

Electronic Recruitment and Staff Productivity in Selected Pharmaceutical Companies in Kwara State, Nigeria

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Abstract

The pharmaceutical industry in an economy plays a prominent role in the general health of the citizenry living within the country, and Nigeria is no exemption. Owing to its significance, it however, remains important to give adequate attention to issues that concern this sector. Managers of indigenous pharmaceutical companies are in an impasse as regards the choice of channel to recruit employees that will improve their company's performance and to uplift them to the world's best practice while keeping operational cost at minimum levels. The main objective of the study is to examine the effect of e-recruitment on the staff productivity of selected pharmaceutical companies in Ilorin, Kwara State. The study used a survey research design, specifically a cross-sectional research design. There were 130 respondents used for the study, as a census approach was adopted. The study employed inferential statistics for its analysis. The findings of the study revealed that e-recruitment has a significant effect on staff productivity of selected pharmaceutical companies in Ilorin, Kwara State, with an R² of 0.668 and a P-value of .000. The study concludes that e-recruitment has an effect on the staff productivity of selected pharmaceutical companies in Ilorin, Kwara State. The study recommended that indigenous pharmaceutical companies should critically invest in recruiting staff using electronic means, leveraging technology for better productivity.

Keywords: Recruitment, E-recruitment, Productivity, Performance.

Introduction

In most of the upcoming economies, the pharmaceutical industry contributes significantly to the overall good health of the population in the country and the Nigeria indigenous pharmaceutical companies are regarded as key players. It is important to pay reasonable attention to those issues which are of concern to this sector due to its importance to the overall sustenance of the economy. Once again, there have been a few hitches in the pharmaceutical industry in Nigeria. This has been seen in its failure to handle the challenge that COVID-19, Lassa fever and a myriad of others have presented in recent times. The problems facing the industry are too many both locally and internationally. It is in this context that pharmaceutical companies in Nigeria have registered numerous obstacles in which one of them is the use of the best hands in handling its affairs towards the general

achievement of its establishments. This could perhaps not be hinged discontinuously with the employment of their staff, most of whom are referred to. This kind of attitude implies that there are no best practices in employee selection or no such practices that have been overexploited to get the best hands.

All business enterprises, both in the developed and the developing economies, rely on staff recruitment and selection. The rate of failure and closure of businesses and poor performance of employees in terms of productivity in Nigeria is very worrying. To enable organizations to exist, the human relations must play very important roles in order to ensure that organizations gain competitive advantage over their rivals in the world. Today, organizations are focusing more on the acquisition of the right human capital since the employees are the most important and most valuable asset of an organization. The individual performance by the employees is what often gathers together to become the overall growth of the organization. In the process of recruiting employees, organizations should consider developing a plan that will enable them to recruit the best employees since they generate and reap positive competitive advantages to the organizations.

Many business organizations and companies in Nigeria have failed to adopt modern recruitment and selection practices that can help in improving the quality of product and service delivery through the use of technology. The growth of the pharmaceutical industries with the introduction of new technology needs technical and knowledge skills to manage the same and thus needs to employ employees who will assist in the same and many more challenges to result in the progress of their businesses. The better organizations are at recruiting and selecting the most suitable candidates, the greater the chances of them hiring, keeping and retaining employees. Moreover, the quality of the selection system within an organization also influences business performance, the results of which influence the overall productivity of the organization.

Yet, the organization must think hard on how it will use to gain competitive edge through devising a sustainably viable plan on recruitment and selection process and procedures that will be directed towards their company development. Failure at the workplace, recruitment of the wrong staff, or inability to predict changes in hiring requirements all lead to under-achievement of targets. Careful attention should be given to human resource planning within an organization. However, employees are the resources, assets of an organization, and the skilled and trained workers will work better than the unskilled and trained workers (Mohammed et al., 2023). Given that the process of recruitment constitutes the identification of future staff to occupy real or projected job openings within the organization, recruitment is also perceived as a process of connecting/uniting the persons with job openings and requirements to fill the vacant job. The most effective recruitment process will draw numerous eligible candidates because it also includes information to enable applicants who are not qualified to self-filter themselves out of the job vehicle (Hickok & Masle, 2023).

The forces of competition, technology, and globalization have rendered it an imprudent business move to arbitrarily add more workers in the name of seeking to maximize profit (Aijaz, 2022). The reason is that salary can be high in their staff unless they had done so. Managers of firms therefore have a duty to pursue and develop strategies that will enhance their growth by utilizing technology in their recruitment processes. In case pursuing the traditional route of advertisement by posting in the notice boards and through word of mouth by referral is not able to reach out to many qualified applicants, the contemporary approach through the internet would tap a large pool of diversified experience, talent, expertise, qualification and ability hence enabling the organization to have sufficient number of adequately qualified applicants. Hiring a high workforce is not the best way to ensure company growth and performance as when such workers lack skills and knowledge their productivity will not be high and their contribution will be low (Rahman et al., 2022). Conversely, when a company has employed skilled, qualified, and talented employees, then the employees will be productive and efficient in their work and the company will fulfill its customer requirements and working schedules. This prompted an enquiry on the degree to which e-recruitment application influences the productivity of pharmaceutical firms in Ilorin. This study aims to find out the impact of e-recruitment on staff productivity of sampled pharmaceutical firms in Ilorin, Kwara state. The research question is to quantify the impact of e-recruitment to the expansion of the sampled pharmaceutical firms in Ilorin, Kwara state. Nevertheless, the study hypothesized that e-recruitment does not play any significant role in the productivity of staff of the selected pharmaceuticals in Ilorin, Kwara state.

Problem Statement

Despite the increasing global shift toward electronic recruitment (e-recruitment) as a more efficient, cost-effective, and technologically advanced method of hiring, many pharmaceutical companies in Nigeria still rely heavily on traditional recruitment processes. This reliance has often resulted in limited access to a diverse pool of qualified candidates, slower recruitment cycles, and increased operational costs (Ajayi, & Udeh, 2024). Although some organizations in Nigeria have begun experimenting with e-recruitment, its adoption in the pharmaceutical sector remains low and poorly documented. Most available studies on e-recruitment in Nigeria focus on banks, telecommunications, and manufacturing industries (Nana et al., 2024; Isah et al., 2024), leaving a gap in empirical evidence within the pharmaceutical sector. This gap is particularly concerning because the pharmaceutical industry demands highly skilled employees who can contribute directly to efficiency, innovation, and overall productivity. Without robust adoption of e-recruitment, these firms risk inefficiencies in talent acquisition and a decline in productivity levels compared to global best practice. Hence, there is a need to empirically assess the impact of e-recruitment on staff productivity in Nigeria's pharmaceutical sector, with a focus on companies in Kwara State.

Research Objective

To determine whether e-recruitment has a significant effect on staff productivity in selected pharmaceutical companies in Ilorin, Kwara State.

Research Question

Does e-recruitment have a significant effect on staff productivity in selected pharmaceutical companies in Ilorin, Kwara State?

Hypothesis Statement

H₀₁: E-recruitment does not have a significant effect on staff productivity of selected pharmaceutical companies in Ilorin, Kwara State.

Literature Review

This section covers and review the concept of e-recruitment, organizational growth and corporate efficiency and effectiveness. It also reviewed the concept of performance proxied by productivity and reviewed some theories while adopting study underpinnings as well as a review on empirical literature.

Staff Recruitment

The world became global village that facilitated the flow of knowledge, skills and abilities among the cultures across the various countries worldwide that made researchers turn their attention to the human resource management sector in the effort to take care of various issues associated with the behavior of the employees especially recruitment and selection that is one of the most important functions of the human resource management (Nankervis et al., 2019). This has always been one of the most critical in the pharmaceutical industry due to the lack of any form of absolute methodology in the process of attracting, screening and ultimately getting the right individual in the right position within an organization. The reason is that these types of jobs involving the selling of the finished goods tend to be dependent on human skills. Therefore, Tien et al. (2021) opines that recruitment have become critical in organizations as individuals must be drawn in a timely manner, in adequate quantity and with adequate qualification to accomplish a specific task or duty. Recruitment is also critical to research as the quality and size of the pool of applications determines directly the effectiveness of the selection (Bashi, 2022). A good thing about this study is that it conducted research on both recruitment and selection at the same time to get a clearer overview as most scholars have done earlier (Abdalla Hamza et al., 2021). Most of the literatures treat recruitment and selection as two different issues yet they are related and one cannot happen without the other. Whether the process of recruiting will be effective to get a sufficient number of applications or not, right selection becomes very hard to any particular job (Abraham et al., 2023). This is due to the fact that, there might be no better candidates to a certain job.

E-Recruitment

Mamatha et al. (2023) argue that there is no doubt that the most notable recent development in this field is the use of the internet as a method of recruitment, yet its practical value remains to be a mirage to human resource management practitioners. E-recruitment methods include attracting, screening and monitoring of applicants, selection and offering of jobs or rejection of applicants. E-Recruitment is also cheaper and allows organizations to give considerably more information to job seekers and this information can be updated easily. One has a greater opportunity to articulate the employment proposition in a manner that makes the organization more appealing as an organization to work in (Armstrong, 2023). The other major strength, in the opinion of Mamatha et al (2023), is speed. Within seconds of reading an opportunity, people can e-mail their Curriculum Vitae or resume to the employer. Nevertheless, as noted by Nevertheless, as noted by Anthony et al. (2023), a number of downsides came to light. To illustrate, not all have access to the internet and therefore not all qualified applicants are being considered, a number of downsides came to light. To illustrate, not all have access to the internet and therefore not all qualified applicants are being considered. The problem can also be the higher number of applicants. A company that does not have a computerized tracking system can be overwhelmed with applications and does not have enough time to look through them and reply to them.

Digital age has introduced a new aspect in the field of recruitment. E-recruitment is one of the ways that internet is employed as a tool of getting qualified personnel to take jobs that are available. At the beginning of the 2000s, career websites became the primary source of communication in most organizations. These websites posted vacancies, contact information, news of the organizations and changes in the organization (Fernandes & Machado, 2022). E-recruitment being a technological innovation enhances the knowledge recruiting process through the internet. It also enables organizations to save money, update job advertisements and positions any time, reduce the time of the recruitment process, discover, and select the most valuable knowledge potentials among a larger pool of applicants and provides the organizations with a chance to make their profiles and images better.

In addition, improved and quicker recruiting is a competitive edge over firms that operate in the same business industry. The majority of job seekers feel more at ease when applying to jobs online than when using conventional methods due to saving of time and costs, as well as, screening more job opportunities. Of the 100 or more in-house recruitment talent acquisition and employer branding teams responding to online recruitment and social media habits issues and best practices in 2023, it was noted that in 2022, ninety-six percent (96) percent of large companies used online platforms to recruit employees and ninety-eight percent (98) were registered in 2023. But the tendency of the further growth and expansion cannot be so unrelated to the exploitation of technology.

Online recruitment has become a part of the recruitment processes in the business world because employers are able to post much information about a vacancy in the web so that

applicants can take their time to peruse the information. A company that has a site enables them to carry out recruitment online because they can maintain details about job openings, benefits of working in their organization, and the process of application on the site. Applicants, in turn, have the opportunity to look at whether jobs are available at any moment so that they could search and apply to more favorable career options (Tyagi et al., 2023).

Staff Productivity

Productivity is a relative word because everything revolves around the industry or sector that still is being focused on (Singh and Chaudary, 2022). As such, the staff productivity, otherwise known as employee productivity, is normally dictated by the sector or industry being investigated. But, as the pharmaceutical industry is in the health sector the staff employed in this, industry, is representative of employees employed in the industry. Besides, according to Singh and Chaudhary (2022) and Palmer and Dean (1997), the concept of employee productivity is not new in the scope of management since it has been characterized as multi-dimensional (Adeinat & Kassim, 2019). Work-life balance, motivation, compensation, working environment, etc. have ensured the organizations are up to date with employee productivity since Iqbal, Ahmed and Allen (2019) defined employee productivity as impersonal trust that reveals a lack of trust between employees and employers and is a setback to the performance of the organization.

Employee productivity is the level of efficiency that shows the amount of time required to complete a certain task. Positive, in a given time frame, when employees are likely to be productive, they carry out a specific task in a more efficient and effective manner, and, vice versa, they take a relatively long time to carry out a specific task, at some expense, when they are not productive at work (Singh & Chaudary, 2022).

Performance of the Pharmaceutical Industry

Performance is an evaluation of the speed of employees and company policies. Of course, the performance of a specified worker is evaluated in a comparison to an average among the employees who perform the same task. By doing this, the skills of all people in thinking and acting can be coordinated towards the performance enhancement of the organization and its individuals in order to gain the competitive advantage (Akingbade, 2019). Any organization depends on the performance of its workforce to succeed therefore performance of employees is a major concern to businesses. Performance can be defined as carrying out a collection of activities in pursuit of optimal outcomes but performance evaluation stands at the core of performance management. The successful accomplishment of tasks by a chosen individual or individuals, property and quantified by a supervisor or organization, to established acceptable standards with the efficient and effective use of available resources in a dynamic environment is known as organizational performance (Armstrong, 2023).

Empirical Review

A systematic review was made by Vrontis et al. (2021) of Artificial intelligence, robotics, advanced technologies, and human resource management. The purpose of their study was to bring some order to the scholarly contributions on intelligent automation and its key contributions and issues to human resource management (HRM). They identified 45 articles that researched artificial intelligence, robotics, and other advanced technologies in the context of HRM in a systematic search of 13,136 potentially relevant studies published in the leading HRM, international business (IB), general management (GM), and information management (IM) journals. The findings indicate that intelligent automation technologies represent a novel employee management, and performance improvement strategy, thereby presenting a range of opportunities to HRM but also significant technological and ethical challenges. It has been noted that the effects of these technologies have focused on HRM strategies, i.e. job replacement, human-robot/AI collaboration, decision-making and learning opportunities and HRM activities, i.e. recruiting, training and job performance. A paradigm shift in it is discussed in detail, as well as the key contributions to theory and practice and future research directions based on technology, in general.

In their study, Tîru and Mohorata (2021) performed an exploratory study on Attitudes toward e-recruitment in Romania. The research questions aim at determining the recruitment sources preferred by the respondents and also whether their opinions vary between genders and age; occupational status presents a significant variable, which could alter the opinion of the participants when it comes to the effectiveness of recruiting on the websites. The aim was to highlight the connection between social media and recruitment, how exactly the whole process of recruitment works in the virtual world, to be more exact. Judging by the results obtained the study concludes that individuals who are more predisposed to use Facebook than average are also likely to use and have a positive attitude with regard to recruiting platforms. Also, it was observed that individuals who selected as a major source of search a job recruitment site showed perception differences with regard to the other respondents. The inferences made about this research are that the variables of age and gender do not exhibit differences in perception. However, according to the received results it was observed that the preferences to use recruiting platforms affect their opinions.

The article is titled impact of Recruitment and Selection Strategy on Employees Performance: A Study of three Selected Manufacturing Companies in Nigeria. The research investigated the recruitment and selection strategy on employee performance in the real sector through descriptive survey research design. The type of inferential statistics applied is the one sample T-test to determine the degree of relationship between recruitment/selection strategy and the performance of employees. The research has shown that recruitment/selection process through recruitment agency and employee recommendation within an organization helps an organization to hire loyal and productive workforce. Conversely, the promotion of recruitment by the host society results in lack of efficiency in the organization. The study hence advises that Organizations may utilize the

employment agencies in the process of recruitment and selection but must be willing to reveal the job description and duties to them.

Nanayakkara, (2020) performed a conceptual review of the Effect of Electronic Human Resource Management on Employee Job Performance. The paper is trying to explore the use of e-HRM in performance of employees. It was preceded by a thorough literature review to shape a discourse on theoretical and empirical materials concerning e-HRM practices as pertain to employee performance. The paper acknowledges the ECG theory and management by objective theory to elaborate the theoretical basis in the utilization of e-HRM to employee performance. The development of the literature review was based on the main sub-contents concerning e-HRM and employee performance. As the primary source of information, it examined journal articles to structure the contents with empirical reasons that eventually address the concepts of employee recruitment, training, performance, and communication by implementing e-HRM practices.

The article by Borowska and Wilczewska (2018) is devoted to the New Technologies in the Recruitment Process. The overall aim of the research was to examine the effects of the new technology on the recruitment process. In the example of ItutorGroup, the recruitment process was offered. The paper takes into consideration the need to incorporate modern technologies in the recruitment and selection policies of the organization through a case study approach. The case study outlines the cooperation project of the work service personnel consultancy with the international organization ItutorGroup. It used video recruitment to select and recruit its people. The results suggest that e-recruitment turns the conventional recruitment process into a time- and space-free, collaborative recruitment process. The greatest changes are observed in the order and greater fragmentation of the primary recruitment activities. Communicating with candidates became the primary work of management. The use of modern technologies in recruitment and selection strategy presupposes the team of experienced and competent people, two indisputable advantages are: reduction of the time of the process and the fact that the cost reduction.

Singh, (2017) examined new Dimension of Human Resource Management in India; E-Recruitment. The only fundamental worth that an enterprise might require in the booming global economy is the experience, skills, innovativeness and perceptions of the manpower resources that can be regarded as the main constituents of the assets of the organisation. Organizations must possess the fundamental power of a good workforce in this very competitive market. This is the biggest challenge of the current system because every organization strives to attract, hire, and retain talented manpower resources. The research paper uses the available literature to identify Internet recruitment techniques and explain how the advantages of the online recruitment processes can be used to contain time and costs. The study discovered that recruitment through the Internet has helped in taking HRM to e-HRM attracting potential candidates to an organization from the recruitment process, which is referred to as e-recruitment. The practice of issuing a vacant position and applying for a job via a website has increased steadily. The purpose of the study is to broaden the

research on online recruitment practices for the entire development of the organization with a focus on e-recruitment practices and trends in India.

Underpinning Theory

The theory adopted to support this study is Resource Based View (RBV) which states that sustainability advantage of firms are possible when firms possess effective human resource that cannot be duplicated or cloned in other organizations (Barney, 1991). The theory argues that the single biggest factor contributing to the strength or weakness of any firm comes through the nature of the people it has hired and the working relationships the employees have with one another. The process of this employment must be accomplished through traditional or electronic channels.

Firstly, the study was addressing this theory due to the emphasis on quality of personnel that will pass through the recruitment process and its impact on the overall performance of the organization. This theory views an organization as a bundle of resources and it is a very effective framework to integrate a number of unrelated resources, which can be joined together so as to create competitive advantage (Varadarajan, 2023).

Additionally, the theory says that companies should constantly evaluate their workforce to determine that they have the right individuals with the right skill and knowledge that could propel the organization to gain a competitive advantage over other competitors. Therefore, companies must make sure that they cover the deficit in the companies through sound recruitment and selection procedures (Barney, 1991). The reason behind why the study chose this theory is that, it describes how and why electronic recruitment is necessary, as it is a process or a means that uses technology to increase the productivity of the staff of pharmaceutical companies in Ilorin, Kwara State.

Methodology

This study employed a cross-sectional survey design to examine the effect of e-recruitment on staff productivity in selected pharmaceutical companies in Kwara State, Nigeria. The design was considered appropriate because it allows data collection from a relatively large population at a single point in time, thereby enabling the establishment of associations between variables without manipulating them. The study population comprised 130 management staff drawn from five pharmaceutical companies in Ilorin Metropolis: Tuyil Pharmaceutical Company, Peace Pharmaceutical Company, Bioraj Pharmaceutical Company, Sam Pharmaceutical Company and Kwara Chemical Company. Given the limited population, a census method was taken whereby all the members of the population were surveyed. This method was considered appropriate because it will help to remove sampling error and the study population will be fully represented. The use of structured questionnaire was used in the collection of data that was categorized into two. In order to ascertain the validity and reliability of the instrument, questionnaire was subjected to scrutiny by three experts in human resource management and research methodology to ascertain its content and face validity. It was a pilot study on 20 respondents who were not in the chosen sample

to optimize the instrument. Cronbach alpha coefficient was used to measure the internal consistency of the items and gave a value over and above the recommended values of 0.70 hence reliability was established (Nunnally and Bernstein, 1994). Ethical considerations were also properly followed in the study. The research ethics committee of Kwara State University provided ethical approval and asked all the respondents to give informed consent prior to data collection. The analysis was done with the help of IBM SPSS version 22.0. The descriptive statistics were used in revealing the characteristics of the respondents in terms of means, standard deviation, and frequency to describe the respondents characteristics and their perception of e-recruitment and productivity. In order to test the hypotheses, regression was undertaken to identify the impact of e-recruitment on the staff productivity. The level of significance was determined to be $p < 0.05$, and the effect size determined by using the values of R^2 and standardized coefficients (β).

Results and Discussion

Descriptive Analysis

Descriptive analysis was conducted to summarize the key characteristics of the data collected from respondents in the selected pharmaceutical companies. The analysis helps to present the general trend and central tendency of the data, showing the average levels of e-recruitment practices and staff productivity within the organizations before conducting inferential statistical tests.

Table 4.1: Descriptive Statistics

Variable	Mean	SD
1. E-Recruitment	4.12	0.71
2. Staff Productivity	4.25	0.68

Descriptive statistics for the study variables are presented in Table 4.1. The results show that respondents reported relatively high levels of both e-recruitment practices and staff productivity in the selected pharmaceutical companies in Kwara State.

Regression Analysis

Regression analysis was used to test the hypothesis of the study; it is intended to investigate the effect of e-recruitment on staff productivity of pharmaceutical companies in Ilorin metropolis.

H₀- e-recruitment does not have a significant effect on staff productivity of selected pharmaceutical companies in Ilorin, Kwara State.

Table 4.2: Model Summary a

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.817 ^a	.668	.658	2.049.706

a. Predictors: (Constant), Electronic Recruitment

b. Dependent Variable: Staff Productivity

Sources: *Researcher's Survey, 2024*

This study has found that e-recruitment has a significant and positive impact on the productivity of the staff in the chosen pharmaceutical firms in Kwara State, Nigeria. The model produced a value of R-Square equal to .668 which implies that the e-recruitment practices explain approximately 66.8 percentage of the variance in the staff productivity. It is an effect size that is substantial by the standards of social science (Cohen, 1988) and this implies that technological systems used to recruit employees are controlling close to two-thirds of the noticeable variation in the way that employees work productively. This observation highlights that within knowledge-based and controlled sectors like pharmaceuticals, the method of employee recruitment (especially using technology-based processes) is front and centre in defining the overall efficiency of the organizations as well as workforce abilities.

Table 4.3: ANOVA

Source	Sum of Squares	df	Mean Square	F	Sig.
Regression	1230.27	1	1230.27	73.29	<.001
Residual	612.72	128	4.19		
Total	1842.99	129			

a. Predictors: (Constant), Electronic Recruitment

b. Dependent Variable: Staff Productivity

Sources: *Researcher's Survey, 2024*

Table 4.3 above summarizes the results of the analysis of variation on staff productivity with a large value of regression sum of squares (1230.272) in comparison to the residual sum of squares with a value of 612.722. The result indicated that the model fits to explain a lot of the variation in the pharmaceutical company's staff productivity. Thus, the estimated F-value (73.288) as given in the table above with a significance value of 0.000 is less than the p-value of 0.05 ($p < 0.05$). This means that e-recruitment affects the productivity of staff of pharmaceutical companies in Ilorin Metropolis.

Table 4.4 Coefficients

Predictor	B	SE B	β	t	p	95% CI (B)
(Constant)	4.596	0.702	—	6.53	<.001	[3.20, 5.99]
E-Recruitment	0.389	0.068	0.451	5.72	<.001	[0.255, 0.523]

Predictor: Staff Productivity

Sources: *Researcher's Survey, 2024*

Table 4.4 indicates the positive unstandardized coefficient ($B = 0.389$, $p < .001$) and standardized coefficient ($\beta = .451$) indicate that higher levels of e-recruitment usage led to

higher levels of staff productivity. Consequently, the null hypothesis (H_{01}), which states that e-recruitment has no significant effect on staff productivity, is rejected.

Discussion

The findings of this study reveal that electronic recruitment (e-recruitment) has a statistically significant and positive effect on staff productivity in selected pharmaceutical companies in Kwara State. This implies that the adoption of technology-driven recruitment mechanisms enhances employee efficiency, reduces recruitment time, and strengthens organizational performance. This aligns with the growing body of literature emphasizing the role of digital human resource practices as a strategic lever for achieving competitive advantage in today's technology-oriented business environment (Armstrong and Taylor, 2023; Abraham et al., 2023).

In a conceptual perspective, the resource-based View (RBV) that was proposed by Barney (1991) and which states that an organization develops sustainable competitive advantage through the acquisition and successful exploitation of valuable, rare, inimitable, and non-substitutable (VRIN) resources is present in the study. Human capital, when hired using technologically advanced tools like e-recruitment, is a strategic source that has potential of supporting high productivity. The fact that e-recruitment has a positive correlation with staff productivity, as it is observed in the current study indicates that companies that use technology to acquire human capital can better utilize the available internal resources to perform better. This school of thought reiterates Palmatier, Wetzel et al. (2025) who stated that competitive advantage in the long term of any organization is directly proportional to the strength and uniqueness of its workforce.

The finding is in line with the report of Vrontis et al. (2021), who emphasized that recruitment and performance management are undergoing a paradigm shift where advanced technologies that include artificial intelligence (AI), big data analytics, and robotics are making the processes more accurate, efficient, and effective. Although they did not create novel methods, they mentioned in their systematic review that companies that use digital HR systems report improved productivity rates because of making data-related decisions and optimizing talent. In a similar finding, Tîru and Mohorata (2021) found out that job seekers favor e-recruitment platforms more and more and find them as transparent, quick, and efficient, expanding the talent pool that an organization can access. This supports the conclusion made in the present study that e-recruitment results in better access to qualified candidates and an improved organizational productivity due to a more objective method of selection.

The results are also similar to Nanayakkara (2020), who found out that e-HRM practices, such as e-recruitment, save the administrative workload, encourage efficiency, and enhance employee performance. Moreover, empirically, Borowska and Wilczewska (2018) have proven that e-recruitment not only reduces costs of recruitment but also decreases the time of hiring but also guarantees an improved fit between candidates and their jobs,

which subsequently predetermines enhanced efficiency. On the same note, Singh (2017) and Mamatha et al. (2022) also discovered that internet-based recruitment improved the performance and sustainability of an organization through the ability of such an organization to attract, screen, and retain skilled workers. All these findings discussed globally support the fact that e-recruitment plays a major role in the efficiency of operations and this eventually translates to improved productivity in pharmaceutical companies.

The results can be interpreted in the Nigerian context because Persson and Wallo (2022) also highlighted that structured and technology-based recruitment practices create better and more competent and motivated workforce compared to informal or manual recruitment. As well, Ajayi and Udeh (2024) reported that new methods of recruitment make the workforce adaptable and productive in all industries, assuming that technological structures are sufficiently implemented. Nana et al. (2024) also revealed that e-recruitment is a strong way of enhancing employee performance in Nigerian banks, thus implying that the adoption of digital recruitment has a positive impact on the entire sector in terms of productivity improvement.

Conclusion and Recommendations

Conclusion

This study discussed the impact of e-recruitment on the productivity of the staffs in the selected pharmaceutical companies in the state of Kwara, Nigeria. These findings have shown that the application of e-recruitment affects productivity in a statistically significant and positive way, this indicates that technology-driven recruitment positively influences organizational performance, streamlines the hiring of employees, and enhances human capital quality. These findings are in line with the findings in the global and local markets, which underscores the transformative nature of digital tools in human resource management. Theoretically, the results are in line with the Resource-Based View, as it provides that the presence of high-quality human resources due to the availability of effective recruitment strategies brings with them competitive advantage. Although these are the advantages, issues of the infrastructural constraints, low levels of digital literacy, and organizational resistance are still impediments towards mass adoption in the Nigerian pharmaceutical industry.

Recommendations

Based on the findings, the study makes the following recommendations:

1. Invest in Digital Recruiting Tools: Pharma firms must invest and embrace the use of e-recruitment tools such as professional job platforms, company websites and social media tools to increase the quantity and diversity of talent.
2. Develop HR Technology Capacity: Human resource managers should be trained on digital recruitment tools and analytics so as to improve efficiency in screening, selection, and recruitment of candidates.

3. Enhance Infrastructure and Digital Access: Government and industry associations must join to enhance the digital infrastructure and internet penetration to minimize the obstacles to the successful implementation of e-recruitment.

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