

Use of Scholarly Information by Faculty Members of Engineering Colleges in Villupuram Town, Tamilnadu: A Case Study

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Abstract

Resources of information available via the Internet are increasing exponentially, leading to steady increase in the use of Internet for education and research. Since past few years, free online information sources like e journals, e-books, e-databases have increased considerably. Earlier, information and knowledge were passed by word of mouth or through manuscripts, and communication was a slow process. Today, it is passed from one individual to an infinite number of other users through a number of media and formats which makes rapid and widespread dissemination of information possible. This article discusses Use of Scholarly Information by Faculty Members of Engineering Colleges in Villupuram Town: A Case Study. A questionnaire survey was used for data collection, 180 well structured questionnaires were distributed for collecting the data, out of which, 112 were returned duly filled in with the response rate of 62%. The analysis of data collected covered awareness of electronic resources, Adequacy of E-Resource, Method of learning to access e-Resources, Place of Accessing Electronic Information, Approaching Method in Web for Retrieving relevant Information, impact of use of electronic resources on the academic productivity of respondents and problems faced by researchers while using electronic resources. The study found that the Internet are the most used of the e-resources. Results show that 87 per cent of the faculty is familiar with the use of Scholarly Information, and majority of these members are using Scholarly Information for research and teaching purpose. Study also reveals that majority of the faculty members are learning the required skills for the usage of Scholarly Information through self-study. There was a general indication that respondents did not receive adequate training in the use of electronic resources. Inadequate infrastructure is a major factor that hinders users from using electronic resources. The article provides suggestions for further improvement of use of scholarly information in order reap the benefits of the innovation in the engineering colleges.

Keyword: Scholarly Information, Electronic Resources, Place of Accessing , Retrieved Information, Web Resources, Villupuram

0. Introduction

Information has been identified as one of the vital resources needed for the success in almost every major human endeavor. Academic and research libraries face numerous challenges in managing their information resources in the digital age due to impact of information technology

application. Unprecedented desktop access to scholarly information has been made possible by the introduction of digital libraries [1]. The powerful combination of digital publications, specialist and generalist databases, sophisticated search systems and portals enables scholars and students to rapidly examine a great variety of information.

Academic Research community demand information, which should be timely, accurate, valuable, up to date and quickly available for pursuing their academic and research work. They are much more web focused and Internet oriented. On the issues of changing information needs of the users, George et al. emphasize that the academic libraries need to know more about the information that students use and value and what influences their information searching, obtaining and use [2]. Hence assessment of reading habits of the users is an important task of any efficient information retrieved system so that the information needs of the users may be identified and information available in different types of formats and through a variety of channels may be provided to the users [3]. The primary goal of the survey questionnaires is to collect data on the relevance of existing and possible future services as well as on student and faculty perceptions of the library's value in the context of the scholarly information environment [4]. To address these questions, this study explores academic and research communities' information use pattern as they pursue for scholarly activities – the role of the people, the internet, the academic library and other influence.

1. Scholarly Information

According to Cambridge International Dictionary of English “Scholarly means containing a serious detailed study of the subject concerned. Someone who is scholarly studies a lot and knows a lot about what they study [5]. There are volumes of information are available like primary, secondary, tertiary information and web information. All these information may not be relevant to scholars. Reading habits of scholars in any field depend both on their personal characteristics as well as characteristics of specialty in which they work. Though personal characteristics of scholars is one of the important factors which contributes towards reading habits, but subject characteristics also have definite impact on reading habit of scholars in any field. The net provides an open global networked environment for seamless publishing and access to information. The powerful combination of digital publications, specialist and general databases, sophisticated search systems and portals enables scholars and students to rapidly examine a great variety of information [6]. They demand information i.e. timely, accurate, valuable, up to date and quickly available for pursuing their academic and research work. The information, which has peer-reviewed and high quality, is called scholarly information.

1.1. Statement of the problem

The study will help the library to measure the usage of e-resources, to plan for a better promotion and e-resources delivery model to achieve the goal of investing in e-resources. The major components for the successful implementation of e-resources service are the uses, adequate resources, infrastructure, promotional campaigns, user training and staff support. The present research highlights all the aspects of the use of scholarly information by faculty members as the three selected Engineering colleges in Villupuram town besides serving as an indicator for

strengthening the existing system, Hence it was felt to select the problem as a strong point to conduct research and to report the outcomes.

2. Objectives of the Study

The research objectives of the study are listed below:

1. To find out the level of a usage of electronic information by faculty members of the selected Engineering colleges surveyed.
2. To analyze the awareness on digital resources among the respondents
3. To ascertain the extent of use of e-resources among the respondents
4. To find out the usage of various online database among the respondents
5. To identify the electronic information services offered by the library of the selected Engineering colleges surveyed.
6. To identify the electronic resources available for the respondents in pursuit of their research and developmental activities in the libraries surveyed.
7. To find out the barriers faced by the respondents in accessing electronic information sources.
8. To device information user model based on the study.

2.1 Scope of the Study

The study is undertaken to explore the use pattern of electronic information, the infrastructure environment existed, access to Information Technology (IT) devices and E-Resources in the surveyed Engineering colleges by the respondents and to find the ways and means to promote the existing system. The research covers the faculty members, who are working in permanent basis pursuing their practices in full time of the three Engineering colleges only, staff other than teaching in full time basis and post graduate students are not covered for this study, since their electronic information needs and quality varies.

2.2 Sample size

The total population comprises both faculty members of 240. Sample of 112 respondents of faculty members with difference age groups, qualifications, gender, experience and specialization were taken for this study. 180 well structured questionnaires were distributed for collecting the data, out of which, 112 were returned duly filled in with the response rate of 62%.

2.3 Analysis of Data

Data collected from the respondents were analyzed using Statistical Package for Social Science (SPSS). Mean, Standard Deviation, Percentile analysis, ANOVA (Analysis of Variance) test and Weighted Average Method were carried out for analyzing the data. Weighted Average Method followed based on the ratings assigned by respondents.

3. Analysis and Discussion

Assessment of Use of scholarly information is an important task of any efficient information retrieval system so that the information needs of the users may be identified and information available in different types of formats and through a variety of channels may be provided to the users.

3.1 Designation wise Respondents

Designation is an impact factor, which includes the level of accessing the quality of scholarly information in the electronic environment. Table-1 clearly shows that in IFET College 63% of the respondents were Assistant professor and only 20.37% were professors, while in ESCET College, majority of them (48%) were Assistant professors and only 21% were lecturers. Again in VRSEC College, 36% of the respondents were Assistant professor and only 12% were professors. In over all opinion, majority of the respondents 52.67% were Assistant professor and only 15.17% were Associate professor in all the three colleges surveyed and it is also found that in IFET College, 20.4% of the respondent were professor, which was higher than the least total average.

Table-1 Designation wise Respondent

Designation	IFET	ESCET	VRSEC	Total
Professor	11 (20.37)	5 (15.15)	3 (12.0)	19 (16.93)
Asso.Professor	6 (11.11)	5 (15.15)	6 (24.0)	17 (15.17)
Assi.Professor	34 (62.96)	16 (48.48)	9 (36.0)	59 (52.67)
Lecturers	3 (5.55)	7 (21.21)	7 (28.0)	17 (15.17)
Total	54 (48.21)	33 (29.46)	25 (22.33)	112 (100.0)

3.2 Qualification wise Respondents

Level of Qualification plays a dominate role in identifying and accessing the Scholarly Information, which is relevant to their research and academic activities. Table-2 reveals that 14(0.42%) of the respondents from IFET have M.E qualification and 12(0.36%) have M.Tech, while in ESCET 19(0.35%) have M.E qualification and 18(0.33%) M.Tech again in VRSEC, majority of them 16(0.64%) have M.E and 5(0.2%) have M.Tech qualification. To sum up, 49(0.43%) of the respondents from all the three colleges have M.E qualification and 35(1.31%) have M.Tech qualification. It is also observed that (84) of the respondents from all the three colleges has either M.E or M.Tech qualification.

Table-2 Qualification Wise Respondents

Qualification	IFET	ESCET	VRSEC	Total
M.E	14(0.42%)	19(0.35%)	16(0.64%)	49(0.43%)
M.Tech	12(0.36%)	18(0.33%)	5(0.2%)	35(0.31%)
Ph.D	7(0.21%)	17(0.31%)	4(0.16%)	28(0.25%)
Total	33	54	25	112

3.3 Teaching Experience

Years of teaching Experience will throw light on the respondents in seeking the Scholarly Information, It is evident from the table-3 that majority of the respondents (72.7%) from IFET college have 1-10 years teaching experience and only 9% have 21-30 year teaching experience and it is also found that none of the respondents have more than above 30 years experience, in case of ESCET college, again majority of them (68.5%) have 1-10 years teaching experience and 1.8% of them have more than above 30 years teaching experience, while in VRSEC college,

majority of them (64%) have 1-10 years teaching experience and only 24% have 11-20 years teaching Experience and none of the respondents have more than 30 years above.

Table-3 Teaching Experience

Teaching Experience of	IFET	ESCET	VRSEC	Total
1-10 Years	24 (72.72)	37 (68.51)	16 (64.0)	77 (68.75)
11-20 Years	6 (18.18)	7 (12.96)	6 (24.0)	19 (16.96)
21-30 Years	3 (9.09)	9 (16.66)	3 (12.0)	15 (13.39)
Above 30 Years	0 (0.0)	01 (0.90)	0 (0.0)	01 (0.90)
Total	33 (29.46)	54 (48.21)	25 (22.33)	112(100.0)

3.4 Adequacy of E-Resource in the Central Library

The researcher intended to find out the availability level of electronic information sources in the central library. It is revealed from the table-4 that majority of the respondents (66.7%) in IFET have expressed that their library have adequate e-resources, again majority of the respondents (98.15%) in ESCET and (92%) in VRSEC also have expressed the same opinion. It may be concluded from the overall responses that majority of the respondents (87.5%) from all the surveyed colleges expressed that their library have adequate e-resource and only 12.5% have stated that e-resources in the library was not adequate. When the overall average (87.5%) compared with ESCET (98.15%) and VRSEC (92%), both the colleges were above the total average and IFET was below the total average from the analysis, it may be concluded that ESCET library has much collection on e-resource when compared with the other two surveyed colleges.

Table-4 Adequacy of E-Resource in the Central Library

E-Resource	IFET	ESCET	VRSEC	Total
Yes	22 (66.7)	53 (98.15)	23 (92.11)	98 (87.5)
No	11 (33.3)	01 (1.85)	02 (8.17)	14 (12.5)
Total	33 (29.46)	54 (48.21)	25 (22.33)	112 (100.0)

3.5 Preference of Electronic Information Resources

The researcher tried to find out the preference of various electronic information sources by asking the opinion from the respondents. It may be observed from table-5 that in IFET, e-journal seemed that highest weight age of 4.3 of followed by e-databases seemed 3.5, e-books and e-seminars/conference for the third highest weight age of 26 e-books forth higher weight age 2.5 and electronic these and dissertation secured the least weight age of 2.2. Again in ESCET, e-journal have seemed the highest weight age of 4.38 searching first rank, followed by e-databases seemed the weight age of 3.2 has secured the second rank, e-thesis and dissertations got the weight age of 2.5 securing the third rank and e-conferences/seminars and e-book seemed 2.2 securing the last rank ere fourth rank and in the same way, in VRSEC, e journals recurred the weight age of 4.2 securing first rank, followed by e-databases seemed 3.4 weight age secured 2.5 securing third rank, e-book secured 2.4 securing fourth ranked electronic thesis and dissertation secured 2.2 securing last rank.

In the overall opinions from all the three colleges, e-journal securing 4.35 seemed first rank, e-databases got 3.53 securing second rank, e-seminars/conferences seemed 2.5 possessed third

rank, e-book secured 2.4 occupying fourth rank and e-thesis and dissertations secured 2.3 securing last rank i.e fifth ranks. It is also found that all the three colleges' respondents were top priority to e-journals.

Table-5 Preference of Electronic Information Resources

***AR-Assigned Rank**

Preferred Electronic Source	Colleges	AR-1	AR-2	AR-3	AR-4	AR-5	Weighted Average	Total
e-books	IFET	2 (6.06)	7(21.2)	9(27.2)	3(9.09)	12(36.36)	84/33=2.5	33
	ESCET	3 (5.55)	11(20.37)	8(14.8)	12(22.22)	20(37.03)	126/54=2.3	54
	VRSEC	1 (4)	3(12)	5(20)	7(28)	9(36)	54/25=2.16	25
	Total	6 (5.35)	21(18.75)	22(19.6)	22(19.6)	41(36.6)	264/112=2.35	112
e-Journals	IFET	18 (54.5)	10(30.3)	3(9.09)	2(6.06)	0	144/33=4.36	33
	ESCET	39 (72.22)	7(12.96)	6(11.11)	2(3.70)	0	237/54=4.38	54
	VRSEC	14 (56)	5(20)	5(20)	1(4)	0	106/25=4.24	25
	Total	71 (63.39)	22(19.6)	14(12.5)	5(4.46)		487/112=4.35	112
e-Databases	IFET	9 (27.27)	11(33.3)	5(15.15)	5(15.15)	3(9.09)	116/33=3.51	33
	ESCET	6 (11.11)	26(48.14)	8(14.8)	9(16.6)	5(9.2)	174/54=3.22	54
	VRSEC	4 (16)	12(48)	4(16)	3(12)	2(8)	106/25=4.24	25
	Total	19 (16.96)	49(43.75)	17(15.17)	17(15.17)	10(8.9)	396/112=3.53	112
e-conference/ seminar	IFET	2 (6.06)	4(12.12)	8(24.24)	13(39.39)	6(18.18)	89/33=2.69	33
	ESCET	3 (5.55)	7(12.96)	11(20.37)	21(38.8)	12(22.22)	127/54=2.35	54
	VRSEC	4 (16)	4(16)	7(28)	7(28)	3(12)	74/25=2.96	25
	Total	9 (8.03)	15(13.39)	26(23.2)	41(36.6)	21(18.75)	290/112=2.58	112
e-Theses and Dissertation	IFET	2 (6.06)	3(9.09)	7(21.21)	10(30.3)	11(33.33)	73/33=2.21	33
	ESCET	5 (9.25)	5(9.25)	19(35.18)	10(18.5)	15(27.77)	134/54=2.48	54
	VRSEC	3 (12)	1(4)	4(16)	7(28)	10(40)	54/25=2.16	25
	Total	10 (8.92)	9(8.03)	30(26.7)	27(24.10)	36(32)	261/112=2.33	112

3.6 Method of Learning to Access E-Resources

The electronic information sources are used by the respondents in various occasions such as for academic and research, assignments, writing articles and so on. It is evident from the table-6 that majority of the respondents (85%) from IFET College have stated that they have accessed e-resources by colleague and friends followed by (69%) respondent self and only 3% of the respondents have all used the e-resources through computer centre staff and user Education programmer offered by the library. In case of ESCET, majority of the respondent (79%) have expressed that they have learned by themselves followed by (72%) respondents through colleague and only (3.70%) and (7.40%) respondents have stated that they have learned through computer centre staff and course attended respectively, while in VRS College, (84%) opined that they have learned by themselves followed by colleagues and friends (80%) and only (4%) respondents have stated that they have learned through user education programmer provided by the library.

Table-6 Method of Learning to Access E-Resource

Access E-Resource	IFET	ESCET	VRSEC	Total
Self	23(69.69)	43(79.62)	21(84)	87(77.67)
Through Colleague and Friends	28(84.84)	39(72.22)	20(80)	87(77.67)
Assistant from library staff	3(9.09)	6(11.11)	2(8)	11(9.82)
User education provided by library	1(3.03)	13(24.07)	1(4)	15(13.39)
At Seminar / Workshop	6(18.18)	9(16.66)	2(8)	17(15.17)
Course attended	5(15.15)	4(7.40)	3(12)	12(10.71)
Computer centre staff	1(3.03)	2(3.70)	0	03(2.67)
Total	33(29.46)	54(48.21)	25(22.32)	232

(Since the respondents marked more than one option, the percentage exceeds 100)

Further, combining all the three colleges, majority of the respondent (77.67%) out of 112 respondents have stated that they have learned to access e-Resources by themselves and through colleague and friends. It is also evident from the analysis that, user Education program, which one of the important services to be offered in all the Engineering colleges were lagging and particularly in IFET and VRS College did not fare well and library professionals part in helping them to access the electronic resources in all the college were 9.8%. There fore, it is suggested that user education programmed has to be organized frequently to access the e-resources more effectively.

3.7 Place of Accessing Electronic Information

It is quiet common that user may access the internet, wherever it is available and Internet speed also plays important role in accessing the same. It is clear inference from the table-7 that majority of the respondents (81%) in IFET were accessing the electronic information at library followed by departments with (57.57%) and internet centers with (39%) respectively and only 24% were accessing in home libraries followed by other libraries (12%), where as majority of the respondents (83%) in ESCET at VRSEC (80%) were accessing the electronic information in their departments followed by (59%) in ES College of engineering and (76%) in VRS Engineering College were accessing in library.

Table-7 Place of Accesses Electronic Information

Internet Access Place	IFET	ESCET	VRSEC	Total
Library	27(81.81)	32(59.25)	19(76)	78(69.64)
Home	8(24.24)	16(29.62)	5(20)	29(25.89)
Dept	19(57.57)	45(83.33)	20(80)	84(75)
Inter Colleges in library	13(39.39)	11(20.37)	6(24)	30(26.78)
Other Libraries	4(12.12)	0	0	04(3.57)
Total	33(29.46)	54(48.21)	25(22.32)	112(100.0)

(Since the respondents marked more than one option, the percentage exceeds 100)

3.8 Preferred Electronic file format

The electronic information is available in different formats like PDF, HTML, MS-word, and JPG so on. Though there are number of file formats are available, some formats are frequently used by the respondents all over the world.

Table-8 Preferred Electronic File Format

Electronic File Format	IFET	ESCET	VRSEC	Total
PDF	20(60.60)	33(61.11)	13(52)	66(58.92)
HTML	6(18.18)	6(11.11)	4(16)	16(14.28)
WORD	7(21.21)	15(27.77)	8(32)	30(26.78)
Total	33(2.67)	54(48.21)	25(22.32)	112(100.0)

It is clear indication from the table-8 that majority of the respondents (60%) in IFET Engineering college preferred portable document format (PDF) followed by word format (21%) and only 18% preferred Hypertext Markup Language(HTML) format, and the same trend was continuing in other colleges that in ESCET, (61%) preferred PDF and (27.7%) word, and 11.9% HTML format and in VRSEC, (52%) preferred PDF format followed by word (32%) and 16% HTML format.

3.9 Time Spent for Accessing e-Resource Per week

Users in the present situation spend much of their time for searching information through web. The researcher intended to find out the respondents opinion on time spent for accessing e-resources.

Table-9 Time Spent for Accesses E-Resource per Week

Time Spent Per Week	IFET	ESCET	VRSEC	Total
1-5 Hours	17(51.51)	20(37.03)	12(48)	49(43.75)
6-10 Hours	12(36.36)	11(20.37)	8(32)	31(27.67)
11-15 Hours	2(6.06)	14(25.92)	3(12)	19(16.96)
More than 15 Hours	2(6.06)	9(16.66)	2(8)	13(11.60)
Total	33(29.46)	54(48.21)	25(22.32)	112(100.0)

The Table-9 depicts that majority of the respondents (51%) from IFET opined that they spent 1-5 hours per week followed by 36% stated 6-10 hours per week and only 6% stated that they spent more than 15 hours per week, whole in ESCET 37% stated that they spent 1-5 hours per week and 16.6% spent more than 15 hours per week, where as in VRSEC, 48% stated that they spent 1-5 hours per week and only 8% stated that they spent more than 15 hours. Thus 43.75% of the respondents from all the three colleges stated that they spend 1-5 hours per week and 11.6% standard that they spent more than 15 hours. It is identified that 42% of the respondents in ESCET were spending more than 10 hours, whereas the same was 12% at IFET 20% in VRSEC.

3.10 Approaching Source for finding academic/research web sites

Web provides a lot of information for finding academic and research oriented information, they have to apply any one of the method mentioned below or combination of more than one. It is revealed from the table-10 that in IFET, majority of the respondents (75%) opined that they identified the academic and research related websites through search engines followed by colleague (54%) and only 9% opined that they approached library staff, while in ESCET, majority of the respondents (85.18%) expressed that they approached the search engines followed by 44.54% and only 14.8% stated that they approached the library staff and in VRSEC also the same trend was continuing as majority of the respondents (84%) and (64%) approached the search engine and colleagues –respectively and only 1.78% approached library staff.

Table-10 Methods of Finding Academic / Research Related Websites

Finding Academic/practice/Research Related	IFET	ESCET	VRSEC	Total
Through search Engines	25(75.75)	46(85.18)	21(84)	92(82.14)
Through colleges	18(54.54)	24(44.44)	16(64)	58(51.78)
Through subject Gate ways/portal	6(18.18)	14(25.92)	5(20)	25(22.32)
Library Staff	3(9.09)	8(14.18)	2(8)	13(11.60)
Through Periodical/ Articles / Newspapers	12(36.36)	13(24.07)	8(32)	33(29.46)
Through Stack material	8(24.24)	13(24.07)	6(24)	27(24.10)
Total	33(29.46)	54(48.21)	25(22.32)	112(100.0)

(Since the respondents marked more than one option, the percentage exceeds 100)

3.11 Approaching method in Web for Retrieving Relevant Information

For obtaining relevant information from the web, some mechanism have to be followed like by specifying author's name, journal's name, website's address, key words and so on.

Table-11 Approach in Web for Referring Relevant Information

Referring Relevant Information	IFET	ESCET	VRSEC	Total
Specifying Author Name in the Web	9(27.27)	3(5.55)	6(24)	18(16.07)
Specifying Journals Name in the web	15(45.45)	3(61.11)	11(44)	59(52.67)
Specifying Web Site Address	18(54.54)	34(62.96)	9(36)	61(54.46)
By Designing Key Words	18(54.54)	27(50)	19(76)	64(57.14)
Through Subject Gate Ways/	4(12.12)	5(9.25)	3(12)	12(10.71)
Total User	33(29.46)	54(48.21)	25(22.32)	112(100.0)

(Since the respondents marked more then one option, the percentage exceeds 100)

From the table11- it is identified that in IFET majority of the respondents (54%) opined that they accessed relevant information by assigning keywords and website address followed by specifying journal name in the web (45%) and only 12% stated through subject gateways/directories, On the other hand, in ESCET, majority of them (62.96%) stated that they approach website's address followed by journals name (61.11%), and only 5% stated that they

approached authors for retrieving relevant information and in VRSEC, again majority of the respondents (76%) stated that they approached keyword followed by assigning journal's name by 44% and only 12% stated that they approached using subject gateways / directories.

3.12 Limitations in Accessing Electronic Information

User may access the electronic information by applying any one of the method in which they are familiar. There are number of limitations that have been mentioned will affect their information searching behavior. If it is identified properly, necessary steps can be taken to improve their searching skill.

Table-12 Limitation in Accessing Electronic Information

Limitations	IFET	ESCET	VRSEC	Total
Lack of Technical Know How	9(27.27)	13(24.07)	9(36)	31(27.67)
Lack of Training	11(33.33)	11(20.37)	9(36)	31(27.67)
Lack of Computer Facility	11(33.33)	13(24.07)	6(24)	30(26.78)
Lack of Time	7(21.21)	20(37.03)	6(24)	33(29.46)
Time Consuming	12(36.36)	27(50)	6(24)	45(40.17)
Redundant Information	8(24.24)	16(29.62)	7(28)	31(27.67)
Total	33(29.46)	54(48.21)	25(22.32)	112(100.0)

It is identified from the table12- that in IFET, 36% them stated that “time Consuming” was the major limitation in accessing electronic information followed by each 33% stated “lack of training “ and “lack of computer facility” was the major limitations and 21% stated “lack of time” followed by 24% stated “redundant information”, while in ESCET, majority of them (50%) stated ‘time consuming’ was the major reason, while 20.37% of the respondents opined that “lack of training” was the limitation and it is quiet contradictory than VRSEC significantly differ with ESCET and IFET rating that 36% of them stated “lack of training’ was the major problem for accessing electronic information and 24% stated “lack of time”, lack of computer facility and “time consuming” as limitation and it was also contradicting with ESCET and IFET. It is also found that ESCET and IFET were coinciding with the rating of “time consuming” as limitation by the more number of respondents while 24% only rated in VRSEC “Lack of training” was considered by 36% of the respondents from VRSEC, while 20.37% of ESCET and 33% of IFET respondents rated this factor as limitations.

3.13 Satisfaction on Electronic Information:

In order to find out their satisfaction, the researcher collected the opinion from respondents and the collected opinion is presented in the Table-13. It is understood from the table-13 that majority of the respondents (87%) from IFET (85%) from ESCET and (84%) from VRSEC have state that they were satisfied with electronic information. It can be observed from the overall opinion that majority of the respondents (85.7%) from all the colleges were satisfied with electronic information and only 14.3% stated that they were not satisfied. It is also observed that respondent's opinion from each college and overall opinion was more or less coinciding.

Table-13 Satisfaction of Electronic Information

Satisfaction on Electronic Information	IFET	ESCET	VRSEC	Total
Not Satisfied	4(12.12)	8(14.81)	4(16)	16(14.28)
Satisfied	29(87.87)	46(85.18)	21(84)	96(85.71)
Total	33(29.46)	54(48.21)	25(22.32)	112(100.0)

Major Findings

1. It is found that 63% of the respondents in were Assistant Professors and only 20% were professors. In ESCET and IFET (48% 48%) and 36% were Assistant Professors. To sum up majority of the respondents (52.67) were Assistant Professors and 15.17% were lectures, which is the least percentage of respondents.
2. It is identified that majority of the respondents (72%) belong to IFET were having 1-10 years teaching experience, (68%) in ESCET were also having (1-10) experience. Again, the respondents of VRSEC also depict the same scene with a majority of (64%). Combining all the colleges, 1-10 years of Teaching experience from the majority (68.75%) and only 0.90% was having above 30 years teaching experience.
3. It may be concluded from the overall responses that majority of the respondents (87.5%) from all the colleges expressed that their library have adequate E-Resource. Again, adequate e- resources was the response by majority (98.5%) in ESCET. It was again same opinion by majority (92%) in VRSEC also. From the analysis, it may be concluded that ESCET library has much collection on E-Resource when compared with the other two colleges.
4. It is evident from the analysis that majority of the respondents (77.67%) out of 112 respondents have stated that they have learned to access e-Resources by themselves and through colleague and friends. Other methods of learning were computer center staff (2.67%), assistance from library staff (9.82%), courses attended (10.71%) were the least prepared method for accessing the e-resources.
5. It is found that ESCET and VRSEC departments have more facilities than IFET College for accessing electronic information and also it is observed that 25.3% of the respondents were accessing electronic information from home.
6. It is observed that majority of the respondents 43.75% of the respondents from all the three colleges stated that they spend 1-5 hours per week and 11.6% stated that they spent more than 15 hours. It is identified that 42% of the respondents in ESCET were spending more than 10 hours, whereas the same was 12% at IFET 20% in VRSCET.
7. It is revealed that the majority of the respondents (82%) and (51.78%) approached the search engines and colleagues respectively for also training academic/research related websites and only 11.6% stated library staff. also that approaching method for obtaining academic/research related websites in each university and overall average were coinciding.
8. It is identified that the majority of the respondents from all the three colleges have approached key words 7.14%), website address (54.46%) and journals name (52.67%) respectively and only 10.71% stated that they approached subject gateways / directories.

9. It is found that the ESCET and IFET were coinciding with the rating of “time consuming” as limitation by the more number of respondents while 24% only rated in VRSEC “Lack of training” was considered by 36% of the respondents from VRSEC, while 20.37% of ESCET and 33% of IFET respondents rated this factor as limitations.
10. It is understood that majority of the respondents (87%) from IFET (85%) from ESCET and (84%) are stratified with accessing of electronic information. Sources. It can be observed from the overall opinion that majority of the respondents (85.7%) from all the colleges were satisfied with electronic information and only 14.3% stated that they were not satisfied.

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