Awareness on E-Resources Usage among Engineering College Faculties in Erode District, Tamil Nadu: A Study

N. Sivakami¹ and N. Rajendran²

¹Research Scholar, Periyar University, Salem, Tamil Nadu, India & Librarian, Vellalar College of Education for Women, Erode, Tamil Nadu, India ²College Librarian (S.G.), Salem Sowdeswari College (Aided), Salem, Tamil Nadu, India E-Mail: sivakami.librarian@gmail.com, rajendranlibra@gmail.com (Received 30 January 2019; Accepted 2 March 2019; Available online 7 March 2019)

Abstract - This paper presents a study of an attempt which was made to survey the awareness on e-resources usage among Engineering College Faculties in Erode District. A survey was conducted among the Faculty Members of 10 Selected Engineering Colleges in Erode. Totally 950 questionnaires were distributed, 876 valid questionnaires were collected which constitutes (92.2%) of the total response. Population for the study faculty members; 354 Assistant Professors, 272 Associate Professors and 250 Professors were selected as sample. It is observed that majority of the Assistant Professors access the E-Resources for teaching and research purpose. Majority of the Assistant Professors 74 (31.4) and Professors 60 (25.4) are using E-Journals for accessing the E-Resources.

Keywords: Faculty Members, Usage of E-Resources, User Awareness, Online Database, Usage Survey

I. INTRODUCTION

An e-resource is defined as a resource which computer accesses or any electronic product that delivers a collection of data, text referring to full text bases, e-journals, images, collections of other multimedia products and numerical, graphical or time based as a commercially available title that has been published with an aim for being marketed. E-Resource is a short term for electronic resources or electronic information resources. Electronic resources are materials in digital format accessible electronically. The different types of e-resources are e-books, e-journals, databases, CDs/DVDs, e-maps, e-picture/ photographs, e-manuscripts, e-thesis, e-newspaper, and internet/ websites-list serve, newsgroups, subject gateways, USENET, FAQs etc.

II. REVIEW OF RELATED WORKS

Ally Sornam, S., and Joseph Jestin, K.J. (2016) conducted a research study, "The purpose of this paper is to find out the awareness, availability and the usage of e-resources by the faculty members of Engineering Colleges in Kerala. The findings of the study reveal that the majority of faculty members are well aware about the e-resources and most of them are using e-resources at least once in a week. The study also reveals that almost all staff members are satisfied with the facilities available for accessing e-resources.

Ashok Kumar, V. and Jayaprakash, M. (2017) carried a research study about the awareness and use of e-resources among the Engineering College Faculty Members in Coimbatore and Tirupur District. They used a survey method and questionnaire as primary data collection tool. ANOVA statistical tool was adopted for sample selection procedure. Dependent variable is AICTE prescribed e-resources.

Awareness and use of electronic resources by Engineering Faculty Members of Hyderabad Karnataka Region was done by Gadagin, B.R., and Selvaraj, C. (2017). Survey method is used for this study. The study reveals that 95% of the respondents are using the e-resources which are more relevant to their study rather than print resources. The study findings that, most of the engineering institution libraries have the collection reached with satisfactory level.

Murugesan, N. (2013). Conducted a case study about the awareness and utilization of e-resources by faculty members with special reference to Angel College of Engineering and Technology Tirupur, Tamil Nadu. The study investigated that (42.2%) of the faculty members and research scholars are using the e-resources for research purpose. The major problem for accessing and usage of the e-resources is limited access terminal (26.7%).

Prakash, T., and Jayaprakash, M. (2017) had a research study about the usage of e-resources by faculty members in Nandha College of Technology: descriptive method was used. The aim of the study is to explore the use of e-books, e-journals, e-magazines, e-databases and the level of awareness of students and faculty member's community such as internet and e-resources.

III. OBJECTIVES OF THE STUDY

The main objectives of this study are

- 1. To identify the awareness of e-resources usage among Engineering College Faculties in Erode District.
- 2. To find out the purposes for using e-resources
- 3. To find out the faculty frequency to access e-resources.
- 4. To observe the types of e-resources by faculty members.
- 5. To find the problems faced by faculty members.
- 6. To know the level of satisfaction on e-resources.

IV. SCOPE AND LIMITATIONS

- The present survey is to access the awareness on eresources usage among Engineering College Faculties in Erode District.
- 2. I have selected 10 Engineering Colleges at Erode District affiliated to Anna University.
- 3. For the population study Faculty Members: 354 Assistant Professors, 272 Associate Professors, and 250 Professors were selected as sample.
- 4. Different types of E-Resources tools in this study.

V. RESEARCH METHODOLOGY

The research has adopted the survey method for which a structured questionnaire was designed and distributed among the Faculty Members of Engineering Colleges at Erode District; Totally 950 questionnaires were distributed to Faculty Members. Out of 950 distributed questionnaires, 876 valid questionnaires were collected this constitutes (92.2) of the total response. The collected data given by the Faculty Members is analyzed, tabulated, interpreted and presented in form of this research paper.

VI. DATA ANALYSIS AND DISCUSSION

TABLE I COLLEGE WISE DISTRIBUTION OF OUESTIONNAIRES

| S. No. | Name of the Colleges | Questionnaires Distributed | Questionnaires Received | % of Response |
|--------|--|-------------------------------|----------------------------|------------------|
| 1 | Velalar College of Engineering and Technology (VCET) | 136 | 118 | 86.8 |
| 2 | Surya Engineering College (SEC) | 72 | 66 | 91.7 |
| 3 | Nandha Engineering College (NEC) | 110 | 102 | 92.7 |
| 4 | Kongu Engineering College ((KEC) | 118 | 112 | 94.9 |
| 5 | Erode Sengunthar Engineering College (ESEC) | 104 | 98 | 94.2 |
| 6 | Shree Venkateshware Hitech Engineering College (SVHEC) | 80 | 77 | 96.3 |
| 7 | Sri Ramanathan Engineering College (SREC) | 92 | 83 | 90.2 |
| 8 | Al Ameen Engineering College (AAEC) | 84 | 80 | 95.2 |
| 9 | JKK Munirajah College of Technology (JKKMCT) | 86 | 82 | 95.3 |
| 10 | Aishwarya College of Engineering and Technology (ACET) | 68 | 58 | 85.3 |
| | Total | 950 | 876 | 92.2 |

Table I shows that altogether 950 questionnaires have been distributed to the users of 10 selected Engineering Colleges in Erode. The responses received are 876, representing (92.2%) of the total questionnaires distributed.

The college wise distribution of questionnaires states that 136 questionnaires each have been distributed to the users of Vellalar College of Engineering and Technology (VCET), 118 responses have been received. They represent (86.8%) of the total questionnaires distributed.

Table II displays the gender and qualification wise distribution of respondents. Among the total respondents

(876), 544 (62.1%), and 332 (37.9%) are PG and Ph. D qualified teaching professors. Among the males 512 (58.4%) and 364 (41.6%) are females are involved this study.

TABLE II OUALIFICATION – WISE DISTRIBUTION OF THE RESPONDENTS

| S. No. | Gender | Qualif | Total | |
|--------|--------|------------|------------|------------|
| S. NO. | Gender | PG | Ph. D | Total |
| 1 | Male | 328 (64.1) | 184 (35.9) | 512 (58.4) |
| 2 | Female | 216 (59.3) | 148 (40.7) | 364 (41.6) |
| | Total | 544 (62.1) | 332 (37.9) | 876 (100) |

TABLE III AGE - WISE DISTRIBUTION OF RESPONDENTS

| S. No. | Gender | | Age | | | | | |
|--------|--------|------------|------------|------------|------------|-----------|--|--|
| | Gender | 25 – 30 | 31 – 35 | 36 – 40 | > 40 yrs | Total | | |
| 1 | Male | 212 (41.4) | 97 (18.9) | 73 (14.3) | 130 (25.4) | 512 (100) | | |
| 2 | Female | 65 (17.9) | 85 (23.3) | 98 (26.9) | 116 (31.9) | 364 (100) | | |
| | Total | 277 (31.6) | 182 (20.8) | 171 (19.5) | 246 (28.1) | 876 (100) | | |

Table III indicates that gender and age wise distribution of respondents. Among the total respondents (876), 277 (31.6%) are in below 25 - 30 years of age, 182 (20.8%) are having 31 - 35 years and 171 (19.5%) are having 36 - 40

years and 246 (28.1%) are having above 40 years among the males 512 and 364 are females are involved this study.

Table IV observed that gender and teaching experience wise distribution of respondents. Among the total respondents

(876), 31.7 percent of them have between 5 - 10 years, 27.9 percent of them have between 11 - 15 years, and 19.6

percent of them have between 16 - 20 years and 20.8 percent have above 20 years of experience.

TABLE IV TEACHING EXPERIENCE – WISE DISTRIBUTION OF RESPONDENTS

| C No | Gender | Teachi | ng Experienc | e of the Respo | ondents | Total |
|--------|--------|------------|--------------|----------------|------------|-----------|
| S. No. | Gender | 5 – 10 yrs | 11 – 15 yrs | 16 – 20 yrs | > 20 yrs | Total |
| 1 | Male | 158 (30.9) | 136 (26.6) | 98 (19.1) | 120 (23.4) | 512 (100) |
| 2 | Female | 120(32.9) | 108 (29.7) | 72 (19.8) | 64 (17.6) | 364 (100) |
| | Total | 278 (31.7) | 244 (27.9) | 172 (19.6) | 182 (20.8) | 876 (100) |

TABLE V DESIGNATION - WISE DISTRIBUTION OF RESPONDENTS

| | | | Designation | | |
|--------|--------|------------------------|------------------------|------------|-----------|
| S. No. | Gender | Assistant Professor | Associate Professor | Professor | Total |
| 1 | Male | 218 (42.6) | 160 (31.3) | 134 (26.1) | 512 (100) |
| 2 | Female | 136 (37.4) | 112 (30.8) | 116 (31.8) | 364 (100) |
| | Total | 354 (40.4) | 272 (31.1) | 250 (28.5) | 876 (100) |

Table V designations of the respondents are grouped into Assistant Professor, Associate Professor and Professor. Among the total respondents (876), 354 (40.4%) are

Assistant Professors, 272 (31.1%) are Associate Professors and 250 (28.5%) are Professors. Among the males 512 and 364 are females are involved this study.

TABLE VI FREQUENCY OF USING E-RESOURCES

| C Na | Candan | Fre | equency Of V | Visits | Total |
|--------|--------|------------|--------------|-------------|-----------|
| S. No. | Gender | Daily | Weekly | Fortnightly | Total |
| 1 | Male | 266 (51.9) | 132 (25.8) | 114 (22.3) | 512 (100) |
| 2 | Female | 180 (49.4) | 136 (37.4) | 48 (13.2) | 364 (100) |
| | Total | 446 (50.9) | 268 (30.6) | 162 (18.5) | 876 (100) |

Table VI shows that gender and frequency of using eresources. Among the total sample (876), 446 (50.9%) of the respondents are visited daily, 268 (30.6%) of the respondents are visited weekly, and 162 (18.5%) of the respondents are visited fortnightly. Among the males 512 and 364 are female are involved this study.

TABLE VII PURPOSE OF USING E-RESOURCES

| S. No. | Gender | Assistant Professor | Associate Professor | Professor | Total |
|--------|----------------------------|------------------------|------------------------|------------|-----------|
| 1 | Teaching Purpose | 98 (43.8) | 70 (31.2) | 56 (25) | 224 (100) |
| 2 | Research Work | 90 (42.9) | 82 (39) | 38 (18.1) | 210 (100) |
| 3 | Publishing Articles | 78 (42.9) | 70 (38.4) | 34 (18.7) | 182 (100) |
| 4 | Career development | 22 (23.2) | 26 (27.3) | 47 (49.5) | 95 (100) |
| 5 | Update General Information | 66 (40) | 24 (14.5) | 75 (45.5) | 165 (100) |
| | Total | 354 (40.4) | 272 (31.1) | 250 (28.5) | 876 (100) |

Table VII analyses that purpose of the using e-resources. Among the total respondents (876), 354 (40.4%) of the assistant professors, 272 (31.1%) are associate professors and 250 (28.5%) are professors.

It is observed from the above table that 98 (43.8%) assistant professor for teaching purpose, 82 (39%) associate professor for research work, and 75 (45.5%) professor for update general information.

Table VIII shows the use of e-resources among the responded engineering college teaching professors.

102 (43.2%) of the assistant professor are using e-journals, 74 (31.4%) of the associate professor are using e-journals and 60 (25.4%) of the professors for accessing e-resources for their study.

TABLE VIII USE OF E-RESOURCES BY FACULTY MEMBERS

| S. No. | Electronic Documents | Assistant Professor | Associate professor | Professor | Total |
|--------|----------------------|------------------------|---------------------|------------|-----------|
| 1 | E – Journals | 102 (43.2) | 74 (31,4) | 60(25.4) | 224 (100) |
| 2 | E – Books | 92 (42.6) | 70 (32.4) | 54 (25) | 210 (100) |
| 3 | E – Databases | 82 (41.2) | 60 (30.2) | 57 (28.6) | 182 (100) |
| 4 | E – Thesis | 68 (40.2) | 56 (33.2) | 45 (26.6) | 95 (100) |
| 5 | E – Magazines | 10 (17.9) | 12 (21.4) | 34 (60.7) | 165 (100) |
| | Total | 354 (40.4) | 272 (31.1) | 250 (28.5) | 876 (100) |

TABLE IX USE OF SEARCH ENGINES BY FACULTY MEMBERS

| | | 1 | | | |
|--------|----------------|------------------------|------------------------|------------|-----------|
| S. No. | Search Engines | Assistant Professor | Associate Professor | Professor | Total |
| 1 | Google | 106 (43.1) | 76 (30,9) | 64 (26) | 246 (100) |
| 2 | Yahoo | 98 (43.4) | 74 (32.7) | 54 (23.9) | 226 (100) |
| 3 | Ask | 87 (41.6) | 67 (32.1) | 55 (26.3) | 209 (100) |
| 4 | Bing | 50 (42.1) | 36 (30.2) | 33 (27.7) | 119 (100) |
| 5 | Alta Vista | 13 (17.1) | 19 (25) | 44 (57.9) | 76 (100) |
| | Total | 354 (40.4) | 272 (31.1) | 250 (28.5) | 876 (100) |

Table IX indicates the respondent of search engines of teaching professors of engineering colleges among the respondents 106 (43.1%) of the assistant professor are using

google, 76 (30.9%) of the associate professor are using google, and 64 (26%) of the professor for accessing search engines for their study.

TABLE X USE OF INTERNET SERVICES BY FACULTY MEMBERS

| S. No. | Internet Services | Assistant Professor | Associate Professor | Professor | Total |
|--------|-------------------|------------------------|------------------------|------------|-----------|
| 1 | www | 99 (43.1) | 78 (33.9) | 53 (23) | 230 (100) |
| 2 | E-Mail | 87 (42.2) | 68 (33) | 51 (24.8) | 206 (100) |
| 3 | File Transfer | 79 (42.7) | 71 (38.4) | 35 (18.9) | 185 (100) |
| 4 | Archive | 61 (40.6) | 40 (26.7) | 49 (32.7) | 150 (100) |
| 5 | Bulletin Board | 28 (26.7) | 15 (14.3) | 62 (59) | 105 (100) |
| | Total | 354 (40.4) | 272 (31.1) | 250 (28.5) | 876 (100) |

Table X observes the use of internet services. It was assessed with the help 5 internet services. 99 (43.1%) of the assistant professor are using www, 78 (33.9%) of the

associate professor are using www, and 62 (59%) of the professor are using bulletin board for accessing internet services for their study.

TABLE XI PROBLEMS IN ACCESSING E - RESOURCES

| | | τ | User Category | | | |
|--------|--------------------------------------|------------------------|------------------------|------------|-----------|--|
| S. No. | Problems | Assistant Professor | Associate Professor | Professor | Total | |
| 1 | Slow Internet Access | 60 (42.3) | 50 (35.2) | 32 (22.5) | 142 (100) | |
| 2 | Accessing Full Text Journal Articles | 32 (29.6) | 18 (16.7) | 58 (53.7) | 108 (100) | |
| 3 | Power Failure | 110 (42.3) | 82 (31.5) | 68 (26.2) | 260 (100) | |
| 4 | Lack of Time | 62 (39.7) | 54 (34.6) | 40 (25.7) | 156 (100) | |
| 5 | Lack of Training | 90 (42.9) | 68 (32.3) | 52 24.8) | 210 (100) | |
| | Total | 354 (40.4) | 272 (31.1) | 250 (28.5) | 876 (100) | |

Table XI reveals that the problems in accessing e-resources by the respondents. Among the total respondents (876), 110 (42.3%) of the assistant professor are faced problem in

power failure, 82 (31.5%) of the associate professor are faced problem in power failure and 68 (26.2%) of the professor in accessing e-resources.

TABLE XII SATISFACTION IN ACCESSING E - RESOURCES

| S. No. | Problems | Assistant Professor | Associate Professor | Professor | Total |
|--------|------------------|------------------------|------------------------|------------|-----------|
| 1 | Highly Satisfied | 129 (40.6) | 101 (31.8) | 88 (27.6) | 318 (100) |
| 2 | Satisfied | 106 (37.6) | 96 (34.1) | 80 (28.3) | 282 (100) |
| 3 | Average | 80 (38.1) | 55 (26.2) | 75 (35.7) | 210 (100) |
| 4 | Poor | 39 (59.1) | 20 (30.3) | 7 (10.6) | 66 (100) |
| | Total | 354 (40.4) | 272 (31.1) | 250 (28.5) | 876 (100) |

Table XII it could be noted that out of the total (876) respondents. 129 (40.6%) of the assistant professor are highly satisfied, 101 (31.8%) of the associated professor are highly satisfied and 88 (27.6%) of the professor are highly satisfied for accessing e-resources for their study.

internet access. The study reveals that the respondents have a highly satisfied opinion on the collection of e-resources in libraries. Most of the faculty members use e-resources for their teaching and research work.

maximum number of faculty member's problem is of slow

VII. MAJOR FINDINGS OF THE STUDY

- 1. Out of 950 questionnaires were distributed and 876 (92.2%) questionnaires were responded properly.
- 2. Among the total 876 faculty members involved this study. 512 (58.4%) are male and 364 (41.6%) are female respondents.
- 3. Majority of the age wise respondents 277 (31.6%) are above 25 30 years of age respectively.
- 4. Almost 278 (31.7%) of the total respondents are within the teaching experience of 5 10 years.
- 5. Based on their designation, 354 (40.4%) of the assistant professors, 272 (31.1%) of the associated professors, and 250 (28.5%) of the professor involved this study.
- 6. A high percentage of both respondents 446 (50.9%) frequency of using e-resources are daily.
- 7. The e-resources are being used by the faculty members for the purpose of teaching.
- 8. Most of the (236) faculty members are using the e-iournals.
- 9. Majority 246 of the respondents used Google search engines for accessing e-resources.
- 10. Maximum number of (142) faculty members are faced the slow internet access is the main problem while accessing e-resources.
- 11. A majority of (318) faculty members are highly satisfied with available information.

VIII. CONCLUSION

The present study aims at finding the awareness on E-Resources usage among Engineering College faculties in Erode District. A sample of 876 faculty members in selected 10 Engineering Colleges was issued a structure questionnaire and primary data. It is also determined that

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