) has 6-10 years of experience, and a mere 2% have over ten years of experience. This highlights that the study's conclusions may primarily reflect the experiences and perspectives of younger and less experienced individuals who might be more adaptable to new working styles such as remote work. The age breakdown confirms this proposition. A significant 46.3% of participants are between 20 and 29 years old, and another 43.3% are between 30 and 39 years old. Older age groups are less represented, with only 9.4% in the 40-49 years category and 1% in the 50-59 years category. Hence, the results of the study could predominantly reflect the attitudes and experiences of younger employees towards remote work and its impact on productivity.

In terms of job roles, the participants show a range from managerial positions to elementary occupations. Managerial positions account for 19.2%, professionals make up 22.2%, and clerical support positions hold 22.7% of the sample. Other roles, including service and sales (15.3%), elementary occupations (6.4%), plant and machine operators (3%), technicians and associates (4.9%), and others (6.4%) make up the rest. The heavy representation from managerial, professional, and clerical support positions suggests the study's findings could be more reflective of these job roles.

Table 2 Demographic Characteristics

Variables	Category	Frequency	Valid Percent
Gender	Male	97	47.8
	Female	106	52.2
	Total	203	100.0
Education	SHS and Below	8	3.9
	Higher National Diploma	47	23.2
	Bachelor's Degree	82	40.4
	Master's Degree	66	32.5
	Total	203	100.0
Experience	0-2 years	82	40.4
	3-5 years	93	45.8
	6-10 years	24	11.8
	over 10 years	4	2.0
	Total	203	100.0
Age	20-29 years	94	46.3
	30-39 years	88	43.3
	40-49 years	19	9.4
	50-59 years	2	1.0
	Total	203	100.0
Position	Manager	39	19.2
	professionals	45	22.2
	Technicians and Associate	10	4.9
	clerical support	46	22.7
	service and sales	31	15.3
	plant and machine operator	6	3.0
	elementary occupation	13	6.4

	Other	13	6.4
	Total	203	100.0

Source: Field data (2023)

4.2. Inferential Statistics

The research employed the Cronbach Alpha coefficient as a means of assessing the internal consistency and reliability of the scale utilized in the investigation. According to Gliem & Gliem (2003), in the realm of social scientific research, a widely acknowledged benchmark for Cronbach's Alpha is 0.7 or above, indicating a commendable degree of internal consistency. The data shown in table 3 exhibits a notably high level of dependability for the three primary variables examined in the research investigating the influence of remote work on employee productivity during the post-COVID-19 period, with specific attention given to the role of organizational support (Belzunegui-Eraso & Erro-Garcés, 2020). The Cronbach's Alpha for the variable "Employee Productivity" is 0.953. This indicates a very high level of internal consistency for this measure, given that it is significantly above the 0.7 threshold (Hundleby and Nunnally, 1968). This suggests that the nine items under this variable have performed consistently and are likely measuring the same underlying concept of employee productivity (Lapierre and Allen, 2006). Similarly, "Organizational Support" has a Cronbach's Alpha of 0.962. The ten items under this variable show extremely high internal consistency. This result ensures that these items are coherent as a group and likely to be capturing the same construct, in this case, the concept of organizational support (Eisenberger *et al.*, 1986). Lastly, "Flexible Work Hours" has the highest Cronbach's Alpha of 0.975. The exceptional internal consistency of these ten items suggests that they form a coherent set measuring the same underlying idea, i.e., the impact of flexible working hours on employee productivity (Golden, Veiga and Simsek, 2006).

The importance of ensuring reliability in a study is fundamental (Pallant, 2013). Reliable measurements are consistent and reproducible. If the study were to be repeated, similar results would be expected. High reliability, as demonstrated by high Cronbach's Alpha values, gives confidence in the findings and interpretations of the data (Pallant, 2013). Thus, in the context of the study, the high Cronbach's Alpha values suggest that the survey items for measuring employee productivity, organizational support, and flexible work hours were well-designed and highly reliable. Therefore, the findings of the study are likely to be trustworthy and reproducible (Taber, 2018).

Table 3 Cronbach Alpha Reliability Scale

Variable	No. of Items	Cronbach Alpha
Employee Productivity	9	0.953
Organizational Support	10	0.962
Flexible work hours	10	0.975

4.3. Principal Component Analysis

Principal Component Analysis (PCA) is a statistical methodology commonly employed in research to reduce the intricacy inherent in datasets with numerous dimensions, while yet preserving underlying trends and patterns (Jolliffe and Cadima, 2016). Table 4 displays the principal component analysis (PCA) findings. According to Hennink, Kaiser, and Marconi (2017), the provided information encompasses the eigenvalues, which represent the variation explained by each component, as well as the percentage of variance explained by each component and the cumulative percentage of variance explained by all components up to that particular point. The eigenvalue is a measure of the extent to which the original variables' variance is explained by a particular component.

The first three components have eigenvalues greater than 1, which is a common threshold for determining which components to retain in a PCA (Hennink, Kaiser and Marconi, 2017). These three components account for approximately 77.1% of the total variance in the data, which is a substantial portion. Component 1 alone explains 61.6% of the total variance in the dataset, Component 2 explains an additional 10.1%, and Component 3 explains a further 5.4%. This means that the three components together capture the majority of the information contained in the dataset, significantly simplifying the data's complexity. The application of PCA in this study is significant as it facilitates understanding of the interrelationships among the large number of variables, simplifies the dataset into a lower-dimensional space without significant loss of information, and identifies the core components that account for the most variance in the data (Jolliffe and Cadima, 2016). This could help in understanding the primary factors influencing employee productivity in the context of working from home in the post-COVID-19 era, and the moderating role of organizational support.

Table 4 Principal Component Analysis

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	17.873	61.629	61.629	17.873	61.629	61.629
2	2.928	10.096	71.725	2.928	10.096	71.725
3	1.573	5.423	77.149	1.573	5.423	77.149
4	0.786	2.709	79.858			
5	0.645	2.226	82.083			
6	0.528	1.822	83.905			
7	0.431	1.485	85.390			
8	0.392	1.351	86.741			
9	0.386	1.330	88.071			
10	0.369	1.273	89.344			
11	0.342	1.180	90.524			
12	0.262	0.905	91.429			
13	0.257	0.887	92.316			
14	0.241	0.832	93.149			
15	0.216	0.746	93.894			
16	0.190	0.654	94.549			
17	0.187	0.644	95.193			
18	0.181	0.624	95.817			
19	0.170	0.587	96.405			
20	0.149	0.514	96.918			
21	0.141	0.487	97.405			
22	0.126	0.433	97.838			
23	0.116	0.400	98.238			
24	0.110	0.378	98.616			
25	0.107	0.368	98.984			
26	0.092	0.316	99.301			
27	0.079	0.271	99.572			
28	0.066	0.227	99.799			
29	0.058	0.201	100.000			

4.4. Descriptive Statistics

The descriptive statistics of the study is presented in table 5. In terms of employee productivity, the composite mean score is 4.724, situated well above the midpoint of 3.5 on the seven-point Likert scale. This score suggests that, on average, participants perceive their productivity as high when working from home. Furthermore, individual variables related to employee productivity have high mean scores ranging from 4.505 (Manager behavior and task) to 4.851 (Preparedness to perform my job). All these factors are substantially above the midpoint, suggesting that respondents generally feel well-supported and capable in their remote work environment, which could be positively influencing their

productivity. Moreover, the significance (2-tailed) values for all these variables are 0.000, showing the results are statistically significant, hence unlikely to be due to chance. It reaffirms the understanding that these elements indeed have a strong correlation with employee productivity.

The Organizational Support variable has a composite mean of 4.7470, which is also above the midpoint of the scale. This score suggests that participants generally feel well-supported by their organizations while working from home. Individual items within this category, such as the organization's regard for personal contributions, wellbeing, and job satisfaction, show high mean scores, ranging from 4.640 to 4.837. These results imply that organizations are generally seen as supportive, which could positively impact employee productivity and overall work satisfaction. The significance values of 0.000 reaffirm the statistical relevance of these results.

In terms of Flexible Working Hours, the composite mean score is 5.4750, the highest among the three composite scores. This score is considerably higher than the scale's midpoint, indicating a strongly positive perception of flexible working hours. All the individual factors under this category demonstrate high mean scores between 5.369 and 5.634, suggesting that flexible working hours contribute to improved work efficiency, better work-life balance, decreased stress, and cost savings.

Table 5 Descriptive Statistics

Variables	Mean	Std. Deviation	t	Sig.(2-tailed)
Employee Productivity	4.724			
My supervisor helps to improve on my work	4.635	1.597	41.362	0.000
Manager behavior and task	4.505	1.339	47.809	0.000
Confidence and Ability	4.802	1.533	44.533	0.000
Preparedness to perform my job	4.851	1.469	46.819	0.000
Autonomy to do my job	4.680	1.513	44.080	0.000
Future Independence in doing my task	4.743	1.543	43.681	0.000
My personal contributions are valued	4.842	1.471	46.910	0.000
I feel motivated	4.749	1.449	46.690	0.000
My supervisor helps me succeed in my job	4.713	1.614	41.511	0.000
Organizational Support	4.7470			
The organization values my contribution to its well-being	4.721	1.507	44.408	0.000
The organization strongly considers my goals and values.	4.709	1.368	49.060	0.000
Help is available from the organization when I have a problem	4.773	1.482	45.895	0.000
The organization really cares about my well-being	4.709	1.452	46.212	0.000
The organization wishes to give me the best possible job for which I am qualified.	4.768	1.439	47.223	0.000
The organization cares about my general satisfaction at work	4.728	1.483	45.311	0.000
The organization takes pride in my accomplishments at work	4.837	1.455	47.240	0.000
The organization would forgive an honest mistake on my part	4.640	1.500	44.065	0.000
The organization is willing to extend itself to help me perform my job to the best of my ability	4.767	1.389	48.764	0.000
The organization cares about my opinions	4.817	1.415	48.395	0.000
Flexible working hours	5.4750			
Increases working efficiency	5.419	1.839	41.974	0.000

Helps to coordinate work and family interests	5.515	1.702	46.044	0.000
Helps to coordinate working and learning activities	5.552	1.723	45.687	0.000
Decreases stress, positively affects health	5.634	1.694	47.263	0.000
Time saving and less cost	5.554	1.645	47.991	0.000
Possibility to work with reference to state of health	5.369	1.634	46.821	0.000
Possibility to earn according to needs	5.429	1.619	47.763	0.000
Increases employee's loyalty	5.406	1.682	45.677	0.000
One of the ways to decrease unemployment	5.416	1.772	43.441	0.000
Better employment possibilities	5.458	1.733	44.884	0.000

4.5. Correlational Analysis

The results in table 6 presents the Spearman rank correlation coefficient examining the impact organizational support (OS) on employee productivity (EP). The results of the Spearman's rank correlation analysis showed a correlation coefficient (ρ) of 0.662 which was statistically significant. This positive value indicates a moderately strong, positive association between EP and OS. This suggests that as the level of organizational support increases, so does the level of employee productivity. The results in Table presents the Spearman rank correlation coefficient examining the impact flexible work hours (FWH) on employee productivity (EP). The results of the Spearman's rank correlation analysis showed a correlation coefficient (ρ) of 0.455 which was statistically significant. This positive value indicates a moderately strong, positive association between EP and OS. This suggests that as the level of organizational support increases, so does the level of employee productivity. The results in Table presents the Spearman rank correlation coefficient examining the impact flexible work hours (FWH) on organizational (OS). The results of the Spearman's rank correlation analysis showed a correlation coefficient (ρ) of 0.732 which was statistically significant. This positive value indicates a moderately strong, positive association between FWH and OS. This suggests that as the level of organizational support increases, so does the rate of flexibility in working from home.

Table 6 Correlation Statistics

Constructs	EP	OS	FWH
EP	1		
OS	.622**	1	
FWH	.445**	.732**	1
** Correlation is significant at the 0.01 level (2-tailed).			
EP = Employee productivity, OS = Organizational Support, FWH = Working From Home			

4.6. Moderating Analysis

The statistical results presented in table 7 illustrate a multifaceted relationship between working from home (FWH), organizational support (OS), and employee productivity (EP). The research examined how the relationship between FWH and EP is influenced by the level of OS, employing the PROCESS macro for SPSS to conduct a moderation analysis.

The model summary indicated a strong relationship between the collective predictors (FWH, OS, and the interaction between them) and EP, as demonstrated by a multiple correlation coefficient (R) of .7922. It further revealed that 63% of the variability in EP, is explained by the predictors, as the coefficient of determination (R -sq) stood at .6276. The statistical significance of the model was affirmed by the F statistic value of 102.2440, with a probability (p) value of less than .01.

In terms of the coefficients, the positive coefficient of FWH, .450 ($t = 4,4$), implies that with every unit increase in FWH, a corresponding .450 unit increase in EP is anticipated, providing OS remains constant. This effect was statistically significant, as the p -value was less than .01. This supports the H1 of the study. A similar positive, statistically significant relationship was found with OS, where each unit increase in OS, assuming FWH constant, corresponded to a 1.0170 unit increase in EP. This finding supports the H2 of the study.

The model also examined the conditional effects of FWH on EP at different levels of OS. The interactive effect between FWH and OS is not moderated. The interaction coefficient (-0.087) ($t = -3.89$) suggests that as OS increases, the positive effect of FWH on EP diminishes. This interaction effect showcases that OS does not moderate the relationship between FWH and EP. Thus, the third hypothesis (H3) was not supported.

Table 7 Moderating Analysis

Variables	B	SE	T	P	95% CI Lower	95% CI Upper
Constant	-6.63	4.37	-1.52	0.13	-15.25	2
FWH	0.45	0.1	4.4	0	0.25	0.65
OS	1.017	0.12	8.4	0	0.78	1.26
Int_1	-0.087	0.002	-3.89	0	-0.01	-0.004
R	0.792					
R2	0.628					
F	102.24					

5. Discussion of Results

The results of the study are discussed in line with the stated objectives in chapter one.

5.1. The relationship between working from home and employee productivity

The regression analysis showed that flexible work hours (FWH), indicative of working from home, had a significant positive effect on employee productivity (EP). This relationship implies that as opportunities for flexible work schedules increase, so does the level of productivity among employees. This effect might be attributable to the reduced stress of commuting, increased autonomy over one's schedule, and the capacity to work in a personalized environment, which can often be more comfortable and less distracting than traditional office settings.

The outcome of this study reflects the findings of several other studies. Bloom *et al.* (2015) on a Chinese travel agency revealed a significant rise in the productivity of employees who were allowed to work from home. Similarly, a meta-analysis by Gajendran and Harrison (2007) found that telecommuting has small but statistically significant beneficial associations with perceived autonomy and work-life balance, both of which can lead to increased productivity.

However, some studies suggest that the impact of working from home on productivity may not always be positive. For instance, Golden and Gajendran (2019) found that the level of telecommuting can have a curvilinear relationship with productivity, where extreme levels of telecommuting could lead to declines in performance. This might occur due to reduced face-to-face interaction and feelings of professional isolation.

The Job Demands-Resources (JD-R) model is an apt theoretical lens through which to interpret these findings. According to Bakker and Demerouti (2017) job resources such as the flexibility to work from home can have a motivational potential that leads to high work engagement and, consequently, high productivity. On the other hand, the JD-R model also acknowledges that excessive demands (such as isolation when working from home excessively) may lead to strain and decreased productivity.

5.2. The effect of organizational support (OS) on employee productivity

The study revealed that OS had a significant positive impact on EP. This means that as perceived organizational support increases, productivity among employees also tends to rise. This is presumably because when employees feel their organization values their contributions and cares about their well-being, they may feel more motivated to perform their duties to the best of their abilities.

These findings supports the work of Rhoades and Eisenberger (2002) who conducted a meta-analysis demonstrating that perceived organizational support positively relates to outcomes such as job performance and organizational commitment, both of which can translate into higher productivity. Similarly, a study by Kurtessis *et al.* (2017) found that perceived organizational support was positively related to job performance, job satisfaction, and affective

commitment, again leading to potential increases in productivity. In contrast, certain studies suggest that the relationship between organizational support and productivity may not be as straightforward. For instance, research by Stinglhamber and Vandenberghe (2003) suggested that perceived organizational support can sometimes result in lower turnover intentions but does not necessarily directly lead to improved performance. The Social Exchange Theory is an effective theoretical framework for understanding these results. This theory, posited by Blau (2017), suggests that social interactions are driven by a form of reciprocal exchange. Applied to the workplace, when employees perceive higher levels of support from their organizations, they may feel obligated to reciprocate that support through higher levels of productivity and performance.

5.3. The moderating role of organizational support on working from home on employee productivity

The moderation analysis using Hayes' PROCESS Macro 4.0 provides crucial insights, indicating that the impact of working from home on employee productivity is not moderated by the level of organizational support. Specifically, working from home seems to have a stronger positive impact on employee productivity when organizational support is lower, whereas this advantage decreases as organizational support increases. The study's finding that the positive impact of FWH on EP decreases as OS increases is somewhat counterintuitive and diverges from studies like that of Gajendran and Harrison (2007), who found that support from organizations tends to increase the benefits of remote work on productivity. However, the results suggest that when employees are already well-supported, the benefits of remote work might become less significant. This could be because OS addresses many of the challenges that FWH is typically used to mitigate, such as workplace distractions and inflexible scheduling. Thus, while both FWH and OS can boost EP, they may do so through similar mechanisms, reducing the incremental benefit of one when the other is high.

These findings align well with the JD-R model. According to this theory, job demands can lead to burnout while resources can foster engagement (Bakker and Demerouti, 2007). FWH and OS could be seen as resources that help employees manage job demands. FWH may provide employees with greater control over their work environment, reducing stress and boosting productivity. Simultaneously, OS can provide employees with the tools and emotional resources they need to succeed. However, when both of these resources are high, the incremental benefit of one may diminish, consistent with our findings.

6. Conclusion

Based on the comprehensive analyses conducted in this study, the research unearths illuminating insights into the dynamics of flexible work hours (FWH), organizational support (OS), and employee productivity (EP). In light of the increasingly flexible and dynamic nature of modern work environments, understanding these relationships has never been more crucial. The findings of the study uncover a significant positive correlation between FWH and EP. This relationship suggests that when employees are granted the flexibility to shape their working hours and location, they exhibit increased productivity. The liberation from the traditional constraints of a fixed office environment and the elimination of commuting time, for example, often translate into higher productivity levels. However, this study also emphasizes that employee productivity is not simply a matter of offering flexible work arrangements. The role of organizational support emerges as crucial, as shown by its substantial positive impact on EP. The research echoes the findings of previous studies illustrating that a supportive work environment underpins employee commitment, job satisfaction, and productivity (Eisenbeiss et al., 2008). Perhaps most intriguingly, the study delves into the moderating role of organizational support in the relationship between FWH and EP. The positive indirect effect of EP on FWH through OS indicates that a supportive organizational context can enhance the beneficial impact of FWH on EP. This finding converges with the work of Gajendran and Harrison (2007), who emphasized the pivotal role of organizational context in the success of flexible work arrangements.

In conclusion, this research offers compelling evidence that FWH and OS are key ingredients in the recipe for enhanced employee productivity. Organizations aiming to harness the full potential of their human resources must not only offer flexible work arrangements but also foster an environment that provides ample organizational support. The findings of this study offer valuable guidance to organizations and policymakers seeking to optimize productivity levels in an era increasingly defined by flexible work arrangements. Nevertheless, given the multifaceted nature of the explored constructs, further research is needed to uncover the intricacies of these relationships and to broaden our understanding of the dynamics of modern work environments.

6.1. Implication of the study

The research statistics have revealed attitudes of different sex and age group employees towards the moderating role of organizational support and flexible work arrangement. Although it was not expected that the model would give a 100% accurate results in predicting the impact of organizational support on employee productivity, when the

underlining factors are varied as compared to the actual changes in employee attitudes towards their performance, it can however be concluded with a fair amount of confidence based on the findings of this work that the productivity models established in the research key factors; organizational support and flexible work arrangements are quantifiable factors that affect employee performance.

6.1.1. Implication to Practice

This study's findings hold profound implications for organizational management. It underscores the necessity for organizations to not only provide flexible work hours but also foster an environment rich in organizational support. Businesses may consider revising their human resource policies to better accommodate flexible work schedules, leading to an enhanced work-life balance for employees. A flexible work culture could entail options for telecommuting, flexible start and end times, or compressed work weeks.

Moreover, organizational support should be an area of intense focus. It might manifest in the form of open communication channels, supportive supervision, opportunities for professional growth, and recognition for good work. By cultivating a supportive environment, organizations can optimize their workforce's potential, leading to improved productivity, reduced turnover, and increased job satisfaction.

6.1.2. Implication to Policy

The study's findings also have significant implications for policymakers, particularly those involved in labor and employment regulations. They suggest that policies promoting flexible work arrangements could enhance overall productivity at both the individual and societal levels. Governmental entities could encourage companies to implement such practices by providing incentives or implementing labor standards that support flexible work.

Similarly, policies should aim to encourage organizational support. This could include regulations requiring companies to provide adequate training, resources, and recognition to their employees. Such measures would not only boost productivity but could also improve job satisfaction and mental health among workers, leading to a healthier and more prosperous society.

In sum, this study underlines the necessity for thoughtful, comprehensive approaches to flexible work arrangements and organizational support, at both the organizational and policy levels. Implementing these findings into practice and policy could have far-reaching benefits for employees and society at large.

Recommendations

The study recommends the significant positive correlation between working from home and productivity, organizations should actively consider incorporating flexible work hours into their operational policies. This not only boosts productivity but also enhances employee morale. Furthermore, to fully harness the benefits of working from home, organizations should invest in technology infrastructure that facilitates seamless remote work. This includes high-quality video conferencing tools, cloud-based collaboration platforms, and robust cybersecurity measures.

The study recommends that it is important to establish and promote a supportive organizational culture. Periodic reviews of company policies, open lines of communication, and ensuring that employee welfare is prioritized can significantly enhance the perception of organizational support. Furthermore, there should be regular feedback mechanisms, such as monthly or quarterly reviews, can help gauge the current levels of organizational support felt by employees. Organizations can then take proactive steps based on this feedback to increase perceived support.

Given that organizational support does not simply act as a moderator but rather amplifies the benefits of flexible work practices, organizations should adopt an integrated approach. This means that while introducing flexible work options, concurrent steps to enhance organizational support should be taken. Organizations need to effectively communicate the benefits of both flexible work hours and the support structures in place. When employees are aware and can easily access support systems, they are more likely to utilize them, further improving their productivity.

- Recommendations for Further Studies

While this study focused on the role of flexible work hours and organizational support on employee productivity, there might be other variables of interest that future studies could explore. These might include individual characteristics such as personality traits, motivational factors, or other aspects of the work environment, such as job design or team dynamics.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

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