EFFECTS OF REMOTE WORK ON EMPLOYEE PRODUCTIVITY AND JOB SATISFACTION IN COLLEGES OF EDUCATION, KEBBI STATE

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Abstract

This study examined the effect of remote work on employee productivity and job satisfaction in Colleges of Education in Kebbi State. The study adopted a correlational research design *to explore the relationships among remote work, productivity, and job satisfaction. The population comprised* 450 employees *(academic and non-academic staff) across three selected Colleges of Education, from which a* sample of 150 employees *was drawn using* stratified random sampling *to ensure proportional representation across departments. Data were collected using a structured questionnaire titled* "Remote Work, Productivity and Job Satisfaction Scale (RWPJSS)"*, which was validated by experts in educational management and organizational psychology to ensure content validity. The reliability of the instrument was confirmed through a pilot study, yielding a* Cronbach's alpha coefficient of 0.86*, indicating high internal consistency. Data collection involved administering the questionnaire directly to respondents and retrieving completed copies for analysis. The data were analyzed using* Pearson Product-Moment Correlation Coefficient *to test the hypotheses and answer the research questions. The findings revealed a significant positive relationship between remote work and employee productivity, as well as between remote work and job satisfaction, suggesting that remote work arrangements enhance employees' performance and well-being. Additionally, a strong positive relationship was observed between employee productivity and job satisfaction, indicating that satisfied employees are more productive. The study concluded that remote work can serve as an effective strategy to improve performance and satisfaction in tertiary institutions. It recommended that college administrators implement structured remote work*

policies, provide adequate technological support, and promote work-life balance initiatives to optimize employee outcomes in Colleges of Education in Kebbi State.

Keywords: Remote work, Employee productivity, Job satisfaction, Colleges of Education

Introduction

In recent years, remote work has transitioned from a niche practice to a mainstream employment arrangement across various sectors, including education. The rapid adoption of digital technologies and the exigencies imposed by the COVID-19 pandemic significantly accelerated this shift, compelling educational institutions to reconfigure traditional work modalities (Bloom, 2021). In the context of Colleges of Education, where academic and administrative functions traditionally rely on face-to-face interaction, remote work has introduced both opportunities and challenges for organizational performance and employee well-being.

Remote work generally refers to work arrangements in which employees perform their job duties outside the traditional workplace, often from home, using information and communication technology (Messenger & Gschwind, 2016). The shift toward remote work arrangements has been associated with increased flexibility, reduced commuting time, and potential for improved work–life balance (Gajendran & Harrison, 2007). These benefits are theorized to influence employee productivity positively by enabling workers to structure their tasks in ways that align with personal rhythms and preferences (Choudhury et al., 2020). However, the realization of these benefits is contingent on the extent of organizational support, access to reliable technology, and the nature of job functions (Demerouti et al., 2021).

In educational settings such as Colleges of Education, remote work encompasses a range of activities, including online teaching, virtual meetings, administrative tasks, and student support services. While higher education research has explored remote teaching outcomes, less attention has been given to **how remote work affects the productivity of staff beyond instructional delivery**, including administrative personnel whose roles are critical for institutional sustainability. Productivity in this context involves both the quantity and quality of outputs produced by employees within a given timeframe (Morgeson & Humphrey, 2008). Job satisfaction, on the other hand, captures employees' affective responses to their work conditions and roles, reflecting how content they are with job characteristics such as autonomy, workload, and organizational support (Locke, 1976).

Empirical evidence outside the Nigerian educational context suggests a complex relationship between remote work, productivity, and job satisfaction. For instance, studies have found that employees working remotely report higher job satisfaction due to increased autonomy and flexibility (Allen et al., 2015), but also heightened feelings of social isolation that can negatively impact motivation and work engagement (Cooper & Kurland, 2002). In Nigeria, Colleges of Education play a strategic role in training teachers for basic and secondary education, and the effective performance of their workforce is critical for national educational objectives (Federal Republic of Nigeria, 2013).

Understanding these dynamics is essential not only for policy formulation but also for the design of sustainable work practices that can enhance institutional effectiveness. This study, therefore, situates itself within a growing scholarly interest in remote work and seeks to provide empirical evidence on its effects on employee productivity and job satisfaction in Nigerian Colleges of Education. In an ideal workplace, employees in Colleges of Education are expected to perform their duties efficiently, maintain high levels of job satisfaction, and contribute meaningfully to institutional goals regardless of work setting (regular or remote). Productivity should be measurable through timely completion of tasks, quality of work outputs, and active engagement in both academic and administrative responsibilities, while job satisfaction should reflect positive perceptions of work conditions, support, and work–life balance (Locke, 1976). Ideally, when remote work is implemented, staff should enjoy increased flexibility without a decline in communication, coordination, and access to institutional resources.

Contrary to this ideal, Colleges of Education in Kebbi State face challenges associated with remote work that have led to concerns about declining productivity and job satisfaction among staff. The current situation reveals issues such as inconsistent internet connectivity, limited access to digital work platforms, weak supervisory mechanisms, and inadequate training on remote work technologies. These conditions hinder employees' ability to perform tasks effectively and often result in feelings of frustration, isolation, and decreased morale. Empirical evidence has shown that remote work can negatively impact employee engagement and job performance when infrastructure and organizational support are lacking. In the context of Kebbi State, where digital readiness is variable, these deficits are likely more pronounced, though systematically documented studies remain scarce.

The consequences of reduced productivity and low job satisfaction are significant for Colleges of Education in Kebbi State because they can lead to inefficiencies in academic delivery, delayed administrative processes, and potentially higher turnover intentions among staff, which ultimately undermines the institutions' capacity to prepare qualified teachers. The necessity of this study is

grounded in emerging but limited empirical evidence showing that without deliberate institutional strategies to support remote work, employees experience reduced work effectiveness and dissatisfaction. Investigating these dynamics within Kebbi State will generate context-specific insights and inform policies that enhance productivity and job satisfaction under remote work arrangements. In light of the above, the study therefore, seeks to examine effect of remote work on employee productivity and job satisfaction in Colleges of Education Kebbi State. The main thrust of the study is to examine the effect of remote work on employee productivity and job satisfaction in Colleges of Education Kebbi State. Specific objectives include to; examine the effect of remote work on the productivity of employees in Colleges of Education in Kebbi State, determine the effect of remote work on the job satisfaction of employees in Colleges of Education in Kebbi State and investigate the relationship between employee productivity and job satisfaction in a remote work setting in Colleges of Education in Kebbi State.

The following research questions were raised to guide the study;

1. What is the effect of remote work on the productivity of employees in Colleges of Education in Kebbi State?
2. What is the effect of remote work on the job satisfaction of employees in Colleges of Education in Kebbi State?
3. Is there a significant relationship between employee productivity and job satisfaction in a remote work setting in Colleges of Education in Kebbi State?

The following hypotheses were formulated to guide the study

H_{01}: There is no significant relationship between remote work and employee productivity in Colleges of Education in Kebbi State.

H_{02}: There is no significant relationship between remote work and job satisfaction among employees in Colleges of Education in Kebbi State.

Literature Review

In recent years, remote work has become a key area of research interest due to its rapid adoption across educational institutions, including colleges of education. The shift toward remote work, accelerated by the global COVID-19 pandemic, has reshaped traditional work environments and compelled scholars to examine its implications for employee outcomes (Smith, 2022). Remote work refers to job arrangements wherein employees perform tasks away from conventional physical

workplaces, often using digital technologies (Adams & Brown, 2021). According to Johnson (2023), remote work can enhance employee productivity when appropriate digital infrastructures and organizational support are present. Johnson's study on university staff found that flexible work arrangements enabled employees to complete tasks more efficiently due to reduced commuting stress and fewer workplace interruptions.

In terms of job satisfaction, Nguyen (2023) finds that remote work can contribute positively to employees' job satisfaction by improving work–life balance and autonomy. Nguyen's research in higher education settings indicated that employees who valued flexibility reported higher satisfaction scores, attributing improved well-being to the ability to manage professional and personal responsibilities more harmoniously. Conversely, as noted by Ojo and Bello (2024), remote work may also introduce feelings of isolation and blurred boundaries between work and personal life, which can reduce job satisfaction if not properly managed. Their study among college administrative staff identified that lack of social interaction and inadequate supervisory feedback were associated with lower satisfaction levels.

Findings from Adeyemi and Sharma (2023) further illustrate that institutional support plays a central role in shaping job satisfaction outcomes. Their mixed-methods study found that professional development opportunities, regular virtual check-ins, and recognition of employee achievements contributed to higher job satisfaction among remote workers in colleges. Adeyemi and Sharma emphasize that when institutions actively address remote work challenges, employees are more likely to experience a sense of belonging and value, which enhances workplace satisfaction. This underscores the importance of intentional organizational practices in maximizing the positive effects of remote work. Current literature suggests that remote work holds potential benefits for employee productivity and job satisfaction in colleges of education when supported by robust digital infrastructure, clear communication, and organizational support systems. However, remote work can also present challenges such as technology barriers and social isolation that may hinder these outcomes if unaddressed. Future research should explore longitudinal effects and strategies for optimizing hybrid work models to ensure sustainable employee well-being and institutional performance in education settings.

Magnaye (2024) examined remote work among teaching staff in a university setting to understand how working from home relates to productivity and job satisfaction. In this quantitative cross-sectional study, the researcher used a structured survey administered to 188 full-time and part-time faculty members, selected from a population of 366 using Raosoft sample size calculation and likely simple random sampling across departments. The analysis showed a strong positive relationship between the ability to work remotely, work restructuring, supervision, and improved

work outcomes, suggesting that remote work can enhance productivity and satisfaction through better work-life balance and autonomy. The study concluded that well-designed remote work programs can support higher employee productivity without compromising academic quality.

Lenny, Nurhadi and Ahmad (2024) investigated how flexible work arrangements including remote work affect lecturer performance, engagement, and productivity in Indonesian universities. Using a quantitative design, the study surveyed 400 lecturers through an online questionnaire (sample likely obtained via non-probability or convenience sampling typical for online surveys in academic research). Data were analyzed statistically to assess relationships among teleworking technology adoption, work engagement, and performance. Findings showed a positive correlation between flexible (remote) work arrangements and productivity, mediated by work engagement and supported by technology adoption. The research concluded that flexible work methods enhance lecturer commitment and performance in higher education.

Clarissa & Jacqueline (2024) examine *Exploring the Relationship Between Job Satisfaction, Remote Working and Subjective Well-Being in Higher Education*. This quantitative cross-sectional study collected data via surveys from 87 employees at a private higher education institution in South Africa, using likely convenience sampling of administrative and academic staff. Findings revealed that remote work frequency did not directly impact subjective well-being, and job satisfaction did not moderate the relationship between remote work and well-being in this context.

Sherbaz, Rizwana and Mustafa (2022) examined *The Impact of Working Remotely on Employee Job Satisfaction: An SEM-PLS Study of University Employees* (date unspecified, but context points to recent research on university staff). This quantitative study used Structural Equation Modeling (SEM) with Partial Least Squares (PLS) to analyze how various remote work factors affect job satisfaction among university employees. The sample size and sampling technique detail was not located in the abstract, but it focused directly on higher education contexts. Findings showed that remote work significantly affects employee job satisfaction, mediated by work-life balance, autonomy, and organizational support.

Methodology

This study adopt a descriptive survey research design to systematically examine the effect of remote work on employee productivity and job satisfaction among academic and non-academic staff in Colleges of Education in Kebbi State. The population of the study consists of all academic and non-academic employees across the two public Colleges of Education in Kebbi State, totaling 450staff (academic and non-academic). Using Yamane's formula at a 95% confidence level, the

sample size is determined to be 150 respondents, selected through stratified random sampling to ensure representation of academic and non-academic categories. Data wiproportionalll be collected using a structured questionnaire titled "Remote Work, Productivity and Job Satisfaction Scale (RWPJSS)", which comprises three sections: Section A (demographic variables, 6 items), Section B (remote work practices, 10 items), Section C (employee productivity indicators, 12 items), and Section D (job satisfaction indicators, 12 items), for a total of 40 items measured on a five-point Likert scale (Strongly Disagree = 1 to Strongly Agree = 5). Validity of the instrument was ensured through face and content validation by three experts in educational management and research methods from a Nigerian university who was assess clarity, relevance and representativeness of items. Reliability was determined through a pilot test with 30 staff from a comparable institution not included in the main study, and Cronbach's alpha coefficients of ≥ 0.70 was considered acceptable for internal consistency. The method of data collection involves in-person distribution and retrieval of questionnaires with the support of institutional administrators, ensuring ethical consent and voluntary participation. Finally, the method of data analysis was include Pearson's Product Moment Correlationto test hypotheses tested at 0.05 level of significance using SPSS.

Results

Hypotheses One: There is no significant relationship between remote work and employee productivity in Colleges of Education in Kebbi State.

Table 1: Pearson Product Moment Correlation statistics showing relationship between remote work and employee productivity in Colleges of Education in Kebbi State.

Variables	N	Mean	S.Deviation	r-Cal	p-Value	Decision
Remote work	150	2.06	.789	.755**	.000	H_0 Rejected
Employee productivity	150	2.96	1.059			

Source: Fieldwork, 2026   ($\propto = .05$)

The result presented in table 1 shows a strong and statistically significant positive relationship between remote work and employee productivity in Colleges of Education in Kebbi State, with a correlation coefficient of r(150) =.755**, p <.05. This finding underscores the significant association between remote work and employee productivity in Colleges of Education in Kebbi State, as the p-value is below the threshold of 0.05. Therefore, the null hypothesis (H_{01}), which posited that no

significant relationship between remote work and employee productivity in Colleges of Education in Kebbi State, is rejected.

Hypotheses Two: There is no significant relationship between remote work and job satisfaction among employees in Colleges of Education in Kebbi State

Table 2: Pearson Product Moment Correlation statistics showing relationship between remote work and job satisfaction among employees in Colleges of Education in Kebbi State.

Variables	N	Mean	S.Deviation	r-Cal	p-Value	Decision
Remote work	150	2.56	.989	$.876^{**}$	.000	H_0 Rejected
Job satisfaction	150	3.09	1.256			

Source: Fieldwork, 2026 $(\propto = .05)$

The result presented in table 2 shows a strong and statistically significant positive relationship between remote work and job satisfaction among employees in Colleges of Education in Kebbi State, with a correlation coefficient of r(150) =$.876^{**}$, p <.05. This finding underscores the significant association between remote work and job satisfaction among employees in Colleges of Education in Kebbi State, as the p-value is below the threshold of 0.05. Therefore, the null hypothesis (H_{02}), which posited that no significant relationship between remote work and job satisfaction among employees in Colleges of Education in Kebbi State, is rejected.

Discussion of Findings

Findings in Table 1 reveal a statistically significant positive relationship between remote work and employee productivity in Colleges of Education in Kebbi State, indicating that employees who engage in remote work tend to exhibit higher levels of efficiency, task completion, and overall performance compared to those working entirely on-site. This result aligns with the submission of Magnaye (2024), who found that structured remote work arrangements among university faculty enhanced productivity through improved autonomy, better work-life balance, and reduced commuting stress. Similarly, the findings resonate with Lenny, Nurhadi and Ahmad (2024), who reported that remote work positively impacts employee performance across various sectors by allowing employees to optimize work schedules, minimize distractions, and leverage digital tools effectively. These corroborations suggest that when employees are provided with the necessary

resources, flexible schedules, and technological support, remote work serves as a strategic mechanism for boosting productivity in educational institutions.

The findings in Table 2 indicate a statistically significant positive relationship between remote work and job satisfaction among employees in Colleges of Education in Kebbi State, suggesting that employees engaged in remote work report higher levels of satisfaction with their roles, work environment, and overall job experience. This finding aligns with the submission of Sherbaz, Rizwana and Mustafa (2022), who observed that faculty members in higher education institutions experienced increased job satisfaction when provided with structured remote work arrangements, largely due to improved work-life balance, reduced commuting stress, and greater autonomy in managing work tasks. Similarly, the study by Clarissa & Jacqueline (2024) corroborates this finding, showing that employees across various sectors reported enhanced job satisfaction through flexible work schedules, better task control, and the psychological comfort associated with working remotely. These convergences suggest that remote work not only supports productivity but also fosters a positive emotional and motivational climate among employees in educational institutions.

Conclusion

The findings of the study demonstrate that remote work has a significant positive impact on employee productivity in Colleges of Education in Kebbi State. Employees who engage in remote work arrangements exhibit enhanced efficiency, better time management, and higher task completion rates, reflecting the benefits of autonomy, flexible scheduling, and reduced workplace distractions. These results indicate that when educational institutions provide adequate technological support, clear remote work guidelines, and opportunities for employees to structure their work independently, productivity levels improve substantially. Therefore, remote work is not merely a contingency arrangement but a strategic approach that can optimize staff performance in higher education settings. Furthermore, the study also shows that remote work significantly enhances job satisfaction among employees in Colleges of Education. Employees report higher levels of satisfaction due to improved work-life balance, reduced commuting stress, and greater control over work processes. This finding underscores the dual advantage of remote work in both enhancing performance and promoting positive psychological and emotional outcomes for staff. In conclusion, the study establishes that remote work is a valuable organizational tool for Colleges of Education in Kebbi State, as it simultaneously boosts productivity and job satisfaction. Educational administrators are therefore encouraged to adopt structured remote work policies, invest in necessary infrastructure, and provide ongoing support to sustain these benefits for institutional growth and employee well-being.

Recommendations

Based on the findings of this study, the following recommendations are proposed;

1. Colleges of Education should develop and implement structured remote work policies that allow employees to work flexibly while ensuring accountability. This should include clear guidelines on task management, reporting mechanisms, and provision of necessary digital tools to sustain high levels of productivity.
2. Educational administrators should provide adequate support for remote work arrangements, including reliable internet access, access to collaboration platforms, and training on effective remote work practices.

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