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UTILIZATION OF INFORMATION SOURCES IN PHYSICAL SCIENCES BY RESEARCH SCHOLARS AND POSTGRADUATE STUDENTS: A STUDY AT S.V. UNIVERSITY, A.P.

D. Narayana
Research Scholar, Department of Library and Information Science S.V. University, Tirupati.

Co - Author Details :

K. Padmini
Professor, Department of Library and Information Science, S.V. University, Tirupati.

ABSTRACT

Through a questionnaire survey, data collected from 256 users from the Physical Sciences, Sri Venkateswara University revealed that Cent percentage of the respondents of research scholars are visit to the library for consult periodicals and use Theses / Dissertations. Concludes that various findings of the present study serve as guiding principles in developing need based collection and provide effective services to the users' community of the of Physical Sciences, Sri Venkateswara University in particular and paves the way for conducting similar studies in other disciplines..

KEYWORDS :Physical Sciences, P.G Students, Research Scholars.

INTRODUCTION

Information today is considered to be one of the most vital resources for success and development. In a highly competitive modern world, knowledge of the new developments in the field in which one chooses to be active has become one of the prerequisites for success. Hence, it has become imperative for people working in various capacities, involved in various activities and professions to update their knowledge to take right decision at the right time. The need to know, or

sometimes the urge to know what is new may be a result of a person's self-interest to keep himself abreast of the developments in areas concerned or necessitated by the activity he is involved in, for instance, research activity.

The information plays vital role in this digital environment. This has become possible because of the technological advancements and changing information needs of the users. Technology has dominated all spheres of human activity and the libraries are not an exception one. The new storage media have appeared after the invention of storage devices like microforms, magnetic tapes, compact discs etc., have found their places in modern libraries and are playing vital role in storage and dissemination of information. Since the mid-eighties, developments in computer technology have established a new platform for the use of information technologies for libraries and information centres. These developments include spreading of high performance and cost effective computers, local area networks, high bandwidth of internet, digitization of printed information, and high-density storage and distribution media. Due to developments in technological advancements, sources like electronic journals, e-Books, e-Databases, pre-prints, numerical and graphical data, library catalogue, educational materials, patents, standards, and so on are available on the Web. Apart from providing lot of information, the web also provides lots of information services like table of content page, electronic document delivery, reference service over the web, database access, indexing and abstracting, referral service, bibliographic search, and so on. The availability of information in the electronic media has created an opportunity for global access to information.

2. UNIVERSITY LIBRARIES IN THE PRESENT DAY

The University library has been described as the heart of the learning community. University libraries are changing radically by implementing new means of technology in all activities of print to e-environment like printed library card catalogues have been replaced by computerized Online Public Access Catalogue (OPAC) system, online accessibility for 24/7, availability of numerous e-databases, e-journals, electronic information resources, services for users. In the present day, the University Libraries can be viewed as:

2.1 Gateways to Information

An Academic Library has to function as a central gateway for library users to access, locate, transform and utilize information resources in a variety of printed and electronic formats.

2.2 Learning Centre

An Academic Library has to provide library users with dynamic equipment, facilities, resources and services to support their learning activities, which cover assignments, presentations, project, research papers, reports etc.

2.3 Training Centre

An Academic Library shall provide best training facilities to users for improving their knowledge in the utilization of Electronic Information Resources of Library.

2.4 Facilitating Centre

An Academic Library shall provide library users with computer hardware and software and other supporting facilities to create, design, develop, publish and upgrade their various multimedia presentations, projects, and blogs and so on.

It is necessary for library administrators, librarians, staff and other professionals to review and reassess the objectives in digital age where academic libraries are shifting from "Information Possession" to "Information Access" and redefining its new roles of learning and training centre1.

3. REVIEW OF LITERATURE:

Mostofa (2011)2examined the use of Internet among business students in Darul Ihsan University, a pioneer private university of Bangladesh. A total of 162 questionnaires were distributed and 137 completed questionnaires were returned. Findings revealed a high percentage of internet use among students. Google and Yahoo search engines were found to be more widely used than other search engines. The major problem faced by the students in their use of the Internet includes slow access speed. The author recommended that the bandwidth should be increased to overcome the problem of slow connectivity of the university to internet and more computers with latest specifications and multimedia facilities should be provided.

Malathi (2000)3conducted a survey on "Utilization of Internet Sources and Services in Sri Venkateswara University ."

The major findings are :
- Student community (73.3%) is more aware of the Internet.
- Majority of the users use Internet services for e-mail purpose only.
- Most of the users use google search engine for getting information.
- Majority of them (80%) browse the Internet to keep themself abreast of the latest information in research and learning.

Dash (1998)4expressed that periodicals are considered as the mostimportant components in information communication process. Several problems related to space, finance, management, and circulation are faced by the libraries for a good periodical service to the users. The author has made an evaluative study on the quality of the periodical service of Smt. Hansa Mehta Library of the Maharaja Sayajirao University of Baroda by taking a sample of 53 respondents with a structured questionnaire. The study is limited to the periodicals in the field of chemistry. The significant findings are: i) the periodicals are used for research and for guiding research scholars. ii) the degree of the benefits received from the service is low, iii) no significant relationship between the use of a particular periodical with its cost, IV) quality of the periodical service is relatively poor. The author provides few suggestions for the improvement of the periodical service in the library.

Chrzastowski and Anthes (1995)5 in their study revealed that decentralized document delivery service was a cost- effective way to extend the serials collection and the results of users' survey of the chemistry library showed a high level of user satisfaction associated with the service.

Calderhead(1996)6 in the study conducted about the relocation of departmental chemistry library into a centralized academic library stated that departmental library is a user based system by nature and the main concern should be in convincing the chemistry user group that the relocation is not a loss. Further the study stressed for improved services and collection management rather than library administrative efficiency.

4. BRIEF PROFILE OF S.V. UNIVERSITY LIBRARY:

The S.V.University Library was started in 1955 with a small collection of 6,700 books taken from the Sri Venkateswara College, Tirupati, administered by Tirumala Tirupati Devasthanams.The

University Library, centrally situated and easily accessible to all the departments on the campus has steadily grown over the years and it has 3,68,315 documents as on 31st March, 2014. The collection of the library includes textbooks, reference books, general books, gift books, reports, back volumes of journals, M.Phil., & Ph.D., dissertations and e-documents. The Library subscribes to about 465 current journals of national and international importance by spending Rs.6.75 lakhs per year.

4.1 Collection Arrangement

In order to provide better service to the users of the library, the huge and perennial growth of its collection has been arranged in such a manner that books and back volumes of journals on Science and Technology are housed in newly constructed Extension Building and books and back volumes of journals on Social Sciences, Arts and Humanities are housed in three floors of the Stack Area of the library building, so that readers may not find any difficulty in locating the documents of their choice.

4.2 ICT Infrastructure

The S.V.University Library is a member in the INFLIBNET Programme of UGC. Under this programme, the V-Sat facility to have access to Internet is installed in SVU Computer Centre. The INFLIBNET has provided 10 Mbps connectivity to S.V. University. The Computer Centre has provided Internet connectivity to all the Departments/Institutions on the Campus. UGC provided Rs. 6.5 lakhs (Non-Recurring grant) and Rs.1.72 Lakhs (Recurring Grant) for computerisation of SVU Library under INFLIBNET Programme. The library has a bibliographic database of 1,80,000 records which includes books, theses and dissertations and back volumes of periodicals.

4.3 Online Open Access Journals (Directory of Open Access Journals - DOAJ)

The website of DOAJ provides access to about 9,966 Open access journals. Any one can access the full text of journals at free of cost. SVU Library provide a link from its home page to DOAJ website.

4.4 Institutional Repository

Institutional repository has been designed and developed for Ph.D. Theses submitted to S.V. University by using DSpace. At present, 1,201 Ph.D. theses have been digitalized and uploaded into the repository. In future, the library has planned to develop institutional repositories of M.Phil., dissertations, publications of faculty and question papers.

4.5 OPAC

A link is provided in the home page of SVU Library to its OPAC(Online Public Access Catalogue). OPAC can be accessed from any where through Internet. The users can search the availability of documents through OPAC.

5. OBJECTIVES OF THE STUDY:

1.To know the purpose of visit to the library by the P.G Students and Research Scholars.
2.To know the order of priority of the users on approach the availability of documents in the library.
3.To examine the awareness on Print / Electronic Sources available in the library.

6. METHODOLOGY:

As the sample units are scattered, the researcher adopted the questionnaire method to collect data. Questionnaire method is the most suitable to this type of study.

Post Graduate students and Research Scholars in Physical Sciences of the S.V University situated in Andhra Pradesh are considered for the present study.The study does not include astronomy, geology, mineralogy and meteorology subjects.

7. ANALYSIS OF DATA:

Table: 1
Category-wise distribution of questionnaires and their response rate

S. No	Categories	Questionnaires Distributed	Questionnaires Received
1.	P.G Students	240	214 (83.59)
2.	Research Scholar	65	42 (16.40)
3.	Total	305	256 (100)

Note: Number of parentheses indicates percentages

It is evident from Table 1 that out of the total respondents selected for the sample, 83.59 % are Post Graduate students and the remaining 16.40 % are Research Scholars.

Table: 2
Purpose of library visit

S. No	Purpose	P.G Students	Research Scholar
1.	To issue / return the books	194 (90.65)	14 (33.33)
2.	To collect Subject specific Information	93 (43.45)	39 (92.85)
3.	To consult periodicals	75 (35.04)	42 (100)
4.	To consult competitive examination books	69 (32.24)	10 (23.81)
5.	To consult reference sources	86 (40.18)	37 (88.09)
6.	To use Theses / Dissertations	103 (48.13)	42 (100)
7.	To browse UGC-Infonet	79 (36.91)	39 (92.85)
8.	Using Internet and search online databases	185 (86.44)	41 (97.61)

Note: Number of parentheses indicates percentages

The above table depicts that cent percentage of the research scholars are visit to the library for consulting periodicals and to use the Theses / Dissertations, 97.61 % are also mentioned that thy visit library for using Internet and search online databases, equal number of respondents (92.85%) are visit to the library for to collect subject specific information and to browse the UGC-Infonet.

It is also clear from the above table that 90.65 % of the P.G respondents are visit the library for issue / return the books, 86.44 % of the respondents are visit to the library for using internet and search online databases regarding the physical sciences.

Table: 3
Sources of Information about the availability of documents in the library

Rank	1	2	3	4	5	6	7	Priority	Total N=256
Online Public Access Catalogue(OPAC)	83 (32.42)	54 (21.10)	35 (13.67)	26 (10.15)	20 (7.81)	21 (8.20)	17 (6.64)	7	256 (100)
Card Catalogue	96 (37.50)	43 (16.79)	37 (14.45)	34 (13.28)	21 (8.20)	17 (6.64)	8 (3.12)	6	256 (100)
Through friends	205 (80.07)	14 (5.46)	11 (4.29)	8 (3.12)	7 (2.73)	4 (1.56)	7 (2.73)	1	256 (100)
Library staff	123 (48.04)	19 (7.42)	23 (8.98)	34 (13.28)	16 (6.25)	32 (12.50)	9 (3.51)	4	256 (100)
Through teachers	160 (62.50)	18 (7.03)	21 (8.20)	16 (6.25)	10 (3.90)	21 (8.20)	10 (3.90)	2	256 (100)
Through seniors	145 (56.64)	41 (16.01)	16 (6.25)	7 (2.73)	8 (3.12)	4 (1.56)	35 (13.67)	3	256 (100)
Directly searching the Shelves	110 (42.96)	48 (18.75)	35 (13.67)	17 (6.64)	9 (3.51)	11 (4.29)	26 (10.15)	5	256 (100)

Note: Number of parentheses indicates percentages

It is apparent from the Table 3 that 80.07 % of the respondents gave first priority to friends regarding the Sources of Information about the availability of documents in the library, 62.50 % of the respondents gave second priority to teachers, 56.64% of the respondents gave third priority to seniors, 48.04 % of the respondents gave fourth priority to library staff, 42.96 % of the respondents gave fifth priority to directly searching the shelves, 37.50 % of the respondents gave sixth priority to card catalogue and 32.47 % of the respondents gave last priority to Online Public Access Catalogue(OPAC).

Table: 4
Awareness on Print / Electronic Sources available in the library

SI. N0	Sources	P.G Students N=214		Research Scholars N=42	
		Yes	No	Yes	No
1.	Books	187 (87.38)	27 (12.61)	36 (85.71)	6 (14.29)
2.	Periodicals	130 (60.74)	84 (39.25)	29 (69.04)	13 (30.95)
3.	Dissertation / Theses / Research reports	62 (28.97)	152 (71.02)	39 (92.45)	3 (7.14)
4.	Standards	54 (25.23)	160 (74.76)	15 (35.71)	27 (64.28)
5.	Reference Sources	74 (34.57)	140 (65.42)	25 (59.52)	17 (40.47)
6.	Maps and Charts	35 (16.35)	179 (83.64)	11 (26.19)	31 (73.81)
7.	E-Books	83 (35.78)	131 (61.21)	18 (42.85)	24 (57.14)
8.	E-Journals	93 (43.45)	121 (56.64)	29 (69.04)	13 (30.95)
9.	Online Reference Sources	89 (41.58)	125 (57.47)	31 (73.81)	11 (26.19)
10.	Fulltext databases	23 (10.74)	191 (89.25)	16 (38.09)	26 (61.90)
11.	Abstract/Index Databases	19 (8.87)	196 (91.58)	9 (21.42)	33 (78.57)

Note: Number of parentheses indicates percentages

It is evident from table no 4 that majority of the P.G respondents (87.38%) are aware of the books regarding the Physical Sciences in the library, followed by periodicals (60.74%), E-journals (43.45%) and online reference sources (41.58%)

It is also clear from the above table that most of the respondents of the research scholars (92.45%) are aware of the dissertations / theses / research reports, 85.71 % of the respondents are aware of the books, followed by online reference sources (73.81%), equal number of respondents are aware of the Periodicals (69.04%) and E-Journals (69.04%).

It can be inferred that majority of the research scholars aware of the print / Electronic sources available in the library compare to P.G Students.

8. FINDINGS:
1.Majority of the respondents are Post Graduates (83.59%).
2.Most of the P.G students (90.65%) are visit to the library for issue / return the books.
3.Cent percentage of the respondents of research scholars are visit to the library for consult periodicals and use Theses / Dissertations.
4.Majority of the respondents (80.07%) gave first priority to friends for approaching the availability of documents in the library.

5. Less than one third of the respondents (32.47%) gave last priority to Online Public Access Catalogue(OPAC).

6. Majority of the P.G Students (87.38%) are aware of the books available in the library.

7. Most of the respondents of the research scholars are aware of the (92.45%) dissertation / theses / research reports available in the library.

9. CONCLUSION:

The level of information requirements of the users' community in the university setup depends upon the nature of their academic activities. Among the users, students and researchers need information at the levels of study and research respectively. Therefore it is the responsibility of the library professionals to undertake research activities from time to time to assess the suitability of its services to the users. The studies conducted in a particular discipline like Physical Sciences will help in understanding the users' requirements more precisely compared to overall studies. Therefore, it is concluded that various findings of the present study serve as guiding principles in developing need based collection and provide effective services to the users' community of the Physical Sciences of the Sri Venkateswara University in particular and paves the way for conducting similar studies in other disciplines.

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