KNOWLEDGE, PROFICIENCY AND EXPERTISE REQUIRED BY SMART LIBRARIANS IN THE DIGITAL ERA

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Adoption of Information and Communication Technology (ICT), in libraries have helped librarians in administration and in serving the end users. The technology is changing everyday at faster speed which is creating a burden to librarians to adopt new technology and function accordingly. The aim of the present research is to study knowledge, proficiency and expertise required by practicing librarians in the digital era. Survey research method was employed and structured questionnaire as a data collection tool. The sample consisted of library professionals (not semi and non library professionals) of South Mumbai Region only. The study found that along with traditional knowledge, LIS professional need to develop their IT skills too. It was observed that the drastic changes in the field of ICT are creating pressure on library in general and LIS professionals in particular to adopt the latest techniques and practices in digital age. For this purpose academic librarians need to attend the different types of professional training Programmes such as workshops, conferences, demonstrations, online trainings etc. to develop and learn new technologies effectively and efficiently work in the digital library environment. For a successful professional career in the digital library environment, it is utmost important that the upcoming generation of LIS professionals should have high knowledge of ICT technologies such as database development and management systems, networking, cloud computing, file management, discovery services, which are most essential in today's context.

Keywords: Academic libraries, India, Information and Communication Technology, Knowledge, Knowledge and Skills, LIS professionals, Skills

INTRODUCTION

Due to the emergence of Information and Communication Technology (ICT), libraries are the ones who have observed a strong positive effect by implementing in house technologies and as well as adopting technology in serving users. The highly appreciated ICT has a darker side as everyday technology is changing at a faster speed which is creating a burden to librarians to adopt new change and function accordingly. To face these challenges libraries need to focus on to upgrade and enhance LIS professional's knowledge and skills (Wright, 2014). The present study is

an attempt to find out the knowledge and proficiency required by practicing/professional librarians to work with full efficiency in a digital era. As in the fast-moving technology-driven society, librarians need to keep pace with it and the study will uncover the facts about their general perception regarding the need for digital education/training to be incorporated likely in their library routine.

Skills and Knowledge required for LIS professionals in digital era are classified as Personal skills, Generic skills, General IT skills and Technical skills. Personal skills especially personal attributes as being important in Library and Information Science (LIS) work environment, the capacity for continuous learning, flexibility, fostering change and the capacity to work independently, enthusiasm, and self-motivation. Generic skills refer to life skills such as communication and interpersonal skills, critical thinking, problem solving and teamwork which allow individuals to function not only in disciplinary or subject domains but also in employment and social situations (Orme, 2008).

General ICT skills are crucial in operating the computers in the libraries and overall housekeeping activities such as file management, web navigation, software installation, photocopy & printer handling, online searching and retrieval, etc. Technical Skills in the digital environment includes developing digital content, its organisation, preservation by various means such as adopting Metadata schemas, get exposed to web-crawlers so that it is discoverable through the Internet. These IT skills have become the integral or core identity of librarians. Librarians should have strong knowledge of Integrated Library Systems (ILS), ins and outs of their system, Web technology, Electronic resources management, Web page development and its updation, Discovery services, Institutional repository development, Open accessible learning resources etc. (Raju, 2014). Even librarians need to know learning management software so that it can be utilized by them to provide information literacy Programmess, support reading materials or resources, etc.

REVIEW OF LITERATURE

There were numerous articles that discussed key skills and competencies of a new generation of LIS professionals (Calarco et al. 2016; Choi and Rasmussen, 2009; Howard, 2009; Marcum, 2016; Myburgh, 2005; Nonthacumjane, 2011; Sarasvathy, Nambratha and Giddaiah, 2012; Sreenivasulu, 2000; Tennant, 1999). Canadian Association of Research Libraries (CARL, 2010) prepared a complete guideline in a form of competencies profile intended as a guide to help librarians working in CARL libraries manage their careers, set meaningful professional development goals and align those goals with the missions of their respective organizations. Library professional can do actual SWOT (Strength Weakness Opportunities and Threats) analysis of their own to identify the strengths to enrich and enhance, weaknesses to overcome and opportunities of new learning and surpass threats with knowledge.

In the case of research studies, one of the important studies by Raju (2014) reported a preliminary study that was part of a wider study. The study was about practicing librarians to develop a frame, a guideline covering a varied

set of skills required to work efficiently in today's environment in South Africa. This can be used by freshers as well as those who are established very well in the profession to identify the need and depth of further skills acquisition. Johnston and Williams (2015) investigated and documented the skills and knowledge needs of future library professionals in Qatar and to upgrade course curricula that meet the needs of the local workforce and also guide or improve national or local professional development Programmes. It was reported that participants of the study felt that there was a lack of opportunities for professional development in Qatar and that the most essential area of skills training was information literacy, awareness about copyright laws and training and technical skills including RDA and Arabic cataloging.

Seena and Pillai (2014) investigated the awareness skills and attitude towards ICT among library professionals in Kerala University Library, India. It was revealed that their library professionals possess moderately average level skills in various ICT related activities that are performed in libraries. Pillai (2016) covered the skills required by the librarian in teacher training colleges in Mumbai city of India. The author pointed out that trainee teacher's information needs are high and more accurate as compared to other general academic users. The author claimed that it is of utmost importance for librarian to have essential skills such as web designing, blogging skills, knowledge of open source software, research skills, etc. Sawant and Manchekar (2019) in their study of personal information management highlighted the importance of ICT

skills, Web 2.0 skills, and technical skills for librarians while persuing Phd. Ezeani (2011) discussed that it is a responsibility of the librarian to acquire Internet skills or web 2.0 skills including social media. Librarians should use the Internet effectively to deliver information or reference services to the users. The author examined that newcomers in the LIS profession are more interested to learn & adopt upcoming IT skills as compared to old-fashioned librarians. Therefore, the author suggested that every staff member of the library no matter what position they are in should take part in learning IT skills. By organizing in-house training, attending conferences/seminars, workshops to learn new skills and achieve higher goals in the profession, etc.

RESEARCH DESIGN

The objectives of the present study are

- To find out knowledge and proficiency and skills required by practicing/professional librarians to work with full efficiency in a digital era.

- To the the general perception regarding the need for digital education/training to be included in the LIS courses.

This study coveres only professionals (not semi and non-library professionals) of the western suburb Mumbai part of Mumbai city. The survey research method was employed and structured questionnaire as a data collection tool. It was consisted of 27 questions and developed in Google form. The cluster sample method was used to select the sample considering a western suburb Mumbai part of Mumbai city. There were approximately 70 granted and non granted

colleges chosen from the western suburb Mumbai based on the convenience of the authors. About 51 participants filled up the questionnaire that makes 73 % of the response rate.

ANALYSIS AND FINDINGS OF THE STUDY

Personal Information

About 42 (82%) respondents were holding a permanent position, while 9 (18%) were working on a contract basis but full time (Table 1). It was observed that 20 (39%) of the respondents fall in the age group of 31-40 years and an equal number of respondents fall under the 41-50 age group. Only 6 (12%) respondents were belonging to up to 30 age groups; 5(10%) respondents were falling under the 51-60 age group (Table 2). It was observed that majority of the female respondents, i.e. 36 (72%) responded to the questionnaire (Table 3). It was observed that more than half of the respondents 30 (60%) had M.L.I.Sc. degree. Few of them had PhD degree, i.e. 9 (18%) even 8 (16%) had done MPhil in Library & Information Science (Table 4). Nearly half of the respondents 24 (47%) had the experience of 6-15 years followed by 15 (29%) 16-25 years of experience, 8 (16%) have 1-5 years and lowest i.e. 4 (8%) had the experience of 25 years and above (Table 5).

Table 1: Job status

Sl. No.	Job status	No. of respondents	Percentage (%)
1	Parmanent	42	82
2	Part time on contract basis	0	0
3	Full time on contract basis	9	18

Table 2: Age group

Sl. No.	Age group	No. of respondents	Percentage (%)
1	21-30	6	12
2	31-40	20	39
3	41-50	20	39
4	51-60	5	10

Table 3: Gender

Sl. No.	Gender	No. of respondents	Percentage (%)
1	Male	15	28
2	Female	36	72

Table 4: Qualification

Sl. No	Qualification	No. of respondents	Percentage (%)
1	BLISc	3	6
2	MLISc	30	60
3	MPhil	8	16
4	PhD	9	18

Table 5: Experience

Sl. No.	Experience	No. of respondents	Percentage (%)
1	1-5	8	16
2	6-15	24	47
3	16-25	15	29
4	25 and above	4	8

Knowledge and skills of the respondents

Professional development training Programmes, types of the Programmes attended and its effect on their job performance

The question was asked about the participation of respondents in the professional development training programmess in the last two

Table 6: Professional development Programmes attended by the respondents

Sl. No.	Professional Development Programmes	No. of respondents	Percentage (%)
1	Workshop	30	58.82
2	Training	44	88
3	Seminar	16	31.37
4	Lecture	10	19.16
5	Conference	14	27.45
6	Demonstration	3	5.88
7	Video Presentation	1	1.96
8	Webinar	1	1.96
9	Online course	6	11.76

years. It was examined that 44 (88%) respondents had attended the professional development training Programmess, followed by 30 respondents (58.82%) who attended the workshops. The data is shown in table 6.

Gained Skills and Knowledge

About 20 (39%) of the respondents reported that their performance got improved, whereas 15 (29%) have mentioned that their performance got greatly improved; whereas, 5 (10%) of the respondents mentioned that had little effect of training/seminar/conference Programmes on their performance. About 11 (22%) said that Programmess somewhat improved their performance. Further, the respondents were asked about the other ways of updating their knowledge apart from the seminar /conference, it was observed that most of the LIS professionals gained the skills and knowledge 'On the Job' (43, 84.31%), while the lowest response was received to the 'Professional association activities' (19, 37.25%). The data is given in figure 1.
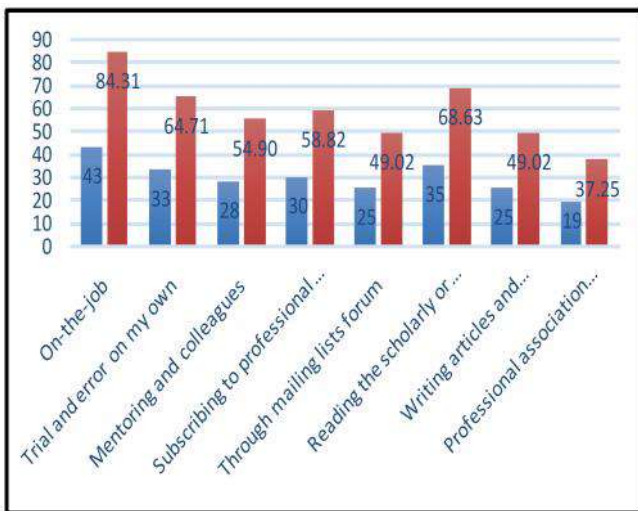
Figure 1: Gained skills and knowledge

It was noted that 29 (57 %) respondents felt that it is very important to attend professional development training for them to develop library skills and knowledge. About 8 % respondents felt that it was somewhat important to them. When respondents were asked about how well their need for knowledge and skills development is being met by attending training, about 31 (61%) felt that there need is met by attending such Programmess whereas 3 (6%) respondents said no, about 17 (33%) of the respondents said sometimes there need is met by attending such Programmess.

Training opportunities available to the professionals

It was important to ask the respondents about how satisfied they are with the training opportunities currently available to them. It was observed that 22 (43.14%) respondents were satisfied whereas more or less the number of respondents i.e. 21 (41.18%) respondents were sometimes satisfied and 8 (15.69%) were not at all satisfied (Table 7). In continuation of this, the respondents were asked about the reasons of non-satisfaction. It was observed that support from parent organization and duration of the Programmes found to be the most reasons for their non-satisfaction with the current opportunities of professional training available to them. The data is presented in table 8.

Table 7: Level of Satisfaction with the training opportunities

Sl. No.	Level of Satisfaction	No. of respondents	Percentage (%)
1	Yes	22	43.14
2	Sometimes	21	41.18
3	No	8	15.69

Table 8: Reasons for non-satisfaction

Sl. No.	Reasons	No	%
1	Very few Programmess related to my areas of concern are available to me	1	1.96
2	Lack of expertise	1	1.96
3	Duration of Programmes	5	9.80
4	Timings of the Programmes	3	5.88
5	Programmess available in other cities	4	7.84
6	Support from parent organization	5	9.80

Level of knowledge and skills: Personal Skills

There were a series of questions asked for the respondents about the skills that they possess. It was observed that on an average half of the participants of the study felt that they possess good personal skills (Table 9) generic skills (Table 10) and IT skills (Table 11). In the case of personal skills, flexibility (65%) is important as librarians are multitasking, they need to adapt themselves to the situation and act accordingly. For example, if their is an error in data entry, data back up procedure then immediately need to solve by going through manuals or inquiring with respective personnel. Librarians need to be reflective (61%) in nature in cases like delivering reference services, directing users to the right resources, giving opinion in case of reference query raised by research scholars, so their personal skills play an important role in operating library functions smoothly to deliver the best services to the users. Analytical skills (61%) are useful especially in the case of classification of books and creativity (61%) is reflected in case of reference services such as making banners/ flyers for the library, book display, signages used in the library which needs a lot of creativity and understanding of library users and their taste, which again can be reflected from choosing the right film screening for students in the library. The data is presented in Table 9.

Table 9: Personal skills

Sl. No.	Personal skills	Poor	%	Average	%	Good	%	Excellent	%
1	Analytical skills	3	5.88	13	25.49	**31**	60.78	4	7.84
2	Creative (power to create)	0	0.00	11	21.57	**31**	60.78	9	17.65
3	Flexible	0	0.00	10	19.61	**33**	64.71	8	15.69
4	Reflective	0	0.00	18	35.29	**31**	60.78	2	3.92
5	Can handle varied users	0	0.00	6	11.76	**26**	50.98	19	37.25
6	Adaptable	0	0.00	9	17.65	**30**	58.82	12	23.53
7	Proactive	0	0.00	12	23.53	**23**	45.10	16	31.37
8	Responsive to others' such as colleague, users,	0	0.00	5	9.80	**26**	50.98	20	39.22
9	Keen	0	0.00	9	17.65	**26**	50.98	16	31.37
10	Self -motivated	0	0.00	9	17.65	**22**	43.14	20	39.22
11	Marketing skills	3	5.88	15	29.41	**29**	56.86	4	7.84
12	Professional networking skills	1	1.96	17	33.33	**27**	52.94	6	11.76

Level of Knowledge and Skills: Generic Skills

In case of generic skills project management and presentation skills are particularly important and rated high (59%) by respondents as the library is service oriented and librarian need to converse with right from higher authorities to wide range of users, their presentation skills are tested in library committee and even with novice users coming to the library. As rightly said that librarian is teacher of teachers, their teaching and training skills are required especially in the library orirentation Programmes where, with his / her skills, teaching aids, resources and technology they need to make novice user a life long reader. Personal and online Communication skills (55%) are useful and has become the intergral part of librarianship as the technology is advancing in

automating libray to discovery services, asynchronous to real time communication is must. The data is presented in Table 10.

Level of Knowledge and Skills: IT Skills

In the case of IT skills, awareness of database concept was scored more (59%). Bibliographic, citation and full-text databases are subscribed by the libraries, so the general concept of database along with searching skills (51%) is a necessity. This is particularly important in the case of teaching database searching effectively to the users in advanced orientation Programmess. The respondents also agreed that word processing skills which are the utmost required in report writing in the library has become an important skill, the features of word such as tables, review, references widely used by them. In the case of

Table 10: Generic Skills

Sl. No.	Generic skills	Poor	%	Average	%	Good	%	Excellent	%
1	Personal and online Communication skills	0	0.00	10	19.61	**28**	54.90	13	25.49
2	Ethical standards and social responsibility ("an awareness of the need for and commitment to the maintenance of high professional standards and social justice.")	2	3.92	15	29.41	**25**	49.02	10	19.61
3	Project management and presentation skills	1	1.96	12	23.53	**30**	58.82	8	15.69
4	Critical thinking	1	1.96	12	23.53	**29**	56.86	9	17.65
5	Teamwork	0	0.00	4	7.84	**26**	50.98	21	41.18
6	Problem solving	1	1.96	7	13.73	**29**	56.86	14	27.45
7	Leadership	0	0.00	7	13.73	**28**	54.90	16	31.37
8	Building strategic partnerships/relationships	0	0.00	18	35.29	**27**	52.94	6	11.76
9	Research skills	0	0.00	15	29.41	**26**	50.98	6	11.76
10	Teaching and training skills	0	0.00	11	21.57	**29**	56.86	11	21.57
11	Negotiation skills	2	3.92	12	23.53	**26**	50.98	11	21.57

electronic presentation skills, making a good presentation, effectively present in front of higher authorities, and the library users using a projector or via remote desktop has become a routine library culture. The data is presented in Table 11.

Table 11: IT Skills

Sl. No.	IT skills	Poor	%	Average	%	Good	%	Exce-llent	Perce-ntage %
1	Word Processing Skills	0	0.00	15	29.41	26	50.98	19	37.25
2	Spreadsheets Skills	1	1.96	14	27.45	24	47.06	12	23.53
3	Awareness about Database concept	1	1.96	11	21.57	30	58.82	9	17.65
4	Electronic Presentation Skills	2	3.92	13	25.49	25	49.02	11	21.57
5	Web Navigation Skills	4	7.84	14	27.45	22	43.14	11	21.57
6	Web Site Design Skills/ Web publishing skills	14	27.45	14	27.45	18	35.29	5	9.80
7	E-Mail Management Skills	2	3.92	11	21.57	20	39.22	18	35.29
8	Digital Cameras / CCTV cameras	9	17.65	15	29.41	22	43.14	5	9.80
9	Computer Network Knowledge Applicable	7	13.73	11	21.57	24	47.06	9	17.65
10	File Management & Windows Explorer Skills	3	5.88	13	25.49	20	39.22	15	29.41
11	Downloading Software From the Web	6	11.76	13	25.49	21	41.18	11	21.57
12	Installing Computer Software on to a Computer System	10	19.61	12	23.53	20	39.22	9	17.65
13	Blackboard Teaching Skills	9	17.65	15	29.41	24	47.06	3	5.88
14	Video conferencing skills	13	25.49	19	37.25	18	35.29	1	1.96
15	Computer-Related Storage Devices (Knowledge: CDs, USB drives, DVDs)	5	9.80	7	13.73	26	50.98	13	25.49
16	Scanner Knowledge	4	7.84	11	21.57	23	45.10	13	25.49
17	Knowledge of PDAs	9	17.65	16	31.37	20	39.22	6	11.76
18	Deep Web Knowledge	11	21.57	15	29.41	20	39.22	5	9.80
19	Web 2.0 skills	8	15.69	14	27.45	21	41.18	8	15.69
20	Computer Security Knowledge	9	17.65	16	31.37	19	37.25	7	13.73
21	Photocopying and printer handling skills	5	9.80	12	23.53	24	47.06	10	19.61
22	Online searching & Information retrieval	3	5.88	3	5.88	26	50.98	19	37.25

Level of Knowledge and Skills: Technical skills

It was observed that almost half of the respondents felt that they possess average technical skills except for few cases they rated as good. The respondents felt that they possess good skills in the area of eBooks acquisition, maintenance and content management system

(53%) which is a good sign that the change in library operation is imbibed by the respondents. This was followed by advanced web technologies (50%) as the World Wide Web and its underlying technologies are increasingly gaining importance for the development of interactive web applications which are becoming crucial for librarians. Even the educational copyright knowledge is utmost important aspect (48%), while delivering the services, scanning the full-text documents, and uploading documents on the website which may create problem for librarians. Acquisition, licensing, or creation of information using different digital media and formats is gaining momentum and in the present study found that respondents felt that they possess average skills in this context which means they need to be given good training to acquire required

Table 12: Technical Skills

Sl. No.	Technical skills	1 Poor	%	2 Average	%	3 Good	%	4 Excellent	%
1	Advance database management	12	23.53	13	25.49	22	43.14	4	7.84
2	Advance web technology	9	17.65	15	29.41	25	49.02	2	3.92
3	Content management system	8	15.69	14	27.45	27	52.94	2	3.92
4	Data interoperability/ federated search	9	17.65	17	33.33	24	47.06	1	1.96
5	Development of web applications	12	23.53	22	43.14	16	31.37	1	1.96
6	Digital library technology/ software e.g.DSpace	11	21.57	21	41.18	16	31.37	3	5.88
7	Encoded archival description	13	25.49	26	50.98	12	23.53	0	0.00
8	Information architecture for the web to determine the structure, design and flows of information	13	25.49	25	49.02	13	25.49	0	0.00
9	Information visualization	9	17.65	23	45.10	18	35.29	1	1.96
10	Web Programmes	17	33.33	22	43.14	11	21.57	1	1.96
11	Mobile application development	17	33.33	23	45.10	9	17.65	2	3.92
12	Educational Copyright Knowledge	10	19.61	15	29.41	24	47.06	2	3.92
13	Web archiving	12	23.53	19	37.25	19	37.25	1	1.96
14	Digital preservation & access	9	17.65	17	33.33	21	41.18	4	7.84
15	Licensing regarding databases	12	23.53	18	35.29	18	35.29	3	5.88
16	eBooks acquisition and maintenance	6	11.76	14	27.45	27	52.94	4	7.84
17	Acquisition, licensing or creation of information using different digital media and formats	7	13.73	24	47.06	17	33.33	3	5.88
18	Metadata creation and management skills	13	25.49	24	47.06	11	21.57	3	5.88
19	Augmented reality and RFID technology	14	27.45	22	43.14	14	27.45	1	1.96
20	3D printers & maker spaces	20	39.22	24	47.06	7	13.73	0	0.00

skills. It has become a necessity for librarians to create library guides, FAQs, and information literacy /library orientation videos and upload them on the website as it may serve all users which is very common in foreign university libraries. Again evident from the respondents that they possess average skills in case of Metadata creation, Information architecture which need to be addressed by developing special courses/ training Programmess for them by the leading professionals in the LIS field. The data is shown in table 12.

IT Skills needed at the time of employing professional staff

The same questions about Personal, Generic, IT, Technical skills were asked to the respondents that what were their expectations about these skills when they want to employ professional

(entry-level position) staff in their library, which of these qualities should they possess. It was observed that at the time of employing professional (entry level position) staff in the library, almost all personal (Table 3) & generic skills (Table 4) were necessary. In case of IT skills, it was noted that respondents were highly expected from new employees about photocopying and printer handling skills (45, 88.24%), scanner knowledge (42, 82.35), word processing skills (38, 74.51) online searching and information retrieval skills (38, 74.51). Whereas, Deep Web Knowledge (10, 19.61%), Video conferencing skills (15, 21.41%), Blackboard Teaching Skills (19, 3.25%), File Management & Windows Explorer Skills (19, 3.25%) were least expected from the respondents. The data is presented in figure 2.
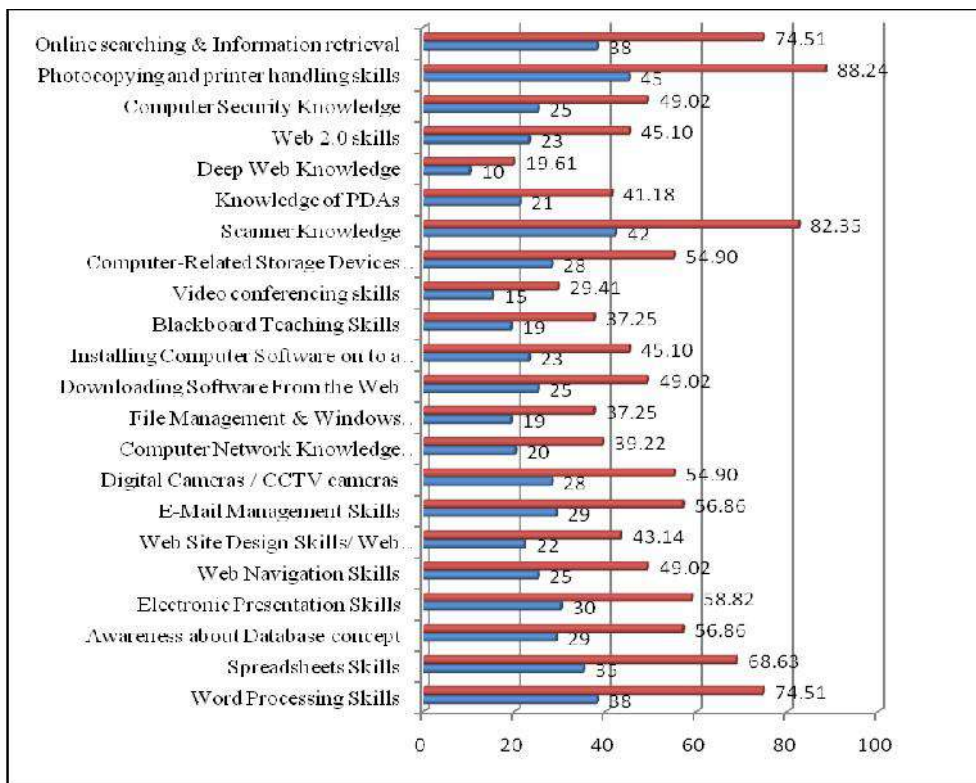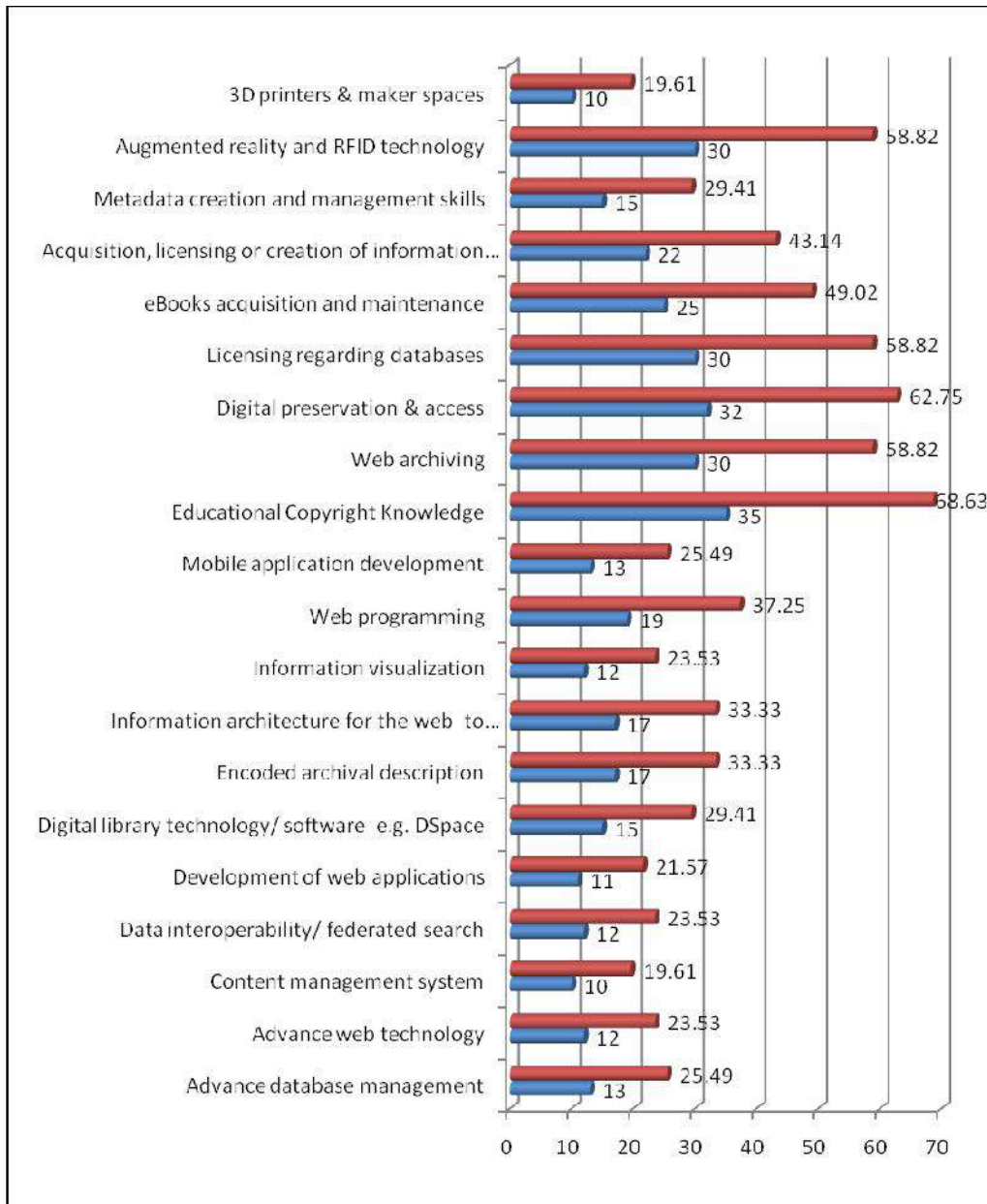

Figure 2: IT Skills needed at the time of employing professional staff

Technical Skills needed at the time of employing professional staff

It was noted that technical skills needed at the time of employing professional staff were i.e. 35 (68.63%) have Educational Copyright Knowledge, 32 (62.75) Digital preservation & access, and 30 (58.52) respondents said that web archiving, Augmented reality and RFID technology and Licensing regarding databases should be necessary. 10 (19.61%) respondents mentioned that knowledge of Content management system and 3D printers & maker spaces were necessary as it is not common in India till today. The data is presented in figure 3.

Figure 3: Technical Skills needed at the time of employing professional staff

Essential qualities for Library Administrator

The respondents were asked about the qualities that are required as a library administrator. Out of the listed qualities, most of the respondents gave importance to the qualities i.e. Communication, vision & creativity, whereas, minimum importance was given to the integrity and supervising staff. The data is presented in figure 4.
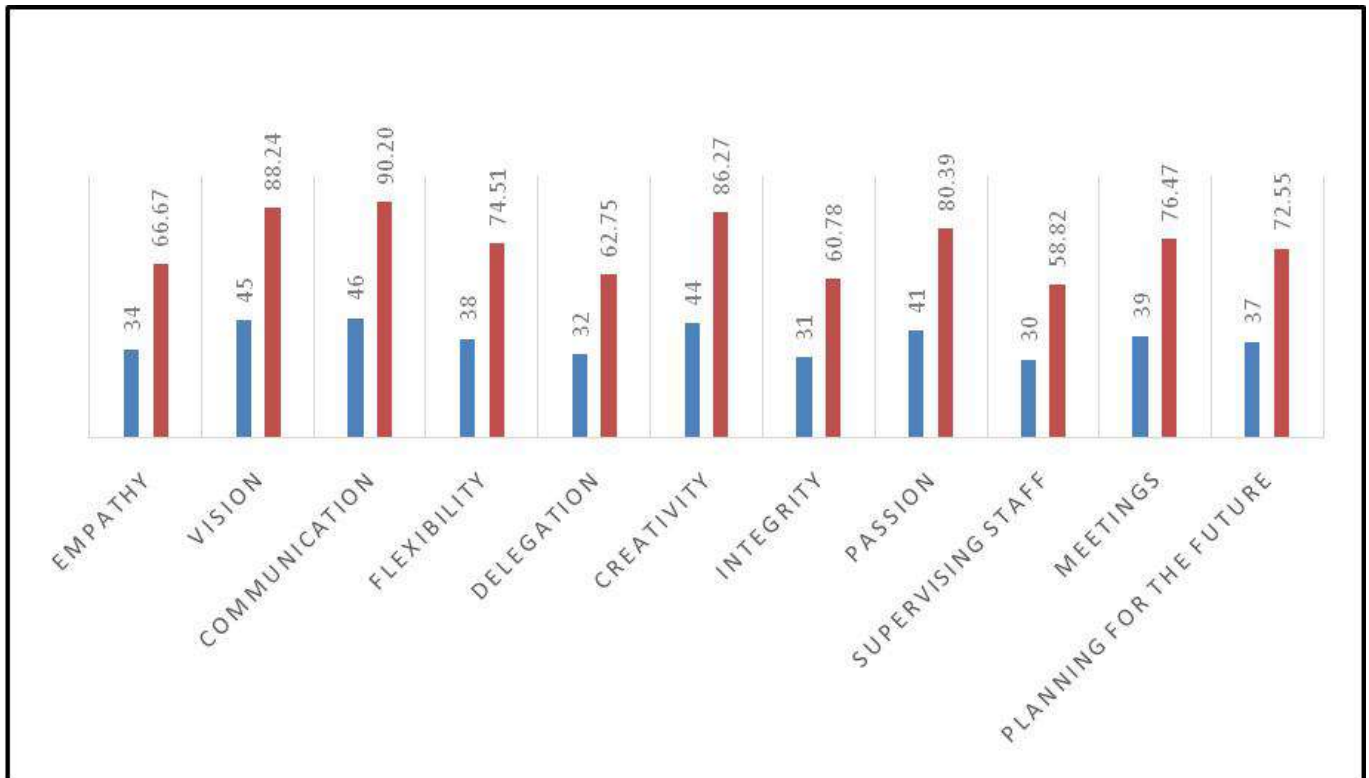

Figure 4: Required Qualities

Revision of LIS curricula as per changing needs in this digital era

All the respondents unanimously agreed that to become a successful librarian in the digital era library schools should revise curricula as per the changing needs and should produce productive and well-skilled students.

Opinion regarding specialized courses, LIS course and its future

The respondents were asked about their opinion regarding the collaboration between library schools with other departments such as computer science to come out with new degree/discipline so that students will become successful librarian in digital era. It was noted that nearly all respondents felt that library schools should collaborate with other department such as computer science to come out with new collaborative courses to sustain in the future.

The respondents were asked to give their opinon regarding specialized courses offered by LIS schools, such as knowledge or records management / Web archiving in collaboration / partnership with working librarians. It was observed that 35 (69%) respondents

agreed that LIS Schools should offer specialized courses in collaboration with working skilled librarians. Whereas, 15 (29%) respondents said that LIS Schools should independently offer specialized courses.

When asked about the expectations from LIS schools about the changes that are happening in the profession. The respondents expressed varied expectations concerning decline of enrollment, restricted job opportunities, personality development as part of syllabus, timely syllabus revision with more technical and IT skills based syllabus, rigorous training /practicals, campus recruitments, MOOCs development by LIS schools etc.

DISCUSSION AND CONCLUSION

Overall, it was noticed that academic librarians attend different types of professional development training Programmes. It is recommended that fully focussed training Programmes should be organised considering the level of professionals such as for beginners and mid-career as the beginners level professionals' needs are different than mid-career professionals. It can also be recommended for beginners to take the MOOCs by SWAYAM (Example: Emerging Trends & Technologies in Library & Information Services (ETTLIS)) as they can help LIS professionals to enhance professional competency and skills. There are few courses available on SWAYAM for librarians to update their knowledge and skills. The complete list is available on swayam.gov.in.

It was noted from the present study that apart from the professional development training Programmesmeseses, LIS professionals also gained knowledge and skills from 'On the job', subscribing 'Scholarly journal articles', 'Trial and error on their own', etc. It can be recommended for professionals to develop

and capture their own talent in the form of small videos that they can preparer with the help of online video or screen capturing apps and should upload on YouTube to make it available for others. It will certainly help budding professionals to find solutions to their problems or can be served as guidance. Some of the respondents were not satisfied with the training Programmess because of some reasons such as Lack of expertise, Duration of Programmes, Timings of the Programmes, Programmess available in other cities, Support from the parent organization. They think that very few Programmess related to their areas of concern are available to them. In this scenario, a pool of experts should be identified at the national and international level that can guide the professionals struggling to find solutions for their problems. For example, there are plenty of mailing list forums to circulate the query generated but very few give solutions. This particular suggestion should be taken up by library associations to work on developing experts zonal wise and skills-wise.

It was observed that respondents felt that library schools should collaborate with other departments such as computer science to come out with new courses for the future needs of librarians or library schools should offer specialized courses, allied areas to the library science such as knowledge or records management / Web archiving / Personal librarianship / Mediacl librarianship / Library entrepreneurship by collaborating with working skilled librarians. A very successful attempt is by Prof. Shalini Urs who founded ISiM (International School of Information Management) - the first Information School in India at the University of Mysore with the global funding and collaboration. So such strong initiatives should be taken up by current LIS leaders to start a new branch of library science and evolve further.

It was revealed that the respondents felt that those qualities that they possess i.e personal, generic, IT skills

they expect approximately the same qualities from staff which will likely join. But in case of the IT skills, their expectations from new incoming staff is very basic, for example, they expect new staff should possess scanning and photocopying, online searching and word processing skills. In the case of technical skills copyright and licensing, augmented reality and RFID technology skills were highly expected in case of fresh recruitment. As more e-resources and databases are subscribed by the libraries more knowledge of liscencing is required infused with their negotiation skills. Again associated with this, knowledge of digital preservation is expected as day by day libraries will more focus on acquiring e-resources that beneath the long term maintenance and access.

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