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Material Resource Management as a Predictor of Graduate Academic Quality in Educational Management Programme in Rivers State Owned Universities, Nigeria

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ABSTRACT

This study investigated material resource management as a predictor of graduate academic quality in Educational Management programme in Rivers State owned Universities, Nigeria. The study adopted predictive survey research design. Two research questions and two hypotheses were formulated and tested at a 0.05 level of significance. The population of the study was 766 respondents offering Educational Management (EDM) Programme in Rivers State University and Ignatius Ajuru University of Education. The sample of the study was 383 respondents (28 staff and 355 undergraduates) which were selected using multistage sampling technique. Two instruments titled “Material Resource Management Questionnaire” and a proforma on Educational Management Graduates’ Cumulative Grade Point Average were used for data collection. The instruments were pilot tested with Cronbach’s Alpha statistic showing a reliability co-efficient of 0.85. The data collected were analyzed using mean and standard deviation to answer the research questions; while regression analysis is used to test the hypotheses at 0.05 level of significance. The findings showed that: physical facilities [$F(1, 150) = 57.943, p < 0.05$] and library resources [$F(1, 150) = 43.193, p < 0.05$] significantly predict graduates’ academic quality in Educational Management Programme in Rivers State owned Universities. Hence, the study concluded that material resource management significantly predicts graduates’ academic quality within Educational Management Programme in Rivers State owned Universities. The study recommended among others that government and non-governmental organizations should allocate funds for upgrading and maintaining physical facilities such as classrooms, laboratories, and libraries to create conducive learning environments that support academic excellence.

Keywords: Material Resources, Resource Management, Physical Facilities, Library Facilities, Graduates’ Academic Quality

INTRODUCTION

Resources generally refer to all materials, non-material, audio-visual school environment, and community materials available in an academic environment to facilitate school administration and simplify the teaching learning process. Resources, according to Aliyu (2013), are all the things that are used directly and indirectly for the purpose of supporting, facilitating, influencing, or encouraging transmission or acquisition of knowledge, competence, skills, and knowhow.. Material resources in this study therefore include physical facilities and library resources. They also include other fundamental materials used in the school to make teaching very easy and learning more meaningful and comprehensible to the learners.

Resource management in the words of Qureshi (2022), refers to the allocation, usage, and optimization of various resources, including financial, human and physical resources, to support the educational process and improve the quality of education offered. These are usually made up of diverse stocks that can be drawn on to meet a requirement since they are essential rudiments of production, without which production cannot occur. Shanka and Adebola (2021), explained that resource management strategies can help to improve students' overall educational experience, skill development and readiness, consequently improving graduates' academic quality. Furthermore, material resource management may also help to guarantee the availability and upkeep of critical infrastructure and facilities like classrooms, laboratories, libraries and technology resources. In the context of this study: physical facilities and library facilities were studied as material resources used in the university system for the purpose of improving graduates' academic quality. A physical facility is typically something that is created, manufactured, or installed to perform a certain function, such as providing a convenience for students during learning (Sam-Kalagbor, 2021).

Physical facility is referred to as something that facilitates the execution of an action or course of conduct in order to offer someone with every convenience for completing a task (Osarenmwinhia & Ikhuenbor, 2021). Oyekan (2014), stated that physical facilities include classrooms, white and electronic boards, chairs and tables, staff and students' housing, laboratories, safety and security posts and other amenities that make the school atmosphere favorable for teaching and learning. These facilities (specific laboratories and simulation rooms) allow students to apply theoretical knowledge while also developing practical skills needed in the profession (Abdullahi & Wan, 2015). As a result, a positive learning environment has the ability to improve students' learning experiences as well as their comprehension and mastery of educational management ideas, resulting in higher-quality graduates. However, inadequate facilities, such as badly kept classrooms, congested spaces, uncomfortable seating, and a lack of basic equipment, could also impede students' learning (Sam-Kalagbor, 2021). It may also distract educational management students' concentration and interest in the learning process. As a result, students' academic quality upon graduation may suffer especially when they do not have no access to library facilities too.

As noted by Tom-George and Onyema (2020), library facilities are built to ensure quality and increase literacy. As a result, libraries are founded to provide information resources and services that promote learning, teaching and research to members of its parent institution. Students can use library facilities to access a variety of educational resources, such as textbooks, reference materials, academic journals, research papers, and online databases (Leo, 2016). Furthermore, educational management students can learn how to explore library catalogues, use research databases, and find suitable sources for research and assignments. This would help to improve students' ability to critically examine information, synthesize findings and contribute to the advancement of knowledge in the field of educational management, thereby enhancing graduates' research skills (Sarmah & Singh, 2021). On the other hand, inadequate library facilities could result in limited access to educational resources such as textbooks, reference materials and academic journals. Students may struggle to perform in-depth research or acquire a strong theoretical basis and stay current with educational management trends if they do not have access to comprehensive and up-to-date materials. The aforementioned disadvantaged may limit students' ability to critically assess information and contribute to the profession, especially when students do not have the financial means to obtain these resources personally.

Furthermore, this research focuses on the undergraduate educational management programme. It is a four-year academic programme in which students are taught education and management courses and earn a Bachelor of Education (B.Ed) degree upon graduation. The absence of universities offering undergraduates educational management programs may negatively impact education, leadership, resource management and school growth in basic and Post-basic schools. In addition, over the years, Rivers State owned Universities have been hampered by various social vices (such as insurgency, crises and students' unrest); to the extent that quality graduates in educational management are needed to help reposition its institutions for optimal performances. This therefore necessitates proper management of school material resources if these universities are to produce quality graduates. However, there is a paucity of empirical data to support any claim on whether there is a prediction between material resource management and graduates' academic quality in Rivers State Universities, Nigeria. This study therefore was designed to find out how material resource management predicts graduates' academic quality using educational management programme in Rivers State owned Universities.

By applying Resource-Based Theory to educational management programme in Rivers State owned universities, administrators could strategically leverage their unique resources, enhance faculty capabilities, promote intellectual capital, differentiate their offerings and cultivate dynamic capabilities. These factors could collectively contribute to the academic quality of graduates, equipping them with the necessary knowledge, skills and competencies to excel in the educational management field and make meaningful contributions to the education sector in not only the region but also throughout the nation.

The concept of graduates' academic quality refers to the overall standard and characteristics exhibited by individuals who have successfully completed a particular educational programme or degree. The theory of Growth of the firm by Penrose (1959) provides a substantial impact on strategic management research, especially in the context of the resource-based view of the institutions, for understanding how material resource management as a predictor of graduate academic quality in educational management programme in Rivers State owned universities. It encompasses a range of factors that evaluate the knowledge, skills, competencies, attributes, and readiness of graduates to enter the workforce or pursue further education in their chosen field. Graduates' academic quality is typically assessed based on the students' class of degree upon graduation (Francis, 2015). Generally, graduate quality goes beyond mere academic achievements and considers the practical application of knowledge, critical thinking abilities, problem-solving skills, communication proficiency, ethical decision-making and adaptability but academic quality focuses on students' level of academic achievement.

Statement of the Problem

Many employers have long questioned the quality of university graduates, particularly those from Nigerian education programmes, because they are viewed as unemployable despite their skills, as some do not appear to meet society or labour demands. Therefore, many Nigerian higher institutions have faced criticism for their mode of training, which many stakeholders assume leads to the production of unemployable graduates (Rufai, Bakar, & Rashid 2015; Abiodun-Oyebanji & Omojola, 2018). An ideal graduate of educational management should be able to apply an understanding of educational systems, policies and practices to real-world educational settings. This graduate should also be familiar with educational management trends, research, and best practices to make informed decisions and solve school difficulties.

Significant proportion of undergraduate students pursuing educational management exhibit substandard attributes, such as limited participation in classroom discussions, group assignments, and extracurricular activities, as well as having challenges with core educational management courses. Asiegbu and Ezeugbor gathered feedback from employers and other stakeholders who interact with educational management graduates and revealed a lack of competence, communication skills and adaptability of these graduates. This low academic quality among educational management graduates as inferred by the cited researchers (Rufai et al, 2015; Abiodun-Oyebanji & Omojola, 2018; Asiegbu & Ezeugbor, 2018), in this study, it is attributed to the influence of material resource management (such as physical facilities and library resources).

Furthermore, the consequence of not producing quality educational management graduates is that the economy may suffer since these graduates may not possess the requisite knowledge, skills, and competences to effectively lead and manage schools. This may result in educational management graduates' ineffective decision-making, poor resource allocation and limited capacity to address the complex challenges faced by educational organizations. However, there is no empirical data to support this claim among educational management graduates in the study area that the study is privy of. This created a gap in literature that the current study sought to fill on whether material resource management predicts graduates' academic quality in Rivers State owned Universities, Nigeria.

Purpose of the Study

The purpose of this study was to investigate material resource management as predictor of graduates' academic quality in Educational Management Programme in Rivers State owned Universities, Nigeria. Specifically, the study sought to determine whether:

1. Physical facilities predict graduates' academic quality in Educational Management Programme in Rivers State owned Universities.
2. Library resources predict graduates' academic quality in Educational Management Programme in Rivers State owned Universities.

Research Questions

The following research questions were raised to guide the study:

1. To what extent does physical facilities predict graduates' academic quality in Educational Management Programme in Rivers State owned Universities?
2. To what extent does library resources predict graduates' academic quality in Educational Management Programme in Rivers State owned Universities?

Hypotheses

The following null hypotheses were formulated to guide the study and were tested at 0.05 alpha level of significance:

- Ho1:** Physical facilities do not significantly predict graduates' academic quality in Educational Management Programme in Rivers State owned Universities, Nigeria.
- Ho2:** Library resources do not significantly predict graduates' academic quality in Educational Management Programme in Rivers State owned Universities, Nigeria.

METHODOLOGY

The predictive correlational survey research design was used to collect data for this study. The area of the study is Rivers State, Nigeria, comprised of Rivers State University, and Ignatius Ajuru University of Education. The population for the study comprised of 766 respondents (53 academic staff and 713 undergraduate students) offering Educational Management (EDM) or Education Administration and Planning programme. The sample of the study was 383 respondents (28 academic staff and 355 students) that were selected using purposive and multistage sampling techniques (that comprised of proportionate and simple random sampling techniques). The instruments for data collection in this study was a self-developed questionnaire and a proforma. The questionnaire was structured and titled "Material Resource Management Questionnaire (MRMQ) while the proforma was titled: Educational Management Graduates' CGPA. The research questionnaire was structured on a modified 4-point rating scale of VHL = Very High Level, HL = High Level, ML = Moderate Level, and LL = Low Level with numerical values of 4,3,2,1 respectively. The instruments were validated and pilot test with Cronbach's Alpha statistic showing a reliability coefficient of 0.85. The data collected were analyzed using mean and standard deviation to answer the research questions; while regression analysis is used to test the hypotheses at 0.05 level of significance.

RESULTS

Research Question 1: *To what extent does physical facilities predict graduates' academic quality in Educational Management Programme in Rivers State owned Universities?*

Table 1: Mean and Standard Deviation of the Level of Physical Facilities in EDM Programme in Rivers State owned Universities.

S/N	ITEMS	n = 374	Mean	Std. Dev	Remark
1.	Classroom equipment		3.74	1.18	HL
2.	Specialized facilities such as simulation rooms		2.49	1.26	LL
3.	Office accommodation for academic staff		4.02	1.36	VHL
4.	Dedicated spaces for collaboration learning		3.63	1.37	HL
5.	Seminar rooms		2.88	1.42	LL
6.	Safety equipment		3.41	1.37	ML
7.	Students' conveniences in the department		3.58	1.78	ML
Grand Mean			3.39		ML

Table 1 reveals that item 3 was at a Very High Level; items 1 and 4 were at a High Level. Also, items 6 and 7 were at a Moderate Level while items 2 and 5 were at a Low Level in Educational Management Programme in Rivers State owned Universities. The table further reveals a grand mean response score of 3.39. This finding implies that physical facilities in Educational Management Programme in Rivers State owned Universities at a moderate level.

Research Question 2: *To what extent does library resources predict graduates' academic quality in Educational Management Programme in Rivers State owned Universities?*

Table 2: Mean and Standard Deviation of the Level of Library Resources in Educational Management Programme in Rivers State owned Universities.

S/N	ITEMS	n = 374	Mean	Std. Dev	Remark
8.	Library orientation facilities		3.78	0.91	VHL
9.	Educational management print media		2.95	1.14	ML
10.	Educational management non-print media		3.33	0.99	HL
11.	Electronic database on EDM research		3.64	0.98	VHL
12.	Specialized collections related to EDM history		3.45	0.99	HL
13.	Adequate quiet study spaces within the library		2.82	1.52	ML
14.	Adequate group study spaces within the library		3.83	0.74	VHL
Grand Mean			3.40		ML

Source: Field Survey (2025)

Table 2 presents the replies provided by the participants in relation to research question 2. The data indicates that item 8, 11, and 14 exhibited a Very High level, while items 10 and 12 shows High Level, items 9 and 13 shows a moderate level in Educational Management Programme in Rivers State owned Universities, Nigeria. The table further reveals a grand mean response score of 3.40. This result implies that library facilities in Educational Management Programme in Rivers State owned Universities are at a moderate level.

Hypotheses Testing

H01: Physical facilities do not significantly predict graduates’ academic quality in Educational Management Programme in Rivers State owned Universities.

Table 3: Summary of ANOVA of Linear Regression of How Physical Facilities predicts Graduates’ Academic Quality in Educational Management Programme

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	13.513	1	13.513	57.943	.000 ^b
	Residual	34.750	149	.233		
	Total	48.263	150			

a. Dependent Variable: Rivers State Owned Universities EDM Graduates’ CGPA

b. Predictors: (Constant), Physical Facilities

The results of analysis in Table 3 presents analysis of variance (ANOVA) of linear regression analysis that aims to examine the how physical facilities predicts graduates’ academic quality in Educational Management Programme in Rivers State owned Universities. The result reveals physical facilities predicts graduates’ academic quality in Educational Management programme in Rivers State owned Universities, $F(1, 150) = 57.943$, $p < 0.05$. This means that the null hypothesis is rejected since the p – value is less than 0.05 level of significance.

H02: Library resources do not significantly predict graduates’ academic quality in Educational Management Programme in Rivers State owned Universities.

Table 4: Summary of ANOVA of Linear Regression of How Library Resources predict Graduates’ Academic Quality in Educational Management Programme

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10.846	1	10.846	43.193	.000 ^b
	Residual	37.417	149	.251		
	Total	48.263	150			

a. Dependent Variable: Rivers State Owned Universities EDM Graduates’ CGPA

b. Predictors: (Constant), Library Resources

The results of analysis in Table 4 presents analysis of variance (ANOVA) of linear regression analysis that aims to examine how library resources predict graduates’ academic quality in Educational Management Programme in Rivers State owned Universities. The result reveals that library resources predict graduates’ academic quality in Educational Management Programme in Rivers State owned Universities $F(1, 150) = 43.193$, $p < 0.05$. This means that the null hypothesis is rejected since the p – value is less than 0.05 level of significance.

DISCUSSION OF FINDINGS

This study discovered that physical facilities in Educational Management Programme in Rivers State owned Universities is at a moderate level, with a grand mean response of 3.39. A moderate level implies that there are some deficiencies or inadequacies in the study area’s facilities such as classrooms, libraries, laboratories, and other amenities. This finding concurred with Osuji and Dappa (2022); Mensah (2020); Kibuthu, Ndirangu, & Udoto, (2016) findings that found that physical facilities in most schools are often moderately available. Sam-Kalagbor (2021) study also agree with the finding that physical facilities in secondary schools include teaching facilities, learning facilities and recreational facilities and are available to an average level. Although, the finding disagrees with that of Shehu, Ezenwegbu, Kabiru, & Alfa (2020) findings that revealed that physical facilities are not adequately available nor well maintained in tertiary institutions.

However, hypothesis 1 was rejected, as the results showed that physical facilities significantly predict graduates' academic quality in Educational Management Undergraduate Programme in Rivers State owned Universities. The finding was in line with Kibuthu et al., (2016) finding which revealed that there was a statistically significant relationship between planning, adequacy and quality of physical facilities of schools to students' success. The finding was also in agreement with Akomolafe and Adesua (2016) which revealed that there was a significant relationship between physical facilities and students' level of motivation and academic performance. Although, Shehu et al., (2020) study revealed that the lack of proper facility management does not affect staff productivity and students' academic achievements. The implication of this finding is that the reported statistical significance suggests that there is a meaningful relationship between physical facilities and the academic quality of graduates within Educational Management undergraduate programme in the study area. This therefore highlights the pivotal role of physical facilities in supporting educational excellence. Well-equipped and maintained facilities provide conducive environments for teaching, learning, and research, which can enhance students' academic engagement, performance, and overall educational experience.

The study also found that library facilities in Educational Management Programme in Rivers State owned Universities is at a moderate level, with a grand mean response of 3.40. The finding is in line with Baffour, Liu and Kwakye (2021); Okwu and Braide (2021); Udem, Ikenwe and Ugwuamoke (2020) findings that library resources are moderately available in tertiary institutions for students' usage. However, Oyedipe, Onasote, Okewale, and Adekunmisi (2017) study show that library resources are highly available in tertiary institutions which differ from the study's finding. The implication of this finding is that it indicates that availability of library resources is acknowledged in the sampled institutions, but there may be areas where improvements are needed to enhance the quality and accessibility of library services.

Also, hypothesis 2 was rejected, as the results showed that library resources significantly predict graduates' academic quality in Educational Management Programme in Rivers State owned Universities. The reported statistical significance indicates that there is a meaningful relationship between the availability of library resources and the academic quality of graduates within Educational Management Programme in the study area. The finding was in agreement with that of Carvalho-Rodrigues and Mandrekar (2020) findings in the study showed that there is a significant and remarkable relationship between the library usage and the students' academic performance and success. Wanyonyi, Odini, and Sikolia (2018) findings indicated that all services offered at Pwani Library had positive effect on user satisfaction and success. However, the finding was in disagreement with Griadhi, Suarni, Marhaeni, and Sutajaya (2018) finding which revealed that library resources quality has no influence towards learning achievement, with probability value of 0.585 ($p > 0.05$). The implication of the findings is that it reveals how library resources significantly predict graduates' academic quality underscores the pivotal role of libraries in supporting academic excellence. Libraries serve as hubs for learning, research, and intellectual exploration, providing students with access to a wealth of educational materials and resources. Therefore, investments in expanding library collections, improving infrastructure, and enhancing library services should be prioritized to ensure that students have access to high-quality educational resources that enhance their academic performance and preparation for the workforce.

CONCLUSION

In conclusion, the findings reveal a significant prediction between material resource management and the graduates' academic quality in Educational Management Programmes in Rivers State owned Universities, Nigeria. The significance of how material resource management predicts graduates' academic quality highlights the critical role of effective resource allocation in creating conducive learning environments that support academic success. Investments in physical facilities and library resources are essential for providing students with the necessary tools, resources, and opportunities to excel academically. Well-equipped facilities enable institutions to offer high-quality education and enhance students' learning experiences, ultimately contributing to the production of graduates who are well-prepared for the

challenges of the workforce. Thus, the study concludes that by prioritizing comprehensive material resource management, tertiary institutions can create dynamic learning environments that foster academic success and the production of graduates who are well-equipped for success in their academic and professional endeavours.

RECOMMENDATIONS

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

1. The government of Rivers state and non-governmental organizations in the state should allocate funds for upgrading and maintaining physical facilities such as classrooms, laboratories, and libraries to create conducive learning environments that support academic excellence.
2. Educational Management stakeholders like lecturers, alumni, postgraduate students are encouraged to invest in library resources, which may include donations of library resources such as academic journals, research materials, and digital databases, to support educational management undergraduate students' research endeavours and facilitate independent learning.

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