



IMPACT OF DIGITAL RESOURCES AVAILABILITY AND UTILIZATION ON THE SERVICE DELIVERY OF ACADEMIC STAFF IN UNIVERSITIES IN CROSS RIVER STATE, NIGERIA

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Abstract

The availability and utilization of digital resources are crucial for enhancing the service delivery of academic staff in universities. Premised on this, a study was conducted to examine the impact of Digital Resources Availability and Utilization on the Service Delivery of Academic Staff in Universities in Cross River State. Two research hypotheses guided the study. Descriptive survey research design was adopted. The population of the study was all 2,795 academic staff (lecturers) from two public universities in Cross River State, University of Calabar (UNICAL) and University of Cross River State (UNICROSS) and the study sample size was 280 (10%) male and female lecturers selected through stratified and simple random techniques from both universities. Data were collected using a questionnaire entitled: "Digital Resources Availability and Utilization" and "Service Delivery of Academic Staff Questionnaire (DRAVSDAS). The scale was structured into three sections. Responses to Section A were used to determine the demographic characteristics of the respondents. Section B and C provided information on Digital Resources Availability and Utilization and Service Delivery of Academic Staff. The validity of the instrument was determined by three experts. Two from Test Measure and Evaluation, and one from Educational Management, University of Calabar. With the use of the Cronbach alpha reliability method, the reliability of the instrument was determined and the coefficient estimate were .82, .86, and .87, respectively. To collect data for the study, all the researchers visited the universities with copies of the questionnaire. They hypotheses were tested at .05 level of significance, using Simple Linear Regression and Multiple Regression analyses of statistical package for social science (SPSS) version 27 for data analysis. The result revealed that digital resources availability and utilization has a statistically significant, positive impact on the service delivery of academic staff in public universities in Cross River State, Nigeria. The study concluded that availability and utilization of digital resources significantly enhance the service delivery of academic staff in universities, leading to improved teaching, research, and administrative efficiency. It was recommended among others the investing in robust digital infrastructure, such as high-speed internet, up-to-date software, and reliable hardware, is crucial to improve the efficiency and effectiveness of academic staff's service delivery.

Keywords: Digital Resources, Availability and Utilization, Service Delivery, Academic Staff, Universities



Introduction

The major objective of establishing universities in Nigeria is to provide high-quality education that fosters intellectual growth, critical thinking, and innovation, ultimately contributing to the nation's socio-economic development. These institutions aim to produce graduates who are well-equipped with the knowledge and skills necessary to meet the demands of a dynamic and competitive global environment. Teachers are key human resources needed for the smooth functioning of any education enterprise (Edut& Etete, 2019). Thus, their commitment to service delivery is crucial for the attainment of the goals of the school system. Likewise, attaining the goals of university education is intricately linked to the service delivery of lecturers, as they play a crucial role in shaping the academic and professional development of students. This is as Ogunode et al., (2022) explained that the academic staff of universities are strong members of the universities' community and the place of the academic staff are irreplaceable. Therefore, there is need to enhance service delivery of lecturers to satisfy the aim of tertiary education.

Academic staff or lecturers' service delivery refers to the numerous duties, and roles performed by academic staff or tertiary education teachers for the students, institution and host community. According to Akuegwu and Nwi-ue (2016), service delivery in teaching involves methods that enhance student learning. Lecturers' service delivery for Brazeau (2022) is all about making sure that lecturers are doing their best to support and guide students in their academic journey. The focus of lecturers' service delivery is on how effectively lecturers perform their duties. This encompasses their teaching methods, their interactions with students, and their efforts to ensure that students maximize their educational experience. Good service delivery means lecturers are proficient in their teaching methods, communicate effectively with students, and offer support and guidance when necessary. Ultimately, it is about creating a positive and productive learning environment.

The services delivered by academic staff are numerous. Effective lecturers engage in rigorous teaching, research, and community service, thereby ensuring that students receive a comprehensive education. Therefore, lecturers' service delivery in the context of this study can be classified into teaching, research and community service. Teaching as a dimension of lecturer's service delivery involves the various methods and techniques lecturers use to effectively deliver educational content (Adeyemi, 2019). This includes planning lessons, providing instruction, assessing student performance, and engaging with students throughout the learning process. Successful teaching requires a deep understanding of the subject matter, diverse instructional strategies, and the ability to address different learning needs.

Research is a scholarly activity that lecturers engage in to advance their field of knowledge. Academic research is the systematic investigation and study of materials, sources, and data to establish facts and reach new conclusions. It involves using scientific methods to gather, analyze, and interpret information to increase knowledge and understanding in a specific field. Lecturers' activities involves conducting original studies, publishing research findings in academic journals, presenting at conferences, and keeping up-to-date with the latest developments (Obasi, 2020). These research activities enhance lecturers' expertise and improve the overall quality of education they provide. Community service includes the efforts of lecturers to utilize their expertise for the benefit of the community. This can include involvement in outreach programs, providing professional services, conducting public education initiatives, and collaborating with community organizations. Community service strengthens the connection between academic institutions and the broader community, creating mutually beneficial relationships (Adewale, 2018).

The quality of academic staff service delivery can significantly influence and enhance students' academic performance and success, school effectiveness and improved educational goals attainment. Interestingly, poor service delivery has been reported by researchers who observed that service delivery among educators generally is increasingly problematic (Tamunokonbia & Nwaogu, 2021). Amanchukwu and Ololube (2015) noted a decline in service excellence among teachers in schools which has impacted essential educational services nationwide and has affected student performance in national exams like JAMB and NECO in Nigeria. Even Ekpoh (2014) highlights worsening academic performance in external exams. In Cross River State, concerns persist about inadequate service delivery among secondary school teachers (Madukwe et al., 2024). These issues significantly affect yearly student outcomes and overall educational quality (Obona et al., 2024). Obona et al., (2024) observed poor classroom management and ineffective teaching practices.

There is also widespread unprofessional behavior among teachers, like frequent absenteeism and lack of commitment to their roles (Obona et al., 2024). Academic staff are expected to provide quality inputs to



enhance quality process (George 2015). However, Chinelo, (2011) pointed out that there is poor service delivery among lecturers in Nigeria tertiary education, the researchers further indicated that the fallen standard of education mostly in tertiary education is attributed to lecturers inability to effectively expose students to the minimum standard. Also, Olayemi and. Abiodun (2019) lamented that the outcry of poor standard of tertiary education in Nigeria is due to lecturers' poor service delivery.

In Cross River State, academic staff in public universities face similar challenges in fulfilling their core duty of providing quality teaching. The researchers observed low morale among many lecturers, evident in their frequent tardiness, absences, and use of outdated teaching methods. Issues include poor lesson planning, ineffective assessment, lack of performance feedback, and weak teacher-student relationships. Classroom observations revealed many lecturers lack deep subject knowledge, diverse instructional strategies, and the ability to address different learning needs. Additionally, there is a widespread lack of interest in research, partly due to poor research skills and partly due to the "publish or perish" culture, which leads some lecturers to engage in unethical practices such as plagiarism, bribery, and fraudulent authorship as well as the popular "write and include my name" syndrome. These issues hinder the development of university education and violate professional ethics. While many factors such as poor university governance, security management lack of office spaces, incessant industrial action, among others has been accused to diminish lecturers' service delivery in tertiary institutions (the United Nations, 2019).

Digital resources availability and utilization can enhance service delivery of academic staff in universities in cross river state. Digital resources, such as e-books, online journals, and databases, provide essential support for teaching and research. The availability and effective use of digital resources are vital for improving the quality and efficiency of teaching, research, and community engagement by academic staff.

Digital resources availability refers to the extent to which electronic resources, such as e-books, e-journals, online databases, and other digital materials, are accessible and obtainable for use by academic staff and students in universities. Their availability includes the infrastructure, technological tools, and support systems that facilitate access to these resources, such as reliable internet connectivity, well-equipped digital libraries, and user-friendly platforms amongst others. The availability of digital resources is crucial for enhancing the quality of teaching, research, and overall service delivery among academic staff in universities. Recent studies have shown varying degrees of digital resources availability in universities, often influenced by institutional policies, funding, and technological infrastructure. According to Okezie and Ezema (2019), the availability of digital resources in Nigerian universities has improved significantly due to increased investment in digital libraries and ICT infrastructure. However, disparities still exist between public and private institutions, with private universities generally having better access to digital resources. Ogunlana and Mabawonku (2020) investigated the availability of e-books and e-journals in selected African universities. Their study found that while there is a growing collection of digital resources, challenges such as limited access to subscription-based journals and inadequate funding for digital infrastructure persists. The study emphasized the need for collaborative efforts to enhance resource sharing among universities.

The availability of digital resources has a profound impact on the service delivery of academic staff, particularly in teaching and research. A study by Chiemeke et al. (2021) explored the relationship between digital resources availability and research productivity among academic staff in Nigerian universities. The findings revealed that academic staff with better access to digital resources produced higher quality research outputs and had more publications in high-impact journals. In another study, Okon and Solomon (2022) examined the impact of digital resources on teaching effectiveness among lecturers in South African universities. The study showed that the availability of digital resources, such as online databases and educational software, significantly enhanced the lecturers' ability to deliver up-to-date and engaging course content. Lecturers reported that digital resources enabled them to incorporate diverse materials into their teaching, thus improving student learning outcomes.

Despite the positive impacts, several challenges hinder the full utilization of digital resources in universities. Ezeani and Igwesi (2019) identified key barriers such as inadequate ICT infrastructure, poor internet connectivity, and lack of technical support. Their study highlighted that many academic staff still struggle with accessing digital resources due to these infrastructural limitations. A study by Adeoye and Popoola (2020) focused on the digital divide in Nigerian universities. The findings indicated that rural-based institutions face more significant challenges in accessing digital resources compared to their urban counterparts. The study recommended increased government and institutional support to bridge this digital



divide and ensure equitable access to digital resources for all academic staff. Akpojotor (2016) examined the use of electronic information resources (EIR) among lecturers in southern Nigerian universities, revealing a high level of awareness and usage of EIR. Factors such as age, computer literacy, and resource availability significantly influenced their usage.

In a study, Livina and Mole (2021) investigated the Academic staff Use of Electronic Resources (ER) in the Nigerian University of Nigeria Libraries during the Corona Virus (Covid 19) lockdown Design/ Methodology/Approach. The study adopted a Descriptive survey research design. The total population of study was 3130. A sample size of 313 was selected for the study using the simple random sampling technique. The instrument for data collection was questionnaire. The data collected for the study were analyzed using descriptive statistics. The benchmark score for decision on the analysis was the real limits of numbers Findings. The finding from the study revealed good use of Electronic resources (ER) by Academic staff during the Covid 19 period. The academic staff mostly used the Electronic Resources (ER) for writing research 2 papers. Similarly, Olajide and Fabunmi (2021) studied the usage of digital libraries among academic staff in Nigerian universities. Their research found that digital libraries were frequently used for research purposes, including accessing journals, e-books, and other scholarly materials. However, challenges such as inadequate ICT infrastructure and limited access to subscription-based resources were also noted.

The relationship between digital resource utilization and service delivery has been a key focus of numerous empirical studies. Oyedokun et al. (2018) analyzed the impact of digital resource use on the teaching and research productivity of academic staff in selected Nigerian universities. Their results indicated that effective use of digital resources significantly enhances teaching quality and research output. Academic staff who regularly used digital resources reported improved access to current information, positively affecting their teaching materials and research work. Mohammed and Shaibu (2020) investigated the use of online databases and e-journals by academic staff in federal universities in Nigeria. Their study showed that the availability and use of these resources contributed to more efficient service delivery, especially in research and publication. Academic staff acknowledged that digital resources offered broader access to diverse and current information, crucial for their academic and professional development.

Despite the benefits, challenges in utilizing digital resources persist. Omeluzor et al. (2017) identified obstacles such as poor internet connectivity, lack of technical skills, and insufficient training on using digital resources, which impede effective usage and service delivery by academic staff. Eguavoen and Ocholla (2022) studied the digital literacy levels of academic staff and their impact on the utilization of digital resources. Their findings showed that while many academic staff are aware of digital resources, their effective use is limited by their digital literacy skills. The study highlighted the need for ongoing training and capacity building to enhance the digital competencies of academic staff.

The cited studies reviewed utilized diverse methodologies that align with the specific objectives of each study, and have yielded different conclusions. However, while many studies have been conducted already, some of them originated from other states and countries. As such no study specifically has been found to be conducted in public universities in Cross River State using the same variables as this study. These gaps in the literature is what this study filled.

Statement of problem

Academic staff service delivery is multifaceted, encompassing teaching, research, and community service. Teaching involves various methods and techniques that lecturers use to deliver educational content, aiming to ensure that students receive a comprehensive education and to create a positive and productive learning environment. Research is a scholarly activity that lecturers engage in to advance their field of knowledge. Community service includes efforts by lecturers to utilize their expertise for the benefit of the community, such as involvement in outreach programs, providing professional services, conducting public education initiatives, and collaborating with community organizations. This service strengthens the connection between academic institutions and the broader community, creating mutually beneficial relationships.

However, the quality of service delivery among academic staff has declined in recent times. Students expect lecturers to provide quality teaching as a core duty, yet researchers have observed very low morale among many lecturers, evident in their habitual lateness to classes and frequent absences for trivial reasons. Other indicators of declining quality include the use of outdated teaching practices, poor assessment plans, lack of performance feedback, and weak teacher-student relationships. Classroom observations revealed that many lecturers lack a deep understanding of the subject matter, diverse instructional strategies, and the ability



to address different learning needs. Instead of improving their research skills, many rely solely on others to write and then include their names for promotion. Additionally, many lecturers delay reading students' projects, theses, and dissertations, as well as marking examination scripts, leading to prolonged graduation periods for final-year students and denying students timely knowledge of their academic standing.

These issues have resulted in students' examination failures, course carry-overs, involvement in examination malpractices, probation, skipping class assignments/group work, poor concentration, irregular attendance to classes, missing examinations, dropping out of school, and other academic deficiencies that undermine the teaching profession. This is particularly concerning because, despite government and university management efforts such as paying staff monthly salaries, organizing retraining workshops, and implementing quality assurance mechanisms, no significant improvement has been achieved.

It is on this worrisome note that researchers are questioning whether the availability and utilization of digital resources can enhance the service delivery of academic staff. Therefore, this study aims to address the question: What is the impact of digital resource availability and utilization on the service delivery of academic staff in universities in Cross River State, Nigeria?

Purpose of the study

The main purpose of this study was to investigate the impact of digital resources availability and utilization on the service delivery of academic staff in universities in Cross River State, Nigeria.

Specifically, the study sought to find out the impact of:

- i. Digital resources availability on the service delivery of academic staff in public universities in Cross River State.
- ii. Digital resources utilization on the service delivery of academic staff in public universities in Cross River State.
- iii. The composite impact of digital resources availability and utilization on the service delivery of academic staff in public universities in Cross River State.

Statement of hypotheses

The study was guided by the following null hypotheses:

- i. Digital resources availability does not have any significant impact on the service delivery of academic staff in public universities in Cross River State.
- ii. Digital resources utilization has no significant impact on the service delivery of academic staff in public universities in Cross River State.
- iii. Digital resources availability and utilization have no significant joint impact on the service delivery of academic staff in public universities in Cross River State.

Methodology

The study adopted descriptive survey research design and was conducted in Cross River State, capital, Calabar. The population of the study was all 2,795 academic staff (lecturers) from two public universities in Cross River State, University of Calabar (UNICAL) and University of Cross River State (UNICROSS). This comprised 2,221 males and 574 female lecturers (Academic Planning's unit of both public universities, 2024). The study sample size was 280 (10%) male and female lecturers selected through stratified and simple random techniques from both universities. Data were collected using a questionnaire prepared by the researchers, following a review of the literature, entitled: "Digital Resources Availability and Utilization" and "Service Delivery of Academic Staff Questionnaire (DRAVSDAS). The scale was structured into three sections. Responses to Section A were used to determine the demographic characteristics of the respondents. Answers to Section B and C provided information on Digital Resources Availability and Utilization and Service Delivery of Academic Staff. All of the items in section B and C were placed on a Likert-type scale with four possible responses. The validity of the instrument was determined by three experts. Two from Test Measure and Evaluation, and one from Educational Management, University of Calabar. The experts evaluated the instrument for both face and content validity. Each of the academics separately provided their observations. At the end all irrelevant items were either modified or deleted. The researchers were giving suggestions that guided the final preparation of the copy of the instrument. With the use of the Cronbach alpha reliability method, the reliability of the instrument was determined. The reliability coefficient estimates were .82, .86, and .87, respectively. To collect data for the study, all the researchers visited the universities with



copies of the questionnaire. They first obtained permission and consent to administer the questionnaire from the respondents. After that, copies of the instrument were successfully administered on the respondents. A clear explanation was provided in the questionnaire to provide a guide to the respondents. They were given ample time to respond to the items without interference. After two days, the researchers returned to retrieve the questionnaire copies from the respondents. In preparing the data collected for statistical analysis, a coding schedule was designed. All Items in Section B and C of the questionnaire were coded for each variable based on the responses pattern. The scoring was: Strongly Agree (SA) = 4 marks, agree (A) = 3 marks, Disagree (D) = 2 marks and Strongly Disagree (SD) = 1 mark for all positively worded questions. The researchers also reversed the points awarded for all negatively worded items. Next, data collected were subjected to statistical analysis. They hypotheses were tested at .05 level of significance, using Simple Linear Regression and Multiple Regression analyses of statistical package for social science (SPSS) version 27 for data analysis. The results were presented in their respective tables.

Results

Hypothesis one

Digital resources availability does not have any significant impact on the service delivery of academic staff in public universities in Cross River State. The result of the analysis is presented in Table 1.

Table 1

Summary of simple linear regression analysis showing the impact of digital resources availability on the service delivery of academic staff in public universities in Cross River State. (N=280)

Anova ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1449.962	1	1449.962	314.346	.000 ^b
	Residual	1282.309	278	4.613		
	Total	2732.271	279			

*Significant $p < .05$; $R = .728$; $R^2 = .531$; Adj. $R^2 = .529$

Coefficients^a

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	4.879	.822		5.934	.000
	Digital Resources Availability	.722	.041	.728	17.730	.000

a. Dependent Variable: Service Delivery of Academic Staff

b. Predictors: (Constant), Digital Resources Availability

Table 1 showed that digital resources availability have a significant impact on the service delivery of academic staff in public universities in Cross River State as shown by the simple linear regression coefficient (R) of .728 and a coefficient of determination (R^2) of .531 obtained. The R^2 ($R^2 = .531$) meant that the variable of digital resources availability contributed 53.1% of the total variance in the service delivery of academic staff while the remaining percentage score 46.9% was predicted by other external factors outside digital resources availability. This showed that the independent variable (digital resources availability) has a significant impact on the dependent variable (service delivery of academic staff), $F = 314.346$, $p (.000) < .05$. Referring to the coefficients in table 1, the unstandardized coefficient for digital resources availability is .722. This meant that for every point increase in service delivery of academic staff, there is .722 increase in digital resources availability scores from the questionnaire instrument used. Based on this result, the null hypothesis which stated that digital resources availability does not significantly impact the service delivery of academic staff in public universities in Cross River State, was rejected.

Hypothesis two

Digital resources utilization does not have any significant impact on the service delivery of academic staff in public universities in Cross River State. The result of the analysis is presented in Table 2.



Table 2

Summary of simple linear regression analysis showing the impact of digital resources utilization on the service delivery of academic staff in public universities in Cross River State. (N=280)

Anova ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1888.741	1	1888.741	622.467	.000 ^b
	Residual	843.531	278	3.034		
	Total	2732.271	279			

*Significant $p < .05$; $R = .831$; $R^2 = .691$; Adj. $R^2 = .690$

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	7.775	.473		16.449	.000
	Digital Resources utilization	.597	.024	.831	24.949	.000

a. Dependent Variable: Service Delivery of Academic Staff

b. Predictors: (Constant), Digital Resources utilization

Table 2 showed that digital resources utilization have a significant impact on the service delivery of academic staff in public universities in Cross River State as shown by the simple linear regression coefficient (R) of .831 and a coefficient of determination (R^2) of .691 obtained. The R^2 ($R^2 = .691$) meant that the variable of digital resources utilization contributed 69.1% of the total variance in the service delivery of academic staff while the remaining percentage score 30.9% was predicted by other external factors outside digital resources utilization. This showed that the independent variable (digital resources utilization) has a significant impact on the dependent variable (service delivery of academic staff), $F = 622.467$, p (.000) $< .05$. Referring to the coefficients in table 2, the unstandardized coefficient for digital resources utilization is .597. This meant that for every point increase in service delivery of academic staff, there is .597 increase in digital resources utilization scores from the questionnaire instrument used. Based on this result, the null hypothesis which stated that digital resources utilization does not significantly impact the service delivery of academic staff in public universities in Cross River State, was rejected.

Hypothesis three

The composite impact of digital resources availability and utilization on the service delivery of academic staff in public universities in Cross River State. The result of the analysis is presented in Table 3.

Table 3

Summary of multiple regression analysis of composite impact of digital resources availability and utilization on the service delivery of academic staff in public universities in Cross River State.

Model	SS	Df	MS	F	Sig.
Regression	1933.885	2	966.942	335.480	.00
Residual	798.387	277	2.882		
Total	2732.271	279			

*Significant $p < .05$; $R = .841$; $R^2 = .708$; Adj. $R^2 = .706$

a. Criterion: Service Delivery of Academic Staff

b. Predictors: Digital Resources Utilization, Digital Resources Availability



Table 4

Test of regression weight of management variables sub-variables

Variables	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.	Rank
	B	Std. Error				
Constant	5.932.655			9.057	.000	
Digital Resources Availability	.203	.051	.205	3.958	.000	2 nd
Digital Resources Utilization	.483	.037	.672	12.957	.000	1 st

Table 3 showed that the analysis of variance in the regression output produced an F-ratio of 335.480, which is statistically significant .05 probability level. This indicated that the predictor variables of digital resources utilization and digital resources availability are jointly significant in predicting the criterion variable of service delivery of academic staff. This implied that digital resources utilization and digital resources availability are significantly potent in explaining the variance in the service delivery of academic staff.

The result also showed that a multiple regression coefficients (R) of .841 and a coefficient of determination (R^2) of .708 were obtained. The ($R^2=.708$) meant that when the sub-variables of digital resources utilization and digital resources availability are taken together, they contributed 70.8% of the variance in service delivery of academic staff. This further implied that 29.2% of the variation in the service delivery of academic staff could be attributed to other extraneous variables to the study. By this result, the F-value of 335.480 ($p<.05$), R and R^2 of .841 and .708 indicated a high positive relationship between the predictor variables and the criterion variable. Thus, the hypothesis three is rejected. This meant that digital resources utilization and digital resources availability have a statistically significant joint impact on the service delivery of academic staff in public universities in Cross River State.

Therefore, in order to find out the relative contribution of digital resources utilization and digital resources availability sub-variables, a test of regression was performed. The result is presented in table 4. The result showed that digital resources utilization is the strongest predictor of the variance in service delivery of academic staff ($r = 12.957$). This is followed by digital resources availability ($r = 3.958$).

Discussion

Hypothesis one which stated that, digital resources availability does not have any significant impact on the service delivery of academic staff in public universities in Cross River State, was rejected while the alternate hypothesis was accepted. This showed that, **digital resources availability** significantly impact the service delivery of academic staff. The positive finding may likely be due to enhanced access to current information, improved teaching materials, and more efficient administrative processes facilitated by these resources. These resources enable academic staff to develop more engaging and interactive educational content, foster collaborative research through online platforms, and stay updated with the latest academic developments. The study findings agrees with the conclusion of Okezie and Ezema (2019) that the availability of digital resources in Nigerian universities has improved significantly due to increased investment in digital libraries and ICT infrastructure.

The finding is also supports that of Chiemeké et al. (2021) who explored the relationship between digital resources availability and research productivity among academic staff in Nigerian universities. The findings revealed that academic staff with better access to digital resources produced higher quality research outputs and had more publications in high-impact journals. It is similar to that of Okon and Solomon (2022) who examined the impact of digital resources on teaching effectiveness among lecturers in South African universities. The study showed that the availability of digital resources, such as online databases and educational software, significantly enhanced the lecturers' ability to deliver up-to-date and engaging course content. Lecturers reported that digital resources enabled them to incorporate diverse materials into their teaching, thus improving student learning outcomes. The implication of this study finding is that availability of digital resources may not only equipped the academic staff with the necessary skills but will also help them to incorporate these tools into their daily activities, thereby improving overall service delivery.



Hypothesis two which stated that, digital resources utilization does not have any significant impact on the service delivery of academic staff in public universities in Cross River State, was rejected while the alternate hypothesis was accepted. This showed that, **digital resources utilization** significantly impact the service delivery of academic staff. The finding that digital resources utilization has a significant impact on the service delivery of academic staff in public universities in Cross River State was likely because actively using these resources allows academic staff to access a wealth of up-to-date information, and enhance their teaching materials. This utilization fosters a more engaging and effective learning environment, encourages collaborative research efforts, and improves overall efficiency in academic duties. The study finding supported that of Livina and Mole (2021) who investigated the Academic staff Use of Electronic Resources (ER) in the Nigerian University of Nigeria Libraries during the Corona Virus (Covid 19) lockdown. The finding from the study revealed that the academic staff mostly used the Electronic Resources (ER) for writing research 2 papers.

Similarly, the findings is in alignment with that of Olajide and Fabunmi (2021) who studied the usage of digital libraries among academic staff in Nigerian universities. Their research found that digital libraries were frequently used for research purposes, including accessing journals, e-books, and other scholarly materials. The finding agree with that of Oyedokun et al. (2018) who analyzed the impact of digital resource use on the teaching and research productivity of academic staff in selected Nigerian universities, and found that effective use of digital resources significantly enhances teaching quality and research output. Academic staff who regularly used digital resources reported improved access to current information, positively affecting their teaching materials and research work. A key implication of this finding is that promoting and supporting the active use of digital resources among academic staff can significantly enhance the quality of education and research, leading to better academic outcomes and a more efficient educational system.

Conclusion

Premised on the findings of the study, it was concluded that digital resources availability and utilization has a statistically significant, positive impact on the service delivery of academic staff in public universities in Cross River State, Nigeria. Therefore, the availability and utilization of digital resources significantly enhance the service delivery of academic staff in universities, leading to improved teaching, research, and administrative efficiency.

Recommendation

Base on the findings of this study, the following recommendations were made:

1. Universities should implement continuous training programs, including workshops, seminars, and online courses, to ensure academic staff are proficient in using digital resources and integrating them into teaching and research activities.
2. Investing in robust digital infrastructure, such as high-speed internet, up-to-date software, and reliable hardware, is crucial to improve the efficiency and effectiveness of academic staff's service delivery.
3. Universities should create policies and provide incentives to encourage the integration of digital resources into academic workflows, including recognizing and rewarding innovative uses of digital tools and providing technical support to address challenges.

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