



ANALYSING THE EFFECT OF WORK ENVIRONMENT ON EMPLOYEE PERFORMANCE AMONG MEDICAL DOCTORS IN NIGERIA PUBLIC HOSPITALS

By

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Abstract

This study investigates the impact of the work environment on employee performance among medical doctors in public hospitals in Kano State, Nigeria. The primary objective was to evaluate how factors such as hospital infrastructure, peer support, and organizational climate influence doctors' motivation and job performance. A quantitative research design was adopted, with data collected from 256 medical doctors across 33 public hospitals in Kano Metropolis using a structured questionnaire based on the Vantage Circle Employee Performance Survey. Descriptive statistics highlighted the demographic profile of respondents, showing a majority under the age of 30, with significant representation in departments like Internal Medicine and Paediatrics. Inferential statistical analyses, including ANOVA and regression, revealed a significant positive relationship between perception of the work environment (PWE) and employee motivation and performance (EMP), with a p-value of 0.001. This indicates that an improved work environment strongly enhances doctors' performance and motivation levels. The study concludes that enhancing the work environment in public hospitals-through investments in infrastructure, robust support systems, and improved working conditions-can significantly boost doctors' performance. Recommendations include upgrading hospital facilities, fostering teamwork, providing regular professional development opportunities, and implementing policies to promote work-life balance. These measures are vital to ensuring effective healthcare delivery in public hospitals in Nigeria.

Keywords: Environment, Performance, Doctors, Healthcare, Job satisfaction, Leadership.

1.0 Introduction

The public health sector plays a vital role in promoting the well-being of individuals and communities. In many developing countries, including Nigeria, the health sector is often burdened with challenges such as poor infrastructure, inadequate resources, and an overworked labor force (Adebayo, Olagunju, & Sanni, 2015). In such environments, the work environment, a crucial determinant of employee performance, becomes a focal point in discussions about improving public health outcomes. This term paper focuses on the impact of work environment on employee performance among medical doctors in Nigerian public hospitals, particularly within Kano State.

The work environment includes both the physical and psychological aspects of an employee's workspace. For medical doctors, these aspects encompass the availability of necessary medical



equipment, support from hospital administration, the physical state of health facilities, and job stress levels. Bakker and Demerouti (2007) posit that the work environment influences the performance and satisfaction of employees, affecting their ability to provide quality care. According to Adebayo, Olagunju, and Sanni (2015), Nigeria's public health sector is marred by substandard working conditions, leading to high turnover rates among medical professionals, burnout, and even migration of doctors to countries with better work conditions. Research in the health sector has shown that improving the work environment enhances employee performance, reduces job stress, and increases job satisfaction (Gill, Flaschner, & Bhutani, 2016). Nigerian hospitals, however, have often been criticized for their inadequate work environments, ranging from a lack of medical supplies to overcrowded wards, all of which create barriers for effective healthcare delivery (Olaniyan & Okemakinde, 2008).

The public health sector in Nigeria faces numerous challenges, including poor infrastructure, inadequate resources, and an overworked labor force, which negatively impact employee performance. In Nigerian public hospitals, particularly those in Kano State, medical doctors work under suboptimal conditions such as overcrowded hospitals, shortages of medical equipment, poor working facilities, and low financial compensation. These unfavorable conditions lead to low morale, job dissatisfaction, high turnover rates, burnout, and a decline in the quality of patient care. Despite efforts to reform the healthcare system, there is limited empirical research that specifically explores how these work environment factors affect the performance of medical doctors, leaving a significant knowledge gap that this study seeks to address.

The study aims to examine the relationship between the work environment and the performance of medical doctors in public hospitals in Kano State, Nigeria. It seeks to identify specific factors within the work environment that significantly impact doctors' motivation and job performance while assessing how improvements in these factors could enhance employee performance and healthcare outcomes. Additionally, the study intends to provide actionable recommendations for policymakers, hospital administrators, and other stakeholders to foster better work environments for medical doctors across the country.

This study is driven by the hypothesis that there is a significant relationship between the work environment and employee performance among medical doctors in Nigerian public hospitals. Alternatively, it posits that if no significant relationship exists, then the work environment may not be a determinant of performance in this sector. The findings are expected to contribute valuable insights for improving working conditions and healthcare delivery in Nigeria.

2. Literature Review

2.1 Work Environment

The work environment refers to the conditions in which employees operate and perform their duties, encompassing a wide range of factors that collectively influence their job satisfaction, motivation, and overall performance. Armstrong and Taylor (2014) define the work environment as including physical, social, and psychological conditions that affect an individual's work, emphasizing its multifaceted nature. This definition highlights the idea that the work environment extends beyond just physical surroundings to include social interactions and organizational culture. Similarly, Schneider, Ehrhart, and Macey (2013) describe it as the setting, conditions, and culture in which employees perform their



tasks, stressing the interplay between physical space and cultural and relational dynamics. These factors can significantly influence employees' attitudes, behaviors, and performance outcomes.

The work environment is often categorized into several components, each playing a crucial role in shaping employees' experiences. First, the physical aspects refer to tangible conditions such as office layout, equipment, lighting, temperature, and workspace design. According to Davis (1984), elements like proper lighting, comfortable temperatures, and well-maintained equipment are essential for optimal performance. In Nigerian public hospitals, however, these physical conditions often pose challenges, such as inadequate infrastructure, limited medical supplies, and outdated equipment. Addressing these issues is critical to improving the performance of medical doctors and the quality of healthcare services.

2.2 Employee Performance

Employee performance refers to the efficiency and effectiveness with which employees fulfill their job responsibilities and contribute to organizational goals. According to Armstrong and Taylor (2014), performance encompasses the accomplishment of a given task measured against preset standards of accuracy, completeness, cost, and speed. This concept is especially critical in healthcare, where the performance of medical doctors directly impacts patient outcomes, overall service quality, and the competitiveness of healthcare institutions. High levels of performance among doctors are associated with better patient outcomes, higher patient satisfaction, and improved public health metrics (Buchan, Twigg, Dussault, Duffield, & Stone, 2015). Effective performance is characterized by timely and accurate diagnoses, appropriate treatments, and high-quality patient care, which are essential for maintaining trust in the public healthcare system.

The importance of employee performance in healthcare cannot be overstated, as suboptimal performance can lead to serious consequences, including increased morbidity and mortality rates. Furthermore, high-performing medical professionals contribute to reduced hospital readmission rates, lower healthcare costs, and a more efficient use of medical resources (Buchan et al., 2015). Thus, ensuring that medical doctors perform at their best is a key objective for healthcare administrators and policymakers.

2.3 Relationship Between Work Environment and Employee Performance

Research on the relationship between work environment and employee performance reveals critical insights into how workplace conditions influence job outcomes, particularly in the healthcare sector. Shanafelt and Noseworthy (2017), in their study on burnout and engagement among physicians in the United States, identified supportive leadership, adequate resources, and professional growth opportunities as pivotal factors in mitigating burnout and enhancing job satisfaction. Their findings emphasized the importance of leadership that fosters open communication, values employee contributions, and provides necessary resources, resulting in higher performance and improved patient care.

Buchan et al. (2015) explored the impact of workload on healthcare performance in the United Kingdom, highlighting the detrimental effects of high patient volumes and staff shortages on employee morale and productivity. Their study demonstrated that effective workload management strategies,



including balanced patient loads and sufficient staffing, improved job satisfaction and performance, reducing burnout rates and enhancing healthcare outcomes.

Armstrong and Taylor (2014) examined the interplay between job satisfaction, work environment, and employee performance in the UK healthcare sector. They found that effective leadership, clear communication, and a positive organizational culture were strong predictors of employee engagement and productivity. Their research underscored the importance of leadership training and communication practices to sustain high performance levels in healthcare organizations.

The World Health Organization (2020) provided a global perspective on the availability of medical resources and healthcare performance, emphasizing the importance of adequate infrastructure and supplies in improving job performance and patient outcomes. Healthcare workers in well-resourced settings experienced reduced stress, greater efficiency, and higher job satisfaction, while those in low-resource environments faced significant challenges, including increased workload pressures and higher risks of errors.

Robbins and Judge (2013) examined organizational behavior's role in shaping job performance among U.S. healthcare workers, revealing that effective leadership and open communication were critical drivers of motivation and productivity. Their findings highlighted the importance of fostering an environment conducive to teamwork and collaboration to enhance job performance and patient care quality.

Kolb (2014) explored the impact of continuous learning on job performance in the UK healthcare sector, demonstrating that ongoing training and skill enhancement significantly improved clinical competencies and job satisfaction. The study underscored the need for healthcare institutions to prioritize professional development as a means of enhancing both individual and organizational performance.

Guest (2017) examined the influence of work-life balance on job satisfaction and performance among healthcare workers in the United States. Flexible work arrangements and supportive workplace policies were found to enhance employee motivation and productivity while mitigating burnout and turnover risks. The study highlighted work-life balance as a critical factor in maintaining a motivated and high-performing workforce.

Lastly, Baker, Day, and Salas (2006) focused on the role of communication and teamwork in healthcare performance. Their research demonstrated that clear communication and cohesive team collaboration improved patient care coordination and safety outcomes. They advocated for training programs to enhance communication and collaboration skills, which could lead to significant improvements in healthcare performance and patient safety.

Collectively, these studies underscore the profound impact of supportive leadership, resource availability, workload management, professional development, work-life balance, and effective communication on employee performance, particularly in the demanding field of healthcare.



3 Research Methodology

This section outlines the research methodology that will be employed in this study, detailing the research design, population, sample size, sampling technique, data collection methods, and data analysis procedures. The study will adopt a correlational research design to examine the relationship between the work environment and employee performance among medical doctors in public hospitals in Kano State, Nigeria. This design will be appropriate as it will allow for the identification of patterns and relationships between variables without establishing causation, aiming to explore how various aspects of the work environment will impact medical doctors' performance.

The target population for this study will comprise medical doctors working in public hospitals across Kano State. According to the Kano State Ministry of Health, there are expected to be approximately 1,063 medical doctors employed in various public hospitals and clinical departments within the state. This population will include doctors at different career levels, ranging from interns to senior consultants, across diverse specialties.

Utilizing Krejcie and Morgan's (1970) sample size determination table, a sample size of 201 medical doctors will be selected for this study, providing sufficient representation to generalize findings to the larger population of medical doctors in public hospitals in Kano State. To ensure the sample accurately represents various specialties and experience levels, a stratified random sampling technique will be employed. The population will be divided into strata based on specialties, such as surgery, pediatrics, and internal medicine, as well as experience levels, including interns, resident doctors, and consultants. A random sample will then be drawn from each stratum.

Data will be collected using a structured questionnaire developed based on the Vantage Circle (2024) survey framework, which will include items measuring both the work environment and employee performance. The questionnaire will be distributed in both online and paper formats to facilitate participation, consisting of closed-ended questions using a Likert scale to assess respondents' perceptions of their work environment and self-reported performance levels.

The collected data will be analyzed using statistical software, such as SPSS (Statistical Package for the Social Sciences). Descriptive statistics, including mean, standard deviation, and frequency distribution, will summarize the demographic characteristics of the respondents and their perceptions of the work environment and performance. Inferential statistics, including Pearson's correlation coefficient, will be employed to examine the strength and direction of the relationship between the work environment and employee performance, with a significance level of 0.05 used to determine statistical significance.

Ethical considerations will be strictly observed throughout the research process, with participants informed about the study's purpose and their consent obtained prior to participation. Confidentiality and anonymity of respondents will be ensured, and participants will have the right to withdraw from the study at any time without repercussions. By adopting this methodology, the study aims to generate reliable and valid findings that will contribute to understanding the impact of the work environment on the performance of medical doctors in public hospitals in Kano State, Nigeria.



4. Results And Discussion

4.1 Demographic Information

The study administered 285 questionnaires, of which 256 were completed and returned, representing an 89.8% response rate. The sample included 175 male and 81 female respondents, providing a reliable basis for analysis. Demographic data highlighted a predominantly young workforce, with 45% of respondents under 30 years old, followed by 27% aged 30-39, and smaller proportions in older age brackets. This youthful demographic suggests potential for long-term retention and distinct expectations for motivation and engagement. The respondents were distributed across various clinical departments, ensuring a well-rounded representation of specialties. Pediatrics had the highest number of participants (32), followed by Surgery (27), Histopathology (24), and Internal Medicine (22), while other departments such as ENT (11) and Radiology (21) also contributed. This diversity allowed the study to examine how different job demands and environments influence employee performance.

The respondents' positions included Residents (99), Consultants (71), Medical Officers (60), and Specialists (26), ensuring perspectives from both junior and senior medical professionals. This distribution provided insights into how work environment factors affect individuals at different experience levels, as senior staff may encounter distinct stressors compared to their junior counterparts. Regarding years of service, most respondents (43%) had 1-5 years of experience, with smaller proportions in the 6-10 years (23%), 11-15 years (18%), and over 16 years categories. This aligns with the younger demographic profile, highlighting challenges faced by newer employees in adapting to their work environment, while more experienced staff may have developed strategies for managing workplace stress. Overall, the demographic data provided a strong contextual foundation for analyzing how the work environment impacts employee performance across various roles, specialties, and experience levels.

4.2 Results

Table 1: Descriptive statistics

	N	Minimum	Maximum	Mean	Std. Deviation
EMP (Employee Motivation and Performance)	256	1	5	3.05	1.20
PWE(Perception of Work Environment)	256	1	5	2.31	1.08
SPF(Support from Peers and Feedback)	256	1	5	4.02	0.87
Valid N (Listwise)	256				

The descriptive statistics highlight key findings on the effect of the work environment on employee performance among medical doctors in Nigerian public hospitals. Employee Motivation and Performance (EMP) has a mean score of 3.05, indicating moderate levels of motivation and performance, with a wide range of responses (standard deviation of 1.20). Perception of the Work Environment (PWE) scored lower, with a mean of 2.31, reflecting dissatisfaction with workplace conditions such as cleanliness, space, and lighting, and a relatively consistent variation in responses



(standard deviation of 1.08). In contrast, Support from Peers and Feedback (SPF) received a high mean score of 4.02, indicating strong peer support and engagement in constructive feedback, with responses showing little variability (standard deviation of 0.87). Overall, the findings suggest that while peer support is strong, perceptions of the work environment are poor, and employee motivation and performance are moderate.

Table 2: Model Summary

Model	R	R Square	Adjusted R Square	Std Error of the Estimate
1	.745 ^a	.555	.552	.894

The Model Summary table highlights important metrics assessing the strength and fit of the model in studying the effect of the work environment on employee performance among medical doctors in Nigerian public hospitals. The correlation coefficient (R) of 0.745 demonstrates a strong positive relationship between doctors' perception of their work environment (PWE) and their motivation and performance (EMP), indicating that improvements in the work environment are associated with higher motivation and performance. The R Square value of 0.555 suggests that 55.5% of the variation in EMP is explained by PWE, establishing it as a significant predictor. The Adjusted R Square value of 0.552 refines this estimate by accounting for sample size and predictors, showing minimal difference and confirming the model's robustness. The standard error of the estimate (0.894) indicates moderate variability in predicting EMP but aligns with the strong correlation. Overall, the model effectively explains a significant portion of the relationship between work environment and employee performance.

Table 3: ANOVA ^a

Model		Sum of squares	df	Mean Square	F	Sig.
1	Regression	150.324	1	150.324	187.95	.001
	Residual	120.684	254	.475		
	Total	271.008	255			

a. **Dependent Variable: EMP**

b. **Predictors: (Constant), PWE**

The ANOVA results reveal that the regression model effectively explains the variability in employee motivation and performance (EMP) based on the perception of the work environment (PWE). The regression sum of squares (150.324) accounts for a substantial portion of the total variation in EMP,

while the residual sum of squares (120.684) represents the unexplained variability. With a total sum of squares of 271.008, the model demonstrates its ability to capture significant relationships.

The degrees of freedom (df) for the regression is 1, reflecting the single predictor variable, while the residual df is 254, representing the remaining variability among respondents. The mean square for the regression (150.324) is significantly larger than the residual mean square (0.475), further emphasizing the model's explanatory power. The high F-statistic (187.95) and the very low p-value (0.001) confirm that the model is statistically significant and that PWE significantly impacts EMP.

Hypothesis testing supports the research hypothesis that a significant relationship exists between the work environment and employee performance. With a p-value of 0.001 (well below the 0.05 threshold), the null hypothesis, which states no significant relationship, is rejected. The high F-statistic further validates this finding, showing that the model accounts for a substantial portion of the variance in EMP. These results highlight the critical role of the work environment in shaping employee performance among medical doctors in Nigerian public hospitals.

Table 4: Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1	1.250	.215			5.81
(Constant)	.675	.049	.745	.745	13.71
PWE					

a. Dependent Variable: EMP

The unstandardized coefficients (B) represent the raw values for the constant (1.250) and the independent variable PWE (0.675). This indicates that for every 1 unit increase in PWE (Perception of Work Environment), employee motivation and performance (EMP) increases by 0.675 units. The standardized coefficient (Beta) reflects the relative effect of PWE after standardizing the variables, with a Beta value of 0.745 showing a strong positive influence of PWE on EMP. The t-values, which assess the significance of each coefficient, are 5.81 for the constant and 13.71 for PWE, both indicating statistical significance. The p-values for both the constant and PWE are 0.001, confirming that these results are highly statistically significant.

4 Conclusion

The findings of this study demonstrate a significant relationship between the work environment and employee performance (EMP) among medical doctors in public hospitals across Kano Metropolis. Regression analysis revealed a strong positive correlation between the perception of the work



environment (PWE) and EMP, with a standardized coefficient of 0.745 and a p-value of 0.001. These findings align with studies by Chandrasekar (2011) and Armstrong (2006), which emphasize the importance of organizational culture, physical workspace, and interpersonal relationships in enhancing productivity. Similarly, Herzberg's Two-Factor Theory underscores how working conditions and supervision contribute to motivation and performance.

Peer support and feedback emerged as the most valued aspect of the work environment, with a mean score of 4.02, reflecting its positive impact on motivation. This supports the work of Maslach et al. (2001) and Bakker and Demerouti (2007), who found that supportive environments reduce stress and improve well-being. However, dissatisfaction with the work environment was evident in the low mean score of 2.31 for PWE, highlighting challenges such as inadequate infrastructure, poor remuneration, and high patient-to-doctor ratios. Addressing these issues, as emphasized by Adebayo et al. (2015), is critical for improving performance and job satisfaction.

The study also highlights the role of the work environment in employee retention. Positive work environments encourage doctors to remain productive and motivated, as supported by Taris and Schaufeli (2015). Nevertheless, the low PWE scores suggest that hospital administrations need to prioritize improving infrastructure, reducing workloads, and providing administrative support to enhance retention.

This study's implications call for action by administrators and policymakers. Administrators should focus on creating a conducive work environment by improving infrastructure, fostering teamwork, and offering professional development opportunities. Policymakers should allocate resources to improve hospital facilities and reduce workloads, while also implementing work-life balance initiatives to reduce burnout. Additionally, researchers are encouraged to explore cultural and regional factors influencing work environments to expand understanding in diverse contexts.

Despite its contributions, the study has limitations. It focuses solely on medical doctors in public hospitals, limiting its generalizability. The reliance on self-reported data introduces potential bias, and the cross-sectional design restricts causal inference. Future studies should adopt longitudinal designs and include diverse healthcare professionals to address these gaps.

To address the study's findings, hospitals in Kano State should improve facilities and resources, promote peer support, and prioritize employee well-being through flexible schedules and mental health programs. Continuous monitoring and feedback are essential to inform policies and foster a supportive work environment. By taking these steps, public hospitals can enhance employee performance, improve healthcare delivery, and increase patient satisfaction.

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