

Impact of Serials Management, Access and Use on Publication Output of Lecturers in Nigerian Universities

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Abstract

This study investigates serials management in university libraries, determines the extent to which serials are accessed and used and appraises the influence of availability, accessibility and use of serials on publications output of lecturers in federal universities in Nigeria. Questionnaire administration method was adopted to accumulate data for the study. Combinations of both open-ended and closed-form types of questions were used. The study reveals that the universities studied have different types of serials in stock. Print and electronic serials were the major forms of serials used by lecturers in Nigerian universities with print serials being the more utilised. University libraries and Internet were the major sources of serials used by the lecturers. The result also reports that lecturers in Nigerian universities had publications in six categories of publications. The influence of serials management on access and use as revealed by the results, management on access ($r = 0.112$; $P < 0.01$) was significant while management on use ($r = -0.031$; $P > 0.01$) was not significant. All the independent variables (management, access and use) when combined had significant influence on the dependent variable (publications output) ($F_{(3; 860)} = 12.48$, $R = 204$, $R^2 = 0.04$; $P < 0.01$). The study therefore recommends that government should provide adequate fund for provision of relevant, current and adequate serials for research activities to improve publications output of lecturers in Nigerian universities and that universities should maintain the policy associated with 'publish or perish' to boost research, information generation, utilisation and dissemination.

Keywords: Serials management, Access and use of serials, Publication output, Federal university lecturers, Nigeria.

Introduction

Serial is a publication in print, non-print or electronic format issued in successive parts and intended to be continued indefinitely. Serials are of various kinds and include journals, magazines, newspapers, newsletters, accessions, reports, proceedings and transactions of societies and other periodicals like abstracts and indexes. Serials are of great importance because they carry latest, current, up-to-date and useful information.

Serials constitute a major part of all university libraries' collections. The goal of library services is generating, collecting, synthesising and disseminating up-to-date, accurate, unbiased and relevant information available in serials, books and non-book formats which can be stored and retrieved whenever needed. Therefore, it is the duty of the university libraries and librarians to provide serials and services for lecturers, students and other users for research activities.

Universities are involved in teaching, research and publication. One of the preoccupations of any university lecturer is research. The outcome of research is usually published. The worth of a lecturer is usually determined by the quantity and quality of his or her publication. Publication output of every lecturer to a great extent, determines his or her promotion based on the policy of "publish or perish". And to be able to carry out a meaningful research, the researcher must be able to have access to and use relevant, current and adequate serials in the university library.

The success of every library's programme, therefore, could be easily measured in terms of its efforts in acquiring and managing relevant, current and adequate serials. The elements of serials management are serials acquisition which involves selection, deselection and subscription; organisation which involves processing and display on racks for users; and maintenance which involves updating, filling the gap, preservation, binding of back issues and repair of damaged ones. Others are provision of facilities like finding aids, reading areas equipped with tables, chairs and air-conditioners as well as provision of services such as current awareness services,

photocopier, exhibition, translation from foreign language like Germany, French and Arabic to the language understood by the users.

The World Bank (2002) observed that Nigerian universities are still struggling to provide basic facilities, funding and adequate information that could enable the lecturers create and apply new knowledge, innovations and develop analytical perspectives on development problems and also provide service to the public and private sectors. The consequences of insufficient funding in universities are reflected in poorly-remunerated staff, crumbling academic facilities, poorly-equipped laboratories, out-dated libraries and inadequate of serials and low research output (Andrew, Bankole and Olatunde, 2000). This portends a grave danger for academics, the development of the individual and the community.

It is against this backdrop that this study investigated the influence of serials management, access and use on publication output of lecturers in federal universities in Nigeria.

Objectives of the Study

The objectives of the study are to: -

1. examine how serials are managed in Nigerian university libraries;
2. identify forms of serials accessed and used by lecturers in federal universities in Nigeria;
3. find out sources of serials accessed and used by lecturers in federal universities in Nigeria;
4. find out the publication output of lecturers in federal universities in Nigeria; and
5. ascertain the impact of management, access to and use of serials on publication output of lecturers in federal universities in Nigeria.

Literature Review

The emergence of serial as an effective tool in modern information and research has called for serials manager with in-depth knowledge of their peculiarity and techniques for controlling them (Aduhika, 2007). A comprehensive serials management is concerned with everything that happens to serials throughout their life cycle. The serials management operates with many concepts. There are various views on the concepts and elements of serials management.

Serials management deals with: selection and de-selection, liaison with users, collection analysis and user survey (Ogunrombi, 1997); financial control and budgeting deal with price list checking, fund allocation, invoice checking, invoice payment and receipt checking (Ford, 1999); subscription methods deal with direct ordering and subscription agents (Cowley, 1990); house-keeping routines deals with stamping, recording in statistics file, kardex card, visible index and serials lists (Tipple, 1990); cataloguing and classification deal with provision of bibliographic description for each title of serials and provision of access to serials represented in the catalogue (Adeyemi, 2001); organisation deals with cataloguing, classification and display of serials on the racks to facilitate easy access (Law, 1999); storage, preservation and binding deal with protection of serials from damage and prolong their shelf life (Elkington, 1999); direct services to the users deal with circulation, indexing, abstracting, current awareness, translation, photocopying and inter-library lending services (Clerk and O'Driscoll, 1990); and serials automation which deals with application of modern information and communication technologies in carrying out serials processes (Woodward and Graham, 1990).

Access and use analysis are central to serials management. Access to information, according to Akobundu (2008), means that users can identify and use the resources. Resources, as pointed out by Aguolu and Aguolu (2002), may be available in the library and even identified bibliographically as relevant to one's subject of interest, but the users may not be able to lay hands on them. Assessing user needs, satisfaction and library performance at the University of Washington Libraries by Hiller (2001) reported that 97% of the university lecturers had access to the World Wide Web and presumably use this to access the electronic resources including serials provided by the library.

Serials are used for diverse purposes including leisure reading, scholarly research, teaching, professional reasons and hobbies (Nisonger, 1998). Lecturers and researchers in universities, according to Aina (2004), are regarded as the library and serials users with advanced degrees in their subjects of specialisation. Many scholars including Rogers (2001), Dillon and Hahn (2002), Salaam (2008) and Ogunniyi, Akerele and Afolabi (2011) confirm the fundamental concept that a fraction of the periodical collection accounts for the majority of usage. Rogers (2001) at Ohio State University revealed that the number of lecturers that used electronic journals increased from 36.2% in 1998 to 53.9% in 2000; and that reporting similar use of printed journals decreased

from 74.3% to 65.6% over the same period. Research by Dillon and Hahn (2002) at University of Maryland found that 65% of the university lecturers read printed journals at least monthly while 80% read electronic journals at least monthly. Salaam (2008) revealed that serials were fairly available, accessible and used by postgraduate students in universities of agriculture in Nigeria. Ogunniyi, Akerele and Afolabi (2011) reported that majority (66.7%) of lecturers at Adeyemi College of Education, Nigeria used serials in the college's Library.

Universities are involved in teaching, research and publication. All over the world, according to Akintayo and Oghenekohwo (2008), university education has attracted significant interest as it serves as the only way of ensuring immediate changes and transformation in human and technological advancement. One of the preoccupations of any lecturer is research. Research, as pointed out by Ntiamoah Baidu (2008), is the engine that generates new knowledge and provides ideas for national development. The outcome of research is usually published. Ogbomo (2010) maintained that publication is essential for problem-solving, leading to dynamism in library services as a response to changing times and environment. Okwilagwe (2001) asserted that the Academic Union of Universities (ASUU), Nigeria is one of the agencies and professional associations whose activities directly influence the book publishing industry in Nigeria. Publication output of lecturers, as pointed out by Okafor and Dike (2010) can be in form of journal articles, technical reports, conference proceedings, books or chapters of book.

The quantity of publications output of lecturers, as posited by Popoola (2002), could be measured by counting the number of journal articles, technical reports, conference proceedings, books or chapters in books published over a period. Ashor and Chaudhry (1993), as cited in Okafor (2008), revealed that the 1,082 papers covered in their study of Saudi scientists were published in 29 countries. The study also reported that although the scientists published in 442 different journals, only 37 of the journals carried the bulk of the papers, constituting the core scientific journals for Saudi libraries. Despite gaining some intrinsic and extrinsic rewards by engaging in teaching and service activities, the greatest rewards (such as tenure, promotion and professional standing), as described by Watty, Bellamy and Morley (2008), flow to those lecturers who publish scholarly works.

To be able to carry out a meaningful research, the researcher must be able to have access to and use current, relevant and adequate information especially from serials in the university library. Using the journal literature, the individual researcher has to make a trip to the library to locate bound volume containing the article or articles desired (Farrington 1997). In the university community, as put by Anunobi, Nwakwuo and Ezejiofor (2010), access to serials is primarily through the university library. To achieve this primary role, university library ensures that the appropriate serials are selected based on acquisition policy of the institution, acquired and processed.

Research Methodology

The correlation research design was adopted for the study. A sample fraction of 50% was used to select a sample size of 12 universities out of 24 conventional federal universities. Twelve universities were selected using stratified random sampling technique. Using the multi-stage sampling technique, the sample size was made up of 6,570 lecturers. A sampling fraction of 15% was used to select a sample size of 986 lecturers. Twelve serials management personnel were also included as sample in the study. Data were collected through validated questionnaires tagged Lecturers' Serials Access and Use Questionnaire (LSAUQ) ($r=0.90$) and Serials Management Questionnaire (SMQ) ($r = 0.80$). A total of 864 respondents, representing 87.6% of the total population of 986 and 12 respondents of the SMQ administered were used. Data collected were analysed using frequency and percentage, correlation and multiple regressions.

Findings and Discussion

Table 1: Distribution of Questionnaire by Rate of Return

| S/No | Institution | Number Administered | Number Returned | Percentage |
|------|---|---------------------|-----------------|--------------|
| 1 | University of Ibadan, Ibadan | 173 | 147 | 85.0 |
| 2 | University of Agriculture, Abeokuta | 56 | 49 | 87.5 |
| 3 | University of Ilorin, Ilorin | 86 | 80 | 93.0 |
| 4 | Federal University of Technology, Minna | 40 | 37 | 92.5 |
| 5 | University of Agriculture, Umudike | 24 | 19 | 79.2 |
| 6 | Federal University of Technology, Owerri | 35 | 30 | 85.7 |
| 7 | University of Calabar, Calabar | 106 | 92 | 86.8 |
| 8 | University of Benin, Benin | 146 | 133 | 91.1 |
| 9 | Ahmadu Bello University, Zaria | 182 | 175 | 96.2 |
| 10 | Usman Dan Fodio University, Sokoto | 47 | 37 | 78.7 |
| 11 | Federal University of Technology, Yola | 52 | 40 | 76.9 |
| 12 | Abubakar Tafawa Balewa University of Technology, Bauchi | 39 | 25 | 64.1 |
| | Total | 986 | 864 | 87.6% |

Table 1 presents the distribution of respondents by rate of questionnaire return. The result shows that all the sample areas recorded above 80% return rate. For instance, at the University of Ibadan, 173 copies of the questionnaire were distributed and 147 copies were returned and this accounted for 85.0% return rate. Also, at University of Agriculture, Abeokuta, 56 copies of the questionnaire were distributed and 49 copies were returned and this accounted for about 88% return rate. Meanwhile, out of 986 copies of the questionnaire administered, 864 copies were returned and this accounted for 87.6% of returns.

Table 2: Distribution of Respondents by Designation

| Designation | Frequency | Percentage (%) |
|--------------------|------------|----------------|
| Graduate Assistant | 13 | 1.5 |
| Assistant Lecturer | 32 | 3.7 |
| Lecturer II | 129 | 14.9 |
| Lecturer I | 129 | 14.9 |
| Senior Lecturer | 344 | 39.8 |
| Reader | 168 | 19.4 |
| Professor | 49 | 5.7 |
| Total | 864 | 100.0 |

Table 2 presents the distribution of respondents by designation. According to the result of the analysis, the least, 1.5% of the respondents were Graduate Assistants and, majority, 39.8% were Senior Lecturers. This shows that majority of the respondents sampled were Senior Lecturers and above. This is possible because majority of the respondents sampled had Ph.D. This implies that all cadres of lecturers in Nigerian Universities were represented in the study. The least of respondents sampled were Graduate Assistants.

Table 3: Distribution of Respondents by Highest Educational Qualification

| Educational Qualification | Frequency | Percentage (%) |
|---------------------------|------------|----------------|
| Bachelors Degree | 12 | 1.4 |
| Postgraduate Diploma | 64 | 7.4 |
| Masters Degree | 158 | 18.3 |
| M.Phil | 42 | 4.9 |
| Ph.D | 588 | 68.1 |
| Total | 864 | 100.0 |

Table 3 presents the distribution of respondents by educational qualification. The lecturers sampled were qualified. According to the result of the analysis, the least, 1.4% of the respondents had the least qualification, Bachelor's Degree while, majority, 68.1% of the respondents had Ph.D. Indeed, it is mandatory for every lecturer in Nigerian Universities to possess Ph.D.

Table 4: Types of Serials Managed in Nigerian University Libraries

| Types | Yes | | No | |
|-------------|-----------|----------------|-----------|----------------|
| | Frequency | Percentage (%) | Frequency | Percentage (%) |
| Journal | 12 | 100.0 | 0 | 0.0 |
| Proceedings | 12 | 100.0 | 0 | 0.0 |
| Reports | 11 | 91.7 | 1 | 8.3 |
| Magazines | 12 | 100.0 | 0 | 0.0 |
| Newspapers | 12 | 100.0 | 0 | 0.0 |

Table 4 shows the distribution of the types of serials in Nigerian university libraries. The result shows that the entire twelve university libraries have journals, proceedings, magazines and newspapers in stock. On the other hand, 11 universities claimed to have annual reports while one university does not. In fact, some university libraries place their reports in reference section. This implies that the university libraries have different types of serials in stock for research activities. The finding conforms to that of Nwalo (2003) and Aina (2004) who reported that kinds of serials include journals, magazines, newspapers, newsletters, accessories, reports, proceedings and transactions of societies and others like abstracts and indexes.

Table 5: Impact of Serials Management in the Library on Access and Use of Serials

| Variable | N | Mean | S.D | R | PP | Remark |
|--------------------|-----|-------|-------|--------|-------|-----------------|
| Serials Management | 864 | 88.77 | 27.68 | 0.112* | 0.001 | Significant |
| Access to Serials | 864 | 29.94 | 5.57 | | | |
| Serials Management | 864 | 88.77 | 27.68 | -0.031 | 0.359 | Not Significant |
| Use of Serials | 864 | 60.63 | 11.51 | | | |

- Significant at P<0.01

Table 5 reveals significant correlation between serials management in the library and access to serials by university lecturers ($r = 0.112$, $P < 0.01$). In this case, serials management had influence on access to serials. This implies that good serials management practices in the university libraries improve access to serials by the university lecturers. Open access policy and staff attitude to users would aid access to serials in the libraries. On the other hand, the result also revealed a non-significant correlation between serials management and use of serials by the university lecturers ($r = -0.031$; $P > 0.01$). This implies that serials management in the university libraries had no influence on use of serials by the university lecturers. The library could influence the lecturers to use serials by providing adequate, relevant and current serials, facilities and services.

Table 6: Forms of serials accessed and used by lecturers in Nigerian Universities

| Forms | Yes | | No | |
|--------------------|-----------|------------|-----------|------------|
| | Frequency | Percentage | Frequency | Percentage |
| Print Serials | 861 | 99.7 | 3 | 0.3 |
| Microform Serials | 153 | 17.7 | 711 | 82.3 |
| Electronic serials | 638 | 73.8 | 226 | 26.2 |

Table 6 presents the distribution of forms of serials used by lecturers in Nigerian universities. The result showed that print and electronic serials were the major forms of serials used by lecturers in Nigerian universities with print serials being the more used. Majority, 82.3%, of lecturers indicated that they did not use microform serials probably due to their unpopularity in Nigeria. This implies that percentage of those who used electronic serials

was lesser than those who used print serials, maybe, due to paucity of Internet facilities in some of the universities whereas more print serials were at the disposal of the lecturers. Adebika (2007) reported that apart from the availability of serials in paper and electronic formats, serials can also assume the format of microforms. The finding, on the other hand, is contrary to results of Rogers (2001) and Dillon and Hahn (2002) researches conducted in the United States of America where users of electronic serials were more than users of print serials.

Table 7: Sources of Serials accessed and used by Lecturers in Nigeria Universities

| Sources | Yes | | No | |
|----------------------------------|-----------|------------|-----------|------------|
| | Frequency | Percentage | Frequency | Percentage |
| University Libraries | 842 | 97.5 | 22 | 2.5 |
| Other Libraries | 131 | 15.2 | 733 | 84.8 |
| Personal Subscription | 45 | 5.2 | 819 | 94.8 |
| Colleagues | 64 | 7.4 | 800 | 92.6 |
| The Internet Outside the Library | 639 | 74.0 | 225 | 26.0 |

Table 7 reveals that the university libraries and the Internet were the major sources of serials used by lecturers in Nigerian universities. The result shows that it was not only in the library that university lecturers sourced for serials used for research, they also used Internet outside the university libraries. Few of the lecturers sourced for serials through personal subscription while some of them relied on their colleagues. The implication of this is that if the university library fails to meet the research needs of lecturers, they look elsewhere for information. A study by Farrington (1997) claimed that using the journal literature, the individual researcher has to make trip to the library to locate bound volumes of serials containing the article or articles desired. The finding conforms with a survey by Smith (2003) on the use of serials by lecturers at the University of Georgia that 29% of the articles read were from print personal subscriptions, 25% from print library subscriptions, 10% from electronic personal subscriptions, 32% from electronic library subscriptions and 4% from others resources.

Table 8: Publications output of lecturers in Federal Universities in Nigeria within a Five-year Period (2007-2011)

| Categories of Publications Output | Yes | | No | |
|-----------------------------------|-----------|------------|-----------|------------|
| | Frequency | Percentage | Frequency | Percentage |
| Conference Proceedings | 588 | 68.1 | 276 | 31.9 |
| Chapters in books | 660 | 76.4 | 204 | 23.6 |
| Textbooks | 660 | 76.4 | 204 | 23.6 |
| Articles in Journals | 672 | 77.8 | 192 | 22.2 |
| Technical reports | 738 | 85.4 | 126 | 14.6 |
| Monographs | 744 | 86.1 | 120 | 13.9 |

Table 8 shows the distribution on the categories of publication output of lecturers in Nigerian universities within five-year period (2007-2011). The result reported that lecturers in Nigerian universities had publications output in six categories of publications. The result disclosed that Nigerian university lecturers had publications in conference proceedings, chapters in books, textbooks, articles in journals, technical reports and monographs. The implication of this is that lecturers in Nigerian universities accessed to and used serials to carry out research. Use of serials by lecturers in Nigerian universities had tremendous impact on their publications output. Indeed, every university lecturer is mandated to publish because publication output of every lecturer to a great extent determines his or her promotion based on the policy of 'publish or perish'. This suggests that if research needs of lecturers are met, their publications output would be improved. The report of the Visitation Committee on Uganda Public Universities (2007) cited in Owoeye and Oyebade (2009) disclosed that one of the primary functions of universities is to create and produce knowledge through research and to disseminate knowledge through publications especially in peer-reviewed books and articles in scholarly journals. The finding is in congruence with Shastree (2000) study to know the result of the research activities of lecturers at Technical

University of Demark. He identified six categories of research publications, namely dissertation, scientific monographs, articles in journals with referee system, other articles, proceedings from conference and reports.

Table 9: Summary of Regression Model and ANOVA of Joint Contribution of Management, Access and Use of Serials to Publication Output of Lecturers in Federal Universities in Nigeria

Model Summary

| Model | R | R Square | Adjusted R. Square | Std. Error of the Estimate | |
|--|-------------------|----------|--------------------|----------------------------|-------------------|
| 1 | .204 ^a | .042 | 0.38 | 7.45952 | |
| a. Predictors: (constant), Serials Management, Access to Serials, Use of Serials | | | | | |
| ANOVA ^b | | | | | |
| Model | Sum of Squares | Df | Mean Square | F | Significant |
| 1 Regression | 2082.872 | 3 | 694.291 | 12.477 | .000 ^a |
| Residual | 47854.266 | 860 | 55.644 | | |
| Total | 49937.138 | 863 | | | |

a. Predictors: (constant), serials management, Access to Serials, use of serials.

b. Dependent Variable: Publications Output

Table 9 reveals that serials management, access to and use of serials accounted for about 4% of the total variation in publication output of lecturers in Nigerian Universities. Nevertheless, the F-values of 12.48 whose probability close to 0% shows statistically that the overall model is significant. This means that, there was a significant contribution of serials management, access and use to publication output of the lecturers ($F_{(3, 860)} = 12.48$, $R = .204$, $R^2 = 0.04$). This indicates that lecturers in Nigerian universities found serials indispensable to research. Thus, increase in best serials management practices, access to and use of adequate, relevant and current serials would enhance publication output of lecturers in Nigerian universities.

Table 10: Summary of Regression Model for Relative Contribution of Management, Access and Use of Serials to Publication Output of Lecturers in Federal Universities in Nigeria

Coefficients^a

| Model | Unstandardised Coefficients | | Standardised Coefficients | T | Significant |
|--------------------|-----------------------------|----------------|---------------------------|--------|-------------|
| | B | Standard Error | Beta | | |
| 1 (Constant) | 17.147 | 2.070 | | 8.285 | .000 |
| Access to Serials | -.096 | .046 | -.071 | -2.000 | .036 |
| Use of Serials | -.026 | .022 | -.040 | -1.193 | .233 |
| Serials Management | .056 | .009 | .194 | 5.787 | .000 |

a. Dependent Variable: Publication Output

Table 10 shows that, access to serials had a significant negative contribution to publication output of lecturers in Nigerian universities ($\beta = -0.07$; $t = -2.000$; $p < 0.01$). Thus, the result suggests that an increase in access to inadequate, irrelevant and outdated serials by university lecturers could lead to significant decrease in publication output. The university lecturers would use serials if they are easily accessible.

On the other hand, serials management had a significant contribution to publication output of lecturers in Nigerian universities ($\beta = 0.194$; $t = 5.79$; $p < 0.01$). This suggests that adherence to best serials management in Nigerian university libraries would lead to increase in lecturers' publication output.

In the same vein, use of serials had in-significant negative contribution to publication output of lecturers in Nigerian universities ($\beta = -0.040$; $t = -1.19$; $p > 0.01$). Thus, the result suggests that an increase in the use of irrelevant, outdated and inadequate serials could lead to a significant decrease in publication output.

University lecturers need serials as primary sources of information to enhance their research activities and publication output. Inadequacy of and limited access to serials might affect their use. Lecturers cannot do a good research without using adequate, relevant and current serials.

Conclusion and Recommendations

The findings showed that the Nigerian university libraries were equipped with serials, services, facilities and personnel to manage them but not adequate. Lecturers in Nigerian universities had access to and used available print and electronic serials in the libraries but also relied on other sources and resources probably due to inadequacy of serials and facilities in the libraries. Improper management of serials and paucity of Internet facilities in the university libraries affected access to and use of serials by lecturers.

The result revealed that the lecturers had different categories of publications to their credit as a result of access to and use of serials. A good serials management practice in the university libraries improves access to and use of serials. The influence of serials management on access and use as revealed by the results, management on access ($r = 0.112$; $P < 0.01$) was significant while management on use ($r = -0.031$; $P > 0.01$) was not significant. All the independent variables (management, access and use) when combined had significant influence on the dependent variable (publications output) ($F_{(3, 860)} = 12.48$, $R = 204$, $R^2 = 0.04$). The library could influence lecturers to use serials by providing adequate, relevant and current serials as well as making them available and easily accessible.

Meanwhile, there is need for government to provide adequate fund for the universities so as to be able to provide adequate, relevant, current serials, services and facilities in the libraries in order to boost management, access to and use of serials as well as research grant for lecturers to aid their research and publication output.

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