

Management of Electronic Resources Vis-a-Vis N-List with Special Reference to Academic Libraries in Telangana

G. Rajeshwar Kumar¹; Dr. M. R. Murali Prasad²

Research Scholar, Department of Library and Information Science, Osmania University, Hyderabad, Telangana¹; Librarian, Centre for Economic and Social Sciences, Begumpet, Hyderabad, Telangana, India²

write2grk@gmail.com, librarian@cess.ac.in

ABSTRACT

E-resources have now become an important component of modern libraries, which are being used in various activities of the library and information science like library automation, library management, library and information network, information repackaging and dissemination. At present, the more accepted system of resource sharing is called library consortia. The consortia for library can be considered as a major step towards library cooperation in sharing electronic resources. N-LIST e-resources are considered a vital part of academic college services in 21st century. It has tremendously changed the way of seeking information towards electronic resources and services. The study helps in planning, developing and extending the N-LIST services to government degree colleges with special reference to NLIST subscribed libraries in telangana state only.

KEYWORDS: Consortia, Library Consortia, N-List, e-resources, e-books, e-journals.

1. INTRODUCTION

The advancement in the field of information technology has worked its impact on library services. Due to the changing environment and automation, there is a demand and increase in the use of electronic information resources. And it is more in the academic institutions, especially in those institutions of Higher Education and Technical Education. Hence, there is a need to study the existing situation as well as to identify the areas to be improved. At the same time, there is a need to study the procedures followed for management of electronic information resources as the future of library services depends greatly on the knowledge and attitude of the users in accepting the electronic information. The consortia for library can be considered as a major step towards library cooperation in sharing of electronic resources.

The present study is important and a need is there to understand different criteria used by the librarians for selection, acquisition and management of the electronic resources in their college libraries. This will help to identify the best

practices, so that the library can adopt a more effective, efficient and meaningful management procedures. N-LIST e-resources are considered a vital part of academic college services in 21st century. It has tremendously changed the way of seeking information towards electronic resources and services. Now it is important to learn and to know the use of N-LIST e-resources among the users. The study helps in planning, developing and extending the N-LIST services to academic colleges.

1.1 E-Resources

E-resources are those resources which include documents in electronic or e-format that can be accessed via Internet in digital library environment. Electronic resources may be delivered on CD-ROM / DVD, over the Internet and so on. Access of E-resources is a service to the library users to find E-Journals, E-Magazines, E-Books, E-Databases, E-Images, Digital Library Projects, E-newsletters, E-conferences proceedings etc., Especially, e-journals have become widely popular among library users. E-resources have now become an important component of modern libraries, which are being used in various activities of the library and information science like library automation, library management, library and information network, information repackaging and dissemination.

1.2 Management of Electronic Resources

The increasing role of digital documents in the present age of digital era has insisted librarians to manage these resources effectively. Management of e-resources helps the user community in identifying and accessing appropriate e-resources. According to Prakashe, management of e-resources involves effective planning and policy development for acquiring, providing access, facilitating users for optimal utilization, budget allocation for these resources, subscription renewal and managing skilled staff for proper functioning of e-resource services. Librarians should have professional as well as technical skills to manage all these resources. They should pay special attention in vendor negotiation, trouble shooting, link maintenance, inter-database linking, etc., so as to utilize the investment made in subscribing all the e-resources in their respective libraries.

2. NEED OF THE STUDY

The present study is important and a need is there to understand different criteria used by the librarians for selection, acquisition and management of the electronic resources in their college libraries. In addition to the other e-resources, to examine the N-List e-resources in academic libraries in Telangana state. This study also helps in planning, developing and extending the N-List services to academic colleges.

3. OBJECTIVES OF THE STUDY

The specific objectives of the present study as follows:

- ✓ To study the different types of electronic resources and services available in Academic Libraries.
- ✓ To study the present situation and identify the problems on selection, acquisition and management of electronic resources in Government college libraries.
- ✓ To study the network infrastructure and ICT facilities available to make use the electronic resources in the Government college libraries.
- ✓ To study the different types of e- resources available under N-List.
- ✓ To examine the extent of awareness and knowledge of library professionals on N-List resources.

- ✓ To know the current status of user registration in N-List.
- ✓ To find out the satisfaction level of the library professionals in managing N-LIST e-resources.

4. HYPOTHESES

In order to resolve the research problem under study, some hypotheses need to be established that can be tested during the course of the research work.

- i) There is no significant difference in the availability of electronic resources in academic libraries.
- ii) There is no significant difference in the strategies employed by library professionals in managing e-resources.
- iii) The faculty and students are satisfied with the ICT infrastructural facilities provided by the member colleges.
- iv) There is no significance difference in the satisfaction level of library professionals in managing N-LIST e-resources.
- v) There is a need of training to the library users in accessing N-List e-resources.

5. METHODOLOGY

To collect the primary data most popular survey method is adopted for the present study. The questionnaire have been prepared and distributed to the librarians of selected 51 Government Degree colleges in Telangana State. The data have been collected through structured questionnaire. The collected data were tabulated and analyzed with the applications of suitable statistical tools.

6. National Library and Information Services Infrastructure for Scholarly Content (N-LIST)

National Library and Information Services Infrastructure for Scholarly Content (N-LIST), popularly known as N-LIST which was formally launched by Shri Kapil Sibal, Union Minister for Human Resource Development, on 4th May, 2010. The N-LIST Project is being jointly executed by the e-ShodhSindhu Consortium, INFLIBNET Centre and the INDEST-AICTE Consortium, IIT Delhi provides for i) cross-subscription to e-resources subscribed by the two Consortia, i.e. subscription to INDEST-AICTE resources for universities and e-ShodhSindhu resources for technical institutions; and ii) access to selected e-resources to colleges. The N-LIST project provides access to e-resources to students, researchers and faculty from colleges and other beneficiary institutions through server(s) installed at the INFLIBNET Centre. All colleges covered under Sections 12(B) and 2(f) of the UGC Act are eligible to access e-resources through the N-LIST programme. Non-Aided colleges (except Agriculture, Engineering, Management, Medical, Pharmacy, Dentistry and Nursing) can get benefit from the N-LIST programme by joining the programme. Beneficiary colleges, registered for the N-LIST, a college component of E-Shodh Sindhu, can access 6,290+ electronic journals and 1,95,809+ electronic books available through national subscription.

In the year 2015, the MHRD formed **e-ShodhSindhu**, merging three Consortia initiatives, namely UGC-INFONET Digital Library Consortium, N-LIST and INDEST-AICTE Consortium in order to provide access to peer-reviewed journals and a number of bibliographic, citation and factual databases in different disciplines to the research and academic community in the country.

6.1 STATE WISE LIST OF COLLEGES

As on **September 12, 2022**, a total number of 5518 colleges have registered themselves with the N-LIST programme, in which 4183 colleges continuing their subscription for accessing N-LIST e-resources. Out of 4183 colleges including 3885 Govt. and Govt.-aided colleges covered under the section 12B of UGC Act as well as 298 Non-Aided colleges. All e-resources subscribed for colleges under the N-LIST Project are now accessible to these colleges through the N-LIST website (<http://nlist.inflibnet.ac.in>).

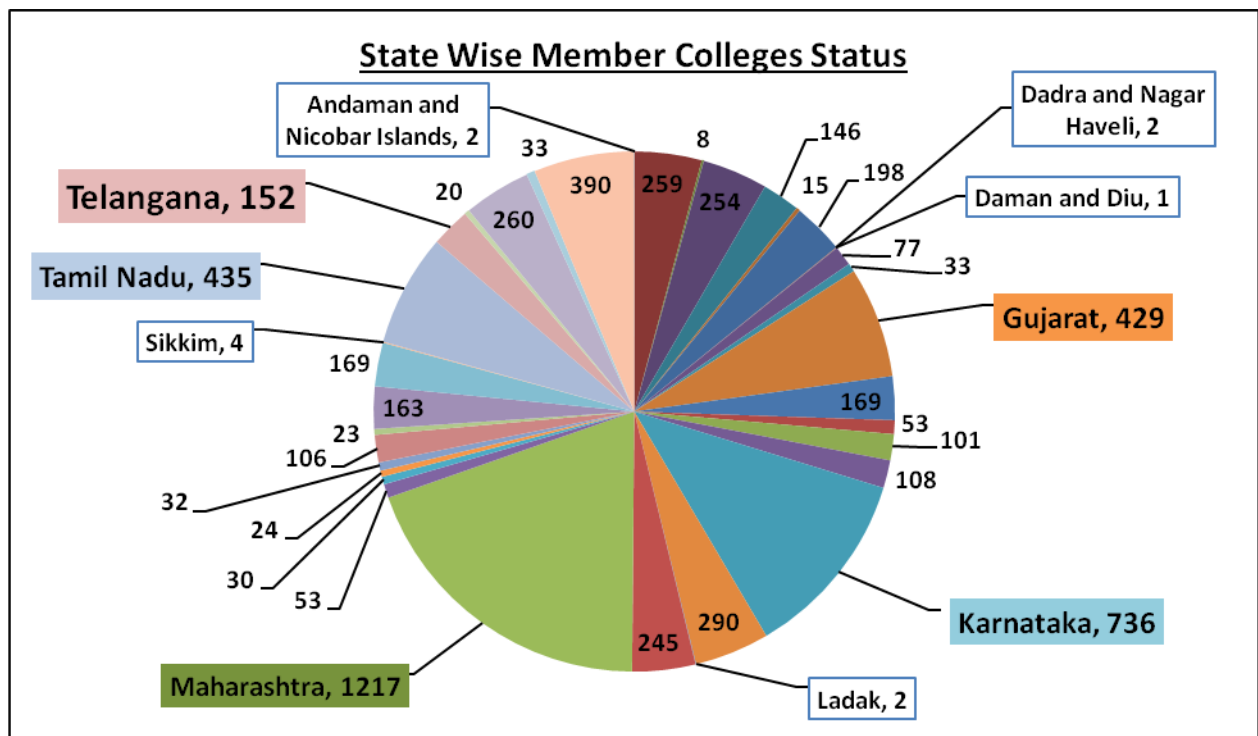
In Telangana 152 colleges are registered N-List programme for their users. Out of 152 colleges 108 colleges are continuing their subscription for accessing e-resources from N-LIST. Out of 152 colleges 78 government colleges are registered in N-LIST. State wise registered colleges list as shown below Table-1.

State wise Registered colleges in N-LIST

Sl. No	State	Registered	Access Enabled	Rank
1	Maharashtra	1217	905	1
2	Karnataka	736	496	2
3	Tamil Nadu	435	346	3
4	Gujarat	429	103	4
5	West Bengal	390	337	5
6	Kerala	290	244	6
7	Uttar Pradesh	260	115	7
8	Andhra Pradesh	259	183	8
9	Assam	254	209	9
10	Madhya Pradesh	245	148	10
11	Chhattisgarh	198	146	11
12	Haryana	169	121	12
13	Rajasthan	169	78	13
14	Punjab	163	115	14
15	Telangana	152	108	15
16	Bihar	146	45	16
17	Jharkhand	108	66	17
18	Orissa	106	35	18
19	Jammu and Kashmir	101	73	19
20	Delhi	77	67	20
21	Himachal Pradesh	53	34	21
22	Manipur	53	45	22
23	Goa	33	31	23
24	Uttarakhand	33	13	24
25	Nagaland	32	26	25

26	Meghalaya	30	25	26
27	Mizoram	24	17	27
28	Pondicherry	23	13	28
29	Tripura	20	12	29
30	Chandigarh	15	14	30
31	Arunachal Pradesh	8	5	31
32	Sikkim	4	2	32
33	Andaman and Nicobar Islands	2	2	33
34	Dadra and Nagar Haveli	2	2	34
35	Ladak	2	1	35
36	Daman and Diu	1	1	36

Table-1: State wise list of colleges



Graph-1: State wise Registered Colleges

The above Table-1 and Graph-1 shows state wise registered colleges in N-LIST, which shows that maharashtra (1217) is the first place in highest number of colleges followed by Karnataka (736), Taminadu (435) and Gujarath (429). Daman and diu (1), Dadra and Nagar Haveli (2) and Ladak (2) shows the least rank in registered colleges. in Telangana state 152 colleges registered as on december 14 ,2022 and placed 15 rank in registered colleges position.

6.2 Electronic Resources Available under the N-LIST Programme

Beneficiary colleges, registered for the N-LIST, a college component of E-Shodh Sindhu, can access 6,293+ electronic journals and 31,64,309 electronic books including e-books available through national subscription.

7. DATA ANALYSIS

The researcher conducted a **Plot Study** on selected 5 Government Degree Colleges (GDC) from all six university affiliations of newly emerged 28th State of Telangana in India. Hence, the research scholar collected the required information from the all five selected degree college librarians and users presented in the following tables; graphs and also pie-charts and discussed in a scientific way as follows.

This survey analysis discuss about the responses from the college librarians on librarians demographic details, availability of college library infrastructure and facilities, N-List E-resources, which are available in N-LIST database exclusively in government degree college libraries in telangana state.

Table-2: Select Govt. Degree Colleges for the Pilot Study

SL. NO	Name of the Government Degree College	College Code	Type	Year	NAAC Grade	Affiliated University	District
1	Kakatiya Government College, Hanamkonda	KGDCH	Govt	1972	B+	Kakatiya	Hanamkonda
2	Pingle Government College For Women, Waddepally	PGCWH	Govt (Autonomous)	1965	A	Kakatiya	Hanamkonda
3	Government Degree College, Narsampet	GDCNS	Govt	1984	A	Kakatiya	Warangal
4	Government Degree College, Mulugu	GDCMU	Govt	1999	B	Kakatiya	Mulugu
5	Government Degree College, Garimilla, Mancherial	GDCMA	Govt	1967	B	Kakatiya	Mancherial
6	Government degree college Bellampally	GDCBE	Govt	1987	B	Kakatiya	Mancherial
7	SR & BGNR Arts And Science College, Khammam	SRBGN	Govt (Autonomous)	1956	B++	Kakatiya	Khammam
8	JVR Government College, Sathupally	JVRGC	Govt	1976	A	Kakatiya	Khammam
9	Government Degree College, Huzurabad	GDCHU	GOVT	1993	B+	Satavahana	Karimnagar
10	Government Degree College, Jammikunta, karimnagar	GDCJK	Govt	1965	B	Satavahana	Karimnagar

7.1 How many colleges responded to the questionnaire?

Table-3: Distribution of Questionnaires to Librarians

Sl. No.	Total No. of Govt. Degree College	Total No. of Questionnaires Distributed	Total No. of Questionnaires Received
1	10	10	10
2	Percentage	100%	100%

Source: Primary Data

The above Table 3 shows that for the present pilot study, out of 51 Government Degree Colleges(GDC), 10 colleges (10) were selected. Hence, the researcher distributed Questionnaires to the selected ten (10) college librarians and received the same with a hundred (100%) percentages.

7.2 Demographic representation of Librarians

Demography refers to the fundamental and measurable statistics of a population with characteristics such as gender, age, education qualification etc to which the faculty belongs to. The analysis of the data has been done in the following manner:-

Table-4 Demographic Details of the GDC Librarians

(N=10)

Sl. No.	Demographic Details	Nature of the Respondents	No. of Respondents	Percentage (%)
1	Gender	Male	10	100
		Female	0	0
2	Qualifications	Ph.D.	3	30
		MLISC.with NET/SLET/SET	7	70
3	Experience (In Years)	Below10	8	80
		11 and Above	2	20

Source: Primary Data

Of the 10 librarians selected for the study, all of them 10 (100%) were male librarians. 2 of them (20%) were served for above 11years, 8 (80%) of them were had experience of below 10 years, 3 (60%) of them had less than 5 years of experience and 6 (11.1%) of them had 11-20 years of experience.

7.3 Librarians Knowledge on ICT

Table-5: Librarians` Knowledge on ICT

Sl. No.	ICT Knowledge	No. of Respondents	Percentage (%)
1	Yes	7	70.00
2	No	3	30.00
3	Total	10	100.00

Source: Primary Data

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As per the data shown in the above Table 5 with regard to librarians' knowledge on ICT. Out of ten college librarians, seventy (70%) librarians have a good knowledge on Information Communication Technology (ICT) and remaining 3 (30%) were opined do not have enough knowledge on ICT. On the whole, a majority of librarians having good knowledge on ICT, which is more benefit to library users of the Degree Colleges.

7.4 Training programmes attended by librarians

Table-6 Attending the ICT Training/Orientation Programmes

Sl. No.	Attending ICT Training/ Orientation Programmes	No. of Respondents	Percentage (%)
1	Yes	6	60.00
2	No	4	40.00
3	Total	10	100.00

Source: Primary Data

As per the data shown in the above Table-6 that a total of ten (10) librarians from the selected Government Degree Colleges from the state of Telangana of the present pilot study, A majority librarians, 6 (60%) are attending the ICT Training/Orientation Programmes, to learn ICT skills; to use and delivery the needy library services to their respective degree college users, and; remaining; 4 (40%) not attending.

On the whole, a large majority of the degree college librarians are attending the ICT Training/Orientation Programmes. It's a good sign.

7.5 Availability of ICT Infrastructure facility:

Table-7: College-Wise Availability of ICT Infrastructure Facility in College Library

Sl. No.	Name of the Govt. Degree College	Digital Library	Computers	Laptops	Internet Facility	UPS Facility	ICT Trainee Staff
1	KGDCH	Y	Y	N	Y	Y	N
2	PGCWH	Y	Y	N	Y	Y	N
3	GDCNS	Y	Y	N	Y	Y	N
4	GDCMU	Y	Y	N	Y	Y	N
5	GDCMA	Y	Y	N	Y	Y	N
6	GDCBE	Y	Y	N	Y	Y	N
7	SRBGN	Y	Y	N	Y	Y	N
8	JVRGC	Y	Y	N	Y	Y	N
9	GDCHU	Y	Y	N	Y	Y	N
10	GDCJK	Y	Y	N	Y	Y	N

Source: Primary Data

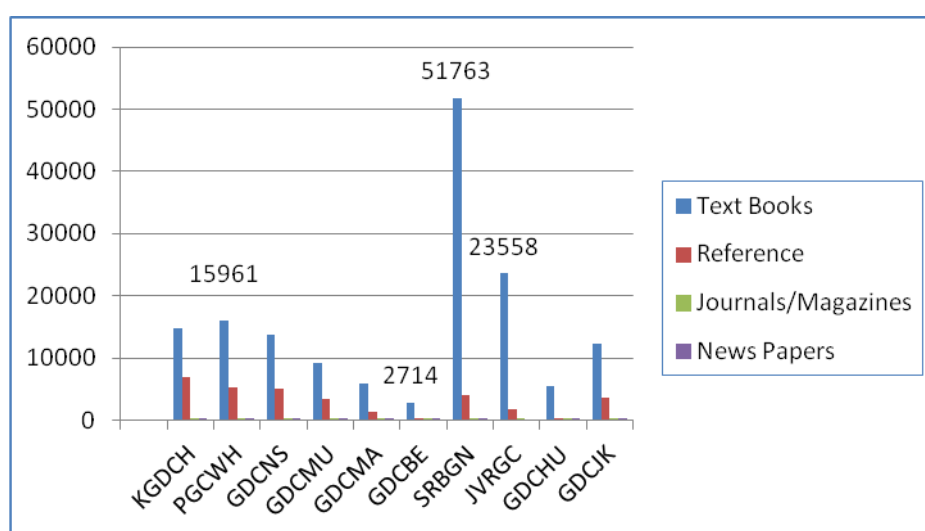
7.6 Print Resources available in colleges

Table-8 College-Wise Availability of Print Resources in College Libraries

(Up to Mach, 2021)

Sl. No.	Name of the Govt. Degree College	Text Books	Reference Books	Journals/Magazines	News Papers
1	KGDCH	14853	7003	26	7
2	PGCWH	15961	5312	13	6
3	GDCNS	13700	5094	20	4
4	GDCMU	9274	3475	32	5
5	GDCMA	5874	1359	13	2
6	GDCBE	2714	102	9	2
7	SRBGN	51763	4000	18	7
8	JVRGC	23558	1800	7	
9	GDCHU	5536	152	5	2
10	GDCJK	12242	3622	18	2

Source: Primary Data



Graph-2: College-Wise Availability of Print Resources in College Libraries

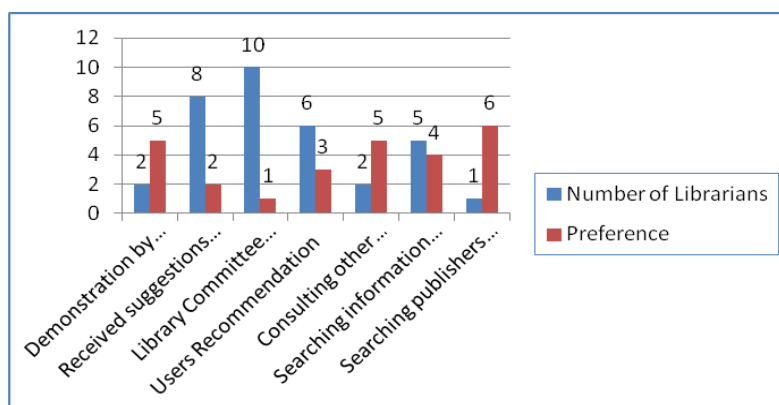
7.7 E-Resource Management:

7.7.1 Methods used for selection of E-Resources

Table- 9: Preferable Method for selection of e-resources

Sl. No.	Method for selection of E-Resources	Number of Librarians	Preference
1	Demonstration by Vendors	2	5
2	Received suggestions from faculty	8	2
3	Library Committee Recommendation	10	1
4	Users Recommendation	6	3
5	Consulting other libraries	2	5
6	Searching information on website	5	4
7	Searching publishers catalogue	1	6

The above table, 9 shows the method used for selection of e-resources in the libraries. In the above table all 10 college libraries preferred library committee recommendation followed by received suggestions from faculty (8), user recommendations (6), searching information on website (5). Demonstration by vendors (2), Consulting other libraries (2) and Searching publishers catalogue (1) is hardly used for the selection of e-resources for the libraries.

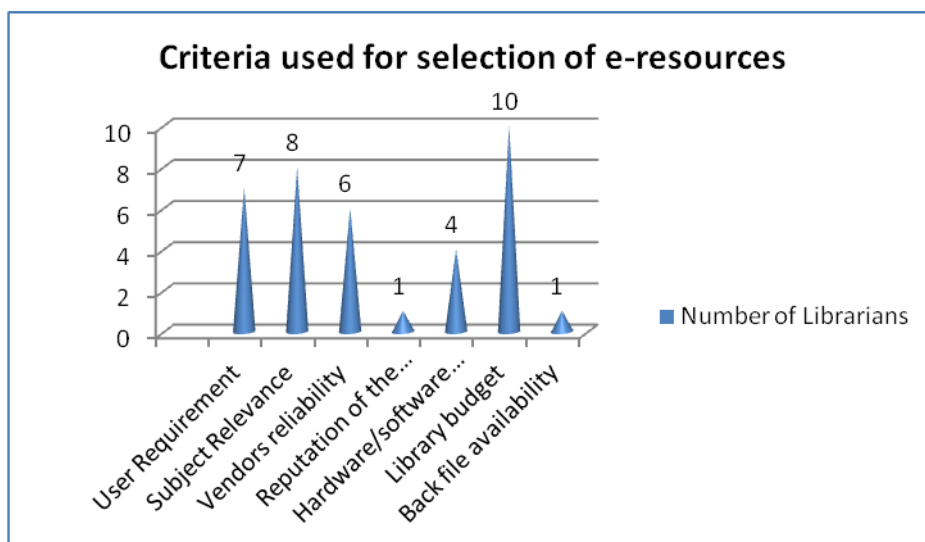


Graph-3: Method used for selection of e-resources

7.7.2 Criteria use for the selection of e-resources

Table-10: Criteria use for the selection of e-resources

Sl. No.	Criteria for selection of E-Resources	Number of Librarians
1	User Requirement	7
2	Subject Relevance	8
3	Vendors reliability	6
4	Reputation of the publisher	1
5	Hardware/software compatibility	4
6	Library budget	10
7	Back file availability	1



Graph-4:Criteria use for the selection of e-resources

The above table-10 and Graph-4 shows the criteria used for the selection of e-resources in the libraries. It is found that out of 10 college librarians, majority librarians (100%) agree that e-resources are selected on the criteria of library budget, followed by subject relevance 8 (80%), user requirement 7(70%), vendor reliability 6(60%) whereas 10% feel that reputation of publishers and back file availability is the criteria used for the selection of e-resources.

7.8 N-LIST E-Resources

7.8.1 Access Mechanism used for N-List E-resources

Table-11: Access Mechanism used by Colleges

Sl. No.	Access Mechanism	No. of Respondents	Percentage (%)
1	Individual Login ID & Password	10	100%
2	Institutional Login ID& Password	0	
	Total	10	100.00

Researcher also tried to find out access mechanism used by the college libraries. It is observed from table-11 that 10 (100%) college libraries have provided Individual Login ID & Password to their users.

7.8.2 N-List Training programmes attended by librarians

Table-12 N-List Training/workshops attended by College Librarians

Training/Workshops on N-List E-resources	No. of Librarians	Percentage (%)
Yes	9	90%
No	1	10%
Total	10	100.00

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The above table, 12 depicts with nine (9) degree college librarians attended training/workshops on N-list e-resources, only 1(10%) librarians not attended any training programme on N-list e-resources.

7.8.3 Organizing User Awareness programmes

Table-13: Organizing the Users Awareness Programmes on N-list E-Resources

Awareness Programmes on N-list Resources	No. of Respondents	Percentage (%)
Yes	7	70%
No	2	20%
Not Interested	1	10%
Total	10	100.00

Source: Primary Data

The above table, 13 depicts with regard to organizing the Users` Awareness Programme on use of N-List E-Resources by the selected college librarians. A total of 10, seven (7) degree college librarians conducting the `Users` Awareness Programmes on N-list E-Resources` to newly admitted students and teaching faculty, followed by, two (2) are not and remaining one (1) college librarian is not taking very much interest to conduct the above said user awareness programme. On the whole, a majority degree college librarians conducting the user awareness programme on use of N-List E-resources for their academic usage.

7.8.4 Frequency of User Awareness Programmes

Table-14: Frequency of N-list User Awareness Programmes

Frequency	No. of Libraries	Percentage (%)
Monthly	0	0
Quarterly	1	10
Half-Yearly	4	40
Once in a Year	5	50
Occasionally	0	0
Total	10	100.00

The above table, 14 depicts with regard to frequency of N-list user awareness programmes conducted by college libraries. A total of 10 libraries five (50%) of the college libraries organised user awareness programme once in a year, followed by, four (40%) are conducted half-yearly and remaining one (1) college librarian is organising user awareness programme in quarterly. On the whole, a majority of degree college librarians yearly once conducting the user awareness programme on use of N-List E-resources.

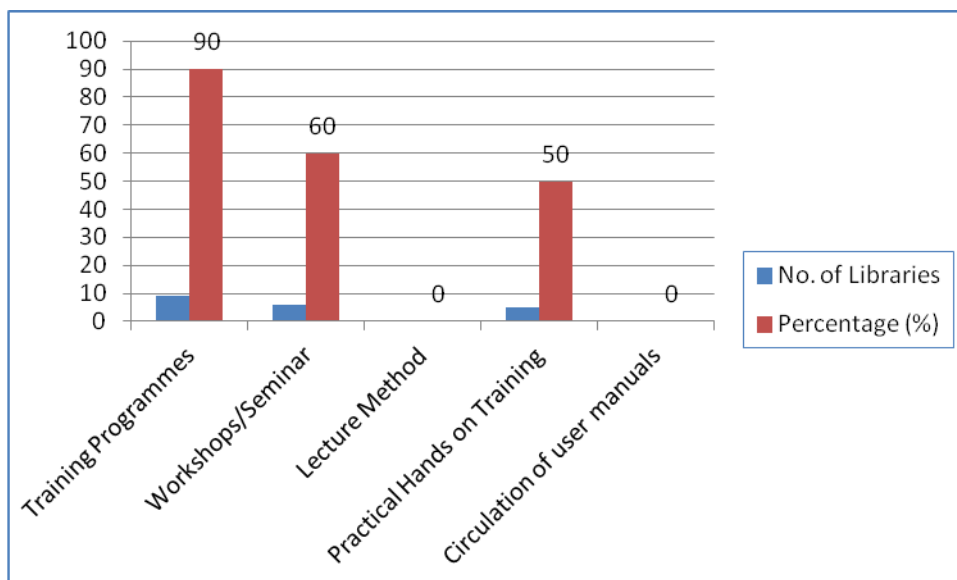
7.8.5 Method used for Awareness Programmes

Table-15: Method used for User Awareness Programme

(Choose more than one)

Method	No. of Libraries	Percentage (%)
Training Programmes	9	90
Workshops/Seminar	6	60
Lecture Method	0	0
Practical Hands on Training	5	50
Circulation of user manuals	0	0

The above table, 15 depicts with regard to method of N-list user awareness programmes conducted by college libraries. In the above table librarians can opt more than one option. A total of 10 libraries 9 (90%) of the college libraries organising training programmes regarding awareness of N-list e-resources followed by, six (60%) libraries are organise workshops/seminars, 5(50%) libraries are organising user awareness programme in hands on training. On the whole, a majority of degree college librarians preferred training programme.



Graph-5: Method used for User Awareness Programme

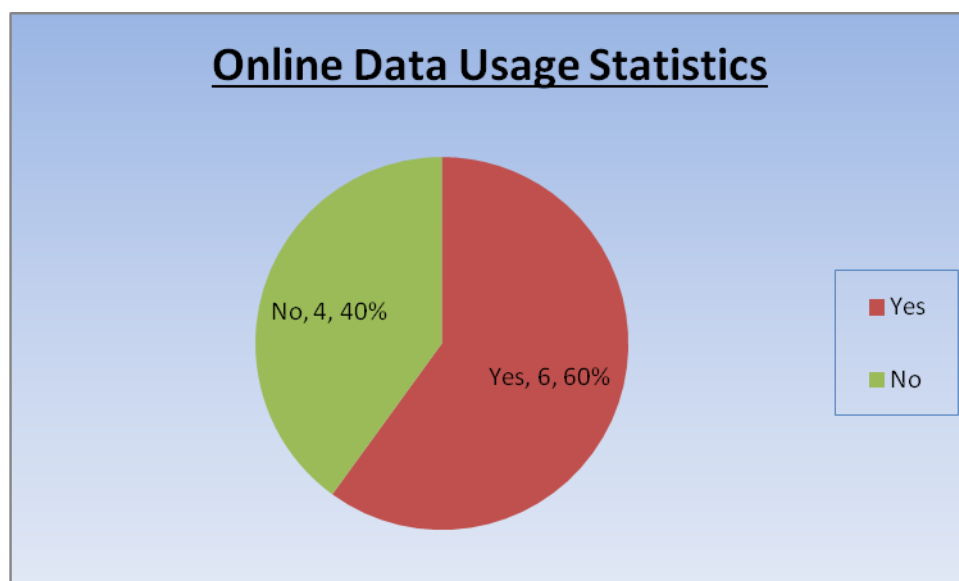
7.8.6 Usage Statistics of N-List

Table-16: Maintaining Data usage statistics of N-LIST e-resources:

Sl. No.	Online Data Usage Statistics	No. of Libraries	Percentage
1	Yes	6	60%
2	No	4	40%
	Total	10	100.00

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The above table.16 depicts with the availability of online usage statistics of N-LIST e-resources by the selected college libraries. A total of above 10 colleges, six (60%) degree college librarians maintaining online statistics of N-LIST e-resources, whereas four(40%) degree college librarians do not maintaining online statistics of the usage data.



Graph-6: Online Usage Statistics

7.8.7 Satisfaction of managing e-resources

Table-17: Level of satisfaction about managing e-resources

Sl. No.	Category	No. of Libraries	Percentage
1	Fully satisfied	7	70%
2	Partially satisfied	2	20%
4	Not satisfied	1	10%
5	Can't say	0	0

The above table,17 depicts the satisfaction level of users about managing e-resources in college libraries. It is found from the table that out of 10 librarians, 7 (70%) librarians are fully satisfied, another 2(20%) librarians are partially satisfied and 1(10%) librarian is not satisfied in managing e-resources in their library..

CONCLUSION

Library consortia may be considered an alliance between the publisher, libraries and vendors. They often provide a reasonable price to all stake holders. N list database, which is provided by INFLIBNET is very useful for academic community. It provide access to qualitative e- resources including full text databases to academic community at a minimal rate of subscription. Lower rate of subscription help to overcoming the problems of growing price of international journals. The college authority should encourage the students and faculty to develop their reading habits with the use of N-LIST consortium, and they have to organize training programs for users on how to use N-LIST e-resources. Then only we will be successful to fill the gap between information and proper dissemination of information. Using N-LIST benefits the libraries to procure more electronic resources in the library with limited library budget and this is what the libraries require in the present scenario. In the present study majority of librarians

(70%) satisfied in management of e-resources in respective libraries, due to lack of budget and insufficient infrastructure facilities some librarians are partially and very few number of librarians are not satisfied in management of e-resources.

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