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Awareness and Use of Self-Archiving Options among Librarians in Public University Libraries in Bayelsa State, Nigeria

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ABSTRACT

The study examined the awareness and use of self-archiving options among librarians in public university libraries in Bayelsa State, Nigeria. Specifically, the study identified the level of awareness, means of becoming aware of, extent of use of self-archiving options and factors motivating the use of self-archiving options by the librarians. The study adopted descriptive survey research design. The population of the study consisted of twenty-seven librarians of public university librarians in Bayelsa State, Nigeria. This figure comprised eleven librarians of Federal University Otuoke Library and sixteen librarians of Niger Delta University Library. An online questionnaire was used for data collection. The instrument was validated by two experts in the Department of Library and Information Science in Niger Delta University, Bayelsa State. The researcher distributed twenty-seven soft copies of the draft of the validated questionnaire to the librarians via social media platforms such as Federal University Otuoke Library Whatsapp Group, Niger Delta University Library Whatsapp Group, Bayelsa State Chapter of the Nigerian Library Association Whatsapp Group and Personal Whatsapp Accounts. Out of the twenty-seven questionnaires distributed, twenty-five questionnaires were properly completed, returned and found usable for data analysis. This produced a response rate of 92.59%. The data collected was analyzed using weighted mean and standard deviation. Findings revealed that the level of awareness of self-archiving options by the librarians was low. It also showed that the librarians gained awareness of self-archiving options by doing personal research, conference/seminar/workshop attendance, interaction with professional colleagues and reading professional literature. Moreso, it indicated that the extent to which the librarians used self-archiving options was low. Lastly, it revealed that the desire to enjoy wider research visibility of research works and personal recognition were the factors that motivated the use of self-archiving options by the librarians. The study recommended that the librarians should make conscious efforts to participate in institutional repository affairs, attend conferences/seminars/workshops, make more use of online publishing to increase their awareness of self-archiving options; the librarians should cultivate the habit of exploring the use of self-archiving options like Kudos, Mendeley.com etc. to draw global attention to their research papers and increase their use of self-archiving options.

Keywords: awareness, use, self-archiving options, librarians, public university libraries, Bayelsa State, Nigeria

INTRODUCTION

In contemporary times, there has been a growing interest among scholars to make their research findings or ideas globally known. Academics in all fields or disciplines desire to be recognized for their research. They are becoming more interested in research feedback, which helps them to know their strengths and weaknesses. Scholarly communication is the term which defines the process of creating public awareness about one's research findings or ideas. Scholarly communication has been seen as the process by which research outputs are made available to the general public. The traditional method of communicating scholarly outputs involves five major components, namely, registration, certification, awareness, archiving and rewarding (Jones, 2006). Archiving is the process of keeping old but useful records or information in a secondary storage medium, which could be physical or electronic or online. In this digital age, researchers or academics have devised online storage mediums for their research findings or ideas where they are made globally available through a process called self-archiving.

Self-archiving can be defined as the process of storing and disseminating research papers or ideas through online platforms. Self-archiving has been seen as a way of making full-text articles available to the public for free. This means that authors can make their research papers available and readers can access them free from cost (Bradley, 2017). It is a process whereby an author deposits a free copy of an electronic document online (pre-print, post-print, theses, book chapters) to one's own institution repository or open archive for the purpose of maximizing its accessibility, usage and citation impact (Harnad, 2004). It is a model of scholarly publishing whereby researchers and academics make pre-print or post print copies of their research work or publications available in open access digital repositories or archives (Emojorho et al., 2012). Self-archiving is defined as the process of storing the scientific research outputs in researchers' own web pages/websites, organizational websites or institutional repositories (Erturk & Sengul, 2012). Self-archiving is making one's academic research available on open access sites (Baro et al., 2018). The history of self-archiving dates back to the year 1994 when Steve Harnad recommended online posting in his subversive proposal. The proposal suggested making one's research findings or ideas freely available to everyone in the world, particularly on the internet (Suber, 2012). Self-archiving is an online activity and it is mainly executed through online platforms.

Several online platforms enable self-archiving of one's research findings or ideas. It has been noted that self-archiving in institutional repositories, subject repositories or personal websites has emerged as a major means of making scholarly outputs available (M'kulama et al., 2020). Many academic publishers have been promoting the practice of self-archiving by researchers or academics. Poynder (2010) reported that over 90% of scholarly journal publishers in all disciplines permit some kinds of self-archiving. According to Covey (2013), most publishers with self-archiving policies in the SHERPA ROMEO database allow authors to deposit their articles in a repository or post them to a website. The policy of many publishers allows the self-archiving of different versions of a research paper, including the version before peer review, called the "pre-print" and the version that has been peer reviewed and accepted for publication, called the "post-print" (Okeji et al., 2018). With this policy, researchers can upload their pre or post-print version of their paper into self-archiving platforms such as kudos, ResearchGate, Mendeley.com, academia.edu etc (Baro et al., 2018). Globally, librarians in

tertiary institutions such as colleges of education, polytechnics and universities seem to take increasing interest in self-archiving.

The practice of self-archiving is not alien to librarians in Africa. According to Fullard (2007), librarians, particularly those working in academic libraries in Africa are alive to the potential for open access publishing to unlock content that previously has been barred to users. However, awareness and adoption of self-archiving has often varied between countries and institutions (M'kulama et al. 2020).

Statement of the Problem

Having adequate awareness of and maximizing the use of self-archiving options can greatly improve the visibility of scholarly works of academics, including librarians in university libraries. In addition, it can boost the recognition and prestige of academics as well as their institutions. Awareness of self-archiving options is important because it enables academics to take advantage of self-archiving. However, preliminary observation suggests that some librarians in public university libraries in Bayelsa State, Nigeria, are yet to adopt self-archiving to make their publications and ideas globally visible. This could be because they are not aware of self-archiving options. If this trend is not checked, these librarians may not avail themselves of the opportunities offered by self-archiving options. This may result in low visibility of their research papers and ideas. The study, therefore, investigated the awareness and use of self-archiving options among librarians in public university libraries in Bayelsa State, Nigeria.

Purpose of the Study

The thrust of this research was to examine the awareness and use of self-archiving options among librarians in public university libraries in Bayelsa State, Nigeria. Specifically, the study sought to:

1. Identify the level of awareness of self-archiving options by librarians in public university libraries in Bayelsa State, Nigeria.
2. Assess the means of becoming aware of self-archiving options by librarians in public university libraries in Bayelsa State, Nigeria.
3. Find out the extent of use of self-archiving options by librarians in public university libraries in Bayelsa State, Nigeria.
4. Evaluate the factors that motivate the use of self-archiving options by librarians in public university libraries in Bayelsa State, Nigeria.

Research Questions

The following research questions were raised to guide the study:

1. What is the level of awareness of self-archiving options by librarians in public university libraries in Bayelsa State, Nigeria?
2. What are the means of becoming aware of self-archiving options by librarians in public university libraries in Bayelsa State, Nigeria?
3. What is the extent of use of self-archiving options by librarians in public university libraries in Bayelsa State, Nigeria?

4. What factors motivate the use of self-archiving options by librarians in public university libraries in Bayelsa State, Nigeria?

REVIEW OF RELATED LITERATURE

Librarians' Level of Awareness of Self-Archiving Options

In reviewing literature on librarians' level of awareness of self-archiving options, it is necessary to discuss each of the self-archiving options commonly used by scholars or researchers around the world. The popular self-archiving options include Kudos, Academia.com, ResearchGate, Mendeley.com, institutional repository and personal websites. These are explained as follows:

Kudos: This self-archiving option was designed by Melinda Kenneway, Charlie Rapple and David Sommer in 2012 to help authors overcome scholarly communication obstacles by enabling them to use social media to reach the online community with their research works. The objective of Kudos is to enhance the visibility, reach and impact of published scholarly works. Kudos achieves its purpose by collaborating with publishers, universities, corporations, funders, metrics-providers and other intermediaries. Consequently, it facilitates strong partnerships between researchers and their affiliated institutions and other service-providers (M'kulama et al., 2020).

Academia.com: Academic.edu is another self-archiving option or platform which was launched in 2008. It has a current global user population of 47 million users. Presently, the platform contains more than 11 million uploaded texts. It is used for hosting academic papers as well as enabling the sharing of publications among its users, who create profiles and list their publications for the view of other scholars or researchers. A user's profile contains such usage information as views and citations as well details about followers/following activities (M'kulama et al., 2020).

ResearchGate: ResearchGate is a self-archiving option developed in 2008 to facilitate a link among researchers and scientists by offering them a forum to disseminate research publications, discuss and collaborate. It requires a user to register with their institutional email address to join the ResearchGate community. The author's publications are linked to his/her profile and statistics of use such as views, reads and citations are provided on the platform. It is one of the fastest growing self-archiving platforms (M'kulama et al., 2020). According to Baro et al. (2018), ResearchGate has over 14 million users, with more than 150 million publications and slightly over 40 million monthly visits. Users are able to share book chapters, conference presentations, research paper pre-prints and post-prints and many other project materials.

Mendeley.com: Mendeley.com is a self-archiving platform which was founded in 2007 and launched in 2008. The name "Mendeley" originated from the names of biologist 'Gregor Mendel' and the chemist "Dmitri Mendeleyev". The platform was purchased by Elsevier in 2013 and is now managed by Elsevier. The purpose of the platform is to enable institutions and professionals improve their healthcare, open science and performance for the benefit of humanity. Mendeley.com is a free referencing and social networking site for academics and

researchers. Its features also enable researchers organize their research publications and collaborate with others researchers (M'kulama et al., 2020). According to Baro et al. (2018), Mendely.com places more emphasis on research publications and less importance on authors. Mendely.com has grown and its impact on visibility and readership is high.

Institutional Repository: An institutional repository can be defined as a warehouse of all the information items generated by an institution. According to Schöpfel et al. (2012), an institutional repository is a container or storehouse for all kinds of information resources produced by faculty, staff and students. It contains such information resources as electronic theses and dissertations, reports, conference proceedings, images, learning objects, pre-print and post-print journal articles, datasets, presentations, posters, etc. The purpose of an institutional repository is to enhance the availability and visibility of all kinds of information resources generated by an institution (Friend, 2011).

Personal Websites: These are websites designed by an individual, an organization or institution or one of its departments for personal use. Personal websites are used for posting or uploading one's scholarly publications and other personal data and information. Studies have identified personal or departmental websites as another potential forum for self-archiving (Andrew, 2003; Antelman, 2006; Swan & Brown, 2005).

In terms of academics' level of awareness of self-archiving options, Okeji et al. (2018) stated that many researchers in universities, mostly in the developing countries, are not aware of Open Access (OA) platforms. Referring to research initiatives in the African scenario, Baro et al. (2018) observe that, many academics are not aware of the benefits of or how to use informal networks to distribute their research. In Nigeria, Musa et al. (2016) note that deposition of research output by academics in federal universities in North-Western Nigeria have been given little or no attention by most academics including librarians. They further noted that the content of Ahmadu Bello University constitutes mainly thesis and dissertation with few seminar papers and conference proceeding, despite the high caliber of academic and other professional staff within the institution.

Empirical findings have also revealed the level of academics' awareness of self-archiving options. A study by Swan and Brown (2005) established that subject repositories or archives were the most known types to the respondents who claimed to be aware of open access repositories than open access journals. Another survey by Van Noorden (2014) found that ResearchGate was much better known to researchers than Academia.edu. Bosah et al. (2017) found that the academic librarians in African universities know about IRs, ResearchGate and academia.edu. The same year, Baro and Eze (2017) found that almost half of the responding academic librarians in Nigeria they did not know about the institutional repository in their institutions. In a subsequent study, Baro et al. (2018) found that the academic librarians in 52 universities in Africa were aware of ResearchGate, institutional repository, personal website/server, kudos and Mendeley. Two years later, M'kulama et al. (2020) reported that Library and Information Science (LIS) professionals in the LIS department at the University of Zambia were aware and knowledgeable about self-archiving. However, Chilimo (2016) found low awareness levels about institutional repositories and self-archiving among researchers in public universities in Kenya.

Librarians' Means of Becoming Aware of Self-Archiving Options

Academics, including librarians in university libraries, become aware of self-archiving options through several ways. Allan (2005) stated that the most common ways in which open access-related terms have been discovered include searching the Internet, participation in debates or via colleagues in their disciplines.

Empirical outcomes have revealed the various means by which academics gain awareness of self-archiving options. For example, findings from a study by Pelizzari (2003) indicated that colleagues, professional literature and libraries have been the main sources of learning about open access to those who claimed to be aware of it. In their study, Swan and Brown (2004) found that self-archiving by their peers, open access debate, institution or library and established subject-based archives promotions were the main means through which researchers were exposed to open access publishing. In a subsequent study, Sanchez-Tarrago and Fernandez-Molina (2009) found that 40% of the respondents were informed about open access through colleagues and 37% for professional literature in their fields of research. In concurrence with the above findings, other studies (Kim, 2006; Moller, 2007) have identified university/library websites, contact from institutional repository staff member, publicity through campus newspapers, results of a web search engine/Internet, direct publicity from publishers, word of mouth from associates and participation in an initial meeting of institutional repository as ways through awareness of open access publishing was gained by academics. Findings from a study by M'kulama et al. (2020) revealed that the sources of awareness and knowledge about self-archiving among Library and Information Science (LIS) professionals in LIS department at the University of Zambia include personal research, seminars/workshops, interaction with colleagues and awareness campaigns by the university library.

Librarians' Extent of Use of Self-Archiving Options

Academics, including librarians, use self-archiving options to various degrees and the extent to which they use such options may differ from individual to individual. Xia et al. (2011) argued that librarians have not noticeably expanded their engagement with self-archiving. Jain (2011) observed that IRs have been increasingly recognized as a vital tool for scholarly communication and an important source of institutional visibility and a viable source of institutional knowledge management. In Nigeria, Musa et al. (2016) observed that deposition of research output by academics in federal universities in Northwestern Nigeria have been given little or no attention by most academics, including librarians. They further noted that the content of Ahmadu Bello University comprises mainly theses and dissertations with few seminar papers and conference proceeding, despite the high caliber of academic and other professional staff within the institution.

Empirical findings have hinted on the academics' extent of use of self-archiving options. Bosah et al. (2017) reported that academic librarians in African universities use institutional repositories and ResearchGate to self-archive their publications. Matthews (2016) who conducted a survey from 2015-2016 and found that ResearchGate was more than twice as popular as Academia.edu (61 per cent vs. 28 per cent) and that ResearchGate was used particularly by researchers in the sciences. Bhardwaj (2017) compared four popular academic social networking sites (ASNSs), namely, ResearchGate, Academia.edu, Mendeley and Zotero in terms of features and services. The study revealed that ResearchGate scored the highest with 61.1 per cent, and was ranked "above average", followed by Academia.edu with 48.0 per cent

and Mendeley with 43.9 per cent and ranked “average”. Baro and Eze (2017) studied academic librarians’ perceptions of open access publishing in Nigeria. The researchers found that only a few of the respondents used institutional repositories and ResearchGate to self-archive their publications. The researchers further found that self-archiving options such as academia.edu and kudos were not popular among the academic librarians. In examining awareness and use of self-archiving options among academic librarians in Nigerian universities, using Survey Monkey software to collect data from 394 academic librarians in Nigerian Universities, Okeji et al. (2018) found that the most popularly used self-archiving options by academic librarians in Nigerian universities include ResearchGate, institutional repository and Academia.edu, whereas, kudos, Mendeley.com and personal websites/servers were not popularly used by the librarians. In investigating Knowledge and use of self-archiving options among academic librarians in African universities, using Survey Monkey software to collect data from 455 academic librarians working in 52 universities in Africa., Baro et al. (2018) found that the academic librarians in Africa upload papers to self-archiving platforms such as institutional repository, ResearchGate, academia.edu and personal websites/ servers. Recent findings of a research by M’kulama et al. (2020) revealed that self-archiving is not widely practiced by Library and Information Science lecturers at the University of Zambia.

Factors Motivating Librarians’ Use of Self-Archiving Options

A number of factors inspire academics including librarians to use self-archiving options when engaging in scholarly communication. While examining “deposition mandate to self-archiving practices among academic librarians in the Northwestern Nigeria: benefits and challenges”, Musa et al. (2016) discovered that the main factors that motivate academic librarians in Northwestern Nigeria to self-archive their publications was to benefit from varying impact of open access, which includes, wider research visibility, increased citation rate and research collaboration. In examining awareness and use of self-archiving options among academic librarians in Nigerian universities, using Survey Monkey software to collect data from 394 academic librarians in Nigerian Universities, Okeji et al. (2018) found that increased exposure of previously published work, wider dissemination of academic research and enhanced institutional visibility were among the critical factors that motivate academic librarians to contribute their scholarly output to self-archiving options.

METHODS

The study adopted descriptive survey research design. The study was carried out in Bayelsa State, Nigeria. The population of the study consisted of twenty-seven librarians of public university librarians in Bayelsa State, Nigeria. This figure comprised eleven librarians of Federal University Otuoke Library and sixteen librarians of Niger Delta University Library. The instrument for data collection was a self-designed online questionnaire titled “Librarians’ Awareness and Use of Self-Archiving Questionnaire (LAUSQ)”. The questionnaire consisted of two parts: Part A and B. Part A covered information on the background of the respondents while Part B had four sections with Section A dealing with “Librarians’ Level of Awareness of Self-Archiving Options”, Section B with “Librarians’ Means of Becoming Aware of Self-Archiving Options”, Section C with “Librarians’ Extent of Use of Self-Archiving Options” and Section D with “Factors Motivating Librarians’ Use of Self-Archiving Options”. Section A adopted two-

point response category of Aware (1) and Not Aware (0). Section B used a two-point response category of Agree (1) and Disagree (0). Section C used a four-point response category of Very Great Extent (4), Great Extent (3), Low Extent (2) and Very Low Extent (1) while Section D adopted a two-point response category of Agree (1) and Disagree (0). The instrument was validated by two experts in the Department of Library and Information Science in Niger Delta University, Bayelsa State, Nigeria. Reliability test was not conducted on the instrument based on the opinion of Nworgu (2015) that once a test is valid, it tends to be reliable.

The researcher distributed twenty-seven soft copies of the draft of the validated questionnaire to the librarians via social media platforms such as Federal University Otuoke Library Whatsapp Group, Niger Delta University Library Whatsapp Group, Bayelsa State Chapter of the Nigerian Library Association Whatsapp Group and Personal Whatsapp Accounts of the librarians. One week was used for data collection. Out of the twenty-seven questionnaires distributed, twenty-five questionnaires were properly completed, returned and found usable for data analysis. This produced a response rate of 92.59%.

The data collected was analyzed using weighted mean and standard deviation. The decision rule followed in interpretation of results from data analysis in respect of Section A of Part B of the instrument was that any questionnaire item with a weighted mean equal to 0.50 and above was regarded as Aware while an item with a weighted mean less than 0.50 was considered as Not Aware. For Section B, an item with a weighted mean equivalent to 0.50 and above was seen as Agreed while an item with a mean less than 0.50 was seen as Disagreed. For Section C, items with means which fell into the range of real limits of 3.50-4.49, 2.50-3.49, 1.50-2.49 and 0.50-1.49 were regarded as Very Great Extent, Great Extent, Low Extent and Very Low Extent respectively. For Section D, an item whose mean was equal to 0.50 and above was regarded as a Motivating Factor while an item with a mean less than 0.50 was viewed as Not a Motivating Factor.

RESULTS

This section presents the results of data analysis in tables in line with the research questions earlier formulated to guide the study.

Research Question 1: What is the level of awareness of self-archiving options by librarians in public university libraries in Bayelsa State, Nigeria?

Table 1: Mean ratings of responses on the level of awareness of self-archiving options by librarians in public university libraries in Bayelsa State, Nigeria

S/N	\bar{X}	SD	Remarks
Self-archiving Options			
1. Kudos	0.11	0.01	Not Aware
2. Academia.com	0.56	0.04	Aware
3. ResearchGate	0.78	0.21	Aware
4. Mendeley.com	0.32	0.09	Not Aware
5. institutional repository	0.71	0.10	Aware
6. personal websites	0.45	0.05	Not Aware
7. university library websites	0.47	0.07	Not Aware
Grand Mean and Standard Deviation	0.49	0.08	Not Aware

Table 1 indicates that Academia.com, ResearchGate and institutional repository are the self-archiving options which librarians in public university libraries in Bayelsa State are aware of, whereas, they are not aware of such options as Kudos, Mendeley.com, personal websites and university library websites. The grand mean of 0.49 is less than the criterion point of 0.50, suggesting that the level of awareness of self-archiving options by librarians in public university libraries in Bayelsa State, Nigeria, is low.

Research Question 2: What are the means of becoming aware of self-archiving options by librarians in public university libraries in Bayelsa State, Nigeria?

Table 2: Mean ratings of responses on the means of becoming aware of self-archiving options by librarians in public university libraries in Bayelsa State, Nigeria?

S/N	\bar{X}	SD	Remarks
1. engaging in personal research	0.57	0.09	Agreed
2. conference/seminar/workshop attendance	0.54	0.04	Agreed
3. interaction with professional colleagues	0.55	0.05	Agreed
4. reading professional literature	0.73	0.32	Agreed
5. use of libraries	0.45	0.11	Disagreed
6. archives and print media publicity	0.32	0.02	Disagreed
7. publishers' publicity	0.35	0.07	Disagreed
8. use of /engaging in institutional repository affairs	0.43	0.05	Disagreed
Grand Mean and Standard Deviation	0.50	0.09	Agreed

Table 2 shows that the means of becoming aware of self-archiving options by librarians in public university libraries in Bayelsa State are engaging in personal research, conference/seminar/workshop attendance, interaction with professional colleagues and reading professional literature. On the other hand, the librarians do not become aware of the self-archiving through such means as use of libraries, archives and print media publicity, publishers' publicity and use of /engaging in institutional repository affairs.

Research Question 3: What is the extent of use of self-archiving options by librarians in public university libraries in Bayelsa State, Nigeria?

Table 3: Mean ratings of responses the extent of use of self-archiving options by librarians in public university libraries in Bayelsa State, Nigeria

S/N	Self-archiving Options	\bar{X}	SD	Remarks
1.	Kudos	0.52	0.05	VLE
2.	Academia.com	3.31	1.09	GE
3.	ResearchGate	4.01	1.20	VGE
4.	Mendeley.com	1.45	0.04	VLE
5.	institutional repository	1.47	1.02	VLE
6.	personal websites	0.54	0.08	VLE
7.	university library websites	1.35	0.18	VLE
	Grand Mean and Standard Deviation	1.81	0.52	LE

Key: VGE (Very Great Extent), GE (Great Extent), LE (Low Extent) and VLE (Very Low Extent)

Table 3 indicates that ResearchGate is used to a very great extent, Academia.com is used to a great extent, whereas, Kudos, Mendeley.com, institutional repository, personal websites and university library websites are used to a very low extent. The cluster mean of 1.81 falls into range of real limits of 0.50-1.49, which is classified as Low Extent. Consequently, the extent of use of self-archiving options by librarians in public university libraries in Bayelsa State, Nigeria, is low.

Research Question 4: What factors motivate the use of self-archiving options by librarians in public university libraries in Bayelsa State, Nigeria?

Table 4: Mean ratings of responses on the factors motivating the use of self-archiving options by librarians in public university libraries in Bayelsa State, Nigeria

S/N	\bar{X}	SD	Remarks
1. wider research visibility	0.78	0.12	Agreed
2. increased citation rate	0.43	0.07	Disagreed
3. personal recognition	0.69	0.11	Agreed
4. research collaboration	0.45	0.15	Disagreed
5. enhanced institutional visibility	0.46	0.04	Disagreed
Grand Mean and Standard Deviation	0.56	0.10	Agreed

Table 4 reveals that wider research visibility and personal recognition are the factors that motivate the use of self-archiving options by librarians in public university libraries in Bayelsa State, Nigeria. However, increased citation rate, research collaboration and enhanced institutional visibility do not motivate the librarians to use self-archiving options.

DISCUSSION

The study shows that the level of awareness of self-archiving options by librarians in public university libraries in Bayelsa State, Nigeria, is low. This is consistent with Chilimo (2016) who finds low awareness levels about institutional repositories and self-archiving among researchers in public universities in Kenya. It is also in line with Okeji et al. (2018) who observe that many researchers in universities, mostly in the developing countries, are not aware of Open Access platforms.

The study also indicates that the librarians become aware of self-archiving options by doing personal research, attending conference/seminar/workshop, interacting with professional colleagues and reading professional literature. The finding agrees with that of M'kulama et al. (2020) which reveals that the sources of awareness and knowledge about self-archiving among Library and Information Science (LIS) professionals in LIS department at the University of Zambia are personal research, seminars/workshops, interaction with colleagues and awareness campaigns by the university library. It is also in consonance with those of Sanchez-Tarrago and Fernandez-Molina (2009) which indicate that 40% of the respondents in their study are informed about open access through colleagues and 37% for professional literature in their fields of research.

The research further reveals that the extent of use of self-archiving options by the librarians is low. This is in agreement with Xia et al. (2011) who maintains that librarians have not noticeably expanded their engagement with self-archiving. The result also agrees with that of

Baro and Eze (2017) which reveals that only a few of the respondents in their study used institutional repositories and ResearchGate to self-archive their publications and that academia.edu and kudos are not popular among the librarians. The outcome further tallies with that of a research by M'kulama et al. (2020) which indicates that self-archiving is not widely practiced by Library and Information Science lecturers at the University of Zambia.

Finally, the study shows that the desire to enjoy wider research visibility and personal recognition are the motivators for the use of self-archiving options by the librarians. The finding is in line with that of Musa et al. (2016) which suggests that the core motivators for the use of self-archiving options by academic librarians in Northwestern Nigeria is benefit from, among others, wider research visibility, increased citation rate and research collaboration. However, the present finding does not recognize increased citation rate as one of the driving forces behind the use of self-archiving options by the librarians in this research. The result is also in agreement with that of Okeji et al. (2018) which identifies increased exposure of previously-published work, wider dissemination of academic research and enhanced institutional visibility were among the critical factors that motivate academic librarians to contribute their scholarly output to self-archiving options. However, the finding fails to confirm enhanced institutional visibility as one the driving forces behind the employment of self-archiving options by the librarians in the present study.

CONCLUSION

The study investigated the awareness and use of self-archiving options among librarians in public university libraries in Bayelsa State, Nigeria. The study has shown that the level of awareness of self-archiving options by librarians in public university libraries in Bayelsa State, Nigeria, is low. The investigation has also revealed that the librarians gain awareness of self-archiving options by doing personal research, conference/seminar/workshop attendance, interaction with professional colleagues and reading professional literature. Furthermore, the research has indicated that the extent to which librarians in public university libraries in Bayelsa State, Nigeria, use self-archiving options is low. Lastly, it has been revealed that the desire to enjoy wider research visibility of research works and personal recognition are the driving forces behind the use of self-archiving options by the librarians.

RECOMMENDATIONS

In the light of the findings of the study, the following recommendations were made:

1. Librarians should make conscious efforts to participate in institutional repository affairs, attend conferences/seminars/workshops, make more use of online publishing to increase their awareness of self-archiving options.
2. Librarians in public university libraries should cultivate the habit of exploring the use of self-archiving options like Kudos, Mendeley.com etc. to draw global attention to their research papers and increase their use of self-archiving options.

REFERENCES

- Allan, J. (2005). Interdisciplinary differences in attitudes towards deposit in institutional repositories. (Unpublished. Masters' dissertation). Manchester Metropolitan University
- Andrew, T. (2003). *Trends in self-posting of research material online by academic staff*. **Error! Hyperlink reference not valid.** Antelman, K. (2006). Self-archiving practice and the influence of publisher policies in the social sciences. *Learned Publishing*, 19(2), 85-95.
- Baro, E. E. & Eze, M. E. (2017). Perceptions, preferences of scholarly publishing in open access routes: A survey of academic librarians in Nigeria. *Information and Learning Science*, 118 (3/4), 152-169
- Bosah, E. G., Okeji, C. C. & Baro, E. E. (2017). Perceptions, preferences of scholarly publishing in open access journals: A survey of academic librarians in Africa. *Digital Library Perspectives*, 33 (4), 378-394.
- Baro, E. E., Tralagba, E. C., & Ebiagbe, E. J. (2018). Knowledge and use of self-archiving options among academic librarians working in universities in Africa. *Information and Learning Science*, 119 (3/4) 145-147. <https://doi.org/10.1108/ILS-01-2018-0003>
- Bradley, D. (2017). *Researchgate launches self-archiving repository–The medical*. <http://medicalfuturist.com/researchgate-launches-selfarchiving-repository/>
- Chilimo, W. (2016). Institutional repositories: Awareness and self-archiving practices of academic researchers in selected public universities in Kenya. *4th CODESRIA Conference on Electronic Publishing* held in Dakar, Senegal, 2016. **Error! Hyperlink reference not valid.**
- Emojorho, D., Iwighregweta, O., & Onoriode, K. O. (2012). Awareness of open access scholarly publication among lecturers in university of Benin, Benin City in Edo State, Nigeria. *Journal of Research in Education and Society*, 3, (1), 3
- Erturk, K. & Sengul, G. (2012). Self archiving in Atılım University. In S. Kurbanoglu, U. Erdogan, A. P. Tonta, & N. Ucak (Eds.). *E-Science and Information Management*. Springer.
- Friend, F. (2011). *Open access business models for research funders and universities*. (Report). Knowledge Exchange. **Error! Hyperlink reference not valid.**
- Fullard, A. (2007). South-African responses to open access publishing: A survey of the research community. *South African Journal of Library and Information Science*, 73 (1), 40-51.
- Harnad, S., Brody, T., ValliÃˆres, F., Carr, L., Hitchcock, S., Gingras, Y., . . . & Hilf, E. R. (2004). The access/impact problem and the green and gold roads to open access. *Serials review*, 30(4), 310-314.
- Kim, M. (2007). The Creative commons and copyright protection in the digital era: Uses of creative commons licenses. *Journal of computer-mediated communication*, 13(1), 33-34. <http://jcmc.indiana.edu/vol13/issue1/kim.html>
- Matthews, D. (2016). Do academic social networks share academics' interests?. *Times Higher Education*. www.timeshighereducation.com/features/do-academic-social-networks-share-academics-interests
- M'kulama, A. C. M., Bwalya, T., & Lubinga, H. (2020). Self-archiving practices of LIS professionals at the University of Zambia (UNZA), *Zambia Journal of Library and Information Science*, 4 (1), 38-63

- Moller, T. (2006). Open access in developing countries. *Frontiers in Neuroscience Magazine*. <http://frontierson.org/global-open-access> 3.2
- Musa, A. U., Kabir, S. M., & Dahiru, L. (2016). Deposition mandate to self-archiving practices among academic librarians in the Northwestern States of Nigeria: Benefit and challenges. *American International Journal of Research in Humanities, Arts and Social Sciences*, 38-39. <http://www.iasir.net>
- Nworgu, B. G. (2015). *Educational research: Basic issues and methodology*. (3rd Ed.). University Trust Publishers
- Okeji, C. C., Eze, M. E., & Chibueze, N. M. (2018). Awareness and use of self-archiving options among academic librarians in Nigerian universities. *Global Knowledge, Memory and Communication*, 68 (1/2), 2-12. DOI 10.1108/GKMC-12-2017-0109
- Pelizzari, E. (2003). Academic staff use, perception and expectations about open-access archives: A survey of social science sector at Brescia University. http://prints.rclis.org/archive/00000737/01/Academic_staff-perception_abot_arch
- Poynder, R. (2010). A prophet whose time has come. *Information Today*, 27(2), 1.
- Sanchez-Tarrago, N., & Fernandez-Molina, J. C. (2009). The open access movement and Cuban health research work: An author survey. *Health Information and Libraries Journal*, 27 (1), 66-74. <http://www3.interscience.wiley.com/cgi-bin/fulltext/122647800/PDFSTART>
- Schöpfel, J., Prost, H., & Le Bescond, I. (2012). Open is not enough: Grey literature in institutional repositories. Paper presented at the *GL 13: Thirteenth International Conference on Grey Literature: The Grey Circuit. From Social Networking to Wealth Creation* held in Washington, 5-6 December, 2011.
- Suber, P. (2012). *Open access publishing: Self-archiving*. <http://www.libguides.lib.umanitoba.ca>
- Swan, A., & Brown, S. (2005). *Open access self-archiving: An author study*. http://www.jisc.ac.uk/uploaded_documents/JISCOAreport1.pdf
- Van Noorden, R. (2014). Online collaboration: Scientists and the social network. *Nature*, 512 (7513), 126-129.
- Xia, J., Gilchrist, S. B., Smith, N., Kingery, J. A., Radecki, J. R., Wilhelm, M. L., . . . & Mahn, A. J. (2012). A review of open access self-archiving mandate policies. *Portal: Libraries and the Academy*, 12(1), 85-102.