

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/337021964>

Research Skills among LIS Research Scholars in Tamil Nadu : A study

Article · January 2012

CITATIONS

0

READS

106

4 authors, including:



[Sivakumaren K.S](#)

Anna University, Chennai

38 PUBLICATIONS 116 CITATIONS

[SEE PROFILE](#)



[Swaminathan Sethu](#)

Ramakrishna Mission Vidyalaya

12 PUBLICATIONS 50 CITATIONS

[SEE PROFILE](#)



[Jeyapragash Balasubramani](#)

Bharathidasan University

101 PUBLICATIONS 118 CITATIONS

[SEE PROFILE](#)

Research Skills among LIS Research Scholars in Tamil Nadu : A study

K.S.Sivakumaren*, S.Swaminathan**, B.Jeyaprakash*** and G.Karthikeyan****

*Assistant University Librarian, Library,
MIT Campus, Anna
University, Chennai, Tamil Nadu, India

**Librarian, Sri Ramakrishna Mission
Vidyalaya College of Education,
Coimbatore

***Assistant Librarian, University Library,
Bharathidasan University, Trichy,
Tamil Nadu, India

****Library Assistant, University Library,
Bharathidasan University, Trichy

Corresponding Author
K.S. Sivakumaren
siva_kumaren@yahoo.co.in

ABSTRACT

The study attempts to analyze the ICT and Research skills of LIS research scholars. The data were collected from the Research Scholars who are presently pursuing their research in various Universities/Colleges under full time and part-time schemes in Tamil Nadu. A well structured questionnaire was designed to collect the data from the respondents. Based on the study, it is found that majority of research scholars were high skilled in the basic application of computer technologies and further it is found that the research scholars should improve their skills in statistical analysis, presentation skills, report writing and web technologies. It is further recommended that the department of Library and Information Science must include ICT and research skills as a part of their syllabus to impart these skills at primary level of LIS education.

Keywords: LIS, Research, ICT Skills, Research Skills, Research Scholars

Received on: 17.02.2012; Revised on: 22.03.2012; Accepted on: 28.03.2012

INTRODUCTION

Research is a scientific undertaking which means of logical and systematic methods, aims to discover new facts, or verify old facts and to analyze their sequences, interrelationships, casual explanations and the natural laws which govern them. It is critical study or examination in seeking facts or principles, intelligent and diligent investigation in order to ascertain some thing. It answers questions by accumulation and assimilation of generalization, correct or verify knowledge. It is also an intellectual act that starts with the asking of question and progress through the critical and analytical study of evidence and arrives at new conclusions or new knowledge, Tejomurthy and Kumar (1998).

Research refers to the systematic method used to identify area, to determine research problem, to formulate research questions, objectives or hypothesis, to collect data, to analyze data and reach certain conclusions towards the concerned problem. According to Huber, (2003) that "Universities are scholarly communities" and encourage the students to become research communities.

RELATED LITERATURE

Ochai and Nedosa (1998) found that many studies attributed the low research and publication output of LIS professionals which requires acquisition of adequate research, writing skills and identification of research problems. Powell, Barker and Mike (2002) found that LIS practitioners are not involved

in research and further stated the majority of them read at least one research journals, but only less number of them perform research occasionally or frequently which are related to their job. McNicol and Nankivell (2002) identified the lack of skills and knowledge for conducting research among LIS researcher. According to Avemeriautulu (2005) that Self perception is a product of education and skills acquired at the early days of professional practice which also determines the ability to produce scholarly output. Sedikadiwa (2005) investigated that lack of funds as part of encumbrances to research and publication activities. Boaduo and Babitseng (2007) studied that research has always been the main approach to problem solving by all categories of professionals right from the ancient time. Moahi (2007) found that lack of time and inadequate research skills as part of the hindrances. Anunobi and Emerole (2008) recommended that library and information science educators should include research skills and methods in their curriculum to enhance research skills. Haneefa (2007) identified the factors such as lack of fund for ICT infrastructures, lack of ICT skilled professionals in the library. Ramesh Babu et. al (2007) remarked that the LIS professionals need to acquire knowledge and skills in the application of ICT to provide effective library services to the users. Mohsenzadeh (2009) highlighted that the application of ICT in academic libraries should improve to match with ever increasing demand for better library services at universities. Rajesh Kumar Singh (2007) revealed that the library staff need to acquire enhanced level of ICT literacy, ICT training and also improve adequate infrastructure facilities in the library.

OBJECTIVES OF THE STUDY

- ❑ To analyze the ICT skills among LIS research scholars
- ❑ To analyze the Research skills among LIS research scholars

METHODOLOGY

A well structured questionnaire was designed to collect data from the research scholars. It was divided into three sections namely personal information, Level of ICT skills and Level of Research skills. These are directly administrated to the

research scholars those who are pursuing research programme such as M.Phil and PhD under full time and part time schemes in various universities and colleges in Tamil Nadu. A total of 130 questionnaires were distributed and 118 research scholars have responded (90.76%).

DATA ANALYSIS AND FINDINGS

Distribution of Respondents

The demographic information related to respondents is given in table 1.

Table 1 : Demographic Information

S.No	Description	Research Programme				Gender							
		M.Phil n=36(30.5%)		P.hD n=82(69.5%)		Male n=79(66.9%)				Female n=39(33.1%)			
						M.Phil		P.hD		M.Phil		P.hD	
		FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT
1.	Librarian	0 (.0%)	10 (47.6%)	0 (.0%)	51 (69.9%)	0 .0%	8 44.4%	0 .0%	29 60.4%	0 .0%	2 66.7%	0 .0%	22 88%
2.	Assistant Librarian	0 (.0%)	7 (33.3%)	2 (22.2%)	8 (11%)	0 .0%	7 38.9%	2 66.7%	8 16.7%	0 .0%	0 .0%	0 .0%	0 .0%
3.	Library Assistant	2 (13.3%)	4 (19%)	0 (.0%)	12 (16.4%)	2 20%	3 16.7%	0 .0%	10 20.8%	0 .0%	1 33.3%	0 .0%	2 8%
4.	Research Scholar	13 (86.7%)	0 (0%)	7 (77.8%)	2 (2.7%)	8 80%	0 .0%	1 33.3%	1 2.1%	5 100%	0 .0%	6 100%	1 4%

(FT=Full Time and PT=Part-Time)

It is found from table 1 that 36(30.5%) of M.Phil research scholars and 82 (69.5%) of Ph.D research scholars are pursuing M.Phil and Ph.D programmes under fulltime and part-time schemes. It is further indicated that 79(66.9%) of male respondents, 39(33.1%) of female respondents are doing research programmes under fulltime and part-time schemes.

ICT Skills

Eight ICT skills were identified and ascertained on three point scales such as "Low", "Medium" and "High" and the same is given in table 2.

Table 2 : ICT SKILLS

S.No	Description	L	M	H	Total
1.	Basics of Computers	2 1.7%	39 33.1%	77 65.3%	118 (100%)
2.	Operating System	21 17.8%	58 49.2%	39 33.1%	118 (100%)
3.	Ms-Word	4 3.4%	27 22.9%	87 73.7%	118 (100%)
4.	Ms-Excel	12 10.2%	31 26.3%	75 63.6%	118 (100%)
5.	Ms-Power Point	7 5.9%	46 39.0%	65 55.1%	118 (100%)
6.	Internet	4 3.4%	37 31.4%	77 65.3%	118 (100%)
7.	Web-Technologies	20 16.9%	62 52.5%	36 30.5%	118 (100%)
8.	Storage Devices	6 5.1%	30 25.4%	82 69.5%	118 (100%)

(L=Low; M=Medium; H=High)

The respondents were asked to indicate the level of ICT skills. It is found from table 2 that majority 87(73.7%) of respondents were found highly skilled on "Ms-Word" .Further, it is also found that 82(69.5%) of respondents were highly skilled on "Storage Devices. It is indicated that 77(65.3%) of respondents were highly skilled on "Internet". A good number of respondents 75(63.6%) were highly skilled on "Ms-Excel" and

a very few respondents 36(30.5%) were highly skilled on "Web-Technologies"

Distribution of ICT Skills by Research Programme

ICT skills were further ascertained based on the research programmes such as M.Phil and P.hD by three point scales such as "Low", "Medium" and "High" and the same is given in table 3.

Table 3 : ICT Skills Vs Research Programme

S.No	Description	M.Phil n=36			P.hD n=82		
		L	M	H	L	M	H
1.	Basics of Computers	2 5.6%	14 38.9%	20 55.6%	0 .0%	25 30.5%	57 69.5%
2.	Operating System	4 11.1%	21 58.3%	11 30.6%	17 20.7%	37 45.1%	28 34.1%
3.	Ms-Word	4 11.1%	7 19.4%	25 69.4%	0 .0%	20 24.4%	62 75.6%
4.	Ms-Excel	4 11.1%	8 22.2%	24 66.7%	8 9.8%	23 28.0%	51 62.2%
5.	Ms-Power Point	4 11.1%	12 33.3%	20 55.6%	3 3.7%	34 41.5%	45 54.9%
6.	Internet	3 8.3%	15 41.7%	18 50.0%	1 1.2%	22 26.8%	59 72.0%
7.	Web-Technologies	8 22.2%	20 55.6%	8 22.2%	12 14.6%	42 51.2%	28 34.1%
8.	Storage Devices	5 13.9%	11 30.6%	20 55.6%	1 1.2%	19 23.2%	62 75.6%

(L=Low; M=Medium; H=High)

The respondents were asked to indicate the level of ICT skills .It is indicated from table 3 that majority of M.Phil Research Scholars 25 (69.4%) were highly skilled on "Ms-Word" , "Ms-Excel" 24 (66.75%), followed by "Basics of Computers" 20(55.6%), "Storage Devices 20(55.6%) and majority of Ph.D Research Scholars 62(75.6%) were highly skilled on "Ms-Word" and "Storage devices". It is also indicated that 59(72%) of Ph.D Research Scholars, 18 (50%) of M.Phil Research Scholars were highly skilled on "Internet". It is further observed that 21(58.3%) of M.Phil Research Scholars and

37(45.1%) of Ph.D Research Scholars were possessed medium level of skills on "Operating Systems" and a very few M.Phil Research Scholars 8 (22.2%) and 28 (34.1%) of Ph.D Research Scholars were highly skilled on "Web Technologies".

Distribution of ICT Skills by Gender

ICT skills were further ascertained by gender on three point scales such as "Low", "Medium" and "High" and the same is given in figure1.

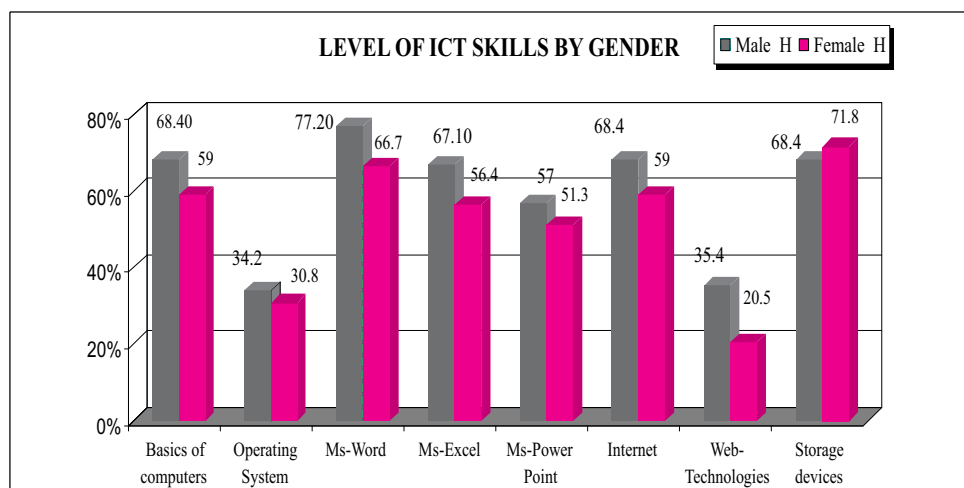


Figure 1.ICT skills by Gender

The respondents were asked to indicate the level of ICT skills .It is found from figure 1 that majority of male (77.2%) respondents and 66.7 % of female respondents were highly skilled on "Ms-Word" , followed by 68.4% of male respondents were highly skilled on "Basics of Computers", "Internet" and "Storage Devices" and 59% of female respondents were high skilled on "Basics of Computers" "Internet"(59%), and "Storage Devices" (71.8%).It is further found that a very few male respondents (35.4%) and female

respondents (20.5%) were highly skilled on "Web-Technologies".

Distribution of ICT Skills by Designation

ICT skills were further ascertained based on designations of the respondents such as Librarian, Assistant Librarians, Library Assistant and Research Scholars by three point scales such as "Low", "Medium" and "High" and same is given in table 4.

Table 4 ICT Skills Vs Designation

S.No	Description	Librarian n=61			Assistant Librarian n=17			Library Assistant n=18			Research Scholars n=22		
		L	M	H	L	M	H	L	M	H	L	M	H
1.	Basics of Computers	1 1.6%	24 39.3%	36 59%	0 .0%	4 23.5%	13 76.5%	0 .0%	3 16.7%	15 83.3%	1 4.5%	8 36.4%	13 59.1%
2.	Operating System	12 19.7%	31 50.8%	18 29.5%	2 11.8%	7 41.2%	8 47.1%	6 33.3%	5 27.8%	7 38.9%	1 4.5%	15 68.2%	6 27.3%
3.	Ms-Word	2 3.3%	15 24.6%	44 72.1%	0 .0%	2 11.8%	15 88.2%	1 5.6%	3 16.7%	14 77.8%	1 4.5%	7 31.8%	14 63.6%
4.	Ms-Excel	7 11.5%	16 26.2%	38 62.3%	1 5.9%	3 17.6%	13 76.5%	3 16.7%	3 16.7%	12 66.7%	1 4.5%	9 40.9%	12 54.5%
5.	Ms-Power Point	3 4.9%	26 42.6%	32 52.5%	1 5.9%	5 29.4%	11 64.7%	1 5.6%	5 27.8%	12 66.7%	1 4.5%	8 36.4%	13 59.1%
6.	Internet	2 3.3%	23 37.7%	36 59.0%	0 .0%	4 23.5%	13 76.5%	1 5.6%	4 22.2%	13 72.2%	1 4.5%	6 27.3%	15 68.2%
7.	Web-Technologies	9 14.8%	37 60.7%	15 24.6%	4 23.5%	6 35.3%	7 41.2%	3 16.7%	6 33.3%	9 50%	4 18.2%	13 59.1%	5 22.7%
8.	Storage Devices	3 4.9%	18 29.5%	40 65.6%	1 5.9%	3 17.6%	13 76.5%	0 .0%	4 22.2%	14 77.8%	2 9.1%	5 22.7%	15 68.2%

(L=Low ; M=Medium ; H=High)

The respondents were asked to indicate the levels of ICT skills. It is found from table 4 that majority of Librarians 44(72.1%) and Assistant Librarians 15(88.2%) were highly skilled on "Ms-Word" whereas 15(83.3%) of Library Assistants were highly skilled on "Basics of Computers" and 15(68.2%) of Research Scholars were highly skilled on "Internet and Web-Technologies". It is further found that 36(59%) of Librarians, 13(76.5%) of Assistant Librarians, 15(83.3%) of Library Assistants and 13(59.1%) of Research Scholars were highly skilled on "Basics of the Computers". A good number of Librarians 32(52.5%), Assistant Librarians 11(64.7%), Library Assistants 13 (59.1%) and Research

Scholars 13 (59.1%) were also highly skilled on "Ms-Power Point". It is further indicated that a very few Librarians 15(24.6%), Assistant Librarians 7(41.2) Research Scholars 5(22.7%) were highly skilled on "Web Technologies".

RESEARCH SKILLS

Research skills are very important in order to pursue research in any discipline. There were seven basic skills identified and ascertained among Research Scholars of LIS on three point scales such as 'Low', "Medium", "High" and the same is given in figure 2.

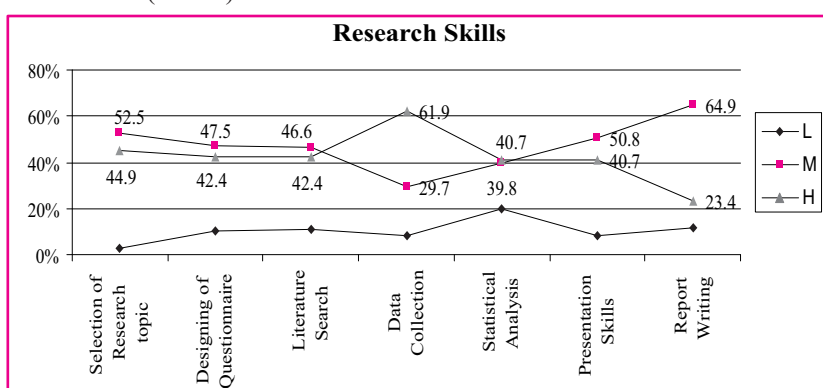


Figure.2

The respondents were asked to indicate the level of research skills. It is found from figure 2 that majority of respondents (61.9%) were highly skilled on "Data Collection" , followed by (52.5%) of respondents are possessed medium level of skills on "Selection of Research topic", "Presentation Skills" (50.8%) and Report Writing (64.9%).It is further observed that a good number of Research Scholars are possessed medium

level of skills on "Designing of Questionnaire(47.5%) and Literature Search (46.6%).A very few respondents (40.7%) were highly skilled on "Statistical Analysis".

Distribution of Research Skills by Gender

Research skills were further ascertained by gender on three point scales such as "Low", "Medium", "High" and the same is given in figure 3.

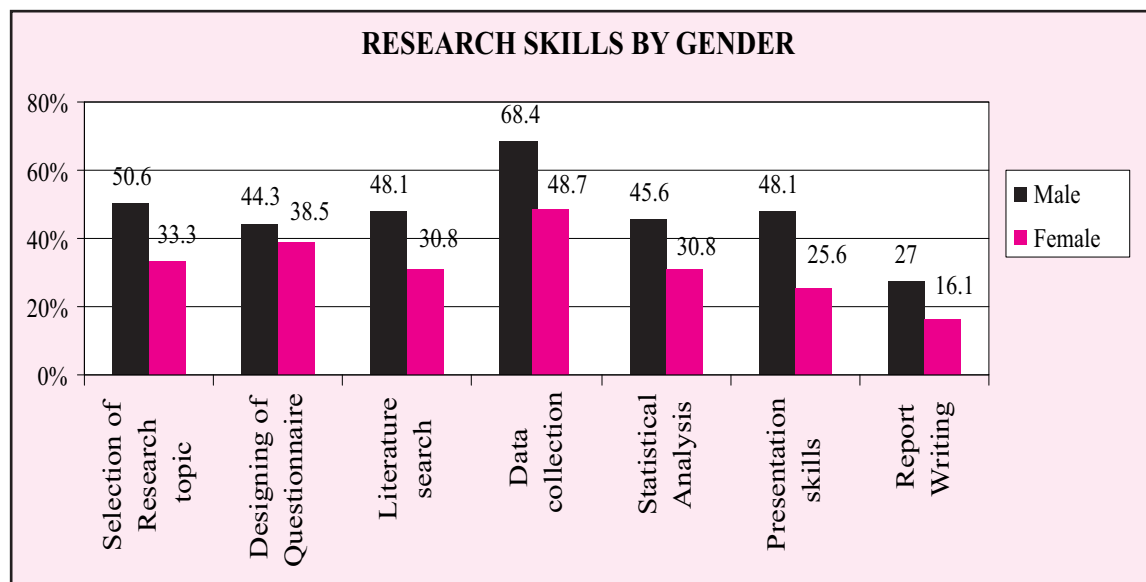


Figure 3 : Research Skills by Gender

The respondents were asked to indicate the level of skills on research. It is found from figure 3 that majority (68.4%) of male respondents and (48.7%) of female respondents were highly skilled on "Data Collection", followed by 50.6% of male were also highly skilled on "Selection of Research Topic" and 38.5% of female respondents were highly skilled on "Designing of Questionnaire". It is further observed that 48.1% of male respondents were highly skilled both on "Literature Search" and "Presentation Skills". It is also found that 33.3% of female respondents were highly skilled on

"Selection of Research Topic". A few male respondents (45.6%), female respondents (30.8%) were highly skilled on "Statistical Analysis" and it is further indicated that 27% of male respondents and 16.1% of female respondents were highly skilled on "Report Writing".

Distribution of Research Skills by Research Programme

Research skills were also ascertained based on Research Programme such as M.Phil & Ph.D and the same is given in table 5.

Table 5 Research Skills Vs Reseach Programme

S.No	Description	M.Phil n=36			P.hD n=82		
		L	M	H	L	M	H
1.	Selection of research topic	2 5.6%	18 50.0%	16 44.4%	1 1.2%	44 53.7%	37 45.1%
2.	Designing of Questionnaire	4 11.1%	18 50.0%	14 38.9%	8 9.8%	38 46.3%	36 43.9%
3.	Literature search	6 16.7%	20 55.6%	10 27.8%	7 8.5%	34 41.5%	41 50%
4.	Data collection	2 5.6%	10 27.8%	24 66.7%	8 9.8%	25 30.5%	49 59.8%
5.	Statistical Analysis	4 11.1%	11 30.6%	21 58.3%	19 23.2%	36 43.9%	27 32.9%
6.	Presentation Skills	2 5.6%	22 61.1%	12 33.3%	8 9.8%	38 46.3%	36 43.9%
7.	Report Writing	4 11.1%	21 58.3%	11 30.6%	6 7.3%	47 57.3%	29 35.4%

(L=Low ; M=Medium ; H=High)

The respondents were asked to indicate the level of skills on research. It is found from table 5 that majority of M.Phil Research Scholars 24 (66.7%) and Ph.D Research Scholars 49 (59.8%) were highly skilled on "Data Collection", followed by 21 (58.3%) of M.Phil Research Scholars were highly skilled on "Statistical Analysis" and 37 (45.1%) of Ph.D Research Scholars were highly skilled on "Selection of Research Topic". It is further observed that 36 (43.9%) of PhD scholars were highly skilled on designing of questionnaire and "Presentations Skills" whereas (44.4%) of M.Phil Research Scholars were

highly skilled on "Selection of Research Topic" and "Presentation Skills 12 (33.3%)". A good number of Ph.D research scholars 41(50%) were highly skilled on "Literature Search". It is further found that a very few M.Phil research scholars 10 (27.8%) were highly skilled on "Literature search".

Distribution of Research Skills by Designation

Research skills were further ascertained by designation on three point scales such as "Low", "Medium" and "High" and the same is given in table 6.

Table 6 Research Skills Vs Designation

S.No	Description	Librarian n=61			Assistant Librarian n=17			Library Assistant n=18			Research Scholars n=22		
		L	M	H	L	M	H	L	M	H	L	M	H
1.	Selection of Research topic	2 3.3%	33 54.1%	26 42.6%	0 .0%	9 52.9%	8 47.1%	0 .0%	7 38.9%	11 61.1%	1 4.5%	13 59.1%	8 36.4%
2.	Designing of Questionnaire	7 11.5%	25 41.0%	29 47.5%	1 5.9%	8 47.1%	8 47.1%	1 5.6%	10 55.6%	7 38.9%	3 13.6%	13 59.1%	6 27.3%
3.	Literature Search	7 11.5%	24 39.3%	30 49.2%	2 11.8%	10 58.8%	5 29.4%	2 11.1%	9 50.0%	7 38.9%	2 9.1%	12 54.5%	8 36.4%
4.	Data Collection	4 6.6%	18 29.5%	39 63.9%	1 5.9%	4 23.5%	12 70.6%	3 16.7%	2 11.1%	13 72.2%	2 9.1%	11 50%	9 40.9%
5.	Statistical Analysis	11 18.0%	26 42.6%	24 39.3%	2 11.8%	7 41.2%	8 47.1%	6 33.3%	4 22.2%	8 44.4%	4 18.2%	10 45.5%	8 36.4%
6.	Presentation Skills	5 8.2%	29 47.5%	27 44.3%	1 5.9%	9 52.9%	7 41.2%	2 11.1%	9 50.0%	7 38.9%	2 9.1%	13 59.1%	7 31.8%
7.	Report Writing	4 6.6%	37 60.7%	20 32.8%	0 .0%	11 64.7%	6 35.3%	2 11.1%	7 38.9%	9 50.0%	4 18.2%	13 59.1%	5 22.7%

(L=Low ; M=Medium ; H=High)

The respondents were asked to indicate the level of research skills. It is found from table 6 that majority of Librarians 39(63.9%), Assistant Librarians 12 (70.6%), Library Assistants 13 (72.2%) and Research Scholars 9 (40.9%) were highly skilled on 'Data Collection'. It is also observed that 33(54.1%) of Librarians are possessed medium level of skills on 'Selection of Research topic'. It is also found that a good number of Librarians were highly skilled on "Literature Search" 30(49.2), "Designing of Questionnaire 29(47.5%), and Presentation Skills 27 (44.3%). A good number of Assistant Librarians 11(64.7%) and Research Scholar 13 (59.1%) are possessed medium level of skill on "Report Writing"

CONCLUSION AND RECOMMENDATIONS

ICT and Research skills are very much essential in order to carry out the research programmes in all disciplines especially in Social Science research. The research output in Library and Information Science is rapidly increased during recent past. It is further to state that many universities are also introduced research programmes under fulltime and part-time

schemes. The Research Scholars must improve their ICT, and research skills to perform the activities effectively to produce a good quality of research. The following recommendations are made based on the study that

- ❑ Research Scholars should improve their ICT Skills in Web based technologies. It will help them to integrate the Information and Communication Technologies with LIS to invent a new technology.
- ❑ It is most important that the research scholars to learn statistical techniques for analysis the data in a systematic order and to produce good results in their research.
- ❑ The Departments of Library and Information Science must introduce practical based curriculum to evaluate research skills at primary level and this will help the research scholars to produce the quality of research in their respective areas.

REFERENCES

Avemeriautulu, S.C (2005). "Role of journals in developing emerging scholars in library and information science." In Aina, L.O., Alemna, A.A.and Mabawonku, I. (eds.) Improving the

quality of library and information science journals in West Africa: a stakeholder's conference. Proceedings of the conference held at the Conference Centre University of Ibadan, Nigeria, Ibadan, Nigeria. Third world Information Services Ltd.

Anunobi, C.V and Emerole, N (2008). Motivation and encumbrance to research and publication: The case of Nigerian library and information science (LIS) practitioners. *Education Research and Review*, 3(2), 066-072.

Boaduo, N.A., & Babitseng, S.M. (2007). The need for teachers to be researchers. *The African Symposium: An Online Journal of Africa Educational Network* 7 (1), 183-191.

Haneefa, M (2007). Application of Information and Communication Technologies in special Libraries in Kerala (India). *Library Review*, 56(7), 603-620.

Huber, M. (2003). What individual can do to develop teaching and research links, paper presented at the American Association for higher education Conference, Washington DC, 14-17 March, 2003.

McNicol, S. and Nankivell, C. (2002) :The LIS Research Landscape: A Review and Prognosis. Center for Information Research (CIRT).

Moahi, K.H. (2007). Library and information science research in Botswana: An analysis of trends and patterns. World Library and Information Congress. 73rd IFLA Conference and Council, 20-23 August, Durban, South Africa.

Mohsenzadeh, F (2009). Application of Information Technology in academic Libraries. *The Electronic Library* 27(6), 986-998.

Ochai A, Nedosa, P (1998). Publication output of librarians the search for alternative justification. *African journal of Library Archives, Information Science*, 8(2), 89-96.

Powell, R.R, Bark, L.M & Mika, J. (2002). Library and Information Science practitioners and researchers. *Library Information Science Research*, 24, 49-72.

Ramesh Babu. B (2007), Vinayagamoorthy. P & Gopalakrishnan. S. ICT Skills among Librarians in Engineering Educational Institutions in Tamil Nadu. *DESIDOC Bulletin of Information Technology* 27(6), 55-63.

Rajesh Kumar (2007). Information and Communication Technology (ICT) Literacy among the Staff of Banaras Hindu University Library System: A Case Study. *Library Herald*, 27 (3), 244-252.

Sendikakawa, E (2005). Scholarly publishing in East African Public Universities. Research report presented at staff-students seminar, University of Da es Salaam Library 6th October (unpublished).

Tejomurthy, A and Kumar, PSG (1998). Research in Library and Information Science, *DESIDOC Bulletin of Information Technology*, 18(1), 11-18.

