The awareness of academic librarians towards Open Access resources to support reference services: A case of private institutions of higher learning in Gaborone, Botswana

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Abstract:

Open access have been acclaimed to have greater impact on research, teaching and learning in higher education through increased and easier access to scholarly research output.. The use of open access has also afforded researchers extensive visibility and usage of research findings to researchers with more diverse audience. Increased exposure to research also amplify citation rate, therefore provides connections that researchers can use as a path to publishing without printing costs. In teaching and learning open access provides wide range barrier free information to teachers and learners.
The present research observes that library users, especially students do not use the open access resources that are available. Now the question that rose was why are the users not aware? Is it because users are not aware of the resources? Is it because the users are not interested?or librarians are not doing enough to shed some light on open access resources. This research seeks to assess if librarians know about the resources and to assess how they use the resources as reference sources. The focus is on librarians because they are usually the first point of call in research for both learning and teaching. The objective of this paper is to assess the awareness of librarians in private institutions of higher learning towards open access information resources as complementary reference resources. The study set out to investigate which OA resources the librarian refers users to. It further explores the reasons for choosing these OA and how librarians use the resources. It will also look at the obstacles and challenges faced by librarian in using open access resources. The study will focus on six private higher education institutions in Gaborone namely are Botho University, Limkokwing University, Ba Isago University College, ABM University College, Botswana

Accountancy College and Gaborone Institute of Professional Studies. A qualitative approached will be adopted to gather data from librarians in these institutions through a self administered questionnaire.

Introduction

The world economy is transforming from the industry based economy system to a knowledge based economy. Knowledge based economies in general means "economies that are directly based on the production, distribution and use of knowledge and information" (OCED, 1996). In this context, knowledge can be considered the most critical means of production, even more critical than land, labor and capital. "In knowledge society, knowledge has an ultimate economic renewable value; the stock of knowledge is not depleted by use. However, the value of knowledge to an economy comes from sharing it with others" (Brinkley, 2006:5) the efficient use and sharing of this knowledge can be affected by systematic managing of the said knowledge.

As mentioned by OECD (1997) the knowledge economy depends as much on the knowledge distribution power of the system as on its knowledge production power. This openness to knowledge will provide the impetus for the accelerated growth of knowledge societies Raju (2013). Openness means unhindered access to information and knowledge. The free flow of information is a major component to bridging the knowledge gaps between privileged and under-privileged communities Raju (2013).

In a knowledge-based economy higher educational institutions are agencies of knowledge exchange and production and are a potential source of knowledge inputs to the economy and society Abrahams, Burke & Rens (2008) mentioned that scholarly communication plays a strategic role in disseminating knowledge produced in universities. "Scholarly communication" describes both the dissemination of and access to scholarship and research in a variety of formats and states of completion, such as published books or journal articles, research results and data sets, and drafts of papers (Shearer & Birdsall 2002).

Academic libraries play an important role in the scholarly communication system. Since many academic institutions are research-intensive and a library's main mandate is to support the teaching, learning and research activities of their parent institutions (Jain 2012). In carrying out this mandate, a lot of activities are involved in facilitating access to knowledge. Open Access means accessibility of knowledge and information. Ugwauanyi, et al, (2013) refer that Open Access means accessibility of all kinds of information that is published and can be accessed through the internet free of charge.

What is Open Access?

Various initiatives and declarations lead to a binding engagement on Open Access and advocate for its implementation specifically. One of the most important events in Open Access development is the Budapest Open Access Initiative (BOAI), which arose at a meeting held in Budapest and organized by the Open Society Institute on December 1-2, 2001. The purpose of the meeting was to accelerate progress in the international effort to make research articles in all academic fields freely available on the internet.

According to BOAI, the basic definition of: OA is the free availability of information resource on the public internet, permitting any users to read, download, copy, distribute, print, search or link to the full texts 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 cknowledged and cited (Budapest Open Access Initiative, 2002).

BOAI recommend two complementary ways to publish**I. Self-Archiving**: First, scholars need the tools and assistance to deposit their refereed journal articles in open electronic archives, a practice commonly called, self-archiving**.** When these archives conform to standards created by the Open Archives Initiative, then search engines and other tools can treat the separate archives as one. Users then need not know which archives exist or where they are located in order to find and make use of their contents.

II. Open-access Journals: Second, scholars need the means to launch a new generation of journals committed to Open Access, and to help existing journals that elect to make the transition to Open Access. Because journal articles should be disseminated as widely as possible, these new journals will no longer invoke copyright to restrict access to and use of the material they publish. Instead they will use copyright and other tools to ensure permanent Open Access to all the articles they publish. Because price is a barrier to access, these new journals will not charge subscription or access fees, and will turn to other methods for covering their expenses.

The second important initiative in the Open Access movement was the Bethesda Statement. The Bethesda Statement (2003) defines Open Access as the author(s) and copyright holder(s) grant(s) to all users a free, irrevocable, worldwide, perpetual right of access to, and a license to copy, use, distribute, transmit and display the work publicly and to make and distribute derivative works, in any digital medium for any responsible purpose, subject to proper attribution of authorship as well as the right to make small numbers of printed copies for their personal use.

The third significant initiative in the Open Access movement was the Berlin Open Access declaration which occurred in October 2003. The Declaration of the Budapest Open Acess Initiative,the Bethesda Statement on Open Access Publishing, the Berlin Declaration promotes the Internet as a functional instrument for a global scientific knowledge base and human reflection and specify information measures, which research policy makers, research institutions, funding agencies, libraries, archives and museums need to consider.

Open Access publishing typically implies that the user is able to freely access scholarly materials because the price of publication has been assumed by another party, usually the author of the material, the author's institution, or the grant which funded the research (Tenopir, 2004). One can see that Open Access publication is not, therefore, a completely cost-free endeavor. Indeed, the costs have merely been shifted from the consumers of information to the producers, or those who fund them (Wren, 2005), which applies equally to both the gold and green models of Open Access. Gold Open Access model is when the author/researcher can publish his/her paper in Open Access Journals, where every paper is freely accessible to any user. On the other hand Green Open Access the author /researcher have to put research output in institutional repository or subject repositories.

The position of academic librarians in promoting Open Access

The major mission of academic libraries is supporting the universities teaching learning and research activities. However due to high cost of journals and books, libraries are struggling to implement their mission. Open Access has numerous impacts on academic libraries: economic, technological, collection development and management, reference services, information literacy, and peer evaluation. Open Access is a prerequisite to survive and thrive for academic libraries (Giarlo 2005).

Librarians have also shown their support for Open Access by signing on to Open Access initiatives and petitions. Academic libraries are taking the initiative in academic publishing efforts. In a statement by the Association of Research Libraries (ARL), entitled "principles for emerging systems of scholarly publication (2000) highlights the increasing cost of publication as a scholarly publication crisis and academic libraries are mentioned as source of potentially new models of scholarly publishing. This statement was produced at a meeting of university librarians in Tempe March 2000, Ajit (2007)

Cryer & Colline (2011) mentioned that academic libraries have taken it to be their responsibilities and have paved a path in the expansion of the OA movement by promoting it in a variety of ways such as: including records for OA journals in their public catalogues and e-journals lists, collaborating with their institutions to establish institutional repositories, participating in institutional initiatives to encourage faculties to deposit their research outputs in the institution's repository, and becoming active OA journal publishers.

Recent studies on Open Access
Several empirical studies have been highlighted academic librarians involvement in Open Access. Parmer, Dill and Charlene (2006) found that the American Academic librarians had positive attitudes towards Open Access principles and they were focused on advocating Open Access. Another study conducted in Nigerian private colleges librarian found out that, the academic librarians have positive perception towards Open Access information resources Utulu & Avemaria (2011).

Similarly, Ugwuanyi etl (2013) identified that the perceptions of librarians in colleges of education in south-east Nigeria towards Open Access to knowledge were positive. The researchers Ugwuanyi & Ugwaungy (2013) also discovered that most of the librarians did not understand the concept of Open Access. The current research completed by Tanzanian health science librarians Lwoga & Quetier (2015) reveals that 75% of the librarians strongly support promoting OA issues on campus. On the other hand the researcher identified that various Open Access-related tasks did not translate in to actual action. Thus it is important to assess the awareness of Botswana private colleges and university academic librarians.

Objectives of the study
The general purpose of this study is to assess the awareness of academic librarians in private institutions of higher learning of Open Access information resources as complementary reference resources. Specifically the objectives are to:
- Find out the awareness of academic librarians of Open Access resources as reference material

- Find out the role of librarians in private academic higher institutions in promoting Open Access Resources
- Find out the challenges that librarians at private academic higher education institution encounter when promoting Open Access
- Find out ways in which the identified challenges may be solved

Methodology

The study employed judgmental sampling method, where questionnaires were physically distributed to academic librarians. Out of a total of fifteen registered private higher education institutions in Botswana .This study selected only six private higher education institutions because the researchers wanted to focus on institutions which had more than 6 years establishment, as they believe they have more exposure than the new ones. These institutions were Botho University, Limkokwing University, Ba Isago University College, Gaborone Institute of Professional studies (GIPS), ABM University College and Botswana Accountancy College. From each library a self-administered questionnaire was distributed to two librarians: one serving as a library manager and one serving as an assistant librarian. Thus the total population of this study was 12 academic librarians

Findings

The instrument for data collection was the questionnaire. The questionnaire copies were distributed by hand. T he researchers used Microsoft Excel to analyzing data.
We targeted 12 academic librarians in Private Higher education institutions in Gaborone. The response rate was 100 %.
The demographic characteristics of the academic librarians were studied to find out how they influence their awareness, which may lead to either negative or positive understanding about Open Access. The characteristics include gender, qualification, position and years of experience
The findings indicate that out of 12 respondents, 83% were female while 17 % were males. The researchers have come to an understanding that there were more female academic librarians in private higher learning institutions than the male counterparts.

TABLE 1

Qualifications	Number	Percentage
Certificate	1	8
Diploma	3	25
Degree	6	50
Masters	2	17
Total	**12**	**100**

In terms of the highest academic qualifications attained the findings shows that out of 12 respondents, 8% were found to be holders of certificate, 25% have diplomas, 50% have Degree and the remaining 17% had Masters Degrees. These results indicated in Table 1 therefore give a view that most respondents hold degree qualifications.
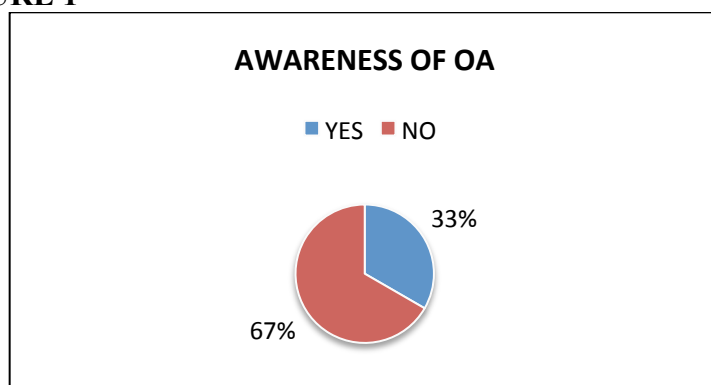
TABLE 2

Position	Number	Percentage
Assistant Librarian	8	67

Librarian	1	8
Senior Librarian	1	8
Library Manager	2	17
Total	**12**	**100**

Table 2 shows results regarding position of respondents in the library, out of 12 respondents the results indicate that 67% are assistant librarians, 8% are librarians, 8% are senior librarians and the remaining 17% are library managers.

Awareness of Open Access
FIGURE 1

The above figure shows 67% of academic librarians in private higher learning institutions were not aware of the concept Open Access and only 33% of the respondents were aware of this concept. The results of our study support the findings of Lwoga & Quetier (2015) who observed that inadequate level of OA awareness may have contributed to low rate of engagement with OA activities.

Usage of OA resources
To find out how often academic librarians use OA resources, they were given options to indicate from: daily, weekly, rarely and never.
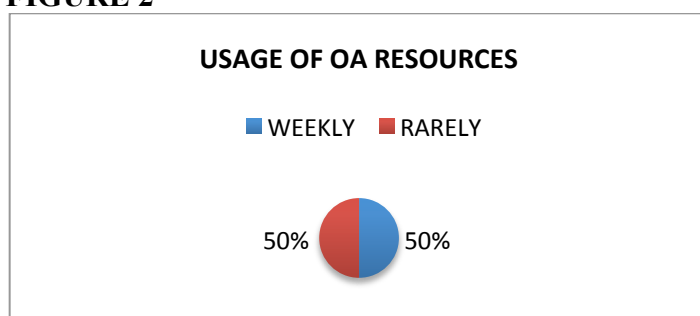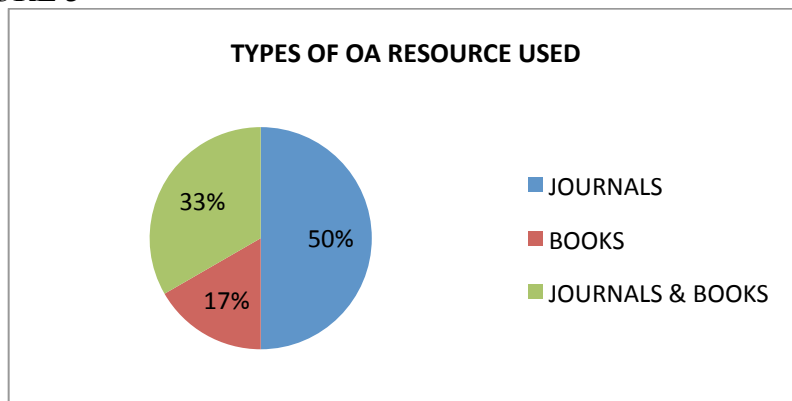
FIGURE 2

Figure 2 depicts that the total respondents that said they were aware of Open Access, 50% were using OA resources on weekly basis and the remaining 50% said they rarely use the OA resources in their provision of reference services. These findings reflect that even though the librarians were aware of OA they were not actively using OA resources to support their reference services.
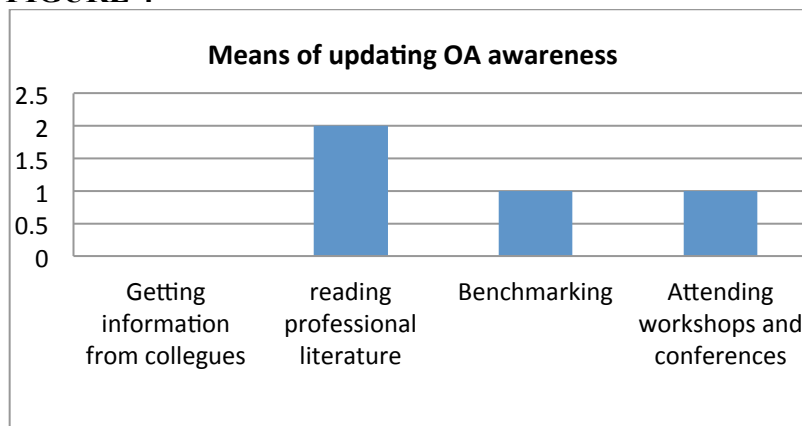
TYPES OA RESOURCES
FIGURE 3

TYPES OF OA RESOURCE USED

- ■ JOURNALS — 50%
- ■ BOOKS — 17%
- ■ JOURNALS & BOOKS — 33%

The findings of the questionnaires show that out of the respondents who stated that they were aware of OA, 50% of the respondents used journals only as their type of OA resources, 17% use books only and 33% used both journals and books in their provision of reference services. The data indicates that journals are the most used type of OA resources.

Academic librarian Current awareness
FIGURE 4

Means of updating OA awareness

This study was also interested in identifying how academic librarians update their awareness of OA. The questionnaire allowed the respondents to specify more than one answer and it included an open ended question. The findings of this research reflected that the majority of the respondents, 50%, improve their awareness on recent OA movements by reading current professional literature.

A total of 25% of the respondents also mentioned that they update their awareness by attending workshops and conferences. Also 25% of the respondents reported that they benchmark from other academic libraries. Under the open end question 50% of the respondents from two different institutions mentioned that they had a chance to attend Botswana Librarian Association (BLA) annual Open Access conference; this helped them to get current information about Open Access movement and trends.

Roles of Academic librarian in promotion OA resources as supplementary reference resources

One of the objectives of this research was to assess the role of academic librarians in promoting OA resource as supplementary reference material. The research found that

majority of academic librarians were teaching and referring library patrons to various types of OA resources when providing reference services. Academic librarians also mentioned that they mostly recommended additional Open Access resources in response to library patron's requests. The librarians that demonstrated an understanding on Open Access indicated that before they recommended an OA resource to their users they evaluated the quality resource.

TABLE 3 Roles of academic librarian (in %) N= 4

Librarians roles in promoting OA	No	%	
Recommending OA resources as supplementary reference resources	4	100	
Evaluating the quality of OA resources	4	100	
Creating pages in Library website	1	25	
Reflecting OA resources in OPAC	0		
Including OA resources in Current Awareness and SDC services	1	25	
Educate Academic community about OA and Copy right issues	2	50	
Introduce OA during library induction	2	50	

✸Multiple responses were allowed

Table 3 indicates that from the total respondents who were familiar with OA, only 25% of them mentioned that they include OA resources in their library website for facilitating the reference activities. The remaining 75 % of respondents indicated that when providing reference services, they discussed and recommended OA resources to library patrons.

The librarians also mentioned that they introduced some OA resources to library users during library orientation. In addition this research found out that from the librarians that were aware of OA, only 25% of them included OA resources as supplementary information resources when conducting the Selective Dissemination Information and Currents awareness services. The remaining 75% of the respondents do not include OA resources.
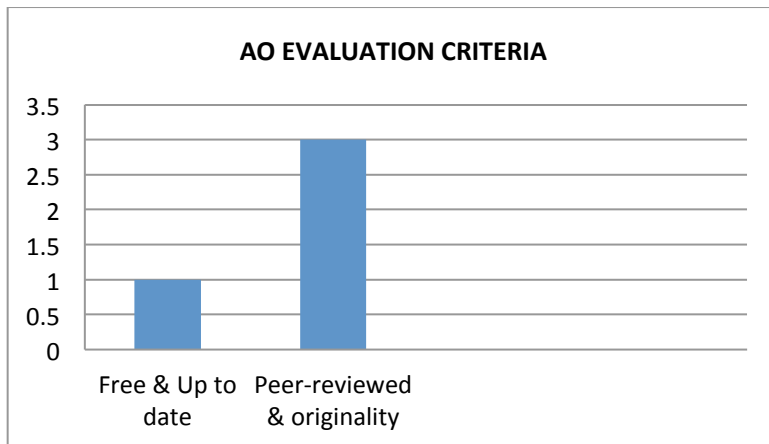
Promotional Medias
In relation to promotional role of academic librarians, this research was interested in knowing how academic librarians promote OA to the academic community. The findings of this research reflected that respondents aware of OA used of those aware of OA used email to promote OA resources while 20% of the respondents used notice boards.

Criteria of evaluating OA to use as complementary reference resources,
One of the major roles of an academic librarian is to evaluate quality and relevance of information resources. Figure 5 shows the results for the evaluation criteria used by academic librarians who indicated that they were aware of Open Access.
This research also found that peer review and originality of the resources were the first evaluation criteria used by academic librarians who were aware of OA. Similarly, previous research by Noaskhere and Abdelwahid (2014) found that 71% African librarians ranked peer review and authority of source as essential characteristic in selection process of OA resources.

FIGURE 5

AO EVALUATION CRITERIA

This study found out that 75% of respondents mention that peer review and originality of the resources were their first prioritized criteria while 25% respondents reported they considered the currency of information and free availability of the material when evaluating OA resources. This indicates that, the academic libraries were concerned about the originality and the contents of the information.

Challenges to OA in references services

The librarians mentioned three major challenges towards Open Access resources: lack of knowledge among the academic community, lack of faculty participation and quality issue of Open Access resources. For instance, one of the respondents mentioned that most of the faculties are not participating in evaluation of the contents and quality of the resources; most of the faculties have poor attitudes towards Open Access resources. The respondent also mentioned that there is lack of coordination between the library and faculties. Another challenge which was mentioned by respondents was lack of infrastructure such as incompatible library management systems, to upload full text OA resources.

In general the researchers observed that in all the targeted Private institutions libraries structure there is no specified reference librarian as a reference service point, mostly the circulation desk is used.

Conclusion and Recommendations

The study's findings provided the current state of academic librarians in private institutions of higher learning in Gaborone, Botswana. It was evident that from the questionnaire results that from total academic librarians of 12 only 4 were aware of Open Access. However those who were aware had adopted the OA concept but were not actively involved in its practice when providing reference services.

Based on the above findings, the study recommends that the mother bodies of information professional institutions: Botswana Library Association and Botswana Consortium should have continuous advocacy programs and training on Open Access to improve academic librarian's awareness and knowledge of Open Access. Furthermore when the academic librarians carry out current awareness services for subscribed resources they should include more Open Access resources in order to create or increase the accessibility and usage of OA resources.

Our findings have revealed that there is lack of faculty participation towards Open Access. We recommend that academic institutions should also promote awareness about Open Access and improve information literacy skills of faculty through workshops, public lectures, meetings and conferences. Currently the librarians are experiencing paradigm shift from

service providers to publishers, so the department of Library and Information Studies should consider this issue and include more Open Access course curriculum

Acknowledgments

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