

IMPACT OF ICT ON INFORMATION SEEKING BEHAVIOUR OF THE STUDENTS: A CASE STUDY OF JAWAHARLAL NEHRU KRISHI VISHWA VIDYALAYA, JABALPUR, M.P.

Surender Kumar*, Raj Boria**

Abstract In our digital world power of computer is used to encourage to implement innovative techniques in teaching and learning practices. The proper application of information technology helps the educators to access books of various authors in the world, improves in the delivery of quality learning, teacher professional development and to track the students' progress. The present study was conducted with objective of various ICT based facilities and services provided by Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur along with suggestive methods. Analysis clearly exposed that the students 54.0% considered computer as one of the daily information searching ICT operating devices. Overwhelming majority of the respondents 92.8% used Google search engine for seeking information. Data was collected through structured questionnaires. The study examines the information seeking of the students to identify the resources used regularly to meet their information needs, purpose of information seeking, use of ICT devices for seeking the information, problems faced by students while seeking information. Some of the respondents, i.e., 27.3% were less aware about the use of OPAC, 22.3% always find the problems due to low speed of Internet connection, 18.7% faced problems due to untrained library staff of the library were not according to their convenience.

Keywords: ICT, Search Engine, Devices, OPAC, Library

INTRODUCTION

The exertion of ICTs in education have created a high influence in teaching, learning, research. Similarly, wide availability of the best practices in education, shared by ICT, encourage and nourish the activities of learning of improved greater academic achievement of students. The service of e-library has a tremendous growth in the field of education through its services offered to educators. It is indispensable to use modern and advance technology to make library services faster. Through ICT in library the educators can learn through various services rendered by the information technology like email SMS, online documents, and also through social media likes Facebook, WhatsApp, twitter etc.

As the generation of students are altering time to time and the current generation students are too passionate to use digital library which provide information to all the users at anytime, anywhere else using ICT technological setting. ICT used in libraries helps to provide services such as access to OPAC/ Web OPAC, database in library of automatic circulation of

library materials, e-resources, Implementation of ICT in library helps to a wider extend to reduce the cost, improve in access of information, enhance in quality of service rendered to the students which attract them and improve their reading habit. The Libraries in the Agricultural University are understanding unhelping the students' needs to improve their library access and gain more knowledge. This study shows the impact of ICT on information seeking behaviour of the students of Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur (M.P.).

JNKVV, JABALPUR: A PROFILE

JNKVV is a public university which is specialized in the field of agriculture. It administers education, researcher of extension activities in the field of Agriculture and Allied Science. Memorandum of Understanding (MOU) is signed between Madhya Bharat Consortium of Farmers Producers Company Limited (MBCFPL), Bhopal and this University on 6th Feb. 2017 for Foundation and certified Seed Production

* Ph.D. Scholar, School of Studies, Library & Information Science, Vikram University, Ujjain, Madhya Pradesh, India.
Email: surenderkumar20009@gmail.com

** Assistant Professor, School of Studies, Library & Information Science, Vikram University, Ujjain, Madhya Pradesh, India.
Email: raj.boria@gmail.com

of Pulses which added advantage in the field of agriculture. The Joint Indo-American Team on Agricultural Research and Education in 1954-55 helps to build a close relationship between the farmers of experts in the field of Agriculture and also through the patterns of Land Grant Colleges of USA in the year 1959-60. Smt. Indira Gandhi, the former Prime Minister of India inaugurated on October 2, 1964 the University, Jawaharlal Nehru Krishi Vishwa Vidyalaya (JNKVV).

SATYANARAYAN SINHA CENTRAL LIBRARY, JABALPUR: A PROFILE

Richard Steel once said, “reading is to mind what exercise is to body”. It is one of the largest of huge collection of learning resources in the India on agriculture and allied sciences. The Central Library, JNKVV, is located at Jabalpur, Madhya Pradesh India is well equipped and spacious. The Central Library was initiated in the year 1965 with 10000 volumes of books and periodicals. Along with the growth of the college, the library has also grown with 84000 volumes of books which act as a gateway to meet the needs of the institution and serve the academic community. All the students, faculty, employees of this institution are entitled for the membership of the library. Other than the institution members the students, faculty of other colleges can avail the service of the library with valid id-cards or letter from their respective institution. All the materials of the central library are arranged according to Dewey Decimal Classification (DDC).

OBJECTIVES

The present study intends to fulfill the following requirements;

- To categories the facilities and services rendered by ICT in Jawaharlal Nehru Krishi Vishwa Vidyalaya Library.
- To know the various techniques for searching information in the JNKVV Library.
- To find out the problems faced by the students in identifying, accessing and using information through ICT in the JNKVV Library.
- To give suggestion to improve library services and facilities.

REVIEW OF LITERATURE

A number of studies have been conducted to know the use of information sources by scientists, researchers, teachers and students.

Bamidele, B. O. and et. al. (2018) identified the students behaviour of central library of Federal University of Agriculture, Abeokuta Ogun State Nigeria. The data were collect from ten Colleges, 120 users of Federal University of Agriculture, Abeokuta using questioner technique. The questionnaire was designed to identify the high impact of variable which is used to identify the behaviour of the students in the Federal University. These study behaviors of students appeared to be learning engaged, and academic libraries providing suitable means of engagement to students. Shows the results resting in the library, chatting with cell phone in the library, chatting with other students in the library etc. Hanchate, Priti D. and Sarika Sawant (2018) gives an outline of ICT used in the library services in AICTE approved institutes of rural areas of Pune. The results showed that the majority of libraries possess the basic ICT equipment's. The ICT facilities like computers, Internet connectivity, sources and resources. the librarian services like reprographic, OPAC and CAS/SDI services were provided. Olofsson, A D., Lindberg, O J., and Fransson, G. (2018) scrutinize the respondents interest on ICT to improve their daily activities and events in their school. The interview was conducted 46 students from three upper secondary schools and Vivo PRO 11 was used for a qualitative investigation. Shastry, Nagaraja and B. R. Gadagin (2017) the study investigate the awareness, skill and attitude towards Information and Communication Technologies among library professionals in Higher Educational Institutions of Shimoga and Davanagere Districts of Karnataka. The study was based on a questionnaire survey of library professionals employed. The study reveals that, 60 (82.19%) respondents were uses computer and more than 30 (41.09%) respondents use telecommunication for information storage and retrieval. It was statement that photocopy facilities were used (27.39%), sometime (32.87%) and frequently (35.61%). In modern age ICT plays an important role in providing services to the users in right time. 59 (80.82%) respondents use services like as subscriptions to Web-based electronic resources, e-books, e-journals, databases, etc. Sunil Kumar M. and Chandarashekara M. (2017) this study conducted in National Institute of Fashion Technology Resource Centre, India, inspect the influence of ICT in collecting the information among the users. In this study well-structured questionnaire was formulated and distributed among the students and the faculty members. Also described that 64(51.05%) students of NIFT, Bengaluru, followed by 61(75.3%) NIFT, Mumbai about 51(66.6%) of NIFT, Hyderabad and 60(75.9%) of NIFT, New Delhi students were female received. The covered in the Department 60(74.1%) respondents from NIFT Mumbai prefer to access the Internet, followed by 61(70.9%) were NIFT Bengaluru students, nearly 40(50.6%) were NIFT New Delhi students and 30(40.0%) of the respondents

from NIFT Hyderabad. Chikkamanju and Bharath Chavan (2017) the study carried out on Information Resources and Services by the Students of College of Agriculture Library, Vijayapur. University of Agricultural Sciences, Dharwad Karnataka. The present study aims to examine the resources and services in the college of agriculture library and the questionnaire method was used for the collect the data. The total 85 questionnaires were distributed to the target respondents out of which 78 filled questionnaires were returned back. It can be observed that 71 (65.38 percent) of respondents were visiting College libraries in every day and followed by 07 (34.62 percent) of respondents were visiting College libraries in Weekly once. In case of books about 33 (42.31 %) of students opine as Good followed by 22 (28.21 %) opine as very good.

RESEARCH METHODOLOGY

The scope of the study was limited to UG, PG & Ph.D. Scholars at Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur. The study was based both on primary and secondary sources. Primary sources were collected by contacting students of agricultural university. In addition to this questionnaire was framed for collecting first-hand information. Books, periodicals and other available literature

on the subject would form the secondary sources. A total of 150 (60 UG students, 60 PG students and 30 research scholars) questionnaires were distributed in their concerned departments, library & hostels in the month of August 2018. In addition to, observation techniques and interview were also used for collecting randomly about the respondents. Out of 150 questionnaires only 139 (57 UG students, 57 PG students and 25 research scholars) filled by the students. Eleven questionnaires were rejected due to incomplete information. After collection of data, the suitable statistical techniques have been used for data analysis i.e. frequency, chi-square, standard deviation etc. The information so collected as per ranks has been grouped to generate the data for analysis. SPSS software have been used to analysed the data.

DATA ANALYSIS

Analysis clearly revealed that help of the respondents 63.3% were male members and female members 36.7%.

Maximum number of the respondents 41.0% hailed from PG programme followed by UG 41.0% and Ph.D. 18.0%.

More than two-third of the respondents 55.4% were from the age group of 21-25 years. Contrary to that 28.1% and 1.4% were from below 20 years and above 30 years respectively.

Table 1: Contextual Matrix of the Respondents

S. No.	Variables		Frequency (139)	Percentage (100)
1.	Gender	Male	88	63.3
		Female	51	36.7
2.	Students	UG	57	41.0
		PG	57	41.0
		Ph.D.	25	18.0
3.	Age (Years)	Below 20	39	28.1
		21-25	77	55.4
		26-30	21	15.1
		Above 30	2	1.4
4.	Frequency of Library Visits	Daily	51	36.7
		Twice or more in a week	54	38.8
		Weekly	23	16.5
		Rarely	11	7.9
5.	Format seek information	Print	19	13.7
		Digital	22	15.8
		Both	98	70.5
6.	Search Engine	Google	129	92.8
		Yahoo	5	3.6
		Alta Vista	1	.7
		Google & Yahoo	4	2.9

Analysis revealed that majority of the respondents 38.8% used the facilities of library Twice or more in a week and daily 36.7% respectively.

The data showed that majority of the respondents 70.5% were used both sources (print and digital) from library. On

the other hand, 13.7% respondents were using the print format documents and digital format 15.8% respectively.

Overwhelming majority of the respondents 92.8% were using Google search engine. On the other hand, least percentage of respondents were using other search engine namely Yahoo, Alta Vista etc.

Table 2: ICT Operating Devices

Operating Devices	Daily		Sometimes		Rarely		Never	
	Resp.	%	Resp.	%	Resp.	%	Resp.	%
Computer & network hardware	75	54.0	45	32.4	14	10.1	5	3.6
Scanner/Printer	14	10.1	57	41.0	44	31.7	24	17.3
CD/DVD/Pen Drive	39	28.1	62	44.6	23	16.5	15	10.8
Television	44	31.7	46	33.1	26	18.7	23	16.5
Cellular phones	98	70.5	16	11.5	8	5.8	17	12.2
Microphone	27	19.4	42	30.2	29	20.9	41	29.5
Camera	66	47.5	24	17.3	31	22.3	18	12.9

Table 2 shows that different ICT operating devices used by the students. The majority of the students i.e. 70.5% considered cellular phones as one of the simplest daily information searching ICT operating devices. 54.0% students use

computer & hardware, 47.5% camera and 31.7% television, 28.1% CD/DVD/Pen Drive, 19.4% microphone and 10.1% daily use the scanner/printer.

Table 3: Impact of ICT in Digital Era While Searching Information from Libraries

S. No.	Impact of ICT	Frequency	Percent
1	Expedite research process	24	17.3
2	Improve professional competence	17	12.2
3	Access to current information	33	23.7
4	Access to wider range of information	18	12.9
5	Fast access of information	12	8.6
6	To remain update about LIS activities	5	3.6
7	Expedite Research Process, Access to Current Information & Improve Professional Competence	1	.7
8	Improve professional competence, Access to current, Access to wider range of information & Fast Access of information	6	4.3
9	Access to Wider Range of Information & Fast Access of Information	1	.7
10	Expedite Research Process, Improve Professional Competence & Access to wider Range of Information	7	5.0
11	Expedite research process, Access to current information & Fast access of information	9	6.5
12	Improve Professional Competence, Access to Current Information & To remain update about LIS activities	3	2.2
13	Access to wider range of information & Fast access of information	3	2.2
	Total	139	100.0

Table 3 shows that the fast access of information 23.7% respondents while searching information from the library their see the impact of ICT in digital era. Mostly respondents 17.3% searching information to expedite research process, 12.9% respondents access to wider range of information

while searching information from the library. Only .7% respondents expedite research process, access to current information & improve professional competence during the search of information in digital era.

Table 4: Satisfaction Level with the Use of ICT for Seeking Information

S. No.	Satisfaction Level	Frequency	Percent
1	Fully satisfied	22	15.8
2	Satisfied	73	52.5
3	Satisfied nor dissatisfied	29	20.9
4	Dissatisfied	15	10.8
	Total	139	100.0

As already mentioned, Satyanarayan Sinha Central Library, Jabalpur (M.P.) is housed with books, theses, journals, maps, online journals, e-journals, references tools and state of the art technology. Yet all the users may not be satisfied with services. Table 4 shows that the satisfaction level of

the users. Nearly two-third of the respondents 52.3% were satisfied with the library services while more than 15.8% of the users were fully satisfied. Only 20.9% users neither satisfied nor dissatisfied.

Table 5: Purpose of Information Seeking

Purposes	Daily		Once in a week		Once in a month		Never	
	Resp.	%	Resp.	%	Resp.	%	Resp.	%
Reading books	66	47.5	49	35.3	9	6.5	15	10.8
Reading newspapers/magazines	77	55.4	38	27.3	14	10.1	10	7.2
Reading journals	48	34.5	46	33.1	28	20.1	17	12.2
Reading competitive materials	55	39.6	41	29.5	21	15.1	22	15.8
Preparing answer to questions	44	31.7	40	28.8	34	24.5	21	15.1
For borrow books	31	22.3	55	39.6	35	25.2	18	12.9
Preparing examination/class notes	48	34.5	48	34.5	29	20.9	14	10.1
Solving subject area problems	46	33.1	47	33.8	32	23.0	14	10.1
For complete lecture notes	41	29.5	51	36.7	28	20.1	19	13.7
For writing assignment	38	27.3	54	38.8	27	19.4	20	14.4

Analysis clearly revealed that more than two-fifth of the students 55.4% were always visiting the library for reading newspapers/magazines in Table 5. Contrary to that 7.2% respondents never visiting the library. It shows that they prefer the library for their study than home. Mostly students are using the library services for their reading books 47.5% and only 10.8% never visiting the library. Followed by 39.6% respondents for reading competitive materials, 34.5%

respondent always come visit the library for reading journals and preparing examination/class notes; never 12.2% and 10.1% not come visit the library. 31.7% Preparing answer to questions, 33.1% solving subject area problems, 29.5% for complete lecture notes and 27.3% for writing assignment are always visiting the library. Highest majority of preparing examination/class notes and solving subject area problems are same average 13.1% never come not visiting the library.

Table 6: Problems Faced by the Users

Problems	Always		Frequently		Occasionally		Never	
	Resp.	%	Resp.	%	Resp.	%	Resp.	%
Required reading material not available	38	27.3	43	30.9	35	25.2	23	16.5
Less awareness of use of OPAC	39	28.1	31	23.3	38	27.3	31	22.3
Language problems	13	9.4	20	14.4	33	23.7	73	52.5
Lack of assistance/trained library staff	26	18.7	23	16.5	34	24.5	56	40.3
Lack of IT knowledge	25	18.0	23	16.5	42	30.2	49	35.3
Low speed of Internet connection	31	22.3	27	19.4	34	24.5	47	33.8
Power backup	19	13.7	25	18.0	48	34.5	47	33.8
Opening hours not suitable	12	8.6	23	16.5	29	20.9	75	54.0

Analysis revealed that 28.1% respondents were always faced the problems of less awareness of use of OPAC followed by required reading material not available of OPAC 27.3%, and lack of assistant/trained library staff 18.7%. Contrary to that the respondents 18.0% were frequently faced the problems of lack of IT knowledge. More than three-fourth of the respondents 22.3% were occasionally faced the problems of low speed of internet connection and 13.7% respondents power backup. Nearly three-fourth of the respondents 52.5% did not faced any language problems.

CONCLUSION

Modern technologies based on ICT had major impact on the development of functioning of agricultural libraries. The development in ICT have changed the users' prospects from the academic libraries in different ways from the above work, it was concluded that because of improved ICT, many users are attracted to the use the library resources and services easily as well as daily for their academic work. ICT devices, operating devices, formats, communication channels and e-resources were the most preferred channels among all the respondents. A large number of the users were using ICT devices and internet as an information searching tools. The majority of the respondents were satisfied on using ICT based services and facility. It was also suggested that The libraries should have user group mail so that, the new arrivals can be sent to all user at a time. The libraries should organize training programmes for the students and faculty members for the effective use of their e-resources that save the time along with quick access to the required information from number of sources.

REFERENCES

- Bamigboye, O. B., Agboola, I. O., Emmanuel, O. S., & Adegbaye, I. S. (2018). New trend of study behavior of students of Federal University of Agriculture, Abeokuta Ogun State Nigeria: A case study of Nigerian student. *Journal of Library and Information Sciences*, 6(1), 4-9.
- Hanchate, P. D., & Sawant, S. (2018). A study on ICT based library services with reference to academic libraries in rural area. *Knowledge Librarian*, 1(1), 85-89.
- Olofsson, A. D., Lindberg, O. J., & Fransson, G. (2018). Students' voices about information and communication technology in upper secondary schools. *The International Journal of Information and Learning Technology*, 35(2), 82-92. Retrieved from <https://doi.org/10.1108/IJILT-09-2017-0088>.
- Shastri, N., & Gadagin, B. R. (2017). Information and Communication Technology (ICT) Skills among Library and Information Science Professionals of Higher Educational Institutions of Shimoga and Davanagere Districts of Karnataka. *International Journal of Library and Information Studies*, 7(3), 255-260.
- Kumar M., & Chandarashekara M. (2017). Information seeking behaviour in ICT environment among users of select NIFT resource centres: A study. *International Journal of Information Movement*, 2(5), 46-53.
- Chikkamanju & Chavan, B. (2017). Use pattern of Information Resources and Services by the Students of College of Agriculture Library, Vijayapur University of Agricultural Sciences, Dharwad Karnataka: A study. *International Journal of Library and Information Studies*, 7(2), 89-96.
- Manjunath, N., & Babu, K. S. (2018). Information needs and information seeking behaviour of research scholars in Bangalore university: A survey. *International Journal of Library and Information Studies*, 8(1), 332-342.
- Nwone, S., & Mutula, S. (2018). Information seeking behaviour of the professoriate in selected federal universities in southwest Nigeria. *SA Jnl Libs & Info Sci*, 84(1), 20-34. <http://sajlis.journals.ac.za> doi:10.7553/84-1-1733.
- Doddamani, K., & Naik, R. R. (2017). Information seeking behaviour of librarians in internet era: A study of First Grade College Libraries of Dharwad city, Karnataka. *International Journal of Library and Information Studies*, 8(1), 1-19.
- Reddy, P. R. (2016). Need of ICT knowledge for librarians in the changing world. *International Journal of Library and Information Studies*, 6(4), 219-224.
- Haque, M. E., Rahman, M. A., & Md Ajimuddin, S. K. (2016). Information seeking behaviour of faculty members and research scholars of Agricultural University Libraries in Bangladesh. *Research Journal of Library Sciences*, 4(2), 1-8.
- Garg, M. (2016). Information seeking behavioural models: A brief introduction. *International Journal of Library and Information Studies*, 6(1), 1-8.
- <http://jnkvv.org/Index.aspx> (cited on dated 25/10/2018.)