Awareness and Use of Open Access Scholarly Publications by Postgraduate Students in Sarojini Naidu Government Girls PG Autonomous College, Bhopal (M.P.)

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Abstract

The study investigated the awareness and use of Open Access scholarly publications by postgraduate students in Sarojini Naidu Govt. Girls PG Autonomous College, Bhopal (M.P.). The study was guided by four research objectives. Survey research design was adopted. The population of the study consists of all the postgraduate students in Sarojini Naidu Govt. Girls PG Autonomous College, Bhopal (M.P. A sample of 100 was purposely selected within a period of one month in Central Library. Questionnaire was used as an instrument of data collection, 97 were successfully retrieved and analysed using descriptive statistics. The study found that postgraduate students in Sarojini Naidu Govt. Girls PG Autonomous College, Bhopal are not fully aware of the major sources of OA publications; surfing/searching through the Internet haphazardly is the major channel through which their became aware of OA publications; postgraduate students in Ahmadu Bello University Zaria predominantly use OA publications to support their thesis/dissertation; majority of the students used to encounter a challenge excess of irrelevant information while using OA publications. It is however, recommended that libraries should organise training on interval base to both staff and postgraduate students in Sarojini Naidu Govt. Girls PG Autonomous College, Bhopal (M.P. on importance of OA publications; postgraduate students in Sarojini Naidu Govt. Girls PG Autonomous College, Bhopal (M.P.should also be trained in Internet searching skills; faculties should guide and encourage their students on the need for publishing in OA journals among others.

Keywords: Open Access, Postgraduate students, Scholarly publications

Introduction

The dissemination of research findings through the use of traditional print journals by research scholars is proven to be mundane, inefficient and slow. The advent of information and communication technology (ICTs), Internet and World Wide Web (WWW) technology had changed the process of scholarly publications dramatically. The Berlin declaration on Open Access to knowledge in the sciences and humanities stated that "mission of disseminating knowledge is only half complete if the information is not made widely and readily available to society". The publication of scientific journals according to smith (2007) began in 1665 to enable researchers share their work quickly and widely and to establish priority of researchers investigating the same problems. Journals published then could not pay the authors, hence, the tradition of writing for impacts rather than payment was in vogue and prevailed. But with the passage of time, "serial crisis" rooted in subscription price became barrier to information access and a serious concern to the stakeholders of scholarship. Only a small number of libraries in the developing world could afford journal subscriptions. Considering the fact these journals are published in the developed world, researchers in developing countries had to wait for months prior to the arrival of these journals by surface mail. This was the remote cause of looking for an alternative model which turned out to be Open Access (Albert, 2006).

It is currently estimated that only 15% of the annual research output is immediately made freely available through open access (Brody et al, 2007). This means that a greater portion of the research output is still published using the conventional system. It is acknowledged that it will take some time for Open Access (OA) mode of scholarly communication to gain substantial adoption due to the fact that open access is disrupting the already well-established system (Johnson, 2002; Fullard, 2007). This has necessitated the interventions by proponents of Open Access to promote its adoption. Accordingly, various initiatives, statements and declarations have been made at national and international levels to speed up the spread of OA. Chan (2009) also reported that at the beginning of this millennium, more than half of the research-based institutions in the poorest countries had no current journal subscriptions and over 20% had an average of two subscriptions. Now, in the age of the WWW, it is possible for research findings to be disseminated widely regardless of time and resource, free of charge to anyone who wishes to read them provided he is online.

Open Access Journals

Open Access (OA) literature comprises of free online copies of peer-reviewed journal articles and conference papers as well as technical reports, theses and working papers. In the view of Suber (2005) OA literature ensures free availability on the public internet, permitting 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 lawful purpose without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. The primary goal of OA is therefore to maximize the accessibility of the research publications that forms

the basis for future scientific development.

OA can be provided in two ways. The first is through self-archiving process or what Jensen (2010) called "Green" open access. Self-archiving is where authors deposit their work on the institutional digital repository which may be a subject-based repository, or a combination of several subjects. The same item may well appear in a traditional journal, which may be print, parallel published or electronic only, OA Journals also known by Jensen (2010) as "Gold" provides access to full-text contents of scholarly, peer reviewed journals which could be available either in electronic version or in both electronic and print versions. BOAI (2001) defines an open access publication to include publications that meet the two conditions below:

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.

A complete version of the work and all supplemental materials, including a copy of the permission as stated above, in a suitable standard electronic format is deposited immediately upon initial publication in at least one online repository that is supported by an academic institution, scholarly society, government agency, or other wellestablished organization that seeks to enable open access, unrestricted distribution, interoperability, and long-term archiving (for the biomedical sciences, PubMed Central is such a repository).

BOAI (2001) also stated that open access journals have the following characteristics:

- they are scholarly,
- they utilize quality control mechanisms like those of conventional journals,
- they are digital,
- they are freely available
- they may allow authors to retain their copyrights and
- they may use Creative Commons or similar licenses

A growing number of studies have confirmed that OA scholarly publications are more likely to be used and cited than one behind subscription barriers. There is enough evidence that OA documents are most likely to be cited than commercial Journals, these assertion is supported by The Open Citation Project (2004) which reported that in some disciplines, online files receive on average 300% more citations than materials available only in paper format. This gives OA authors an advantage over other authors who are skeptical about OA. Also, Google Scholar gives preferential treatment to materials in Institutional Repositories (IR); a paper picked up from an IR would appear higher up on the Google results list (Ashworth, 2006). Scholars are paid by research funders and/or their universities to do research; the published article is the report of the work they have done, rather than an item for commercial gain. The more the article is used, cited, applied and built upon, the better for research as well as for the researcher's career (Suber, 2006).

Statement of the Problem

The emergence of Internet technology and the growing popularity of Open Access journal scholarly publication model over the years many postgraduate students has resolved to use this model to quench their ever increasing information needs. Curiously, the researchers observed that despite the potentials of Open Access publications, there are many postgraduate students who are not fully aware of these perceived benefits of Open Access in Madhya Pradesh, India. However, most of the studies failed to recognize postgraduate students as important stakeholders in the scholarly communication process. Postgraduate students are important because they are being trained to become future researchers and scholars. Also, in the process of preparing and writing their theses and dissertations, postgraduate students need access to scholarly, accurate and timely information. Furthermore the theses and dissertations produced by postgraduate students form an important output for open access repositories. Postgraduate students are therefore among the key beneficiaries of open access opportunities especially in developing countries. It is against this background that the researchers embark on this study to ascertain the level of awareness and use of Open Access publishing among postgraduate students in Sarojini Naidu Govt. Girls PG Autonomous College, Bhopal (M.P.

Objectives of the Study

The study seeks to:-

- Determine the level of awareness of Open Access publications among postgraduate students in Sarojini Naidu Govt. Girls PG Autonomous College, Bhopal (M.P.Determine the channels through which the postgraduate students in Sarojini Naidu Govt. Girls PG Autonomous College, Bhopal (M.P.became aware of Open Access Publications.
- Determine the reasons for using Open Access publications by postgraduate students in Sarojini Naidu Govt. Girls PG Autonomous College, Bhopal (M.P..
- Determine the impediments of using Open Access publications by postgraduate students in Sarojini Naidu Govt. Girls PG Autonomous College, Bhopal (M.P.

Review of Related Literature

Though the idea of Open Access became popular since 2003 after the Berlin declaration of access to knowledge in science and humanities, the concept is still not widely known among academic researchers in developing world. A lot of international and national large scale surveys that investigated the researchers' awareness attitude and usage of open access and the facilitating and inhibiting factors of open access adoption. According to Dinev (2005) "awareness raises consciousness and knowledge about a certain technology and its personal and social benefits". In the open access environment, awareness has also been acknowledged as an important factor determining usage of this mode of scholarly communication (Ramachandran,

2004 and Fullard, 2007). Some of the studies indicated that open access was an unknown concept to many researchers (Grevson, et al 2009 and Christian, 2008). A study by Christian (2008) also for example, revealed that while only 3 percent of 66 respondents at the University of Lagos were aware of the open access concept, 22.7 percent others knew very little about it and a majority (74 percent) of the respondents were completely unaware of open access. It should be noted that even where open access awareness is reported, the level of understanding was not uniform for different open access terms. For example, a study by Swan and Brown (2004), 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. A similar study by Sanchez-Tarrago and Fernandez-Molina (2009) revealed different knowledge of open access related initiatives among scholars from a group of health researchers in Cuba. According to this study, while 44.8 percent of the respondents (N = 160) were reported to be aware of open access journals. Dulle (2008) found in his study that the most common known terms or initiatives by researchers were open access journals (59.6 percent respondents) and open access repositories (22.8 percent respondents). Very few respondents knew about specific open access initiatives such as Budapest open access initiative (none), Open access movement, (8.6 percent) and the OAIster.org (2.9 percent) respectively.

The study by Pelizzari (2003) indicates 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. On the other hand, self-archiving by their peers, open access debate, institution or library and established subject-based archives promotions were established as being the main means through which researchers were exposed to open access (Swan and Brown, 2004). 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 (Allan, 2005).

Open access journals have become an important source for scientific research and development. Eqbal and khan (2007) found that 88.24% faculty of science are more aware about open access journals. The majority of research scholars in faculty of science and 67.64% and 69.23% faulty of Engineering use Open access journals for research work; whereas 35.29% in faculty of science use Open access journals to update their knowledge and 23.70% in faculty of engineering use them for study. Burton and Chadwick (2000) found that researchers are mostly concerned with access, giving the most positive ratings to sources that were easy to find and understand.

Ehikhamenor (2003) states even though 77.5 percent of Nigerian scientists rated Open Access journals as "important" or "very important, " their rating was based on expectation rather than actual use. Gbaje (2007) writing on Nigerian academic libraries, found that only 20 percent of those surveyed provide access to open access resources. Many studies have also been conducted to determine the use of Open Access Journals and other e-resources. Manda (2005) studied the use of electronic resources in Tanzania by academics. He found out that the use was low, due to inadequate end-user training, slow connectivity, and limited access to PCs, poor search skills, and budget cuts. Smith (2007) looked at South Africa, finding that insufficient bandwidth was a major problem, and the range of open access journals in the respondents' field of interest was fairly limited. Okoye and Ejikeme (2010) also identified unstable power supply and unavailability of internet facilities as constraints to the use of open access to researchers. The study conducted on the Awareness, Attitudes, and Use of Open Access Journals by Master's Degree Students of the Department of Library, Archival, and Information Studies, University of Ibadan, Nigeria by Ogbomo and Ivwighreghweta (2010) revealed that masters' degree students' of the Department of Library, Archival and Information Studies, University of Ibadan use of open access journals is high and they have positive attitude towards their use. On the benefits of Open Access Journals, the study found that it provides free cost access to their contents, it increases the impact of researchers work and that it makes for easy accessibility of the researchers work. It was also revealed that retrieval of too much irrelevant information, unavailability of internet facilities, download delay, limited access to computer terminals and power outages were some of the problems facing postgraduate students found in the study.

Research Methodology

The study employed survey research design. The population of the study consists of all the Postgraduate students of Ahmadu Bello University, Zaria in Kaduna state Nigeria. A sample size of 100 students was purposively selected within a period of one month in Kashim Ibrahim Library (University main library) for the study. Structured questionnaire entitled "awareness and use of Open Access publications (AUOAP)" was used as the research instrument to elicit response from the respondents. 97 questionnaires were retrieved successfully from the respondent representing 97% respondent rate. Frequency counts and percentages were used to analyse the data collected.

Results and Discussion

Findings of this study are presented in table 1-4

 Table 1: Level of Awareness of Popular Sources of Open Access Scholarly

 Publications

S/N	Sources	Frequency	Percentage
1	Directory of Open Access Journals (DOAJ)	17	17.9
2	Directory of Open Access Repositories	7	7.4
	(OpenDOAR)		
3	MIT (Massachusetts Institute of Management	3	3.2
	Technology) open Courseware		
4	Ohio link to ETD (Electronic Thesis and	3	3.2
	Dissertation)		
5	None of the above	72	75.8

Table 1 above revealed that 72 (75.8%) of the respondents are not aware of any of the popular sources of OA publications. 17 (17.9%) are aware of directory of OA journals, 7 (7.4%) are aware of directory of OA repository while 3 (3.2%) are aware of MIT courseware and Ohio link to ETD respectively. However from the table it is clear that the postgraduate students in SNGGPG are not aware of world the most popular sources of OA literatures.

S/N	Channels	Frequency	Percentage
1	Colleagues	19	20
2	University Library Website	1	1.1
3	Library Staff	3	3.2
4	Surfing/Searching the Internet	62	65.3
5	Conferences/Workshops/Seminars	15	15.8

Table 2: Channels of Awareness of Open Access Publications

Table 2 sort to find out the channels through which the postgraduate students became aware of OA publications, it shows that 62 (65.3%) of the respondents which represent the majority became aware of OA publication by surfing through the Internet. 19 (20%)through colleagues, (15.8%)15 through conferences/seminars/workshops, 3 (3.2%) through library staff while only 1 (1.1%) through library websites. This finding revealed that large number of postgraduate students became aware of OA publication by searching/surfing through the Internet haphazardly; the study is not in conformity with Pelizzari (2003) who indicate 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, it is also clear from the revelation that library website are not including links to the popular sources of OA in their websites.

Table 3: Reasons for Using Open Access Publications

S/N	Reasons	Frequency	Percentage
1	To Support my Thesis/Dissertation	91	95.8
2	To Publish my Journal Article	21	22.1
3	To write assignment	58	61.1
4	To read for exams	60	63.2
5	To read for personal development	22	23.2

Reasons for the use the use of OA publication by postgraduate students in ABU as shown in table 3 indicates that 91 (95.8%) of the respondent use OA to support their thesis and dissertation, 60 (63.2%) use it to read for exams, 58 (61.1%) use it to write assignments, 21 (22.1%) indicated that their using OA to publish their journal articles. In like manner, almost all the items listed on the table received positive responses which might also be due to open access journals free cost.

S/N	Problems	Frequency	Percentage
1	Lack adequate knowledge about Open Access	51	53.7
	source		
2	Unavailability of Internet facilities	25	26.3
3	Incessant power outage	19	20.0
4	Download delay	25	26.3
5	Poor Internet surfing/searching Skills	37	38.9
6	Limited access to computer terminals	18	18.9
7	Retrieval of too much irrelevant information	71	74.7

Table 4: Problems Encountered while Using Open Access Publications

Lastly, table 4 revealed the challenges encountered by postgraduate students in SNGGPG while accessing OA publication. 71 (74.7%) respondents indicated that their encountered problem of retrieval of too much irrelevant information, 51 (53.7%) indicated lack of adequate knowledge of OA sources, 37 (38.9%) said poor Internet surfing skills, 25 (26.3%) are as a result of unavailability of Internet facilities and download delay respectively, 19 (20.0%) said incessant power supply, 18 (18.9%) said limited access to computer terminals. It is apparent to note that the problem of retrieval of too much irrelevant information may not be unconnected with the poor searching skills by the students, the study is also contrary to the study of Okoye and Ejikeme (2010) who identified unstable power supply and unavailability of internet facilities as constraints to the use of open access to researchers. The students face less problem of Internet connectivity compared to past studies as result of the campus network available in Sarojini Naidu Govt. Girls PG Autonomous College, Bhopal (M.P.

Conclusion and Recommendations

Based on the findings of the study, it is clear that there is acute lack of awareness of major sources of OA publications among the postgraduate students studied. It is also apparent to conclude that the postgraduate students haphazardly search for information on the internet without having any formal training on the use of OA publications. Postgraduate students studied are not fully aware of the potentials of publishing in OA journals despite its numerous advantages, there is also problem of insufficient Internet searching skills among the postgraduate students studied which lead to the problem of retrieval of irrelevant information. Based on the findings of the study and the conclusion of this study, the following recommendations are made:

- Academic libraries should organise training on interval bases to educate postgraduate students on the major sources of OA publications.
- Library staff should be train on OA publications, so as to assist the postgraduate students who often approach them for assistance.
- Library website should have links to all the major source of OA publication that exist across the globe.
- Faculties and academic libraries should also guide and encourage postgraduate

students on publishing in OA journal.

• Libraries and other relevant stakeholders should organise training on interval bases to asquint postgraduate students with effective Internet searching skills.

References

- [1] Albert, K.M. (2006). Open Access: Implications for Scholarly Publishing and Medical Libraries. Journal of Medical Library Association 94 (3): 253–262.
- [2] Allan, J. (2005). Interdisciplinary differences in attitudes towards deposit in institutional repositories. Unpublished. Masters dissertation, Manchester Metropolitan University. Retrieved on 03/07/2013 from from http://eprints.rclis.org/archive/00005180.
- [3] Ashworth, S. (2006). Role of Librarians in the Development of Institutional Repositories Retrieved on 03/07/2013 from from http://www.pfsl.poznan.pl/oa/ppt/2.ppt.
- [4] Brody T., Carr L., Gingras Y., Hajjem C., Harnad S. and Swan, A. (2007). Incentivizing the open access research web. CTWatch quarterly. on 09/06/2013 from http:// www.ctwatch.org/quartery/articles/2007/08/incentivizing-the-openaccess-research-web/.
- [5] Budapest Open Access Initiative (BOAI). 2002. Retrieved on 03/07/2013 from from http:// www.soros.org/openaccess/read.shtml.
- [6] Burton, V., & Chadwick, S.A. (2000). Investigating the practices of student researchers: Patterns of use and criteria for use of Internet and library sources. Computers and Composition, 17 (3): 309-328.
- [7] Chan, L. (2004). Open Access: Promises and Challenges of Scholarship in the Digital Age. Retrieved on 03/07/2013 from http: www.academic matters printable article.aspx. Catelogitemid>2477
- [8] Christian, G. E., (2008). Open access Initiative and the Developing World African Journal of Library, Archives and Information Science, 18 (2).
- [9] Dinev, T. Hu, Q. & Goo, J. (2005). "User Behavior toward Preventive Technologies –Examining Cross-cultural Differences between the United states and South Korea", Proceedings of the 13th Annual Cross-Cultural Research in Information Systems Conference (CCRIS 2005). Las Vegas, USA.
- [10] Dulle, F. W. (2008). open access Publishing: The Emerging Opportunity for Wider Dissemination of Scholarly Output. A paper presented at PANTIL Annual Research Workshop, 06-09 October, 2008, Dodoma, Tanzania.
- [11] Ehikhamenor, A. (2003). Internet Resources and Production in Scientific Research in a Nigerian University. Journal of Information Science 29 (2):102-116
- [12] Eqbal, M., & Khan, A. (2007). Use of Electronic Journals by the Research Scholars of Faculty of Science and Faculty of Engineering, Amu, Aligarh: A comparative study. Library and Information Networking (NACLIN), DELNET, New Delhi, pp 98-132.

- [13] Fullard, A. (2007). South African Response to Open Access Publishing: A Survey of the Research Community. South African Journal of Library & Information Science, 73 (1). Retrieved on 24/05/2013 from http://eprints.rclis.org/archive/00010749/01/SAJLIS_73 (1)04.pdf.
- [14] 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), 40–50.
- [15] Gbaje, E. S. (2007). Awareness of Electronic Journals. Retrieved on 03/07/2013 from http://www.anc.edu/publ/scomm/lib.456.htm.
- [16] Greyson, D, Vezuna, K, Morrison, H, Taylor, D & Black, C. (2009). University supports for open access: a Canadian national survey. Canadian journal of higher education, 39 (3): 1-32. Retrieved on 20/05/2013 from: http://spectrum.library.concordia.ca/6566/1/university_supports_for_OA.pdfw ww.ifla.org/files/hq/papers/ifla75/105-kiran-en.pdf.
- [17] Jensen, Mike (2010). Open Access: Lowering the Costs of International Bandwidth in Africa, APC Issue Papers. Accessed on April 02, 2013 from http://www.researchictafrica.net/images/upload/open_access_EN.pdf.
- [18] Johnson, R. K. (2002). Institutional Repositories: Partnership with Faculty to Enhance Scholarly Communication. D-Lib magazine, 8 (11). Retrieved on 03/07/2013 from http://www.dlib/november02/Johnson/11johnson.html
- [19] Manda, A. (2005). Electronic resources in Tanzania by academics. In: GL7 Conference Proceedings. Retrieved on 03/07/2013 from http://www.greynet.org/
- [20] Ogbomo, M. O.and Ivwighreghweta, O. (2010). Awareness, Attitudes, and Use of Open Access Journals by Master's Degree Students of the Department of Library, Archival, and Information Studies, University of Ibadan, Nigeria. Retrieved on 01/05/2013 from http://unllib.unl.edu/LPP/PNLA%20Quarterly/ogbomo-ivrighweghweta77-2.htm.
- [21] Okoye, M., & Ejikeme, A. (2010). Open access, Institutional Repositories and Scholarly publishing: The role of librarians in South East Nigeria. Journal of Nigeria Library Association: 48th National Conference.
- [22] Papin–Ramcharan, J. I. & Dawe, R. A (2006). Open access publishing: A developing country view. First Monday: Peer-Reviewed Journal on the Internet, 11 (6) Retrieved on 22/06/2013 from http://firstmonday.org/issues/issue11_6/ papin/ index.html.
- [23] Pelizzari, E. (2003). Lecturers use, perception and expectations about openaccess archives: a survey of social science sector at Brescia University. Retrieved o 10/05/2013 from: http://prints.rclis.org/archive/00000737/01/Academic_staffperception_abot_arch.
- [24] 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. Retrieved on 21/03/2013 from: http://www3. interscience.wiley.com/cgi-bin/fulltext/122647800/PDFSTART

- [25] Smith, T. (2007). Survey of open access barriers to scientific information: providing an appropriate pattern for scientific communication in Iran. In: GL7 Conference Proceedings. Retrieved on 03/07/2013 from http://www.greynet.org/.
- [26] Suber, Peter (2005). Open Access Overview. Retrieved on 29/04/2013 from http://www.earlham.edu/~peters/fos/overview.htm.
- [27] Swan, A. & Brown, S. (2004). JISC/OSI Journal authors survey report, key prospects, Truro. Retrieved on 11/06/2013 from: http://www.jisc.ac.uk/uploaded_documents/ JISCOAreport1.pdf
- [28] The Open Citation Project. (2004). The Effect of Open Access and Downloads ('hits') on Citation Impact: A Bibliography of Studies. Retrieved on 03/07/2013 from from http://opcit.eprints.org/oacitation-biblio.html.
- [29] Warlick, S. E. & Voughan, K. T. (2006). Factor influencing publication choice: why faculty choose open access. Biomedical digital libraries 4 (1). Retrieved on 04/04/2013 from: http://www.pubmedcentral.nih.gov/picrender.fcgi?article=1832218blobtype=pd f.