# Perception on UGC INFONET: A Study on Faculty of Science at Annamalai University, Tamil Nadu

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Abstract

*Now a day the universities and institutions of higher learning institutions have started optimally utilizing the resources amongst themselves via resource sharing over the network available under various consortia like INDEST (Indian National Digital Library in Engineering Science and Technology) UGC-INFONET and etc. The present study summarizes the perception about UGC INFONET among scholars of faculty of science at Annamalai Unversity. The Annamalai University has been selected due to its importance such as being one among the ten universities searching over the world in internet and the faculty of science also one of the renowned division among the best Schools of research in international level. The disproportionate sampling technique used to collect information from the sample respondents. It concluded that the UGC-Infonet consortium had a significant impact on the productivity of researcher and academicians. But the small ineffectiveness on the time utilization may found among scholars in the use of UGC Infonet journals.*

Keywords

UGC, Infonet, academic Skill, opinion

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## INTRODUCTION

The rapid growth of information communication technologies gave an importance to the presence of various new eras such as paperless society, electronic resources, portal and global digital library. The intellectual desires of the users could be fulfilled by both digital resources namely E books and databases than printed resources in present context by the all kind of libraries. Further, the information seeking behavior is mainly concerned with those who need information and how information is found, evaluated and used and how their needs can be identified and satisfied. According to him the information seeking behavior dealt with Identifying objective, Defining need, Accessing information system, establishing sources of information, Information acquisition, Use of Information and Satisfaction / dissatisfaction. The information seeking behavior essentially refers to the strategies and actions undertaken to locate discrete knowledge elements. It is concerned with the integrated utilization of the three basic sources. It can be said that the behavior, which yields the highest information satisfaction is the best. Now a day the universities and institutions of higher learning institutions have started optimally utilizing the resources amongst themselves via resource sharing over the network available under various consortia like INDEST (Indian National Digital Library in Engineering Science and Technology) UGC-INFONET and N-List Programme of MHRD / UC (INFLIBNET) in India to have 24X7 access to the 5500 + e-journals, e-books and databases by the faculty ad researchers working in the areas of higher studies and research, Electronic resources represent an increasingly important component of the collection building activities of libraries due to emergence of many local, regional, national and International resource sharing knowledge network initiatives throughout the world.

The UGC (UGC) has instigated a striving programme to enrich a quality of academic infrastructure, especially for higher education and to make use of the benefits of Information and Communication Technology to all the universities and colleges across the country. Under this initiative, UGC is modernizing the university campuses with the state-of-the-art Campus Wide Networks and has set up its own nationwide communication network named UGC-Infonet. The UGC-Infonet is supporting the higher education in several ways it has full capability to support distance learning, it constitutes mixed heterogeneous network environment to distribute the

educational material and e-journals to the remotest place, researchers and scholars can use this network to search and retrieve the up-to-date information from the Internet, it can be used as medium for collaboration among teachers and students, not only within the country but also all over the world, it forms as an Intranet for Indian universities; therefore, the accessing cost e-resources hosted within the network is very low and the universities can also use this network to establish a channel for globalization of education and marketing their services and developments. So User studies are necessary not only for planning and designing information system but also for their efficient and effective operation. There are likely to be many surprises to even an experienced librarian about his own clientele as he would not have heard them all in a systematically planned set up in his day to day work and helps to improve the relation of the library with users in an objective way provided it is done with the organization concerned. The present study summarises the perception about UGC INFONET among scholars of faculty of science at Annamalai Unversity.

## REVIEW OF LITERATURE

Anderson, Cokie et al portrayed the importance of electronically archived materials which must be digitized by classifying and indexing for the use of scientists to retrieve the information effectively. This was proficiently had a straight collision on the scientists work and communication. This may adapted to XML to rectify the challenges and solutions of the digitization for scientific information. The various kinds of digital scientific objects should be stored and retrieved by using a single generic framework which depends on Open Archives Initiative standards and Dublin Core metadata. More over the digitization had a significant influence on a small state scientific association's proceedings for wider scientific community to communicate successfully. The bioinformatics database had a numerous use and usability in front of creation, management and use of freely available electronic scientific information. Asemi and Riyahiniya surveyed awareness and use for digital resources in the libraries of Isfahan University of Medical Sciences, Iran. Results of the study are that 70 % students are aware of digital resources available in the university dataases; 87.2 % of students feel that the available digital resources meet their information needs. Authors conclude that users are facing some problems like low speed connectivity and shortage of inadequate hardware facilities.

The considerable growth has been identified in the use of e-resources by students of Institute of Health and community studies. The need of e-resources is more by the students computer science and Electronic and Communication as revealed by nearly three fourth of the respondents. Beard, Dale and Hutchins identified that the percentage for staff in the School of Conservation Sciences was 75 per cent and for the School of Design, Engineering and Computing 53 per cent with respect to the use of e-resources. Beno, David surveyed the extent of use for digital by students and researchers in five universities in Israel and the ratio of use between authorized electronic information resources provided by academic libraries between 2005 and 2006. The surface of the web has been used for seeking information for 80 per cent of the respondent's studies or research. But only about 28 percent of the respondents reported high or very high use of academic e-journals, 40 percent high or very high use of digital databases, and only 13 percent high or very high use of e-books. The Surface Web two or three times more frequently than more authoritative digital information sources provided by their library indicated a severe problem related to the quality of information used, which may severely harm the quality and creditability of research based upon it. The survey findings were worrying since much Surface Web information is not reliable or authoritative. Bidyut and Bajpal concluded that all faculty members are familiar about e-resources as well as that of searching for literature through Internet. The main purposes of the use of e-resources are publication and research of a large number of faculty members. The slow access speed is the major problem encountered by the faculty members. The e-journals, e-databases and Internet accessed by most of the faculty members. All faculty members use partially and are least satisfied with e-resources section most of the faculty members strongly agreed to subscribe relevant e-resources, some of them agreed to subscribe more e-resources whereas some demand ore opening time and printing facility of downloaded matters. Deb, Subrata found that TERI Integrated Digital Library has been created to provide access to all digital and digitized offline and online resources, online e-journals, electronic documents and virtual resources, online e-journals, electronic documents and virtual resources, and virtual libraries. A physical digital library has been created to address access to all the LAN connected systems that provided CD-ROM access and journals and books

downloaded or purchased for all time free access to in-house users. Integration has helped in saving researchers' valuable time; library management had become easier and much more effective time. Library management had become easier and much more effective than before. Any additions to existing resources are announced by e-mail for user access. Future plans were to make the resources highly interoperable across platforms should not be a problem. Once a search is initiated, the search engine form the main search window should be able to hand over the search windows for any given database (bibliographic and full text). Once a search is handed over to the subordinate search engines, it should be able to retrieve the items and display the retrieved items in the main window. Future libraries seem to have no escape from the integrated digital library approach other than to an integrated digital collection that will make all available resources accessible from a single window.

Gunasegaran, Balasubramani and Sivaraj found that Computer science and engineering users use the electronic journals (17 %) to the most extent rather than information technology (16 %), computer applications (15 %), electrical and electronics engineering (12 %), electronics and communication engineering (10 %), Mechanical engineering (9 %), biotechnology (8%), civil engineering (7 %) and textile engineering (6 %) among nine departments in Bannari Amman Institute of Technology (BAIT). Guruprasad et al highlighted the role of the Net in spreading scholarly scientific communication by revealing that the most popular place of use of the Internet amongst the aerospace scientists and engineers was 'Right at their Desktop', followed by 'Access from their Homes', Access from Cyber Café'. 'The Organization's Library', 'Access from other Departments' and 'Access from another Library' occupy lesser priorities, the overall average monthly usage of the Internet got a mean value of 84.19 which implies that on an average the selected aerospace organizations were familiar and had exposure to the Net for at least 7.01 years, the main purpose of using the Internet amongst this 'niche' aerospace engineering community happens to be for 'Sending and receiving e-mails', followed by 'Collecting general information' and 'Access e-Resources and 'Download software for scientific research', the main motivation factors to us the Net amongst this community were 'To update self-knowledge in thee are of research' followed by 'User- friendly search engines' and 'Easy access to resources', the most frequently used search engines were' Google', followed by 'Yahoo' and 'Alta Vista', the most popular scientific web sites accessed and used were 'Goole Scholar', followed 'Google Book' and 'SCIRUS' and the biggest bottleneck faced by these scientists and engineers while accessing the Netware 'Very poor Internet connectivity (low speed)' followed by 'Getting irrelevant information' and ;Internet charges are high'.

Haridasan, Sudharma and Khan, Majid presented the fact that electronic resources are a significant part of library collections. A large amount was ivested in the development and management of e-resources in the libraries. The study aimed to identify the acceptance of e-resources in the National Social Science Documentation Centre (NASSDOC) library in New Delhi, India and determine their usage, performance, degree of user satisfaction, and barriers faced in the access of e-resources. It also attempted to find out the users' views about computer literacy among the social scientists. The study focused on the impact and use of e-resources by social scientist pursuing research in the NASSDOC library the data were collected from the entire population of social scientists at NASSDOC through a questionnaire accompanied by personal interview. This as further analysed using statistical techniques and percentages to arrive at qualitative and quantitative results. The major findings of the study indicated that respondents were aware of the e-resource were aware of the e-resources (such as e-books, e-journals, e-encyclopedias, e-theses, CD-ROM databases, e-mail, internet and the OPAC). Large numbers of research scholars and faculty members were using these e-resources or their research work. Many faculty members strongly agreed with the necessity for computer and internet literacy to access information. A majority of users were satisfied with the e-resources available at the NASSDOC library.

Kanniyappan, Nithyanandan and Ravichandran carried out the study on use and impact of E-resources in an academic and research environment and found that the entire respondents used computers/online service (100 %). Regarding the electronic information Service (53.47 %) if tge staff members are fully satisfied with E-mail (60.67 %), Internet (56.67 %), OAP system (58 %) and on-line journals (50.67 %). Further the researcher found that on-line electronic journals (48.66 %), University library site (40 %) and research project sites (38.67 %) are very useful. The result was that majority of the respondents (52.66 %) used the E-journals than

the printed journal and 32 % of the respondents used both E-journals and printed journals equally. The survey reveals that most of the faculty members are aware of the availability of electronic resources and the latter are used frequently by the former for their teaching purposes.

**SIGNIFICANCE OF THE STUDY**

The UGC- INFONET was an important milestone and developed by UGC in collaboration with INFLIBNET is a landmark initiative towards sharing of E-resources the formation of consortia. The new release of electronic resources under the consortia in the year 2004 for Indian universities is a milestone in the history of higher education system in India. Hence it is precise occasion to study the UGC Infonet consortium on research potential of Scholar in faculty of Science how far the E-Journals are being used by them and impact them. So the researcher had been invented this topic. The pilot study had been conducted to identify the problem through interview schedule among the sample respondents and thus found that there is a potential problem in that area which made the researcher to form the topic. The Annamalai University has been selected due to its importance such as being one among the ten universities searching over the world in internet and the faculty of science also one of the renowned division among the best Schools of research in international level.

**OBJECTIVES**

- To study the Perception about the UGC-Infonet journals by Scholars of faculty of Sciences in Annamalai University
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**HYPOTHESIS**

- Status of the respondents and their opinion about Satisfaction of the Quality of journals provided by the the UGC-Infonet consortium is equal to one another
- There is no difference between Gender and their opinions about UGC-INFONET journals have developed their academic skills.

**METHODOLOGY**

The disproportionate random sampling technique used to select the sample respondents from total population. The 30 questionnaire circulated to each department scholars of faculty of science as samples from the universe. A sample including research scholars of both M.Phil and Ph.D were chosen from the various departments of faculty of science (Maths, Statistics, Physics, Chemistry, Botany, Zoology, Earth Science and Bio Chemistry and Bio Technology) and hence the sample size is 240. A total number of 217 Questionnaires were collected from the scholars of faculty of science by filling questionnaires properly.

**DATA SOURCE**

The study is mainly based on both primary and secondary data. The primary data were collected from research scholars of faculty of science at Annamalai University through questionnaire. The Secondary data are collected basically from various Books, Journals, Magazines, Newspapers and records of Annamalai University.

**Table 1:**Level of satisfaction on the UGC-Infonet E-journal portal

| SL. NO | Portals | Rank | | | | Weighted score | Overall Rank |
|---|---|---|---|---|---|---|---|
| | | Rank 1 | Rank 2 | Rank 3 | Rank 4 | | |
| 1 | American Chemical Society | 109 | 71 | 15 | 22 | 701 | 6 |
| 2 | Annual Reviews | 77 | 92 | 15 | 33 | 647 | 11 |
| 3 | Blackwell - Wiley | 87 | 117 | 13 | - | 725 | 3 |
| 4 | Cambridge University Press | 67 | 113 | 15 | 22 | 659 | 10 |
| 5 | JSTOR | 81 | 116 | 14 | 6 | 706 | 4 |
| 6 | Sci Finder Scholar | 14 | 109 | 25 | 19 | 452 | 14 |
| 7 | Oxford University Press | 102 | 77 | 13 | 25 | 690 | 7 |
| 8 | Portland Press | 68 | 91 | 35 | 26 | 551 | 13 |
| 9 | Project Muse | 77 | 102 | 20 | 18 | 672 | 9 |
| 10 | Royal Society of Chemistry | 59 | 101 | 25 | 32 | 621 | 12 |
| 11 | Science Direct/Elsevier | 127 | 87 | 3 | - | 775 | 1 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 12 | Springer Link | 125 | 74 | 13 | 5 | 753 | 2 |
| 13 | Taylor and Francis | 69 | 113 | 24 | 11 | 684 | 8 |
| 14 | Web of Science | 111 | 69 | 19 | 18 | 705 | 5 |

**Source: Primary Data**

Table 1 shows that the E Silver has been viewed as the prime portal that used by the scholars, followed by the Springer Link with the second rank. The third overall position has been obtained by Black Well-Whily. J Stor has been viewed as the fourth major portal for research scholars of Annamalai University. The overall fifth rank has been given to Web of Science; American Chemical Society had sixth rank; Oxford University Press had Seventh rank and Taylor and Francis had Eight rank. It can also be seen that the least rank was given to Annual reviews, Sci finder scholar, Protland press and royal society of chemistry.

**Table 2:**Extent of the use of E-journals and Print journals according to the age wise category of respondents

| No. | Category | 50% E-journals& 50% Print journals | 20% E-journals& 80% Print journals | 80% E-journals& 20% Print journals | Other ratio | Total |
|---|---|---|---|---|---|---|
| 1 | 23-28 | 70 (32.26) | 24 (11.06) | 39 (17.97) | 25 (11.52) | 158 (72.81) |
| 2 | 29-33 | 8 (3.69) | 7 (3.23) | 29 (13.36) | 6 (2.76) | 50 (23.04) |
| 3 | 34-38 | 3 (1.38) | 2 (0.92) | 1 (0.46) | - | 6 (2.76) |
| 4 | Above 38 | 2 (0.92) | 1 (0.46) | - | - | 3 (1.38) |
| | Total | 83 (38.25) | 34 (15.67) | 69 (31.80) | 31 (14.29) | 217 (100) |

**Source: Primary Data**

Table 2 depicts that among the 23-28 age category of respondents, 32.26 per cent use 50% E-journals& 50% Print journals, 11.06 per cent use 20% E-journals & 80% Print journals, 17.97 per cent use 80% E-journals& 20% Print journals against to among the 29-33 age category of respondents such as 3.69 per cent use 50% E-journals& 50% Print journals, 3.23 per cent use 20% E-journals & 80% Print journals and 13.36 per cent use 80% E-journals & 20% Print journals. Among the 34-38 age category of respondents, 1.38 per cent use 50% E-journals& 50% Print journals, 0.92 per cent use 80% E-journals& 20% Print journals. Among the above 38 age category of respondents, 0.92 per cent use 50% E-journals& 50% Print journals. It is interesting to note that majority of the respondents using 50 per cent of E journals and 50 per cent of Print journals among all age categories at Annamalai University.

**Hypothesis I**

There is no significant difference between Status of the respondents and Satisfaction of the Quality of journals provided by the the UGC-Infonet consortium.

**Table 3:** Results of ANOVA

| | Sum of Squares | Df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | 39.461 | 1 | 39.368 | 53.431 | .006 |
| Within Groups | 153.752 | 214 | .638 | | |
| Total | 212.321 | 214 | | | |

**Source: Computed data**

The results of ANOVA are given in table 3. The significance of variance is 0.006. Since, the significance value 0.000 is less than 0.05 ($p<0.05$), the variance between different experimental conditions is significant. Therefore, it concluded that the status of respondents sample means of satisfaction of the quality of journals differ from each other significantly according to the opinions of respondents. Table 4 depicts the influence of UGC-Infonet E-journals on the research skill of the research scholars. In this study, 18.89 per cent of the respondents have access to up-to-date information, 27.19 per cent of the respondents have the consortium expedites the research process, 11.98 per cent respondents have access to a wider range of information, 14.29 per cent have faster access to information 20.28 per cent of the respondents have easier access to information and 7.37 per cent respondents have improved professional competence. It concluded that the UGC-INFONET consortium significantly influenced the research skill of the sample respondents at Annamalai University.

**Table 4:**Distribution of the respondents according to the opinion about Influence of UGC-INFONET e-journals on Research Skill

| No. | Opinions | No of Respondents | Percentage |
|---|---|---|---|
| 1. | Up to date information | 41 | 18.89 |
| 2. | Expedites the research process | 59 | 27.19 |
| 3. | A wider range of information | 26 | 11.98 |
| 4. | Faster access to information | 31 | 14.29 |
| 5. | Easier to access to information | 44 | 20.28 |
| 6. | Improves profession competence | 16 | 7.37 |
| | Total | 217 | 100 |

**Source: Primary Data**

**Testing of hypothesis - II**

There is no difference between Gender and their opinions about UGC-INFONET journals have developed their academic skills.

**Table 5:** Test Statistics

| | Opinion gender |
|---|---|
| Mann-Whitney U | 6157.000 |
| Wilcoxon W | 10438.000 |
| Z | -.732 |
| Asymp. Sig. (2-tailed) | .314 |

a. Grouping Variable: Gender

**Source: Computed Data**

Since Man-Whitney's U value is 6157.000 and exact p-value for 2 tailed is 0.314 which is >0.05, the null hypothesis can be accepted at the level of significance 0.05. There is enough evidence to conclude that there is no difference in the mean opinions of male and female about UGC-INFONET journals have developed their academic skills.

**Table 6:** Distribution of the respondents according to the opinion about overall services

| No. | Opinions | No of Respondents | Percentage |
|---|---|---|---|
| 1. | Very Good | 67 | 30.88 |
| 2. | Good | 106 | 48.85 |
| 3. | Satisfactory | 33 | 15.21 |
| 4. | Not Satisfactory | 11 | 5.07 |
| | **Total** | **217** | **100** |

**Source: Primary Data**

Table 6 depicts that 30.88 per cent of the respondents stated very good to the UGC Infonet at overall. In this study, 48.85 per cent of the users stated as good, 15.21 per cent stated as satisfactory and 5.07 per cent stated as not satisfactory. It concluded that 94.94 per cent of the library respondents agreed that UGC-Infonet is good at overall.

## MAJOR FINDINGS OF THE STUDY

- The E Silver has been viewed as the prime portal that used by the scholars, followed by the Springer Link with the second rank. And the least rank was given to Annual reviews, Sci finder scholar, Protland press and royal society of chemistry.
- Majority of the respondents are using 50 per cent of E journals and 50 per cent of Print journals among all age categories at Annamalai University.
- It concluded that 82.02 per cent of the respondents are satisfied with the availability/accessibility of UGC-Infonet journals.
- Out of total respondents, 79.27 per cent of the library respondents are satisfied with the quantity of journals provided by the UGC-Infonet consortium.
- It is interesting to note that among Ph.D research scholars and students, majority of them are satisfied with Quality of journals provided by the the UGC-Infonet consortium.
- It concluded that 77.42 per cent of the library respondents are satisfied with the internet connectivity at UGC-Infonet consortium of Annamalai University.
- INFONET consortium significantly influenced the research skill of the sample respondents at Annamalai University.
- Most of the library respondents (65.43 per cent) agreed that with the UGC-Infonet consortium of Annamalai University enriched their academic skill.
- It concluded that majority of the male and female respondents agree with UGC-INFONET journals have developed their academic skills.
- It concluded that 94.94 per cent of the library respondents agreed that UGC-Infonet is good at overall.

- There is no difference in the mean opinions of male and female about UGC-INFONET journals have developed their academic skills.
- The status of respondents sample means of satisfaction of the quality of journals differ from each other significantly according to the opinions of respondents.

## CONCLUSION AND SUGGESTION

The present study is evidence of the findings of the previous studies which shows that the UGC-Infonet consortium had a significant impact on the productivity of researcher and academicians. But the small ineffectiveness on the time utilisation may found among scholars in the use of UGC Infonet journals. However, the library professionals should take appropriate concern to create a effective environment to access the UGC Infonet journals. The university must encourage the scholars to spend more time for utilising the UGC Infonet journals. The scholars should extend their own effort to utilise the UGC Infonet at maximum level.

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