

# **Web Resource Service: Usage of Open Access Journals by the Academicians of Autonomous Colleges in Dakshina Kannada-A Survey**

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## **Abstract**

*In the digital environment the academicians' interest are moving towards accessing and using Electronic journals for their day to day academic activities. These 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 titles available. The promising open access movement is opening alternate channels for the distribution of scholarly work. As the availability of open access journals increasing, accessing to these journals is also increasing gradually. No doubt the digital information is becoming popular among users in almost all the libraries. Considering the importance of open access journals the research study has been undertaken to provide awareness to the faculty members of five Autonomous Colleges in Dakshina Kannada district of Karnataka. The study result would provide library professionals and academicians with clear insights into the benefits of using open access journals. The study result reveals that the majority respondents are unaware of open access journals and among those who uses electronic journals majority of them are using open access journals for their academic purposes. Through this study the researcher provided awareness to the to the faculty members regarding various open access initiatives available in India and abroad.*

**Keywords:** E-Journals, Open Access Journals, Usage Study, Open Access Directories

## **1. Introduction**

To carry knowledge to the doors of those that lack it and to educate all to perceive the right! Even to give away the whole earth cannot equal that form of service.-Manu

In the current context of Privatization and Globalization, it is an inevitable to produce, use and disseminate Knowledge. Information and knowledge is not contradictory and mutually exclusive to each other. Instead they supplement each other and lead to the development of the nation.

According to Mahapatra and Bhuyan the academic community appears to be the largest consumer of information. Their job of teaching and learning and research involves generation, collecting, processing, storing, disseminating and using information in several forms for different purposes. (Mahapatra & Bhuyan, 2003). This indicates that today the information needs of the academicians increases enormously so much that no single library on its own can meet their needs.

Internet sources have brought out revolutionary changes in the approach of sharing resources, needs and requirements of information consumers. It is absolutely necessary for an Information Centre to respond to environmental stimuli and acquire information to meet the requirement of

users' interests. Electronic journals are attracting readers' attention in today's networked environment. They play an important role in the creation and transmission of knowledge. The immense growth of literature on one side and the libraries continue to lament on their inability to hold current subscriptions against increasing cost of print information on the other side, put the academic and research community in their back feet.

This has made the academicians all over the world searching for alternative sources of information, which has resulted in open access concept or open access journals.

### **1.1 Need for the study**

As the number of Open access journals available in internet is growing everyday, the libraries are interested in collecting, preserving and providing services using these recourses. A literature search on Library and Information Science Abstracts Plus (LISA Plus), and scanning of journal articles, convention volumes revealed only a few general surveys on e-journals use and such studies have not been extensively done in Indian general libraries, especially in college libraries regarding open access journals usage.

Keeping in view the above aspects, the present study has been taken up to know the current state of the use of open access journals in Autonomous Colleges by the academic communities of Autonomous colleges in Dakshina Kannada Districts.

### **1.2 Objectives of the Study**

The study seeks to

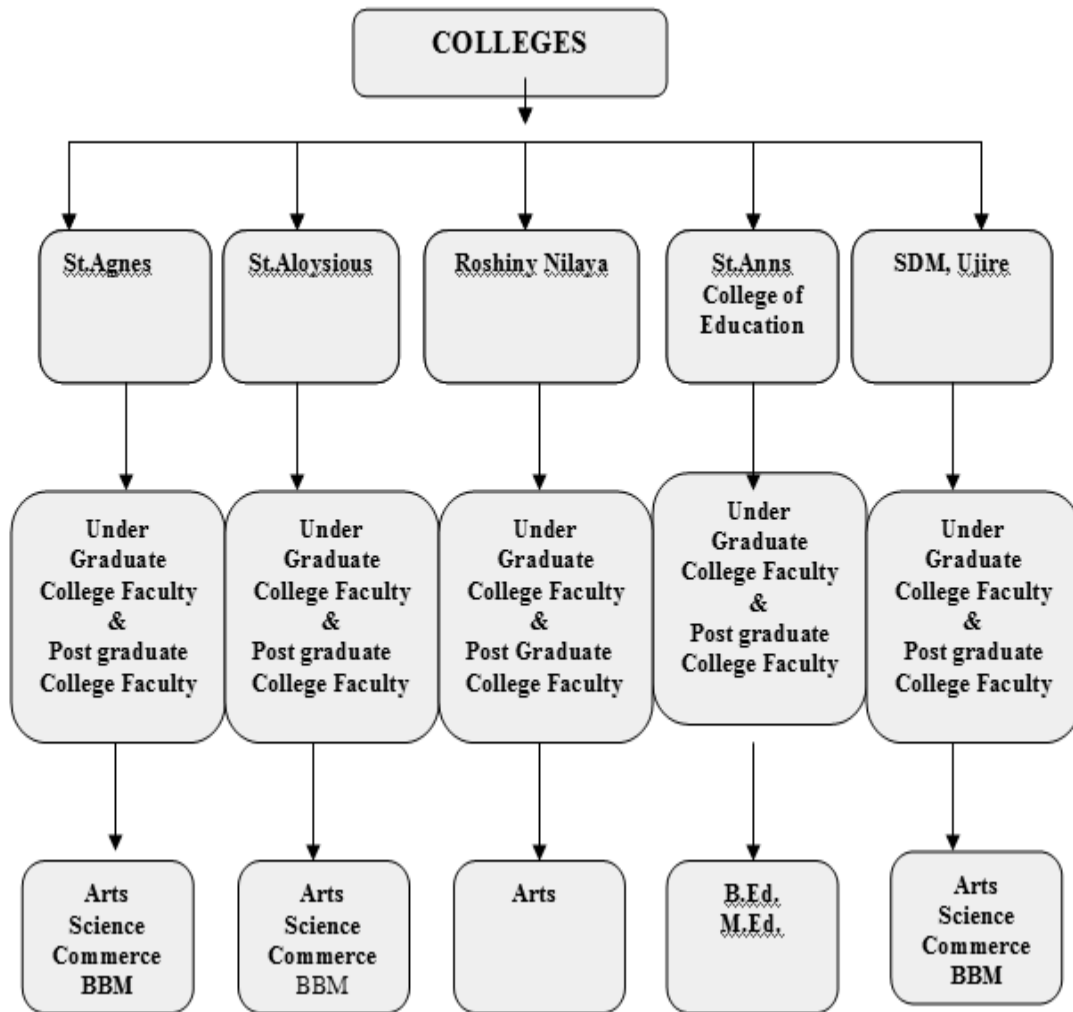
1. Investigate the usage of e journals by the academicians
2. Investigate whether the users are aware of the open access journals?
3. Determine the open access directory which has been used extensively by the faculty.
4. Assess the extent of use of open access journals - campus-wise and also discipline wise.
5. Suggest a model which could enhance the use of open access journals

### **1.3 Significance of the Study**

So far, very few surveys have been undertaken to know whether academic community uses open access journals throughout Karnataka State. The result of the study would provide documentation indicating the awareness and usage of existing open access journals by the faculty members of Autonomous Colleges in Dakshina Kannada. These studies serve as an indicator to assess how frequently readers use open access journals so that steps can be taken to provide awareness to the non users.

**1.4 Methodology**

To investigate the usage of open access journals by the academicians and its impact on them, a survey method has been adopted. The colleges – and disciplines surveyed are presented in Figure No.1



The departments were grouped into 3 broad disciplines as (1) Arts and Humanities (2) Social Science (3) Science for further analysis. The returned questionnaires were coded and data were recorded and also analyzed with Statistical Package for Social Sciences (SPSS) 13.0 for windows. Tables and graphs were used for analyzing the rest of the data. The reference tool, End Note, 9.0.0 version was used to provide bibliographic references, according to the 5<sup>th</sup> edition of American Psychological Association Style.

### **1.5 Scope of the Study**

Mangalore University consists of 158 constituent colleges. Considering the information needs of the users in Autonomous Colleges, the present research study is confined to the awareness and use of open access journals by the users of Autonomous Colleges of Dakshina Kannada.

All the Autonomous colleges affiliated to Mangalore University like- St.Agnes College, Mangalore, St. Anns College, Mangalore, St. Aloysius College, Mangalore, Roshni Nilaya-College of Social Work- Mangalore, and Sri Dharmasthala Manjunatheshwara College, Ujire have been surveyed.

### **1.6 Limitation of the Study**

The academic community of autonomous college libraries includes post graduate students, faculty members, technical staff and non-teaching staff, and members of the various academic and executive bodies of the college, the college management and visiting fellows and others. The study is restricted to permanent teaching staff members because of their long tenure in the college.

## **2. Review of Literature**

An attempt has been made here to review select studies which are most relevant for the present investigation and listed in chronological order.

In an article which examines the benefits and importance of open access, open source, and open standards for libraries, the author opines that the libraries should embrace all three concepts because of the benefits included like lower costs, great accessibility, and better prospects for long term preservation of scholarly works. By supporting open access libraries users will have easier and more comprehensive access to scholarly research articles. (Corrade, 2005)

The article presents a concise overview of important concepts and current issues that are useful in understanding the open access movement. He briefs about open access, its publishing model and how does it work, initiatives of open access movement, copyright issues involved, future of open access, and presents how the open access benefits academic libraries with limited budgets. As a life science librarian, he opines that it becomes increasingly important that librarians and faculty should work co-operatively on building a balanced science collection (Shelton, 2005)

The data gathered from the logs for the period January 2003-June 2005 to examine the impact on usage of the journal Nucleic Acids Research (NAR) moving to an open access model. The findings of the study revealed that the rise in use of NAR over the survey period (140%) could largely be attributed to the opening up of the site to search engines and that the more OA had a relatively small influence on driving usage up further (less than 10%).( Nicholas, Hantington & Jamali, 2007)

The very purpose of the paper is to describe the Open access and Open source movement in the digital library world. Major initiatives like Open Society Institute, American Association of Law Libraries, Bethesda Statement on Open Access Publishing, Canadian Association of Research Libraries and

developments in open access and open source is provided. Findings of the study reported that open source software and open access to research findings are of great use to scholars in developing Nations. The paper also has explained the numerous benefits of OA journals. (Krishnamurthy, M. 2008)

### 3. Data Analysis and Interpretation

#### 3.1 Population Surveyed and Response Rate

The academic communities covered under the study are the faculties of five Autonomous colleges in Dakshina Kannada district. These colleges are St.Agnes, St.Aloysius, Roshni Nilaya, St.Ann's and Sri Dharmastala Manjunatheshwara College, Ujire. In total structured questionnaires were distributed to 200 teachers of selected departments of all five colleges. Out of the total of 200 questionnaires distributed 147 respondents returned filled in questionnaire. The response rate therefore accounts for 73.5%. Thus, the rest of the analysis is based on the 147 coded filled in questionnaires.

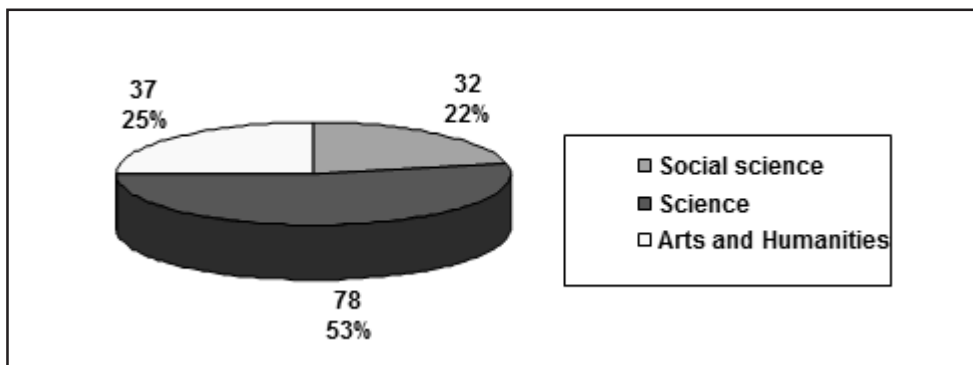
**Table 1: Questionnaires distributed and Responses Received**

Sl.No.	Colleges	Questionnaire Distributed	Response Received	Percentage
1	St.Agnes	45	30	67%
2	St.Aloysius	70	57	76%
3	Roshni Nilaya	25	18	72%
4	St.Anns	15	09	60%
5	SDM	45	33	73%
	Total	200	147	73.5%

Table 1 reveals that the highest response, out of 70 questionnaire distributed 57 (76%) was collected from St. Aloysius College, followed by SDM College i.e 73% (45 Questionnaire distributed and 33 responses received) respectively. It was also identified that the number of faculty members who were working on permanent basis at Roshni and St.Anns Colleges were comparatively less than the faculty members of St.Agnes, St.Aloysius and SDM College.

#### 3.2 Discipline-wise Responses

The respondents were consolidated into three broad disciplines such as Social Science, Sciences and Arts and Humanities based on their subject of study. The same has been presented in Figure 2. The survey result reveals that out of 147 respondents, 37 (25.2%) belonged to Arts and Humanities, 32(21.8%) were from Social Sciences, 78(53.01 %) were from Sciences. The largest category was identified as Sciences with 78(53.01%) respondents, and the smallest category was of Arts and Humanities with 32(21.8%) respondents.



**Figure 2: Discipline-wise distribution of respondents**

### 3.3 Use of e-journals

Response received from the users regarding the usage of e-journals is shown in Table 2 which reveals that out of 147 responses 74 (50.3 %) reported using e-journals and 73 (49.7%) reported they had never used e-journals.

**Table 2: Use of e-journals**

Response	Frequency	Percent
No	73	49.7
Yes	74	50.3
Total	147	100.0

### 3.4 Aware of Open Access Journals

Table 3 depicts that out of 74 who used e-journals 60 (81.1%) respondents confirmed that they used the open access journals and 14 (18.9%) respondents reported that they had never used the open access journals which are available freely on the internet.

**Table 3: Aware of open access journals those who use e-journals**

Response	Awareness and use of open access journals
No	14 18.9%
Yes	60 81.1%
Total	74 100%

### 3.5 Discipline-wise awareness of Open Access Journals

The extent of awareness of open access journals by various disciplines was studied and the result revealed is illustrated in Table 4. Greater usage of open access journals was reported by scientists 39 (65.0%), followed by 12 (20%) reported by Arts and Humanities then by Social Scientists-9 (15%). The study result reveals that among three major disciplines the use was highest among scientists-39 (65%), The lowest usage was recorded from Social Scientists- 9(15%).

**Table 4: Discipline \* Awareness and use of the open access journals**

Discipline	Yes
Social Science	9 15%
Science	39 65.0%
Arts and Humanities	12 20.0%
Total	60 100%

### 3.6 Awareness and use of open access journals according to college-wise:

The study revealed that awareness and usage of open access journals according to the college – wise revealed that the highest usage was recorded at St. Aloysius College -32(53.33%), followed by SDM–14(21.67%) then by Agnes College- 9(15%).The same has been shown in Table 5.

**Table 5: College \*Aware and use of the open access Journals**

College	Aware of the open access journals		Total
	No	Yes	
Agnes	1 7.14%	9 15%	10 13.5%
Aloysius	6 42.86%	32 53.33%	38 51.4%
Roshni Nilaya	3 21.43%	4 6.67%	7 9.5%
Annas	2 14.28%	2 3.33%	4 5.4%
SDM	2 14.28%	13 21.67%	15 20.28%
Total	14 100%	60 100%	74 100%

### 3.7 Open access directories usage by the faculty members

The question regarding the Open access directories usage was raised by the researcher to identify which directories offered through Open access initiatives had been heavily used. The question aimed at probing further details about the directories on which the academic community depend. Table 6 indicates that out of 60 faculty members who used open access journals, the majority- 26(43.3%) used Free Full Text followed by BioMed Central access journals- 22 (36.7%) directory. The study revealed that only- 13(21.7%) respondents used Directory of Open Access Journals.

**Table 6: Awareness and Usage of open access directories**

<b>Awareness of the open access journals</b>	<b>No</b>	<b>Yes</b>	<b>Usage of the open access journals</b>	<b>No</b>	<b>Yes</b>
BioMed Central	33 55.0%	27 45%	BioMed Central access journals	38 63.3%	22 36.7%
Directory of Open Access Journals	39 65%	21 35%	Directory of Open Access Journals	47 78.3%	13 21.7%
Open J-Gate	44 73.3%	16 26.7%	Open J-Gate	46 76.7%	14 23.3%
PhysNet	51 84.7%	9 15.3%	PhysNet	52 86.7%	8 13.3%
ABC Chemistry	49 81.7%	11 18.3%	ABC Chemistry	53 88.3%	7 7.7%
SAO/NASA Astrophysics Data System	53 88.3%	7 7.7%	SAO/NASA Astrophysics Data System	54 90%	6 10%
CAST	56 93.3%	4 6.7%	CAST	56 93.3%	4 6.7%
Biology Browser	45 75%	15 25%	Biology Browser	47 78.3%	13 21.7%
PubMed Central	36 60%	24 40%	PubMed Central	36 60%	24 40%
Free Full Text	34 56.7%	26 43.3%	Free Full Text	34 56.7%	26 43.3%
High Wire Press	48 80%	12 20%	High Wire Press	50 83.3%	10 16.7%
Behavioral and Brain Sciences	49 81.7%	11 18.3%	Behavioral and Brain Sciences	51 85%	9 15%
Marshland Press	54 90%	6 10%	Marshland Press	54 90%	6 10%



#### **4. Major Findings of the Study**

1. The survey has been administered to a sample of 200 respondents at the selected departments. The response received was 147 accounting to the response rate of 73.5%.
2. It reveals that the highest response, out of 70 questionnaire distributed 57 (76%) was collected from St.Aloysius College followed by 33(73%) responses out of 45 Questionnaire distributed from SDM College.
3. It is also reported that 74 (50.3 %) were familiar with e- journals' use and 73 (49.7%) were not.
4. Out of 74 who used e-journals 60 (81.1%) respondents confirmed that they used the open access journals and 14 (18.9%) respondents reported that they had never used the open access journals which are available freely on the internet.
5. The study result reveals that among three major disciplines the use was highest among scientists-39 (65%), The lowest usage was recorded from Social Scientists- 9(15%).
6. Greater usage of open access journals-29 (48.33%) was reported by the age group belonged to "23-32", and the least usage was reported by 4(6.67%) respondents belonged to the age group "Above 52".
7. The result revealed that out of 74 e journals users , the majority of faculty-57 (77.03%) expressed the idea that they were in need of orientation programme to use e-journals. Only 17(22.97%) faculty stated that they did not require any orientation to use e-journals or open access journals.
8. The study disclosed that among open access journals users the first highest-26 (43.3%) usage was recorded for "Free Full Text directory" followed by the second highest-24 (40%) was recorded for "PubMed Central directory". It is only 13(21.7%) respondents recorded usage of open access journals offered through DOAJ Directory.

#### **5. Suggestions and Conclusion**

One needs advanced and scholarly literature to improve the quality of education and research work. Due to increase in price and availability of number of journals and decrease in purchasing power of libraries forces a library to reduce the number of journals purchased. Open access initiative is a boon to the academicians and they should use the journal articles available freely on the internet for their teaching and research and other academic activities. Figure 3 representing the suggested model points out that the responsibility of promoting open access journals in the college environment must be shared among college administration, college library, and University Grants Commission (UGC). The role and responsibilities of each of these agencies or institutions are explained in detail.

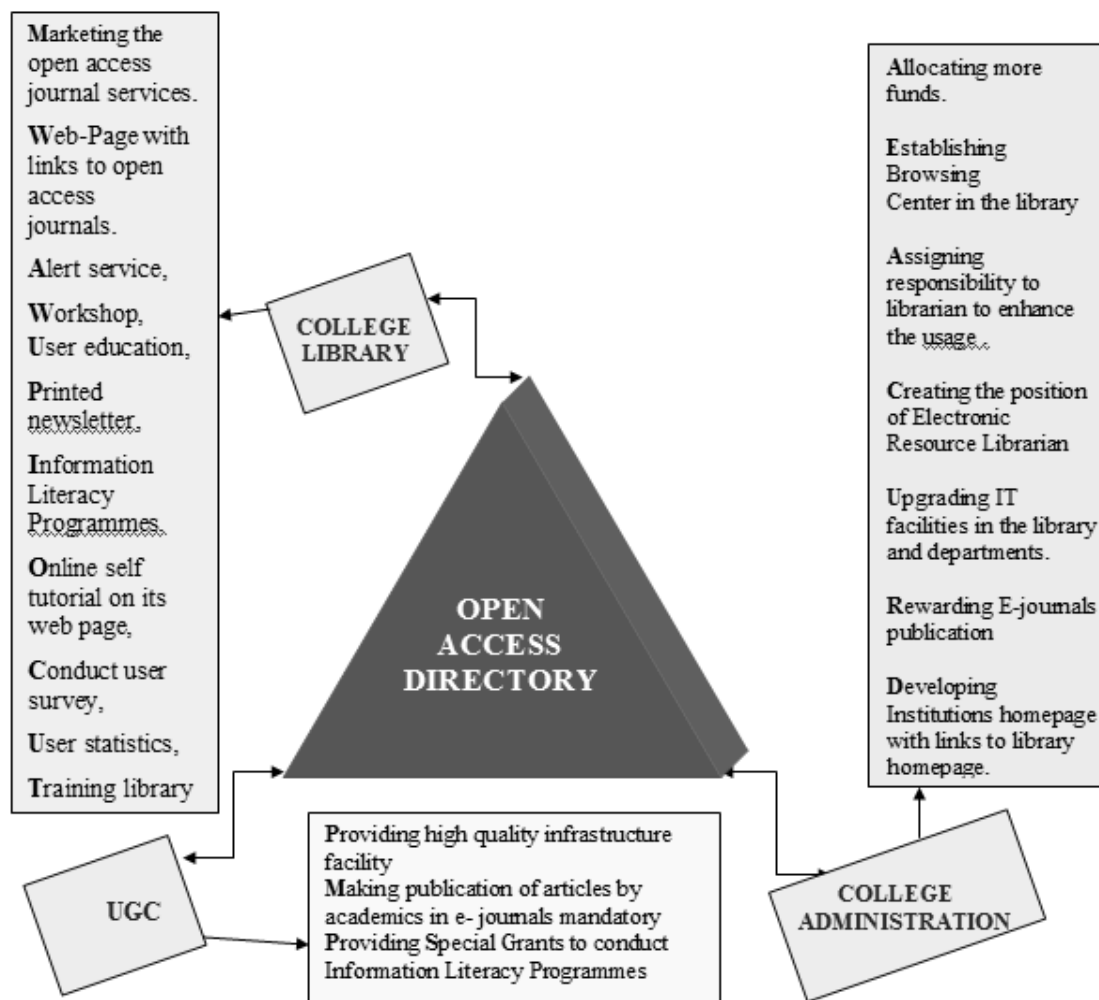


Figure 3: A Model to enhance effective use of open access journals

## 6. Conclusion

Electronic journals are attracting readers' attention in today's digital environment. In this environment these e-journals open up many exciting opportunities and have already brought a revolutionary transition in library philosophy. These are one of the main vehicles used by researchers for scholarly communication. They play an important role in the creation and transmission of knowledge.

The researcher felt the role of the librarian is absolutely crucial in the new digital environment and should have the thorough knowledge of the availability of open access resources and should assist in providing right information to the right user at a right time using these open access journal articles. The libraries should take initiative in publicizing the open access journal articles. Marketing

and publicity are the integral parts of successful open access directories initiatives. It is also felt by the researcher that the success or failure of the open access initiatives depends on how best the traditional and modern methods will be accomplished by the librarians to create awareness on e-journals service and open access initiatives of the libraries. Through the research study most of the non users are given training to access and use open access journals. Proper publicity was given to the open access through the questionnaire wherein Web address of open access directories was given to provide awareness to the faculty members.

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