LIBRARY INNOVATION, FINANCIAL ACCOUNTABILITY IN LIBRARY, AND ACADEMIC PERFORMANCE OF TERTIARY INSTITUTIONS IN NIGERIA

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Abstract

The paper is an empirical interrogation into the relationship between library innovation, financial accountability in library, and academic performance in tertiary institutions in Nigeria. Survey research design was adopted for this research through the administration of likert-scale questionnaire to randomly selected academic staff in Edo State, Lagos State, and Abuja, Nigeria. They constituted the sample size as representative of large number of academicians in Nigeria.The Cochran (1977) formula was used in arriving at a sample size from the large population, while primary data for the study were derived through the means of well-structured questionnaire administered on randomly selected sample respondents. A Cochran sample size, of four hundred and twenty (420) copies of questionnaire were administered, while about 395 copies were retrieved. After sorting for defects and mutilated copies, 384 copies were used for the study. Frequencies, percentages, and inferential statistics were used to analyze the responses. The findings showed that, on average, there was a significant correlation between academic performance at Nigerian tertiary institutions and library innovation, as well as a significant correlation between financial accountability in libraries and academic performance in Nigerian tertiary institutions. Based on these results, it is advised that the appropriate government authorities develop policies as soon as possible to bring about the desired improvement in tertiary education performance, with a focus on strengthened financial accountability in library systems throughout Nigerian tertiary institutions and better library innovation.

Keywords:

Introduction

The phrase academic performance of tertiary institutions could be described as a vague because it lacks a precise meaning. This presupposes that the perspective from which performance is being assessed is the determining factor for appraising such performance.

For instance, while a sole proprietor may be focused on profitability in monetary terms as a basis for measuring performance in the context of private tertiary institutions, the society and employers of labour are likely to be more focused on the output, in terms of value addition capacity of graduates of such institutions.

Similarly, what constitutes performance indicators for non-profit oriented tertiary institutions, could be inconsistent with those of profit-oriented institutions.

These assertions are indicative of the fact that there are likely to be vagaries of attributes which can drive performance indicators of tertiary institutions. Some of these

attributes which drive performance of tertiary institutions could include proper Research and Development (R&D), library innovation, sound financial accountability, good governance policy, and effective leadership.

In the context of accountability, Usman (2016) acknowledges the fact that tertiary institutions are riddled with high problems of accountability, hence the author suggested some factors that could improve this narrative to include good leadership, regular supervision of schools, faculties and department auditing of educational activities, effective communication, and efficient and effective funding which are targeted towards enhanced performance of tertiary institutions.

There are alarming statistics to show low level of research productivity amongst scholars of higher institutions of learning in Nigeria, with the universities haven recorded forty-two months, eighteen days strikes within a 204-month period (1993 – 2009).

In the same vein, the catalystic role of education as a bridge between the rich and poor is gradually being eroded due to managerial crisis and system decay (Akpanuko, 2012).

These crisis and the attendant consequences call for collective action of accountability in other to maximize huge government investment in education to salvage the situation and promote academic productivity.

Knapp and Feldman (2012), posited that accountability in university systems is categorised as internal and external accountability; and the legal and financial accountability, furthermore as scholarly (academic) and moral accountability.

The unique features are likely to have effect on the individual or researcher who make use of the library facilities, particularly in terms of flexibility, efficiency, and effectiveness in sourcing for the required information.

It is imperative to note that public tertiary institutions in Nigeria for the past two decades on the average, have been confronted with challenges such as poor accountability, lack of adequate funding on the part of government, poor state of libraries largely devoid of innovations, stiff competition from proliferation of private tertiary institutions, as well as leadership deficit.

This has led to the erroneous claims by some employers of labour that most of Nigeria's tertiary institutions graduates are not employable, a development that amounts to ethical questions on the performance of tertiary institutions and its associated determinants.

This paper also draws motivation from the fact that there is scarcity of empirical evidence which jointly relates library innovation, and financial accountability with scholarly performance of tertiary institutions of learning in Nigeria.

This empirical paper uses employer of labour perspective to ascertain its broad objective, which is relationship between library innovation, financial accountability, and academic performance of tertiary institutions in Nigeria.

Literature Review

Conceptual Review

Academic Productivity of Tertiary Institutions

Academic publications are designed to disseminate the output of rigorous research and thus assess academic success. Productive manpower is often the output of educated population with the propensity to propel economic growth (Ehighebolo, 2022).

Educated populace are offshoots of tertiary institution as they provide a great percentage of this desired manpower required for a nation's economic growth and development.

Productivity is largely a function of motivation and ability. It could therefore be implied that productivity is rooted in ability and motivation (Udoji, 2006). In terms of functional relationship, Uduji (2006) noted as follows:

Productivity = F(ability) (motivation).

This presupposes that academic productivity could be adjudged as being a function of ability and motivation. Motivation in this context could include accountability, library innovation, adequate funding, and good leadership, as well as competence.

According to the International Labour Organization (ILO, 1999) academic productivity can be gained from capacity building, and suggested that western countries like the United Stated, Europe, Great Britain, as well as some Asian and Latin American Countries have continually adopted productivity measures in appraising their universities system.

Financial Accountability in the University Library

The financial accountability of libraries in public universities is akin to the accountability frameworks of public universities which is a semblance of non-profit making organizations.

They hence render stewardship to government in line with laid down government instructions and financial accounting regulations (Akpanuko, 2012).

According to Fox (2015), the purpose of accountability in the educational system is to address the unspoken social contract that exists between the general public and public educational institutions.

The relevance of financial accountability in tertiary institutions across different countries of the world cannot be overemphasized, thus constitutes an integral aspects of the subject matter surrounding tertiary education (Adetula *et al.* 2020).

In the same vein, Salihu (2015) conducted an investigation in examining the effect of accountability in tertiary institutions and found that most of the institutions were devoid of adequate internal controls particularly in the context of supervision, segregation of duties, personnel controls, and authorization and approval.

Empirical Review

Library Innovation and Academic Productivity of Tertiary Institution

Okiki and Mabawonku (2013) investigated the relationship between information literacy skills and academics research productivity in federal universities in Nigeria.

The research method adopted for this study work was the survey research design. Copies of the questionnaire was administered to a sample size of one thousand and fifty-seven academic staff (1,057) determined with the aid of multi-stage sampling technique after subjecting the questionnaire to relevant validity and reliability tests.

A total of eight hundred and seventy three copies were returned completed, while the responses were analysed with the aid of descriptive statistics.

The analyses' indicated a strong correlation between information literacy (which includes seeking help from peers, going to seminars and workshops, learning by doing, being self-taught, receiving guidance from library staff, and receiving departmental and faculty training) and the productivity output of Nigerian universities.

Additionally, it was revealed that academic staff in Nigerian universities produced research in the form of working papers, conference papers, journal articles, technical reports, and occasional papers than they did in the form of monographs, textbooks, patents, and inventions.

Nwakpa (2015) examined the relationship between insecurity and quality of tertiary education in Nigeria. The study showed

that insecurity had significant impact on the negative growth of tertiary institutions in Nigeria.

Kpolovie and Onoshagbegbe (2017) investigated the research productivity of academic staff of Nigerian universities. Google Scholar h-index and i10-index was used as proxies for research productivity.

Sample were drawn from federal, state, and private universities totalling 1,073 in a proportion of 713; 266; and 94 respectively in the South-South geopolitical zones of Nigeria.

One-way ANOVA and the independent samples t-test were used to analyze the data at the 0.05 level of significance.

The analysis' findings indicate that there are statistically negligible variations in federal, state, and private universities' research productivity: F (2, 1072) = 2.853, P>0.05 for the h-index, and 2.288, P>0.05 for the i10-index. Nevertheless, it was also shown that the nine faculties (areas of specialization) varied statistically significantly in the h-index (F (8, 1064) = 40.666, P < 0.05) and i10-index (F (8, 1064) = 22.321, P < 0.05). Furthermore,

Research productivity was found to be significantly higher in the faculties of agriculture, health science, and natural/applied sciences than it is in the faculties of law, humanities, education, social sciences, management sciences, and engineering.

Additionally, research productivity among female academics was shown to be lower than that of their male counterparts.

Peretomode and Chukwuma (2020) investigated the relationship between manpower development and lecturers' productivity in tertiary institutions in Delta State of Nigeria to select 205 lecturers from a population of 1,021 lecturers as part of an ex-post facto research design.

A proportionate stratified random sampling technique was employed. Multiple regression analysis and the Pearson Product Moment Correlation Coefficient were used to analyze the responses.

The results showed a strong correlation between the productivity of teachers in Nigerian universities and manpower development.

Jacob *et al.* (2021) adopted library-based contextual analyses to x-ray the problems facing academic staff of Nigerian universities. The study made use of information from print and online publications written by reputable organizations, individuals, and bodies.

The studies showed that the issues affecting academic staff in Nigeria include insecurity, large class sizes, low motivation, a bad staff development program, strike action, inadequate infrastructure, low computer literacy, and inadequate financing for research.

Financial Accountability in Library and Academic Productivity of Tertiary Institutions

Ejoh and Ejom (2014) investigated the relationship between financial performance and internal control practices in Nigerian tertiary institutions, with a particular emphasis on Cross River State College of Education in Akamkpa.

Using a survey study methodology, a questionnaire was used to gather data from participants in the chosen sample with the use of a stratified sampling procedure.

Basic percentages, tables, correlation coefficients, and z-scores were utilized to analyze the copies of the questionnaire that were retrieved.

The study's conclusions showed that there was little correlation between Cross River State College of Education's financial performance and its internal control operations.

Akosile and Akinselure (2016) investigated the connection between internal control and financial management of selected universities in Nigeria.

Survey approach was used with administration of one hundred and fifty (150)

copies of likert scale a questionnaire to the purposively sampled universities.

Responses were analyzed with the aid of descriptive statistics which included percentages, chi square as well as frequency tables.

The results of the analysis showed a strong correlation amongst internal control and wise resource management in Nigerian universities.

Shehu (2020) examined the relationship between internal control system and financial accountability of tertiary educational institution in Bauchi State-Nigeria.

A survey research design was chosen, and members of the selected sample were given a questionnaire.

Copies of the responses were then retrieved, and the data was analyzed using STATA 10 software data analysis package, frequency tables, and percentages in addition to non-parametric statistical tests like Chi-square.

Results of the analyses shows that internal audit in Bauchi State is ineffective in relation to financial accountability.

Methodology

The employers of labour both from public, private, and quasi (hybrid) sectors of the Nigeria economy constituted the population of this study, and since the numerical metric of employers of labour in Nigeria is infinite, the study adopted the use of Cochran (1977) formula in arriving at a sample size from the infinite population.

The justification for the use of Cochran (1977) approach is premised on the fact that it is a standard formular for drawing sample size in an infinite population of a given study.

However, given 5% margin of error, the deduced sample size is three hundred and eighty-four (384) respondents.

Hence, primary data for the study were derived through the means of well-structured questionnaire administered on randomly selected sample respondents, who are employers of labour in Edo State, Lagos State, and Abuja, Nigeria.

However, to achieve the Cochran sample size, four hundred and twenty (420) copies of questionnaire were administered, while about 395 copies were retrieved, after sorting for defects and mutilated copies, the sample size of 384 copies were used for the study.

Validity and reliability of research instrument

Survey questionnaire had been subjected to a pilot test to ascertain its reliability and validity. Validity aided the determination as to whether the questions asked to satisfy the purpose as it relates to the study.

In the same vein questionnaire was administered to two colleagues (professor and senior lecturer respectively) in the Faculty of Management Sciences, and Library, University of Benin, Benin City, to help ascertain the face validity.

The necessary corrections which include restructuring of scale, sentence structure and technical terms were made. These adjustments were incorporated in the final draft to make it valid for this study.

A reliability test was also conducted on the questionnaire, which measures the degree or extent of consistency of a research instrument.

Twelve respondents who are not sample population members were selected from among employers of labor in the public, private, and quasi-hybrid sectors of Nigeria.

A test-retest methodology was used for the pilot test. The identical instrument was

given to the same participants again after a two-week break.

The study questionnaire was tested using Cronbach's Alpha. Questions 1 through 5 in the questionnaire sets, which address the connection between library innovation and academic performance of tertiary institutions in Nigeria, had a Cronbach's Alpha coefficient of 0.88, however, the questionnaire sets' questions 6 through 10 that examine the connection between financial accountability and academic achievement in Nigerian tertiary institutions revealed a Cronbach's Alpha coefficient of 0.84.

The reliability coefficients values justify the reliability of our research instruments since the reliability benchmark is achieved when Cronbach's $\alpha > 0.7$.

Method of Data Analyses

The analyses of data in this research were done with the aid of descriptive and inferential statistics, while frequencies, percentages, and inferential statistics were computed for address of the broad and specific objectives. The likert scale questionnaire were used to generate data.

Data analyses and interpretation

The results of frequencies of responses, and percentages computed which is used to address the specific objectives and answer the implied research questions and discussion of findings are presented below:

Library Innovation and Academic Performance of Tertiary Institutions In Nigeria (Q1-Q5)

Library innovation leads to high standard of academic performance of tertiary institutions in Nigeria?

Table 3.1		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	219	57.0	57.0	57.0
	Agree	165	43.0	43.0	100.0
	Neutral	0	0	0	100.0
	Disagree	0	0	0	100.0
	Strongly Disagree	0	0	0	100.0
	Total	384	100.0	100.0	

Source: Researcher Computation using SPSS 25.0

Updates of library research materials improves the quality of university graduates in Nigeria?

Table 3.2		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	270	70.4	70.4	70.4
	Agree	70	18.2	18.2	88.6
	Neutral	44	11.4	11.4	100.0
	Disagree	0	0	0	100.0
	Strongly Disagree	0	0	0	100.0
	Total	384	100.0	100.0	

Source: Researcher Computation using SPSS 25.0

Link or subscription to high impact journals enhances the market value of graduates from Nigeria tertiary institutions?

Table 3.3		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	262	68.2	68.2	68.2
	Agree	122	31.8	31.8	100.0
	Neutral	0	0	0	100.0
	Disagree	0	0	0	100.0
	Strongly Disagree	0	0	0	100.0
	Total	384	100.0	100.0	

Source: Researcher Computation using SPSS 25.0

Access to digital and manual textbooks improves the quality of tertiary institutions in Nigeria?

Table 3.4		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	288	75.0	75.0	75.0
	Agree	88	23.0	23.0	98.0
	Neutral	8	2.0	2.0	100.0
	Disagree	0	0	0	100.0
	Strongly Disagree	0	0	0	100.0
	Total	384	100.0	100.0	

Source: Researcher Computation using SPSS 25.0

Digitalization of library materials and archives exposes tertiary institutions students to quality materials globally, hence enhance academic performance of tertiary institutions in Nigeria?

Table 3.5		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	173	45.0	45.0	45.0
	Agree	211	55.0	55.0	100.0
	Neutral	0	0	0	100.0
	Disagree	0	0	0	100.0
	Strongly Disagree	0	0	0	100.0
	Total	384	100.0	100.0	

Source: Researcher Computation using SPSS 25.0

Findings as revealed in Tables 3.1, 3.2, 3.3, 3.4, and 3.5 respectively are used to address the specific objective of this study which is to examine the relationship between Library innovation and academic performance of tertiary institutions in Nigeria.

The results of the frequency distribution across the different tables shows that the total numbers of respondents who strongly agree, as well as agree on relevant questions relating to to the relative variables of interest are higher with cumulative ratings of 100%, 88.6%, 100%, 98%, & 100% respectively.

Hence, it can be deduced on the average that library innovation has a significant positive relationship between library innovation and academic performance of tertiary institutions in Nigeria.

Financial Accountability in Library and Academic Performance of Tertiary Institutions in Nigeria (Q6-Q10)

Sound internal control systems in library financial activities leads to high academic performance of tertiary institutions in Nigeria?

Table 3.6		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	204	53.0	53.0	53.0
	Agree	161	42.0	42.0	95.0
	Neutral	19	5.0	5.0	100.0
	Disagree	0	0	0	100.0
	Strongly Disagree	0	0	0	100.0
	Total	384	100.0	100.0	

Source: Researcher Computation using SPSS 25.0

Compliance with fundamental accounting principles and guidelines enhances academic performance of tertiary institutions in Nigeria?

Table 3.7		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	173	45.0	45.0	45.0
	Agree	211	55.0	55.0	100.0
	Neutral	0	0	0	100.0
	Disagree	0	0	0	100.0
	Strongly Disagree	0	0	0	100.0
	Total	384	100.0	100.0	

Source: Researcher Computation using SPSS 25.0

Maintenance of Statutory Accountability Framework in Libraries in line with international best practices lead to high academic performance of tertiary institutions in Nigeria?

Table 3.8		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	315	82.0	82.0	82.0
	Agree	42	11.0	11.0	93.0
	Neutral	27	7.0	7.0	100.0
	Disagree	0	0	0	100.0
	Strongly Disagree	0	0	0	100.0
	Total	384	100.0	100.0	

Source: Researcher Computation using SPSS 25.0

Adoption of statutory procurement procedures and guidelines in libraries leads to quality academic performance of tertiary institutions in Nigeria?

Table 3.9		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	262	68.2	68.2	68.2
	Agree	122	31.8	31.8	100.0
	Neutral	0	0	0	100.0
	Disagree	0	0	0	100.0
	Strongly Disagree	0	0	0	100.0
	Total	384	100.0	100.0	

Strict compliance with rules and regulations governing financial accounting in libraries lead to high academic performance of tertiary institutions in Nigeria?

Table 3.10		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	240	62.5	62.5	62.5
	Agree	131	34.0	34.0	96.5
	Neutral	13	3.5	3.5	100.0
	Disagree	0	0	0	100.0
	Strongly Disagree	0	0	0	100.0
	Total	384	100.0	100.0	

Source: Researcher Computation using SPSS 25.0

Findings as revealed in Tables 3.6, 3.7, 3.8, 3.9, and 3.10 respectively are used to address the specific objective of this study which is to find out the nexus between financial accountability and academic performance of tertiary institutions in Nigeria.

The results of the frequency distribution across the different tables shows that the total numbers of respondents who strongly agree, as well as agree on relevant questions relating to relating variables of interests are high with cumulative ratings of 95%, 100%, 93% 100%, & 96.5% respectively.

Hence, it can be deduced on the average that there is a significant and positive relationship between financial accountability in the libraries and academic performance of tertiary institutions in Nigeria.

Summary and Conclusion

The need to improve on the output of higher institutions of learning in Nigeria has continually generated heated debate among different stakeholders, owing to claims and series of complains among employers of labour over the past decades.

The unending industrial unrest between different tertiary institutions-based unions also tends to affirm the narrative that all is not well with the state of these institutions in Nigeria.

In view of these assertions, this study conducted an empirical investigation between library creativity, financial accountability in libraries, and the academic achievement of higher learning institutions in Nigeria in an effort to add to the body of knowledge on the academic performance of postsecondary institutions in Nigeria.

The study's conclusions showed that there was, on the average, a significant correlation between academic performance at Nigeria's tertiary institutions and library innovation, as well as a significant correlation between financial responsibility in libraries and academic performance.

Based on these findings, it can be concluded that with improved investment in critical infrastructure in tertiary institutions in Nigeria, there is likely to be an improvement in the performance of tertiary institutions graduates.

It is therefore recommended that relevant authorities of government should as a matter of urgency craft policies targeted at achieving the desired positive change in tertiary education performance, with particular emphasis on library innovation, and entrenched financial accountability in library systems across tertiary institutions in Nigeria.

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