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Strategic Innovation and Productivity of Healthcare Practitioners in Selected Teaching Hospitals in South West, Nigeria

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ABSTRACT

Strategic innovations are essential tools for measuring an organization's internal and external performance, assessing strengths, opportunities, weaknesses, and trends to achieve economic growth and development. Strategists must effectively manage these challenges to ensure productivity, profitability, and sustainability. Unfortunately, in Nigeria today, there appears to be a decline in the motivation to enhance employee productivity. This has become a major concern for healthcare practitioners and strategic management scholars. The health sector requires strategic innovation systems to effectively manage healthcare practitioners' productivity activities in teaching hospitals across South West Nigeria. Therefore, this study examined the effect of strategic innovation on employee productivity of healthcare practitioners of selected teaching hospitals in South West, Nigeria. The study adopted survey research design. The population was 11,600 senior and middle-level healthcare practitioners from selected teaching hospitals in South-West, Nigeria, who are registered by the West African College of Physicians in Nigeria and Federal Ministry of Health. The sample size of 484 was determined using Raosoft sample size calculator. Respondents were selected by simple random sampling technique. Structured and validated questionnaire was used to collect data. Cronbach's alpha reliability coefficients for the constructs ranged from 0.74 to 0.94. The response rate was 85.1%. Data were analysed using descriptive and inferential (multiple liner regression) statistics at 5% level of significance. Findings revealed that strategic innovation had a significant effect on employee productivity (Adj. $R^2 = 0.509$, $F(5,405) = 86.006$, $p < 0.05$) of selected teaching hospitals in South-West, Nigeria. This study concluded that strategic innovations significantly affect employee productivity of healthcare practitioners in selected teaching hospitals in South-West, Nigeria. It is therefore recommended that management of selected teaching hospitals should adopt the use of strategic innovations in order to enhance healthcare practitioners' productivity.

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KEYWORDS: *Strategic innovation, Infrastructural Innovation, Information Technology Innovation, Equipment Innovation, Compensation Innovation, Health Safety Innovation, Healthcare Practitioners' Productivity*

INTRODUCTION

Healthcare practitioners' productivity is a critical determinant of effective healthcare delivery that played vital role to improve economic and development growth of the nation. This level of concern about healthcare practitioners' productivity has been a significant focus globally as most teaching hospitals performance, in public have experienced a downward slope in employee productivity performance. In selected teaching hospitals across South-West Nigeria, these innovations are not just incremental improvements but transformative changes that redefine the standards of patient care and employee productivity. By fostering an environment that embraces cutting-edge technology, modernized infrastructure, and robust health and safety protocols, these hospitals are setting new benchmarks in medical excellence and practitioner satisfaction. This study examines how strategic innovation impacts healthcare practitioner productivity in selected teaching hospitals across South West, Nigeria.

Healthcare practitioner productivity is significantly impacted by a confluence of systemic challenges. In the United States, physician burnout, reported by 53% of physicians due to demanding workloads and lack of support (De-Hert, 2020), directly undermines efficiency and quality of patient care. This burnout contributes to substantial physician turnover, with an estimated loss of 40,000 physicians annually (American Medical Association, 2023), further straining workforce capacity and productivity. Moreover, while US healthcare spending reached $4.2 trillion in 2020 (Raghupathi & Raghupathi, 2020), limiting investment in crucial workforce development and innovative technologies, the resulting resource constraints compound the productivity challenges. Even with this high expenditure, the nation ranks lower in key health outcomes compared to other developed countries (OECD, 2023), indicating inefficiencies that affect practitioner effectiveness. Finally, the need for effective communication strategies regarding public health, as demonstrated by the 18% of US adults believing vaccines are unsafe (Khalid et al., 2023), further highlights the added burden on healthcare practitioners to address misinformation and promote patient adherence, impacting their overall productivity.

More so, healthcare practitioner productivity is increasingly influenced by the integration of advanced technologies, yet significant barriers persist, while hospitals within the European Union, as evidenced by a 2022 German study (Khalid et al., 2023), recognize the potential of AI to enhance efficiency, challenges related to data privacy, workforce training, and implementation costs impede widespread adoption. This is reflected globally, where only 12% of healthcare organizations report achieving advanced AI implementation, indicating a significant productivity gap between technological potential and practical application. This disparity means that many healthcare practitioners still rely on less efficient, traditional methods, limiting their capacity. Furthermore, productivity is hampered by factors beyond technology. For example, vaccine hesitancy and distrust in healthcare institutions, as highlighted in French studies (Peterson et al., 2022), creates added workload for practitioners who must address misinformation and bolster patient compliance, thus impacting their ability to deliver care effectively. Healthcare practitioner productivity in Africa is severely constrained by systemic challenges. A critical factor is the significant shortage of healthcare workers, estimated at 9 million by the WHO (World Health Organization, 2024), which directly increases the workload and reduces the efficiency of existing practitioners. This is compounded by insufficient funding, with sub-Saharan Africa's health expenditure per capita at a mere $122 in 2020, compared to the global average of $1,151 (World Bank, 2023), limiting access to necessary resources and hindering practitioner effectiveness.

In Ethiopia, ongoing conflicts and political unrest (Tolera et al., 2024) divert resources away from essential health interventions, disrupting healthcare systems and diminishing practitioner productivity. Furthermore, limited research infrastructure and funding impede the development of evidence-based solutions, and deep-rooted traditional beliefs (Avan et al., 2024) create challenges in delivering culturally sensitive care, adding to the burdens faced by healthcare professionals.

Similarly, in Ghana, reliance on foreign aid for healthcare funding (Boachie et al., 2022) limits sustainability and restricts opportunities for innovation that could enhance practitioner efficiency. Weak supply chain management (Effah, 2024) results in shortages of essential medicines and equipment, directly hindering the ability of healthcare practitioners to deliver effective care. Additionally, the need for innovative financing mechanisms and resource mobilization, as highlighted by Adeoye et al. (2021), is critical to address inadequate medical equipment and facilities, particularly in rural areas, where geographic barriers and resource limitations create significant disparities in access to care, and therefore productivity. Finally, throughout Africa, insufficient data collection and analysis (African Health Initiative Partnership, 2022) limit informed decision-making, hindering the development and implementation of interventions that could improve practitioner productivity.

Healthcare practitioner productivity in Nigeria is severely challenged by a multitude of systemic issues. While health spending has seen a slight increase (Sasu, 2024), it remains significantly below the Abuja Declaration's 15% target (Awoyemi et al., 2023), leading to inadequate funding for essential resources and infrastructure. This directly affects practitioners' ability to deliver efficient care. The rapid population growth (International Trade Administration, 2023) further strains the already burdened healthcare system, demanding increased productivity from a workforce facing significant challenges. The emigration of competent healthcare workers due to low wages and declining medical infrastructure (Awoyemi et al., 2023) exacerbates the workforce shortage, placing a greater burden on remaining practitioners.

Moreover, the global trend highlighting the need for strategic innovation in healthcare (Yusuf & Hoda, 2023; Baudier et al., 2022) is particularly relevant in Nigeria. The cost of personnel turnover (Wali, 2021; Tan et al., 2024), driven by factors such as lack of managerial support, stagnant advancement opportunities, and diminished self-worth (Kaliannan et al., 2022; Rožman et al., 2023), significantly impacts productivity. This turnover is compounded by the scarcity of healthcare professionals (Ojebola et al., 2020) and the challenges of funding, training, job overload, and capacity building (Bello et al., 2024). Therefore, strategic innovation is crucial to enhance healthcare practitioner productivity and retain skilled professionals within the Nigerian healthcare system. A healthy workforce is vital for sustainable economic development (Velenturf & Purnell, 2021), and addressing these challenges is essential to ensure efficient and effective healthcare delivery

Statement of the Problem

Extant literature has examined the importance and role of strategic innovation in a turbulent environment filled with competition and business realities, including competency, work engagement, customer satisfaction, employee commitment, job satisfaction, and quality service delivery (Al-Haroon & Al-Qahtani 2020). Studies such as (Abubakar et al. 2024; Adeleke et al. 2023; Abdallah & Alhassan, 2021) has investigated the relevant aspects of strategic innovation in area of polices formulation, organizational culture, organizational performance and job satisfaction, yet the field of strategic innovation has recorded only a handful studies in area of employee productivity. An investigation on the relationship between incentive programs and business outcomes in Edo State institutions (Ifunanya & Emmanuel, 2022; Krijgsheld et al., 2022). Scholars such as Ada et al., (2021); Adu, (2022); Chinyere, (2020); Nyengidiki and Nyengidiki (2020); Salami et al., (2022), have examined workplace mentoring and the enhancement of public hospital staff performance in healthcare sector in Nigeria. However, the exact nature of this impact is still not fully explored, which limits our ability to apply both empiricism and conceptualism to the problem of strategic innovation's effect on productivity in the workplace. Accordingly, the purpose of this research is to look at how certain hospitals in South-West Nigeria's hospitals have been able to boost staff productivity through strategic innovation.

In light of the stated gap in literature, high turnover rates and staff shortages, particularly among nurses and other critical roles, lead to increased workloads for remaining staff, contributing to burnout and reduced productivity (Yang et al. 2021). Healthcare workers frequently experience high levels of stress and burnout due to the demanding nature of their jobs. This has been exacerbated by the COVID-19 pandemic, leading to mental health issues that further impact productivity (Krijgsheld et al. 2022). Excessive administrative tasks can take time away from patient care. Healthcare professionals often spend a significant portion of their time on paperwork and other non-clinical duties, which can detract from their primary responsibilities (Yang et al., 2021). While technology has the potential to improve efficiency, its implementation can sometimes be problematic. Issues such as poorly integrated systems, lack of training, and resistance to change can hinder productivity (Yang et al., 2021). The physical and organizational environment can significantly impact productivity. Factors such as inadequate facilities, poor management practices, and lack of support can create a challenging work environment (Krijgsheld et al., 2022). Consequently, it could be paramount to establish if strategic innovation affects employee productivity of tertiary healthcare sector.

LITERATURE REVIEW

This section discusses business strategic innovations and its dimensions (infrastructural innovation, equipment innovation, information technology innovation, compensation innovation, and health safety innovation) and healthcare practitioners' productivity

Strategic Innovation

Strategic innovation refers to the development of knowledge-intensive strategies that leverage a firm's competencies and capabilities to address market demand gaps, ultimately establishing and maintaining competitive advantage, as explored in the context of strategic innovation systems and firm innovation performance Farida and Setiawan (2022). Davenport and Glaser (2022) asserted that while data-driven decision-making in healthcare improves clinical accuracy and operational efficiency, healthcare practitioners must navigate intricate data systems to safeguard patient information. Güner et al. (2024) conceptualized that strategic innovation is the composition of organisational culture, leadership, human resources, organizational structure, knowledge acquisition, knowledge sharing, cooperation, policy, and technology. Hospital development has identified strategic innovations and the performance of healthcare practitioners as major indicators. We cannot over emphasize the importance of committed and productive health care practitioners in improving hospital performance (Ghaffar et al., 2024; Abubakar et al., 2024). All nations have adopted the perception

and practice of strategic management due to its effective contribution to organizational performance (Alsabi et al., 2023; Osintsev & Khalilian, 2023). Strategic innovation in healthcare practitioners refers to the intentional introduction of new or improved processes, products, or services that transform patient care, improve outcomes, and enhance the overall healthcare experience (Lagrosen & Lagrosen, 2022).

According to Markides and Oyon (2021), strategic innovation is characterized by a long-term focus, technological integration, adaptability, collaboration, customer orientation, sustainability, and effective risk management. These traits collectively contribute to an organization's ability to innovate successfully and sustainably. In this study, strategic innovation is defined as the purposeful creation and implementation of novel business strategies or changes in existing strategies that enable a company to compete effectively in evolving markets or create entirely new market spaces.

Infrastructural Innovation

According to James and Stewart (2021) infrastructural innovation involves reimagining the built environment, often through the integration of smart technologies and sustainable practices, to create more livable and adaptable urban spaces. Infrastructural innovation in healthcare is defined as innovations that target organisational change within a secondary healthcare setting. These innovations according to the scholars focus on implementing changes at the structural level of healthcare organizations to improve performance and outcomes (Madden et al., 2024). Fagbohun and Oladehinde (2021) contended that infrastructural innovation in hospitals encompasses patient-centered design, where hospital spaces are redesigned to enhance patient comfort, privacy, and well-being. This includes creating healing environments with natural light, noise reduction, and easy navigation. Infrastructural innovation will be defined as introduction of new technologies, processes, or systems that transform the physical and digital infrastructure of cities and communities, enhancing their resilience, sustainability, and efficiency.

Information Technology Innovation

According to Mariani and Dwivedi (2024) information technology innovation refers to the creation and implementation of new technology solutions that significantly impact individuals, business, and society as a whole. This encompasses advancements in hardware, software, networking, and applications, driving transformation across various sectors. Osakede (2022) conceptualized that information technology innovation, in the context of health system performance, refers to the utilisation of information and communication technology (ICT) to enhance various aspects of healthcare delivery. The scholar maintained that spreading health information for efficient disease management and prevention, improving communication between patients and healthcare providers, facilitating the ordering of medical equipment, minimizing stock shortages, and enhancing administrative duties. Digital tools such as electronic health records (EHRs), telemedicine platforms, and mobile health applications can streamline workflows, improve communication, and facilitate access to information, thereby enhancing health workers' efficiency and effectiveness (Ifunanya & Emmanuel, 2022).

Equipment Innovation

The advent of technology and its subsequent innovation in the healthcare sector has brought a wind of change that will improve life expectancy, quality of life, diagnostic and treatment options, as well as the efficiency and cost-effectiveness of healthcare systems (Kim et al. 2022). Equipment Innovation, it highlights its importance within the framework of disruptive innovation in healthcare (Lee & Lee, 2020). According to Kim et al. (2022) utilising portable and affordable telemedicine equipment to expand access to specialist consultations and remote patient monitoring in underserved areas will lead to rapid and user-friendly diagnostic tools for early detection and treatment of diseases, particularly in resource-limited settings. Phromket et al. (2023) emphasizes that innovative work behavior capability is crucial for fostering equipment innovation by enhancing skills, promoting learning, adopting technology, disseminating knowledge for change, and ensuring fair rewards. In this study, equipment innovation is defined as the implementation of new or improved equipment, tools that enhance performance, efficiency and effectiveness in healthcare.

Compensation Innovation

To effectively manage employee productivity, businesses now need pay systems that incorporate both monetary and non-monetary benefits. An organization's success may be attributed, in large part, to its motivated staff. According to Kuo (2023), there are many different kinds of remuneration in the healthcare industry, both monetary and otherwise. It underscores the importance of fair compensation in enhancing employee motivation, reducing job stress, and fostering a productive and innovative work environment. Andersson et al., (2023) and Mendonça et al. (2022) opined that compensation innovation can be defined as a multifaceted concept that involves nurturing an innovative culture within healthcare

organizations to drive improvements in patient care, organizational efficiency, and overall performance. According to Minghui et al. (2021) when employees feel cared for and supported by their organization, they are more likely to be engaged and motivated to perform at their best, this can lead to higher levels of job satisfaction, which in turn can drive innovation within the organization.

Health Safety Innovation

Healthcare providers and ancillary staff play a critical role in delivering quality healthcare services to the population (Smith et al., 2020). However, their work environments expose them to numerous occupational health hazards that can compromise their health and safety. Ramesh (2024) conceptualizes that health safety innovation is the development and implementation of novel approaches, strategies, and models within healthcare settings to enhance patient safety and nursing excellence. The scholars further argued that the idea is to explore innovative methods and practices to improve the quality-of-care delivery and patient outcomes, as well as to elevate nursing standards in healthcare facilities. Furthermore, healthcare safety and innovation are implementing a safety management system (SMS) approach in healthcare to proactively assess risks, specify risk management strategies, and establish clear accountability and responsibility for addressing risks (Back et al., 2024). The researcher defined health safety innovation as the implementation of new technology, or processes that minimise risks, prevent injuries, and promote a safe and healthy environment such as healthcare.

Healthcare Practitioners Productivity

Employee productivity in the healthcare sector can be defined as the efficiency and effectiveness with which healthcare professionals utilize their time, skills, and resources to deliver quality patient care and achieve organizational goals (Kurrey et al., 2024). Onasoga and Lawal (2021) conceptualised that training and professional development enhanced skills, knowledge, and competencies among healthcare professionals as employee productivity. Alaba et al, (2021) opined that effective leadership styles, supportive management practices, and clear communication channels can foster employee engagement, motivation are the outcome of employee productivity. Well-designed incentives and rewards systems, including performance-based bonuses and recognition programs, can serve as motivators for healthcare professionals and enhance their productivity in Nigeria teaching hospitals (Adebayo et al, 2020). However, employee productivity is influenced by factors such as meaningful tasks, a positive work environment, and supportive relationships with colleagues and supervisors (Jamil & Hyder, 2024). In this study, employee productivity is defined as the amount of work done by an employee efficiently and effectively within a given time period, relative to the resources used.

METHODOLOGY

The study was conducted in South West Nigeria, One of the geographical zones in Nigeria. South west made of six states. One teaching hospital was selected from each state. The target population of this study comprised eleven thousand and six hundred (11600) healthcare practitioners of six (6) selected teaching healthcare institutions registered by the Western African College of Physicians in Nigeria and the Federal Ministry of Health in Nigeria. The six selected teaching hospitals are Lagos University Teaching Hospital (LUTC), established in 1962; University of College Hospital (UCH), Ibadan, established in 1948; Obafemi Awolowo University Teaching Hospital Complex (OAUTHC), Ile-Ife, established in 1970; Olabisi Onabanjo University Teaching Hospital (OOUTH), Shagamu, established in 1982; Federal Teaching Hospital, Ido-Ekiti, established in 2003; and Federal Medical Centre, Owo, established in 1994. These Teaching Healthcare institutions were selected because they have minimum of four hundred (400) healthcare workers in their records. They have been in existence for more than 20 years and essential training grounds for doctor, nurses, and other healthcare professionals. The sampling unit of this study comprised of the top-level and middle-level management of selected teaching hospitals in South West, Nigeria. The study adopted survey research design. The population was 11,600 senior and middle-level healthcare practitioners from selected teaching hospitals in South West, Nigeria, who are registered by the West African College of Physicians in Nigeria and the Federal Ministry of Health in Nigeria. The sample size of 484 was determined using Raosoft sample size calculator. Respondents were selected by simple random sampling technique. A structured and validated questionnaire was used in the study. Cronbach's alpha reliability coefficients for the constructs ranged from 0.74 to 0.94. The response rate was 85.1%. Data were analysed using descriptive and inferential (multiple and hierarchical regression analysis) statistics at 5% level of significance. The study used adapted structured survey questionnaire with closed-ended questions. The response was rated from each item in the questionnaire using (six-point modified Likert scale type) the following scale: Very high (VH) = 6, high (H) = 5, moderately high (MH) =

4, moderately low (ML) = 3, low (L) = 2, and very low (VL) = 1. This modified scale increased the reliability of the responses and give respondents more effective results (Malunju & Kembu, 2021).

The data obtained from respondents was analysed using the Statistics Package for Social Sciences (SPSS version 27) for the descriptive statistics and Smart PLS version 4.1 for the inferential statistics.

Response Rate

The researcher distributed 484 copies of questionnaire to the respondents of which 412 copies of the distributed questionnaire were duly filled and returned and was used for the analysis. This represents a response rate of about 85.1% of the population employed in the study, which was considered an excellent response rate. Table 4.1 presents results of the response rate.

Table 4.1 Response Rate

Category	Frequency	Percentage
Completed usable copies of questionnaire	412	85.1
Unreturned/incomplete copies of questionnaire	72	14.9
Total	**484**	**100**

Source: Survey Data, 2025

Restatement of Research Objective, Research Question and Research Hypothesis, Analysis and Discussion

Objective: Determine the effect of strategic innovation dimensions on employee productivity of selected teaching hospitals in South west Nigeria.

Research Question: In what way does the role of strategic innovation affect employee productivity of selected teaching hospitals in South West, Nigeria?

The objective for this study sought to establish the effect of strategic innovation dimensions on employee productivity of selected teaching hospitals. Six-point Likert type scale was used to analyze their responses. These points formed the weights for calculating the score for each item. The findings were presented, followed with an analysis and interpretation. The descriptive statistics for employee productivity was presented on Table 4.1.1a followed with the interpretations.

Table 4 Descriptive Statistics of Employee Productivity

	VH	H	MH	ML	L	VL	Missing	Total	
	%	%	%	%	%	%	%	Mean	Standard Deviation
Provide the right resources	25	36	26	8	2	1	1	4.65	1.21
Encourage breaks	15	31	28	19	4	1	1	4.24	1.25
Supportive work environment	24	33	24	13	4	1	2	4.51	1.29
Offer training	21	32	25	14	4	2	1	4.41	1.30
Healthy work-life balance	26	31	19	15	5	2	1	4.47	1.37
AVERAGE MEAN								**4.46**	**1.28**

Source: Author's computation, 2025

Interpretation

Table 4 presents the results of the descriptive analysis employee productivity. According to the results from the analysis, on average, the respondents indicated that provide the right resources is high (mean = 4.46, STD = 1.43). Furthermore, on average, the result revealed that majority of the respondents indicated that encourage breaks is high (mean = 4.46, STD = 1.28). The table revealed further that on average, it was revealed that the majority of the respondents show that support work environment is high (mean = 4.51, STD = 1.29). Additionally, the result revealed that on average, the study revealed that majority of the respondents show that offer training is high (mean = 4.41, STD = 1.30). Lastly, the table revealed that on average, the respondents indicated that health work-life balance is very high (mean = 4.47, STD = 1.37).

The average mean of the employee productivity is 4.46 with a standard deviation of 1.28 which means that on average the respondents indicated that employee productivity is high as regards employee productivity of selected teaching hospitals in south west Nigeria.

The finding suggests that strategic innovation plays a significant role in enhancing their problem-solving skills to the development of new and improved processes and services in the selected teaching hospitals in South-West, Nigeria. This outcome addresses research question and contributes to achieving the objective of the studies, highlighting that strategic innovation may affect employee productivity in the selected teaching hospitals.

Restatement of Research Hypothesis

Strategic innovation components have no significant effect on employee productivity of selected teaching hospitals in South West, Nigeria.

Table 5: Summary of multiple Regression of strategic innovation components and employee productivity of selected teaching hospitals in South West, Nigeria.

N	Model	B	Sig.	T	ANOVA (Sig.)	R	Adj. R^2	F (5,405)
412	(Constant)	0.594	0.007	2.718	0.000[b]	0.718[a]	0.509	86.006
	Infrastructure Innovation	0.195	0.001	3.408				
	Information Technology Innovation	0.144	0.006	2.737				
	Equipment Innovation	0.100	0.085	1.729				
	Compensation Innovation	0.152	0.000	3.675				
	Health Safety Innovation	0.288	0.000	5.847				
	Predictors: (Constant), Infrastructure Innovation, Information Technology Innovation, Equipment Innovation, Compensation Innovation, Health Safety Innovation							
	Dependent Variable: Employee Productivity							

Source: Author's computation, 2025

Table 5 shows the multiple regression analysis results for the components of strategic innovation on employee productivity of selected teaching hospitals in South West, Nigeria. The results showed that infrastructure innovation (β = 0.195, t = 3.408, p<0.05), compensation innovation (β = 0.152, t = 3.675, p<0.05), information technology innovation (β = 0.144, t = 2.737, p>0.05) and health information system (β = 0.288, t = 5.847, p<0.05) all have positive and significant effect on employee productivity on selected teaching hospitals in South-West, Nigeria. However, equipment innovation (β = 0.100, t = 1.729, p>0.05) have positive but insignificant effect on employee productivity on selected teaching hospitals in South-West, Nigeria. This implies that, infrastructure innovation, compensation innovation, information technology innovation and health safety innovation are the significant predictor of employee productivity within the selected teaching hospitals in South-West, Nigeria.

The *R* value of 0.718 supports this result and it indicates that strategic innovation components have a very high positive relationship with employee productivity of selected teaching hospitals in South West, Nigeria. The coefficient of multiple determination *Adj* R^2 = 0.509 indicated that about 50.9% variation that occurs in selected teaching hospital can be accounted for by the components of strategic innovation while the remaining 49.1% changes that occurs is accounted for by other variables not captured in the model. The predictive and prescriptive multiple regression models are thus expressed:

$EE = 0.594 + 0.195II + 0.144ITI + 0.100EI + 0.152CI + 0.288HSI + U_i$--- Eqn(i) (Predictive Model)

$EE = 0.594 + 0.195II + 0.144ITI + 0.152CI + 0.288HIS + U_i$---Eqn(ii) (Prescriptive Model)

Where:

EP = Employee Productivity
II = Infrastructure Innovation
EI = Equipment Innovation
CI = Compensation Innovation
HIS = Health Safety Innovation
ITI = Information Technology Innovation

The regression model shows that holding strategic innovation component to a constant zero, employee productivity would be 0.594 which is positive. In the predictive model it is seen that of all the variables are significant in the study. The results of the multiple regression analysis as seen in the prescriptive model indicated that when all other variables of strategic innovation component (infrastructure innovation, equipment innovation, compensation innovation, health safety innovation and information technology innovation) are improved by one unit employee's productivity would also increase by 0.195, 0.100, 0.152, 0.144, 0.288, and respectively and vice-versa. This implies that an increase in infrastructure innovation, equipment innovation, compensation innovation, information technology innovation and health safety innovation would lead to an increase in the rate of employee productivity of selected teaching hospital in South West, Nigeria.

Also, the F-statistics (*df* = 5, 405) = 86.006 at *p* = 0.000 (p<0.05) indicated that the overall model is significant in predicting the effect of strategic innovation component on employee productivity which implies that strategic innovation component variables are important determinants in employee productivity of selected teaching hospitals in the South-West, Nigeria. The result suggests that such teaching hospitals should pay more attention towards developing the components of the strategic innovation

especially infrastructure innovation, compensation innovation, information technology innovation and health safety innovation. Therefore, the null hypothesis, which states that strategic innovation component variables have no significant effect on employee productivity of selected teaching hospitals in South west, Nigeria was rejected.

DISCUSSION OF FINDINGS

Hypothesis finding revealed that strategic innovations as used in this research have significant effect on employee productivity of selected Tertiary Hospitals South-West, in Nigeria ($Adj.R^2$= 0.509, $F(5, 405)$ =86.006, p<0.05). Notably, the merger of the independent sub variables was significant in predicting the strategic innovation in Nigeria. In other words, the employee productivity of selected Tertiary Hospitals in Nigeria is significantly impacted by embracing strategic innovation and sub variables used in this research. In support of this study findings was Joan and Prince (2020) and Ifunanya and Emmanuel (2022), who found a positive significance of strategic innovation with employee productivity. In consonance also is Krijgsheld et al. (2022) implemented a systematic review to investigate job performance in the healthcare sector. The investigation agreed with this study findings which highlighted that employee performance.

In the same vein, Tom and Laura (2020) concurred through literature review to that examined the integration of technology into healthcare education. The study results demonstrated the present utilisation of a diverse array of technologies in the field of healthcare education. Reddy (2020) who investigated the influence of compensation on employee performance. The research determined that the compensation system's design should consider the employee's job responsibilities and related proficiency. Mentoring has been shown to improve staff performance at public hospitals in Rivers State, according to research by Nyengidiki and Nyengidiki (2020). According to the results, mentorship has a significant beneficial effect on employee performance.

Furthermore, Salami et al. (2022) showed concord with the study result on how public hospitals in Abuja-FCT, Nigeria, were affected by training and development in terms of their performance. The study's findings highlight a strong relationship between staff orientation and wait times for patients. Consistent with this study is Adu (2022) who examined the influence of time pricing on healthcare providers. The results of the investigation indicated that the selection of a healthcare provider is significantly influenced by the duration of travel and the duration of waiting. Similar agreement was recorded in Sadiq (2022) conducted an investigation into the productivity and welfare of employees at a Nigerian specialist teaching hospital. The study's results suggest a robust correlation between employee productivity and staff welfare in Nigeria's specialist teaching hospitals. Chinyere (2020) agreed conducted an analysis of employee productivity and team participation in decision-making at private hospitals in Port Harcourt, Nigeria. The study's results indicate a positive correlation between employee productivity and team participation in decision-making in private hospitals.

Knowledge transferability and workers' productivity in public institutions in south-south Nigeria were also investigated by Agbai et al. (2023) which displayed consonance. The results of the investigation indicated that the productivity of employees in public institutions is influenced by the transferability of knowledge. Philip et al. (2022) used a scoping review to look at potential health risks in the workplace for healthcare workers and support personnel in Ghana. In consonance is Olalekan and Oladoyin (2021) whose findings show that several factors impact whether or not rural women in Osun State use basic healthcare services. The research establishes that healthcare utilisation is substantially determined by socioeconomic variables, such as educational attainment and income level. Likewise, Claudio et al. (2019) who established that computerised healthcare system has a positive impact on productivity and offers an innovative solution for healthcare organisations.

The results of this study logically fit Schumpeter's entrepreneurial innovation theory from 1934, which is especially pertinent for analysing how tertiary hospitals' internal resources and capacity improve employee performance and general output. According to the theory, managers and entrepreneurs especially mix resources to produce fresh products or manufacturing techniques, find new input sources, or create new market or industry standards. This original approach changes the equilibrium of the economic system. Schumpeter thinks that the essence of entrepreneurship is innovation. This innovation shows itself in several forms: the creation of new products with more appeal, fresh manufacturing techniques, the procurement of new raw resources, the investigation of new markets, and major reforms of present market structures (Schumpeter 1934, 1942).

All things considered, the findings of the multiple regression analysis show that the application of strategic innovation and its dimensions used in this study had a major influence on the staff productivity

of the chosen tertiary hospitals in Nigeria. These results matched earlier research stressing the advantages of strategic innovation in raising organisational performance. The results of this study have practical relevance for tertiary hospitals in Nigeria as well as for other companies trying to raise staff productivity by means of strategic innovation.

CONCLUSION/RECOMMENDATION

This study concluded that strategic innovation improved healthcare practitioners' productivity in selected teaching hospitals in South West, Nigeria. Finding asserted that strategic innovation sub-variables enhanced employee productivity of healthcare practitioners of selected teaching hospital in South West, Nigeria. Thus, this study recommended that for healthcare practitioners to achieve employee productivity, strategic innovation measures such as infrastructural innovation, information technology innovation, equipment innovation, compensation innovation and health safety innovation should be given high level of priority.

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