

Awareness and use of Open Access Resources among the Social Scientists: A Study of ICSSR Institutes in India

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Abstract

Social science research institutions play a vital role in society by way of creating, formulating public policies. This study focuses on social scientists' approach to open access initiatives in India. A structured questionnaire was distributed among 288 faculty members of ICSSR institutes located all over India; 166 (58%) responses were received. The study findings show that, 67% of the respondents are aware of open access resources available in social science research arena, but are not very keen on publishing their research work in open access journals. Over 55% of the respondents have responded positively to citation of open access resources in their research publications. Visibility and free access are found to be the major advantages associated with open access journals, while expensive author publishing charge is the foremost hurdle to publishing articles in open access journals. Finally, the study concludes with the suggestion that OA publishers need to be more vibrant about maintaining the quality of research articles in addition to enlightening on the role of librarians in promoting the use of open access resources.

Keywords: Indian Council of Social Science Research (ICSSR) Institutes, Open Access (OA), Scholarly Communication, Social Science Publications, Social Scientists

1. Introduction

Academic communities are the largest consumers as well as producers of information. However, when it comes to a free flow of information there is what has come to be a knowledge driven society. In this regard, open access publications act as a bridge in terms of filling the knowledge flow gap between the privileged and under-privileged academic communities of society. The term Open Access (OA) has been defined by many authors; According to Suber (2008)¹ open access is digital, online, free of charge and free of most copyright and licensing restrictions. What make it possible are the internet and the consent of the author or copyright-holder. Budapest Open Access Initiative (2002)² observes that open access to literature refers to its free availability on the public internet, thus facilitating any user 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 to use

them for any other lawful purpose, with no financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself and also that the only constraint with respect to 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. Further, on the same lines Bethesda statement on open access publishing (2003)³ define open access literature as one that readily allows the user 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.”

Social science institutions are the building blocks of any society, in terms of assisting the formulation, and evaluation of policies and programmes. In the year 1969, Government of India established Indian Council of Social Science Research (ICSSR) as part of supporting research

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in social science. The underlying objective of ICSSR is to promote research in social sciences. There are 24 research institutions affiliated to and funded by ICSSR for carrying out research and training programmes in various social science disciplines. This study explores the awareness level and use of open access resources by the faculty members of ICSSR institutions located in different parts of the country.

2. A Brief Review of Literature

There are many studies on open access initiatives, awareness and use of open access publications. Nick (2012)⁴, in his study, explains that, open access publications are globalizing research output in that they enhance dissemination and distribution of information, support active learning, and provide areas for nursing informatics research. Fidishun (2010)⁵ in his personal blog observes, “transformation has been so rapid, so dramatic that there has been very little opportunity to access, adjust and respond to the impact on scholarly communication.” Russell (2011)⁶ emphasizes on the role of academic community in enhancing the visibility of research output and the importance of open access movement. Bennett (2013)⁷ while studying the role of publishers in scholarly communication notices the general acceptance of open access by many commercial publishers. Most of the publishers have initiated some sort of open access model in their existing journal programme”.

Nicholas, Huntington and Rowlands (2005)⁸ in a study conducted on open access journal publishing of world’s selected authors, finds that 34% of the respondents were not aware of open access publishing while almost 46% had not published any research papers in OA journals and only 11% of the respondents had published papers in open access journals. A study by Nagaraj and Bhandi (2016)⁹ on the use and awareness of open access resources with respect to researchers finds that a majority (91%) of the respondents were aware of open access resources available in their respective subject area with Wikipedia web 2.0 being the most preferred tool for searching information. It further reveals that, 65% of the respondents were completely satisfied with the available open access resources in their subject area. Zeng (2010)¹⁰ while highlighting the implications of open access journals for research and development observes that, open access publications have brought about a substantial transformation in research and academic publication, but still there are issues like copyright problem, operating outlay, quality controlling problem etc. Pinfield (2007)¹¹

based on a survey, points out that libraries should facilitate to its users in accessing open access resources by creating metadata, indexing, data harvesting etc., in addition to highlighting the importance of user education programmes related to open access publishing as part of enhancing the usage of OA resources.

3. Objectives

The primary objective here is to explore the level of awareness of and use of open access resources by social scientists of India. The specific objectives are as follows:

1. To identify the modes of academic information searching through internet by social scientists working with ICSSR institutes, India;
2. To study the extent of awareness of social science academic communities of ICSSR institutes regarding OA resources;
3. To investigate the publication pattern and citation pattern of OA resources among the respondents of the study;
4. To identify the advantages and barriers associated with the publication of research articles in open access journals; and
5. Finally, to measure the level of satisfaction with the available open access resources, and to suggest the ways and means to improve the usage of open access publications.

4. Methodology

A structured questionnaire was designed using Google form and distributed among the faculty members of ICSSR affiliated institutions through e-mail. As a follow-up, we did carry out personal and telephonic interactions, based on the inputs acquired from the questionnaire administered.

5. Data analysis and Interpretation

Random sampling technique was used with a view to generalizing the results. The population consisted of Professors, Associate Professors and Assistant professors of ICSSR institutions. The questionnaire was distributed among 288 faculty members of ICSSR institutes located all over India; responses were received from 166 accounting for 58% of the total population (Table 1).

5.1 Modes of Searching Online Information

Table 2 presents the tools employed by social scientists for searching information.

The data presented in Table 2 reveals that Google (94%) is the most preferred channel for all categories of respondents when it comes to searching information, followed by subscribed online journals (77.11%), Google Scholar (66.26%) and institutional repositories (62.05%). While interestingly, searching information through open access resources is found to be the least preferred mode

38(22.89%) among the social scientists.

5.2 Extent of Awareness Regarding Open Access Resources

The lowest rate of response for Open Access resources as a mode of searching information may indicate the lack of awareness regarding open access publications among social scientists. Hence, the study carried out a further analysis to understand the extent of awareness regarding

Table 1. Distribution of respondents

Gender	Job Title			Total
	Professor	Associate Professor	Assistant Professor	
Female	5 3.00%	5 3.00%	43 25.90%	53 31.90%
Male	32 19.30%	40 24.10%	41 24.70%	113 68.10%
Total	37 22.30%	45 27.10%	84 50.60%	166 100.00%

Table 2. Modes of searching online information

Modes	Job Title			Total
	Professor	Associate Professor	Assistant Professor	
Google	37 23.70%	40 25.60%	79 50.60%	156 94.00%
Google Scholar	21 19.09%	30 27.27%	59 53.64%	110 66.26%
Online Journals	23 17.97%	31 24.22%	74 57.81%	128 77.11%
Institutional Repos- itories	15 14.56%	31 30.10%	57 55.34%	103 62.05%
OA Resources	5 13.16%	20 52.63%	13 34.21%	38 22.89%

Table 3. Level/extent of awareness regarding OA resources

Job Title	Level/extent of Awareness				Total
	Very Good	Fair	Uncertain	Poor	
Professor	4 10.80%	12 32.40%	21 56.80%	0 0.00%	37 100.00%
Associate Professor	4 8.90%	26 57.80%	10 22.20%	5 11.10%	45 100.00%
Assistant Professor	5 6.00%	60 71.40%	9 10.70%	10 11.90%	84 50.60%
Total	13 7.83%	98 59.04%	40 24.10%	15 9.03%	166 100.00%

open access resources available among social scientists.

As can be observed from Table 3, a vast majority of the respondents i.e., 98 (59.04%) are fairly aware of open access resources available in their area of research; A category-wise analysis shows that as many as 60 (71.40%) Assistant Professors and 26 (57.80%) Associate Professors are aware of open access publications, a large number of professors 21(56.80%) are uncertain about open access publications available in their area of research. Some of the related studies such as Ivwighrehweta and Onoriode (2012)¹² also have similar The Chi-Square test was employed to understand whether there existed any statistical significant association between the designation of respondents and awareness of OA resources.

Table 4. Chi-Square tests for rate of awareness of OA resources

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	34.506 ^a	6	.000
Likelihood Ratio	35.574	6	.000
Linear-by-Linear Association	1.370	1	.242
N of Valid Cases	166		

a: 4 cells (33.3%) have expected count less than 5. The minimum expected count is 2.90.

The result presented in Table 4 suggests that awareness varies with position of respondents.

5.3 Open Access Research Article Publication Pattern

It is important to analyse the open access publication pattern of academicians as part of understanding their

support for open access resources. The present study asked the respondents to indicate the number of open publications including journal articles, books, etc. The results are presented in Table 5.

It is evident from Table 5 that, highest number i.e., 120 (72.30%) respondents have ≤10 articles published in open access resources. But, it is interesting to observe that highest number i.e., 84(50.60%) Assistant Professors have published their research output in open access resources as compared to the other two categories of respondents. This is an indication of faith and trust the present generation has in open access publications.

5.4 Citation Pattern of OA Resources

Considering the importance of understanding the publication pattern of open access resources, we felt it equally important to analyse the citation pattern as well. The data spread in Table 6 shows that, 92(55.40%) respondents have cited open access resources in their research publications. The job title-wise responses reveal that, Associate professors 35(77.80%) are in the forefront when it comes to citing open access publications, followed by Assistant Professors 45(53.60%) and Professors 12(32.40%).

With regard to citations to open access resources Garfield, Eugene (2004)¹³ expressed in American Scientist Open Access forum that an open access research article improves both readership and citation. Thomson ISI (2004)¹⁴, in a study on the impact of open access journals report that open access journals have almost a similar citation pattern as non-open access journals. It is evident that a larger visibility of open access resources results in a better citations pattern.

5.5 Advantages of Open Access Publishing

The study listed the major advantages associated with

Table 5. Total no. of OA publications

Job Title		Total No. OA Articles			Total
		0-10	11-20	31-40	
Professor	Count	11	12	14	37
	%	29.70%	32.40%	37.80%	22.29%
Associate Professor	Count	35	10	0	45
	%	77.80%	22.20%	0.00%	27.11%
Assistant Professor	Count	74	10	0	84
	%	88.10%	11.90%	0.00%	50.60%
	Total	120	32	14	166
	%	72.30%	19.30%	8.40%	100.00%

Table 6. Citations of OA publications

Job Title		Citations of OA Publications		
		Yes	No	Total
Professor	Count	12	25	37
	%	32.40%	67.60%	100.00%
Associate Professor	Count	35	10	45
	%	77.80%	22.20%	100.00%
Assistant Professor	Count	45	39	84
	%	53.60%	46.40%	100.00%
	Total	92	74	166
	%	55.40%	44.60%	100.00%

Table 7. Correlation test for job title citation of OA publications

		Job Title	Citation of OA Publications
Job Title	Pearson Correlation	1	0.105
	Sig. (2-tailed)		0.18
	N	166	166
Citation of OA Publications	Pearson Correlation	0.105	1
	Sig. (2-tailed)	0.18	
	N	166	166

Table 8. Advantages of publishing articles in OA journals

Factors	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Total
OA Journals are free to access	83 50.00%	47 28.30%	32 19.30%	4 2.40%	0 0.00%	166 100.00%
OA Provides user friendly interface to full text information	41 24.70%	91 54.80%	34 20.50%	0 0.00%	0 0.00%	166 100.00%
OA Provides more visibility	55 33.10%	84 50.60%	21 12.70%	6 3.60%	0 0.00%	166 100.00%
OA Removes all the price barriers	53 31.90%	71 42.80%	37 22.30%	5 3.00%	0 0.00%	166 100.00%
Publishing of OA articles has helped increase citation	39 23.50%	73 44.00%	54 32.50%	0 0.00%	0 0.00%	166 100.00%

open access publishing and asked the respondents to rate according to Likert scale.

The data presented in Table 8 reveals that most of the respondents 139 (83.70%) have given a positive response regarding the visibility of open access journals. Free access

appears to be the second major advantage associated with OA journals, followed by 124 (74.70%) respondents indicating that open access publishing removes all price barriers. The study by Ivwighrehweta and Onoriode (2012)¹² has reported similar result, in that 87% of the

Table 9. Barriers to publishing OA journals

Factors	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Total	X ²	F	Sig
OA Journals have a lower impact factor	24 14.50%	40 24.10%	61 36.70%	41 24.70%	0 0.00%	166 100.00%	28.632	6	.000
Author publishing charges for OA Journals are highly expensive	26 15.70%	68 41.00%	55 33.10%	17 10.20%	0 0.00%	166 100.00%	30.200	6	.000
Copyright polices with regard to OA journal articles are not clear	10 6.00%	43 25.90%	71 42.80%	42 25.30%	0 0.00%	166 100.00%	34.297	6	.000
Articles in OA Journals get fewer citations	11 6.60%	42 25.30%	62 37.30%	51 30.70%	0 0.00%	166 100.00%	13.878	6	.031
No peer-review process is followed	16 9.60%	34 20.50%	76 45.80%	35 21.10%	5 3.00%	166 100.00%	17.131	8	.029

respondents have reported free access and more visibility as the major advantages.

5.6 Barriers to Open Access Publishing

The study brings out a few barriers to open access resources like copyright problems, author charges, impact factor and citations issues etc. The results displayed in Table 9 reveal that a number of the respondents 76 (45.80%) neither accept nor reject the different barriers listed while 96 (56.70%) of total respondents agree that author publishing charges for open access journals are very. The second major hurdle as reported by the respondents is ‘OA journals have a lower impact factor’ with 24(14.50%) of the respondents strongly agreeing and 40 (24.10%) just agreeing with that. Less than a third of the respondents do not agree with the statement that ‘OA articles will get fewer citations’.

Overall, the study noticed diverse opinions on the different disadvantages associated with open access publishing. Rowlands, Nicholas, and Huntington (2004)¹⁵, in their study on open access authors, also have noticed that, OA authors are resistant to the idea of author payment. Coonin and Younce (2010)¹⁶ have found

56.1% of open access authors not willing to publish in OA journals that charge publication fee. Hence, it is clear from the studies that authors are not willing to publish their research work by paying money to the publisher.

5.7 Overall Satisfaction Regarding OA Resources

It is observed from Figure 1 that, most of the respondents 111(67%) are fairly satisfied; a very small percentage (3%) of the users have expressed ‘Excellent’ with regard to the satisfaction level of open access resources available. Only around 12% of the social scientists is not satisfied with OA resources.

6. Findings

The major findings are as below:

- Most of the social scientists (94%) prefer Google as the preferred mode of searching online information, followed by e-journals and Google scholar,
- 66.87% of the social scientists are aware of open

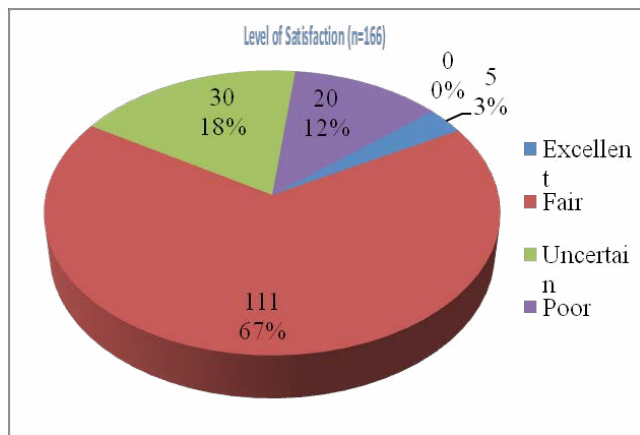


Figure 1. Overall satisfaction levels regarding OA publications.

access journals, but 56.80% of professors are uncertain about open access resources,

- It is evident from the study results that social science scholars are not very keen on publishing their research articles in open access journals. The study also reveals that 72.30% of the respondents have published less than 10 research articles in open access journals,
- There are about 83.70% of the respondents who agree that open access journals have more visibility, while 78.30% acknowledge that the advantage of open access lies its free access and that it removes all price barriers to scholarly communication,
- The study has found mixed responses with regard to the disadvantages of OA publishing in that 56.70% of the respondents have indicated that author publishing charges for OA Journals are high, while 36.70% the respondents neither agree nor disagree with the opinion that open access journals have a lower impact factor, and
- The study also has found that 67% of the respondents (maximum) are fairly satisfied with OA resources,

7. Conclusion

An open access to journals is an ambitious initiative in scholarly communication; it facilitates information inclusiveness by removing the disparity between those who are privileged to access information and those unable to access. The present study is an attempt in understanding the perceptions of social scientists regarding open access resources. Unlike scientific open access publication, the social science open access initiation in India is in its infancy. The findings of the study indicate that, although social scientists are aware of open access publication, they

show least interest in publishing their research papers in open access journals. It is apparent from the study that open access publications give more visibility and remove the price barriers to scholarly communication and the peer reviewed open access journals may fetch better citations. The user perceptions regarding open access journals are quite interesting, in that many feel that open access journals are quite useful especially to academicians in the developing countries as non-OA journals are generally expensive. Open access helps remove the publication biases by understanding the other side of the research world.

The survey highlights the positive attitude towards open access journals among the social scientists in India. In this respect, library and information professionals need to play a greater role in building awareness regarding open access resources among users.

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