

## ENHANCE THE N-LIST E-RESOURCES USAGE TOWARDS THE GROWTH OF HIGHER EDUCATION SERVICES OF ACADEMIC LIBRARIES - A STUDY OF ARTS AND SCIENCE COLLEGES OF PUDUCHERRY.

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### ABSTRACT:

Changing needs of users and growing interest towards electronic resources forcing librarians and major players of e-resources to come up with new initiatives. It is a major challenge to the higher education to provide quality of the e-resources services. The N-LIST is one of the best e-resources services to the college libraries which are providing under section 12B/2(f) of the UGC Act status colleges which is dream child of UGC-INFONET and INDEST-AICTE consortium. This is a first initiative taken by these premier bodies to extent e-resources to college libraries at the national level. The main purpose of this paper is to give the best suggestion to improve the quality of the usage of N-LIST e-resources services which are finding the problems while accessing the N-LIST e-resources based on the study. A questionnaire method was primary tool which is designed as 5 scaling Likert scale tool from the 10 selected Arts and Science colleges in Puducherry. The total data was collected from 1713 out of 2000 respondents of Faculty and students. The SPSS 24 and other statistical techniques has been applied and the inferences have been drawn thereof for identifying the problems of N-LIST e-resources and to provide suggestions for aiming at improving the users' academic pursuits and learning outcomes.

**KEYWORDS:** N-LIST; Higher education of India; Digital Library services, college e-resources; Puducherry N- LIST Arts & Science colleges; enhance the N-LIST e-resources

### 1 INTRODUCTION

N-LIST E-Resources are considered a vital part of academic college services in the 21st century. It has tremendously changed the way of seeking information towards electronic resources. It is today important to learn and know the assessing the use of N-LIST e-resources among the Science faculties. The study reveals that N-LIST E-Resources are useful to academic users and elaborates on the problems faced while accessing and utilizing N-LIST e-resources. The study helps in planning, developing and extending the N-LIST e-resources to academic Colleges.

Library is a repository of resources. It is an integral part of the educational system whose primary function is to serve users (students, faculty, researchers and staff). Computers and related electronic resources have come to play a central role in education. Electronic resources are the prime ingredients and they become a common part of the suite of most academic library resources today. Being jointly executed by the UGC-INFONET Digital Library 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 UGC-INFONET 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. The authorized users from colleges can now access e-resources and download articles required by them directly from the publisher's website once they are duly authenticated as authorized users through servers deployed at the INFLIBNET Centre.

### 2 REVIEW OF LITERATURE

Paul Samwel Muneja, (2023) the author assessed college libraries and 52 institutions in Tanzania as a sample to learn about e-resource marketing using web-based technologies. Using a pre-established checklist, the websites were assessed in order to find web-based materials that could be beneficial for e-resource marketing. The study's conclusion shows that the majority of libraries have websites that are connected to their respective institutional webpages.

Daulat Jotwani, (2014) IIT Libraries at Kharagpur, Bombay, Madras, Delhi, Kanpur, Guwahati, and Roorkee. The author observed and find out some of the importance techniques like library bolgs, website updates, email alerts, news groups, conducting workshops and seminars, user trainings, mouth convincing by the friends, bannered and brothers etc. led the better underrating and utilization of digital resources, staff training, feedback forms, banners etc.

Manpreet Kaur and Paramjeet Kaur Walia, (2016), authors examined the current practices related to e-resource collection development in management libraries of India with special reference to the National Capital Region (NCR) of Delhi with some constructive suggestions for improvement in this area. The study found that libraries associated with management institutions such as ABS, DMS-IITD, FMS, BIMECH and FSM need to add more management-related databases. The study is of great importance to information professionals of similar management institutions in India.

Mubofu,C (2019). The author conducted an examination of the library staff and sixty students at Mwalimu Nyerere Memorial Academy in order to determine the obstacles and tactics involved in selling electronic resources. According to this report, MNKA has inadequate managerial coordination, undertrained library staff, and a lack of ICT infrastructure. Therefore, the use of e-resources in MNMA can be improved if the college enhances the aforementioned services for the distribution of best services through the use of notice boards, institutional website, and orientation to new users, home page alerts, text messages, and information contact with social networks.

### 3 OBJECTIVES OF THE STUDY

This study examines the accessibility of N-LIST e-resources and their usage trends amongst faculty and students' at Arts and Science Colleges, Puducherry. The objectives of the study are as follows:

To find out the Knowledge level of N-LIST users

To find out how N-LIST users are accessing the N-LIST e- resources

To find out what purpose they are using the N-LIST e- resources

To identify what are the Issues faced while accessing N-LIST e- resources

To find out how far the users are satisfying by using N-LIST

To provide Suggestions for improving the access to e-resources and services

### 4 METHODOLOGY

A quantitative approach was utilized in this study to pinpoint the factors impacting N-LIST utilization. The methodology was carefully crafted to align with research objectives, utilizing a structured questionnaire tested for reliability and validity. Primary data was gathered from 1713 respondents across 10 colleges affiliated with Pondicherry University.

The study data was analysed using SPSS version 24. Categorical variables were analysed for frequency and percentage, while continuous variables were assessed for mean values and standard deviations. To determine significant differences among study constructs, chi-square analysis, student t-test, and one-way ANOVA were conducted

### 5 ANALYSIS AND INTERPRETATION

The researcher distributed 2,000 questionnaires to N-LIST beneficiary users of Arts Science & colleges in Puducherry State. 1713 users responded to the survey, which represents almost 86.65 % of the total number of users. This study says that a majority of respondents in this study were young, with the subsequent largest group of respondents belonging to the middle-aged category .78 %Faculty and 22% of students are responded to this study and found that 17.2% of respondents are says that, 17.27% users are able to retrieve the e-resources extremely fast, 52.7% were very fast only.

#### 5.1 Knowledge level

The knowledge level about using computers was found to be above average ( $4.462 \pm 0.643$ ) and the knowledge level about using internet was found to be excellent ( $4.699 \pm 0.541$ ).

	Mean	Std. Deviation
Computer	4.462	0.643
Internet	4.699	0.541

**Table 5.1 Knowledge level**

#### 5.2 Accessing the internet in library

Access to the library internet is crucial for the utilisation of N-LIST e-resources. Various factors influencing access to the library, including the reliability of net connection, adequacy of power supply, effectiveness of hardware and software support, and occurrences of human interface errors were evaluated in the study. Power supply ( $4.108 \pm 0.546$ ) and hardware and software support ( $4.076 \pm 0.543$ ) were found to be rated highly, whereas human interface errors ( $3.863 \pm 0.377$ ) and net connection ( $3.752 \pm 0.495$ ) were found to be rated moderately.

	Mean	Std. Deviation
Net connection	3.752	0.495
Power supply	4.108	0.546
Hardware and software support	4.076	0.543
Human interface errors	3.863	0.377

**5.2 Accessing the internet in library**

### 5.3 Advantages of N-LIST

The respondents' perceptions about the advantages of N-LIST were evaluated. It was found that N-LIST e-resources were easy to search ( $4.99 \pm 0.083$ ), provided up-to-date information ( $4.17 \pm 0.391$ ), were accessible from anywhere ( $4.892 \pm 0.320$ ), and had 24 hours accessibility ( $4.55 \pm 0.509$ ). The respondents had a neutral opinion about N-LIST being time saving ( $3.454 \pm 0.519$ ), easy to download ( $3.99 \pm 0.068$ ), and link to related article ( $3.837 \pm 0.369$ ).

	Mean	Std. Deviation
Easy to search	4.993	0.083
Time-saving	3.454	0.519
Easy to download	3.999	0.068
24 hours accessibility	4.551	0.509
Up-to-date Information	4.177	0.391
Accessibility from anywhere	4.892	0.320
Link to related article	3.837	0.369

### 5.3 Advantages of N-LIST

### 5.4 Purpose of using N-LIST

The respondents used the N-LIST platform for different purposes, which were classified into categories such as paper presentation, staying updated with the latest developments, assignment completion, project or practical learning, and writing articles or books. The N-LIST was predominantly used for paper presentation ( $4.847 \pm 0.397$ ), writing articles/books ( $4.974 \pm 0.215$ ), assignment purposes ( $4.988 \pm 0.110$ ) and keeping abreast with the latest development ( $4.048 \pm 0.215$ ). It was found that N-LIST was rarely used for project or practical learning ( $2.428 \pm 0.989$ ).

	Mean	Std. Deviation
Paper presentation	4.847	0.397
Keeping abreast with the latest development	4.048	0.215
Assignment purpose	4.988	0.110
Project or practical learning	2.428	0.989
Writing Articles / Books	4.974	0.215

### 5.4 Purpose of using N-LIST

### 5.5 Issues faced while accessing N-LIST resources

Some of the issues encountered while accessing N-LIST resources were examined. It was found that lack of guidance ( $4.194 \pm 0.536$ ) was a frequent issue while accessing N-LIST resources. Discomfort in reading on computer screen ( $3.832 \pm 1.592$ ), limited number of computers ( $3.725 \pm 0.447$ ), slow internet speed ( $3.258 \pm 0.657$ ), and lack of awareness on database ( $3.037 \pm 0.803$ ) were the issues faced occasionally while accessing N-LIST resources. Lack of searching skills ( $2.679 \pm 0.627$ ), understanding of the process involved ( $2.287 \pm 0.455$ ), power failure ( $2.156 \pm 0.370$ ), user id and password failure ( $2.047 \pm 0.704$ ) were some of the rare issues, and useless junk material ( $1.800 \pm 0.525$ ) was never an issue while accessing N-LIST resources.

	Mean	Std. Deviation
Useless Junked Materials	1.800	0.525
Lack of awareness on database	3.037	0.803
Slow internet speed	3.258	0.657
User id and password failure	2.047	0.704
Limited number of computers	3.725	0.447
Lack of searching skills	2.679	0.627
Understanding of the process involved	2.287	0.455
Power failure	2.156	0.370
Discomfort in reading on computer screen	3.832	1.592
Lack of guidance	4.194	0.536

### 5.5 Issues faced while accessing N-LIST resources

### 5.6 Suggestion for improving the access to e-resources and services

Enhancing the available resources significantly contributes to mastery of a subject. The participants were asked about suggestions that could be implemented for improving the N-LIST e-resources. It was found that better searching facilities

( $4.119 \pm 0.963$ ) and training programmes ( $4.972 \pm 0.235$ ) were deemed essential to improve the access of N-LIST e-resources and services. Training for library professionals ( $3.496 \pm 0.724$ ), more discipline oriented e-resources ( $3.486 \pm 0.697$ ), single search facility for multiple database ( $3.450 \pm 0.843$ ), article delivery services ( $3.358 \pm 0.767$ ), and curriculum based e-resources ( $3.222 \pm 0.903$ ) were moderately required to improve the access of N-LIST e-resources and services.

	Mean	Std. Deviation
Better searching facilities	4.119	0.963
More discipline oriented e-resources	3.486	0.697
Single search facility for multiple database	3.450	0.843
Training programmes	4.972	0.235
Curriculum based e-resources	3.222	0.903
Training for library professionals	3.496	0.724
Article delivery services	3.358	0.767

**Table 5.6 Suggestions for improving the access to e-resources and services**

### 5.7 Need for training/orientation and need to improve skills

Adequate training plays a vital role in the acquisition of skill sets. The respondents were enquired about their requirements for training and orientation to improve their proficiency in using N-LIST e-resources. The respondents stated that they require training/orientation ( $4.572 \pm 0.643$ ) and they felt the need to improve their skills ( $4.535 \pm 0.500$ ) for using N-LIST e-resources.

	Mean	Std. Deviation
Need training/orientation	4.572	0.643
Need to improve your skills	4.535	0.500

**Table 5.7 Need for training/orientation and need to improve skills**

### 5.8 Satisfaction

Assessing satisfaction is integral to shaping perceptions of specific products or services. The levels of satisfaction and comfort in using the infrastructure and resources provided by N-LIST e-resources were evaluated. The results revealed that the respondents were satisfied with the overall N-LIST programme ( $4.472 \pm 0.499$ ), sufficient number of full text database ( $4.441 \pm 0.737$ ), subjects and coverage and their relevance ( $4.411 \pm 0.977$ ), and the overall N-LIST programme ( $4.472 \pm 0.499$ ). However, the respondents expressed a neutral opinion on guidance by library ( $3.815 \pm 0.682$ ), search strategy ( $3.727 \pm 0.611$ ), and sufficient number of bibliographic databases ( $3.696 \pm 0.975$ ). Considering the level of satisfaction with the infrastructure facility, the respondents were neutral about the printing facility ( $3.518 \pm 0.510$ ), power supply ( $3.016 \pm 1.014$ ), and furniture ( $3.352 \pm 0.936$ ). Conversely, it was found that the respondents were dissatisfied with computer terminals ( $2.838 \pm 1.006$ ), system hardware ( $2.872 \pm 1.009$ ), internet connectivity ( $2.382 \pm 0.901$ ) and Wi-Fi facility ( $2.291 \pm 0.709$ ).

	Mean	Std. Deviation
Level of satisfaction and comfort		
Subjects and coverage and its relevancy	4.411	0.977
Guidance by library	3.815	0.682
Sufficient number of bibliographic databases	3.696	0.975
Sufficient number of full text database	4.441	0.737
Search strategy	3.727	0.611
Overall N-LIST programme	4.472	0.499
Update information in your subject discipline	4.048	0.580
Infrastructure facility		
Computer terminals	2.838	1.006
Wi-Fi facility	2.291	0.709
Internet connectivity	2.382	0.901
Printing facility	3.518	0.510
Power supply	3.016	1.014
Furniture	3.352	0.936
System hardware	2.872	1.009

**Table 5.8 Satisfaction**

## 6 FINDINGS, SUGGESTIONS AND RECOMMENDATIONS

One of the most exquisite and productive programs offered by INFLIBNET via the Shodhsindu consortium is N-LIST. The N-LIST college administration and librarians will undoubtedly have more success if they implement the below advice and recommendations, which are based on the research from the aforementioned study.

### College Authority Support

N-LIST e-resources should get support by College Authorities like renewal of N-LIST, regular awareness programmes like seminars and workshops as well as they have to encourage the Librarians and Faculty to participate in the N-LIST conducted programmes for learning and giving the best training to the student community too. They should provide the proper infrastructure for accessing the N-LIST e-resources with high speed bandwidth in order to access throughout the campus in their desktop itself.

### Motivation by the College Faculty

Faculty should motivate the student towards the usage of N-LIST e-resources by giving assignments, projects works, to be covered in the syllabus and refer the by the N-LIST e-resources and ask them to keep on updating the information through college website, notice boards, Library portal etc.

### Promotion of N-LIST e-resources by the College Librarians

Librarians should encourage the students and faculty for attacking and users for the active user of the Library quiz, essay competitions, seminars, and hands on training of N-LIST e-resources etc. to promote the N-LIST e-resources. Librarians or libraries should provide the proper requirement of usage of N-LIST e-resources like Computers with backup power supply facility and reprographic services like scanning, printing, photocopying etc. The libraries should conduct a regular survey on usage of N-LIST resources. The librarian should get usage statistics regularly from the INFLIBNET and publicize the same in notable places of the college campus. They try use the social networking sites for dissemination the e-resources information as much as possible. Librarians should provide the remote login facility for the faculty members to use the N-LIST e-resources at their home as well as active users of the N-LIST students. They have to prove the manual or user guides of N-LIST e-resources in their Libraries for better understanding.

### Recommendation for INFLIBNET Authority

N -LIST is very wonderful e-resources programme for the college libraries which is beneficial by INFLIBNET with nominal fee. Here are some followings recommendations are given based on the study and understating of the researcher for the best services to the N-LIST user community. They should always monitor the usage of N-LIST users, update the website, improve the N-LIST e-resources quality and search Strategy, training programmes, annually reward and appreciate the top ten user colleges of N-LIST e-resources to inspire other colleges to boost their utilization.

## 7 CONCLUSION

India's higher education institutions offer valuable e-resources to enhance academic and research careers. Ensuring access to information is crucial in the digital age. N-List e-services are popular among Pondicherry University-affiliated colleges, improving knowledge, awareness, and support. Following Dr. S.R. Ranganathan's 2nd law of Library Science, ensuring every reader accesses necessary information is crucial in this digital age. N-List e-services are highly favoured among Arts & Science colleges affiliated with Pondicherry University, contributing to improved knowledge levels, awareness, and support mechanisms. N-LIST e-resources, supported by librarians, enhance usage and justification. Librarians' promotion efforts contribute to achieving Indian Government's academic development goals in the digital era.

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