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Role of Librarians' Information Literacy Skills to Enhance Research Culture: A Case Study of University of Agriculture Faisalabad

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ABSTRACT:

This study has investigated the role of librarians' Information Literacy (IL) skills to enhance the research productivity of Faculty Members of the University of Agriculture Faisalabad, Punjab, Pakistan. The population of the study was the faculty members of the University of Agriculture and five library professionals of the university's Central Library. A quantitative approach followed by a survey research design was adopted to meet the objectives of the study. Data were gathered through the instrument of the questionnaire. Quantitatively driven data was analyzed by SPSS Software. Results showed that Library professionals played a vital role in the promotion of research culture on the whole. IL instruction programs were of great value for the output of research productivity. Library professionals faced several barriers including lack of information literacy training, Unreliable power supply, the ineffective role of library organizations, lack of funding from institutions, lack of proficiency to use the internet, personal health issues, and official issues like leaves, permissions, work burden, etc. The most preferred suggestions to improve IL skills of LIS professionals and faculty members are; provision of funds or scholarships, revision of LIS curriculum, the active role of Pakistan Library Association (PLA), National IL skills training program for LIS professionals and faculty members, and instructional programs for the improvement of IL skills of faculty members and librarians.

Keywords: Role of Information Literacy, Information Literacy Skills, Role of Librarians in Research productivity

BACKGROUND & INTRODUCTION:

Humanity has now been living in a modern “Information era” and society has confidently recognized that information has become a very effective tool for continuous progress. Successful survival in this modern era demands that one should be multi-dimensional in approach for acquiring information while serving in a field or profession (Psacharopoulous & Mahmood, 2008). Now a day the Explosion of Information and its specialization has emerged as the potential outcome of the information revolution in the 21st century. The researchers and general public do get plenty of ways and channels to attain information from different resources and various techniques for their various purposes, and they need information for every field of life and to fulfill their various tasks and meet the various goals of life, during that period they have plenty of options of information and various resources of information in front of them for their required information needs and wants and they have plenty of options to choose right information for the right person for the right time to complete and the specific task of information from thousands of available resources and various methods to ascertain every type of their necessary information.

The Society of College, National, and University Libraries (SCONUL) in the UK and Ireland has presented seven Pillars of Information Skills Model for IL training. This model consists of a basic library and IT skills (Webber & Johnston, 2003). This model was revised according to changing scenario of information needs in 2011 as a generic "core" model for Higher Education with a series of "lenses" for different learning groups of various communities and ages (SCONUL, 2011).

Kuhlthau (2005) developed the Information search process (ISP) model. He was a Professor of LIS at Rutgers University in New Jersey. In this model, it has been shown that how users move toward their research process and it has also been shown in this model that how the confidence of each user increase at each stage of their research. There are some stages in this model: include initiation, selection, exploration, formulation, collection, presentation, and assessment.

Another model which is also well known, named as Pathways to Knowledge Information Skills Model was developed by Professor Marjorie Pappas and Follett. It is an elegant model of IL, which is completed with recommended strategies, forms of expression, and methods of teaching and learning. There are certain stages in this model which include appreciation, pre-search, search, interpretation, communication, and evaluation (Pappas & Tepe, 1997)

This study will highlight the librarians to consider the prominence of IL Skills and their potential impact on their users, particularly the researchers. This study will determine the Role of Librarians' IL skills and will examine the impact of Librarians' IL skills on the research productivity of faculty in Agriculture University as well. This study will play a substantial role in the measure the level as well as the quality of IL skills of the librarians and faculty members of the University of Agriculture Faisalabad. The results of this study can be generalized to all those universities having similar teaching and education system, strategies, and circumstances. This study may also be helpful for librarians and faculty members to become critical consumers of the published literature. This study may also be helpful to advocate the initiate of IL initiative in the higher education curriculum. This study may also be helpful to point out the difficulties faced by librarians and faculty members of the university during the acquisition of the IL process. This study may also be useful to the IL training organizations and stakeholders to design and planning the programs to the enhancements of IL, skills of researchers, and to faculty members of universities and other institutions.

This study is delimited to the University of Agriculture Faisalabad but will be helpful for other Agricultural Universities in the world with similar systems, policies circumstances, and also teaching and learning environments. The respondents were library professionals and faculty members of Agricultural University Faisalabad.

LITERATURE REVIEW:

Information literacy involves the polishing of IL skills also to help literate persons to the establishment in a better way. Concerning work on online skills, it was revealed about such capabilities which make people more proficient and efficient while completing a given task. People

without information literacy skills may spend much time retrieving information, maybe due to the challenges they may encounter when trying to download information stored in electronic format (Madu & Dike, 2012). In 1987, ALA constituted a presidential committee regarding information literacy for recognition of the functionality and potential role of information through all levels in education, trading sector, government institution, and everyday affairs for both formal and informal learning (Thompson, 2002 & McAdoo, 2008). After some investigation, the committee reported to ALA that many educationists and other businessmen have many learning deficiencies in their learning and workers as well did not express their skill to operate the latest technological tools to meet their tasks efficiently. The (NFIL) took steps to enhance the IL skills of individuals on account of feedback from the Presidential Committee on Information Literacy in 1989. The competency standards of IL, published by ACRL, were designed for higher education in 2000 based on responses collected from the task force of institutions and organizations in the education sector and accreditation institutions. (Association of College and Research Libraries, 2004).

The standards, focusing on higher education, given by ACRL proved their application significance as a tool to conduct evaluation, formulating course contents, and structuring exercises while running capacity-building programs for enhancing Information literacy. Other listed countries from around the world are Australia, Canada, New Zealand, China, Japan, South Africa, Singapore, and Malaysia that have established standards as well, on the same pattern and guidelines provided by ACRL (Ali & Daud, 2009). Anyhow, ACRL's IL standards are more significant and elegant to provide a framework to the users and enable them to expand their meta-cognitive approach. Furthermore, these standards have been user-friendly when applied to adopt procedures while collecting the data or information, appraising and exploiting information objectively. Prior evaluations of IL standards are necessary before their implantation so that they prove their worth to achieve the mission and objectives set by institutions (Association of College and Research Libraries, 2004). IL Standards for Higher Education are five in number whereas there are twenty-three indicators to mark performance boundaries. The stated standards are: “determine the extent of information needed; access the needed information effectively and efficiently; evaluate information and its sources critically; incorporate selected information into one’s knowledge base; use information effectively to accomplish a specific purpose; and understand the economic, legal, and social issues surrounding the use of information, and access

and use information ethically and legally” (Association of College and Research Libraries, 2000).

Information Literacy (IL) skills can enhance competencies among librarians, teachers, and researcher-oriented staff, to associate IL ideas into their learning, professional, coaching, and exploration and to prepare their curricula. Information literacy required skill that is very essential to handle the bulk of information and their proper use in higher education and also for the productivity of research work of a faculty member and researchers. The Universities and other educational institutions should take part to equipped their faculty members and staff to arrange some IL seminars and some hands-on workshops to learn them searching techniques use of computers and websites and the latest databases to meet their research and study needs. It is very much necessary to judge the IL competencies of the instructors and also to determine the learning outcomes of the students and researchers in this regard. The responsibility also lying on the departmental and central library and library staff to measure the information literacy abilities of students as well teachers continuously and to do some appropriate training and workshops to enhance their IL skills (Emmett & Emde, 2007).

It has been observed about libraries and their staff regarding the collection and organizing their resources has gone through remarkable changes during the last few years. The availability of digital resources has predominantly increased and its sharing and transmission through offline and through internet services and the professional librarians launched many services (web-based) to attract their users. It was possible due to the IL skills of librarians and the latest information communication technology tools. Regular sessions are being organized regarding IL skills in libraries to generate effective awareness among users through ICT tools. At first, librarians must themselves get fully equipped with the emerging tools and technologies through attending training, workshops, and seminars regarding IL skills. This is obligatory to broaden the personal professional vision to satisfy the interacting community and to improve library services for efficient response to queries of library users and conducting some orientations and Information Literacy sessions on various disciplines focusing on various subjects in the institutions (Sunil, Kumar & Satpathy, 2011). IL skills perform a vibrant part in the lives of faculty members. They need information continuously to enhance their professional career, promote their research activities, keep up with the current developments in their fields of study, as well as to develop competence in their teaching skills, among others.

Majid et al. (2000) recognized information-seeking behavior as an area of interest for information scientists. Line et al. (2008) have explored that natural science scientists have more information needs while social scientists are less involved in information dealing. According to Mason and Robinson (2011), scholars are required to spend forty percent of their time doing research, and producing important, original work. The influx of ideas due to the rapid flow of information among the research community has increased the pace of information generation are causing about 140,000 journals to get published annually (Gilbert, 1995). According to Badke (2011), the goals of both IL professionals and the subject teachers are synchronized, besides having some differences, as they are aimed at helping the students in doing adequate research. The aim of both is to facilitate the students and researchers for research and education-related stuff. The emergence of IL skills in libraries is seen as the base of continuous learning and the application of diverse technology is leading to rapid changes in higher education. The learning-how-to-learn approach, promoted by this skill, has increased the confidence of library staff, building their capacity to help academics (Andretta, 2005).

According to Ijirigho (2009), teachers and learners need the regular provision of academic literary stuff for the revival of fresh knowledge and it is badly disadvantaged if library services are not up to date or the librarians are lacking appropriate skills. Hemmati (2017) observed in his study that the universities are the main knowledge-creating Centre of society need to strengthen their information literacy skills and knowledge management skill to achieve their objectives. In this regard, the regard the importance of IL skills for a faculty member is much needed for a faculty member to be well equipped with Information literacy of various subjects and know the latest searching techniques he will be very well able to teach these techniques to their students and also use these searching techniques in his classes lectures preparation to search relevant materials of various subjects and these IL skills will be very helpful for their research work and its productivity. Floyd and Bodur (2008) highlighted more skillful faculty which perform through innovations acquired by virtue of IL skills developed through capacity-building programs. Such programs impart hands-on training and bring proficiency by assignments and evaluations. Training of faculty makes it comfortable for themselves and students to find and decide the area to research and proper use information resource.

McGuinness (2006) discovered that faculty teachers lack IL skills and do not consider them imperative for their current job and keep it pending for the need to arise and hence they remain unable to coach the students in their institutions to get the latest information and their resources. Library professionals should realize the genuine need to assess the level and concepts of faculty about acquiring IL skills to better deliver in teaching and research. Corral et al. (2009) advised the professional of library science that they should be equipped with the latest model of IL skills and latest databases, resources, and latest techniques of information communication technology to uplift their profession as well as to create research productivity of institutional faculty members. They should play a positive role to enhance the IL skills of themselves but also their teaching staff, researchers, and students to deliver publications following different patterns as set by journals. Wiklund and Voog (2013) gave a model to explore the productivity of teaching staff and the new mode of research. It consisted of synthesizing research; gathering information; data manipulation, evaluation, and result writing, and sharing of research results through easy access to give way forward.

Hollister and Schroeder (2015) conducted a study through a survey and realized that majority of faculty teachers utilize the already available traditional collections. Their lack of interest in innovations and emerging tools is among the major causes for librarians to be less proactive professionally. They should understand the current trends of grant activities, systematic handling of existing data, recognizing research productivity as intellectual property and its potential benefits, and the need for bibliometric-based study results. Janke and Rush (2014) have emphasized that the IL Skills of library professionals can help build a research team with a good aptitude for productivity and are devoted to spreading this valuable information faithfully. Their contribution exercises great impact to help find un-operated areas and expand the knowledge base to make future research decisions. Okiki and Mabawonku (2013) stated that information literacy promotes research productivity through improved consultation of resources in a more competitive academic context. Faculty teachers need refined knowledge for re-orient research and framing its design thoroughly for productive outcomes.

OBJECTIVES:

The following objectives of the study were set:

- To determine the role of library professionals in the spread of research culture
- To measure the Information Literacy Skills of the faculty members of Agriculture University Faisalabad and the Library Professionals
- To reveal hurdles related to the Information Literacy

METHODOLOGY:

The quantitative method followed by Survey Research Design was adopted in this study. The population of the study was the permanent, contractual, TTS teaching staff and qualified librarians of Agriculture University Faisalabad. There are thirty-nine departments in the university under the umbrella of seven major faculties. Each faculty has various departments according to its capacity. There are five professional Librarians MLISc. Degree holder in the library of the University of Agriculture Faisalabad. A stratified sampling technique was applied according to the requirement of the study. There was a total number of 579 faculty members in these various departments of the university working on different designations such as; Lecturer, Asst. Professor, Associate Professor as well as Professors. The researchers determined the sample size from Google Calculator. The researchers constructed strata of faculty members from every faculty and their respective departments according to the number of faculty members because some big faculties in the university have more departments and faculty members rather than some faculties have fewer departments and faculty members attach those faculties. The researcher constructed strata of each faculty from the ratio of their faculty and according to the number of sample size given in the table below:

Table:1

Sr. #	Name of Faculty	Departments	Total Population	Sample Size
1	Agriculture	09	199	79
2	Agri Engineering	06	60	24
3	Animal Husbandry	01	26	10
4	Food Sciences	02	45	18
5	Basic Sciences	09	123	49
6	Social Sciences	05	65	27
7	Veterinary Sciences	07	61	24
Total Numbers		39	579	231

The questionnaire was designed based on five principles of ACRL of (IL) with some important performance indicators to achieve the goals of the research. The instrument was sent to five experts for their valuable opinions. The experts proposed a few changes that were incorporated into the questionnaire. The reliability was ensured by researchers through pre-testing of the tool in a pilot testing procedure. The pilot testing was carried out among 30 faculty members of the various departments of the university. The reliability of the instrument of the current study is as under;

Reliability Statistics

Table:2 Reliability

According to (George & Mallery, 2014) the value of Cronbach's Alpha above 0.7 scale is good. According to the following table, the result of the pilot test shows that the scale which was used in the instrument is reliable.

Variable	Cronbach's Alpha	No. of Items
Information Literacy Skills	0.886	9
Programs Offered	0.706	5
Research Productivity	0.707	4
Hurdles while Acquiring ILS	0.727	8

The researchers approached most of the faculty members in the university to their respective departments and collect the data through questionnaire and to make understand them if some queries were arisen from them to collect valid and authentic information while remaining some questionnaires were distributed through departmental librarians of the university and collected after they get filled. The researcher also guided the librarians regarding the contents of the questionnaire to get a maximum valid and authentic response from the population.

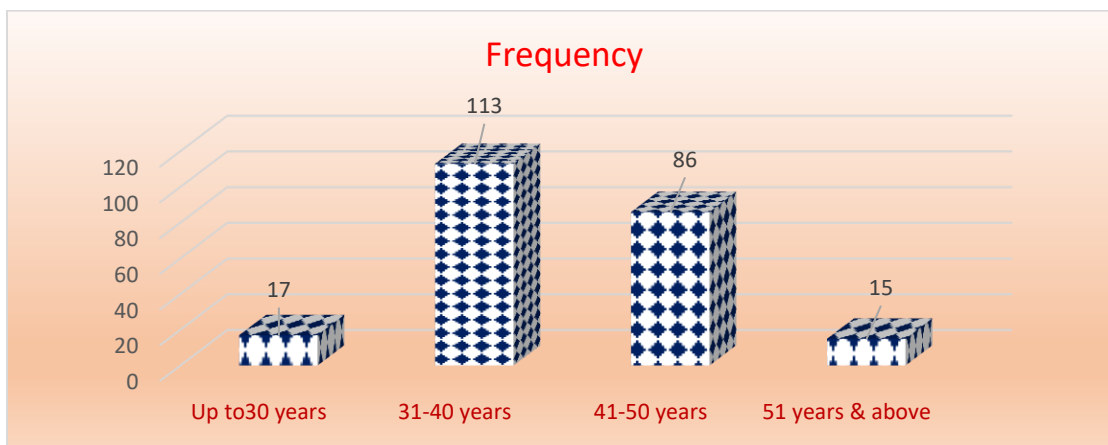
The researchers arranged the questionnaires respective to their faculty wise and assigned the numbers to each questionnaire for entering data in the appropriate software. Statistical Package for Social Science (SPSS) was used for the objective of data analysis. The response of faculty members was entered into the SPSS software. The descriptive statistics were applied to attain the objective of the study and data was decoded with the support of tables and figures.

DATA ANALYSIS AND INTERPRETATION:

AgeWise Frequency of Respondents

In the given figure 1, the researchers drew a frequency distribution about the age of the respondents. There are four age groups. 7.4% of the respondents belong to up to 30 years age group. 48.9% of the respondents belong to 31-40 years. 37.2% of the respondents belong to 41-50 years. 6.5% of the respondents belong to the 51 years & above age group.

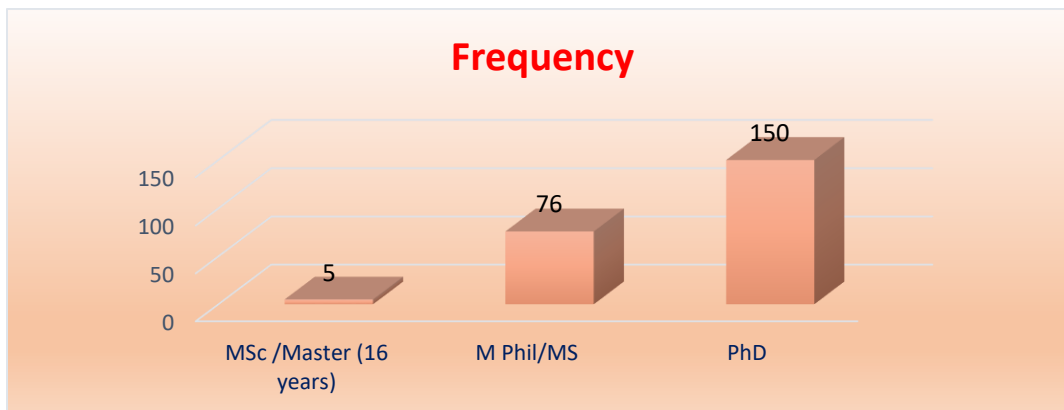
Figure 1
Age-Wise Frequency of Respondents



Sample Description based on Educations

In the given figure 2, the researchers drew a frequency distribution of the sample based on the qualification of the respondents. 2.2% of the population were MSc /Master (16 years) degree holders. 32.9% of the respondents were M Phil/MS. 64.9% of the population were Ph.D.

Figure 2:
Education-wise Frequency



Chi-Square Test to check the Association of Variables

Table: 3

Statement & Scale		Designation				Total
		Lecturer	Assistant Professor	Associate Professor	Professor	
I can find what I am looking for at the UAF library	SA	15	34	4	8	61
	A	64	43	11	4	122
	N	8	6	4	0	18
	D	22	4	2	0	28
	SD	1	1	0	0	2
Total		110	88	21	12	231

Chi-square = 37.525^a **P-value = .000**

In the above table, the researcher checked the association between the designation and the statements "I can find what I am looking for at the UAF library". To check the association between the variable and their relation the researcher applied the Chi-square test. The p-value is 0.000, which means there is a significant association between the statement and the designation of the respondents.

Table: 4

Statement & Scale		Designation				Total
		Lecturer	Assistant Professor	Associate Professor	Professor	
I can use UAF library's Online Public Access Catalogue (OPAC) for searching books	SA	7	9	2	6	24
	A	28	55	14	5	102
	N	58	18	2	0	78
	D	13	4	3	0	20
	SD	4	2	0	1	7
Total		110	88	21	12	231

Chi-square = 68.583^a **P-value = .000**

In the above table, the researcher checked the association between the designation and the statements "I can use UAF library's Online Public Access Catalogue (OPAC) for searching books". To check the association between the variable and their relation the researcher applied the test. The p-value is 0.000, which means there is a significant association between the statement and the designation of the respondents.

Table: 5

Statement & Scale		Designation				Total
		Lecturer	Assistant Professor	Associate Professor	Professor	
I can use different	SA	12	30	6	4	52
databases to find out	A	42	33	7	6	88
information/articles	N	33	16	7	1	57
for research	D	22	8	1	0	31
purposes	SD	1	1	0	1	3
Total		110	88	21	12	231

Chi-square = 21.54

P-value = .045

In the above table, the researcher checked the association between the designation and the statements "I can use different databases to find out information/articles for research purposes". To check the association between the variable and their relation the researcher applied the test. The p-value of the test is 0.002 it means there is a significant association between the statement and the designation of the respondents.

Table: 6

Statement & Scale		Designation				Total
		Lecturer	Assistant Professor	Associate Professor	Professor	
I can examine and	SA	7	5	3	3	18
evaluate the reliability	A	57	59	12	6	134
and accuracy of	N	31	14	5	3	53
information source	D	15	8	1	0	24
	SD	0	2	0	0	2
Total		110	88	21	12	231

Chi-square = 18.227a

P-value = .109

In the above table, the researchers checked the association between the designation and the statements "I can examine and evaluate the reliability and accuracy of information source". To check the association between the variable and their relation the researcher applied the Chi-square test. The p-value of the test is 0.109 it means there is no significant association between the statement and the designation of the respondents.

Table: 7

Statement & Scale		Designation				Total
		Lecturer	Assistant Professor	Associate Professor	Professor	
I can summarize	SA	9	4	2	1	16
and synthesize	A	38	55	17	9	119
identified	N	54	26	2	2	84
information to	D	8	2	0	0	10
generate new ideas	SD	1	1	0	0	2
Total		110	88	21	12	231

Chi-square = 20.555^a

P-value = .002

In the above table, the researchers checked the association between the designation and the statements "I can summarize and synthesize identified information to generate new ideas". To check the association between the variable and their relation the researcher applied the test. The p-value of the test is 0.002, which means there is a significant association between the statement and the designation of the respondents.

Table: 8

Statement & Scale		Designation				Total
		Lecturer	Assistant Professor	Associate Professor	Professor	
I can	SA	7	8	3	4	22
acknowledge/cite the	A	55	51	12	5	123
information used in	N	35	24	6	3	68
my research work	D	13	5	0	0	18
	SD	0	0	0	0	
Total.		110	88	21	12	231

Chi-square = 15.560^a **P-value = .077**

In the above table, the researchers checked the association between the designation and the statements "I can acknowledge/cite the information used in my research work". To check the association between the variable and their relation the researcher applied the test. The p-value of the test is 0.077, which means there is no significant association between the statement and the designation of the respondents.

Table: 9

Statement & Scale		Designation				Total
		Lecturer	Assistant Professor	Associate Professor	Professor	
I understand the	SA	11	7	1	2	21
ethical, legal, and	A	32	43	17	8	100
socio-economic	N	51	35	3	2	91
issues of	D	15	2	0	0	17
information	SD	1	1	0	0	2
Total		110	88	21	12	231

Chi-square =33.634^a **P-value = .001**

In the above table, the researchers checked the association between the designation and the statements "I understand the ethical, legal and socio-economic issues of information". To check

the association between the variable and their relation the researcher applied the test. The p-value of the test is 0.001, which means there is a significant association between the statement and the designation of the respondents.

Table: 10

Statement & Scale		Designation				Total
		Lecturer	Assistant Professor	Associate Professor	Professor	
I can communicate my research productivity	SA	11	13	5	2	31
	A	54	56	11	10	131
	N	31	16	5	0	52
	D	13	2	0	0	15
	SD	1	1	0	0	2
Total		110	88	21	12	231

Chi-square = 21.045^a **P-value = .050**

In the above table, the researchers checked the association between the designation and the statements "I can communicate my research productivity". To check the association between the variable and their relation the researcher applied the test. The p-value of the test is 0.050, which means there is no significant association between the statement and the designation of the respondents.

Table: 11

Statement & Scale		Designation				Total
		Lecturer	Assistant Professor	Associate Professor	Professor	
UAF Library conducts orientation programs for new students and faculty members	I do not know	57	31	7	0	95
	No	16	9	4	2	31
	yes	37	48	10	10	105
Total		110	88	21	12	231

Chi-square = 21.75 **P-value = .043**

In the above table, the researchers checked the association between the designation and the statement "UAF Library conducts orientation programs for new students and faculty members". To check the association between the variable and their relation the Chi-square test was applied by the researcher. The p-value of the test is 0.000, which means that the statement and the designation of the respondents have a significant association.

Table: 12

Statement & Scale		Designation				Total
		Lecturer	Assistant Professor	Associate Professor	Professor	
UAF, Library staff cooperates to learn new searching techniques and Information Literacy Skills	I do not know No Yes	63 25 22	49 15 24	7 5 9	4 4 4	123 49 58
Total		110	88	21	12	231
Chi-square = 17.44					P-value = .009	

In the above table the researchers checked the association between the designation and the statements "UAF, Library staff cooperates to learn new searching techniques and Information Literacy Skills". To check the association between the variable and their relation the Chi-square test was applied by the researcher. The p-value of the test is 0.009, which means that the statement and the designation of the respondents have a significant association.

Table: 13

Statement & Scale		Designation				Total
		Lecturer	Assistant Professor	Associate Professor	Professor	
UAF Library provides sufficient resources for your research and academic needs	I do not know	16	8	5	1	30
	No	34	48	9	7	98
	yes	60	32	7	4	103
Total		110	88	21	12	231

Chi-square =28.44**P-value = 0.037**

In the above table, the researchers checked the association between the designation and the statements "UAF Library provides sufficient resources for your research and academic needs to check the association between the variable and their relation the Chi-square test was applied by the researcher. The p-value is 0.037 it means there is a significant association between the statement and the designation of the respondents.

Table: 14

Statement		Designation				Total
		Lecturer	Assistant Professor	Associate Professor	Professor	
Librarians' ILS are helpful for UAF faculty to learn the new searching techniques to save time during the research	SA	10	7	1	1	19
	A	15	10	6	1	32
	N	38	14	5	1	58
	D	45	57	9	9	120
	SD	2	0	0	0	2
Total		110	88	21	12	231

Chi-square = 11.227**P-value = .011**

In the above table, we checked the association between the designation and the statements "Librarians' ILS are helpful for UAF faculty to learn the new searching techniques to save the time during research". To check the association between the variable and their relation the Chi-square test was applied by the researcher. The p-value of the test is 0.011 it means there is a significant association between the statement and the designation of the respondents.

Hurdles while Acquiring Information Literacy Skills by UAF Faculty

Table: 15 Lack of information literacy training

Statement & Scale		Designation				Total
		Lecturer	Assistant Professor	Associate Professor	Professor	
Lack of information literacy training	SD	1	1	2	0	4
	D	5	4	0	2	11
	N	14	10	4	1	29
	A	79	61	11	8	159
	SA	11	12	4	1	28
Total		110	88	21	12	231

Chi-square =26.45

P-value = .034

In the above table, the researchers checked the association between the designation and the statements "Lack of information literacy trainings "To check the association between the variable and their relation the, Chi-square test was applied by the researcher. The p-value of the test is 0.034 it means there is a significant association between the statement and the designation of the respondents.

Table: 16 Unreliable power supply

Statement & Scale		Designation				Total
		Lecturer	Assistant Professor	Associate Professor	Professor	
Unreliable power supply	SD	1	3	0	0	4
	D	14	12	3	2	31
	N	27	17	4	6	54
	A	63	36	14	2	115
	SA	5	20	0	2	27
Total		110	88	21	12	231

Chi-square = 38.54**P-value = .176**

In the above table, the researchers checked the association between the designation and the statements "Unreliable power supply ". To check the association between the variable and their relation the, Chi-square test was applied by the researcher. The p-value of the test is 0.176 it means there is a significant association between the statement and the designation of the respondents.

Table: 17 Reluctant attitudes of library staff

Statement & Scale		Designation				Total
		Lecturer	Assistant Professor	Associate Professor	Professor	
The reluctant attitude of library staff	SD	2	5	0	0	7
	D	39	29	7	7	82
	N	40	44	8	2	94
	A	23	6	6	3	38
	SA	6	4	0	0	10
Total		110	88	21	12	231

Chi-square = 26.45**P-value = .033**

In the above table, the researchers checked the association between the designation and the statements "Reluctant attitude of library staff ". To check the association between the variable and their relation the, Chi-square test was applied by the researcher. The p-value of the test is 0.033 it

means there is a significant association between the statement and the designation of the respondents.

Table: 18 Ineffective roles of library organizations

Statement & Scale		Designation				Total
		Lecturer	Assistant Professor	Associate Professor	Professor	
Ineffective role of library organizations to conduct IL sessions for faculty	SD	1	1	0	0	2
	D	26	27	4	5	62
	N	39	22	8	3	72
	A	42	37	8	4	91
	SA	2	1	1	0	4
Total		110	88	21	12	231

Chi-square = 45.78

P-value = .034

In the above table, the researchers checked the association between the designation and the statements “Ineffective role of library organizations to conduct IL sessions for faculty ”. To check the association between the variable and their relation the, Chi-square test was applied by the researcher. The p-value of the test is 0.034, which means there is a significant association between the statement and the designation of the respondents.

Table: 19 Lack of funding for IL training from an institute

Statement & Scale		Designation				Total
		Lecturer	Assistant Professor	Associate Professor	Professor	
Lack of funding for IL training from institutes	SD	0	1	0	1	2
	D	8	10	3	1	22
	N	38	29	5	5	77
	A	56	43	12	5	116
	SA	7	5	1	0	13
Total		110	88	21	12	231

Chi-square = 16.44

P-value = .023

In the above table, the researcher checked the association between the designation and the statements "Lack of funding for IL trainings from institutes ". To check the association between the variable and their relation the, Chi-square test was applied by the researcher. The p-value of the test is 0.023, which means there is a significant association between the statement and the designation of the respondents.

Table: 20
Lack of proficiency to use the internet

Statement & Scale		Designation				Total
		Lecturer	Assistant Professor	Associate Professor	Professor	
Lack of proficiency to use the internet	SD	3	4	0	1	8
	D	17	7	4	1	29
	N	20	23	3	4	50
	A	62	51	14	6	133
	SA	8	3	0	0	11
Total		110	88	21	12	231
Chi-square = 34.65						P-value = .034

In the above table, the researcher checked the association between the designation and the statements "Lack of proficiency to use the internet ". To check the association between the variable and their relation the, Chi-square test was applied by the researcher. The p-value of the test is 0.034, which means there is a significant association between the statement and the designation of the respondents.

DISCUSSION

Results of the study reveal that overall, the IL skills of librarians are important to the extent the research services of faculty members in the institution and there is a positive relationship of the IL skills of librarians and the research services to the fulfillment of the research material needs of teachers and students and in the viewpoint of the University of Agriculture Faisalabad. According to the data analysis, there is also a constructive relationship between the IL skills of

UAF librarians and the research services of the faculty members. According to results of data analysis, the most faculty members are agreed that the librarians IL skill are also source of learning for them but some population of the faculty is also neutral and some population of the study is not settled with the report of the researcher. Most of the faculty members are not agreed that the Librarians' IL skills are helpful to increase the research productivity of their research.

The findings show that the IL skills of librarians of the University of Agriculture and not much helpful to learn new searching techniques and to save time during their research it's not mean that the professional librarians are not capable of teaching something new about search techniques and to save their time but it was observed that they will have to come one step more forward to help the faculty members and it is very much necessary for the professional librarians to conduct some productive sessions, seminars, and training of Information Literacy to enhance their IL skill of faculty members to the productivity of their study and to save their precious time during their research work.

According to the results, a maximum of the librarians and faculty members have coincided to the research question regarding the issue concerning acquiring of IL skills by faculty members and professional librarians according to respondents lack the training of IL skill are very much necessary to enhance their IL skills. The administration and library staff of the University of Agriculture should take initiatives to conduct such productive sessions and training which could be very beneficial to improve the IL skills of faculty members and also for library staff as well. The unreliable power supply is also an issue for acquiring IL skills for faculty because in developing countries like Pakistan electricity shortfall is very common these days and a researcher is highly disturbed when he/ she attend some productive seminar or training session. Most respondents are agreed that the attitude of the library staff is positive and they help them out in every way when faculty members approach the library to learn something new or obtain their required material.

The result of the findings shows that the library organizations of library science are not playing their part to conduct some training sessions on IL skills for faculty members and professional librarians to improve their IL skills these days. That is why it is the responsibility of

the professional organization to conduct some productive sessions to improve the IL skills of librarians and faculty members in the country. The majority of the faculty members agreed that lack of funding to conduct seminars and trainings is also a big issue to improve the IL skills of the faculty, the institutions should take steps and should provide adequate funds to conduct the trainings of their faculty members and professional librarian to improve their IL skills at least twice in a year. As the result of these trainings faculty can librarians can give a positive result in the shape of productive research work for the institution.

Findings show that large numbers of faculty members are not proficient in using the internet and its relevant databases that is why they are not able to learn something new from the internet regarding IL skills from the internet.

It has been affirmed from the results of the study that the faculty members and professional librarian of the University of Agriculture have a moderate level of IL skill from which they have acquired from different sources and the researcher has been given many recommendations at the end of the study to improve their IL skills with the help of many initiatives. The results of the study show that they are capable of understanding all five IL standards which were verified in the current study. The respondents can find what they want to look for in the UAF library. The professional librarians and teachers can use UAF library's Catalogue for searching books and other material and they are much capable of searching their desired material from a bundle of information in the library. The respondents can find which they want to search from different databases such as information or articles for their research purposes.

The respondents are also competent to examine and appraise the needed material and their sources and can use this gathered information for new tasks. They are also competent to check the precision, validity, and reliability of material and use this information for their research and also to use it for their lecture preparation, etc. The respondents can summarize and synthesize identified new information and can generate new ideas for their research activities and also know the consequences of generated information. The respondents are the capability to know the copy right laws and copy right policies of the information and other material which they gathered from different sources and they are also capable to escape piracy and use material honorably and they also able to identify the legal, moral, and socio-economic disputes of material.

After the data analysis of the current study, the result shows that the library staff of the University of Agriculture Faisalabad conducts orientation sessions at the start of every year for their new students and staff to introduce library it services and rule and regulation. The result of the study depicted that the staff of the library cooperate with the faculty members to search the material and if they won't learn new techniques of searching various databases. According to data analysis, it is also clear that UAF library has sufficient collection for their study and research needs and it grows every year when the annual budget is allocated to the library and staff can give their recommendations for their required books and journals. It also explored after study that library staff of the University of Agriculture Faisalabad does not conduct seminars and trainings to improve the IL skills nor conduct any session to find searching databases and electronic resources of their faculty members due to various problems which already have been discussed in 5.3.4 section of the ongoing study.

The analysis of the study confirms that overall IL skills of the librarians are important to extend the research services of the faculty members in universities and from librarians University of Agriculture perspective is also important and the librarians of UAF should come one step more come forward to help the faculty members to improve their skills of information literacy. The study also confirms about the librarians of the UAF library that they are also a source of learning for the faculty members of the university. The results of the study show that faculty members are not agreed that the IL skills of librarians are much important to increase the productivity of their research and faculty members are also not agreed that the IL skills of UAF librarians are not much important to faculty members of the University of Agriculture in learning of new searching techniques and save the time during their research work.

The results of the current study depicted that most of the respondents are agreed with the research statement that the lack of IL skill training is a vital issue in acquiring IL skills for faculty members and also for professional librarians and it can be overcome through conduct some productive training sessions and some IL skills relating workshops. The results show that the unreliable power supply is also a hurdle for acquiring IL skills, but the facts and figures show that the attitude of the library staff is positive and cooperative for university teachers. The results show

that the Pakistan Library Association (PLA) and other library science organization are not playing their role regarding conducting some seminars and training workshops to enhance the IL skills of faculty members and professional librarians. According to data analysis and results, it is also affirmed that the institution is also not providing sufficient funds to the library of UAF to conduct some training sessions and workshops for faculty members. The results show that the lack of proficiency of staff to use the internet is also an issue to acquire IL skills. The result of the study depicted that the health issues of personal and also official issues of faculty members and professional librarians such as leaves, permission to attend trainings, and work burden are also hurdles for respondents to acquire IL skills for them.

REFERENCES

- Ali, R., Abu-Hassan, N., & Daud, M. Y. M. (2009, December). Information literacy of engineering students: A case study. In *2009 International Conference on Engineering Education (ICEED)* (pp. 143-147). IEEE.
- Andretta, S. (2005). *Information Literacy: A Practitioner's Guide*. Oxford: Chandos Publishing. <http://dx.doi.org/10.1533/9781780630755>
- Association of College, Research Libraries, & American Library Association. (2000). *Information literacy competency standards for higher education*. ACRL.
- Badke, W. (2011). Why information literacy is invisible. *Communications in Information Literacy*, 4(2), 2.
- Corrall, S., Kennan, M. A., & Afzal, W. (2013). Bibliometrics and research data management services: Emerging trends in library support for research. *Library trends*, 61(3), 636-674.
- Emmett, A., & Emde, J. (2007). Assessing information literacy skills using the ACRL standards as a guide. *Reference Services Review*, 35(2), 210-229.
- Floyd, D. M., Colvin, G., & Bodur, Y. (2008). A faculty-librarian collaboration for developing information literacy skills among pre service teachers. *Teaching and Teacher Education*, 24(2), 368-376.
- Hemmati, M. (2017). The Relationship between Information Literacy and Knowledge Management among Students and Faculty Members of Shiraz University. *International Review of Management and Marketing*, 7(2), 372-377.

- Hollister, C. V., & Schroeder, R. (2015). The impact of library support on education faculty research productivity: An exploratory study. *Behavioral & Social Sciences Librarian, 34*(3), 97-115.
- Ijirigho, M. A. (2009). Faculty expectations of libraries: A comparative study of Covenant University and the University of Lagos. *Library philosophy and practice, 1*.
- Johnston, B., & Webber, S. (2003). Information literacy in higher education: a review and case study. *Studies in higher education, 28*(3), 335-352
- Kuhlthau, C. C. (2005). Information search process. *Hong Kong, China, 7*, 226.
- Madu, E. C., & Dike, V. W. (2012). An assessment of the relationship between information literacy competencies and academic productivity amongst staff in Nigerian universities in North Central Geographical Zone.
- Majid, S., Anwar, M. A., & Eisenschitz, T. S. (2000). Information needs and information seeking behavior of agricultural scientists in Malaysia. *Library & Information Science Research, 22*(2), 145-163.
- Mason, H., & Robinson, L. (2011). The information-related behaviour of emerging artists and designers: inspiration and guidance for new practitioners. *Journal of Documentation, 67*(1), 159-180.
- McGuinness, C. (2006). What faculty think—exploring the barriers to information literacy development in undergraduate education. *The Journal of Academic Librarianship, 32*(6), 573-582.
- Okiki, O. C. (2013). Research productivity of teaching faculty members in Nigerian Federal Universities: An investigative study. *Chinese Librarianship an International Electronic Journal. 99-118*.
- Pappas, M. L., & Tepe, A. E. (1997). Pathways to knowledge: Follett's information skills model. *Kit. McHenry, IL: Follett Software Company*.
- Wiklund, G., & Voog, H. (2013). It takes two to tango—making way for relevant research support services at Lund University Libraries (LUB). *ScieCom Info, 9*(1).