

## Use and Awareness of E-Databases in Engineering College Faculties of Karnataka: An Analytical Study

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### **Abstract**

*This paper aims to assess and evaluate the use of e-database in engineering college libraries of Karnataka, use of e-databases by the faculty members of various engineering colleges through a survey based on a structured questionnaire. Various statistical methods have been used for data analysis. The study confirmed that faculty members are aware of the e-databases and various types of e-resources, e-thesis, and e-journals. The highly significant difference ( $\chi^2=2306$ ;  $P<0.000$ ) among the respondents with regard to the use of 'IEEE' (The Institute of Electrical and Electronics Engineers)' many respondents scoring 170(48.6%) says 'agree'. E-databases are playing major role in engineering college libraries.*

**Keywords:** Use of E-database, awareness of E-databases, engineering colleges, analytical study

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### **INTRODUCTION**

The rapid advancement of information and communication technology (ICT) in the field of library and information science has brought a revolutionary change in the information scenario giving rise to a number of options to handle varied information sources conveniently and effortlessly as a result of which e-databases have become the most sought after modern library's reserves in satisfying varied needs of students, teachers, and researchers with minimum risk and time [1]. Information technology has changed the world and has become one of the important tools for retrieving information. The electronic information resources have acquired a major portion of library collections. The value and use of information resources, particularly e-databases, have increased with the time. Therefore, there is necessity to make study on the different aspects of e-databases and the issues relating to the use of e-resources by users, more particularly by the faculty members of academic institutions. The present study is an attempt to analyse the use of e-resources by the faculty members in engineering college libraries of Karnataka and to find out the problems and constraints faced by the faculties in accessing the e-databases with some purposeful suggestions for its development.

### **LITERATURE REVIEW**

Satpathy and Rout (2010) [2] aims to assess and evaluate the use of e-resources by the faculty members of C.V. Raman College of Engineering (CVRCE), Bhubaneswar, India, with a view to examine the exposure of faculty members to e-resources. Besides the study confirmed that faculty members are aware of the e-resources and various types of e-resources, e-database, and e-journals. It suggests for the improvement in the access facilities with high Internet speed and subscription to more e-resources. Mulla (2011) [3] presents a study done in 2011 at the HKBK College of Engineering in Nagawara, Bangalore, India which looks at how faculty members at the college use electronic resources, as reported by survey results. Topics include impediments to accessing or using services that faculty member's encounter, what the impact is of electronic resources on the use of traditional resources, and recommendations for improving electronic resource services for faculty. It also says that library staff is usually the people to provide faculty members with electronic resource skills training. Dhanavandan *et al.* (2012) [4] investigating the use of e-resources at the KCET Library in Cuddalore, India. The study's goals of determining the utilization, satisfaction levels, and opinions of students,

faculty, and staff regarding electronic information resources and methodology are described, and the findings that many more students than faculty utilized electronic resources and that many still preferred print versions of resources due to convenience are explored. Lewis and Malliah (2014) [5] focus on use of information resources by the students, faculty members and research scholars in the engineering college libraries of Dakshina Kannada and Udupi Districts. Questionnaire was used as the data collection tool. The analysis showed that respondents do experience inadequacy of information resources in their college libraries. The hypothesis formulated in this connection was proved by the study. Author showed that there were significant differences in the satisfaction level of information resources among the respondents of various categories. There is need to evaluate the library resources, facilities and services regularly to meet the changing needs of the users. Lewis (2016) [6] narrates the use of information resources by the students, faculty members and research scholars in the engineering college libraries of Dakshina Kannada. Questionnaire was used as the data collection; using Likert's 5 point scale, using two ways ANOVA, factor analysis and fisher's exact test. Author find that research scholars attach more importance to electronic resources than print resources and there exists significant difference in the preference among the respondents. The hypothesis formulated in this connection was proved by the study.

## OBJECTIVE

This part consists of following objectives:

- To find out the purpose of visiting the library of engineering college libraries.
- To find out the awareness of digital library in engineering college libraries of Karnataka.
- To know the use of e-databases in engineering college libraries of Karnataka.
- To know the advantages of accessing of e-databases.
- To find out the dissatisfaction of available e- databases.

## METHODOLOGY

The investigator will adopt survey method. The tools for collecting data will be through

questionnaire from the faculty members of engineering college libraries of Karnataka, keeping in mind the basic objectives of the study. The data was personally collected from the faculty members. Besides, personal interviews were also conducted with library and information science professionals to assess the problems relating to use of e-databases by the faculty members.

## SCOPE AND LIMITATION

The present study covers the nature of e-databases and its use by the faculty members of the engineering colleges in Mysore region. Further, geographically the coverage of the institutions is limited to Mysore region. The heads of all the 60 engineering college libraries form the sample of the study to assess the nature of the collection development. On the other hand the libraries and its users coming under Belgaum region, Gulbarga region and Bangalore region of Visvesvaraya Technological University (VTU), Belgaum, Karnataka, India are not included in the study.

## ANALYSIS AND INTERPRETATION OF DATA

Analysis and interpretation of data received from the users about the use of VTU (Visvesvaraya Technological University) consortium e-databases in engineering college faculties of Karnataka. The user analysis is presented different statistical tools such as mean, standard deviation (SD) and chi square test are used for the data analysis. Out of 400 faculty members of engineering college libraries of Karnataka, only 350 (87.5%) responded with the filled in questionnaire. The questionnaires were edited where necessary. Thus, in all the cases the total number of respondents was 350. The data collected through the questionnaires was scrutinized, classified, and tabulated for better understanding and clarity. Certain factors like whether the data collected are correct or incorrect, statistically true or not, etc. judged using some statistical methods.

## Gender

The gender wise status of users is shown in Table 1. It may be seen from the table that majority of the respondents numbering 238 (68 %) are male and the remaining 112 (32%) are female respondents.

**Table 1: Gender of the Users.**

S/No.	Gender	No. of Responses	Percentage
1	Male	238	68
2	Female	112	32
	Total	350	100.0

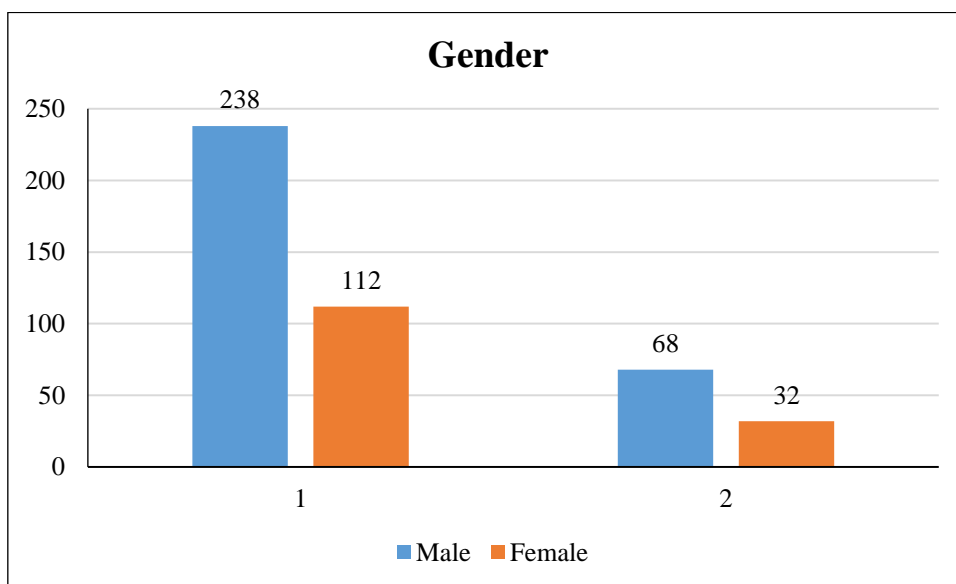
**Designation of the Users**

Engineering college users have different status. Table 2 shows the status wise breakup of responses. It is observed from the Table 2 that, majority accounting 294(84%) has the designation as Assistant Professor, whereas 36 respondents representing 10.2% are Associate Professors, remaining 16(4.6%) are designated

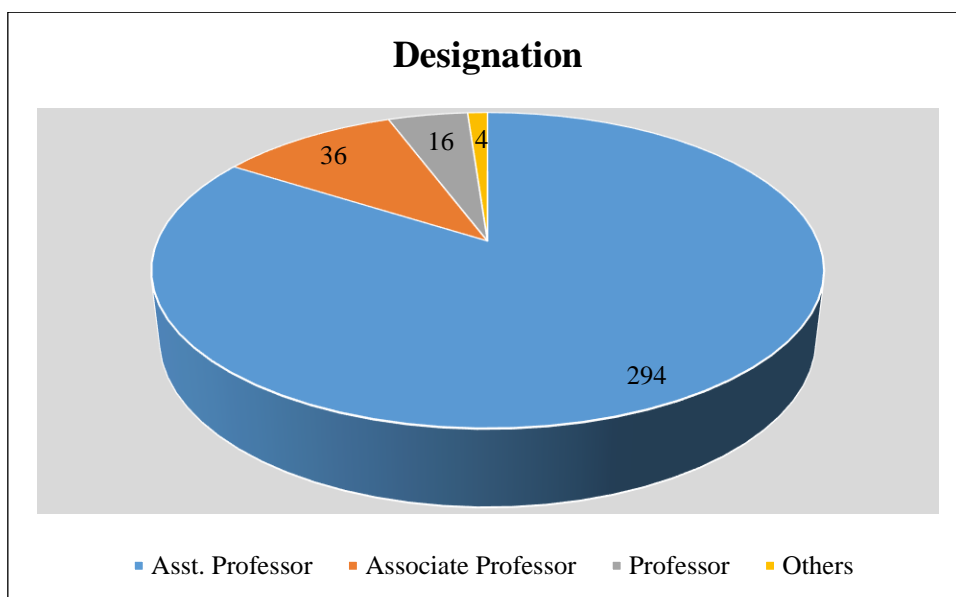
as Professor and the remaining four respondents scoring 1.2% consist of others. Thus, the highest numbers of respondents are assistant professors (Fig 1-3).

**Table 2: Designation of the Users.**

S/No.	Designation	No. of Responses	Percentage
1	Asst. Professor	294	84
2	Associate Professor	36	10.2
3	Professor	16	4.6
4	Others	4	1.2
	Total	350	100.0



**Fig. 1: Gender of the Users.**



**Fig. 2: Designation of the Users.**

### Purpose of Library Visit

The engineering college faculties visit library for various purposes, like to read text/ journals, to borrow books, to read newspapers etc. The purposes for which engineering college faculties visit their library are presented in Table 3. There are significant differences ( $\chi^2=527.855$ ;  $P<.000$ ) among the respondents with regard to the purpose - 'To Read Text/ Journals'. Many respondents scoring 182(52.0%) say, 'agree'; 82(23.4%) of them say 'strongly agree'; only 19(5.4%) of them state 'strongly disagree' with a mean value of 3.79 and SD being 1.06 Chi-Square test reveals that there are significant differences ( $\chi^2=381.724$ ;  $P<.000$ ) in case the purpose of visit -'To Use Computer', scoring 164(46.9) and the respondents say 'agree'; 81(23.1%) of users say 'strongly agree' and very few accounting 15(4.3%) state 'strongly disagree' with a mean value of 3.77 and SD being 1.03.

There are significant differences ( $\chi^2=357.171$ ;  $P<.000$ ) among the respondents with regard to

the purpose 'To Request Inter Library Loan'. Many respondents scoring 153(43.8%) who say 'agree'; 152(43.6%) of users say 'strongly agree'; only 11(3.2%) of them state disagree with a mean value of 4.20 and SD being .97

There are significant differences ( $\chi^2=766.816$ ;  $P<.000$ ) in case of the purpose 'To Issue and Return Library Materials' among the users. Many respondents scoring, 178(50.9%) say agree; 125(35.7%) say 'strongly agree'; only 8(2.3%) of them 'strongly disagree' with a mean value of 4.15 and SD being .84

The engineering colleges library users also visit library 'To Read Your Own Documents', and There are significant differences ( $\chi^2=261.092$ ;  $P<.000$ ) among the respondents. It is observed that Many respondents scoring 192(54.9%) say 'agree'; nearly 120(34.3%) of the respondents say 'strongly agree', and very few, accounting 8(2.3%) state 'strongly disagree' with a mean value of 4.15 and SD being .84.

**Table 3: Purpose of Library Visit.**

S/N	Purposes	Responses in Percentage (N=350)					Mean	SD	$\chi^2$	P Value
		1	2	3	4	5				
1	To Read Books/Journals	19 (5.4)	30 (8.6)	37 (10.6)	182 (52.0)	82 (23.4)	3.79	1.06	527.855	.000
2	To Use Computer	15 (4.3)	28 (8.0)	62 (17.7)	164 (46.9)	81 (23.1)	3.77	1.03	381.724	.000
3	To Request Inter Library Loan	14 (4.0)	11 (3.2)	19 (5.4)	153 (43.8)	152 (43.6)	4.20	.97	357.171	.000
4	To Issue And Return Library Materials	8 (2.3)	9 (2.6)	3 (8.6)	178 (50.9)	125 (35.7)	4.15	.85	766.816	.000
5	To Read Your Own Documents	8 (2.3)	12 (3.4)	18 (5.1)	192 (54.9)	120 (34.3)	4.15	.84	261.092	.000
6	To Use Internet in The Library	57 (16.3)	56 (16.0)	75 (21.4)	108 (30.9)	54 (15.4)	3.13	1.31	394.803	.000
7	To Use Current Journals	17 (4.9)	22 (6.3)	50 (14.3)	186 (53.1)	75 (21.4)	3.80	1.00	637.329	.000
8	To Refer Old Question Papers	30 (8.6)	35 (10.0)	79 (22.6)	163 (46.6)	43 (12.3)	3.44	1.10	70.039	.000
9	To Browse Newspapers/Popular Magazines	104 (29.7)	72 (20.6)	75 (21.4)	73 (20.9)	26 (7.4)	2.56	1.30	73.145	.000
10	To Use Electronic Resources	26 (7.4)	18 (5.1)	31 (8.9)	179 (51.1)	96 (27.4)	3.86	1.05	66.408	.000
11	To Getting Photocopies	30 (8.6)	23 (6.6)	45 (12.9)	158 (45.1)	94 (26.9)	3.75	1.17	100.895	.000
12	To Use Digital Library Resources	85 (24.3)	67 (19.1)	55 (15.7)	94 (26.9)	49 (14.0)	2.87	1.40	73.145	.000

Key: 1 – Strongly disagree, 2 – Disagree, 3 – Neither agree nor disagree, 4 – Agree, 5 – 'strongly agree', SD = Standard deviation, N=Number of Respondents,  $\chi^2$  = Chi-Square, P = Probability,  $P \leq .050$  – Significant,  $P > .050$  – Not Significant, Numbers in Parentheses Indicates Percentage.

There are significant differences ( $\chi^2=394.803$ ;  $P<.000$ ) among the respondents with regard to the purpose - 'To Use Internet in the Library. Many respondents scoring, 108(30.9%) say 'agree'; nearly 75(21.4%) respondents say 'neither agree nor disagree', and only 54(15.4%) of them state 'strongly agree' with a mean value of 3.13 and SD being 1.31

There are significant differences ( $\chi^2=63.329$ ;  $P<.000$ ) among the respondents with regard to the purpose - 'To Use Current Journals' and a Many of them scoring, 186(53.1%) say 'agree'; 75(21.4%) respondents say 'strongly agree' only 17(4.9%) of them 'strongly disagree' with a mean value of 3.80 and SD being 1.80.

There are significant differences ( $\chi^2=70.039$ ;  $P<.000$ ) among the respondents with respect to the purpose 'To Refer Old Question Papers'. Where, many respondents scoring 163(46.6%) say 'agree'. About, 79(22.6%) of them say 'neither agree nor disagree' and very few accounting 30(8.6%) of them 'strongly disagree' with a mean value of 3.44 and SD being 1.10.

There are significant differences ( $\chi^2=73.145$ ;  $P<.000$ ) among respondents with regard to the purpose 'To Browse Newspapers/Popular Magazines'. Many respondents scoring 104(29.7%) say 'strongly disagree'; nearly 75(21.4%) of users say 'neither agree nor disagree', and only 26(7.4%) of them state 'strongly disagree' with a mean value of 2.56 and SD being 1.30.

Similarly, there are significant differences ( $\chi^2=66.408$ ;  $P<.000$ ) among the respondents with regard to the purpose 'To Use Electronic Resources'. Many respondents scoring, 179(51.1%), say 'agree'; 96(27.4%) of them 'agree'; only 18(5.1%) of them state 'disagree' with a mean value of 3.86 and SD being 1.05.

There are significant differences ( $\chi^2=73.145$ ;  $P<.000$ ) among the respondents with regard to the purpose of library visit 'To Get Photocopies', where, 158(45.1%) respondents say 'agree'; nearly 94(26.9%) of them say 'strongly agree', and only 23(6.6%) of them

say 'disagree' with a mean value of 3.75 and SD being 1.17.

There are significant differences ( $\chi^2=73.145$ ;  $P<.000$ ) among the respondents in case of the purpose 'To Use of Digital Library Resources'. Many respondents scoring 94(27.5%) say 'agree'; 85(24.3%) of them 'strongly disagree'; only 55(15.7%) of them 'neither agree nor disagree' with a mean value of 2.87 and SD being 1.40.

### Working Hours of Digital Library

The working hours of digital library is shown in Table 4. It may be seen from the table that majority of the respondents numbering 210 (60 %) of the users say convenient and the remaining 140(40%) are users say inconvenient.

### Aware of VTU Consortium

The Table 5 shows that the awareness of VTU consortium. It may be seen from the table that majority of the users numbering 243 (69.4 %) of the users say awareness with VTU consortium and the remaining 107(30.6%) are users say not aware with VTU consortium.

### Use of VTU Consortium E-database

There are various types of e-Database such as ASTM Digital Library; ASCE (American Society of Civil Engineers); ASME (American Society of Mechanical Engineers); Engineering Village; IEE (Institute of Electrical Engineers); IEEE (The Institute of Electrical and Electronics Engineers); J-Gate; Springer; Mc-Graw-Hill; Science Direct; Elsevier.

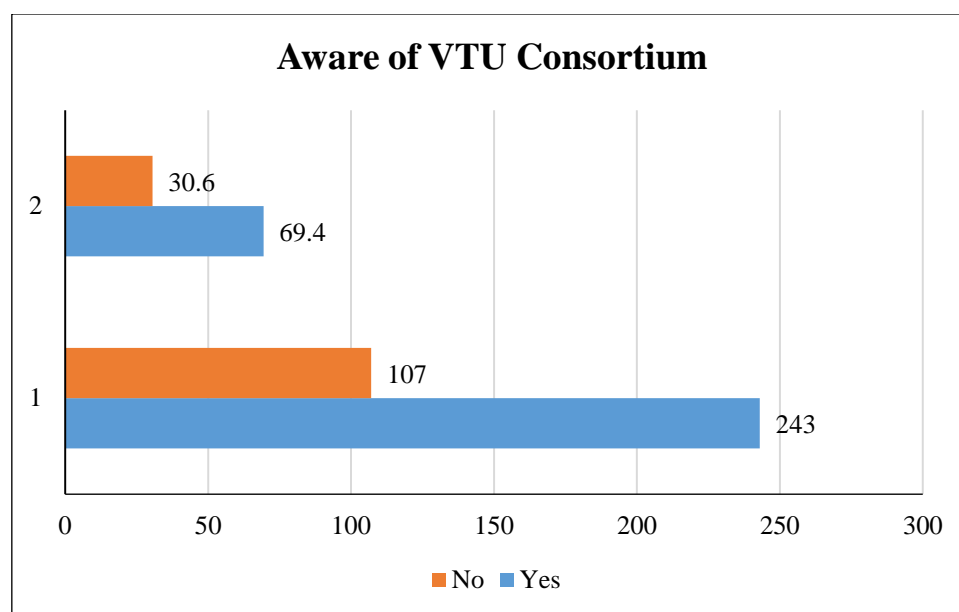
**Table 4:** Working Hours of Digital Library.

S/N	Working Hours	No. of Responses	Percentage
1	Convenient	210	60.0
2	Inconvenient	140	40.0
	Total	350	100.0

**Table 5:** Aware of VTU Consortium.

S/N	Aware of VTU Consortium	No. of Responses	Percentage
1	Yes	243	69.4
2	No	107	30.6
	Total	350	100.0





**Fig. 3:** Aware of VTU Consortium.

The analysis of each one of the e-Database used by the respondents is presented in Table 6. It may be seen from the table that, there is a significant difference ( $\chi^2=230$ ;  $P<.724$ ) among the respondents with regard to the use of 'IEEE' (The Institute of Electrical and Electronics Engineers). Many respondents scoring 170(48.6%) says 'agree'; 63(18.0%) of them say 'neither agree nor disagree', and only 29(8.3%) of them state 'disagree' with a mean value of 3.65 and SD being 2.41.

There is a significant difference ( $\chi^2=250.658$ ;  $P<.000$ ), among the respondents with regard to the use of 'Elsevier Science Direct'. Many respondents scoring 174(49.7%) say 'agree'; nearly 75(21.4%) say 'neither agree nor disagree'; only very few accounting 19(5.4%) state 'strongly disagree' with a mean value of 3.49 and SD is being 1.02.

There is a significant difference ( $\chi^2=234.987$ ;  $P<.000$ ) in case of the use of 'Springer' among the respondents. Many of them scoring, 157(44.9%) say 'agree'; 86(24.6%) of them say 'neither agree nor disagree'; only 24(6.9%) of them state 'strongly disagree' with a mean value of 3.47 and SD being 1.06.

There is a significant difference ( $\chi^2=225.987$ ;  $P<.000$ ) among the respondents in the use of 'Taylor Francis'. It is observed that many respondents scoring 174(49.7%) say 'agree'; 82(23.4%) of them say 'neither agree nor

disagree', and only 23(6.6%) state strongly disagree with a mean value of 3.50 and SD being 1.02.

There is a significant difference among the respondents ( $\chi^2=366.776$ ;  $P<.000$ ) in case of the use of 'ASCE' (American Society of Civil Engineers). Many respondents scoring, 158(45.1%) say 'agree'; nearly 89(25.4%) of them say 'neither agree nor disagree', and only 29(8.3%) of them state 'strongly disagree' with a mean value of 3.38 and SD being 1.07.

Chi Square results given in the Table 6 reveal that ( $\chi^2 =348.487$ ;  $P<.000$ ), There is a significant difference among engineering college users in the use of 'ProQuest Engineering Journals'. It is observed that many respondents scoring 169(48.3%) says 'disagree'; 94(26.9%) users say 'neither agree nor disagree', and only 28(8.0%) of them say 'strongly disagree' with a mean value of 3.36 and SD being 1.07

There is a significant difference among engineering college user's use of 'ProQuest Management Journals'. It is observed that many respondents scoring 169(48.3%) says 'agree'; 81(23.1%) users say 'neither agree nor disagree', and only 17(4.9%) of them say 'strongly disagree' with a mean value of 3.65 and SD being .997

**Table 6: Use of VTU Consortium E-database.**

S/N	VTU Consortium E-database	Responses in Percentage (N=350)					Mean	SD	$\chi^2$	P Value
		1	2	3	4	5				
1	IEEE/IEL Online	32 (9.1)	29 (8.3)	63 (18.0)	170 (48.6)	55 (15.7)	3.65	2.41	230.724	.000
2	Elsevier–Science Direct	19 (5.4)	43 (12.3)	75 (21.4)	174 (49.7)	39 (11.1)	3.49	1.02	250.658	.000
3	Springer	24 (6.9)	37 (10.6)	86 (24.6)	157 (44.9)	46 (13.1)	3.47	1.06	234.987	.000
4	Taylor & Francis	23 (6.6)	32 (9.1)	82 (23.4)	174 (49.7)	39 (11.1)	3.50	1.02	225.987	.000
5	ASCE (American Society of Civil Engineers)	29 (8.3)	38 (10.9)	89 (25.4)	158 (45.1)	36 (10.3)	3.38	1.07	366.776	.000
6	ProQuest Engineering journals	28 (8.0)	150 (42.3)	94 (26.9)	41 (11.7)	37 (10.6)	3.36	1.07	348.487	.000
7	ProQuest Management journals	17 (4.9)	24 (6.9)	81 (23.1)	169 (48.3)	59 (16.9)	3.65	.997	70.539	.000
8	Knimbus Digital library	10 (2.9)	32 (9.1)	56 (16.0)	159 (45.4)	93 (26.6)	3.84	1.01	72.434	.000
9	EBSCO	17 (4.9)	30 (8.6)	70 (20.0)	170 (48.6)	63 (18.0)	3.66	1.02	177.447	.000
10	McGraw Hill	31 (8.9)	33 (9.4)	45 (12.9)	184 (52.6)	57 (16.3)	3.58	1.13	160.947	.000
11	ASTM Digital Library	20 (5.7)	41 (11.7)	61 (17.4)	167 (47.7)	61 (17.4)	3.59	1.08	79.434	.000
12	Emerald	28 (8.0)	35 (10.0)	65 (18.6)	175 (50.0)	47 (13.4)	3.51	1.09	69.105	.000
13	Wiley Blackwell	45 (12.9)	59 (16.9)	92 (26.3)	86 (24.6)	68 (19.4)	3.21	1.29	69.750	.000
14	ASME (American Society of Mechanical Engineers)	107 (30.6)	128 (36.8)	68 (19.4)	39 (11.4)	18 (5.15)	3.25	1.17	28.487	.000

Key: 1 – Highly helpful, 2 – ‘helpful’, 3 – Moderately helpful, 4 –Partially helpful, 5 – Not at all helpful, SD = Standard deviation, N=Number of Respondents,  $\chi^2$  = Chi-Square, P = Probability,  $P \leq 0.050$  – Significant,  $P > .050$  – Not Significant, Numbers in Parentheses Indicates Percentage

There is a significant difference ( $\chi^2=72.434$ ;  $P<.000$ ) among the respondents with regard to the use of ‘Knimbus Digital Library’. Many respondents scoring 159(45.4%) say ‘agree’; nearly 93(26.6%) of them say ‘strongly agree’, and only 10(2.9%) of them state ‘strongly disagree’ with a mean value of 3.84 and SD being 1.01.

Chi Square results given in the Table 6 reveal that ( $\chi^2 =177.447$ ;  $P<.000$ ), There is a significant difference among the users in the use of ‘EBSCO’ (Elton B. Stephens Co.). It is observed that many respondents scoring 170(48.6%) says ‘agree’; 70(20.0%) users say ‘neither agree nor disagree’, and only 17(4.9%) of them say ‘strongly disagree’ with a mean value of 3.66and SD being 1.02.

There is a significant difference ( $\chi^2=160.947$ ;  $P<.000$ ) in the use of ‘Mc-Graw-Hill’ e-database among the respondents. Many

respondents scoring, 184(52.6%) say ‘agree’; nearly 57(16.3%) of them say ‘strongly agree’, and only 31(8.9%) of them say ‘strongly disagree’ with a mean value of 3.58 and SD being 1.13.

There is a significant difference ( $\chi^2=79.434$ ;  $P<.000$ ) in use of ‘ASTM Digital Library’. Many respondents scoring 167(47.7%) say ‘agree’; 61(17.4%) respondents say ‘strongly agree’ and very few accounting 20(5.7%) state ‘strongly disagree’ with a mean value of 3.59 and SD being 1.08.

There is a significant difference ( $\chi^2=69.105$ ;  $P<.000$ ) among the respondents with regard to the use of ‘Emerald’. Many respondents scoring 175(50.0%) say ‘agree’; nearly 65(18.6%) of them say ‘neither agree nor disagree’, and only 28(8.0%) of them state ‘strongly disagree’ with a mean value of 3.51 and SD being 1.09.

There is a significant difference ( $\chi^2=69.750$ ;  $P<.000$ ) among the respondents of uses 'Wiley Blackwell'. It is observed that many respondents scoring 92(26.3%) say 'neither agree nor disagree'; 86(24.6%) of them say 'agree' and only 45(12.9%) of them 'strongly disagree' with a mean value of 3.21 and SD being 1.29.

Chi Square results given in the table 6.6 reveal that ( $\chi^2 =28.487$ ;  $P<.000$ ), There is a significant difference among users in the use of 'ASME' (American Society of Mechanical Engineers). It is observed that many respondents scoring 128(36.8%) says 'disagree'; 107(30.6%) users say 'strongly disagree', and only 18(5.15%) of them say 'strongly agree' with a mean value of 3.25 and SD being 1.17.

#### Advantages of Accessing e-Databases

Advantages of accessing e-databases such as Less Time in Searching, Availability of the Journal Much before the Print Copy, Simultaneous Usage, Easy Accessibility, Downloading Facility, Author can be Contacted Directly Through E-Mail, Archival Facility.

The analysis of advantages of the e-Database is presented in Table 7. It may be seen from the table that, there is a significant difference ( $\chi^2=235.182$ ;  $P<.182$ ) among the respondents with regard to the advantages of accessing e-

databases of 'Less Time in Searching'. Many respondents scoring 175(50%) says 'agree'; 65(18.6%) of them say 'neither agree nor disagree', and only 28(8.0%) of them state 'strongly disagree' with a mean value of 3.51 and SD being 1.09.

There is a significant difference ( $\chi^2=220.658$ ;  $P<.000$ ), among the respondents with regard to the accessing of 'Availability of the Journal Much before the Print Copy'. Many respondents scoring 92(26.3%) say 'neither agree nor disagree'; nearly 86(24.6%) say 'agree'; only 45(5.4%) state 'strongly disagree' with a mean value of 3.21 and SD being 1.29.

There is a significant difference ( $\chi^2=214.987$ ;  $P<.000$ ) in case of the accessing of 'Simultaneous Usage' among the respondents scoring, 101(28.9%) say 'Neither agree nor disagree'; 96(27.4%) of them say 'agree; only 27(7.7%) of them state 'strongly disagree' with a mean value of 3.25 and SD being 1.17.

There is a significant difference ( $\chi^2=205.987$ ;  $P<.000$ ) among the respondents in the accessing of 'Easy Accessibility'. It is observed that many respondents scoring 128(36.6%) say 'agree'; 107(30.6%) of them say 'strongly agree', and only 8(2.3%) state strongly disagree with a mean value of 2.18 and SD being 1.05.

**Table 7: Advantages of Accessing e-Databases.**

S/N	Advantages	Responses in Percentage (N=350)					Mean	SD	$\chi^2$	P Value
		1	2	3	4	5				
1	Less Time in Searching	28 (8.0)	35 (10.0)	65 (18.6)	175 (50.0)	47 (13.4)	3.51	1.09	235.182	.000
2	Availability of the Journal Much Before the Print Copy	45 (12.9)	59 (16.9)	92 (26.3)	86 (24.6)	68 (19.4)	3.21	1.29	220.658	.000
3	Simultaneous Usage	27 (7.7)	69 (19.7)	101 (28.9)	96 (27.4)	57 (16.3)	3.25	1.17	214.987	.000
4	Easy Accessibility	8 (2.3)	39 (11.1)	68 (19.4)	128 (36.6)	107 (30.6)	2.18	1.05	205.987	.000
5	Downloading Facility	5 (1.4)	72 (20.6)	60 (17.1)	156 (44.6)	57 (16.3)	2.46	1.03	266.776	.000
6	Author can be Contacted Directly Through E-Mail	28 (8.0)	46 (13.1)	87 (24.9)	101 (28.9)	88 (25.1)	2.50	1.22	248.487	.000
7	Archival Facility	7 (2.0)	55 (15.7)	70 (20.0)	131 (37.4)	87 (24.9)	2.33	1.07	235.18	.000

Key: 1 – Strongly disagree, 2 – Disagree, 3 – Neither agree nor disagree, 4 – Agree, 5 – 'strongly agree', SD = Standard deviation, N=Number of Respondents,  $\chi^2$  = Chi-Square, P = Probability,  $P \leq .050$  – Significant,  $P > .050$  – Not Significant, Numbers in Parentheses Indicates Percentage



There is a significant difference among the respondents ( $\chi^2=266.776$ ;  $P<.000$ ) in case of the accessing of ‘Downloading Facility’ many respondents scoring, 156(44.6%) say ‘agree’; nearly 72(20.6%) of them say ‘disagree’, and only 5(1.4%) of them state ‘strongly disagree’ with a mean value of 2.46 and SD being 1.03.

Chi Square results given in the Table 7, reveal that ( $\chi^2 =248.487$ ;  $P<.000$ ), There is a significant difference among engineering college users in the accessing of ‘Author can be Contacted Directly through E-Mail’. It is observed that many respondents scoring 101(29.9%) says ‘agree’; 88(25.1%) users say ‘strongly agree’, and only 28(8.0%) of them say ‘strongly disagree’ with a mean value of 2.50 and SD being 1.22.

There is a significant difference among engineering college user’s accessing of ‘Archival Facility’. It is observed that many respondents scoring 131(37.4%) says ‘agree’; 87(24.9%) users say ‘strongly agree’, and only 7(2.0%) of them say ‘strongly disagree’ with a mean value of 2.33 and SD being 1.07

#### 6.8. Reasons for Dissatisfaction on available e-Resources.

The study investigates about the reason of dissatisfaction of e-databases by the faculty member such as infrastructure is not good; E-databases are not as per need; Library time is not suitable, Library staffs are not cooperative. The analysis of dissatisfaction of the e-Database is presented in Table 8. It may be seen from the table that, there is a significant difference ( $\chi^2=41.961$ ;  $P<.000$ ) among the

respondents with regard to the dissatisfaction of available e-databases of ‘Infrastructure is not good’. Many respondents scoring 118(33.7%) says ‘disagree’; 96(27.4%) of them say ‘neither agree nor disagree’, and only 34(9.7%) of them state ‘strongly disagree’ with a mean value of 2.83 and SD being 1.09.

There is a significant difference ( $\chi^2=23.143$ ;  $P<.000$ ) among the respondents with regard to the dissatisfaction of available e-databases of ‘E-databases are not as per need’. Many respondents scoring 102(29.1%) says ‘agree’; 85(24.3%) of them say ‘disagree’, and only 33(9.4%) of them state ‘strongly disagree’ with a mean value of 3.17 and SD being 1.23.

Chi Square results given in the table 6.8, reveal that ( $\chi^2 =20.805$ ;  $P<.000$ ), there is a significant difference among engineering college users dissatisfaction of available e-databases of ‘Library Time is Not Suitable’. Many respondents scoring 107(30.6%) says ‘disagree’; 81(23.1%) of them say ‘neither agree nor disagree’, and only 29(8.3%) of them state ‘strongly agree’ with a mean value of 2.77 and SD being 1.20.

There is a significant difference ( $\chi^2=37.212$ ;  $P<.000$ ) among the respondents with regard to the dissatisfaction of available e-databases of ‘Library Staff are not Cooperative’. Many respondents scoring 125(35.7%) says ‘disagree’; 112(32.0%) of them say ‘strongly disagree’, and only 16(14.6%) of them state ‘strongly agree’ with a mean value of 2.23 and SD being 1.16.

**Table 8: Advantages of Accessing e-Databases.**

S/N	Advantages	Responses in Percentage (N=350)					Mean	SD	$\chi^2$	P Value
		1	2	3	4	5				
1	Infrastructure is not good	34 (9.7)	118 (33.7)	96 (27.4)	78 (22.3)	24 (6.9)	2.83	1.09	41.961	.000
2	E-Databases Are not as Per Need	33 (9.4)	85 (24.3)	75 (21.4)	102 (29.1)	55 (15.7)	3.17	1.23	23.143	.000
3	Library Time is Not Suitable	55 (15.7)	107 (30.6)	81 (23.1)	78 (22.3)	29 (8.3)	2.77	1.20	20.805	.000
4	Library Staff are Not Cooperative	112 (32.0)	125 (35.7)	50 (14.3)	47 (13.4)	16 (4.6)	2.23	1.16	37.212	.000

Key: 1 – Strongly disagree, 2 – Disagree, 3 – Neither agree nor disagree, 4 – Agree, 5 – ‘Strongly Agree’, SD = Standard Deviation, N=Number of Respondents,  $\chi^2$  = Chi-Square, P = Probability,  $P \leq .050$  – Significant,  $P > .050$  – Not Significant, Numbers in Parentheses Indicates Percentage

## CONCLUSION

The topic use and awareness of e-databases in the research of Library and Information Science is one of the important concept in the present era. There are three important components in the research and education of librarianship. The library collection is broadly grouped in to print and non-print. ASTM Digital Library, ASCE (American Society of Civil Engineers), ASME (American Society of Mechanical Engineers), Engineering Village, IEE (Institute of Electrical Engineers); IEEE (The Institute of Electrical and Electronics Engineers), J-Gate, Springer, Mc-Graw-Hill, Science Direct, Elsevier, online search service and other types. The present study started with literature search from LISA (Library and Information Science Abstract) database and Library and Information Science and Technology Abstract (LISTA), Google Scholar, and Emerald Insight. Some important ALA books were also consulted to design the questionnaire for faculties. A well design questionnaire is used to collect the data. The analysis is based on the primary data collected from the faculties of 60 engineering colleges of Karnataka in Mysore region, in this study an attempt to make to examine the use of e-database by the faculty members of engineering college libraries. There is a significant difference ( $\chi^2=250.658$ ;  $P<.000$ ), among the respondents with regard to the use of 'Elsevier Science Direct'. Many respondents scoring 174(49.7%) say 'agree'; nearly 75(21.4%) say 'neither agree nor disagree'; only very few accounting 19(5.4%) state 'strongly disagree' with a mean value of 3.49 and SD being 1.02. There is a significant difference ( $\chi^2=160.947$ ;  $P<.000$ ) in the use of 'Mc-Graw-Hill' e-database among the respondents. Many respondents scoring, 184(52.6%) say 'agree'; nearly 57(16.3%) of them say 'strongly agree', and only 31(8.9%) of them say 'strongly disagree' with a mean value of 3.58 and SD being 1.13. Hence, the use of e-databases is very useful for the engineering college libraries in the present days.

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### Cite this Article

K.N. Shivakumaraswamy. Use and Awareness of E-Databases in Engineering College Faculties of Karnataka: An Analytical Study. *Journal of Advancements in Library Sciences*. 2018; 5(1): 58–67p.