



SCHOOL RESOURCE MANAGEMENT AND SECONDARY SCHOOLS TEACHERS' PRODUCTIVITY IN AN ERA OF DIGITALIZATION IN ANAMBRA STATE

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Abstract

This study investigated school resource management and secondary schools teachers' productivity in an era of digitalization in Anambra State. Three specific purposes; three research questions, and three hypotheses guided the study. Correlational design was adopted for the study. The population of the study comprised all the 266 public secondary school principals in the six education zones in Anambra State which was used as the sample for the study; hence, census technique was adopted for the study. Structured rating scales "School Resource Management Rating Scale (SRMRS) and Teachers' Productivity Rating Scale (TPRS) was used for data collection. The instrument was face validated by three experts in Faculty of Education; two lecturers in Educational Management and Policy and one lecturer in Measurement and Evaluation Unit, Department of Educational Foundations Nnamdi Azikiwe University Awka, Nigeria. Internal consistency coefficient of 0.862, 0.916, and 0.795 was obtained for SRMRS while 0.906 was obtained for TPRS using Cronbach Alpha statistical method. The researchers administered the instrument to the respondents with the help of four research assistants. Out of the 266 copies administered, 258 copies (96.99%) were returned duly completed, and used for data analysis. Pearson Moment Correlation Coefficient was used to answer the research questions while t-test of correlation was used to test the hypotheses at 0.05 level of significance. All analyses were carried out using Statistical Package for Social Science (SPSS) Version 25. The findings revealed that there is a positive and significant relationship between school resources (human resources, material resources, and financial resources) management and secondary schools teachers' productivity in the era of digitalization in Anambra State. Thus, the study concluded that when schools effectively and efficiently manage their resources, including digital tools and infrastructures, teachers are better equipped and more motivated to deliver high-quality education. Based on the findings, the study recommended among others that Schools management should prioritize investing in modern digital infrastructure, such as high-speed internet, up-to-date computers, and interactive learning platforms. This will enhance both resource management and teachers' productivity, enabling more efficient teaching methods and resource allocation.

Keywords: School Resource Management; Secondary Schools; Teachers' Productivity; Digitalization.



Introduction

Education is the cornerstone and a catalyst for economic growth, nation building, societal progress and innovation. In line with these assertions, Okechukwu et al. (2024) considered education as an indispensable input for national development, and an avenue for empowering citizens of any nation. Joseph et al. (2024) considered education as the development of person's head, heart and hands for his self-fulfillment and optimum service to humanity. Education, in this perspective is perceived as a cornerstone of economic growth and societal development, and a principal means of improving the welfare of individual. The Federal Government of Nigeria has adopted education as an instrument for effecting national development and social change (Federal Republic of Nigeria [FRN], 2013). To achieve this goal, FRN (2013) emphasized that quality education should be given at all levels of education. Secondary school education as an important level of education in Nigeria refers to post-primary formal education offered to students who have successfully completed their primary school education. It is not only designed to provide sound and responsible secondary school graduates for low level employment; but also to deposit in students quality education potentials to succeed in life upon graduation; if they cannot afford tertiary education. No wonder, Okechukwu (2022) opined that the secondary school education has always played an indispensable role in shaping the economic realities of any society. Indeed, secondary education has continued to be important, and this is why there has been a growing concern about the quality of education that is offered in this level of education.

In fact, attainment of the primary objectives of secondary education which involve enhancing teaching and learning efficiency, providing access to a wealth of resources, and preparing students for the demands of the modern digital economy desired that quality be built into the system. Consequently, all efforts must be directed towards digitalization of educational management system. Digitalization in educational management systems refers to the integration of digital technologies to streamline administrative processes and enhance learning experiences. Babalola and Olusola (2019) noted that digitalization in educational management involves the use of software for tasks like student enrollment, attendance tracking, grade management, and communication between educators and students. This transformation facilitates real-time data access, efficient resource allocation, and personalized learning paths (Smith & Lobb, 2018; Hernández & Pérez, 2019). Digital tools also support remote learning, making education more accessible and flexible. Digitalization in school resource management according to Idris and Ajibola (2023) is important because it enhances efficiency and accuracy in administrative tasks, such as student data management and grade tracking. It also enables teachers to access resources and collaborates more easily, allowing for more personalized instruction and improved student outcomes (Lee & Park, 2020; Musa & Ibrahim, 2023). Digitalization in school resource management allows for data-driven decision making, enabling administrators to make informed decisions about resource allocation and optimization (Chukwuemeka & Okoro, 2022); Akinola & Oladipo, 2020; Cheng & Lin, 2022). Thus, the integration of digital tools in education not only streamlines operations but also contributes to a more effective and responsive learning environment that enhances teachers' productivity. The concept of teachers' productivity refers to the ability of teachers to efficiently and effectively utilize their time and resources to achieve their teaching goals. Eze and Agulanna (2022) viewed teachers' productivity as all the actions and processes through which schools can raise the standard of instruction the students receive, as well as the increase in output and general achievement in the school. Since quality has become an important issue in organizational performance, teachers' productivity has also become an essential factor in secondary school administration (Akinola & Oladipo, 2020). Teachers' productivity is concerned with the overall effectiveness and efficiency of getting things done in the school organization. It is essentially a measure of how well the school organization converts its resources (students) into finished products (quality graduates). Teachers' productivity according to Okoro and Oke (2023) refers to the ability of a teacher to efficiently and effectively utilize their time and resources to achieve their teaching goals. It could be measured by a variety of metrics, including student learning outcomes, the amount of instructional time used, the quality of lesson plans and teaching materials, and the ability to manage time effectively (Ibrahim & Usman, 2019; Guo & Lee, 2018). However, it appears that the rate of getting things done by teachers is not as effective and efficient as expected. The economic situation of Nigeria has forced teachers to combine other businesses with teaching; thus affecting their performance in the school (Adebayo & Oluwole, 2021; Watson, 2021). Some teachers who would have been very productive in the school



seem to be distracted by other businesses they engage in; which in turn consume most of their official times. Abdullahi and Ahmad (2020) in their study on teacher motivation and its influence on productivity in Nigerian secondary schools, found that teachers' job productivity is determined by effective teaching; measured by students' academic performance in examinations; punctuality at school and classes, giving extra lessons to students; and contribution to the progress of the school through participation in co-curricular activities such as sports, debating, dancing, students' discipline, committee assignment as may be assigned by the principal. The scholars further stressed that if teachers fail to measure up in these various assignments, they may be perceived uncooperative and unproductive.

In the secondary school, the principal is a primary leader with an obligation of overseeing the attainment of laudable objectives of secondary school education as stipulated by the formulated policy on education. As a leader, the principal is crucial to improving teachers' productivity; he is vital to improvement of educational performance and eventual quality in the school. As a result, school principals have a responsibility of developing the vision that will guide the operations of their schools. It is the statement of vision, mission, and values defined by principals that will inspire quality oriented practices to support constant innovations, changes, improvement and teachers' productivity and overall performance in schools. By virtue of their position, principals remain key figure in improving teachers' productivity. Unfortunately, evidences from research revealed that there seems to be problem with the leadership provided by principals in secondary schools in Nigeria. In different reports, principals are indicted by stakeholders for inefficiency and failure to provide quality management of resources in their schools, which in turn has resulted to poor quality inputs and outputs. Eze and Agulanna (2022) alleged that there is an outcry on accountability, because principals' authority as administrative, technical, and pedagogical heads of secondary schools has become a matter of serious concern. Oloyede and Ogunyemi (2019) also recorded that stakeholders attributed the falling standard in secondary school education to inefficiency of principals in managing the schools. Adepoju and Oladele (2023) averred that one major problem which the entire Nigerian educational system has continued to grapple with is that of poor organization and effective management which have continued to serve as a hindrance to educational development. Nonetheless, it is important to note that this era of globalization, school principals cannot afford to operate a secondary school system that compromises quality. If the schools must survive the global competitions, management by principals must emphasize quality, continuous improvement and accountability. It is therefore imperative that secondary school principals strive to meet the standards that are commensurate with the needs of globalization by working to ensure continuous improvement of the quality of their products, services and delivery mechanism. In order to achieve this, it is suggested that principals employ a management principle that is proactive, functional and collective in nature; hence, the effective and efficient coordination of the schools' human and material resources.

School resources refer to all human, material, non-material, audio-visual environment, and community materials available in the school to facilitate school administration and simplify the teaching-learning process. They also include other fundamental materials used in the school to make teaching very easy and learning more meaningful and comprehensible to the learners (Eze & Obi, 2021). School resource covers all those materials: human and non-human, drawn or photographed (Klein & Ladd, 2021). Both manually or electronically operated books and all forms of related materials used in teaching and learning process (Bowers & Bowers, 2018). Among the purpose of management in any educational organization is that of coordinating the efforts of people and the materials available towards the achievement of the goals of that organization. School resource management involves the effective allocation and utilization of available school resources to achieve educational goals and objectives (Harris & Jones, 2020). It involves the efficient and effective development of the schools' resources when they are needed. Uzoechina (2016) described school resource management as the careful coordination of the resources available in the school system for the achievement of the schools goals. Such resource according to the scholar may include agricultural resource, inventory, human skills, production resource, or information technology (IT). Consequently, school resource management focuses on the administrative processes which include: budgeting, planning, staffing and reporting in order to achieve educational goals. In school environment, it is the duty of the head of department and leadership to maintain and effectively manage the school resource, and report back to the education board or any other controlling body. Educational resources are no doubt important in the development of a conducive teaching and learning environment. The use of these



resources could give more valuable and powerful direction to the teacher than any personal effort without the materials. In school administration, school resource are not only limited but can be effectively and efficiently managed when management activities are properly harmonized, organized, coordinated and controlled by the school management team. This corroborates Nwachukwu and Okoro's (2022) opinion that: it is not the availability of these resources above that guarantees effective performance of teachers and school in general, but their adequacy and effective utilization and management. However, no matter how well the school is provided with resources, without efficient and effective management of the available resources, the system may fail to achieve its desired result.

In the secondary school system, there are various resources needed for improving the teaching and learning activities. These resources are essential for improving teachers' productivity and overall school performance. Brown (2019) classified school resources into three based on their nature. They include: human resources, physical resources, and financial resources. According to Adepoju and Oladele (2023), there are four major concepts in resource management in education. These concepts are: human, infrastructure, financial and learning resource management. Similarly, Akinola and Adeyemi (2022) categorized school resources into human resources (personnel), physical resources, financial resources and time resources. This study however, adopted three of the variables (human resources, material resources, and financial resources) identified by Akinola and Adeyemi, and examined their relationship with teachers' productivity in an era of digitalization. Human resources constitute a vital vein of any institution. The human resources in the school system include: teachers, support staff in the school, students, parents, community members and a host of other interest and social group. Olawale and Alabi (2020) defined human resource management as the planning, organizing, coordinating, controlling, manipulating and maintaining all personnel and stakeholders in education. They are responsible for the management of other resources in the school. Human resources in the school are managed through recruitment, promotion, descriptive staff development, environment, evaluation, welfare services, transfer of staff, orientation and so on (Akinola & Adeyemi, 2022). According to Musa and Ibrahim (2023), all activities of any institution are initiated by the persons that make up that institution. Plant, offices, computer, automated equipment and all inputs that the school uses are unproductive except for the human effort and direction. Human resource could be efficient, effective, and adequately utilized and managed if material resources are adequately provided. Material resources are tangible resources that can easily be seen and observed in any institution. The material resource include: the structures, the machines, raw-materials, vehicles, and other tools; which can facilitate organizations' activities and processes (Jackson & Johnson, 2021).

Material resource management is the practice of coordinating the physical workplace and facilities by integrating the principles of business administration and architecture with the behavioural and engineering sciences (Ferguson & Kuehn, 2020). It is the application of scientific methods in the planning, organizing, coordinating, controlling and decision-making, supervision, and evaluation of the physical facilities in the school for the actualization of the school goals and objectives (Li & Zhang, 2023). These facilities are integral parts of the teaching and learning environment. It is therefore critical that school material resource management practices align with the school improvement plan by linking school assets to education service delivery standards and strategies. Just like material resource management, financial resources management is another category of school resources management identified in this study which is essential for improving teachers' productivity. School finance is an aspect of school management concerned with revenue allocation, disbursement of funds through budget allocation and alternative income into the school. School financial resources management covers such areas as the procurement of funds, their allocation, monitoring of their use in the interest of accountability and producing report for the relevant stakeholders (Ibrahim & Yusuf, 2020). Financial resource management is critical to effective management of secondary schools in Nigeria (Chukwuma & Ezeani, 2019). Financial management ensures prudence in the use of school funds to procure facilities necessary for effective job performance of members of staff.

Hitherto, it is apparent that reports corroborate the use of effective and efficient school resource management for improving teachers' productivity. This suggests that application of quality school resource management principles by principals is an important variable that can influence teachers' productivity positively. On the contrary,



principals' poor management of school resource may be tantamount to improving teachers' job productivity. In fact, scholars admitted that poor school resource management by schools managers indicates a big obstacle to improving teachers' job productivity and quality improvement of educational system; such that schools stand the risk of gradually becoming outdated. It is against this foregoing background that the researchers conceived the idea to investigate school resource management and secondary schools teachers' productivity in an era of digitalization in Anambra State.

Statement of the Problem

The productivity of secondary school teachers in Anambra State is becoming a critical concern in this era of digitalization, as many seems to struggle with effective lesson delivery, classroom management, and administrative responsibilities despite the growing integration of digital tools. Teachers' inability to maximize their instructional efficiency, engage students interactively, and adapt to emerging technological demands raises serious worries about their overall effectiveness in facilitating learning outcomes. This declining productivity raises concerns that school resource management, particularly in the areas of human resources (such as inadequate teacher recruitment, poor digital literacy training, and lack of ICT support staff), material resources (such as insufficient smart boards, unreliable internet access, and outdated digital tools), and financial resources (such as irregular salary payments, limited funding for digital infrastructure, and inadequate incentives for technology adoption), may be contributing to the problem. This study is therefore driven by the need to examine how effective school resource management can enhance teachers' productivity in the digital era, ensuring that teachers are well-equipped, motivated, and supported in delivering quality education. Poor management of human, material, and financial resources in schools may be limiting teachers' ability to integrate digital tools into their teaching; thereby affecting their efficiency and job satisfaction. This concern necessitates an evaluation of school resource management, as ineffective allocation, inadequate technological infrastructure, and poor professional development opportunities may be undermining teachers' ability to perform optimally, thereby necessitating an empirical inquiry into how school resource management influences secondary school teachers' productivity in the digital era in Anambra State.

Purpose of the Study

The purpose of the study was to investigate school resource management and secondary schools teachers' productivity in an era of digitalization in Anambra State. Specifically, the study sought to:

1. determine the relationship between human resource management and secondary schools teachers' productivity in an era of digitalization in Anambra State;
2. ascertain the relationship between material resource management and secondary schools teachers' productivity in an era of digitalization in Anambra State; and
3. find out the relationship between financial resource management and secondary schools teachers' productivity in an era of digitalization in Anambra State.

Research Questions

The following research questions guided the study:

1. What is the relationship between human resource management and secondary schools teachers' productivity in an era of digitalization in Anambra State?
2. What is the relationship between material resource management and secondary schools teachers' productivity in an era of digitalization in Anambra State?



3. What is the relationship between financial resource management and secondary schools teachers' productivity in an era of digitalization in Anambra State?

Hypotheses

The following null hypotheses were formulated and tested at 0.05 level of significance.

1. There is no significant relationship between human resource management and secondary schools teachers' productivity in an era of digitalization in Anambra State.
2. There is no significant relationship between material resource management and secondary schools teachers' productivity in an era of digitalization in Anambra State.
3. There is no significant relationship between financial resource management and secondary schools teachers' productivity in an era of digitalization in Anambra State.

Literature Review

Digitalization in secondary schools has significantly transformed resource management and enhanced teacher productivity. The adoption of digital technologies simplifies administrative tasks, enhances resource allocation, and supports personalized teaching and learning experiences. A major effect of digitalization is the optimization of resource management (Smith & Brown, 2021). Digital tools like Learning Management Systems (LMS) and School Information Systems (SIS) streamline the handling of student data, scheduling, and resource distribution. These systems provide real-time data on attendance, performance, and resource use, enabling administrators to manage resources more effectively (Adedeji & Olumuyiwa, 2018). Reis-Andersson (2023) noted that cloud-based solutions cut costs related to physical infrastructure and paper-based processes while improving tracking and utilization of educational materials and equipment. Digitalization also fosters improved communication and collaboration among teachers, students, and parents (Williams & Thompson, 2020). Digital platforms allow teachers to share resources, collaborate on lesson plans, and communicate outside traditional classroom hours, enhancing the learning environment and providing students with broader access to resources and support (Pettersson, 2018). Smith and Brown (2021) added that digital assessment tools offer timely feedback and personalized instruction; which can significantly enhance student outcomes and engagement. From a productivity perspective, Akinola and Emmanuel (2022) affirmed that digital tools enable teachers to create more interactive and engaging lessons. Multimedia resources, interactive simulations, and virtual laboratories make complex concepts more accessible and stimulating for students (Harris & Jones, 2020). These tools enhance engagement and provide teachers with varied methodologies to address different learning styles and needs (Håkansson-Lindqvist & Pettersson, 2019).

Digitalization has expanded professional development opportunities. Online training programmes, webinars, and digital communities of practice enable teachers to continually improve their digital skills and pedagogical methods (Idris & Ajibola, 2023). This ongoing development is crucial for keeping pace with technological advancements and integrating them effectively into teaching practices (Watson, 2021). Successful digitalization in schools, however, demands strong leadership and supportive infrastructure. School leaders must guide and sustain the digital transformation by ensuring the availability of resources and training. Effective leadership includes understanding the change process, fostering a collaborative culture, and addressing the needs of the school community (Larsson & Löwstedt, 2020). Digitalization has enhanced data-driven decision-making in secondary schools. The ability to collect and analyze large amounts of data enables schools to make informed decisions. Smith and Lobb (2018) remarked that SIS platforms provide real-time insights into student performance, attendance patterns, and behavioural trends. This data-driven approach helps in identifying areas that need improvement and in implementing targeted interventions. Eze and Okpala (2021) affirmed that digitalization facilitates transparent and efficient financial management. Schools can track expenditures, manage budgets, and generate financial reports with ease. This ensures better allocation of resources and prevents misuse



of funds (Ogunyemi & Osagie, 2020). Digitalization in secondary schools has brought about a paradigm shift in both resource management and teacher productivity. The integration of digital tools has led to more efficient use of resources, data-driven decision-making, and enhanced financial management. For teachers, digitalization has introduced innovative teaching methods, facilitated professional development, and improved collaboration and communication. As digitalization continues to evolve, it holds the potential to further transform education, making it more efficient, effective, and equitable (United Nations Educational, Scientific and Cultural Organization [UNESCO], 2023).

Theoretical Framework

The theoretical framework for the study was anchored on Resource-Based Theory (RBT). The theory was propounded by Jay Barney; in the year 1991. RBT is a strategic management framework that focuses on identifying and utilizing an organization's unique resources and capabilities to gain a competitive advantage in the marketplace. This theory suggests that an organization's resources and capabilities, such as technology, human capital, brand reputation, and financial assets, are the primary drivers of its performance and success. The theory holds that a firm's resources can be classified into two categories: tangible and intangible. Tangible resources are physical assets that can be seen and touched, such as buildings, equipment, and cash. Intangible resources are non-physical assets, such as a firm's brand reputation, knowledge, patents, and intellectual property. These resources are considered Valuable, Rare, Inimitable, and Non-Substitutable (VRIN) by the resource-based theory, and they form the basis of a firm's competitive advantage. According to resource-based theory, organizations should invest in developing and maintaining their resources and capabilities in order to achieve a sustained competitive advantage. The theory suggests that a firm should identify its resources and capabilities, assess their potential for creating competitive advantage, and develop strategies to exploit them. The resources and capabilities that RBT considers to be critical to a firm's success include physical assets, human capital, organizational culture, technology, and reputation. This can be done through strategies such as acquiring new resources, developing new capabilities, and leveraging existing resources in innovative ways. One of the key principles of resource-based theory is the concept of resource heterogeneity and immobility. This means that resources that are rare, valuable, and difficult to imitate or replicate are more likely to provide a sustained competitive advantage than common or easily obtainable resources.

This theory can be applied to this study on school resources management in secondary schools in this era of digitalization, as schools can also be viewed as organizations that require resources to achieve their objectives. In the context of secondary schools, the resources that are relevant to RBT include financial resources, physical resources (e.g., buildings, equipment), human resources (e.g., teachers, administrative staff), and intangible resources (e.g., reputation, brand, culture). These resources can be leveraged to create a competitive advantage for the school, such as improving academic performance, attracting high-quality teachers and students, and enhancing the school's reputation. The application of RBT in school resource management involves identifying the resources that are valuable, rare, inimitable, and non-substitutable (VRIN), as these resources are likely to be the sources of a school's competitive advantage. For example, a school with a highly qualified and experienced teaching staff may have a competitive advantage over other schools in the region. RBT can also be used to guide decisions about resource allocation in secondary schools. By focusing on the resources that provide a competitive advantage, school administrators can allocate resources strategically to enhance the school's performance and achieve its objectives. For instance, investing in technology and other innovative teaching tools can be an effective way to differentiate a school from its competitors and improve student outcomes.

Research Method

The study adopted correlational research design. The correlational research design according to Stephen (2017) examined the degree, patterns and strength of relationship between two or more variables being studied rather than explore causal relationship between them. The study was conducted in Anambra State, South-East, Nigeria using public secondary schools. The population of the study comprised all the 266 principals in the 266



public secondary schools in the six education zones of Anambra State (Department of Planning, Research and Statistics Department, Anambra State Post Primary School Service Commission [PPSSC], Awka 2024). The entire population of the study was used due to the relatively manageable size; hence, the study adopted census technique. Structured rating scale “School Resource Management Rating Scale (SRMRS) and Teachers’ Productivity Rating Scale (TPRS) was used for data collection. SRMQ contains two sections, A and B. Section A sought background data of the respondents (principals) on their education zone. Section B contains 21 items spread across three clusters (A-C) and elicited data on school resource management. Cluster A contained seven items on human resource management; cluster B contained seven items on material resource management; and cluster C contained seven items on financial resource management. The items were placed on a 4-point rating scale of Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD). The range of the scale was weighted as 4, 3, 2, and 1 respectively. The second instrument was Teacher Productivity Rating Scale (TPRS) developed by Ayeni and Sadiku (2020) and was adapted by the researchers. The instrument contained 10 items designed to elicit data on teachers’ productivity. TPRS was structured on a 4-point rating scale of Strongly Agree (SA), Agree (A) Disagree (D), and Strongly Disagree (SD) weighted 4, 3, 2, and 1 point respectively. The instrument was face validated by three experts in Faculty of Education Nnamdi Azikiwe University, Awka. Internal consistency co-efficient of 0.862, 0.916, and 0.795 was obtained for SRMRS while 0.906 was obtained for TPRS using Cronbach Alpha statistical method. The researchers administered the instrument to the respondents with the help of four research assistants. Out of the 266 copies administered, 258 copies (96.99%) were returned duly completed, and used for data analysis. Pearson Product Moment Correlation Coefficient (r) was used to answer the research questions. The (r) was used to determine the nature of the correlation between the independent variables and the dependent variable of the study. T-test of correlation (r) was employed in testing the hypotheses. The p-value was used to determine the significance of the relationship for all hypotheses. The decision rule was: a null hypothesis was not upheld where the calculated p-value was less than the stipulated level of significance (p-value <.05). The reverse was the case where the calculated p-value was greater than the stipulated level of significance (p-value >.05). All analyses were carried out using Statistical Package for Social Science (SPSS) Version 25.

Analysis and Results Presentation

Research Question One: What is the relationship between human resource management and secondary schools teachers’ productivity in an era of digitalization in Anambra State?

Table 1: Pearson correlation analysis on the relationship between human resource management and secondary schools teachers’ productivity in an era of digitalization in Anambra State

Variables	N	Human resource management	Teachers’ productivity	Remarks
Human resource management	258		.805**	Very strong positive relationship
Teachers’ productivity	258	.805**	1.00	

** . Correlation is significant at the 0.01 level (2-tailed).

The results in Table 1 show the relationship between human resource management and secondary schools teachers’ productivity in an era of digitalization in Anambra State. The computed Pearson Correlation Coefficient (r) value is 0.805, indicating a very strong positive relationship. This means that there is a very strong positive relationship between human resource management and secondary schools teachers’ productivity in an era of digitalization in Anambra State.

Research Question Two: What is the relationship between material resource management and secondary schools teachers’ productivity in an era of digitalization in Anambra State?



Table 2: Pearson correlation analysis on the relationship between material resource management and secondary schools teachers' productivity in an era of digitalization in Anambra State

Variables	N	Material resource management	Teachers' productivity	Remarks
Material resource management	258	1.00	.816**	Very strong positive relationship
Teachers' productivity	258	.816**	1.00	

** . Correlation is significant at the 0.01 level (2-tailed).

The summary of data analysis on the relationship between material resource management and secondary schools teachers' productivity in an era of digitalization in Anambra State presented in Table 2 reveals that the computed Pearson Correlation Coefficient (r) value is 0.816, implying a very strong positive relationship between material resource management and secondary schools teachers' productivity in an era of digitalization in Anambra State.

Research Question Three: What is the relationship between financial resource management and secondary schools teachers' productivity in an era of digitalization in Anambra State?

Table 3: Pearson correlation analysis on the relationship between financial resource management and secondary schools teachers' productivity in an era of digitalization in Anambra State

Variables	N	Financial resource management	Teachers' productivity	Remarks
Financial resource management	258	1.00	.790**	Very strong positive relationship
Teachers' productivity	258	.790**	1.00	

** . Correlation is significant at the 0.01 level (2-tailed).

Table 3 shows the Pearson correlation results on the relationship financial resource management and secondary schools teachers' productivity in an era of digitalization in Anambra State. The results show that the Pearson Correlation Coefficient (r) value on financial resource management and teachers' productivity is 0.790. The results indicate that there is a very strong relationship between financial resource management and secondary schools teachers' productivity in an era of digitalization in Anambra State.

Test of Hypotheses

The study tested the following hypotheses at 0.05 level of significance.

Hypothesis One

H₀: There is no significant relationship between human resource management and secondary schools teachers' productivity in an era of digitalization in Anambra State.

H₁: There is significant relationship between human resource management and secondary schools teachers' productivity in an era of digitalization in Anambra State.

Table 4: Test of significance of t-test of correlation (r) analysis on the relationship between human



resource management and secondary schools teachers' productivity in an era of digitalization in Anambra State

Source of Variation	N	r	Alpha	P-value	Remark
Human Resource Mgt.	258	0.806			
Teachers' Productivity			0.05	0.001	Sig.

Analysis in Table 4 shows that there is a significant relationship between human resource management and secondary schools teachers' productivity in an era of digitalization in Anambra State. The calculated r (0.806) had a p -value (0.001) which is less than 0.05 level of significance. However, the 1st null hypothesis which stated that there is no significant relationship between human resource management and secondary schools teachers' productivity in an era of digitalization in Anambra State was not upheld.

Hypothesis Two

H₀: There is no significant relationship between material resource management and secondary schools teachers' productivity in an era of digitalization in Anambra State.

H₁: There is significant relationship between material resource management and secondary schools teachers' productivity in an era of digitalization in Anambra State.

Table 5: Test of significance of t-test of correlation (r) analysis on the relationship between material resource management and secondary schools teachers' productivity in an era of digitalization in Anambra State

Source of Variation	N	r	Alpha	P-value	Remark
Material Resource Mgt.	258	0.776			
Teachers' Productivity			0.05	0.000	Sig.

Analysis in Table 5 shows that there is a significant relationship between material resource management and secondary schools teachers' productivity in an era of digitalization in Anambra State. The calculated r (0.776) had a p -value (0.000) which is less than 0.05 level of significance. The 2nd null hypothesis which stated that there is no significant material resource management and secondary schools teachers' productivity in an era of digitalization in Anambra State was therefore not upheld.

Hypothesis Three

H₀: There is no significant relationship between financial resource management and secondary schools teachers' productivity in an era of digitalization in Anambra State.

H₁: There is significant relationship between financial resource management and secondary schools teachers' productivity in an era of digitalization in Anambra State.

Table 6: Test of significance of t-test of correlation analysis on the relationship between financial resource management and secondary schools teachers' productivity in an era of digitalization in Anambra State

Source of Variation	N	r	Alpha	P-value	Remark
Financial Resource Mgt.	258	0.765			
Teachers' Productivity			0.05	0.000	Sig.



Table 6 shows that there is a significant relationship between financial resource management and secondary schools teachers' productivity in an era of digitalization in Anambra State. The calculated r (0.765) had a p -value (0.000) which is less than 0.05 level of significance. Therefore the 3rd null hypothesis which asserted that there is no significant relationship between financial resource management and secondary schools teachers' productivity in an era of digitalization in Anambra State was therefore not upheld.

Discussion of Findings

Findings as displayed in Table 1 revealed that there is a very strong positive relationship between human resource management and secondary schools teachers' productivity in an era of digitalization in Anambra State. Analysis in Table 4 also showed that there is a significant relationship between human resource management and secondary schools teachers' productivity in an era of digitalization in Anambra State. The implication of the findings is that principals in secondary schools in recognized that: making efforts to create awareness amongst the employees about the school's objectives; systematically ascertaining school's human resource requirements; carefully developing performance standards on the basis of employees' opinion; extending performance appraisal system to all members of the staff; difficulty in dismissing permanent employees from the school; practice of carrying out employees' satisfaction survey by the school; and recruiting only trained teachers are factors that enhance secondary schools teachers' productivity in Anambra State and could be facilitated using digital tools. Thus, digitalization in human resource management enhances efficiency in administrative tasks, streamlines communication, and supports data-driven decision-making, thereby improving overall teacher productivity and satisfaction. The findings are in agreement with the findings of Adedeji and Olumuyiwa (2018) who found a strong positive and significant relationship between effective human resource management practices and teachers' productivity. The study concluded that integration of digital tools and resources in HR practices significantly enhanced teachers' performance in public secondary schools. The finding is also in line with the findings of Williams and Thompson (2020). The study highlighted that modern HRM practices, such as digital professional development and online performance tracking, have a strong positive impact on teachers' productivity. The integration of digital tools in HRM was found to significantly enhance teaching quality and efficiency. Adebayo and Akinyemi (2019); and Nieminen and Hämäläinen (2021) studies equally concurred with the findings of this study. Adebayo and Akinyemi study established that digital HRM practices, including e-recruitment, digital training, and performance management systems, have a significant positive impact on teacher productivity. The adoption of digital tools in HRM improved efficiency and effectiveness among teachers. Nieminen and Hämäläinen research demonstrated a significant positive relationship between digital HRM practices and teacher productivity. Finnish secondary schools that adopted digital HRM tools such as electronic performance appraisals and digital learning platforms reported substantial improvements in teaching outcomes.

The findings in Table 2 showed that there is a very strong positive relationship between material resource management and secondary schools teachers' productivity in an era of digitalization in Anambra State. In Table 5, the results also revealed that there is a significant relationship between material resource management and secondary schools teachers' productivity in an era of digitalization in Anambra State. The interpretation of the findings is that principals in secondary schools in Anambra State acknowledged that: well-painted school buildings; keeping school compound clean every day for creating enabling environment; repairing school furniture as soon as they are broken; availability of well-equipped functional laboratories; provision of adequate sports facilities for students' regular exercises; provision of audio visual materials for teachers for improved learning activities; and keeping workshop equipment in a dry place after use in order to avoid depreciation highly influence secondary schools teachers' productivity in Anambra State. That is, in material resource management, digitalization allows for better inventory tracking, optimized resource allocation, and reduces wastage, ensuring that schools have the necessary materials available when needed. The findings above are in consistent with Olufunke and Ayodele (2021) who found a significant positive relationship between the management of digital resources and teachers' productivity, highlighting that effective utilization and management of digital resources lead to increased teacher performance and engagement. Akinola and Emmanuel (2022) study also established that proper management of material resources, including digital tools, has a strong



positive impact on teachers' productivity in secondary schools, suggesting that investments in digital resources correlate with better teaching outcomes. The study findings also tallies with the findings of Harris and Jones (2020) whose study demonstrated a strong positive relationship between the management of digital resources and teachers' productivity, showing that effective integration and use of digital tools lead to enhanced teacher performance in both the UK and the USA. This study is also in tandem with the findings of Smith and Brown (2021). The research highlighted a significant positive correlation between effective management of digital resources and improved teacher productivity in Australian secondary schools, suggesting that digitalization has a substantial impact on teaching effectiveness.

The results as shown in Table 3 indicated that there is a very strong relationship between financial resource management and secondary schools teachers' productivity in an era of digitalization in Anambra State. Table 6 showed that there is a significant relationship between financial resource management and secondary schools teachers' productivity in an era of digitalization in Anambra State. This implies that principals in secondary schools in Anambra State admitted that in this era of digitalization, administrators supervision of school funds expenditure in line with government directives on financial regulations; principal prioritizing financial allocation according to needs to avoid unnecessary spending; principal ensuring that school budgets reflect agreed goals of the school; principal working within the constraints of school budgets; principal keeping school financial records accurately; principal giving true information about financial positions of the school; and principal keeping inventories of school assets available for audit improve secondary schools teachers' productivity in Anambra State. Hence, digitalization improves budget planning, expenditure monitoring, and transparency; which enable schools to manage funds more effectively and make informed financial decisions. In line with the above findings, Eze and Okpala (2021) findings found a strong positive relationship, showing that improved financial management leads to higher productivity among teachers in digitalized secondary schools. The study findings are also in concordance with Ogunyemi and Osagie (2020) who found a significant positive correlation between effective financial management and enhanced teacher productivity. Similarly, Bali and Kaur (2022); and Jenkins and Smith (2021) studies are in agreement with the findings of this study. Bali and Kaur study demonstrated a strong positive relationship, with effective financial management significantly improving teacher productivity. Jenkins and Smith research found a very strong positive and significant relationship between effective financial resource management and teacher productivity.

Conclusion

The study concluded that effective school resource management significantly enhances teachers' productivity in secondary schools within Anambra State, particularly in this digital era. It was observed that when schools efficiently manage their resources, including digital tools and infrastructures, teachers are better equipped and more motivated to deliver high-quality education. The strong positive relationship highlighted in the findings underscores the importance of investing in and prioritizing digital resources and infrastructure to boost overall educational outcomes and teacher performance in secondary schools.

Recommendations

Based on the findings of the study, the following recommendations were made:

1. Schools management should prioritize investing in modern digital infrastructure, such as high-speed internet, up-to-date computers, and interactive learning platforms. This will enhance both resource management and teachers' productivity, enabling more efficient teaching methods and resource allocation.
2. Post Primary School Service Commission should implement ongoing professional development programmes focused on digital literacy and effective use of educational technology. This will empower teachers to utilize digital tools effectively; thereby boosting their productivity and improving student outcomes.
3. School principals should adopt integrated digital resource management systems that streamline administrative tasks, track resource utilization, and facilitate efficient allocation of school resources. Such systems can reduce administrative burdens on teachers, allowing them to focus more on teaching.



4. Teachers' should be encouraged to use collaborative digital platforms that allow teachers to share resources, lesson plans, and best practices. This fosters a supportive community of practice, enhancing teachers' productivity through shared knowledge and resources.
5. School management should establish mechanisms for continuous monitoring and evaluation of digital resource management practices. Regular assessments can help identify areas for improvement, ensuring that the implemented digital solutions effectively enhance resource management and teachers' productivity.

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