Original Article

Open Access Resources: Academic Insights from Shivaji University, Kolhapur

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Abstract:

With the advent of web-enabled technologies and innovative ICT applications, new editorial models for scientific communication are rapidly emerging. Open Access (OA) resources represent a revolutionary shift in the dissemination of scholarly information, aiming to make academic content freely accessible to all. This study explores the awareness and perceptions of Open Access resources among the academic community at Shivaji University, Kolhapur. A total of 607 respondents participated in the study. The survey method was employed, with data collected through a structured questionnaire administered to faculty members and research scholars across 37 departments of the university. The findings indicate that 40% of the respondents belong to the Science Department, while 31% are from the Engineering & Technology Department. A substantial majority 82% respondents being aware of various Open Access Resources (OAR). The study also examines the correlation between the academic community and their level of awareness of OA resources. Furthermore, it discusses the purposes for which these resources are utilized and the frequency of their use.

Keywords: Open Access Resources; Scholarly Communication; Faculty Perception; Research Scholar; Shivaji University.

Introduction:

Until recently, the most common method of scholarly communication was through writing and publishing research findings in books or scholarly journal articles. However, the advent of the internet and other ICT (Information and Communication Technology) tools has

brought about a significant shift from traditional print to digital formats. E-publishing and the digital processing, storage, and retrieval of information have profoundly impacted scholarly communication, influencing both the publishing and dissemination processes. These technological advancements have facilitated self-publication, giving scholars greater control and ownership over their work. As a result, self-publishing has become an integral part of the academic landscape. Additionally, the rising costs of printed materials and electronic journal subscriptions have prompted the search for alternative modes of scholarly communication, such as open access.

The open access (OA) movement—through journals and digital repositories—is a prime example of how the academic community is leveraging technology to broaden the reach of research. By making scholarly content freely available and reducing copyright restrictions, OA initiatives aim to enhance accessibility and promote the wider dissemination of knowledge.

Open Access:

The term 'Open' has become somewhat of a buzz word which currently has positive associations for most people. The two most important aspects of openness have to do with free availability over the internet and as few restrictions as possible on the use of the resource, whether technical, legal or price barriers. Suber (2012) defines Open Access as "Open Access literature is digital, online, free of charge, and free of most copyright and licensing restrictions". The concept of open access has emerged in response to the restrictive access to knowledge in scholarly and scientific journals imposed by commercial publishing houses via subscription fees, license fees or pay-per-view fees (Christian, 2008).

"Open access to the literature, means its free availability on the public internet permitting 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 use them for any other lawful purpose, without financial, legal or technical barriers other than those inseparable from gaining access to the internet itself". Budapest Open Access Initiative (2002)

Need and Significance of the Study:

Open Access (OA) resources represent a transformative shift in accessing scholarly content within higher education systems, aiming to make academic information freely available to all. At Shivaji University, the academic community—including students, research scholars, and faculty members at various levels such as Professors, Associate Professors, Assistant Professors, and Research Fellows—plays a pivotal role in generating new and innovative knowledge within their respective fields.

A review of existing studies showed a lack of systematic research on the use and perception of OA resources at the university. To bridge this gap, the present study investigates the awareness and usage of open access resources among the academic community of Shivaji University, Kolhapur.

Objective of the Study:

1. To find out the level of awareness towards open access resources

among the academic community in the Shivaji University, Kolhapur

2. To identify the frequency and purpose of using open access resources.
3. To analyze the user perceptions towards open access resources.

Hypotheses:

1. The level of awareness of open access resources is higher among the academic community at Shivaji University, Kolhapur, and is associated with different user categories.

Scope and Limitations:

The present study is limited only for the academic community in the Shivaji University, Kolhapur. There are 37 Various Departments in the Shivaji University, Kolhapur. The researcher covered these 37 departments for the study. Researcher proposes to administer questionnaire to the all-faculty members and research scholars in these departments.

Literature Review:

Review of related literature is conducted to assist the researcher to get a clear understanding about the specific field of study. An effort has been made to present the findings of previously conducted research studies bearing relevance to the topic under investigation. **Shubhasmita Acharya & Lulu Rout (2022),** Research highlights the importance of open access (OA) resources for research, curriculum, and current information. As OA resources expand, libraries and institutions must ensure users are aware of them, including OERs

and OA repositories. Studies show that many students and researchers rely on libraries and the internet rather than formal education to discover these resources. Therefore, both public and private institutions should implement awareness programs to enhance accessibility and usage. **Ishfaq Ahmad Palla & others (2022)** The study highlights that open access (OA) has transformed scholarly communication by making research more accessible globally. Faculty and librarians in higher education play a key role in promoting OA through seminars, workshops, and training programs. Institutional repositories enhance citation impact and visibility for researchers. To support OA, the Ministry of Education and universities should develop necessary infrastructure and policies. **Ganesan P & Mangai G (2021),** The study reveals that most research scholars are unaware of e-content pages, e-reports, and other OA resources. Limited access to department computers hinders usage, highlighting the need for more computers with high-speed internet in both departments and libraries. Awareness programs like Open Week and information literacy sessions should be conducted regularly. Additionally, gender-based differences in OA impact and the higher stress levels among female scholars should be addressed.

Research Methodology:

For this research, descriptive and Survey method has been used. For collecting data, specially structured questionnaire has been used. Google form format of questionnaire has been structured for online data collection. Researcher had distributed a

questionnaire to the all-faculty members and research scholars of every department of Shivaji University to know their usages pattern about open access resources. The collected data has been analyzed using the Statistical Package for Social Sciences (SPSS) software to identify a pattern and the findings would be presented with the help of tables and graphs for clarity.

Analysis and Interpretation of Data:

Opinions collected from the respondents of the study are analyzed and interpreted by using appropriate statistical techniques. Both descriptive and inferential statistics are used for analysis. Descriptive statistics like mean, standard deviation, percentage, and inferential statistics like chi-square test is used.

1. Department wise Distribution of Respondents:

The present study consists of respondents from various departments under the heads such as Arts, Commerce, Education, Engineering & Technology, Interdisciplinary, Science and Social Science. The department wise distribution of respondents is given in Table 1.

Table 1: Department wise Distribution of Respondents

Sr. No.	Department	No. of Respondents	Percent
1	Arts	29	4.78
2	Commerce	11	1.81
3	Education	6	0.99
4	Engineering& Technology	189	31.14
5	Interdisciplinary	18	2.97
6	Science	244	40.20
7	Social Science	110	18.12
	Total	607	100

Source: Primary Data

Table 1 reveals that Majority of the users 40.20 per cent (244) of the respondents are from Science which includes Botany, Chemistry, Computer Science, Electronics, Industrial Chemistry, Microbiology, Mathematics, Physics, Statistics, Zoology Then it is followed by 31.14 per cent (189) from Engineering & Technology, which includes Computer Science and Technology , Chemical Engineering, Civil Engineering, Electronics and Telecommunication Engineering, Food Technology, Mechanical Engineering departments.

2. Awareness of various Open Education Resource:

The Open Education Resources (OER) and Open Access Resources (OAR) are representing one and the same. The open access resources are of different types ranging from open access book to open access database similar to e-resources of payment. The awareness of respondents towards various open access resources is further studied and the details are summarized in Table 2.

Table 2: Awareness towards various Open Educational Resources

Sr. No.	Open Educational Resources	Aware	Unaware
1	Open Access Journals	485(79.2)	122(20.8)
2	Open Access Repositories	180(29.7)	427(70.3)
3	Open Access Database	342(56.4)	265(43.6)
4	Open Access e-book	424(70)	183(30)
5	E Learning Platforms	487(80.3)	120(19.7)

Source: Primary Data

Table 2 shows that the majority (80.3 per cent) of the respondents have awareness about university websites. It is followed by open access journals by 79.2 per cent, open access e- book by 70 per cent, personal blogs and websites by 57.1 per cent, open access database by 56.4 per cent and open access repositories by 29.7 per cent.

Table 2 shows that majority of the respondents have awareness towards various open access resources. Hence, it is interpreted that academic community have awareness towards open access resources. Therefore, the hypothesis is accepted.

3. Level of awareness towards Open Access Resources:

The level of awareness of users towards open access resources enhances their optimum utilization. Level of awareness of respondents towards open access resources is further studied and the details are provided in Table 3.

Table 3: Level of awareness towards Open Access Resources

Sr. No	Level of Awareness	No. of respondents	Percent
1	Fully Aware	501	82.5
2	Unaware	15	2.5
3	Somewhat Aware	91	15
Total		607	100

Source: Primary Data

The Table 3 discloses that 82.5 per cent (501 out of 607) of the respondents have awareness towards open access resources, only 2.5 per cent (15 out of 607) are unaware of open access resources and the remaining 15 per cent (91 out of 607) are somewhat aware about open access resources. Hence, it is interpreted that 82.5 per cent of the respondents are fully aware of open access educational resources.

4. Association between academic community and Awareness towards OAR:

The association between academic community and level of awareness towards open access resources are further examined using the chi-square analysis. The details of chi-square analysis are presented in Table 4.

The table below is a contingency or co-occurrence table or cross-table is extracted from 'data sorting final' file. There are two variables. These are 'Categories' and 'Level of Awareness'.

Each has two values. All these are qualitative and ordinal variables. It is required to find out whether the two variables are associated or not. (Note in case of qualitative variables, the relation, if any, is considered as Association. If these variables are quantitative, then it is called correlation.

The Association between two or more variables is tested by conducting Chi-Square test. In other words, it is used to test null hypothesis. In the present case the null and Alternative hypotheses are,

H$_0$: There is no association between the academic community and awareness of open access resources.

H$_a$: The two variables are associated.

Chi-square test helps in accepting or rejecting the null-hypothesis.

Table 4: Association between academic community and Awareness towards OAR

Category	Awareness		Total	Chi-Square test for contingency		
	Fully aware	Somewhat aware		Chi-Square	DF	P-Value
Faculty	139 (67.47)	67 (32.53)	206 (100.00)	2.567	1	0.109
Research Scholar	244 (60.84)	157 (39.16)	401 (100.00)			
Total	383 (128.31)	64 (71.69)	607 (100)			

As p-value is far less than computed chi-square value, the null-hypothesis is rejected at 1 degree of freedom, and the alternative hypothesis is accepted. i.e. the level of awareness is associated with the categories of users.

5. Frequency of using Open Access Resources:

The frequency of the usage of the open access resources by the academic community is further examined, based on the responses of the study. The frequency of using open access resources by the respondents of the study is presented below.
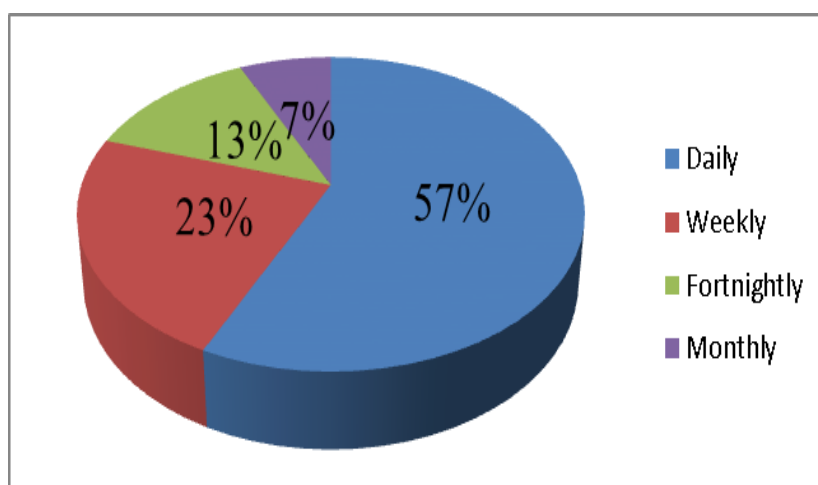

Figure 1: Frequency of using Open Access Resources

The percentage of the frequency of using open access resources is represented in the pie-diagram in Fig 1. It reveals that 345 out of 607 respondents (57 per cent) use the open access resources daily. It is followed by 23 per cent (138 out of 607) use at least once in a week, fortnightly by 13 per cent and at least once in a month by 7 per cent (45out of 607).

6. Age and Frequency of using OAR:

The age of the respondents influences the use of open access resources. The age and frequency of using open access resources wise distribution of respondents are presented in Table 5.

Table 5: Age and frequency of using OAR

Variable	Category	Frequency of using of OAR				
		Daily	Weekly	Fortnightly	Monthly	Total
Age	Below 25 yrs	53	25	14	10	102
	26-40 Years	247	65	53	28	393
	Above 40 Yrs	45	48	12	07	112
Total		345	138	79	45	607

Table 5 discloses that 53 out of 102 respondent use the open access resources daily, followed by 25 out of 102 uses at least once in a week, 14 out of 102 uses at least once in a fortnight, and 10 out of 102 uses at least once in a month under age below 25 years. Similarly, under age group between 26 to 40 years, 247 out of 393 use dailies, 165 out of 393 uses at least once in a week, 53 out of 393 use at least once in a fortnight, 28 out of 393 use at least once in month. Similar trend is prevailing in other age groups too. Forty five out of 112, 48 out of 112, and 12 out of 112 respondent use the open access resources daily respectively under age group above 40 years.

7. Time spent for Accessing Open Access Resources:

Open access resources are electronic resources which are being accessed through computer terminal with the aid of internet connectivity. Time spent by the respondents for accessing open access resources on internet are presented below.
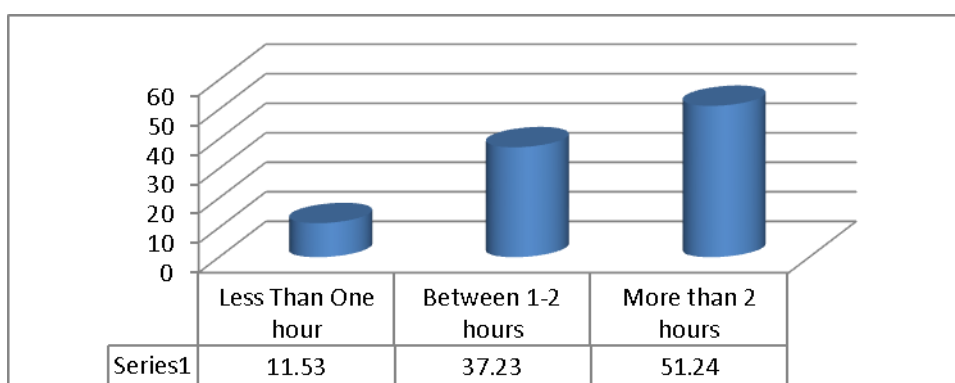

Figure 2: Time Spent for Accessing Open Access Resources

Fig. 2 clearly indicates that majority of the respondents (51.24 per cent) spent 2 hours for accessing open access resources per week, followed by 37.23 per cent of the respondents spent 1-2 hour per week and 11.53 per cent spent more than less than one hours per week for accessing open access resources.

8. Purpose of Using Open Access Resources:

The purpose of using open access resources is varying from user to user based on their general and specific information needs. The purpose of using open access resources by the respondents are given in table 6.

Table 6: Purpose of Using Open Access Resources

Sr. No	Purpose of using OAR	No. of respondents	Percent
1	Teaching	252	41.52
2	Updating subject knowledge	552	90.94
3	To do course work/assignments	401	66.06
4	Research work/project	448	73.81
5	Writing papers/articles	482	79.41
6	Other academic activities	485	79.90

Source: Primary Data

Table 6 indicates that the 90.94 per cent of the respondents uses open access resources for the purpose of Updating subject knowledge. It is followed by other academic activities work (79.90 per cent), for writing papers/articles (79.41 per cent), for Research work/project (73.81 per cent), for To do course work/assignments (66.06 per cent) and for teaching purposes (41.52 per cent).

Thus, it is interpreted that majority of the respondents uses open access resources for Updating subject knowledge.

9. User Perception towards Open Access Resources:

The perception of the respondents towards open access resources are measured based on their opinion on various perception statements on its various features. It consists of ten statements on various facets of the concept open access resources and the opinions are rated on a five-point scale of Likert's type ranging from strongly disagree to strongly agree. Out of ten statements, four of them are negative statements. Various statistics calculated from the perception score are provided in below Table.

Table 7: User Perception towards OAR

Sr.No	Statistic on User Perception Score		Value
1	N		607
2	Mean		3.881
3	Std. Deviation		0.954
4	Variance		13.058
5	Range		1.02
6	Minimum		3.23
7	Maximum		4.25
8	Percentiles	33.33	28.00
		66.67	36.00

Source: Primary Data

It is clear from Table 7 that means user perception score towards open access resources is 3.88, standard deviation 0.954 and variance 13.058. The maximum and minimum score are respectively 4.25 and 3.23. The 33.33 and 66.67 percentiles are respectively 28 and 36. Thus, the users of academic community have medium level perception towards open access resources. Deviation in the scores shows that user differs in their level of perception towards open access resources.

Findings of the Study:

Based on the analysis of collected data the following findings are made.

1. In the present study 40.20 percent of the respondents are from Science Department and 31.14 per cent of the respondents are from Engineering & Technology Department, it is followed by other departments from university respondents.
2. Eighty-two per cent of the users are fully aware of open educational resources.
3. Majority of the users (90.94 per cent) use open access resources for the purpose of Updating subject knowledge. It is followed by, for other academic purposes (79.90 percent), for writing papers/articles by 79.41 per cent, for research /project work by (73.81 per cent), course work/assignments by (66 per cent and for teaching purpose by(41.52 per cent) only.
4. Academic community in the academic community of Shivaji University system uses open access resources daily by 57 per cent, at least once in a week by 23 per cent, once in a fortnight by 13 per cent and at least once in a month by 7 per cent.
5. There is an association between the age of the academic community and frequency of using open access resources. Users of age below 26-40 are using open access resources more frequently than other age groups.
6. Majority of the users in academic community in the academic community of Shivaji University system (51.24 per cent) spent more than 2 hours for accessing open access resources per week. It is followed by 37.23 per cent of the respondents spent between 1-2

hours per week and 11.53 per cent spent less than one hour per week.

7. Users of academic community in the academic community of Shivaji University system have medium level perception towards open access resources. The mean and standard deviation are respectively 3.881 and 0.954.

Conclusion:

The use of Open Access (OA) resources is vital for the academic community at Shivaji University in today's digital age. Freely available e-books, journals, databases, and repositories enhance education, support research, and foster innovation. This study finds that most users of academic community of Shivaji University are aware of and actively use OA resources to meet academic needs. Therefore, the insights from this study hold valuable implications for the Library and Information Science (LIS) community, academic professionals, and policymakers, guiding future initiatives in the promotion and effective use of open access resources.

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