Winter 11-7-2017

Open Access Publishing in Developed Countries: A Comparative Study between United States of America and United Kingdom

Irfan ul Haq Akhoon
University of Kashmir, India, irfanakhoon@kashmiruniversity.net

Open Access Publishing in Developed Countries: A Comparative Study between United States of America and United Kingdom

Irfan ul haq Akhoon
Research Scholar, University of Kashmir-190006
irfanakhoon@kashmiruniversity.net

Abstract

The present study measured quantitatively the current position and growth of Open Access archives, at the first stage it gives a quantitative overview of Open Access archives established and published from different developing and developed countries. Further it focuses on a comparative study between United States of America (USA) and United Kingdom (UK) the two developed nations. Open access journals indexed in Scopus database are being surveyed for this study. As the study is based on the data collected from the Scopus database upto July 2017, which shows that the total number of journals indexed are 36377 in which 63% of journals are active and about 37% are in active. USA is leading at the top by contributing 10141 journals (28%), followed by UK by contributing 7431 journals (20%) of total number of journals indexed by Scopus. With about 5927 (26%) of total number of Active journals indexed by Scopus, USA has built significant influences headed for the progress of Open Access Scholarly publishing.

Keywords: Open Access Scholarly Publishing-Developed Nations; Open Access journals; Open Access-USA; Open Access-UK; Scopus Indexing Open Access Journals

Introduction:

Internet is continuously making diverse changes in every facet of our humanity, it keeps reshaping the whole process of scholarly communication cycle in numerous ways. Open Access movement is one of the recent revolution in scholarly communication process, which encourages access to all scholarly information free of cost, without any access barrier and copyright restriction over the Internet.

Open Access are transforming the processes and institutions of research, knowledge creation and dissemination globally: enabling new forms of collaboration, allowing researchers to be seen and heard in new ways and reshaping relationships between stakeholders across the global academic publishing system. Open access to scholarly information has been a hot topic for debate among scholarly community over the last few years. Work published in Open Access mode might be seen, read & used by everyone who is interested, thus allowing academic research to have a greater impact on the world. Open access Journals exist at a promising platform all across the globe.

Universities and Colleges throughout the Globe are appreciating the obligation on the part of organizing their education, research and resources in an operational approach. OA publishing like Institutional Repositories (IR) and OA Journals are the premium technique through which the institutional research outcomes will be available to the entire world, irrespective of cast, colour, creed and religion. OA publishing mode is having the ability to maximize the visibility,

accessibility, impact, of the research output throughout globe which results in permitting and inspiring interdisciplinary style of research. It is because of those diverse benefits of OA publishing, numerous institutions are evolving in developing their own OA Journals and institutional repositories.

Numerous librarians around the world are voiced and dynamic supporters of OA and consider it as capacities to eradicate the problem of serial crises with the help of providing the scholarly information without any cost and copyright restriction. Open access is also considered to be the future of educational institution' library interactions all over the globe. Increasing rate of contributors in the form of academic libraries in open access publishing mode not only has transformed the mode of traditional scholarly communication process and fetched a price free process of communication of academic research output, at the same time OA, also endures to influence on the services, products, role and collections development technology of academic libraries. Several OA promoters consider that national support will play a very important role in reacting to OA commands from organisational funders.

Literature Review

Open access to scholarly information is a burning issue in web based education and research todays. Open access has become an increasingly important and potentially divisive issue in recent years as journal inflation rates have increased. Not only governmental funding agencies but also learned societies, associations and publishers have taken a step towards open access movement in a right direction. For many librarians and scholars, journal price inflation is itself the central problem and open access is the solution **(Hirwade & Rajyalakshmi, 2006)**.

Nashipudi & Ravi (2014) conducted a study on, 'status of India in publishing Open Access content'. A survey of the open access journals indexed in the Directory of Open access Journals (DOAJ) and the repositories indexed in the Open DOAR were followed for the study. They concluded their study as, there is an essential need for a proper mechanism in order to promote and coordinate open-access publishing systems and to improve awareness for open access in India. Study also shows a growth of 15 fold of the open access journal output within a year by India

Sengupta (2012) in her study gives an overview of the growth and development of institutional repositories in Asia in the field of Library & Information Science with the data from the OpenDOAR database. Researcher found that the growth and diversity of open access repositories in Asia in the field of Library & information Science show that throughout the world people are trying to disseminate their research work or institutional holdings with the help of Internet to a large group of people. Still, the number is very few.

Institutions across the United States are actively creating institutional repositories (IRs) and an array of field-specific online collections, especially in the biological sciences. The 20 earth and biological scientists interviewed for this article embrace online resources for use in their research, teaching, and creative activities and, although previously unaware of the functions of an IR, unanimously support the development of one at the University of Oklahoma. The ability to

share scholarly information across campus and to securely archive data are seen as valuable attributes of an IR **(Brown and Abbas 2010)**

Bhat (2010) conducted a study on Community Engagement in Indian Open Access Repositories: A Deposit Activity Profile, on the bases of the data retrieved from ROAR (Registry of Open Access Repository) which provides automatic deposit activity of the repositories by taking data from Celestial, an OAI-PMH (Open Archives Initiative Protocol for Metadata Harvesting) compliant harvesting proxy. The results suggest that only a few repositories are active and the rest being mostly static including the largest repository of IISc (Indian Institute of Science).

Wani, Gul & Rah (2009) threw light on the growth and development of open access repositories throughout the world. The study further emphasizes deeply into the Asian contributions and brings to light detailed profiles of Asia. They concluded their study as, OA movement is going to set new standards for information sharing and management. The trend to set up OA repositories worldwide is inevitable and needs to be encouraged as well, particularly in the emerging world like Asia, which has every reason to excel, given the strong ICT background and mushrooming of quality academic and research institutions with high research output

Wang and Su (2007) state that although Open Access started with developed countries, it is appealing to developing countries and is spreading throughout the world quickly. Based on a comprehensive literature review, this paper outlines the concept of OA, various OA operational models, and key stakeholders, major OA projects in the developing countries with focused discussions on major issues in OA development in China. In addition, this paper evaluates the similarities and differences of OA development by using the developed counties as best practice benchmark. This paper concludes, that OA was initiated in the developed countries, and now it has become an international movement.

Rajashekhar (2004) discussed two components of open access publishing in Indian context. At first instance his study focuses on the relevance of Open access publishing in developing ountries, the potential for open access publishing in India and few current open access initiatives in India. Then second component of his study proposes a possible technical model to organize open access publishing in India.

Objectives

The main objectives of the study were to:

1. Determine the total indexed open access resources of Scopus.
2. Discover the country wise contribution of open access journals.
3. Ascertain the quantitative output of open access journals among United States of America (USA) and United Kingdom (UK) according to Active and In-Active Journals.
4. Compare indexed Open Access Resources through different parameters like subject, status, language, rank, source type, coverage of open access journals published by USA and UK

Methodology

This study was established on data collected from an online survey. Where the list of Scopus indexing open access journals were collected and then evaluated through different parameters by using MS Excel spread sheet software.

4.1. Limitations

The study was conducted and restricted to the Open Access archives, with full, immediate, free access to users, including Journals, Trade Journals, and Book Series indexed by Scopus upto July 2017. Further the scope of this study encompasses a comparative study between USA and UK in publishing open access scholarly journals.

Data Analysis and Interpretation

Table I: Open Access Journals of Scopus

Total no of Journals = 36377	
Active = 22794	In-active = 13583

*Source- Scopus

Table I, reveals the total no of open access journals indexed by Scopus submitted throughout the globe, in which 62.66% of journals are active updating in regular interval of time. While as about 37.33% of journals are inactive or have been ceased to publish.

Table II: Top 10 Contributing Countries

S. No.	Name of Country	No. of Journals	Active Journals	In-Active Journals
1	United States of America	10141	5927	4214
2	United Kingdom	7431	5260	2171
3	Germany	2729	1623	1106
4	France	1057	515	542
5	Italy	857	415	442
6	China	840	584	256
7	Switzerland	799	433	366
8	Japan	761	419	342
9	Spain	692	479	213
10	India	593	375	218

In Table II, top 10 countries which are publishing there research output in open access mode and are indexed by Scopus is represented. USA is leading at the top by contributing 10141 journals (28%) of total no of journals indexed by Scopus, followed by UK by contributing 7431

journals (20%) of total no of journals indexed by Scopus, while as no country of SAARC nations other than India is categorized under top 10 country list, in fact India is still at the last number. While accessing the journals as active and inactive type only 51% of total no of journals published by USA are active and 49% are in-active and about 71% of total number of journals published by UK are active and 29% are in-active. On the other extreme 52% of total no. of journals published by Italy are in-active while as only 48% of Journals are active. Same is the case with the France, only 48% of journals are active while as; 52% of journals are in-active.

Table III: Top 10 actively contributing countries to open access

S. No.	Name of Country	Active Journals
1	United States of America	5927
2	United Kingdom	5260
3	Germany	1623
4	China	584
5	France	515
6	Spain	479
7	Switzerland	433
8	Japan	419
9	Italy	415
10	India	375

Table III shows the top ten Countries which are having the highest no. of active journals indexed in Scopus. USA is leading at the top followed by UK, India is still at the last. While as some changes have been occurred in positions in comparison to the table II and table III with some countries like France was on the 4th position, in this table that came on 5th place, same is the case with Italy was on 5th position and now that is on 9th position while as China was on 6th place but now that is on 4th place

Table IV: Top Five Contributed Subjects

S. No	Subject	No. of Journals	Active Journals	In-Active Journals
1	Health Sciences	13712	7133	6579
2	Medical Science	12922	6546	6376
3	Physical Sciences	12114	7441	4673

4	Social Sciences	10690	8698	1992
5	Life Sciences	6708	4601	2107

Table IV, reveals the top level journals in total subjects available or indexed by scopus, according to the ranking style adopted by the Scopus, where Health Science is at the top followed by Medical Science then by Physical Science with a little gap then by Social Science and then by Life Science. On the other side if we took Active journals into consideration, it is found that Social Science is leading at the top followed by Physical Science then by Health Science with a little gap then by Medical Science and then by Life Science.

Fig. 1.1: Country wise percentage of contribution of journals into Scopus

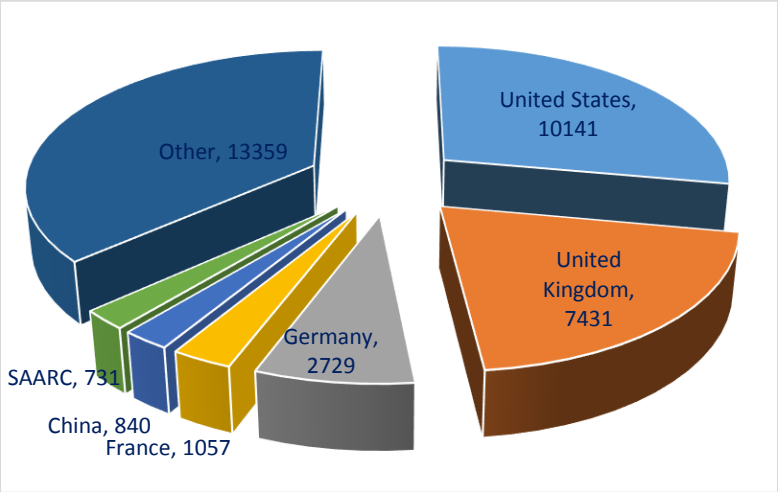

Fig. 1.1 drafts the comparison between US & UK with the other countries of world with reference to the percentage of contribution of open access journals into Scopus to the total no of open access journals indexed in Scopus. Hence it shows that about 28% of Journals are published by USA and about 21% of Journals are from UK and about 13% of journals are from three next top countries like Germany, France & China and only 02% of journals are form SAARC Nations rest 36% are from other countries of the world

Fig. 2.1: Comparison between USA and UK as per the quantitative output of Journals

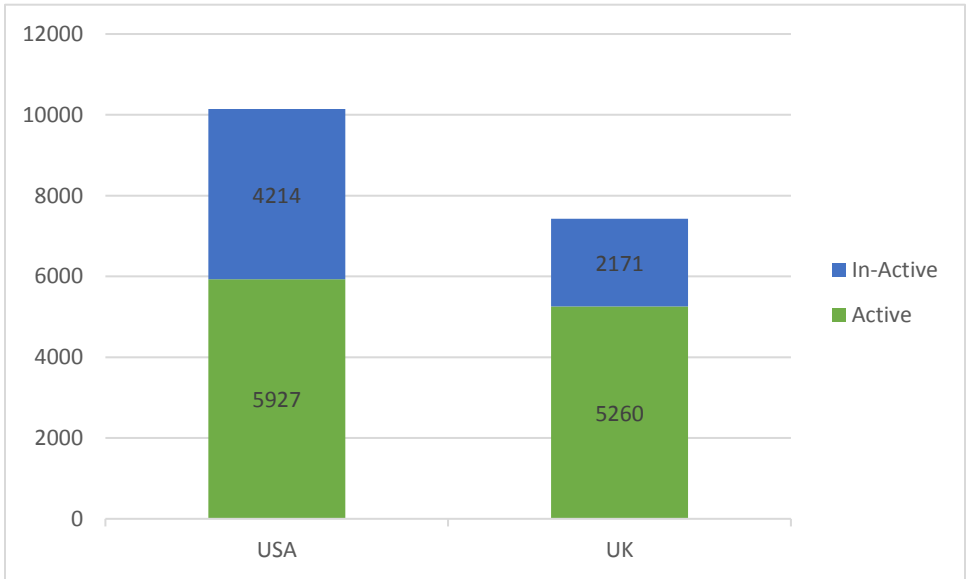

Fig. 2.1 drafts the comparison between USA and UK with reference to the contribution of open access journals into Scopus. Hence it shows that about 10141 Journals are published by USA in which only 5927 (58.44%) journals are currently active and other 4214 (41.56%) are in-active. No. of Journals published by UK is 7431 in which 5260 (70.79%) journals are active while as 2171 (29.21%) journals are in-active.

Table V: Contribution towards Open Access by USA

Total number of journals published by USA = 10141									
31 Main & 525 Sub-Subjects		***Languages***		***Coverage (1875 - 2017)***		***Source Layout***		***Journal Ranking 2016***	
Subject	*No. of Journals*	*Language*	*No. of Journals*	*Year*	*No. of Journals*	*Source type*	*No. of Journals*	*Rank type*	*Rank Range*
Health Science	4162	English	6102	1875-1975	40	Journal	9564	Cite-Score	0.00-9.920
Physical Science	3301	Unknown	3949	1976-2000	89	T. Journal	340	SNIP	0.00-9.177
Social Science	3043	Other	90	2001-2017	10012	Book Series	237	SJR	0.100-9.700

Table V, shows some of the important features and coverage of open access journals which are publishing from USA and indexed in Scopus and lists the top most three of all features like, Total no of journals published by USA is 10141. USA publishing journals in 31 main subjects which are leaded by 'Health Science' subject by 41% followed by 'Physical Science' by 28.56% then by 'Social Science' by 25.63% of the total No. of Journals indexed through Scopus. 6102 (60%) journals are published in English language, 3949 (39%) of journals found a blank space in their language column while as only 90 (1%) of journals are published in other languages. Scopus indexes USA journals published form the year 1875. Open access sources of information is presented in three main layouts, in which 9546 (94.13%) is in the form of Journals and 340 (3.35%) is in the form of Trade Journals and other 237 (2.62%) is in the form of Book Series. Three styles of journal ranking had been applied on Open access journals of Scopus database and the Journals

publishing from USA is on the top and ranges as for 'SNIP' (0.00-9.177), for 'Cite-Score' (0.00-9.920) and for 'SJR' (0.100-9.700) for the year 2016.

Table VI, shows important features of Open access journals publishing from UK and are indexed in Scopus and lists the top most three of all features like, Total no of Open access journals published by UK is 7431 in 31 main subjects which are leaded by 'Social Science' by 2956 (29.77%) followed by 'Physical science' 2925 (29.36%) then by 'Health Science' by 2349 (21%) of the total No. of Journals indexed through Scopus. 5314 journals (72%) of total no. of journals are published in English language. 2033 (27%) journals found blank space in language space. 84 (1%)of Journals are published in other than English languages. Scopus indexes journals published by UK form the year 1823. Open access sources of information is categorised in three main layouts, in which 7065 (95%) is in the form of Journals, 174 (2%) is in the form of Trade Journals and 192 (3%) is in the form of Book Series. Three styles of journal ranking had been applied on Open access journals of Scopus database which ranges as for 'SNIP' (0.00-9.652), for 'Cite-Score' (0.00-9.76) and for 'SJR' (0.100-9.925) for the year 2016.

Table VI: Open Access by UK

Total number of journals published from UK = 7431									
31 Main & 445 Sub-Subjects		***Languages***		***Coverage (1823 - 2017)***		***Source Layout***		***Journal Ranking***	
Subject	*No. of Journals*	*Language*	*No. of Journals*	*Year*	*No. of Journals*	*Source type*	*No. of Journals*	*Rank type*	*Rank Range*
Social Science	2965	English	5314	1823-1925	11	Journal	7065	SNIP	0.000-9.652
Physical Science	2425	Unknown	2033	1926-1975	51	T. Journal	174	Cite-Score	0.000-9.76
Health Science	2349	Other	84	1975-2017	7369	Book Series	192	SJR	0.100-9.925

Fig. 3.1: Subject wise comparison.

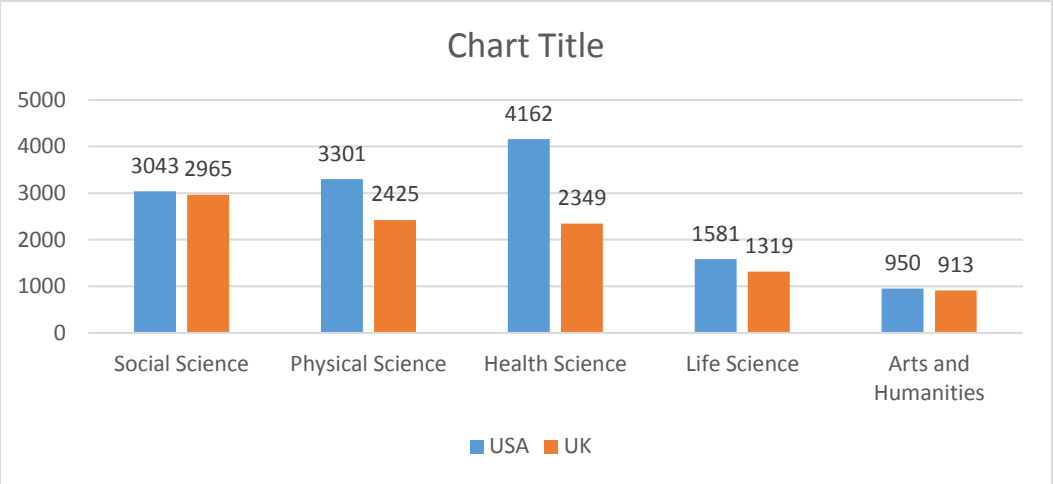

Fig. 3.1 drafts the Subject wise comparison between USA and UK with reference to the quantitative output of open access journals into Scopus. Hence it shows that as USA is leading UK in publishing open access journals. It is obvious that the USA may also lead in subject wise contribution. It is shown in the fig.3.1 that in the subjects like Health Science, Physical Science and Life Science USA is leading UK. On the other side USA and UK are at the same level with a little or no gap, in the subjects like Social Science both the countries are contributing at the same pace as USA is publishing 3043 and UK is publishing 2965 Journals. Same is the case in Arts and Humanities as USA is publishing 950 journals and UK is publishing 913 journals.

Conclusion:

The OA is achieving reputation day by day. As per the interpretation of the data on the contribution of developed nations towards open access publishing, the study can easily be concluded that like in the past revolution in the process of preservation and dissemination of information and knowledge was brought by the invention of paper and Gutenberg printing press, the open access movement, is going to set innovative principles for knowledge management and dissemination. In the implementation part of OA, Library Information Science authorities must need to perform a active part in developing and managing open access journals and repositories in their respective institutions.

USA and UK being the developed countries are an active contributors to global open-access literature. With about 5927 (26%) of total number of Active journals indexed by Scopus, USA has built significant influences headed for the progress of Open Access publishing. It was also found during the study that about 38% of the OA Journals, indexed by Scopus are in-active. Hence USA and UK is leading in publishing OA Journals it is obvious that most of the In-active Journals belongs to these countries. It is rightly said that these developed countries have stepped towards the development of OA Publishing at the right time, the matter is that now it is time for developing nations especially for India to come forward for this development also.

Refrences

Bhat, M.H (2010). Community Engagement in Indian Open Access Repositories: A Deposit Activity Profile. *Chinese Librarianship: an International Electronic Journal, 29.* Retrieved from http://www.iclc.us/cliej/cl27bhat.pdf

Brown, C., & Abbas, J.M. (2010). Institutional digital repositories for science and technology: A view from the laboratory. *Journal of Library Administration, 50,* 181-215. doi: 10.1080/01930821003634930

Hirwade, M & Rajyalakshmi, D. (2006). Open access: India is moving towards third world super power. Retrieved from: http://hdl.handle.net/1944/537

Nashipudi, M. & Ravi, B. (2014). Indian research going global: a study on the status of open access publishing. *International Journal of Information Research*. Retrieved from: http://www.spoars.org/journal/v3n4p4

Rajashekhar, T. (2004). Open access initiatives in India. In N.J.Deshpande, & S.K.Patil (Eds.), *University and college librarianship in India in the 21st century* (pp.201-207). Pune: Prof.S.G.Mahajan Felicitation Committee.

Sengupta, S. (2012). Open Access Repositories: The Asian Scenario with Special Reference to Library & Information Science. *Redesigning Libraries & Information Centres in Digital Era.* Retrieved from: http://eprints.rclis.org/18129/

Wang, X., & Su, Chang. (2007). Open access- philosophy, policy and practice: A comparative study. *Chinese Librarianship: an International Electronic Journal, 23*. Retrieved from http://www.iclc.us/cliej/cl23WangSu.htm

Wani, Z.A., Gul, S., & Rah, J.A. (2009). Open access repositories: A global perspective with an emphasis on Asia. *Chinese Librarianship: an International Electronic Journal, 27*. Retrieved from http://www.iclc.us/cliej/cl27WGR.htm