# S.B. Journal of Library and Information Science

Vol.1, No.1, January-June 2025: P.12-24 Original Article Available online at www.bpaspublications.com

# A Study of ICT Skills among Library Professionals in the Manonmaniam Sundaranar University Library System

## <sup>1</sup>Divina Rosiline D'silva and <sup>2</sup>Dr. P. Balasubramanian

### **Author's Affiliation:**

<sup>1</sup>Research Scholar, Department of Library and Information Science, Manonmaniam Sundaranar University, Tirunelveli-627 012, Tamil Nadu, India.

E-mail: divinarosa31@gmail.com

<sup>2</sup>University Librarian & Head, Department of Library and Information Science, Manonmaniam Sundaranar University, Tirunelveli-627 012, Tamil Nadu, India.

E-mail: bala\_phd2010@yahoo.com

\*Corresponding Author: Divina Rosiline D'silva, Research Scholar, Department of Library and Information Science, Manonmaniam Sundaranar University, Tirunelveli-627 012, Tamil Nadu, India. Email: divinarosa31@gmail.com

**How to cite this article**: D'silva D.R. and Balasubramanian P. (2025). A Study of ICT Skills among Library Professionals in the Manonmaniam Sundaranar University Library System. *S.B. Journal of Library and Information Science*, 1(1), 12-24.

#### **ABSTRACT**

The study was conducted to investigate the awareness, skill and attitude towards Information and Communication Technologies (ICT) among library professionals in Manonmaniam Sundaranar University Library, Tirunelveli. The study is based on a questionnaire survey of library professionals employed in the central and departmental libraries of the Manonmaniam Sundaranar University. The analyses revealed that the library professionals in the Manonmaniam Sundaranar University library system have 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.

**KEYWORDS:** Information and Communication Technologies (ICT) skills; Attitude; Library professionals; Manonmaniam Sundaranar University, library system.

### 1. INTRODUCTION

Information and Communication Technology (ICT) is a term that has various meanings. ICT refers to technology that provides access to information through telecommunications. According to Seenivasulu ICT skills or IT skills can be referred to as the overall competencies (knowledge, know-how, skills and attitudes) necessary to create, store, analyse, organize, retrieve and disseminate digital information (text, images, sounds) in digital libraries or any type of information. In recent years, work for the information profession has become characterized by fast-paced change and new skills requirements. ICT has provided the library with new opportunities to improve its resources and services



### 2. REVIEW OF LITERATURE

The rapid advancement of Information and Communication Technology (ICT) has significantly impacted the roles and functions of library professionals across the globe. The integration of ICT in libraries necessitates that Library and Information Science (LIS) professionals acquire and maintain specific skills and competencies to effectively utilize modern technologies. Several studies have explored the ICT skills and competencies of library professionals in different contexts, shedding light on the challenges, opportunities, and varying levels of ICT adoption in libraries.

Bansode and Viswe (2017) study, "ICT Literacy among Library Professionals Working in University Libraries in Maharashtra, India," examines the ICT literacy levels among university librarians in Maharashtra. The study reveals that while most library professionals are familiar with basic ICT tools such as word processing and internet browsing, there is a notable deficiency in advanced ICT skills such as digital archiving, data management, and information retrieval. The authors highlight the need for more structured ICT training programs and suggest that libraries need to invest in the continuous professional development of their staff to bridge the competency gap. This study is significant as it sheds light on the challenges faced by library professionals in resource-constrained settings and stresses the importance of training to enhance service delivery.

Bajpai and Madhusudhan (2019) In their study, "ICT Skills and Competencies of Library and Information Science Professionals Working in College Libraries, University of Delhi," Bajpai and Madhusudhan (2019) explore the ICT competencies of LIS professionals in the college libraries of the University of Delhi. They found that while the majority of library professionals possessed basic ICT skills, advanced competencies such as digital cataloging, database management, and online resource management were less common. The study also emphasizes the growing role of ICT in libraries and calls for the inclusion of ICT skills as part of formal LIS education and continuous professional development. Bajpai and Madhusudhan argue that the enhancement of these skills is essential to support the modernization and digitalization efforts within academic libraries.

**Kalbande and Chavan (2016)** "*ICT Skills Among Agricultural College Librarians: A Comparative Study*" investigates the ICT proficiency of librarians working in agricultural colleges in India. The study compares the ICT skills of librarians in different institutions and finds that librarians in more established institutions are more proficient in using ICT tools for information management and service delivery. The authors note that librarians in rural and less-developed areas face additional challenges, such as inadequate infrastructure, limited access to technology, and insufficient training. The study highlights the need for targeted ICT training programs that cater to the specific needs of agricultural college librarians, helping them to better serve the academic community.

Agava and Underwood (2020) In "ICT Proficiency: Perspectives of Tangaza University College Librarians in Kenya," Agava and Underwood (2020) assess the ICT proficiency of librarians at Tangaza University College in Kenya. Their study highlights that while ICT skills are generally recognized as important, many librarians still face challenges in fully utilizing advanced digital tools due to limited training opportunities and lack of formal professional development programs. The study stresses the importance of continuous training and the integration of ICT competencies into LIS curricula to ensure that library professionals remain capable of meeting the demands of modern library environments. Agava and Underwood suggest that institutional support is crucial to fostering ICT proficiency among library professionals.

**Kaur and Gaur (2017)** article, "*ICT Skills and Competencies for LIS Professionals in Digital Environments*," explores the essential ICT skills required for LIS professionals working in digital and online environments. The study emphasizes the growing importance of digital literacy, web-based library services, and online resource management. The authors argue that LIS professionals need to be equipped

with skills in areas such as digital content management, information retrieval, and online reference services to keep pace with the evolving library landscape. The study calls for enhancing both the technical and soft skills of library staff to ensure they can adapt to the fast-changing digital environment and provide quality service to library users.

## 3. OBJECTIVES OF THE STUDY

- To assess the level/extent of different types of ICT skills possessed by the Library Professionals
- To evaluate the attitude of library professionals towards the application of ICT in University libraries
- To identify the constraints in acquiring ICT skills by library professionals under study;

### 4. METHODOLOGY

The study is based on a questionnaire survey of library professionals employed in the central and departmental libraries of the Manonmaniam Sundaranar University. The library system follows a decentralized pattern with a central library and department libraries attached to the teaching departments of the universities. A structured questionnaire was designed to collect data keeping in mind the basic objectives of the study. The questionnaire consists of both optional type questions and statements in five-point Likert's scale. The collected data were analysed using the latest version of Spss for appropriate statistical analysis and description.

The study includes the library professionals of the central campus, college of engineering and departmental libraries in the Manonmaniam Sundaranar University. Out of 224 questionnaires, 204 responses were received. The data collected through the questionnaires was scrutinized, classified, and tabulated for better understanding and clarity. The collected data were entered into spss 20 for further analysis. The first part of the questionnaire is structured to get information about variables like age, gender, qualification, designation, experience, etc.

### 5. LIMITATIONS OF THE STUDY

- The study is confined to library professionals.
- Other categories such as paraprofessionals, university administrators and library users are excluded from the study.
- The sample size is a limited one.

### 6. ANALYSIS AND INTERPRETATION

Table 1: Age-wise distribution

Sl. no.	Age Group	No. of Respondents	Percentage
1	20-30 years	58	28.43
2	31-45 years	86	42.16
3	46-55 years	60	29.41
Total		204	100

Source: Primary Data

Table 1 shows that most of the library professionals fall in the age group between 31 and 45 years (42.16%) at the time of the survey. Only 28.43% of the professionals are below 30 years of age. The remaining 29.41% are above 46 years of age.

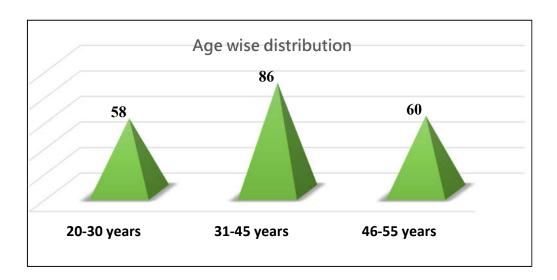


Figure 1: Age wise Distribution

**Table 2: Educational Qualifications** 

Sl. no.	<b>Educational Qualifications</b>	No. of Respondents	Percentage
1	Undergraduate	78	38.24
2	Post Graduate	112	54.90
3	Others	14	6.86
Total		204	100

Table 2 reveals the educational qualifications of library professionals under study. It was found that 54.90% of the respondents have a Post Graduate degree and 38.24% has a degree in their basic subject. It is clear from the table that 6.86% of the respondents possess an engineering degree. It is concluded that more than one-half of the library professionals are postgraduate.

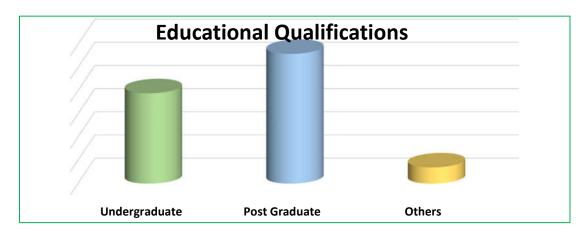


Figure 2: Educational Qualifications

**Table 3: Professional Qualifications** 

Sl. no.	Professional Qualifications	No. of Respondents	Percentage
1	Bachelor of Lib.Science	20	9.80
2	Master of Lib.Science	118	57.84
3	M.Phil.	18	8.82
4	PhD.	48	23.53
Total		204	100

It is evident from Table 3 that the LIS professionals in the Manonmaniam Sundaranar University have higher professional qualifications. The basic qualification for entry cadre as a library professional in Universities being Degree with Bachelor of Lib. Science, it can be seen that 9.80%, professionals having the degree, while 57.84% of professionals have Master of Lib. Science, 8.82% have M.Phil. degrees and 23.53% are having a PhD.

Table 4: Awareness of ICT based applications

Sl. No.	Technology	Extremely Poor	Below Average	Average	Above Average	Excellent	Total
1	RFID Technology	70 (34.31%)	84 (41.18%)	40 (19.61%)	6 (2.94%)	4 (1.96%)	204 (100%)
2	Barcode technology	38 (18.63%)	116 (28.43%)	76 (37.25%)	22 (10.78%)	10 (4.90%)	204 (100%)
3	Operating system Windows	8(3.92%)	20 (9.80%)	100 (49.02%)	56 (27.45%)	20 (9.80%)	204 (100%)
4	Operating system Linux	30 (14.71%)	56 (27.45%)	94 (46.08%)	18 (8.82%)	6 (2.94%)	204 (100%)
5	MS Office package	10 (4.90%)	30 (14.71%)	94 (46.08%)	116 (28.43%)	12 (5.88%)	204 (100%)
6	Photoshop	30 (14.71%)	76 (37.25%)	80 (39.22%)	12 (5.88%)	6 (2.94%)	204 (100%)
7	Web page design	50 (24.51%)	86 (42.16%)	116 (28.43%)	10 (4.90%)	0 (0%)	204 (100%)
8	Create metadata /tag	60 (58.41%)	96 (47.06%)	38 (18.63%)	6 (2.94%)	4 (1.96%)	204 (100%)
9	Installation and customization of software	52 (25.49%)	90 (44.12%)	50 (24.51%)	12 (5.88%)	0 (0%)	204 (100%)
10	Database	36	60	86	18	4	204

Management	(17.65%)	(58.41%)	(42.16%)	(8.82%)	(1.96%)	(100%)
System						

### **Source: Primary Data**

Table 4 presents the respondents' level of awareness in ICT based applications. It is found from the table that the respondents relatively possess a higher level of awareness in using Windows (49.02%), Linux (46.08%) and MS Office package (46.08%).

Table 5: Awareness of library automation software

Sl. No.	Library Automation Software	Extremely Poor	Below Average	Average	Above Average	Excellent	Total
1	LIBSYS	10 (4.49%)	16 (7.84%)	108 (52.94%)	60 (58.41%)	10 (4.90%)	204 (100%)
2	SOUL	20 (9.80%)	50 (24.51%)	92 (45.10%)	38 (18.63%)	4 (1.96%)	204 (100%)
3	WINISIS	48 (23.53%)	60 (58.41%)	76 (37.26%)	16 (7.84%)	4 (1.96%)	204 (100%)
4	КОНА	52 (25.49%)	64 (31.37%)	76 (37.26%)	10 (4.90%)	2 (0.98%)	204 (100%)
5	NEWGENLIB	82 (40.20%)	66 (32.35%)	54 (26.47%)	(0.98%)	0 (0%)	204 (100%
6	EVERGREEN	110 (53.92%)	116 (28.43%)	34 (16.67%)	2 (0.98%)	0 (0%)	204 (100%)

**Source: Primary Data** 

Table 5 shows the level of awareness of library automation software among library professionals. Out of 204 respondents in Manonmaniam Sundaranar University, respondents seem to be familiar more with LIBSYS software (52.94%) followed by SOUL (45.10%). Among open-source software, the professionals have more skill in using KOHA (37.26%). The professionals expressed their skills as poor in two of the software such as NEWGENLIB (40.20%) and EVERGREEN (53.92%). In addition to this software, the professionals are average in the use of some of the other software such as E-Granthalaya (3.92%), Alice for Windows (1.96%), LIBSOFT (6.86%) and LIBMAS (3.92%).

Table 6: Skill for managing electronic resources

Sl.	<b>Electronic Resources</b>	Extremely	Below	Average	Above	Excellent
No		Poor	Average		Average	
1	Open Access Journals	18	8	116	46	16
	_	(8.82%)	(3.92%)	(56.86%)	(22.55%)	(7.84%)
2	Use of OPAC/Web	4	8	72	96	24
	OPAC	(1.96%)	(3.92%)	(35.58%)	(47.06%)	(11.77%)
3	Library Consortium	18	44	94	34	14
		(8.82%)	(21.57%)	(46.08%)	(16.67%)	(6.86%)
4	Library website	10	16	88	74	16

		(4.90%)	(7.84%)	(43.14%)	(36.28%)	(7.84%)
5	E-books	12	18	110	50	14
		(5.88%)	(8.82%)	(53.92%)	(24.51%)	(6.86%)
6	Library Networks	14	52	84	38	16
	-	(6.86%)	(25.49%)	(41.18%)	(18.63%)	(7.84%)
7	Online journals	10	8	106	64	16
		(4.90%)	(3.92%)	(51.96%)	(31.37%)	(7.84%)
8	Digital archives/ Subject	20	38	96	40	10
	gateways	(9.80%)	(18.63%)	(47.06%)	(19.61%)	(4.90%)
9	Online databases	14	10	108	116	14
		(6.86%)	(4.90%)	(52.94%)	(28.43%)	(6.86%)
10	ETD	26	24	104	44	6
		(12.75%)	(11.76%)	(50.98%)	(21.57%)	(2.94%)

Table 6 presents the respondent's skill in managing e-resources. From the table, it is evident that the respondents possess a higher level of skills in the use of e-resources. The analysis of data shows that the library professionals are above average in the use of OPAC/Web OPAC (47.06%) followed by library websites (36.28%) and online journals (31.37%). The professionals have average skill in the use of almost all the e-resource.

Table 7: Skills for managing ICT based library services

S1. No	Information services	Extremely Poor Below	Below Average	Average	Above Average	Excellent
1	Circulation of new additions list	16 (7.84%)	56 (27.45%)	90 (44.12%)	30 (14.71%)	12 (5.88%)
2	SDI services	32 (15.69%)	52 (25.49%)	84 (41.18%)	30 (14.71%)	6 (2.94%)
3	Current awareness services	26 (12.75%)	46 (22.55%)	94 (46.08%)	32 (15.69%)	6 (2.94%)
4	Development of institutional repository	30 (14.71%)	66 (32.35%)	92 (45.10%)	8 (3.92%)	8 (3.92%)
5	Online bibliographic services	38 (18.63%)	62 (30.39%)	80 (39.22%)	14 (6.86%)	10 (4.90%)
6	Inter library loan through networking	36 (17.65%)	80 (39.22%)	76 (37.25%)	6 (2.94%)	6 (2.94%)
7	Digital reference service	40 (19.61%)	48 (23.53%)	88 (43.14%)	20 (9.80%)	8 (3.92%)
8	Online indexing and abstracting	24 (11.77%)	68 (33.33%)	98 (48.04%)	8 (3.92%)	6 (2.94%)
9	Electronic document delivery	18 (8.82%)	40 (19.61%)	100 (49.02%)	36 (17.65%)	10 (4.90%)
10	Information retrieval	4 (1.96%)	12 (5.88%)	106 (51.96%)	64 (31.37%)	18 (8.82%)

Table 7 gives the result of the analysis of professionals' skills for managing various ICT related library services. A consistent percentage (31.37%) of professionals has above average skills only for ICT based

Information retrieval (accessing, searching and use of e-documents). Below average skills are shown for an interlibrary loan through networking (39.22%), online indexing and abstracting services (33.33%) and development of institutional repository (32.35%). Respondents also have a significant average level of skills in Information retrieval (accessing, searching and use of e-documents (51.96%), electronic document delivery system (49.02%), online indexing and abstracting services (48.04%) and current awareness services (46.08%) etc.

Table 8: Constraints in acquiring ICT skills

Sl. No	Problems	Garret's score	Rank
1	Inadequate training in ICT applications	3.821	II
2	Lack of infrastructure & network facility	3.25	V
3	Lack of support from authorities for implementing ICT applications in library	3.02	VII
4	Lack of budget for ICT	4.196	I
5	Lack of co-ordination among library staff	2.77	VIII
6	Non-availability of consultation services	3.696	III
7	Lack of updating ICT strategy	3.625	IV
8	Fear of ICT applications	3.018	VI
9	Lack of interest for Library professionals in learning ICT applications	2.73	IX

**Source: Primary Data** 

The respondents were asked to mark their ranks against the main problems faced by library professionals in the effective use of ICT applications. A significant number of library professionals identified that the main issue relating to the application of ICT in libraries is the Lack of budget with the mean score of 4.196 which is followed by Inadequate training in ICT applications, Non-availability of consultation services is another problem faced by library professionals. The result is depicted in Table 9 which shows that the least important constraint is the lack of interest for Library professionals in learning ICT applications and fear of ICT applications.

Table 9: Attitude towards the impact of ICT

S1.	Attitude	Strongly	agree	Undecided	Disagree	Strongly
No		agree				disagree
1	The utility of ICT in my	10	88	36	62	8
	institution is good	(4.90%)	(43.14%)	(17.65%)	(30.39%)	(3.92%)
2	Not able to update the	6	96	20	76	6
	technology of ICT in time	(2.94%)	(47.06%)	(9.80%)	(37.25%)	(2.94%)
3	Difficult to cope with all the	10	60	40	76	18
	ICT jargon	(4.90%)	(58.41%)	(19.61%)	(37.25%)	(8.82%)
4	ICT affects regular budgeting	10	40	50	90	14
	provision	(4.90%)	(19.61%)	(24.51%)	(44.12%)	(6.86%)
5	ICT disturbs routine work of	18	20	20	118	30
	the library	(7.84%)	(9.80%)	(9.80%)	(57.84%)	(14.71%)
6	ICT application increased job	116	116	18	14	2
	satisfaction of Library	(28.43%)	(54.90%)	(8.82%)	(6.86%)	(0.98%)
	professional	, ,			, ,	

7	ICT application reduce the	116	114	16	14	2
	workload of library	(28.43%)	(55.88%)	(7.84%)	(6.86%)	(0.98%)
	professional					
8	ICT application help to enhance	88	104	6	4	2
	knowledge and skills of library	(43.14%)	(50.98%)	(2.94%)	(1.96%)	(0.98%)
	professional					
9	ICT application improve the	110	90	4	0	0
	quality of library services	(53.92%)	(44.12%)	(1.96%)	(0%)	(0%)
10	ICT application facilitates quick	90	108	4	0	2
	access to current data.	(44.12%)	(52.94%)	(1.96%)	(0%)	(0.98%)

Table 9 shows that library professionals have a positive attitude towards the application of ICT in libraries. Majority of the library professionals agreed that ICT application facilitates quick access to current data (52.94%), improves the quality of library services (53.92%), helps to enhance knowledge and skills of library professional (50.98%) and reduces the workload of library professionals (55.88%). Of the negative aspects listed, to the variables 'ICT disturbs routine work of the library' majority of the respondents (57.84%) disagreed and only 9.80% agreed. Similarly, respondents replied with disagreement to the variables, 'ICT affects regular budgeting provision' (44.12%) and 'Difficult to cope with all the ICT jargon' (37.25%). Most of the professionals agreed with the variables 'Not able to update the technology of ICT in time' (47.06%) and 'The utility of ICT in my institution is good' (43.14%).

Table 10: Awareness of digital library software

S1. No.	Digital library software	Extremely Poor Below	Below Average	Average	Above Average	Excellent
1	Greenstone	66 (32.35%)	74 (36.27%)	116 (28.43%)	4 (1.96%)	2 (0.98%)
2	D-Space	42 (20.59%)	62 (30.39%)	82(40.20%)	16 (7.84%)	2 (0.98%)
3	E-Print	64 (31.37%)	76 (37.25%)	60 (58.41%)	4 (1.96%)	0 (0%)
4	Fedora	64 (31.37%)	94 (46.08%)	40 (19.61%)	6 (2.94%)	0 (0%)

**Source: Primary Data** 

The level of knowledge of digital library software among library professionals is illustrated in Table 6. It is clear from the table that most of the library professionals have more skill in D-Space software (40.20%). The skills are below the average level in the use of other digital library software such as Greenstone (36.27%), E-Print (37.25%) and Fedora (46.08%) About thirty-two per cent professionals expressed that they are poor in the use of Greenstone digital library software.

**Table 11: Descriptive Statistics** 

	N	Mean	Std. Deviation	Minimum	Maximum
Inadequate training in ICT applications	204	3.7696	1.06944	2.00	5.00
Lack of infrastructure & network facility	204	3.5735	.81215	2.00	5.00
Lack of support from authorities for implementing ICT applications in library	204	4.0245	1.28054	1.00	5.00
Lack of budget for ICT	204	3.0049	.62381	2.00	4.00
Lack of co-ordination among library staff	204	3.2941	1.46276	2.00	5.00
Non-availability of consultation services	204	3.6471	.96895	2.00	5.00
Lack of updating ICT strategy	204	3.6078	.77086	2.00	5.00
Fear of ICT applications	204	3.3824	1.02716	2.00	5.00
Lack of interest for Library professionals in learning ICT applications	204	3.4461	.62148	2.00	4.00
Attitude	204	2.3725	.67205	1.00	3.00

**Table 12: Coefficients** 

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	4.989	.545		9.155	.000
	Inadequate training in ICT applications	215	.045	343	-4.789	.000
	Lack of infrastructure & network facility	478	.060	578	-8.024	.000
	Lack of support from authorities for implementing ICT applications in library	.181	.033	.346	5.513	.000
	Lack of budget for ICT	053	.083	049	630	.529
	Lack of co-ordination among library staff	176	.041	383	-4.316	.000
	Non-availability of consultation services	.169	.044	.243	3.803	.000
	Lack of updating ICT strategy	.007	.058	.008	.112	.911
	Fear of ICT applications	183	.050	280	-3.693	.000
	Lack of interest for Library professionals in learning ICT applications	031	.078	029	398	.691
a.	Dependent Variable: Attitude of l	Respondents				

Table 13: Anova

Model		Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	61.829	9	6.870	44.637	.000ь	
	Residual	29.857	194	.154			
	Total	91.686	203				
a. Dependent Variable: Attitude of the Respondents							

#### **Table 14: Model Summary**

Model	R	R Square	Adjusted R Square	Std. error of Estimate		of	the
1	.821a	.674	.659	.39231			

a. Predictors: (Constant), Lack of interest for Library professionals in learning ICT applications, Lack of support from authorities for implementing ICT applications in the library, Lack of infrastructure & network facility, Fear of ICT applications, Non-availability of consultation services, Lack of updating ICT strategy, Inadequate training in ICT applications, Lack of budget for ICT, Lack of co-ordination among library staff

The above table 12, 13 and 14 disclose regression coefficient results of dependent variable "Attitude of respondents towards the impact of ICT and the independent variable Constraints in acquiring ICT skills. The multiple "R" 0.821 indicates a good correlation between the dependent variable and independent variable. Besides the "t" value of independent variables is more 1.96 and the corresponding significance value is less than 0.05 at 95 per cent confidence level except for the Lack of budget for ICT, Lack of updating ICT strategy and Lack of interest for Library professionals in learning ICT applications. Hence it is concluded that Constraints in acquiring ICT skills is influenced the respondents' attitude towards the impact of ICT.

#### 7. FINDINGS

- The researcher found that most of the library professionals fall in the age group between 31 and 45 years (42.16%) at the time of the survey. Only 28.43% of the professionals are below 30 years of age. The remaining 29.41% are above 46 years of age.
- It was found that 54.90% of the respondents have a Post Graduate degree and 38.24% has a degree in their basic subject, besides 6.86% of the respondents possess engineering degree.
- It can be seen that 9.80%, professionals having the degree, while 57.84% of professionals have Master of Lib. Science, 8.82% have M.Phil. degrees and 23.53% are having a PhD.
- It is found from the table that the respondents relatively possess a higher level of awareness in using Windows (49.02%), Linux (46.08%) and MS Office package (46.08%).
- Respondents seem to be familiar with LIBSYS software (52.94%) followed by SOUL (45.10%). Among open-source software, the professionals have more skill in using KOHA (37.26%).
- Most of the library professionals have more skill in D-Space software (40.20%).
- The analysis of data shows that the library professionals are above average in the use of OPAC/Web OPAC (47.06%) followed by library websites (36.28%) and online journals (31.37%)
- A consistent percentage (31.37%) of professionals has above average skills for ICT based Information retrieval (accessing, searching and use of e-documents).
- A significant number of library professionals identified that the main issue relating to the application
  of ICT in libraries is the Lack of budget with the Garett score of 4.196 followed by Inadequate training
  in ICT applications, Non-availability of consultation services is another problem faced by library
  professionals.

- Majority of the library professionals agreed that ICT application facilitates quick access to current data (52.94%), improves the quality of library services (53.92%), helps to enhance knowledge and skills of library professional (50.98%).
- Constraints in acquiring ICT skills is influenced by the respondents' attitude towards the impact of ICT.

#### 8. SUGGESTIONS

The numerous views and comments offered by the library professionals have enabled the investigators to offer some feasible suggestion for the successful application of ICT in libraries.

- Sufficient funds should be made available by the authorities for developments of ICT infrastructure, digital resource development, and application of ICT enabled services in university libraries.
- The authorities need to review their policies regarding the implementation of technological developments in libraries.
- Libraries should promote ICT awareness to the professionals as well as users by providing short-term courses, in-house training programmes, organizing workshops, seminars, conferences and public lectures.
- Library users should also be given motivation by organizing orientation programmes and user awareness programmes in ICT.
- A new model curriculum for information science courses in universities should be devised by
  integrating traditional and modern knowledge and applications. ICT should be a core component of
  formal Library and Information Science education incorporating the skill and expertise in handling
  the digital libraries and application of ICT in libraries.

### 9. CONCLUSION

ICT provides libraries with an opportunity to give value-added information services and access to a wide variety of digital-based information resources to their clients. In this current situation, whereby ICT is being continuously updated, and the traditional formats are being replaced by digital formats, regular training for the library professionals in changing technology is inevitable. In-house training programmes are more effective in libraries. From the present survey, it is clear that most of the ICT technologies which are taken for this study are not yet been introduced in the Manonmaniam Sundaranar University library system. Therefore, library professionals are not in a position to use these technologies in their work. This will create a low level of technical skill development among the professionals working in this library system. Concerning the implementation of the technologies, lack of support from the authority is the major issue in the university library. The study concludes that the university library needs proper ICT infrastructure and training to the professionals in using the digital resources effectively

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