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Perceived Information Literacy Skills among University Students at AzadJammu&Kashmir

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ABSTRACT

The present study was conducted with an aim to determine the perceived information literacy skills among university students at Azad Jammu & Kashmir. A survey research design was used to collect data from the participants. The population of this study were post-graduate students enrolled in public sector universities of AJ&K. A convenience sampling technique was used to collect the data. A statistical package for social sciences (SPSS-20) was used for the analysis of data. The descriptive statistics was used to determine percentage, frequency, mean and standard deviation, and inferential statistic was used to determine relationship among variables. The result of the study found that majority of the respondents has ability to recognize, understand, locate, evaluate, use, communicate, and manage required information (M=3.77). However, few of them were facing difficulties, while using digital information resources due to poor ICT skills (M=3.62). The results of the study also revealed that a good number of information resources were available in university libraries but they were not properly utilized due to lack of information literacy skills (M=3.56). Lack of information literacy training and workshops were the main barriers faced by respondents while acquiring information literacy skills (M=3.56). Moreover, it was found that a statistical significant relationship (P= .000) exists between age of the respondents and their information literacy skills. Which shows that age of the respondents and information literacy skills were correlated with each other.The significance value (P=.001) indicated that gender of the respondents and their level of information literacy skills were also correlated. Further, the statistical value (P=. 218) indicated that level of degree and information literacy skills of respondents were not correlated.

Keywords: Information Literacy; Skills; Use; University libraries.

Introduction

Information literacy is important in the age of technology revolution because, it enables us in locating the information at the time of its need "It involves computer skills required to use the emerging library as access to information. It makes us possible to explore and analyze the information we need by providing us assurance in utilizing that information to take an action or build a product"(Leebaw, Partlo et al. 2013). Information literacy is a major component of academic libraries users' education. Most of non-librarians perceived information literacy for a long time as foreign language idea. The word information literacy was considered initially with usage of electronic and digital information resources. Electronic information has become more beneficial because of wireless media that facilitate users at anytime from anywhere when they need. Users know the value and importance of digital resources, that make easy to get access to specific information resources from anywhere in world" (Chen and Lin 2011).

According to American Library Association information literacy is a set of skills required to "recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information" (ACRL, 2013). Students involve on their own in active and self-directed learning activities retrieving and using their related information in an information literate environment. IL promotes and blooms a resource-based learning environment where students make concrete and efficient decisions about appropriate information sources. IL also decreases the information dependency of the students and enhances the ability to use information with full empowerment and courage. Information resources are mostly consumed by information-literate students that employ different techniques to search material in a variety of ways. They are more informed and better prepared to make decisions about the sources they use to find their relevant information from a huge collection of information available on the internet.

Large number of research studies were found in literature on information literacy skills, information literacy assessment, information literacy competency, and proposed model on information literacy instructions (Oakleaf.2009; Bhatti, 2010; Anunobi and Ukwom, 2016; Mehmood, 2013). Furthermore, there is lack of such a program in universities that would educate their students about the use of library and its resources, the library Online Public Access Catalogue (OPAC) and other online databases that may help them to attain their desired information. Therefore, it was important to conduct a study that determined the skills needed to improve IL skills of universities students.

Research Objective

- To determine the level of information literacy skills among students in public sector universities of AJ&K.

Research Hypotheses

The following null hypotheses were formulated for conducting statistical tests:

H^0.1 There is no relationship between age and level of information literacy skills of AJ&K universities students.

H^0.2 There is no relationship between degree level and information literacy skills of AJ&K universities students.

H^0.3 There is no relationship between gender and level of information literacy skills of AJ&K universities students.

Literature Review

Chen and Lin (2011) Conducted a study on library user education. They found that knowledge of information literacy skills were essential for LIS professionals working in university libraries and students. The study also revealed that coordination among computer experts, LIS professional and students are considered important for the development of information literacy skills among users. Because, it was observed that collaboration based

system was more successful to attract the attention of students towards information literacy curricula. Similarly Licea de Arenas et al. (2004) studied the Information literacy skills between two university Students. They found that information resources used by both universities students were outdated. Both university Students like lecture method of teaching to learn information literacy skills. The disadvantage of this method is that, it does not develop require information literacy skills among students. Students of both universities used printed and electronic resources for their study regularly. Moreover, it was found that university of Mexican students search more databases as compared to the students of Murcia University. However, both universities have deficiency of some key information resources. Alsour Rehman and Alfaresi (2009) noted that majority of Kuwaiti high school students were unable to use library catalogue, unable to search their desire information sources. However, female students possessed low information literacy skills than male students. Moreover, Bhatti (2010) conducted a study on 'users education programme in universities libraries in Pakistan'. It was found that 39.3 percent universities libraries in Pakistan do not offer regular information literacy programmes, whereas 69 percent have not regular programme, few universities offer both regular or irregular information literacy programme. The percentage of time of provision of all type of user education 36%, whereas the required provision time for user education was 48%. The teaching of user education was mostly influenced by the user's large group size .The size of users do not exceed more than 30 users. Majority of librarian 96%, use lecture method to taught user education and only 18% were used helping AV in lecture method for teaching of user education. The other major issues the regularity of user in user education programme was very small. On the other hand Baro, Endouware et al. (2011) conducted a study on 'information literacy skills among medical college students in Nigeria'. Mix method research design was used in the study. It was found that information literacy skills of respondents do not meet the criteria defined by higher education for information

literacy. Majority of students use printed materials related to their academic activities. The usage frequency of student's electronic information resources of medical field, related databases like Medline and Hianri were low. Because of lack of awareness and poor information literacy skills related to library electronic and digital information resources. Also Sasikala and Dhanraju (2011) conducted a survey to assess the 'information literacy skills among science faculty students'. It was found that 41%, respondents were regular users of library, 27% mostly use library resources according to their need, and interestingly 5% users never went to library even a single time in year. The purpose of visiting respondents' library was found to be differently, majority of respondents 56% visit library to read or consult course assignments and research work, 27% of respondents visit library to increase their general knowledge and only 26% respondents' visit library for mind relaxation. The usage frequency of library information sources by respondents were 94% who were use books, 44% consult reference books,43% use magazine, newspaper and electronic materials was used by only 28%. The low usage frequencies of electronic information resources were due to lack of computer literacy. However, the use of information resources was positively correlated with awareness of respondents.

Similarly in Pakistan Bhatti (2012) found that university libraries of Pakistan have not proper policy for information literacy development that enables users to efficiently search information. The study also indicated that information literacy instruction, university libraries infrastructure, information resources and services and retrieval of information from various sources and research ability of users were of great importance. The study also found number of issues for the healthy promotion of information literacy programme that includes lack of interest from high authority, lack of evaluation system of library users, lack of users academic needs, inappropriate training for library staff, gap in research on information literacy skills in Pakistan, low feedback from students and staff, and limited finance for the development of

library collections. Mahmood (2013) also found that the students held basic knowledge of ICT and internet but they were unable to search specific information in full text database and journals. And the students who enrolled in higher degree education have facility of computer at their house possessed good information literacy skills.

Kim and Shumaker (2015) conducted a survey on 'students information literacy skills in department of library and information science'. It was found that students who were engaged more in assignments related to information literacy skills have higher information literacy skills and utilized effectively information than those students who are slow in practices of information literacy assignments.

Ramamurthy and Siridevi (2015) found that students do not possess required skills, only a small percentage of students have ability to use information resources efficiently. About 62.67% of students who understand information but unable to use library catalogue effectively due to poor skills. Students have not enough knowledge of library use to evaluate specific information among available information resources, whereas most of students even do not know what kind information can be obtained. However, low information literacy skills of college students are due to more focused on theoretical work rather than practical work. Similarly Misco et al. (2015) assessed the information literacy skills among students in Miami University. Among fifteen different classes, 300 students were selected for study. Students from both science and arts faculty were included in study. It was found that majority of students search information from Google and Wikipedia, whereas only 21% of total respondent had competency to search information from Google scholar search engine, scholarly search engine and databases. More surprisingly only one percent respondents use Google or Wikipedia for information searching. Among the respondents, 55% were confident that they were able to use information resource either print or electronic in one class can also

use another class. While 45%, of respondents were unable in utilizing their skills in another class.

Qadri and Shafiq (2016) conducted a study on ‘information literacy among users of two academic department of university of Kashmir and national institute of technology in digital environment’. It was found that both institutes facilitated their users with number of library orientation seminar and training to effectively utilize the printed and electronic information resources. The students of both academic departments had good ability to search across several electronic data bases and journals for information. Further it was also noted that respondents of both academic departments spend a lot of time to search their need because of poor searching skills. Moreover, it was also investigated that users of both institute are unable to use advance search techniques due to lack of searching skills.

Shafique and Bhatti (2017) conducted a study on ‘Students information literacy skills at Islamia university of Bahawalpur’. They found that large percentage of social science students was unable to search their need through library catalogue. The students of social sciences have not appropriate information about books classification number, advance searching and use of web OPAC. Further, it was found that students were unable to explore meta search engines for required information. However, students of social sciences had poor information literacy skills than natural science students.

The literature review indicated that a number of studies have been conducted to determine the IL skills of students, researchers in Pakistan. Further, there is a deficiency of literature that focuses on the IL skills of universities students in Pakistan particularly within the AJ&K.

Research Methodology

The survey method was used to achieve the objectives of this study. A structured questionnaire, listing seven information literacy (IL) skills, was prepared keeping in view the local conditions. ACRL (2000) standards, Lau (2006), provided guidelines for the development of questionnaire. The questionnaire was reviewed by library and information science experts for content validation. The validity and reliability of the questionnaire was determined with Cronbach's alpha test. It was also pilot-tested on group of students who were not part of the sample. Data was collected from the postgraduate students enrolled in the public sector universities of AJ&K. A convenience sampling technique was used to collect data from the respondents. Consequently, 630 questionnaires were collected from the postgraduate students and further 30 questionnaires were discarded due to outliers and incomplete information provided by the students. Data was analyzed by using SPSS-20 software. The researcher applied descriptive statistics to determine frequency, percent, mean and standard deviation, whereas inferential statistics was used to measure relationship among variables.

Findings

Demographic Information of the Respondents

Table1.shows that most of the respondents participated in this study were females with a ratio of 365 (60.8%) while 235 (39.2%) respondents were males. Majority of respondents 358 (59.7%) belonged to the age group 21 to 25 years and only 25 (4.2%) were more than 30 years old. Most of the respondents enrolled in master degree with a ratio 263 (43.8%) followed by M. Phil/MS degree with a ratio of 135 (22.5%) and only 15(2.5%) respondents were enrolled in Ph. D degree. The respondents of all the participating universities were equally responded the questionnaire. The response ratio 120 (20.0%) made by each participating university.

Table 4.1: Demographic information of the respondents

	Frequency	Percent
Gender		
Male	235	39.2%
Female	365	60.8%
Age		
Less than 20 years	129	21.5%
21-25 years	358	59.7%
26-30 years	88	14.7%
More than 30 years	25	4.2%
Level of Degree		
BS	181	30.2%
Master	263	43.8%
MPhil/MS	135	22.5%
Ph. D	15	2.5%
Any other	6	1.0%
University of the Respondents		
UAJ&K	120	20%
MUST	120	20%
UPR 120	20%	
MUS&TK	120	20 %
WUB120	20 %	

Ability to recognize needed information

Respondents were asked eight statements in order to measure their perceived ability to recognize needed information. All the eight statements received a mean score around 4, indicating that majority of the respondents found agree that they were ‘able to understand

how much information is needed' (M=3.77, SD=1.106), 'able to recognize different formats of information' (print, digital, etc) (M=3.76, SD=1.152) (Table 4.4).

Table 4.2: Ability to recognize needed information

Rank	Statements	N	Mean	St. Deviation
1	I am able to understand how much information is needed	600	3.77	1.106
2	I am able to recognize different formats of information (print, digital, etc.)	600	3.76	1.152
3	I am able to understand what kind of information is needed	600	3.71	1.109
4	I am able to recognize the internet source of information	600	3.70	1.164
5	I am able to recognize the limitations linked with information (e.g. time, format, currency, and access).	600	3.64	1.180
6	I am able to differentiate between scholarly and other popular source of information	600	3.58	1.180
7	I am able to understand when a piece of information is needed	600	3.51	1.204
8	I am able to recognize the information when it is needed	600	3.50	1.345

Scale: 1= Strongly Disagree,2 = Disagree, 3 =Undecided, 4= Agree, 5=Strongly Agree,

Ability to understand needed information

Respondents were asked three statements in order to measure their perceived ability to understand needed information. All the three statements received a mean score around 4, indicating that majority of the respondents found agree that they were 'able to understand how to access available information resources' (M=3.75, SD=1.866), 'able to identify where information resources are available' (M=3.58, SD=1.125). However, one statement received a mean score 3.47 indicating that respondents were found undecided with the statement that 'they were able to identify what information resources are available for use' (M=3.47, SD=1.324) (Table 4.5).

Table 4.3: Ability to understand needed information

Rank	Statements	N	Mean	St. Deviation
1	I am able how to access available information resources	600	3.75	1.866
2	I am able to identify where information resources are available	600	3.58	1.125
3	I am able to identify what information resources are available for use	600	3.47	1.324

Scale: 1= Strongly Disagree, 2 = Disagree, 3 =Undecided, 4= Agree, 5=Strongly Agree,

Ability to locate needed information

Respondents were asked 07 statements in order to measure their perceived ability to locate the needed information. Of the 07 statements, 02 statements received a mean score around 4, indicating that majority of the respondents found agree that they were 'able to locate information from search engine (Google, Yahoo, MSN etc) (M=3.64, SD=1.205), 'able to locate information by browsing (browse by subject, title, author)' (M=3.51, SD=1.386). On the other hand, 05 statements received a mean score around 3, indicating that majority of

the respondents were undecided in the perceived ability to locate needed information (e.g., 'able to use library catalogue' (M=3.45, SD 1.263), 'able to use OPAC (online catalogue)' (M=3.37, SD=1.221)', and 'able to locate information from databases (Science Direct, Emerald, JStor)' (M=3.36, SD=1.281)(Table 4.6).

Table 4.4: Ability to locate needed information

Rank	Statements	N	Mean	St. Deviation
1	I am able to locate information from search engine (Google, Yahoo, MSN etc.)	600	3.64	1.205
2	I am able to locate information by browsing (browse by subject, title, author)	600	3.51	1.386
3	I am able to use library catalogue	600	3.45	1.263
4	I am able to use OPAC (online catalogue)	600	3.37	1.221
5	I am able to locate information from databases (Science Direct, Emerald, JSTOR)	600	3.36	1.281
6	I am able to use advanced searching (Boolean operators, truncation, phrase searching etc.)	600	3.35	1.223
7	I am able to use abstracting and indexing journals	600	3.35	1.310

Scale: 1= Strongly Disagree, 2 = Disagree, 3 =Undecided, 4= Agree, 5=Strongly Agree,

Ability to evaluate needed information

Respondents were asked a set of 06 statements in order to determine their perceived ability to evaluate needed information. Of the 06 statements, 03 statements received a mean score around 4, indicating that majority of the respondents found agree that they were 'able to evaluate the consistency (up to date) of information' (M=3.62, SD=1.190), 'able to evaluate the accuracy of information locate information' (M=3.57, SD=1.176), and 'able to evaluate

the authenticity of information' (M=3.56, SD=1.118). On the other hand, 03 statements received a mean score around 3, indicating that majority of the respondents were undecided in the perceived ability 'to evaluate the authority of information (ownership, reputation)' (M=3.48, SD=1.111), 'to evaluate the information relevance to problems/question' (M=3.43, SD=1.282), and 'to evaluate the index, bibliography in any information resource' (M=3.43, SD=1.520)(Table 4.7).

Table 4.5: Ability to evaluate needed information

Rank	Statements	N	Mean	St. Deviation
1	I am able to evaluate the consistency (up to date) of information	600	3.62	1.190
2	I am able to evaluate the accuracy of information	599	3.57	1.176
3	I am able to evaluate the authenticity of information	600	3.56	1.188
4	I am able to evaluate the authority of information (ownership, reputation)	600	3.48	1.111
5	I am able to evaluate the information relevance to problems/question	600	3.43	1.282
6	I am able to evaluate the index, bibliography in any information resource	600	3.43	1.520

Scale: 1= Strongly Disagree, 2 = Disagree, 3 =Undecided, 4= Agree, 5=Strongly Agree,

Ability to use needed information

Respondents were asked eight statements in order to measure their perceived ability to use needed information. Of the 08 statements 06 statements received a mean score around 4, indicating that majority of the respondents found agree that they were 'able to analyze retrieved information to provide accurate research results' (M=3.70, SD=1.165), 'able to

understand issue of privacy and security in using of information' (M=3.64, SD=1.135), 'able to combine retrieved information from various sources (M=3.61, SD=1.140). On the other hand 02 statements received mean score around 3indicating that majority of the respondents were undecided in their perceived ability 'to understand retrieved information from various source (M=3.48, SD=1.264) and 'to develop new knowledge'(M=3.27, SD=1.360) (Table 4.8).

Table 4.6: Ability to use needed information

Rank	Statements	N	Mean	St. Deviation
1	I am able to analyze retrieved information to provide accurate research results	600	3.70	1.165
2	I am able to understand issue of privacy and security in using of information	600	3.64	1.135
3	I am able to combine retrieved information from various sources	600	3.61	1.140
4	I am able to compare retrieved information from various sources	600	3.53	1.174
5	I am able to understand intellectual property, copyright, and fair use of information	600	3.52	1.142
6	I am able to understand and give credit to other peoples work. (citations, references)	600	3.51	1.216
7	I am able to understand retrieved information from various sources	600	3.48	1.264
8	I am able to develop new knowledge	600	3.27	1.360

Scale: 1= Strongly Disagree, 2 = Disagree, 3 =Undecided, 4= Agree, 5=Strongly Agree,

Ability to communicate needed information

Respondents were asked a set of 04 statements in order to measure their perceived ability to communicate needed information. All the 4 statements received a mean score around 4, indicating that majority of the respondents found agree that they were 'able to communicate my finding through presentation' (M=3.66, SD=1.162), 'able to communicate knowledge of footnotes (M=3.63, SD=2.070), and 'able to communicate my finding through written report' (M=3. 59, SD=1.153)(Table 4.9).

Table 4.7: Ability to communicate needed information

Rank	Statements	N	Mean	St. Deviation
1	I am able to communicate my finding through presentation	600	3.66	1.162
2	I am able to communicate knowledge of footnotes	600	3.63	2.070
3	I am able to communicate my finding through written report	600	3.59	1.153
4	I am able to communicate my finding on web pages	600	3.57	1.305
5	I am able to communicate knowledge of citation style	600	3.53	1.123

Scale: 1= Strongly Disagree, 2 = Disagree, 3 =Undecided, 4= Agree, 5=Strongly Agree,

Ability to manage information

Respondents were asked a set of 4statements in order to determine their perceived ability to manage information. Of the 04 statements, 03 statements received a mean score around 4, indicating that majority of the respondents found agree that they were 'able to manage the use of folders to organized computer stored data' (M=3.65, SD=2.348), 'able to manage security and backup copies of information resources' (M=3.59, SD=1.159), 'able to

understand and organize the email and email attachments (M=3.53, SD=1.144). On the other hand one statement received a mean score 3, showing that most of the respondents were undecided in their perceived 'ability to manage information resources at a later date' (M=3.42, SD=1.343) (Table 4.10).

Table 4.8: Ability to manage information

Rank	Statements	N	Mean	St. Deviation
1	I am able to manage the use of folders to organized computer stored data	600	3.65	2.348
2	I am able to manage security and backup copies of information resources	600	3.59	1.159
3	I am able to understand and organize the email and email attachments	599	3.53	1.144
4	I am able to manage information resources at a later date	600	3.42	1.343

Scale: 1= Strongly Disagree, 2 = Disagree, 3 =Undecided, 4= Agree, 5=Strongly Agree,

4.13 Barriers in acquiring information literacy skills

Respondents were asked a set of 6 statements in order to measure their perceived barriers in acquiring information literacy skills. Of the 6 statements, only one statement received a mean score around 4, indicating that majority of the respondents found agree that 'lack of training and workshops' were a main barrier (M=3.56, SD=1.258). Whereas, five statements received a mean score around 3 indicating that most of the respondents were undecided in their perceived ability to 'search across several resources' (M=3.48, SD=1.255), 'to understand significance of different communication channels (e.g. web page, presentation,

written report)' (M=3.42, SD=1.233), and 'to recognize, locate, evaluate, use and manage information' (M=3.40, SD=1.277) (Table 4.11).

Table 4.9: Barriers in acquiring information literacy skills

Rank	Statements	N	Mean	St. Deviation
1	Due to lack of training and workshops, I am unable to recognize, locate, evaluate, use and manage information.	600	3.56	1.258
2	I am unable to search across several resources	600	3.48	1.255
3	I am unable to understand significance of different communication channels (e.g. web page, presentation, written report)	600	3.42	1.233
4	Due to lack of ICT skills, I am unable to 'recognize, locate, evaluate, use and manage information'.	600	3.40	1.277
5	I am unable to spend the appropriate time to use information resources	600	3.38	1.345
6	Due to lack of information literacy courses, I am unable to 'recognize, Locate, evaluate, use, communicate and manage information'.	600	3.35	1.218

Scale: 1= Strongly Disagree, 2 = Disagree, 3 =Undecided, 4= Agree, 5=Strongly Agree,

Hypotheses Testing

The relationships of information literacy skills with respondents' age, level of degree and gender were determined by using inferential statistics. The results of the null hypotheses are given below in tables.

Age and level of information literacy skills of AJ&K universities students

The first hypothesis was developed to determine the relationship between age and level of information literacy skills. Pearson correlation was used for the testing of hypothesis. A statistical significant relationship exists between age of the respondents and their information literacy skills. The result of analysis are shown in Table 4.15.Therefore, null hypothesis that 'there is no relationship between age and level of information literacy skills of AJ&K university students' is rejected and alternate hypothesis is accepted.

Table 4.12: Relationship between age and level of information literacy skills

		Age of the respondents	IL Skills
	Pearson Correlation	1	.164**
	Sig. (2-tailed)		.000

Level of degree and information literacy skills of AJ&K universities students

The second hypothesis developed to identify the relationship between level of degree and information literacy skills of AJ&K universities students. To examine this relationship Pearson correlation co-efficient was measured. The (Sig. 218) value indicates that level of degree and information literacy skills were not significantly correlated as shown in (Table 4.16). Therefore, the null hypothesis 'there is no relationship between level of degree and information literacy skills of AJ&K universities students is accepted and alternate hypothesis is rejected. It means that the level of degree does not affect the information literacy skills of AJ&K universities students.

Table 4.3: Relationship between level of degree and information literacy skills

		IL Skills	Education of respondents
	Pearson Correlation	1	.051
	Sig. (2-tailed)		.218

Gender and level of information literacy skills of AJ&K universities students

The third hypothesis developed to investigate any possible relationship between gender and their level of information literacy skills. Pearson correlation co-efficient was used to measure this relationship. Significance value (.001) indicated that gender and their level of information literacy skills were correlated as shown in Table 4.20. Therefore, the null hypothesis 'there is no relationship between gender and level of information literacy skills of AJ&K universities students is rejected' and alternate hypothesis is accepted. It is found that gender affect the level of information literacy skills of AJ&K universities students.

Table 4.14: Relationship between gander and level of information literacy skills

	IL Skills	Gender
Pearson Correlation	1	.138**
Sig. (2-tailed)		.001

Discussion

Results of the study showed that female students of AJK Universities responded the questionnaire more as compared with male and most of them were young. Further, the response rate of BS and Master degree programs students were high as compared to M. Phil/MS and Ph. D degree programs students. Most of the respondents were using university libraries on weekly bases and few of them never used library. The results of current study

were same with previous studies. Gakibayo et al. (2013) argued that 7% respondents visit university library many time in a day, 30% five times in a week, 40% once time in week and 24% never visit once time in a month. Majority of respondents were satisfied with the available information resources and services provided by university libraries. These findings are comparable withTörmä and Vakkari (2004) that the level of satisfaction of users depend on the availability of digital information resources in library. In another study Galvin (2005) analyzed that the provisions of virtual reference service, online web-based electronic information resources and access to library web-opac were the key services for improvement in respondents level of information literacy skills.

The result of the study found that majority of the respondents has ability to 'recognize, locate, evaluate, use, mange, and communicate' the needed information. These findings are similar with theMahmood (2013)findings that the students which were in higher degree education who had facility of computer at their house possessed good information literacy skills. Nicholas et al. (2009) also found that the searching ability of students in full text electronic database, and journals were higher than staff members. Similarly Akpojotor (2016) found positive relationship between information literacy skills and use of electronic information resources.

The study also found that some of the respondents were unable to search across online journal and databases due to poor ICT Skills.Probert (2009) conducted a study on school teachers in New Zealand found that only 5% teachers were possessing good knowledge of ICT and 95% held poor ICT skills. In another study Sasikala and Dhanraju (2011) assessed the low usage frequencies of electronic information resources due to lack of computer literacy. The results of the study showed that few of the respondents were remained neutral in their responses either they have ability or not to use the library services. Lawal (2017) in his study found that among 152 respondents 47% had ability to effectively use the available

university libraries services, 52% were unable to use because lack of information literacy skills and only 2% of total respondents remained neutral in their response.

The results of inferential statistics indicated a significant relationship between age and level of information literacy skills among respondents. These result support Misco et al. (2015) that the students who were in 22 to 25 years age group, their information literacy skills were good than above 30 years of age group. The study also revealed that information literacy skills of respondents were not correlated with level of educational degree. These result agreed withMiller (2014) that postgraduate and undergraduate students held poor information literacy skills in locating, searching specific databases. Similarly Mirza and Mehmood (2012) also found that respondents who were enrolled in MPhil and Ph. D degree their information literacy skills were same to BS and Master degree education. On the other hand Ferdows and Ahmed (2015) reported that undergraduate student's information literacy skills were not found good as compared to postgraduate students. Also in another study Dubicki (2013) found that the information literacy skills were not mapped with the level of respondents degree.

The results of Pearson correlation found that a significant association between information literacy skills and gender of respondents. The result support that the computer skills of male students were higher than female students (Baro and Feynman 2009). Also Zin et al. (2000) stated that the information literacy skills of males were good as compared to females.

Conclusions and Recommendations

The result of the study concluded that the information literacy skills were good among university students of AJ&K. They had sufficient skills to 'recognize, locate, evaluate use, mange, and communicate' the required information. However, some of respondents were unable to search across various online electronic information resources due to poor ICT

skills. A statistically significant relationship of information literacy skills was found with respondents age, gender whereas, information literacy skills was not correlated with education level of respondents.

The university libraries should regularly organize workshop, seminar on information literacy instructions to enhance students' information literacy skills. LIS professionals should start the information literacy programme throughout the university campuses and departments, and integrate into academic curricula to improve the students searching skills across various types of information resources. Also university should provide the facility of IT instructors at campuses and in departments to promote students computer skills, which help them to effectively retrieve and utilized e-resources of library. Moreover, university authority should appoint well qualified and competent library professionals that provide services to user according to their needs.

Implications

The finding of this study will be helpful for university professionals, administrations and policy makers to understand the level of information literacy skills among students, its role in the provision of library services. These findings may be generalized, while care must be exercised, on other universities with the same teaching and learning system, strategies, and circumstances.

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