

RELATIONSHIP BETWEEN ICT, s SKILLS AND JOB SATISFACTION OF LIBRARIANS IN THE UNIVERSITIES OF SINDH, (PAKISTAN)

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Abstract

Purpose _ The main purpose of this research was to check the correlation between ICT, s skills and employment satisfaction of librarians in the universities of Sindh, Pakistan. **Design/methodology/approach** – To achieve the objectives of the study researchers were established the four research hypotheses. The structured questionnaire was designed, adapted and developed for data collection. Twenty two (22) Public sector universities of Sindh, Pakistan were the population of this study. Census sampling technique was used for the data collection and SPSS (version 22) was used for data analysis. To check the relationship between ICT, s skills and job satisfaction of librarians in the universities of Sindh, Pakistan Pearson correlation test was used. **Findings** – The study discovered that a moderate positive but statistically significant relationship of five dimensions of ICT skills with job satisfaction. The study concluded that most important factor was found library functions and services skills towards job satisfaction including (nature of work, working ability and financial benefits). **Research limitations** – The study also check the ICTs skill level of university librarians in Sindh, (Pakistan). **Practical implications** _ The practical implication of this study for professionals of libraries, library associations, university libraries and librarians. Moreover, the current study results are also helpful for university administration to recruits those library professionals which have better ICT ,s skills and will meet the challenges of digital environment. **Originality/value** – Previous studies can examine the impact of ICT ,s skills on the performance of job, library services and staff satisfaction. The researchers conducted this study for particularly examine the relationship of ICT ,s with the job satisfaction of librarians in the universities of Sindh, Pakistan. Moreover, this study will be suitable to find those library professionals which have more ICT, s skilled and also helpful for library manager for assigning of duties in the library according to their skill level.

Keywords _ Job Satisfaction, ICT skills, Information Retrieval skills, Library services, Information Storage skills

Introduction

Information and communication technology (ICT) is an emerging field which brought a great revolution in all sphere of knowledge. Through ICT, s data can be managed, organized, controlled and widely communicated. Harrods’s librarian Glossary states that “the ICT has replaced IT and combined the communication technology in computer hardware and software” this addition opened the new doors of novel technology and developed a new term “global village”. Sharm and Mahesh (2009) describe ICT as a “range of technologies including internet which widely used for information storage and “retrieval”.

Like other fields ICT fetched unprecedented changes in libraries. By the help of ICT, s library traditional functions are moving towards the automated functions. The development and advances in the field of ICT now directly affect libraries particularly in management, collection development, digitization, security and services. Libraries are now transformed from print to

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digital and web resources. Due to advance development in communication the information can be speedily disseminated globally.

Now, it is need of a day that library embrace ICT, s and develop skills in library professionals as they may be able to utilize technology efficiently. Education testing service (2007) defined information and communication skills as “using electronic tools, communication devices, network to access, supervise, integrate, assess and generate information so as to function in a familiarity with society”. Mahmood (2001) states that competency is needed in library professionals and changing scenario demands from library professionals to learn ICT and get expertise in use of Internet, networking, intranet, multimedia, imaging technology, and full text database”. Baker (2005) found 13 categories of ICT skills in his study like, word processing, emails, internet and intranet, graphics, presentations, publishing, spreadsheets, and project management to system maintenance, system analysis, and programming. Ansari (2013) defines that ICT skills is a broader term which includes various skills and she found various required areas for ICT skills in Pakistan such as making applications, software mechanism, web design, virtualization & representation of technology, e-cataloguing, online classification, system analysis and design, networking, MS-Office, database searching techniques, data transformation, OCR devices etc.

The employees are getting knowledge and develop their skills in ICT. It is a proverb that employees can make or break the organization. They are the personnel who enhance the reputation of a library. That is why they are considered the valuable assets of library. Now, it is a need that library professionals fight for their respect and it is possible through when they get enough knowledge in using ICT smoothly without the help of others. This will give them honor in their professional field. This scenario requires a certain level of skills needed by the professionals of libraries. The future of libraries fully depends on the ICT skills including innovative, managerial and research oriented behaviors professional skills.

Moreover, library professionals are essential part of the universities. Teaching community alone cannot enable the students to learn from different channels of communications. Librarian as a partner of faculty plays vital part in learning by different wide range resources. Job satisfaction is very important term which means whether employees are happy with their job or not. Adeeyemo (2000) states that “Job satisfaction means a positive attitude of staff towards his work and a satisfying emotional state for performing his job”, Parmer and East (1993) describe job satisfaction as relating to individuals feeling or emotion towards work. an individual performance can be measured by some factors such as motivation, the desire to work, the ability to do work, the environment, the tools, material and information needed to do work.

Job satisfaction and performance are vital issues. Every institution including the library needs for maximum performance which relates with satisfaction. Those employees who are more satisfied render good performance.

There is a great correlation between *ICT* proficiency, employment satisfaction and presentation of the professionals of libraries. *ICT* skilled library staff may get great opportunities in their respective field. *ICT* skills enable them to perform their duties smoothly, effectively, efficiently, and speedily. They can perform their work easily and confidently answer the users query and help the users by different angles and aspects. *ICT* skilled professional can earn the honor individually and collectively.

Review of the Literature OR Theoretical Background

The review of literature has been organized to check the studies on ICT skills, job satisfaction and also relationship of both areas. It is very difficult to select the works for review because there is a number of published and unpublished works appeared on this topic. In this chapter only those local and foreign works are reviewed which have been done in previous ten years. For convenience the chapter is organized chronologically which will be helpful to our audience to find previous studies on related topic with year wise. The major studies are reviewed below:

ICT Skills

Hussain, M. (2021) conducted a study to examine the ICT proficiency and skills of library professionals functioning in the public libraries and information centers in KPK. Outcomes reveal that most of the librarians had the proficiency to work on different operating systems, application software, and websites applications. Furthermore, main resources used by the respondents to obtain ICT, s competency comprises on self-study, conferences, workshops, formal education and curriculum. Moreover, major issues faced by the employees for obtaining of ICT proficiency were lack of attention of professional associations, lack of funds, partial training opportunities, lack of co-ordination amongst employees and deficient employees in the library. In another study, Joshi, D. R. (2021) explored the awareness of ICT, s in mathematics lecturer at secondary schools of Nepal. A cross-sectional survey approach was set up amongst 336 secondary school teachers of Nepal. Findings showed that level of ICT, s skills among lecturer was found moderate in the basic thoughts of computers and utilization of Internet. In contrast, it was found to be developing-level in hardware and software. Olatoye, O. I. (2021) examined the levels of ICT literacy and experiences amongst the students of Fort Hare and Rhodes universiteis on the use of digital assets amongst South Africa. Numerical approach was used for this research study. Results show that there is under use of digital assets by the undergraduate respondents due to their low level of information and communication technology skills and experience. In another study, Agava, S. L. (2020) aimed to evaluate the ICT expertise of LIS professionals functioning in Tangaza University College (TUC) library, Kenya. Data were gathering using a well structured interview. Outcomes pointed out that a larger number of TUC LIS professionals had great level of ICT expertise in basic information and communication technology skills and few digital technologies; while, on the other hand, they lack in technical ICT skills. Baro, E. E. (2019) evaluates the electronic awareness possessed by LIS professionals functioning in the university libraries of Africa. The researcher found that library professionals had very moderate level of awareness in database searching ability, uploading documents to online platforms, proficiency in using other social media platform, sending and receiving g-mails proficiency, electronic library development awareness, proficiency in applying latest technologies into library services, capability to generate different file formats and proficiency to use library integrated software.

Job Satisfaction

Opeke, R. (2019) examined the level of job satisfaction among library workers of government universities in South-West, Nigeria. To explore the level of satisfaction researcher check their income, their association with colleagues and manager and with the endorsement opportunity. Outcomes reveal that the level of job satisfaction among library worker is higher in employment safety, association with colleagues and manager. Moreover, only few worker were not satisfied with their income. In another study, Ranaweera, R.A.A.S. (2018) explored the level of employment satisfaction of three categories; proficient, para-proficient and supporting employees in universities. Results show that university library staff was normally pleased with their work and commonly the colleagues, income and advantages, physical working situation, job promotional

opportunities, work itself, admiration and responses recognized as the major factors of employment satisfaction. Moreover, library administration should be taken some steps to eliminate the dissatisfaction level of the employees such as encouraging a joint working atmosphere, give new job development opportunity, create a appropriate mechanism for provide appreciation and feedback to enrich the present level of employment satisfaction of library employees. In another study, Ibegbulam (2018) ascertained the levels of job satisfaction amongst library and information science personnel which were working in federal and state university libraries of south east Nigeria. Outcomes show that a positive significant difference exist the type of university, gender category and employment satisfaction amongst the library personnel. But, there is no positive significant difference of employment satisfaction in connection to expert status, age and job experience. Esakkimuthu (2015) studied the measure of employment satisfaction amongst the professionals of library working in the engineering institutions of Tamilnadu. Result of this research show that library and information expert functioning in these organization were lightly pleased with their nature of employment, whereas the income, promotion, without access to advantages and employment safety were not recognized because of their main constraints to employment satisfaction.

ICT, s Skills and Job Satisfaction

G. O., Omeluzor (2021) examined the effect of *ICT* capability on employment performance amongst library professionals in the university libraries of south-South, Nigeria. The study takes a descriptive survey approach using self create questionnaire as a tool for data gathering. Outcomes show that bulk of the respondents in the university libraries obtain *ICT* competency by self-support. Moreover, a large number of the respondents were not competent in organization management, web application and apparatus for instance: digital conferencing /webinar instruments, system troubleshooting, create websites, and Web 2.0, virtual communication. In another study, Ahmed, S. (2020) studied the *ICT* competency of LIS professionals as a predictor of better library services. The outcome of this research showed that a major relationship was found between the *ICT* competencies of library science professionals which improved their performance and services of the library. Moreover, the role of *ICT, s* is considered to be very helpful in every field of life. In another study, Bellary, R. N (2016) found the distinct reasons that effects on staff satisfaction, how to get better staff satisfaction and effects of information and communication technology on staff satisfaction of library and information science experts. A content analysis strategy was used for this research. Outcomes shows that experienced and qualified library information science expert give efficient services to its readers and accomplish the purpose of the parent organization. Rahman, A. A. (2018) conducted a study to identify the relationship between computer awareness and employees satisfaction in University Tun Hussein Onn Malaysia (UTHM). The researcher found a strong and positive relationship of employment satisfaction with the computer knowledge, computer, email, and internet or networking. Findings also supported the theory of acceptance model (Davis, 1989).

Research Objectives and Hypotheses

The aim of this research was to test the correlation between *ICT, s* skills factors including (Library software skills, Information retrieval skills, Library functions and services skills, information storage skills and Computer software skills) and job satisfaction factors including (nature of work, library functions and services, working ability) among the public sector university libraries around Sindh. The following hypotheses were developed to achieve this objective.

1. There is a significant relationship between five factors of ICT skills (Library software skills, Information retrieval skills, Library functions and services skills, information storage skills and Computer software skills) with the nature of work among university librarians of Sindh.
2. There is a significant relationship between five factors of ICT skills (Library software skills, Information retrieval skills, Library functions and services skills, information storage skills and Computer software skills) with the financial benefits among university librarians of Sindh.
3. There is a significant relationship between five factors of ICT skills (Library software skills, Information retrieval skills, Library functions and services skills, information storage skills and Computer software skills) with the working ability among university librarians of Sindh.
4. There is a significant relationship between ICT skills and job satisfaction among university librarians of Sindh.

Delimitations of the study

The study will be delimited to LIS experts functioning in the Central and Seminar Libraries of Public Sector Universities of Sindh, (Pakistan) regarding the information and communication technology skills and job satisfaction.

Research Methodology

Study design

This study employed the quantitative methodology for comprehensive understanding of ICT skills and job satisfaction level in LIS professionals in university libraries across the province. A quantitative study described by Bhandari (2020) as the process of accumulating and analyzing quantitative data. It may be used to discover samples and averages, make predictions, check causal correlations, and create outcomes to wider populace. The structured questionnaire was designed, adapted and developed for data collection. Twenty two (22) Public sector universities of Sindh, Pakistan were the population of this study. Census sampling technique was used for the data collection and SPSS (version 22) was used for data analysis.

After completing questionnaire, the questionnaire was sent to the experts for review with a request that if any mistake or errors found then the mistakes or errors may be improved, the experts given their suggestion and recommendations regarding the questionnaire. These suggestion and recommendations of the experts were included in the questionnaire. Table 1 shows the Cronbach Alpha values, numbers of items/statements, variables of the study and their sub factors.

Table 1: *Cronbach Alpha, number of statements/items and Value Study variables*

ICT skills and Job Satisfaction Dimensions	Number of Items	CA Value
Computer Software Skills	07	.868
Library Software Skills	08	.788
Information Storage Skills	07	.927
Information Retrieval Skills	07	.462
Library Function & Services	09	.867
Nature of Work	06	.555
Financial Benefits	05	.636
Working Ability	07	.449

The analysis of relationship between two variables is termed as correlation analysis. Correlation analysis is used to elaborate the strength and direction of the linear relationship between two variables. Pearson “r” is designed for interval and ration level continuous variables. It can also be used if you have one continuous variable. The correlation is expressed in the form of a coefficient.

Symbolized as “r” a correlation coefficient is normally reported as a decimal number somewhere between +1.0 and -1.0. The positive and negative signs indicate positive and negative correlation correspondingly. Positive sign shows that with increase in one variable, the other is increase as well, while negative correlation indicates that with an increase in one variable, the other is decrease. However the value itself provides an indication of the strength of the relationship. A perfect correlation of 1 or -1 indicates that the value of one variable can be determined exactly by knowing the value on other variables, on the other hand, a correlation of “0” indicates no relationship between the two variables. Knowing the value on one of the variables provides no assistance in predicting the value on the second variable.

Population, Data Collection and Analysis Procedures

The population for the current study was consists of library and information science professionals (i.e. chief librarians, librarians, deputy librarians, library officers, assistant librarians, and library assistant etc. (with BS (PDG-Lis, Bs. Hons, Master program) or higher degree in the library and information science. It comprise all library and information science professionals performing in the twenty four (24) public sectors HEC recognized university libraries (i.e. central and seminar libraries) situated in the jurisdiction of Sindh province, Pakistan.

Results of the Study

Firstly, researcher check the relationship of nature of work with the five dimensions of ICT skills; (Library functions and services, Information storage skills, Library software skills, Computer Software skills and information retrieval skills) by using the Pearson’ s product-moment correlation test in SPSS. Table II shows the results of relationship between matrix, mean and also standard deviations. Result showed the statistically moderate and positive correlation of nature of work with the library functions and services ($r=.313^{**}$) at $p < 0.05$ in universities libraries. Library software skills has the correlation of ($r=.265^{**}$) at $p < 0.05$. Information storage skills has the correlation of ($r=.206^{**}$) at $p < 0.05$. Computer software skills has correlation of ($r= .183^{**}$) at $p < 0.05$ towards nature of work. Information retrieval skills has the correlation of ($r= .135^{*}$) at $p < 0.05$ towards nature of work. Moreover, library functions and services and library software skills explained the highest variance (10% & 7%) in the librarians’ scores in terms of nature of work. Furthermore, information storage skills have been explained moderate variance (4%) while; lowest variance (3% & 2%) has been explained by computer software skills and information retrieval skills in the respondents’ scores towards nature of work. Hence, nature of work looks like an important factor and very good enabler of library functions and services towards information and communication technologies skills among library professionals.

Table II: Correlation test of nature of work with computer software skills, library software skills, information storage skills, information retrieval skills and library functions and services

Variable	Mean	SD	NOW	CSS	LSS	ISS	IRS	LF&S	P	r ²
NOW	24.46	5.128	1							
CSS	22.19	4.871	.183**	1					.006	3%
LSS	20.69	4.889	.265**	.633**	1				.000	7%
ISS	18.28	5.534	.206**	.626**	.685**	1			.002	4%
IRS	22.73	6.716	.135*	.387**	.367**	.496**	1		.043	2%
LF&S	28.37	7.115	.313**	.581**	.595**	.624**	.461**	1	.000	10%

*. Correlation is significant at the 0.05 level (2-tailed).

Secondly, scholar test the correlation of financial benefits with the five aspects of Information and Communication Technology skills (ICTs); (Library functions and services, Information storage

skills, Library software skills, Computer Software skills and information retrieval skills) by using the Pearson' s product-moment correlation test in SPSS. Table III demonstrates the outcomes of correlation between matrix, mean and also standard deviations.

Outcomes also shows the statistically smaller and positive correlation of Financial benefits with the library functions and services ($r=.283^{**}$) at $p < 0.05$ in universities libraries. Library software skills has the correlation of ($r=.186^{**}$) at $p < 0.05$. Information storage skills has the correlation of ($r=.155^*$) at $p < 0.05$. While, computer software skills and Information retrieval skills has no relationship with financial benefits ($r= .057^{**}$) at $p < 0.05$ and ($r= .020$) at $p > 0.05$. In addition to library functions and services explained the highest variance (8%). Whereas library software skills represent the moderate variance (3%) in the librarians' scores in terms of financial benefits, Additionally, information storage skills have been explained low variance (2%) although; the lowest variance (0% & 0%) has been explained by computer software skills and information retrieval skills in the respondents' scores towards financial benefits. Therefore, financial benefits give the impression as a vital aspect and very good enabler of library functions and services to the information and communication technologies competency among library professionals.

Table III: Correlation test of financial benefit with computer software skills, library software skills, information storage skills, information retrieval skills and library functions and services

Variable	Mean	SD	FB	CSS	LSS	ISS	IRS	LF&S	P	r2
FB	19.29	3.796	1							
CSS	22.19	4.871	.057	1					.397	0%
LSS	20.69	4.889	.186**	.633**	1				.005	3%
ISS	18.28	5.534	.155*	.626**	.685**	1			.020	2%
IRS	22.73	6.716	.020	.387**	.367**	.496**	1		.763	0%
LF&S	28.37	7.115	.283**	.581**	.595**	.624**	.461**	1	.000	8%

*. Correlation is significant at the 0.05 level (2-tailed).

Thirdly , researcher check the relation of working ability with the five headings of ICT skills; (Library functions and services, Information storage skills, Library software skills, Computer Software skills and information retrieval skills) by using the Pearson' s product-moment correlation test in SPSS. Table IV signifies the outcomes of the correlation between matrix, mean and also standard deviations. Outcomes showed the statistically smaller and positive correlation of working ability with the library functions and services ($r=.267^{**}$) at $p < 0.05$ in universities libraries. Library software skills has the correlation of ($r=.184^{**}$) at $p < 0.05$, Information storage skills has the correlation of ($r=.172^{**}$) at $p < 0.05$, Computer software skills has a small correlation of ($r= .151^*$) at $p < 0.05$, towards working ability while, information retrieval skills has no correlation with working ability ($r= .074$) at $p < 0.05$. In addition, library functions and services elaborated the top variance (7%). While the library software skills and Information storage skills illustrate the moderate variance (3, & 3%) in the librarians' scores in terms of working ability. In addition, computer software skills have been enlightening the low variance (2%) whereas; lowest variance (1%) has been describe by information retrieval skills in the respondents' scores towards working ability. Therefore, working ability looks like a significant aspect and very good enabler of library functions and services to the information and communication technologies skills among library information science professionals.

Table IV: Correlation test of working ability with computer software skills, library software skills, information storage skills, information retrieval skills and library functions and services

Variable	Mean	SD	WA	CSS	LSS	ISS	IRS	LF&S	P	r2
WA	28.86	5.230	1							
CSS	22.19	4.871	.151*	1					.023	2%
LSS	20.69	4.889	.184**	.633**	1				.006	3%
ISS	18.28	5.534	.172**	.626**	.685**	1			.010	3%
IRS	22.73	6.716	.074	.387**	.367**	.496	1		.266	1%
LF&S	28.37	7.115	.267**	.581**	.595**	.624**	.461**	1	.000	7%

*. Correlation is significant at the 0.05 level (2-tailed).

Finally, researcher checks the whole relationship of information and communication technology skills (ICTs) with job satisfaction (JS) by using the Pearson's product-moment correlation test in SPSS. Table V signifies the outcomes of relationship between matrix, mean and also standard deviations. Results showed that there is a moderate statistically and positive correlation of information and communication technology skills (ICTs) with the job satisfaction (JS) ($r=.310^{**}$) at $p < 0.05$ in universities libraries. Moreover, information and communication technology skills (ICTs) and job satisfaction explained the highest variance (10%) in the librarians' scores in terms of ICT skills.

Table V: Correlation test between information and communication technology skills and job satisfaction

Variable	Mean	SD	ICTs	JS	P	r2
ICTs	112.13	23.009	1			
JS	72.61	10.587	.310**	1	.000	10%

*. Correlation is significant at the 0.05 level (2-tailed).

Discussion

The present research study tested the following four research hypotheses:

(H.1) There is a significant relationship between five factors of ICT skills (Library software skills, Information retrieval skills, Library functions and services skills, information storage skills and Computer software skills) with the nature of work among university librarians of Sindh.

(H.2) There is a significant relationship between five factors of ICT skills (Library software skills, Information retrieval skills, Library functions and services skills, information storage skills and Computer software skills) with the financial benefits among university librarians of Sindh.

(H.3) There is a significant relationship between five factors of ICT skills (Library software skills, Information retrieval skills, Library functions and services skills, information storage skills and Computer software skills) with the working ability among university librarians of Sindh

(H.4) There is a significant relationship between ICT skills and job satisfaction among university librarians of Sindh.

Results of the study show that the ratio of seminar library professionals is higher as compared to central library professionals. And most of the respondents belong to the age group of 31 to 40 years followed by 41 to 50 years and 51 to 60 years. While, only small number of library professionals belong to the age group of 20 to 30 years.

Ratio of PGD-LIS & Master degree qualification by the library professionals is more as compared to BS (Hons), Mphil, and very few are studying at Doctorate level. Majority of the participants are belonging to the designation of librarian followed by Library Assistant, Assistant Librarian, Librarian, Chief Librarian, Deputy Librarian, while only small number are Library Officer.

Among the total population most of the library professionals having experience 6 to 10 years followed by participants possessed experience up to 11 to 15 years, 16 to 20 years, Up to 5 years, Above >30 years, 20 to 25 years while only few participants possessed experience 26 to 30 years.

(H.1) Results of Pearson product moment show that there is a significant statistically moderate and positive correlation of nature of work with the five variables of ICT,s skills (Library software skills, Information retrieval skills, Library functions and services skills, information storage skills and Computer software skills). Moreover, library functions and services and library software skills explained the highest variance (10% & 7%) in the librarians' scores in terms of nature of work. Furthermore, information storage skills have been explained moderate variance (4%) while; lowest variance (3% & 2%) has been explained by computer software skills and information retrieval skills in the respondents' scores towards nature of work. Hence, nature of work looks like an important factor and very good enabler of library functions and services towards information and communication technologies skills among library professionals.

(H.2) Outcomes also shows that there is a significant statistically smaller and positive correlation of financial benefits with the three constructs of ICT,s skills (Library software skills, Library functions and services skills and information storage skills) while no relationship was found of financial benefits with the computer software skills and information retrieval skills. In addition to library functions and services explained the highest variance (8%). Whereas library software skills represent the moderate variance (3%) in the librarians' scores in terms of financial benefits, Additionally, information storage skills have been explained low variance (2%) although; the lowest variance (0% & 0%) has been explained by computer software skills and information retrieval skills in the respondents' scores towards financial benefits. Therefore, financial benefits give the impression as a vital aspect and very good enabler of library functions and services to the information and communication technologies competency among library professionals.

(H.3) Outcomes showed that there is a significant statistically smaller and positive correlation of working ability with the four constructs of ICT,s skills (Library software skills, Library functions and services skills, information storage skills and Computer software skills) while, no relationship was found between information retrieval skills and working ability. In addition, library functions and services elaborated the top variance (7%). While the library software skills and Information storage skills illustrate the moderate variance (3, & 3%) in the librarians' scores in terms of working ability. In addition, computer software skills have been enlightening the low variance (2%) whereas; lowest variance (1%) has been describe by information retrieval skills in the respondents' scores towards working ability. Therefore, working ability looks like a significant aspect and very good enabler of library functions and services to the information and communication technologies skills among library information science professionals.

(H.4) Results also showed that there is a moderate statistically and positive correlation of information and communication technology skills (ICTs) with the job satisfaction (JS) ($r=.310^{**}$) at $p < 0.05$ in universities libraries. Moreover, information and communication technology skills (ICTs) and job satisfaction explained the highest variance (10%) in the librarians' scores in terms of ICT skills.

Some studies are found on related this topic where relationships are found for instance; Asad, K. (2013) and R, Pandita. (2018)

Conclusions and Recommendations

ICT application in libraries has become inevitable in an era of information explosion and widespread use of digital information resources. Effective application of ICT in libraries helps in performing their operations and services most efficiently. It is only possible when libraries are equipped with complete ICT infrastructure and trained staff. The ICT skilled staff can perform their duties confidently and effectively. This study has provided baseline data on the current status of ICT skills and job satisfaction level in library professionals working in public sector university libraries in Sindh. The core objective of this research study was to investigate a relationship between ICT skills and job satisfaction of librarians in the universities libraries of Sindh, Pakistan. Pearson correlation analysis was used to check the relationship between these constructs. The correlation analysis specifies a moderate positive but statistically significant relationship of five dimensions of ICT skills with job satisfaction. However, no relationship was found of information retrieval skills with the two constructs of job satisfaction (financial benefits and working ability). Moreover, results also show that there was no relationship between computer software skills and financial benefits. As well as the others factors were concerned the most important factor was found library functions and services towards job satisfaction including (nature of work, working ability and financial benefits). Outcome demonstrates that the good level proficiency in information and communication technology skills may increase the job satisfaction level of librarians in the universities of Sindh, Pakistan as well as provision of better library services to the users of library through these ICT, s skills, whereas a poor level competency in information and communication technology skills may reduce the level of job satisfaction of librarian.

Moreover, university administration must vigilant towards these five constructs of ICT, s skills (Library software skills, Information retrieval skills, Library functions and services skills, information storage skills and Computer software skills) because now a day's these skills play a very important role for the provision of better library services. Furthermore, these factors play important role to improve the level of job satisfaction and also increase the performance of library professionals as well.

Researchers also suggested that library and university administration must be included the new technologies in the curriculum of library professionals. Moreover, some new courses and different workshops must be conducted for the continuing education as well as for the performance improvement of library professionals because if library professionals have not these skills then they cannot provide library services properly according to the modern demand. Through this paper library professionals will be able to overcome their weaknesses and also library administration will be able to increase their level of ICT, s skills through proper courses. Moreover, this study will be suitable to find those library professionals which have more ICT, s skilled and also helpful for library manager for assigning of duties in the library according to their skill level.

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