

Self-archiving practices of LIS professionals at the University of Zambia (UNZA)

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ABSTRACT

Open access (OA) has emerged as a major means of communicating scholarly outputs in the research community. It is considered an efficient alternative to the traditional scholarly communication method that is otherwise costly and less effective. Universities and research institutions have adopted OA and established institutional repositories (IRs) and encourage researchers to deposit or self-archive digital copies of the research outputs to allow for free access. This paper investigates self-archiving practices of researchers at the University of Zambia with a focus on Library and Information Science (LIS) professionals. The objectives of the study were: 1) to establish researcher's awareness and knowledge about self-archiving, 2) to determine researcher's perceptions about self-archiving, 3) to ascertain the platforms that researchers use for archiving, and 4) to find out the challenges that researchers face in practicing self-archiving. Qualitative research methods and an interview guide were used for data collection from a purposive sample of twelve (12) researchers from the LIS department. Findings revealed that LIS professionals are aware and knowledgeable about self-archiving and the sources of awareness and knowledge include personal research, seminars/workshops, interaction with colleagues and awareness campaigns by the University Library. Additionally, it was revealed that LIS lecturers consider self-archiving as an important channel for increasing their research visibility and impact. Despite being aware and knowledgeable, self-archiving is not as widely practiced as expected. The study identified lack of technical support, limited time as well as lack of skills as reasons for inadequate self-archiving. The paper recommends massive awareness campaigns about self-archiving focusing on the benefits and relevance of OA. There is also need for the university to adopt

strategies and policies that either mandate or encourage self-archiving of research publications.

Keywords: Open access; Institutional Repositories; Self-archiving; Scholarly communication; Library and Information Science (LIS); UNZA; Zambia

1. INTRODUCTION

Self-archiving in institutional repositories (IRs), subject repositories or personal websites has emerged as a major means of making scholarly outputs available and it is considered a form of open access (OA) publishing. The influence of self-archiving on the scholarly communication process cannot be overemphasised. Expectedly, its use has drawn massive attention in academia. Scholarly communication is simply “the method and route by which academic information is passed from author to reader, via intermediaries” including peer reviewers, publishers and libraries (Mukherjee, 2009:1). It is basically 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). These components are cardinal in ensuring that scholarly communication is authentic. However, the conventional mechanism of scholarly communication has over the years proven to be costly for the academic and research communities, particularly for academic libraries due to high subscription prices. This has made it difficult for academic and research institutions to afford access to the best publications leading to inequalities in research. As journal subscription fees increase, funding towards university libraries has been plummeting (Sanjeeva and Powdwal, 2017). Hence open access emerges as a major alternative for communicating scholarly outputs.

In essence, there are two ways in which scholarly outputs are made available to the general public. The first method is through subscription to journal publishers in order to have access to current journal publications. This is the traditional method that has long been used to communicate scholarly outputs. The second method is through the OA channel, where access to scholarly works is free for users, with the exception of internet access (Jones, 2006; UNESCO, 2015).

Open access has been defined differently by different authors. At the centre of the definitions is free access to knowledge without restrictions. Three major statements namely the Budapest Open Access Initiative in 2002, the 2003 Bethesda Statement on Open Access Publishing and

the 2003 Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities all gave definitions of the concept of OA. All three definitions highlight the need for free access to knowledge through the removal of price barriers and license restriction. Suber (2012:4) drawing from the definitions by the Berlin declaration, Budapest and Bethesda statements defined and summarised OA as literature which is “digital, online, free of charge and free of most copyright and licensing restrictions”. This paper adopts the Budapest initiative on OA definition which defines open access as:

“the literature that has free availability on the public internet permitting any user to read, download, copy, distribute, print, search, or link to the full text of these articles, crawl them for indexing, pass them as data to software, or use them for any other lawful purpose, without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. The only constraint on reproduction and distribution, and the only role for copyright in this domain, should be to give authors control over the integrity of their work and the right to be properly acknowledged and cited” (BOAI, 2002).

Two major types of OA publishing are identified in the literature and these are “Gold OA” also referred to as the “business model”. This type involves publishing scholarly articles in open access journals. According to Mizera (2013) the conditions of publishing articles using the Gold route are similar to the conditions in traditional publishing method “except that the published paper is freely available to the public”. Rather than charging the reader to access the article, the cost of access is borne by authors who pay article processing charges (APCs) so that access to scholarly outputs for readers is free. However, OA journal publishers have often waived APCs from authors and opt to provide a free service to both authors and readers thus rendering access to scholarly outputs free.

The other type of open access publishing is “Green OA” also called “self-archiving” in institutional repositories (Pinfield, 2009). Green OA differs from Gold OA in two main ways; the first difference is in the peer review process. With Gold open access peer review is done by the OA journals themselves while green OA (institutional repositories) does not necessarily involve performance of peer reviews even though a significant number of articles hosted in IRs will have been peer reviewed elsewhere. The second difference between gold and green OA is in rights ownership. OA journals obtain rights or permissions to use articles “directly from the right holders, while repositories as depositors to obtain the needed rights or permission on their own” (Suber, 2012:53).

The Green OA model employs different strategies to ensure efficient communication of scholarly works and these according to Jacobs (2002) are “legitimate, accepted and trusted communication mechanisms of scholarly” outputs. According to Suber (2012) self-archiving in IRs is the major means of the green open access strategy. Crow (2002:11) defines IRs “as digital archives of the intellectual products created by faculty research staff and students of an institution and accessible to end users both within and outside of the institution, with few if any barriers to access”. IRs are usually set up by institutions, subject communities or research funding groups to play “functions of electronic document preservation and publishing” and as a means for accessing and communicating different scholarly works, including “peer-reviewed journal articles, book chapters, theses, datasets, learning objects, or rich media files” (Pinfield, 2009:165).

Many countries including Zambia have joined the OA movement and as required have established or are in the process of establishing IRs to encourage self-archiving. The University of Zambia’s institutional repository was established in 2010 (Bimbe et al, 2017) with the help of the Netherlands government. Since establishment, UNZA management through the library have been encouraging members of staff to deposit their research publications in the institutional repository as a way of showcasing the research productivity of the University. Currently, the IR at the UNZA has over 8,000 digital assets including undergraduate and postgraduate theses and various pre-print and post-print research publications. Against this background, this paper is an assessment of the self-archiving practices of lecturers and researchers at the University of Zambia: a case of the LIS department in the School of Education.

1.1 Statement of the problem

IRs and the practice of self-archiving provide a flexible method of communicating scholarly outputs, controlling the digital assets of the university and as a vehicle for increasing the visibility and impact of the university’s research activities. Awareness campaigns to raise consciousness and knowledge about self-archiving have been carried out to encourage faculty members to utilise this form of scholarly communication to showcase their research. However, there exists a research gap regarding self-archiving practice among lecturers and researchers at UNZA and specifically self-archiving practices of LIS professionals in Zambia. It is not clear how researchers communicate their research outputs as it has not been documented. Little research has been conducted to document self-archiving practices of lecturers at the UNZA. As such, this research was envisaged to understand lecturer’s awareness and knowledge about self-archiving, self-archiving practices and challenges

encountered in self-archiving of research articles among UNZA lecturers in the LIS department.

1.2 Research objectives

The purpose of this study was to investigate self-archiving practices among University of Zambia lecturers among lecturers from the LIS department. In this regard, the study sought to:

- i. establish the awareness and knowledge levels of lecturers on self-archiving,
- ii. determine the perceptions of lecturers about self –archiving,
- iii. ascertain the platforms that researchers use for archiving,
- iv. establish challenges that lecturers face in practicing self-archiving.

1.3 Significance of the study

The study is significant from many fronts; firstly the study has potential to unveil and increase knowledge and awareness about self-archiving as a means of communicating scholarly outputs in Zambia. The information from the study will be of use to the University of Zambia and other tertiary institutions as the findings can be used in decision making and policy direction regarding research productivity through institutional repositories. In addition, understanding LIS researcher self-archiving practices adds an important dimension to the discussion on scholarly communication and open access as they are considered experts in the area of scholarly communication and publishing.

2. LITERATURE REVIEW

The literature in this area of study has been growing significantly. Therefore to ensure a focused review of the literature, themes including self-archiving, knowledge of self-archiving and open access, perceptions and challenges regarding self-archiving were targeted during literature search and review.

2.1 Self-archiving

Self-archiving also known as “green open access” is the act of the author depositing an electronic copy of his/her document on the internet to make it publicly and freely accessible (University of Manitoba, 2017). To self-archive according to Eprints (2012) “is to deposit a digital document in a publicly accessible Website, preferably an Open Archive Initiative (OAI)”. Depositing involves a simple web interface where the depositor copies and pastes in the “metadata” (date, author-name, title, journal-name, etc.) of the paper and then attaches the full-text document. The reason people self-archive is to make their work accessible to the general public. It helps researchers to build on what other authors have written and thus contributing to development in research.

The history of self-archiving dates back to the year 1994 when Steve Hernard proposed for online posting in his subversive proposal. Since then, a number of authors have made statements regarding self-archiving (Suber, 2012). In the beginning, OA publications were doubted for their authenticity and quality: established authors and researchers shied away from both contributing to and citing from OA literature. It was only when the Budapest Open Access Initiative in 2002 was established as the first global Open Access initiative that defined open access and added clarity did researchers begin to actively use it. This initiative created for public good made possible the world-wide electronic distribution of peer-reviewed journal literature and completely free and unrestricted access to it by all scientists, scholars, teachers, students and other curious minds (Budapest Open Access Initiative, 2002). Open access awareness and advocacy has spread across countries and continents. Several conferences and seminars deliberated on the issues and methods of OA and similar efforts continue to date. There are numerous initiatives being carried out to promote self-archiving in different countries and encourage authors to communicate scholarly outputs using this method (Pinfield, 2005).

2.2 Advantages of self-archiving to the academic and research community

Published research shows that OA publications serves the interests of various groups including authors, readers, teachers and students, libraries, universities, journal publishers, funding agencies, governments and the public in general. According to Eysenbach (2006) self-archiving has the potential to accelerate recognition and dissemination of research findings. This is because OA publishing leads to increased readership and access of freely available articles. In a study of self-archiving economics, Bergstrom (2007) discovered that self-archiving by authors is much more prevalent for the most cited journals than less-cited journals. Mounce (2015) adds that with open access, research papers are fully available to all, thus maximizing discoverability of the published content and opening them up to the full benefits of modern technology such as text and data mining. Giarlo (2005) agrees to the fact that OA provides an avenue to connect with global society more easily and researchers can publish without printing costs.

According to Willinsky (2010) OA places the rich and the poor on an equal status. To the author, OA gives a worldwide audience larger than that of any subscription-based journal. To the reader, open access ensures barrier free access to the latest literature and research findings from around the globe. Suber (2012) commented that OA gives the work of journal publishers more visibility, discoverability, easy retrieval and usefulness. In addition, OA's significant benefit is in increasing the return on investment in research for research funding

organisations thus making the results of the funded research widely available and useful (Suber, 2012).

The advantage of open access and self-archiving to libraries and universities is that it solves the pricing and permission crisis for scholarly journals. This helps users find the information they need regardless of the budget-enforced limits on the library's own collection. To the society, OA incorporates local research into all interoperable networks of global knowledge increasing the impact of local research, providing new contacts and research partnerships from authors (Suber, 2010). It is clear that the advantages of OA to academic research and the community are numerous and serve as an effective vehicle to information exchange.

The advantages of a researcher making their work freely available to the public are bountiful. Self-archiving brings about great opportunities for the researcher and exposes the researcher to the global academic and research communities. Some of the widely cited benefits include, increasing the visibility, influence and potential benefits of their research. It helps redress global inequality of access to scholarship by dismantling cost barriers to research dissemination (Success, 2013). And it returns research results more swiftly and readily to the public who provide much of the funding for scholarly work. Cerejo (2013) notes that the most significant benefit of self-archiving is that it increases the reach of science and makes it available to the public world. It is a cost-free method to increase the number of views, downloads and citations for the researchers' articles. More so, self-archiving repositories created by universities and research institutions offer a one-stop place for the world to see the entire gamut of research conducted by members of universities/institutions which help attract external funding, faculty and students.

2.3 Growth of IRs and Common Archives platforms

Literature shows that over the years, self-archiving has experienced steady growth from the time of its inception in the year 1990s. A number of scholars, researchers and students have use open access for research with IRs increasingly considered the best way of provide open access scientific output. There are a number of self-archiving platforms used for self-archiving of scholarly outputs. Baro (2018) identifies "kudos", "mendely.com", "academia.edu", "researchGate.net, and of course institutional repositories described in the introductory chapter above as some of the major platforms for self-archiving ones work. Below is a brief description of some of the self-archiving platforms:

Kudos is a self-archiving platform that “aims to increase the visibility, reach and impact of published scholarly works”. In 2012, Melinda Kenneway, Charlie Rapple and David Sommer established kudos to help solve the challenges of the scholarly communication process by allowing authors to use social media (Kudos) to engage the digital community with their research activities:

“Kudos works with publishers, universities, corporations, funders, metrics-providers and other intermediaries to help aggregate efforts around researchers to build impact for their work. By doing so we help strengthen partnerships between researchers and their affiliated organizations and other service-providers”.

The other platform used for self-archiving is Academia.edu. Academic.edu was launched in 2008 with approximately 47 million users worldwide. It now boasts of over 11 million uploaded texts. This platform is useful in hosting academic papers and allowing for sharing of publications among users. Users of Academic.edu create profiles and list their publication documents for others to see. Statistics on usage such as views and citation as well as social interactions (followers/following) are included on a user’s profile. Research shows that one of the major uses of Academia.edu is to contact new research collaborators and uploading of academic papers (Haustein, et al., 2014).

ResearchGate was founded in 2008 with the aim of connecting researchers and scientists by providing them with a platform to share research publications, engage in discussion, and collaborate. To be part of the ResearchGate community, a user registers with an institutional email address. The author’s publications are linked to his/her profile and statistics of use such as views, reads and citations are provided. ResearchGate is one of the fastest growing self-archiving platforms. According to Baron (2018) ResearchGate has over 14 million users, with more than 150 million publications and slightly over 40 million visits in a monthly. Users are able to share book chapters, conference presentations, research paper preprints and post prints and many other project materials. According to Bradley (2017) ResearchGate considers profile pages of users on ResearchGate as legal personal website of the user (and the majority of journal publishers allow articles to be openly accessible on personal homepages) hence avoidance of copyright of infringement. Therefore, each user can upload his or her published articles in compliance with self-archiving regulations.

Mendeley.com is a free referencing and social networking site for academics and researchers. It has features that enable easy organisation of research publications as well as collaborate with others researchers. Mendeley was founded in 2007 and launched in 2008. The name

Mendeley derives from the biologist ‘Gregor Mendel’ and the chemist Dmitri Mendeleev. Mendeley was purchased by Elsevier in 2013 and is now under their management. The mission of Mendeley.com is to “help institutions and professionals advance healthcare, open science and improve performance for the benefit of humanity”. According to Baron (2018) Mendeley.com unlike other self-archiving platforms focuses on research publication with less focus on authors. Mendeley.com has grown and its impact on visibility and readership is high. For instance, Thelwall’s (2018) in a study assessing whether “Mendeley reader counts are high enough for research evaluations when articles are published” found that Mendeley.com actually has more readers than Scopus citations per article at the month of publication. Out of the 104,520 articles from ten disciplines which were compared for reader counts between Mendeley.com and Scopus, articles from Mendeley attracted on average, between 0.1 and 0.8 readers per article in the month in which they first appeared in Scopus.

2.4 Knowledge and awareness about self-archiving

Research shows that the relationship between awareness and institutional affiliation to an institution’s institutional repository is significant. Awareness varies from one institution to another and is probably a factor in advocacy strategies and compliance taking place in institutions. Awareness and adoption of self-archiving has often varied between countries and of course institutions. Research shows rapid growth in the number of universities adopting and using institutional repositories and self-archiving. For example, Vernooij-Gerritsen et al (2008) in a research noted that half of the European universities had an institutional repository by 2008. Chilimo (2016) however, in study on “awareness and self-Archiving practices of Academic Researchers in Selected Public Universities in Kenya found low awareness levels regarding institutional repositories and self-archiving among researchers in Kenya. Baro (2018) carried out a study to find out the “knowledge and use of self-archiving options among academic librarians working in universities in Africa”. The research revealed that researchers are aware of ResearchGate, institutional repository, personal website/server, kudos and Mendeley and they actually upload papers to self-archiving platforms such as institutional repository, ResearchGate, academia.edu and personal websites/servers. The found that the factors that motivate users to self-archive include exposure of one’s previously published work, provides exposure for works not previously published (e.g. seminar papers), broadens the dissemination of academic research generally and increases one’s institutions’ visibility.

2.5 Challenges and hindrances to self-archiving

Despite the apparent benefits of self-archiving and the recent growth in support for the practice, significant barriers to its widespread adoption remain. According to a survey conducted on attitudes of Authors toward IR by Rowlands, Nicholas, and Huntington (2004), the findings from the survey revealed that 82% of authors' knew 'nothing at all' or 'a little' about IR. Westrienen and Lynch (2005) while reporting European survey, it noted that low faculty participation in IRs was attributed to confusion and uncertainty about intellectual property issues, as well as the perception of open access content being of low quality. Hahn and Wyatt (2014); Yang and Li (2015) surveyed business faculty from 125 Associations of Research Libraries (ARL) institutions and reported that the majority of faculty members were unaware of IRs in their local institutions and that many faculty were also ignorant regarding to OA journals. Several user studies provide evidence for low uptake to self-archiving for instance Rockman, Buehler, and Boateng (2005) while reporting the experience of Rochester Institute of Technology regarding self-archiving they stated that Even though, the Library created a useful avenue to deposit, store, and present scholarly contents, faculties are often reluctant to take advantage of the IR to showcase their intellectual research content.

3. METHODOLOGY

The study adopted qualitative research methods and employed purposive sampling to select and draw participants. In purposive sampling the researcher relies on his or her own judgement to select subjects due to their qualities or characteristics that make them fit a particular profile (Gray, 2014). In this study 12 lecturers and researchers from the LIS department were sampled and drawn to participate in the study because of their relative knowledge of the topic of open access publishing and self-archiving. In qualitative research, there usually is no need for a fixed sample size number, instead the characteristics of the participants as well as the data that is collected from interviews is adequate (Bestand Kahn, 2009). An interview guide was used for data collection and all the 12 participants agreed to take part in the interview and consented to having the interviews recorded. The data was analysed using thematic analysis. According to Gray (2014) thematic analysis involves the researcher closely examining the scripts and identifying the common themes that emerge from the responses. Many support thematic analysis because it is flexible and helps researchers to make sense of the vast qualitative data (Bryman, 2012).

4. FINDINGS AND DISCUSSION

4.1 Demographics

A total of 12 lecturers from the LIS department were selected for the study. Out of the twelve (12) lecturers, 8 were male and 4 were female. In terms of work experience, 2 participants had worked in the LIS department for less than 5 years, 6 had worked for more than 5 years and the rest (3) had worked for more than 15 years.

4.2 Awareness and knowledge about self-archiving

To determine the awareness and knowledgeable levels of LIS lecturers on self-archiving, participants were asked to explain what they think self-archiving is in their own words. Findings revealed that LIS lecturers are aware and knowledgeable about the concept of self-archiving. They conceptualise self-archiving as the act of making research publications freely available for users to access and use:

“Self-archiving is basically depositing or uploading my research articles onto the institutional repository”.

“Making research available for free so that others can download and use and cite it”

“Self-archiving means putting one's research online, using an institutional repository or social media platforms so that it can be freely available. The research can be put in various platforms to enhance accessibility”.

To follow up on the awareness and knowledge of self-archiving, participants were asked about how they became aware of the concept of self-archiving. The findings revealed that, the major source of awareness and knowledge about self-archiving is personal research, from colleagues, workshops and seminars, and university awareness campaigns. Below are some of the comments participants made:

“My knowledge about self-archiving has been increasing over the years. Some colleagues in the department have been instrumental about encouraging open access to research articles. The motivation for me is having my research widely read and of course cited.”

“I became aware about the concept of self-archiving through a workshop that was organized by the department of library and information science as well as the Library and Information Association of Zambia, and I learned that it is something of the future and can advance academic knowledge.”

Regarding becoming aware through publicity on the university library website and awareness campaigns participant 2 stated the following:

“I got to learn about the concept of self- archiving when colleagues from the library were discussing the issue of uploading research work online in inn the institutional repository order for it to be easily accessed by fellow lecturers and other users”

For those participants who stated that they became aware through their own research. Participant 5 said the following:

“I became aware of the concept of self-archiving through my own research when I worked on a paper on topic in relation to open access“

These findings indicate more significantly that LIS lecturers are not only aware of self-archiving as a practice but are in fact knowledgeable of self-archiving. Most of them became aware of self-archiving through personal research about open access publishing, through workshops and seminars as well as discussion with colleagues. Similar findings have also been reported elsewhere, for instance in a study by Lwonga (2013) on health sciences faculty perception and practices on open access scholarly communication. It was revealed that faculty are aware and mainly learnt about OA publishing through their colleagues, workshops/seminars and other university’s authorities including publicity on a university/library website and institutional repository librarians. Pellizari’s (2009) study of social science faculty’s awareness on open access publishing found that all respondents were aware of open access and more than half affirmed that they already had open access materials freely available on the web. This indicates that awareness is probably an important factor in advocacy strategies and OA campaigns taking place in institutions. This calls for the librarians to put more emphasis on OA advocacy work as well as the need to intensify advocacy campaigns in the university so as to raise awareness about the concept of Self-Archiving.

4.3 Repositories used for Self-Archiving

To find out where LIS lecturers have self-archived or deposit some of their research publications to date. The participants were asked to talk about some of the repositories they have used or are subscribed to for self-archiving purposes. Findings show that most lecturers have been depositing their e-prints in the University of Zambia’s institutional repository (UNZA-IR). However, some of them stated that they have deposited there articles in other

repositories such as ResearchGate and Academia.edu. Commenting on this, one of the participants stated the following:

“...almost all of my work has been published online, I have uploaded my articles on the UNZA institutional repository”.

The other platform that LIS lecturers have used for self-archiving is ResearchGate.com, Academic.edu and Mendeley.com:

“Most of research is uploaded to the IR at UNZA, but I also have uploaded my work on ResearchGate and on Academic.Edu”.

“Ever since being introduced to the concept of self-archiving I started depositing my research publications into the IR UNZA. I also actively deposit my work in ResearchGate and Academia.edu platforms”.

I have all my research work deposited in the UNZA IR and on ResearchGate. I also have created my profile with Mendeley.com”.

However, findings also reveal that some lecturers in the LIS department only use the IR at the UNZA and not any other archiving platforms.

“I self-archive using just the institutional repository at UNZA, am sceptical about other platforms because of certain requirements that these platforms ask for like your institutional email password“

Results show that self-archiving is an integral part of what LIS lecturers do in as far as advancing research is concerned. From the various self-archiving platforms identified in the literature, results from this study show that the IR at UNZA is currently the most used self-archiving platform by lecturers from the LIS department. It was also noted that some lecturers have created accounts with self-archiving platforms particularly ResearchGate and Academic.edu even though those platforms are not as highly utilized as the institutional repository. However, lecturers lamented the lack of awareness campaigns about the availability of the IRs and support to use the IR. Similarly, Chilimo (2015) in Kenya noted that lack of awareness campaigns about the availability of institutional repositories and open access policies in Kenya universities results in low practice of self-archiving. The university of Zambia management recently changed the promotion criteria and adopted a system that considers the ‘h-index’ for promotion. This has forced faculty members to deposit research articles into the IR and other self-archiving platforms in search of increased visibility and accessibility of publications. As Gate (2017) observes researchers are doing everything

possible to ensure that their publications are deposited in repositories so that they are online and visible.

4.4 Perceived benefits of self -archiving

To determine if self-archiving research has been beneficial to lecturers from the LIS department, the participants were asked to talk about some of the benefits they have accrued or think they will gain when they make their work freely available/accessible through self-archiving. It was revealed that self-archiving has contributed to increasing download and usage rates of the research articles thus contributing to increasing the body of knowledge. Below are some of the comments from the participants:

“Self-archiving on ResearchGate is wonderful because it shows the number of times your paper has been downloaded and read. If it has been cited it also shows, that is good especially that UNZA has introduced the H-index”.

“the importance of self-archiving is that it increases knowledge sharing and helps people know about the faculty not only for their research but also in terms of what they are doing because the research is out there”.

“Since I uploaded my research publications online, I realised that when I searched on Google, my publications appear. That way more people will see our research output and cite them and this can even increase the ranking of our university”.

These findings reveal that lecturers perceive self-archiving as a very important route to increasing the availability and accessibility of their research publications. Respondents clearly feel that self-archiving is beneficial for the researcher as it improves chances of availability, readership and citation; improves the university’s research impact and benefits the society at large. Because of the various benefits of self-archiving, lecturers are likely to deposit in IRs so that they can benefit by getting their research visible and cited (Bwalya et al., 2019). Karen and Elizabeth (2002) in a study on the perceived values and benefits of institutional repositories at the University of Michigan in the USA also found that researchers perceive self-archiving beneficial to them as researchers and the research community at large and that the benefits act as a motivation for self-archiving. It is safe therefore to conclude that when lecturers and researchers see the value and benefits of self-archiving they can easily adopt self-archiving and upload their research publications online for the public to access for free.

4.5 Challenges to practicing self-archiving

To finding out the challenges that lecturers face in practicing self-archiving, participants were asked to indicate the challenges that they have faced whenever they practiced self-archiving in the IR at UNZA or in other self-archiving platforms. The themes identified on challenges were: inadequate skills, lack of technical support, clarity about copyright ownership, and slow response from IR staff.

Regarding inadequate skills to practice self-archiving, the following was stated by one of participants:

“I must admit that I feel like I am not adequately equipped with the skills to upload my article to the IR at the UNZA. Sometimes the credentials I have don’t work as they should when I try to deposit my work in the IR and that can be very discouraging.”

Those who identified technical support as the main challenge to practicing self-archiving stated the following:

“I think self-archiving requires technical support from IT personnel. The system sometimes fails and that tends to discourage. There is need for consistent support regarding using D-space”.

Regarding copyright ownership, one researcher stated as follows:

“I haven’t posted in the university repository because sometimes it is difficult to tell who the Copyright belongs to, because it requires me to take my work physically to the library and the super-admin has to go through the information to see if it is relevant or it is irrelevant, so assuming every time I take my work to be uploaded and they always find it irrelevant it means my work will not be uploaded always, therefore I consider that there is no cooperation and for that reason I do not pay attention to self-archiving”

Others cited lack of time and bureaucratic procedures as the challenges for not practicing self-archiving as follows:

“It seems I cannot just upload my work on the IR, instead Library Staff require me to take the work to them, and they will have to browse through to check if the work is relevant to be uploaded which means there is so much procedure for me to just be able to put my work on the IR, this makes it time consuming and it discourages me to self-archive”

While it was evident that LIS lecturers are knowledgeable and actually do practice self-archiving. It was also clear that their self-archiving efforts are hampered by myriad

challenges. As pointed out above, lack of technical skills, limited time, lack of support from IT staff and bureaucratic procedures hinder lecturers from actively practicing self-archiving. In this regard, IT staff can come in handy in assisting lecturers who do not have the skills and time to practice self-archiving by uploading articles on their behalf. Research has shown that when librarians get involved in self-archiving or adopt mediated depositing, accumulation of content in the IR becomes consistent (Suber, 2012). Mediated depositing is helpful to users who may not be confident or do not have information about self-archiving. For example, one of the participants stated that they do not self-archive due to too many procedures that the university requires for one to deposit their materials online and this discourages them from self-archiving in the IR. Mihailova (2006) in Estonia also found that researchers did not use the institutional repository because of lack of interest/motivation, lack of time to self-archive in IRs and lack of cooperation. To ensure consistent archiving, development of policies mandating researchers to self-archive all their publications as well practicing mediated depositing is encouraged.

5. CONCLUSION AND RECOMMENDATIONS

In conclusion, it is clear that LIS lecturers at the University of Zambia are aware and knowledgeable about the concept of Self-archiving as means OA publishing. However, some lecturers lacked technical knowledge on depositing research in the IR and were not clear about copyright requirements. As a result self-archiving was not as widely practiced as is expected among LIS lecturers. The research revealed that the preferred self-archiving platform was the University's institutional repository. However, lecturers also actively use ResearchGate and Academia.edu for archiving their research publications. The research also revealed that the motivation for practicing self-archiving among lecturers was the need to share their research publications with others and more importantly a channel for increasing recognition and research impact. Results have also revealed many challenges that lecturers face in practicing self-archiving and some of the challenges include: lack of technical support, lack of time, bureaucratic procedures and lack of clarity on copyright issues.

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

- i. Massive awareness campaigns and training on self-archiving among academic members as many of them are not aware of the existence of IR.
- ii. Implement a mandatory policy for self-archiving of all research publications produced during a researcher's life working for the university.
- iii. Consistent technical support to help lecturers with article depositing especially in the UNZA-IR.

- iv. Introduce incentives such as rewarding the most consistent users of the IR in order to encourage and motivate lecturers to deposit their articles in the IR

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