Users Attitudes and Approaches towards E-Resources and Services in the Academic Library of Puducherry Union Territory: A Study

V. Radjagopal
(Corresponding Author)
Librarian, Rajiv Gandhi College of Engineering &Technology
Kirumapakkam, Puducherry- 607402, India
E-mail: vrgradjagopal@gmail.com

K. Chinnasamy
Head of the Department, Library and Information Science
Madurai Kamaraj University, Madurai
Tamilnadu- 625021, India
E-mail: drkchinna@yahoo.co.in

Abstract

The present study is to highlight the user attitude and approaches towards electronic resources and services in the academic libraries of Puducherry union territory. Analyze the data with that of available materials in electronic form and user's attitude in selected college libraries in Puducherry union territory. The new information technology has created a new infrastructure for libraries and change the way they function and provide services. The main function of a library is to provide information to the users. With the help of electronic resources the staff, students and the researchers can access to the huge volume of information with speed and accuracy.This study provides an analysis of the current state of the attitude towards e-Resources and examines the current level of use of these publications by university academics in affiliated colleges of Puducherry University. Consideration is given to both users and non-users, examining why they use or do not use this medium. The perceived advantages and disadvantages of electronic publications are also examined. The study is based on questionnaire method. A questionnaire was distributed among the users to collect desired data. A total of 1300 questionnaires were distributed to the selected sample and 1250 valid samples were collected. The result showed a growing interest in electronic information resources among the engineering users at affiliated colleges of Pondicherry University.

I. Introduction:

In an information system, user is an important component. Access to relevant information is highly essential, particularly in industrial research and development sectors. The user community in an academic library system constitutes the faculty, students, from the view of point of the user whether he is the student, he needs variety of information. An attitude is a mental state of readiness exerting directive or dynamic influence upon individual's response to all objects and situations with which it is related.

Electronic resources are some of the most important aspects of a digital library. In information technology the internet can be used efficient retrieval and meeting information needs E-resources works which are encoded and made accessible through a computer online or in physical format. Especially the internet has profoundly changed the way of publishing newspaper, magazines and periodicals have for years been published online and all kinds of texts are now available in digitized form digital media and network have created new products such as E-books, E-journals, database for the network security. E-resource is an electronic information resource that can access on the web, on or off campus. Material (data and/or program(s)) encoded for manipulation by a computerized device. This material may require the use of a peripheral directly connected to a computerized device (e.g. CD-ROM drive) or a connection to a computer network (e.g. Internet).

Users are increasingly expected to use electronic resources. Studies were undertaken to determine the level of use of this type of resource, how users feel about various issues surrounding electronic resources and whether attitudes change dependent upon subject studied to determine level of use of various electronic information resources, ways in which they felt electronic resources had hindered or improved their academic career, if they perceived themselves capable of using the resources, would the standard of their work suffer without the use of these resources and the various methods employed to acquire the skills necessary to use the sources.

II. Objectives

The main objective of the study is to analyze the user attitudes and approach towards the E-resources and services of academic libraries.

i)   To know the E-services and services in the academic of affiliated colleges to Pondicherry Territory.
ii)   To know the various sources used by the respondents from affiliated colleges and Pondicherry Central University library.
iii)   To examine the extent of use of the library facilities and services made to the college teachers, research scholars and students.
iv)   To determine the relative of different sources of information used by the respondents.

III. Colleges in Puducherry

Pondicherry has, apart from a University there are 33 higher educational institutions. 11 Arts, Science and Commerce Colleges, 5 Engineering, Technical and Architecture Colleges, 6 Medical Colleges, 5 Teacher Training Colleges and 6 other Institutions imparting education in Law, Management, Information Technology and Agriculture. Further, there are 10 Teacher Training Schools, 5 Polytechnics and Technical Schools. While the enrolment of the girls for higher education is more or less equivalent to that of boys (9,233 girls as against 9,691 boys), their enrolment in Polytechnics is much lesser . 674 against 1,118. Their enrolment in Teacher Training Schools is higher than of boys, 287 against 160.

IV. Methodology

Research methodology is a way to systematically solve the research problem. It may be understood as a science of studying how research is done scientifically. In it, we study the various steps that are generally adopted by a researcher in studying the research problem along with the logic behind them.

A questionnaire method was adopted to collect responses from the library professionals and users among various colleges of Pondicherry. The constructed questionnaire was given to subject experts for checking the content and construct validity. Based on their suggestion, changes were carried out in the questionnaire and then distributed to the respondents.

The preparation of the research design, appropriate for a particular research problem involves usually the consideration of the following;

a)   The means of obtaining the information
b)   The availability and skills of the researcher and his staff (if any).
c)   Explanation of the way in which selected means of obtaining information will be organized and the reasoning leading to the selection.
d)   The time available for research;
e)   The cost factor relating to research, i.e., the finance available for the purpose.

4.1 Sampling

12 Government and Private Colleges affiliated by the Pondicherry   University and 100 samples were selected from the Pondy Central University. From the 12 colleges 100 samples from each college were taken as the sample. Therefore totally 1300 samples were selected and questionnaires were distributed individually. But only 1250 samples were correctly responded. Therefore for the present study the researcher selected 1250 samples as the final samples.

4.2 Statistical Techniques Used

The general data interpretation is done with the application of percentage analysis. The diagrammatic and graphical representations of the data are also made on requirement of the study. Cross tables, Chi-square test, t-test and One-way ANOVA were used in the study by using Statistical Software SPSS (Statistical Package for Social Sciences).

4.3 Percentage Analysis

Percentage refers to a special kind of ratio. Percentages are used in making comparison between two or more series of data to describe the relationships. Percentages can also be used to compare the relative terms, the distribution of two or more series of data

$$\% \quad = \quad \frac{\text{No of Respondents}}{\text{Total no of Respondents}} \times 100$$

4.4 Tests of Significance

A very important aspect of the sampling theory is the study of tests of significance which enable us to decide on the basis of the sample results if:

1. The deviation between the observed sample satisfaction and the hypothetical parameter value is significant.

2. The deviation between two sample statistics is significant.

4.5 Chi-Square Test

The Chi-square test suppose we are given a set of observed frequencies obtained under some experiment and we want to test if the experimental result support a particular hypothesis or theory.

4.6 One-Way Anova

The One-Way ANOVA procedure produces a one-way analysis of variance for a quantitative dependent variable by a single factor (independent) variable. Analysis of variance is used to test the hypothesis that several means are equal. This technique is an extension of the two-sample test.

In addition to determining that differences exist among the means, you may want to know which means differ. There are two types of tests for comparing means: a priori contrasts and post hoc tests. Contrasts are tests set up before running the experiment, and post hoc tests are run after the experiment has been conducted. You can also test for trends across categories.

V. Data Analysis and Interpretation

A simple percentage analysis was carried out on the data extracted from the questionnaire based on domain, gender and designation etc.,

Table 1: Distribution of respondents according to Gender

Gender	No. of Respondents	Percentage
Male	538	43.0
Female	712	57.0
Total	1250	100.0

From the above table shows that it is inferred that 43 percent of the respondents are male and 57 percent of the respondents are female. So that it is concluded the majority of the respondents are female on the basis of gender.

Table 2: Distribution of respondents according to Age

Age	No. of Respondents	Percentage
Less than 18 years	335	26.8
Between 20-25	725	58.0
Between 26-40	105	8.4
41 years of more	85	6.8
Total	1250	100

It is evident from the above table that 26.8 percent of the respondents are in the age group of Less than 18 years of age, 58 percent of the respondents are in the age group of between 20 to 25 years of age group, 8.4 percent of the respondents are in the age group of between 26-40 years and 6.8 percent of the respondents are 41 years of more. So it is concluded that majority of the respondents are between 20-25 age group.

Table 3: Distribution of respondents according to qualification

Qualification	No. of Respondents	Percentage
Undergraduate	646	51.68
Post graduate	438	35.04
M.Phil	110	8.8
Others	56	4.48
Total	1250	100

From the above table it is inferred that 51.68 percent of the respondents are qualified Undergraduate , 35.04 percent of the respondents are qualified post graduate, 8.8 percent of the respondents are qualified M.Phil and 4.48 percent of the respondents are other qualification. So majority of the respondents are qualified Undergraduate.

Table 4: Distribution of respondents according to institution

Institution	No. of Respondents	Percentage
Government	763	61.0
Aided	407	32.6
Self-Financing	55	4.4
Others	25	2.0
Total	1250	100

From the above table that 61 percent of the respondents are government institution, 32.6 percent of the respondents are Aided institution, 4.4 percent of the respondents are Self-

Financing institution, 2 percent of the respondents are other institution. So it is concluded the majority of the respondents are government on the basis of institution.

Table 5: Distribution of respondents according to organization

Organization	No. of Respondents	Percentage
Achariya Arts and Science College	100	7.70
Arignar Anna Govt. Arts college	100	7.70
Avvaiyar Govt. College for women	100	7.70
Bharathidasan Govt. College for Women	100	7.70
Idhaya College of arts & Science for Women	100	7.70
Indira Gandhi college of Arts & Science	100	7.70
Kanchi Mamunivar Centre for PG Studies	100	7.70
Perunthalaivar kamarajar Govt. College	100	7.70
Rajiv Gandhi Arts & Science College	100	7.70
Rathnavel subramaniam College of Arts & science	100	7.70
Saradha Gangadharan College	100	7.70
Tagore Arts College	100	7.70
Pondicherry University	100	7.69
Total	1300	100.00

Table 6: Distribution of respondents according to their type of database used

Type of database	No. of Respondents	Percentage
Online	985	78.8
Offline	265	21.2
Total	1250	100

From the above table that 78.8 percent of the respondents are used online database and 21.2 percent of the respondents are used offline database. So most of the respondents are used online database.

Table 7: Distribution of respondents according to their use of on-line mode

Mode	No. of Respondents	Percentage
UGC-INFONET	599	47.9
JCCC	446	35.7

INFLIBNET	120	9.6
EMARALD	28	2.2
OTHERS	57	4.6
Total	1250	100

From the above table it is inferred that 47.9 percent of the respondents are use UGC-INFONT mode, 35.7 percent of the respondents are JCCC mode, 9.6 percent of the respondents are INFIB LIB NET mode, 2.2 percent of the respondents are EMARALD mode and 4.6 percent of the respondents are other type of mode. So that the majority of the respondents are use UGC-INFONT On-line mode.

Table 8: Distribution of respondents according to their use of internet primarily

Purpose of Internet	No. of Respondents	Percentage
Research Paper	600	48.0
Electronic Books	281	22.5
Electronic Journals	215	17.2
Electronic database	96	7.7
Others	58	4.6
Total	1250	100

From the above table it is inferred that 48 percent of the respondents are use the internet for research paper, 22.5 percent of the respondents are use the internet for electronic books, 17.2 percent of the respondents are use the internet for electronic journals, 7.7 percent of the respondents are use the internet for electronic database, 4.6 percent of the respondents are use the internet for other purpose. So that the majority of the respondents are use the internet for research paper work.

Table 9: Distribution of respondents according to their preferred search options

Purpose of Internet	No. of Respondents	Percentage
Simple search options	679	54.3
Advance search options	363	29.0
Restricted search options	137	11.0
Others	71	5.7
Total	1250	100

From the above table it is inferred that 54.3 percent of the respondents are preferred simple search options, 29 percent of the respondents are preferred advance search options, 11 percent of the respondents are preferred restricted search options and 5.7 percent of the respondents are preferred other type of search options. So that the most of the respondents are preferred simple search options.

Table 10: Showing One Way ANOVA for users opinion about library provides adequate access to electronic resources on the basis of age

Age	N	Mean	S.D	F-ratio	Level of Significant
Less than 18 years	335	1.86	0.76		
Between 20-25	725	2.21	0.90		
Between 26-40	105	2.00	0.00]	20.53	0.001 Significant
41 years of more	85	2.11	0.88		

Ho: There is no significant difference between in users opinion about library provides adequate access to electronic resources on the basis of age.

It is inferred from the above table that the calculated F-ratio is significant at 0.05 level. Therefore the stated null hypothesis is rejected and alternate hypothesis is accepted. In Age group Less than 18 years the mean value is 1.86, between 20-25 the mean value is 2.21, between 26-40 the mean value is 2.00 and 41 years of more the mean value is 2.11. So Between 20 to 25 years age group have more provides adequate access to electronic resources. Therefore it is concluded that there is a significant difference in users opinion about library provides adequate access to electronic resources on the basis of age.

Table 11: Showing One Way ANOVA for users opinion about library offer adequate bibliographic instructions on the basis of age

Age	N	Mean	S.D	F-ratio	Level of Significant
Less than 18 years	335	2.23	0.77		
Between 20-25	725	2.10	0.92		
Between 26-40	105	2.00	0.00	2.84	0.05 Significant
41 years of more	85	2.13	0.88		

Ho: There is no significant difference between in users opinion about library offer adequate bibliographic instructions on the basis of age.

It is inferred from the above table that the calculated F-ratio is significant at 0.05 level. In age group Less than 20 years got the mean value 2.23, In age group Between 21-25 years got the mean value 2.10, In age group Between 26-40 years got the mean value 2.00 and 41 years of

more age group got the mean value 2.13. Therefore the stated null hypothesis is rejected and alternate hypothesis is accepted. So it is concluded that there is a significant difference in users opinion about library offer adequate bibliographic instructions on the basis of age.

Table 12: Purpose of visit to library on the basis of gender

Gender	Electronic books	Electronic journal	Online journal	Offline journal	Electronic Database	Search the library home catalog	Periodical /Newspaper	Research paper	Article writing	Conference paper	Any other's	Total
Male	65 (12.08%)	110 (20.44%)	25 (4.64%)	20 (3.71%)	11 (2.04%)	53 (9.85%)	115 (21.37%)	85 (15.79%)	23 (4.27%)	12 (2.23%)	19 (3.53%)	538
Female	90 (12.64)	105 (14.74%)	68 (9.55%)	42 (5.89%)	42 (5.89%)	47 (6.60%)	90 (12.64%)	80 (11.23%)	62 (8.70%)	43 (6.03%)	43 (6.03%)	712
Total	155	215	93	62	53	100	205	165	85	55	62	1250

Calculated chi-square value	Degrees of freedom	Level of significance (p-value)
75.43	10	0.001

The chi square test is applied for further discussion. The computed chi square value is 75.43, value at 5% level of significance. Hence the difference in designation status is statistically identified as significant with respect to respondents' Purpose of visit to library.

It could be seen clearly from the above discussion that respondents purpose of visit to library. In male respondents 12.08 percent of the respondents are visit the library for the purpose of Electronic books, 20.44 percent of the respondents are electronic journals, 4.64 percent of the respondents are Online journals, 3.71 percent of the respondents are offline journals, 2.04 percent of the respondents are electronic database, 9.85 percent of the respondents are search the library home catalog, 21.37 percent of the respondents are periodical /newspaper, 15.79 percent of the respondents are research paper, 4.27 percent of the respondents are article writing, 2.23 percent of the respondents are conference paper and 3.53 percent of the respondents are any other purpose to visit the library.

In Female respondents 12.64 percent of the respondents are visit the library for the purpose of Electronic books, 14.74 percent of the respondents are electronic journals, 9.55 percent of the respondents are Online journals, 5.89 percent of the respondents are offline journals, 5.89 percent of the respondents are electronic database, 6.60 percent of the respondents are search the library home catalog, 12.64 percent of the respondents are periodical /newspaper, 11.23 percent of the respondents are research paper, 8.70 percent of the respondents are article writing, 6.03 percent of the respondents are conference paper and 6.03 percent of the respondents are any other purpose to visit the library.

Therefore it is concluded that female respondents are mostly visited form the library for the purpose of electronic journals.

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In Female respondents 12.64 percent of the respondents are visit the library for the purpose of Electronic books, 14.74 percent of the respondents are electronic journals, 9.55 percent of the respondents are Online journals, 5.89 percent of the respondents are offline journals, 5.89 percent of the respondents are electronic database, 6.60 percent of the respondents are search the library home catalog, 12.64 percent of the respondents are periodical /newspaper, 11.23 percent of the respondents are research paper, 8.70 percent of the respondents are article writing, 6.03 percent of the respondents are conference paper and 6.03 percent of the respondents are any other purpose to visit the library.

Therefore it is concluded that female respondents are mostly visited form the library for the purpose of electronic journals.

VI. Conclusion

The present study attempted to know the users attitude and approaches towards e-resources and services in the academic libraries of Puducherry Union territory. For that the researcher framed some objectives and hypotheses. 12 colleges and one University were selected. Random sample of 1250 users were selected from the above institutions. A well structured questionnaire was framed. Using questionnaire necessary data were collected by survey method. After collecting the data, they were coded. To test the hypotheses, statistical tools such as chi-square test, descriptive test, t-test and F-ratio were used. The result found that students from private colleges fully satisfied regarding the utility of 'e' resources in the library. Few percent of the Government college students not satisfied with the electronic resources in the library.

The result found that clients of Government colleges need further improvement in the application of 'e' resources. The colleges and universities try to provide 24 hours electronic source access. This will help the researchers students and faculties to access the electronic resources and to get necessary information with their convenient time. Thus the clients also get motivation to use 'e' resources.

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