

Use of ICT by P.G. Students and Research Scholars in Pondicherry University

Library: A Study

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ABSTRACT

The present study aims to analyze the ICT use behavior of research scholars and students in Pondicherry university library. The study reveals that, what are the Technology Tools utilized by the research scholars and students for their academic and research activities. The study also shows that purpose of using social networking sites. Further, the study discuss the problems faced by the respondents when they are seeking information through ICT based resources and services. The study also shows that the various internet use skills in which the users having poor knowledge.

KEYWORDS: Information Communication Technology, Pondicherry University Library, Technology Tools and Social Networking Site (SNS).

I. INTRODUCTION

Information is the key factor of any kind of research and development. Information is a fundamental resource which is essential for survival in today's competitive and wired world. Information and communication technology (ICT) is the biggest achievement in the evaluation of mankind. ICT is any system designed to gather, process or distribute the information or it is the science and skill of all aspects of computing, data storage, and communication. In short, communication technology is the activity of designing, constructing, and maintaining communication systems. The value of information in every human endeavor cannot be overstressed. Quick and easy access to the every required information is a supreme importance. Information technology application and the techniques are being used by the libraries for information processing, storage, communication, dissemination of information, automation etc. Recognizing the advantages application of information technology the libraries are essential to provide the facilities to their user community. In the view of the above, the present study is an attempt to know the use behavior of ICT by the research scholars and students in Pondicherry University Library.

II. REVIEW OF LITERATURE

Hema and Nagarajan (2013) conducted a study on use of ICT-based Resources and Services by the Faculty Members, Research scholars, and PG Students of Arts and Science colleges in the Union Territory of Pondicherry. Information and communication technology (ICT) has become an integral part of modern information oriented society and has turned the world into a 'global village'. This study shows the purpose of use, Awareness approach, Experience of use and usefulness of use ICT based resources. In this study, the data have been collected through questionnaire and observational methods. Totally 1500 questionnaires were administered, but only 1332 filled questionnaires were collected from the respondents.

Seena and Sudhier (2017) investigated the awareness, skill and attitude towards Information and Communication Technologies (ICT) among the library professionals in Kerala University Library, Thiruvananthapuram. The study was based on a questionnaire survey of library professionals employed in the central and departmental libraries of the University of Kerala. The analyses revealed that the library professionals in the Kerala University library system as having relatively average level skills in various ICT related tasks in libraries. Libsys software was more used in libraries and a good number of professionals indicated that the main constraint in the application of ICT in libraries is inadequate training in ICT applications. All the professionals expressed a positive attitude towards the application of ICT in libraries.

Kumara and Kumar (2018) conducted a study on the Impact of ICT on Reading Habits of Students: A Survey. The survey was conducted using a well design and structured questionnaire. A total of 440 postgraduate students of faculty of Arts, Science and Commerce were chosen. The result of this study showed most of the students as female (61.6%) and most of them (72.3%) are from rural areas. The study found that students read books daily at home (69.5%) followed by classroom (51.1%). The students strongly agreed that the print books are costlier than the Internet sources (32.3%). The study results also indicated that students are accessed Internet every day and the students used ICT in support of their

academic work. The study recommends the university authorities to provide more ICT facilities to all the postgraduate students. It is also necessary to conduct more ICT-based learning programmes to the students.

Yacob (2018) investigated the factors responsible for the poor use of information and communication technologies in the Southwestern Nigeria. From the finding it is evident that lack of commitment by institutional management; lack of ICT strategy; lack of qualified staff to manage the ICTs and low skill level of the academic librarians dominated the reasons for the poor use of the ICTs in academic libraries in the Southwestern Nigeria. The author recommended that the academic library management in Southwestern Nigeria should provide adequate fund for the acquisition of appropriate ICTs, the management of libraries must ensure that adequate training in the use of ICTs is given to academic librarians, the management of academic libraries in the Southwestern Nigeria must put the ICT strategy in place and there should be a standby generator to ensure the continuity of work in the case of power outage.

III. METHODOLOGY

This study is an attempt to investigate use of ICT by PG students and Research scholars in Pondicherry University Library. The primary data was collected from the PG students and Research scholars by using well structured questionnaire. The questionnaire distributed to the respondents of six schools of the Pondicherry University namely School of Management, Ramanujan School of Mathematical Science, School of Physical, Chemical & Applied Sciences, School of Life Science, School of Humanities and School of Social Sciences & Informational Studies. For this study 878 questionnaire distributed to the respondents, out of these 808 were received back and making the response rate is 92%. The collected data were analyzed and presented as the findings of the study.

IV. OBJECTIVES

The following objectives are formulated for the present study.

- ❖ To examine the respondents' opinion on use of Technology Tools for the Research, Studies and Decision making.
- ❖ To find out the respondents' opinion on usage of Social Networking Sites.
- ❖ To know the respondents' opinion on Purpose of using Social Networking Sites.
- ❖ To identify the respondents' opinion on Problems faced by users' in Information Seeking through ICT based Resources and Services.
- ❖ To find out the respondents' opinion on Need to Improve the Internet Skills among the users of the Library.

V. HYPOTHESES

The following hypotheses are formulated based on the above objectives. They are:

- ❖ There is no difference in Academic Status of the respondents and their opinion on use of Technology Tools for the Research, Studies and Decision making.
- ❖ There is no difference in Academic Status of the respondents and their opinion on usage of Social Networking Sites.
- ❖ There is no difference in Academic Status of the respondents and their opinion on Purpose of Using Social Networking Sites.
- ❖ There is no difference in Academic Status of the respondents and their opinion on Problems Faced by Users' in Information Seeking through ICT based Resources and Services.
- ❖ There is no difference in Academic Status of the respondents and their opinion on Need to Improve the Internet Skills among the Users of the Library.

VI. RESULT AND DISCUSSION

Table - 1
Use of Technology Tools for Research, Studies and Decision Making

S. No.	Academic Status	Google Scholar	Scopus	Zenodo	End Note	Read Cube	Research Gate	SJ Finder
1.	PG students	565 (94.2%)	445 (74.2%)	224 (37.3%)	256 (42.7%)	371 (61.8%)	530 (88.3%)	322 (54.0%)
2.	Research scholars	202 (97.1%)	195 (93.8%)	145 (69.7%)	148 (71.2%)	141 (67.8%)	205 (98.5%)	134 (64.4%)
	Total	767 (94.9%)	640 (79.2%)	369 (45.7%)	404 (50.0%)	512 (63.4%)	735 (91.0%)	456 (56.4%)

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Rows	170060.6	1	170060.6	30.95684	0.001428	5.987378
Columns	76807.71	6	12801.29	2.330271	0.163445	4.283866
Error	32960.86	6	5493.476			
Total	279829.2	13				

The table 1 shows the respondents' opinion on the use of technology tools for the research, studies and decision making. The data review that among the 600 PG students, the highest 565 (94.2%) of them used Google scholar and it followed by 530 (88.3%) used Research Gate respectively. Regarding to research scholars among the 208 respondents' the highest 205 (98.5%) and 202 (97.1%), 187 (89.9%) of them used Research Gate and Google scholar, Scopus respectively.

It is inferred from the above chi-square test the calculated P-value is significant at $P < 0.001$. So, the null-hypothesis is rejected and the alternate hypothesis is accepted. So, it is concluded that there is a significant difference in academic Status wise respondents' opinion on the Use of Technology tools for their Research, Studies and decision making.

Table - 2
Usage of Social Networking Sites

Sl. no	Academic status	Facebook	Youtube	Whatsapp	Twitter	Instagram	Snapchat	linkedin
1	PG students	599 (99.8%)	583 (95.2%)	595 (99.2%)	472 (78.7%)	416 (69.3%)	271 (45.2%)	144 (24.0%)
2	Research scholars	207 (99.5%)	193 (92.8%)	206 (99.0%)	179 (86.1%)	169 (81.2%)	125 (60.1%)	104 (50.0%)
Total		806 (99.8%)	776 (96.0%)	801 (99.1%)	651 (80.6%)	585 (72.4%)	396 (49.0%)	248 (30.7%)

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Rows	257043.5	1	257043.5	27.35184	0.001957	5.987378
Columns	140796	6	23466	2.497003	0.145008	4.283866
Error	56386	6	9397.667			
Total	454225.5	13				

The data presented in table 2 exhibits the academic status-wise respondents' opinion on use of social networking sites. It is noted that a majority of 599 (99.8%) PG students and 207 (99.5%) of research scholars are extensively used the leading and familiar 'Facebok' network and as well as 595 (99.2%) of PG students and 206 (99.0%) of research scholars widely used the 'Whatsapp' network also.

It is inferred from the ANOVA table that the calculated P-value is significant at $P < 0.01$. So, the null-hypothesis is rejected and the alternate hypothesis is accepted. So, it is concluded that there is a significant difference in academic status wise respondents' opinion on usage of Social Networking Site.

Table - 3
Purpose of using Social Networking Sites

Sl.no	Academic status	To stay in touch with friends	To study up to date News and current events	To fill up spare time	To find funny and entertaining content	General networking with other people	To share photo or video with others	To share the opinion with others	To meet new people	To study and research discussion with friends/colleagues
1	PG students	570 (95.0%)	480 (80.0%)	384 (64.0%)	358 (59.7%)	260 (43.3%)	304 (50.7%)	194 (32.3%)	134 (22.3%)	409 (68.2%)
2	Research scholar	166 (79.8%)	178 (85.6%)	157 (75.5%)	70 (33.7%)	160 (76.9%)	91 (43.8%)	152 (73.1%)	128 (61.5%)	167 (80.3%)
Total		736 (91.1%)	658 (81.4%)	541 (67.0%)	428 (53.0%)	420 (52.0%)	395 (48.9%)	346 (42.8%)	262 (32.4%)	576 (71.3%)

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Rows	184832	1	184832	21.91218	0.00158	5.317655
Columns	94485	8	11810.63	1.400172	0.322628	3.438101
Error	67481	8	8435.125			
Total	346798	17				

The data presented in table 3 exhibits the academic status-wise purpose of using social networking sites by the respondents. It is explored that a majority of 95.0 percent PG students and 79.8 percent research scholars stated that they are used the networks 'to stay in touch with their friends', 80.0 percent of PG students and 85.6 percent of research scholars revealed that the networks are used by them 'to study up to date News and current events', 67.0 percent of respondents agreed that they used the networks 'to fill up their spare time'.

It is inferred from the ANOVA table that the calculated P-value is significant at $P < 0.01$. So, the null-hypothesis is rejected and the alternate hypothesis is accepted. So, it is concluded that there is a significant difference in academic status wise Respondents' opinion on purpose of using social Networking site

Table - 4

Problems Faced by Users in Information Seeking through ICT based Resources and Services

Sl.no	Academic status	Lack of knowledge to use	Language barrier	Lack of basic operating skills	Poor Knowledge on search techniques	Insufficient time slot	Lack of assistance by library staff
1	PG Students	89 (14.8%)	74 (12.3%)	42 (7.0%)	202 (33.7%)	60 (10.0%)	70 (11.6%)
2	Research scholars	16 (7.7%)	16 (7.7%)	8 (3.8%)	44 (21.2%)	12 (5.8%)	14 (6.7%)
Total		105 (13.0%)	90 (11.1%)	50 (6.2%)	246 (30.4%)	72 (8.9%)	84 (10.4%)

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Rows	15194.08	1	15194.08	15.40227	0.011131	6.607891
Columns	12306.42	5	2461.283	2.495008	0.169196	5.050329
Error	4932.417	5	986.4833			
Total	32432.92	11				

The table 4 shows the Academic status wise respondents' opinion on problems faced by users in information seeking through ICT based resources and services. Among the different types of problems as noted in the table, a majority of respondents 246 (30.4%) in which 202 (33.7%) PG students and 44 (21.2%) research scholars are facing the problem of 'poor knowledge on search techniques'.

It is inferred from the ANOVA table that the calculated P-value is significant at $P < 0.01$. So, the null-hypothesis is rejected and the alternate hypothesis is accepted. So, it is concluded that there is a significant difference in academic status wise Respondents' opinion on Problems in Information seeking through ICT based Resources and Services.

Table - 5

Need to Improve the Internet Skills among the Users of the Library

Sl.no	Academic status	Advanced search techniques	Advance interfaces: gopher and www	Use of Electronic Journals	Using discussion list/news groups	Online databases	Downloading software	Using telenet/FTP	E-mail
1	PG Students	339 (56.5%)	246 (41.0%)	149 (24.8%)	120 (20.0%)	156 (26.0%)	129 (21.5%)	130 (21.7%)	9 (1.5%)
2	Research scholars	71 (34.1%)	66 (31.7%)	53 (25.5%)	38 (18.3%)	48 (23.1%)	40 (19.2%)	42 (20.2%)	3 (1.4%)
Total		410 (50.7%)	312 (38.6%)	202 (25.0%)	158 (19.6%)	204 (25.2%)	169 (20.9%)	172 (21.3%)	12 (1.5%)

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Rows	52555.56	1	52555.56	17.34594	0.004216	5.591448
Columns	47663.44	7	6809.063	2.247328	0.153717	3.787044
Error	21208.94	7	3029.848			
Total	121427.9	15				

Data presented in table 5 indicated the academic status wise respondents' opinion on need to improve the internet skills among the users of the library. Among the total respondents 808, a majority of 410 (50.7%) respondents in which 56.5 percent of PG students and 34.1 percent of research scholars expressed the need to receive training in 'Advance search techniques'.

It is inferred from the ANOVA table that the calculated P-value is significant at $P < 0.01$. So, the null-hypothesis is rejected and the alternate hypothesis is accepted. So, it is concluded that there is a significant difference in academic status wise respondents' opinion on Need to improve the internet skills.

VII. FINDINGS

Some of the findings are arrived based on the statistical analyses. They are:

- The survey exhibits that there is a significant difference in respondents' opinion about the use of technology tools for the research, studies and decision making based on academic status.
- Statistical research proved that there is a significant difference in respondents' opinion on usage and purpose of social networking site based on academic status.
- Analysis shows that there is a significant difference in respondents' opinion on problems faced by users in information seeking through ICT based on resources and services of academic status.
- Survey exhibits that there is a significant difference in respondents' opinion on need to improve the internet skills among the users of the library based on demographic variables.

VIII. CONCLUSION

The present study aims to know the users opinion about technology tools and usage of social networking site in Pondicherry university library. Result concluded that a majority of PG students used the social networking site such as face book and Whatsapp and the research scholars used it almost optimum level to study up to date News & Current events and also they used the networking sites to study & research discussion with their friends/colleagues. Further, it is also found as in this study that the problems faced by more of the users in seeking information through ICT based resources and services were having poor knowledge on search techniques. Moreover, it is inferred that among the use of various technology tools, most of them used Google scholar, scopus and research gate. Finally, it is concluded that the majority of the research scholars used ICT facilities for their research purpose and the PG students used it for their study purpose.

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