

A STUDY ON UTILIZATION OF OPEN ACCESS RESOURCES BY THE RESEARCH SCHOLARS OF ANNAMALAI UNIVERSITY, TAMIL NADU

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Abstract : The paper presents the results of a study on the impact of open access resources on research in Annamalai University, Tamil Nadu. Five faculties were selected. The data were collected using questionnaire method. The study revealed that level of awareness and use of open access resources, benefit and usefulness also have been identified and presented in the paper.

Index Terms - Open access resources, Annamalai University, e-Journals, e-books.

I. INTRODUCTION

Information age can become a reality only with the help of internet. It extends information sharing, learning and networking. In the digital environment the academicians, scientists are moving towards accessing and using electronic materials for their study and day to day academic activities. They are one of the main means used by researchers for scholarly communication. They play an important role in the creation and communication of knowledge. There are thousands of open access repositories available. The promising open access movement is opening alternate channels for the distribution of scholarly work. The number of open access repositories available in internet is growing every day. The researchers and academicians make use of the rich resources available through open access repositories at free of cost. On the other hand, the utilization statistics of these open access resources does not shows encouraging facts. Therefore, the authors intended to assess how far the research scholars of Annamalai University make use of the open access open access repositories.

II. OBJECTIVES OF THE STUDY

The objectives of the present study are

- To study the awareness and use of Open Access Resources by the Research Scholars of Annamalai University
- To identify the place of access and benefit of using Open Access Resources
- To identify the preference of internet search engine and browsers.
- To know the usefulness of Open Access Resources.

III. METHODOLOGY

This study attempts to examine the awareness and use of open access resources by the research scholars of Annamalai University. The faculties selected for the study include: 1. Faculty of Arts; 2. Faculty of Science; 3. Faculty of Indian Languages; 4. Faculty of Engineering and Technology and 5. Faculty of Education. A structured questionnaire was employed to collect the data. A total of 2066 questionnaire were distributed, of which 1941 questionnaire duly filled in were received back (Table 1). The questionnaire were self administered.

IV. RESULTS AND DISCUSSION

The data collected by questionnaire method were analyzed and interpreted and same are presented in the following tables.

Table 4.1 Faculty - wise Distribution of Respondents

Faculty	Total No. of Research Scholars	No. of Questionnaire Distributed	No. of Questionnaire received	Response Rate
Faculty of Arts	1010	758	733	96.70
Faculty of Science	474	356	331	92.98
Faculty of Indian Languages	207	156	131	83.97
Faculty of Engineering and Technology	717	538	513	95.35
Faculty of Education	343	258	233	90.31
Total	2751	2066	1941	93.95

Table 4.1 presents the status of the respondents. As stated earlier, 5 faculties of Annamalai University were undertaken for the study and the data were collected through Stratified Random sampling method. The highest response were received from Faculty of Arts sharing 96.70 percent of respondents rates followed by Faculty of Engineering and Technology (95.35%), Faculty of Science (92.98%), Faculty of Education (90.31 %), and Faculty of Indian Languages (83.97%). It is interesting that the least response rate which was recorded as 83.97 percent is quite significant.

Table 4.2 Distribution of Respondents on Awareness of Open Access Resources

Faculty	Aware	%	Unaware	%
Faculty of Arts	699	95.36	34	4.64
Faculty of Science	310	93.66	21	6.34
Indian Languages	120	91.60	11	8.40
Engineering and Technology	493	96.10	20	3.90
Education	214	91.85	19	8.15
Total	1836	94.59	105	5.41

Table 4.2 Presents the result on the awareness of the Open Access Resources among the research scholars of Annamalai University. It was found that the research scholars of Faculty of Arts were mostly aware of open access resources which amounts to 95.36 percent followed by Faculty of Science (93.66%), Faculty of Indian Languages (91.60%), Faculty of Engineering and Technology (96.10%) and Faculty of Education (91.85%).

Table 4.3 Faculty wise Distribution of Respondents on Place of Access to open Access Resources

Place of Access	No. of Respondents				Education	Total
	Arts	Science	Indian Languages	Engineering and Technology		
Library	618 (84.31)	278 (83.99)	87 (66.41)	410 (79.92)	142 (60.94)	1535 (79.08)
Department	515 (70.26)	207 (62.54)	74 (56.49)	384 (74.85)	188 (80.67)	1368 (70.48)
Residence	637 (86.90)	258 (77.95)	92 (70.23)	470 (91.62)	167 (71.67)	1624 (83.67)
Cyber cafe	205 (27.97)	102 (30.82)	46 (35.11)	92 (17.93)	68 (29.18)	513 (26.43)

Note: Figures in parentheses denote percentages. Percentages exceeded more than 100% because of multiple choice options.

Data presented in Table 4.3 indicates the faculty-wise distribution of respondents' place of access to open access resources. It is seen from the table that 1624 (83.67%) respondents had access to open access resources at their residences followed by 1535 (79.08%) respondents at their libraries while 1368 (70.48%) respondents had access to the open access resources at their department and 513 (26.43%) respondents at cyber cafes.

In their opinion about places of access to open access resources, about 470 (91.62%) respondents from Faculty of Engineering and Technology and 637 (86.90%) respondents from Faculty of Arts did at their residences.

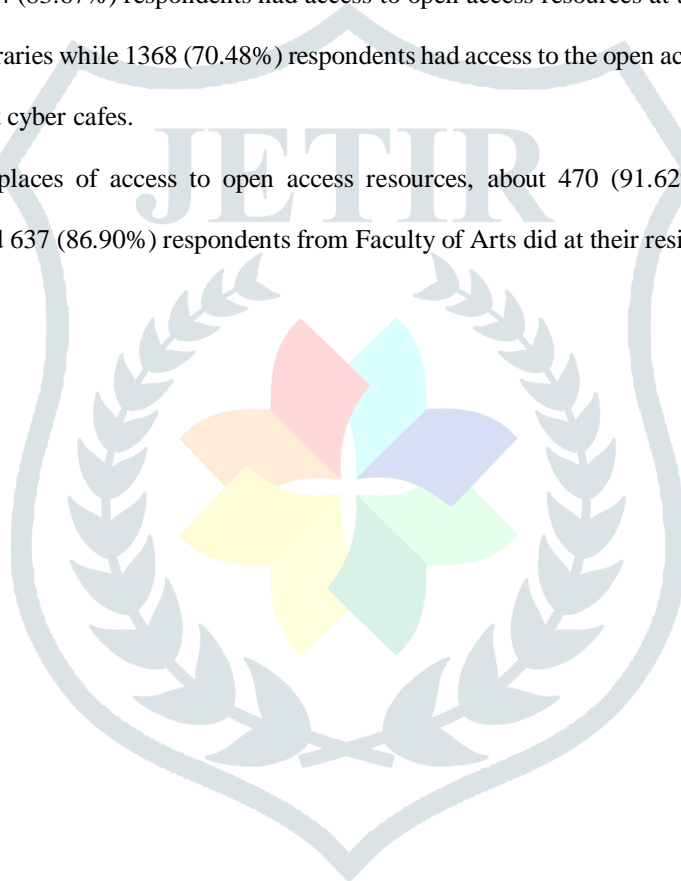
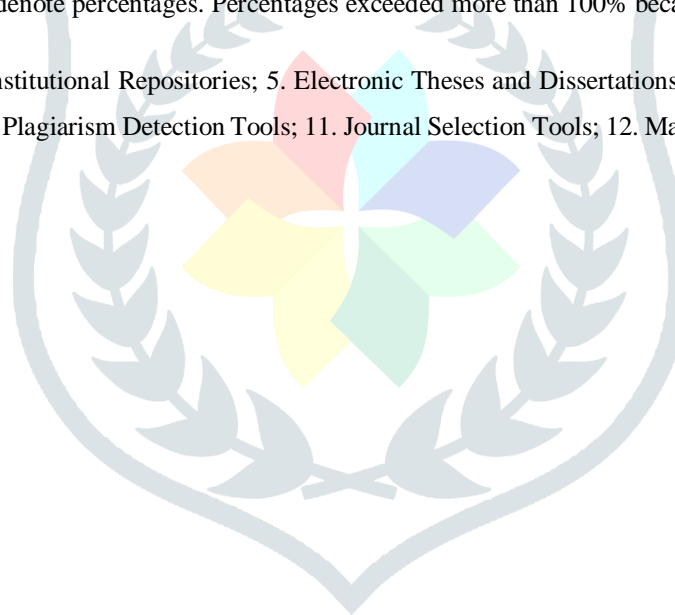


Table 4.4 Faculty wise Distribution of Respondents preference sources open Access Resources

Faculty	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Arts	128 (17.46)	538 (73.40)	665 (90.72)	415 (59.35)	678 (92.44)	102 (13.92)	288 (39.29)	601 (81.99)	101 (13.78)	91 (12.41)	101 (13.78)	25 (3.41)	32 (4.37)	375 (51.16)	39 (5.32)
Science	75 (22.66)	205 (61.93)	298 (90.03)	205 (61.93)	263 (79.46)	58 (17.52)	172 (51.69)	272 (82.18)	68 (20.54)	47 (14.20)	74 (22.36)	31 (9.37)	28 (8.46)	187 (56.50)	24 (7.25)
Indian Languages	31 (23.66)	85 (64.89)	108 (82.44)	82 (62.60)	87 (66.41)	45 (34.35)	71 (54.20)	81 (61.83)	28 (21.37)	21 (16.03)	32 (24.43)	20 (15.27)	18 (13.74)	67 (51.15)	15 (11.45)
Engineering and Technology	115 (22.42)	355 (69.20)	488 (95.13)	318 (61.99)	402 (78.35)	114 (22.22)	315 (61.40)	407 (79.34)	92 (17.93)	87 (16.96)	110 (21.44)	45 (8.77)	41 (7.99)	401 (78.71)	41 (7.99)
Education	79 (33.91)	138 (59.23)	215 (92.27)	115 (49.36)	175 (75.11)	119 (51.07)	108 (46.35)	147 (63.09)	41 (17.60)	30 (12.88)	38 (16.31)	18 (7.73)	15 (6.44)	87 (37.34)	20 (8.58)
Total	428 (22.05)	1321 (68.06)	1774 (91.40)	1135 (58.48)	1605 (82.69)	438 (22.57)	954 (49.15)	1508 (77.69)	330 (17.00)	276 (14.22)	355 (18.29)	139 (7.16)	134 (6.90)	1117 (57.55)	139 (7.16)

Note: Figures in parentheses denote percentages. Percentages exceeded more than 100% because of multiple choice options.

1. Open Course Ware; 2. E- books; 3. E- Journal 4. Institutional Repositories; 5. Electronic Theses and Dissertations; 6. Online Tutorial; 7. Open Access Digital Libraries; 8. Online Reference Tools; 9. Reference Management Tools; 10. Plagiarism Detection Tools; 11. Journal Selection Tools; 12. Manuscript Editing Tools; 13. Open Archives; 14. Subject Gateways; 15. Citation Measurement Tools.



There are fifteen different open access resources identified, which are useful to teaching, learning and research. Out of these fifteen Sources, the investigator attempted to identify the preferred sources among the research scholars from Annamalai University. As can be seen in Table 4.4 E-Journals were found to be the most preferred sources compared to other sources with a percentage share of 91.40 percent. The other preferred sources were Electronic Thesis and Dissertations (82.69%), Online Reference Tools (77.69%); E-books (68.06%); Institutional Repositories (58.48); Subject Gate ways (57.55%); Open access Digital Libraries (49.15%); Online Tutorials (22.57%); Open Course Ware (22.05%); Journal Selection Tools (18.29%); Reference Management Tools (17.00%), Plagiarism Detection Tools (14.22%); Manuscript Editing tools (7.16%); Citation Measurement Tools (7.16%) and Open Archives (6.90%).

As far as the faculty –wise break-up of respondents on the preferred open access resources about 488 (95.13%) research scholars from Faculty of Engineering and Technology and 215 (92.27%) Research Scholars from Faculty of Education preferred E - Journals.

Table 4.5 Faculty –wise Distribution of Respondents on Preferred Search Engines

Search Engines	Arts	Science	Indian Languages	Engineering and Technology	Education	Total
Alta vista	181 (24.69)	110 (33.23)	88 (67.18)	205 (39.96)	125 (53.65)	709 (36.53)
Bing	208 (28.38)	125 (37.76)	72 (54.96)	242 (47.17)	154 (66.09)	801 (41.27)
Google	701 (95.63)	308 (93.05)	102 (71.86)	492 (95.21)	201 (86.27)	1804 (92.94)
Info Seek	105 (14.32)	98 (29.61)	55 (41.98)	132 (25.73)	91 (39.06)	481 (24.78)
Yahoo	698 (95.23)	300 (90.63)	98 (74.81)	479 (93.37)	195 (83.69)	1770 (91.19)
MSN	154 (21.00)	110 (33.23)	61 (46.56)	109 (21.25)	67 (28.76)	501 (25.81)
Galaxy	107 (14.60)	88 (26.59)	55 (41.98)	98 (19.10)	54 (23.18)	402 (20.71)
Excite	115 (15.69)	91 (27.49)	42 (32.06)	87 (16.96)	47 (20.17)	382 (19.68)
Hot Bot	34 (4.64)	51 (15.41)	37 (28.24)	62 (12.09)	59 (25.32)	243 (12.52)
Others	102 (13.92)	64 (19.34)	51 (38.93)	87 (16.96)	62 (26.61)	366 (18.86)

Note: Figures in parentheses denote percentages. Percentages exceeded more than 100% because of multiple choice options.

Table 4.5 shows the faculty-wise distribution of respondents preferred search engine. About 1804 (92.94%) respondents preferred Google search engine for accessing open access resources, followed by 1770 (91.19%) respondents who preferred yahoo search engine; 801 (41.27%) respondents preferred Bing search engine ; 709 (36.53%) respondents preferred AltaVista search engine ; 501 (25.81%) respondents preferred MSN search engine, 481 (24.78%) respondents preferred Info Seek search engine ; 402 (20.71%) respondents preferred Excite search engine; 366 (18.86%) respondents preferred Hot Bot search engine and 243 (12.52%) respondents preferred other search engine for accessing open access resources.

As far as the faculty-wise break-up of research scholars of Annamalai University, about 492 (95.91%) respondents from Faculty of Engineering and Technology and 701 (95.63%) respondents from Faculty of Arts preferred Google search engine for accessing open access resources.

Table 4.6 Faculty wise Distribution of Respondents on Preferred Web Browsers

Web Browsers	Arts	Science	Indian Language	Engineering and Technology	Education	Total
Google Chrome	615 (83.90)	295 (89.12)	92 (70.23)	482 (93.96)	194 (83.26)	1678 (86.45)
Internet Explorer	687 (93.72)	301 (90.94)	105 (80.15)	495 (96.49)	201 (86.27)	1789 (92.17)
Mozilla fire fox	510 (69.58)	218 (65.86)	94 (71.76)	310 (60.43)	137 (58.80)	1269 (65.38)
Netscape	278 (37.98)	127 (38.37)	78 (59.54)	205 (39.96)	98 (42.06)	786 (40.49)
Maxthan	218 (29.74)	105 (31.72)	81 (61.83)	154 (30.02)	75 (32.19)	633 (32.61)
Opera	201 (27.42)	98 (29.61)	61 (46.56)	88 (17.15)	68 (29.18)	516 (26.58)
Safari	174 (23.74)	75 (22.66)	48 (36.64)	75 (14.62)	54 (23.18)	426 (21.95)
Silver light	115 (15.69)	37 (11.18)	27 (20.61)	57 (11.11)	47 (20.17)	283 (74.58)

Note: Figures in parentheses denote percentages. Percentages exceeded more than 100% because of multiple choice options.

Table 4.6 explains the faculty-wise distribution of the respondents' preferred web browsers. It is seen from the table that 1789 (92.17%) respondents preferred Internet Explorer web browser for browsing open access resources, followed by 1678 (86.45%) respondents who preferred Google Chrome web browser; 1269 (65.38%) preferred Mozilla fire fox web browser ; 786 (40.49%) respondents preferred Netscape; 633 (32.61%) respondents preferred Maxthan; 516 (26.58%) respondents preferred Opera ; 426 (21.95%) respondents preferred Safari and 283 (14.58%) respondents preferred Silver Light web browser for browsing open access resources.

As far as the faculty –wise break-up of respondents on the preferred web browsers, about 495 (96.49%) research scholars from Faculty of Engineering and Technology and 687 (93.72%) research scholars from Faculty of Arts preferred Internet Explorer web browser for browsing open access resources.

Table 4.7 Faculty –wise Distribution of Respondents on Benefits of Using Open Access Resources

Benefits	Arts	Science	Indian Languages	Engineering and Technology	Education	Total
Time Saving	558 (76.13)	278 (83.99)	101 (77.10)	469 (91.42)	1.95 (83.69)	1601 (82.48)
Better Sources of Information	435 (59.35)	287 (86.71)	112 (85.50)	451 (87.91)	187 (80.26)	1472 (75.84)
Access to up-to-date Information	678 (92.50)	301 (90.91)	105 (80.15)	478 (93.18)	178 (76.39)	1740 (89.64)
Improvement In the quality of Research Work	685 (93.45)	297 (89.73)	109 (83.21)	492 (95.91)	199 (85.41)	1782 (91.81)
24/7 Access to Resources	475 (64.80)	215 (64.95)	98 (74.81)	405 (78.95)	165 (70.82)	1358 (69.96)
Easily Portability	220 (30.01)	98 (29.61)	65 (49.62)	318 (61.99)	107 (45.92)	808 (41.63)

Note: Figures in parentheses denote percentages. Percentages exceeded more than 100% because of multiple choice options

Table 4.7 reveals the faculty wise distribution of the respondents' benefit of using open access resources. It is seen from the table that 1782 (91.81%) respondents have largely been benefited with improvement in the quality of research work, followed by 1740 (89.64%) respondents benefited with access to up-to-date information; 1601 (82.48%) respondents benefited with time saving; 1472 (75.84%) respondents benefited with better sources of information 1358 (69.96%) respondents benefited with 24/7 access to resources and 808 (41.63%) respondents benefited with easily portability.

As far as the faculty-wise break-up of research scholars is concerned with the benefit of use of open access resources. About 492 (95.91%) respondents from Faculty of Engineering and Technology and 685 (93.45%) respondents from Faculty of Arts benefited with improvement in the quality of research work.

Table 4.8 Faculty –wise Distribution of Respondents Regarding the Usefulness of Open Access Resources

Usefulness	Arts	Science	Indian Language	Engineering And Technology	Education	Total
Very useful	135 (18.42)	98 (29.6)	29 (22.13)	194 (37.82)	85 (36.48)	541 (27.87)
Useful	573 (78.17)	188 (56.80)	85 (64.89)	289 (56.34)	112 (48.07)	1247 (64.25)
Average	21 (2.86)	38 (11.48)	15 (11.45)	22 (4.29)	31 (13.30)	127 (6.54)
Not useful	04 (0.55)	07 (2.11)	02 (1.53)	08 (1.56)	05 (2.15)	26 (1.34)
Total	733 (37.76)	331 (17.05)	131 (6.75)	513 (26.43)	233 (12.00)	1941 (100.00)

Figures in parentheses denote percentage

Data presented in Table 4.8 shows the faculty-wise distribution of respondents regarding the usefulness of open access resources. Out of 1941 respondents, 1247 (64.25%) respondents opine useful; followed by 541 (27.87%) respondents very useful, 127(6.54%) respondents average and only 26(1.34%) respondents opine not useful.

As far as the faculty-wise break-up of research scholars of Annamalai University is concerned, about 573 (78.17%) respondents from Faculty of Arts, 85(64.89%) respondents from Faculty of Indian Languages, 188(56.80%) respondents from Faculty of Science, 289 (56.34%) respondents from Faculty of Engineering and Technology and 112 (48.07%) respondents form Faculty of Education opine useful.

Findings and Conclusion

The study conducted to access the use of open access resources by the research scholars of Annamalai University led to the followings findings:

- Research scholars from Annamalai University are well aware of different categories of open access resources (94.59%).
- The most prominent sources are e-journals, electronic theses and dissertations, and e-books.
- 83.76 percent of the respondents had access to the open access resources at their residences.
- 92.94 percent of the respondents preferred Google search engine for accessing open access resources.
- 92.17 percent of the respondents preferred Internet Explorer web browser.
- 91.81 percent of the respondents have largely been benefited with improvement in the quality of research work.
- 64.52 percent of the respondents opine useful

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