A Study on Use of Digital Resources And Services By The Faculty Members of Arts And Science Colleges In Ramanathapuram District, Tamilnadu

Dr.Senthilkumar,V
Assistant Professor Dept of Library Information Science
Annamalai University, Annamalai nagar-608002.

Abstract- The present study focuses on utilization of digital resources and Services by the faculty members of Arts and Science Colleges. In recent years the digital resources is playing a vital role in the various fields especially in higher education. This study reveals the Information needs various through digital resources of faculty members.

Keywords- Digital resources, Arts and Science College, Faculty members.

I. INTRODUCTION

Digital resources are those resources whose deal with both digital and digitized materials which can be either accessible from library's in house database from the world wide web, the born digital materials includes; e-books, e-journals, e-news paper, magazine, thesis, dissertations, reports, website, www-resources and other related materials which can be considered necessary by the user, researcher, information professional or even by the library management itself; on the other hand digitized materials means converting the materials from other format into digital format.The e-resources play a vital role in disseminating knowledge. They furnish information of current value and interest to the user community. A strong e-book/e-journal satisfies the requirements of maximum number of users. Efficiency in the management of the e-resources are important since utmost levels of benefits cannot be achieved without them. It is thus, desirable that the e-resources should be streamlined and managed more efficiently to improve the levels of benefits accruing from journals and research papers

II. OBJECTIVES OF THE STUDY

The important objectives of the study are as follows.

- To find out Status-wise Distribution of Respondents Purpose of using Digital Resources.
- To find out Gender -wise Distribution of Respondents Purpose of using Digital Resources

- To find out College -wise Distribution of Respondents frequently used Digital Resources
- To analyse the Status- wise Distribution of Respondents frequently used Digital Resources
- To analyse the Gender- wise Distribution of Respondents purpose frequently used Digital Resources
- To analyse the College-wise Distribution of Respondents Place of accessing Digital Resources.

III. HYPOTHESES OF THE STUDY

The important Hypotheses of the study are as follows.

- There will be no significant differences among status -wise respondents Purpose of using Digital Resources.
- There will be no significant differences among college-wise respondents Purpose of using Digital Resources.

IV. METHODOLOGY

This study attempts to examine the digitations of Digital Resources by the faculty members by making an experiment in Arts and Science Colleges, and it traces out the usage of Digital Resources and information needs of faculty members in terms of exploratory approach. It is primarily a fact finding venture. Thus it gives an analytical orientation and the design of this study is partly exploratory in nature and partly analytical in nature. For this purpose a total of 556 questionnaire were distributed among the faculty members, Out of 556 questionnaires distributed 515 valid questionnaire were collected and then data was analysed, tabulated, interpreted and presented.

V. LIMITATIONS

The findings of this study are applicable to the faculty members of Arts and Science colleges in Ramanathapuram District, Tamilnadu and it does not represent

faculty of other institutions. Studying of all institutions is not possible at the level of an individual researcher due to constraints imposed by money, time, energy and efforts.

VI. ANALYSIS AND DISCUSSION

The researcher has collected relevant data from the faculty members of the Arts and Science Colleges in Ramanathapuram District. The relevant data are collected from the faculty members of the concerned colleges by employing mailed questionnaire method. The respondents have properly answered the queries posed by the researcher. After completion of answering, they returned the questionnaires to the researcher.The collected data were classified and tabulated according to the objectives and hypothesis stated.   In order to test the hypothesis the chi square and two ways ANOVA model were applied. The data collected has been summarized using statistical techniques and presented in the form of tables and graphs.

Table 1.Status-wise Distribution of Respondents Purpose of using Digital Resources

Purpose	No. of Respondents				Total	Percentage
	Associate Professor	%	Assistant Professor	%		
Research	72	37.11	181	56.39	253	49.13
Teaching	98	50.52	215	66.98	313	60.78
Publishing Articles / Books	64	32.99	87	27.10	151	29.32
Keeping up-to-date information	152	78.35	274	85.36	426	82.72
Finding relevant information	131	67.53	218	67.91	349	67.77
Professional development	110	56.70	191	59.50	301	58.45
Entertainment	80	41.24	102	31.78	182	35.34
Chatting	30	15.46	64	19.94	94	18.25

Note : The percentage is exceeded to more than 100% because of multiple choice options.

Data presented in table 1 indicates the status-wise distribution of respondents purpose of using digital resources. It is clearly observed from the table 152(78.52%) Associate Professors and 274(85.36%) Assistant Professor had top priority for keeping up-to-date information, followed by 131(67.53%) Associate Professors and 218(67.91%) Assistant Professor use digital resources for finding relevant information, 110(56.70%) Associate Professors and 191(59.50%) Assistant Professor used digital resources for professional development, 98(50.52%) Associate Professors and 215(66.98%) Assistant Professor use digital resources for teaching, 80(41.24%) Associate Professors and 102(31.78%) Assistant Professor use digital resources for entertainment, 72(37.11%) Associate Professor and 181(56.39%) Assistant Professor use digital resources for research, 64(32.99%) Associate Professor and 87(27.10%) Assistant Professor use

digital resources for publishing articles books and 30(15.46%) Associate Professor and 64(19.94%) Assistant Professor use digital resources for chatting.

It is seen from the above table that 152(78.52%) Associate Professors and 274(85.36%) Assistant Professor had top priority for keeping up-to-date information.

Chi-Square Test for Status wise Distribution of Respondents Purpose of using on Digital Resources

Chi-square	P-Value
17.96	0.01(S)

It is inferred from the above chi-square test the calculated P-value is significant. P<0.01. So the null hypothesis is rejected and alternate hypothesis is accepted. So it is concluded that there is a significant difference in status wise distribution of respondents purpose of using on digital resources.

Table 2Gender -wise Distribution of Respondents Purpose of using Digital Resources

Purpose	No. of Respondents				Total	Percentage
	Male	%	Female	%		
Research	154	48.58	99	50.00	253	49.13
Teaching	192	60.57	121	61.11	313	60.78
Publishing Articles / Books	69	21.77	82	41.41	151	29.32
Keeping up-to-date information	292	92.11	134	67.68	426	82.72
Finding relevant information	232	73.19	117	59.09	349	67.77
Professional development	172	54.26	129	65.15	301	58.45
Entertainment	88	27.76	94	47.47	182	35.34
Chatting	63	19.87	31	15.66	94	18.25

Note:- The percentage is exceeded to more than 100% because of multiple choice options.

Table 2 shows the gender -wise distribution of respondents purpose of using digital resources. It is identified from the table that 292(92.11%) male and 134(67.68%) female respondents had top priority for keeping up-to-date information, followed by 232(73.19%) male and 117(59.09%) female respondents use digital resources for finding relevant information, 192(60.57%) male and 121(61.11%) female respondents use digital resources for teaching, 172(54.26%) male 129(65.15%) female respondents use digital resources for professional development, 154(48.58%) and 99(50.00%)female respondents using digital resources for research, 88(27.76%) male and 94(47.47%) female respondents use digital resources for entertainment, 69(21.77%) male and 82(41.41%) female respondents use for publishing articles/ books and 63(19.87%) male and 31(15.66%) female respondents use digital resources for chatting.

It is seen from the above table 292(92.11%) male and 134(67.68%) female respondents had top priority for keeping up-to-date information.

Chi-Square Test for Gender wise Distribution of Respondents Purpose of using Digital resources

Chi-square	P-Value
45.03	0.001(S)

It is inferred from the above chi-square test the calculated P-value is significant. P<0.001. So the null hypothesis is rejected and alternate hypothesis is accepted. So it is concluded that there is a significant difference in gender wise distribution of respondents purpose of using digital resources.

Table -3 college -wise Distribution of Respondents frequently used Digital Resources

Colleges	A	B	C	D	E	F	G	H	I	J
Sethupathy Arts andScience College,Ramanathapuram	34 (79.07)	7 (16.28)	10 (23.24)	4 (9.30)	12 (27.91)	24 (55.81)	13 (30.23)	3 (6.98)	6 (13.95)	21 (48.84)
P.T.M. Thevar Arts and Science College, Kamuthi	21 (84.00)	8 (32.00)	8 (32.00)	3 (12.00)	10 (40.00)	15 (60.00)	10 (40.00)	2 (8.00)	7 (28.00)	14 (56.00)
Thassim Beevi Abdul Kadar College for Women, Kilakkarai	48 (75.00)	14 (21.88)	17 (26.56)	5 (7.81)	20 (31.25)	39 (60.94)	21 (32.81)	4 (6.25)	13 (20.31)	37 (57.81)
Alagappa Evening Arts and Science College, Paramakudi	71 (87.45)	20 (24.69)	25 (30.86)	14 (17.28)	29 (35.80)	51 (62.96)	30 (37.04)	11 (13.58)	19 (23.46)	48 (59.26)
Govt.Arts and Science College, Paramakudi	49 (84.98)	12 (20.69)	13 (22.41)	7 (12.07)	17 (29.31)	37 63.79)	18 (31.03)	4 (6.90)	12 (20.69)	36 (62.07)
Govt.Arts and Science College, Ramanathapuram	19 (79.71)	8 (33.33)	9 (37.50)	6 (25.00)	10 (41.67)	11 (45.83)	10 (41.67)	5 (20.83)	7 (29.17)	10 (41.67)
Sonai Meenal Arts and Science College, Mudukulathur	20 (80.00)	7 (28.00)	8 (32.00)	4 (16.00)	9 (28.00)	14 (56.00)	10 (40.00)	2 (8.00)	6 (24.00)	13 (54.16)
Syed Hammeda Arts and Science College, Kilakkarai	52 (89.64)	10 (17.24)	15 (25.86)	8 (13.79)	21 (34.21)	35 (60.34)	23 (39.66)	5 (8.62)	8 (13.79)	34 (58.62)
Caussanel College of Arts and Science Ramanathapuram	60 (89.55)	11 (16.42)	14 (20.90)	12 (17.91)	19 (28.36)	42 (62.69)	18 (26.87)	8 (11.94)	10 (14.93)	41 (61.19)
Alagappa Evening Arts and Science College, Thondi	15 (53.57)	6 (21.43)	7 (25.00)	8 (28.57)	9 (32.14)	17 (60.71)	10 (35.71)	6 (21.43)	6 (21.43)	18 (64.29)
Alagappa Evening Arts and Science College, Ramanathapuram	23 (54.76)	10 (23.81)	17 (40.48)	12 (28.57)	14 (33.33)	25 (59.62)	15 (35.71)	10 (23.81)	9 (21.43)	25 (59.62)
Total	412 (80.00)	113 (21.94)	143 (27.77)	83 (16.12)	170 (33.01)	310 (60.19)	178 (34.56)	60 (11.65)	103 (20.00)	297 (57.67)

In table 3 shows the digital resources that are types used by the faculty members of Arts and Science Colleges have been presented. In order to analyse the types of used digital resources, the digital resources were classified into ten categories as shows in the table 5.28. As far as the utilization of digital resources by the faculty members of Arts and Science Colleges are concerned, E-journals (80.00%) were the mos used items followed by E-Thesis and Dissertation (57.67%), open sources literature (60.19%), reference sources (34.56%) students and faculty generated contents (11.65%), e-databases (31.07%), e-tutorials (16.12%) and e-books (21.94%), e-conference proceedings (27.77%) and subject gateways/ e-portals (20.00%).

Thus the data shows that most of the college users all the eleven colleges were used digital resources. However, it was found that Syed Hammeda Evening Arts and Science College, Kilakkarai (89.64%) were used more when compared with other colleges.

Table 4 Status- wise Distribution of Respondents frequently used Digital Resources

Digital resources	No. of Respondents				Total	Percentage
	Associate Professor	%	Assistant Professor	%		
E-Journals	142	73.20	270	84.11	412	80.00
E-Books	35	18.04	78	24.30	113	21.94
E-conference proceedings	62	31.96	81	25.23	143	27.77
E-Tutorials	31	15.98	52	16.20	83	16.12
E-Database	68	35.05	102	31.78	170	33.01
Open source literature	102	52.58	298	64.80	310	60.19
E-Reference source	63	32.47	115	35.83	178	34.56
Students and faculty generated contents	18	9.28	42	13.08	60	11.65
Subject Gateways/ E-Portals	36	18.56	67	20.87	103	20.00
E-Thesis and dissertations	82	42.27	215	66.98	297	57.67

Note: The percentage is exceeded to more than100% because of multiple choice options

Table 4 shows the status-wise distribution of respondents use of digital resources. It is seen from the table that 142(73.20%) Associate professors and 270(84.11%) Assistant Professors use e-journals, followed by 102(52.58%) Associate professors and 298(64.80%) Assistant Professors use open source literature, 82(42.27%) Associate professors and 215(66.98%) Assistant Professors use e-thesis and dissertations, 68(35.05%) Associate professors and 102(31.78%) Assistant Professors use e- database, 63(32.47%) Associate professors and 115(35.83%) Assistant Professors use e-reference source, 62(31.96%) Associate professors and 81(25.23%) Assistant Professors use e-conference proceedings, 36(18.56%) Associate professors and 67(20.87%) Assistant Professors use subject gateways/ e-portals, 35(18.04%) Associate professors and 78(24.30%) Assistant Professors use e-books, 31(15.98%) Associate professors and 52(16.20%) Assistant Professors use e-tutorials and 18(9.28%) Associate professors and 42(13.08%) Assistant Professors use students and faculty generated contents.

It could be noted from the table that 142(73.20%) Associate professors and 270(84.11%) Assistant Professors use e-journals.

Table 5 Gender- wise Distribution of Respondents purpose frequently used Digital Resources

Digital resources	No. of Respondents				Total	Percentage
	Male	%	Female	%		
E-Journals	271	85.44	141	71.21	412	80.00
E-Books	60	18.93	53	26.77	113	21.94
E-conference proceedings	95	29.97	48	24.24	143	27.77
E-Tutorials	52	16.40	31	15.66	83	16.12
E-Databases	128	40.38	42	21.21	170	33.01
Open source literature	205	64.67	105	53.03	310	60.19
E-Reference sources	110	34.70	68	34.34	178	34.56
Students and faculty generated contents	39	12.30	21	10.61	60	11.65
Subject Gateways/ E-Portals	69	21.77	34	17.17	103	20.00
E-Thesis and dissertations	226	71.29	71	35.84	297	57.67

Note:- The percentage is exceeded to more than 100% because of multiple choice options.

Table 5 shows the gender- wise distribution of respondents frequently used digital resources. It is seen from the table that 271(85.44%) male and 141(71.21%) female respondents used e-journals, followed by 226(71.29%) male and 71(35.84%) female respondents used e-thesis and dissertations, 205(64.67%) male and 105(53.03%) female respondents used open source literature, 128(40.38%) male and 42(21.1%) female respondents used e-databases,110(34.70%) male and 68(34.34%) female respondents used e-reference sources, 95(29.97%) male and 48(24.24%) female respondents used e-conference proceedings, 69(21.77%) male and 34(17.17%) female respondents used students gateways/ e-portals, 60(18.93%) male and 53(26.77%) female respondents used e-books, 52(16.40%) male and 31(15.66%) female respondents used e-tutorials and 39(12.30%) male and 21(10.61%) female respondents used students and faculty generated contents.

From the analysis, it is inferred that 271(85.44%) male and 141(71.21%) female respondents use e-journals.

Table-6 College-wise Distribution of Respondents Place of accessing Digital Resources

Colleges	Library	Department	Residence	Cyber cafe
Sethupathy Arts and Science College, Ramanathapuram	15(34.88)	18 (41.86)	34 (79.07)	5 (11.63)
P.T.M. Thevar Arts and Science College, Kamuthi	10 (40.00)	11 (44.00)	18 (72.00)	3 (12.00)
Thassim Beevi Abdul Kadar College for Women, Kilakkarai	32 (50.00)	34 (53.13)	57 (89.06)	7 (12.50)
Alagappa Evening Arts and Science College, Paramakudi	54 (66.67)	59 (72.84)	76 (93.83)	9 (11.11)
Govt.Arts and Science College, Paramakudi	38 (65.52)	41 (70.69)	54 (93.10)	7 (10.94)
Govt.Arts and Science College, Ramanathapuram	9 (37.50)	12 (50.00)	19 (79.17)	3 (12.50)
Sonai Meenal Arts and Science College, Mudukulathur	10 (40.00)	11 (44.00)	15 (60.00)	4 (16.00)
Syed Hammeda Arts and Science College, Kilakkarai	39 (67.24)	42 (72.41)	52 (89.66)	6 (10.34)
Caussanel College of Arts and Science Ramanathapuram	35 (52.24)	24 (35.82)	59 (88.06)	10 (14.93)
Alagappa Evening Arts and Science College, Thondi	12 (42.86)	14 (50.00)	19 (67.86)	3 (10.71)
Alagappa Evening Arts and Science College, Ramanathapuram	18 (42.86)	25 (59.52)	37 (88.10)	5 (11.90)
Total	**272 (52.82)**	**291 (56.50)**	**440 (85.44)**	**62 (12.04)**

Note: The percentage is exceeded to more than 100% because of multiple choice options.

Table 5.31 presents the result of place from where the faculty members of arts and science colleges had access to digital resources. There were four opinions viz. library, department, cybercafé, and residence. The result reveals that 440(85.44%) faculty members accessed digital resources through at residence, 291(56.50%) faculty members accessed digital resources through at department, 272(52.82%) faculty

members accessed through at library and 62(12.04%) faculty members accessed through commercially available cybercafé. Thus the data shows that most of the faculty members of all the eleven colleges were using digital resources at residence and department.

Anova Test for College - wise Distribution of Respondents Place of-accessing Digital Resources

ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Rows	7055.909	10	705.5909	9.650006	0.00607	2.16458
Columns	6595.705	3	2198.568	30.06869	0.00356	2.922277
Error	2193.545	30	73.11818			
Total	15845.16	43				

It is inferred from the ANOVA table that the calculated P-value is significant . P<0.01. So the null hypothesis is rejected and alternate hypothesis is accepted. So it is concluded that there is a significant difference in college-wise distribution of respondents place of accessing digital resources.

VII. FINDINGS

- It is seen from the above table that 152(78.52%) Associate Professors and 274(85.36%) Assistant Professor had top priority for keeping up-to-date information

- It is seen from the above table 292(92.11%) male and 134(67.68%) female respondents had top priority for keeping up-to-date information.

- Thus the data shows that most of the college users all the eleven colleges were used digital resources. However, it was found that Syed Hammeda Evening Arts and Science College, Kilakkarai (89.64%) were used more when compared with other colleges

- It could be noted from the table that 142(73.20%) Associate professors and 270(84.11%) Assistant Professors use e-journals

- From the analysis, it is inferred that 271(85.44%) male and 141(71.21%) female respondents use e-journals.

- The result reveals that 440(85.44%) faculty members accessed digital resources through at residence, 291(56.50%) faculty members accessed digital resources through at department, 272(52.82%) faculty members accessed through at library and 62(12.04%) faculty members accessed through commercially available cybercafé.

VIII. CONCLUSION

College library plays an important role in promoting digital resources for the benefit of users. From the above study it is revealed that majority of the faculty members are accessing digital resources for the purpose of keeping up-to-date information and are satisfied with digital resources.

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