

**ASSESSMENT OF KNOWLEDGE ACQUIRED THROUGH TRAINING FOR JOB
PERFORMANCE AMONG LIBRARIANS IN SELECTED LIBRARIES IN NORTH-CENTRAL,
NIGERIA**

RHODA WUSA GOSHIE

Library Services Department, Federal University of Technology, Minna Niger State, Nigeria
goshiewusa@students.ku.ac.ke

DANIEL MUTTEE

Department of Library and Information Science, Kenyatta University, Nairobi, Kenya
muttee.daniel@ku.ac.ke

&

CAROLINE MUTWIRI

Department of Library and Information Science, Kenyatta University, Nairobi, Kenya
mutwiri.caroline@ku.ac.ke

Abstract

The sufficiency of the service is dependent on the Librarians who are properly prepared and constantly learning .As a result, the quality of educational options and the capacity of personnel to take advantage of such chances on a regular basis are critical concerns. Librarians and more information employee need to continue to aspire for greatness in the discipline by constantly upgrading and improving their knowledge and competency as maintained by the IFLA code of ethics. Training of the librarians is a necessity which helps in assisting to carry out services that are acceptable. It is therefore paramount to study the assessment of the Knowledge for librarians and how it affects their job performance in the 21st century librarianship. A descriptive survey design was used for this study. The population of the study was 382 librarians from seven academic libraries in North- Central, Nigeria. Structured questionnaire was used to collect data for the investigation and the sampling technique used was census also known as total enumeration. The results shows that majority of the librarians have no adequate knowledge through training received and have not applied the knowledge for librarians effectively which leads to low performance on the job because most of these libraries do not have ICT knowledge such as; content curation and digital asset management . Nevertheless, they are not competent in applying the knowledge in discharging their duties. The paper concludes that Librarians should not focus on theoretical part of the profession but should emphasize on the application of knowledge of Librarianship on their job performance. The paper recommended that there should be provision of adequate training and retraining of librarian, adequate IT infrastructure should be provided and there should be standing policies for attending the trainings for effective job performance among librarians.

Keywords: Application, Assessment, ICT, Knowledge, Librarians and Training

Introduction

The attainment of library jobs is heavily reliant on librarians. Whatever the library's aims and objectives are, they cannot be met without the help of librarians. Librarians can execute their different duties and responsibilities more efficiently and at a more advanced level with the appropriate skills and knowledge gained via trainings. The future of academic libraries depends on the ubiquity of personal skills, which

include innovative managerial and research-oriented behaviors and professional skills, and information technology dominant pragmatic techniques. According to Khoo (2009), the librarians need these skills: computer literacy skills, word processing, website designs and maintenance, database design and construction, analytical skills, communication skills, search engine skills technologies, programming and scripting, operating systems, spreadsheet and numerous others. They need to possess a portfolio of technology related skills in order to complement and support the navigational skills. Such skills help librarians to manage the information more widely and, in turn, transfer these skills to the users as appropriate. Library staff therefore is faced with the challenge of upgrading their skills. This is why librarians must endeavor to equip themselves with technological skills that will be useful for their jobs. According to Singh and Mehra (2013), knowledge workers have growing repositories of information resources to search through to perform their work functions. Effective information retrieval for librarians can be challenging due to a number of factors including the volume of information through which they must search, a lack of knowledge of advanced information retrieval techniques, a lack of awareness of where to look (both internally and externally produced materials) and a shortage of time to find and process information. Adeleke (2016) is of the opinion that librarians require certain skills and competencies to establish and maintain a digital repository. The skills, according to the author, include traditional library skills and knowledge, as well as management and technical skills, familiarity with metadata creation, and knowledge of copyright. These skills will equip them to deal with digitization and archiving of the content. Digital competencies are the skills necessary to work in digital library environments and manage electronic library infrastructures and services (Chinien & Boutin, 2011). In this situation, all library personnel should have a basic understanding of the Internet, including current networks and how to incorporate the Internet into their duties. In India, the two most major organizations, INFLIBNET and NISCAIR, offer a variety of training programs to library professionals working in university and college libraries to help them enhance their skills in the use of various Information Technology tools and the incorporation of ICT into library services. Duarah and Mazunder, (2015), now adays many employers seek applicants in Library and Information Science (LIS) profession to be acquainted with various technical skills and experience. Some of the technological requirements of a LIS professional in the digital age are as follows; adequate knowledge on computer programming, web development skills, course management software such as Web Computer Technology (CT), must possess the ability to adapt to rapidly changing technologies and use them into the delivery of information services, must play an active role in the development of institutional repositories programs and digital collections and must be able to work with integrated library systems. The quality and effectiveness of library and information services depend on the expertise of staff. Constant flux in the needs of societies, changing technologies, and growth in professional knowledge demand that librarians and other information professionals expand their knowledge and update their skills on an ongoing basis. As stated originally in the United Nations Educational, Scientific and Cultural Organization (UNESCO)/IFLA Public Library Manifesto (1994), and quoted at the beginning of the chapter on human resources in the International Federation of Library Association (IFLA) Public Library Service Guidelines (Koontz & Gubbin, 2010). The adequacy of the service depends on personnel who are well prepared and continuously learning. Therefore, the quality of educational opportunities and the ability of staff to regularly utilize those opportunities are of vital concern. The IFLA code of ethics includes the statement: "Librarians and other information workers strive for excellence in the profession by maintaining and enhancing their knowledge and skills" (IFLA, 2012a). Rapid change is thus something that can and should be expected, and librarians must keep up with these changes by constantly updating and developing current and new skills in terms of groundwork. Libraries now dedicate a lot of space to public computer services, and librarians go through continuous development programs to be well-equipped to deal with probes about current research inquiries about where to locate and borrow books (Emiri, 2015). The services of the university library include indexing and abstracting services, cataloguing services, bibliographical services, reference services, inter library loan services, user education services, information services and circulation services. It is therefore imperative that the university librarians function effectively in their services in order to fulfill the demands of the clientele. As a consequence, a librarian is responsible for three types of work: choosing items for the library, arranging them so that they are simple to locate and use, and assisting individuals in obtaining materials or information that they require (Ezema & Ugwuanyi, 2014).

Farooqet et al. (2016), finds out the librarians in Pakistan University were dissatisfied with their present level of abilities. They desire to grow through studying current abilities that will help them to be able to compete with other academic librarians coming from other spheres of the world. In consonance with the research, in

the last area of professional competency, knowledge in databases, metadata, and indexing was greater than protecting client information protection and sustaining awareness of developing technologies.

Rodriguez (2015), expanded on academic librarians' existing internal knowledge in the United States and tallied strategies for training librarians with regard to contemporary communication practice. The participants were receptive to the training and enthusiastic about the majority of the activities. Academic and the public libraries have been greatly affected by Information Technology (IT), not solely in terms of fundamental infrastructure but also in terms of service delivery to customers. At Punjab University in Pakistan, Batool and Ameen (2010), examined the positions of librarian's technical competencies. They observed that all the librarians that had skills in word-processing were hardware computer specialists, with knowledge of online public access catalogs, Machine Readable Catalogue (MARC) and Web Dewey. They stated about the major hindrances in learning technology were a lack of curriculum coverage, outdated courses, and training workshops.

Barber and Rizvi (2013) and Masreket et al. (2012), evaluated seven areas of competencies within library paraprofessionals in Sarawak state libraries. According to the findings, the majority of respondents possessed strong leadership abilities, abilities in skills for conflict management in solving problems, interpersonal skill and skills in making decision. It was observed that the librarian's data standards, abilities in system analysis, information infrastructure, and understanding of library technology tools and procedures, on the other hand, were less inadequate. Kniru (2010), verifies this scenario by stating that academic libraries in Nigeria have not yet attained the level of giving digital resources and information access which has resulted to several impediments that has hindered academic libraries to provide access to the libraries. Nearly all libraries in industrialized nations have taken measures to give various degrees of Internet training to their employees.

In Japan Library Association's role in staff training and development programs stated that since library services are changing to meet up with current trends, there is every need for a rise in training needs of staff of the library. This in other words will ensure that staff is kept abreast with current innovation in information retrieval, storage and dissemination.

Against this backdrop, the purpose of this research is to conduct a critical examination on the assessment of knowledge through training for job performance among librarians in academic libraries in selected academic libraries in North- central, Nigeria.

Statement of the Problem

Technology advancements in areas such as networking, communications, digitalization, and electronic publication have dramatically altered professional abilities that have previously maintained libraries. This is due to the fact that librarians must stay up with technology advances, and user skills and knowledge have evolved. It was observed that librarians do not have adequate knowledge for them to carry out their work efficiently and effectively. This is an indicator that either the librarians have not acquired the adequate knowledge or have inadequate training of librarians to apply the knowledge for effective job performance. Therefore this study seeks to assess the knowledge attained through training for librarians to ascertain how it affects their effective and efficient job performance.

Objectives of the study

1. To determine adequate knowledge of librarians for effective job performance
2. To determine the extent of utilization of the knowledge after training for effective job performance.
3. To evaluate the knowledge acquired by the librarian for effective job performance.

Research Question

1. What is the adequate Knowledge of librarians for effective job performance among academic librarians?
2. What is the extent of utilization of knowledge after training for effective job performance?
3. How to evaluate the knowledge acquired by the librarians for effective job performance?

Methods

Population

This descriptive study was conducted among Librarians of all the 7 (Seven) Federal University Libraries in North-central Nigeria (Abuja, Benue, Ilorin, Kogi, Nasarawa, Niger and Plateau States respectively). The Librarians working in the selected as at the time of study and who deemed it fit to comply were enlisted for the study, then out of the 382 questionnaires distributed, 363 participants responded to the questionnaires. 37 questionnaires were administered to Librarians from University of Abuja and 35 of them provided a response rate of (94.59%) while, two (2) Librarians (5.41%) failed to participate in the study. Furthermore, 81 questionnaires were administered to Librarians from University of Jos only three (3) Librarians (3.71%) did not respond therefore, 78 Librarians responded and the study gained a response rate of (96.29%). However, 43 questionnaires were distributed to Librarians from University of Ilorin and 40 of them provided contributory views by filling and returning the questionnaire hence the study acquired a response rate of (93.03%) while three Librarians (6.97%) declines responding to the questionnaire. Although, out of 75 questionnaires distributed, five (5) Librarians (6.67%) from Federal University of Technology Minna failed to respond to the study questionnaire while, 70 dully filled and returned the questionnaire, availing the study a response rate of (93.33%). However, 23 Librarians answered questions asked in the questionnaire and all the 23 of them contacted which summed a total response rate of (100%) responded from Federal University Lokoja. Similarly, 63 questionnaires were administered to Librarians from Federal University of Agriculture Makurdi, 59 Librarians attended to the questionnaire giving a response rate of (93.65%) while four Librarians (6.35%) failed to attend to the items of the questionnaire. Therefore, a total of 382 questionnaires were administered to respondents among which 363 were attended to and returned giving rise to 95.02% response rate. Although, the study recorded a shortfall of 19 and the percentage not return a (4.98%). The overall response rate for the study was therefore 95.02 %, which agreed with Saunders *et al.* (2009) who concluded that a minimum of 70% response rate is viewed as very good. As such, the overall response rate of 95.02% obtained in this study was deemed to have been satisfactory.

Procedures

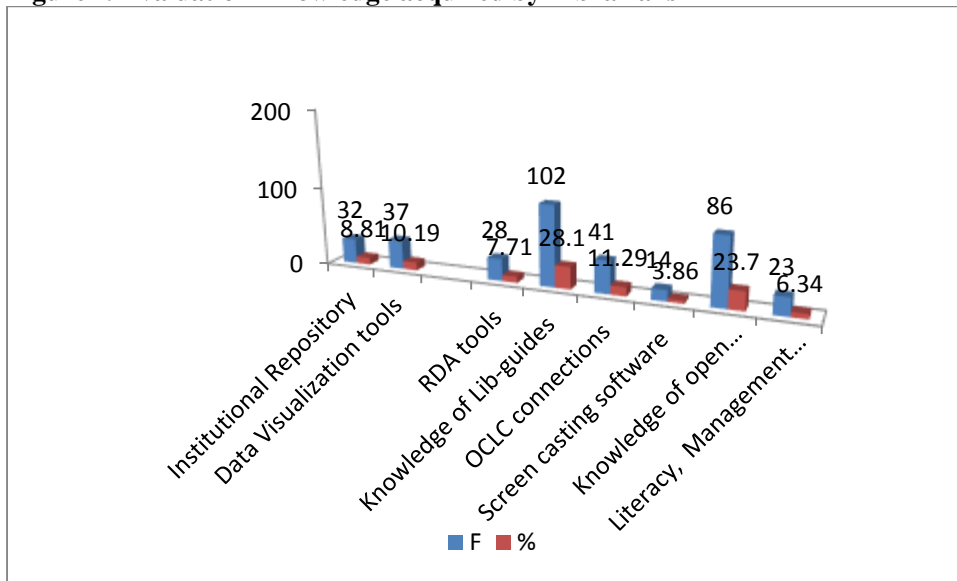
This study adopted a survey research design. Data were collected from academic and non-academic librarians in seven federal university libraries in North-central Nigeria. Total enumeration of all the population was used. Data for the study were collected through a structured questionnaire. From the 382 sets of questionnaire that were administered, 363 (representing 95.02%) were completed and returned. The sampling technique used was census also known as total enumeration. The questionnaire items were divided into four sections (A, B, C, and D) thus: Section A - Socio-demographic variables, Section B - Knowledge possesses. Section A-Adequate knowledge and Section D- Application of Knowledge. Data were analyzed using frequency counts and percentage calculation and SPSS (Statistical Package for Social Sciences) version 22 was used to enhance the analysis.

Table 1: Demographic of the Respondents

Demographic variables		Frequency	Percentage %
Educational Qualification	Professor(University Librarian)	3	0.83
	PhD	21	5.79
	MLS	70	19.28
	MSC	33	9.09
	MIM	73	20.11
	PGD	25	6.89
	B. Tech	30	8.26
	BLS	57	15.70
	GCE	24	6.61
	B.SC	27	7.44
	Total		
Status	Principal Librarian	26	7.16
	Senior Librarian	25	6.89
	Senior Library Assistant	20	5.51
	Higher Library Officer	30	8.26
	Chief Library Officer	24	6.61
	Librarian I	100	27.55
	Librarian II	45	12.40
	Assistant Librarian	34	9.37
	Library Assistant	59	16.25
		Total	
Years of working experience	Below 1 Year	50	13.77
	1-5 Years	100	27.55
	6-10 Years	63	17.36
	Above 10 Years	150	41.32

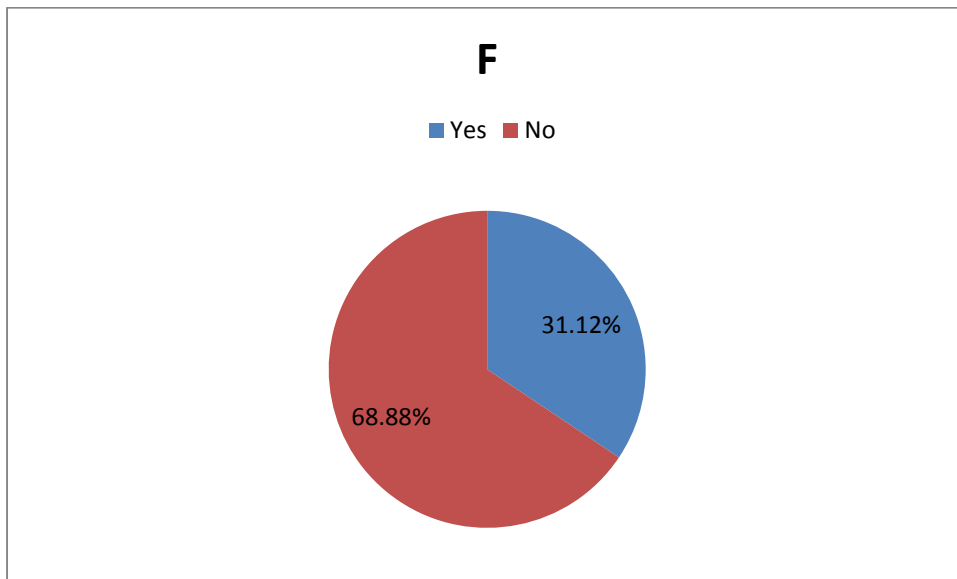
Source: Field Study, 2022

Figure I: Evaluation Knowledge acquired by Librarians



Source: Field Survey, 2022

Figure 2: Adequate Knowledge of Librarians



Source: Field Survey, 2022

Table 2. Extent of Application of Knowledge after attending the Continuous Staff Development Programs.

s/n	Items	Responses n=363									
		Excellent		Very Good		Somewhat		Neutral		Not Good	
		f	%	F	%	F	%	F	%	F	%
1	Content Curation management system	19	5.23	35	9.65	70	19.28	118	32.50	121	33.34
2	Competitive intelligence	15	4.13	34	9.37	76	20.94	133	36.63	105	28.93
3	Knowledge of scanning procedures	28	7.71	51	14.05	59	16.25	97	26.73	128	35.26
4	Knowledge of digital file formats	29	7.99	43	11.85	81	22.31	123	33.88	87	23.97
5	Collection management system	94	25.89	126	34.71	22	6.06	31	8.54	90	24.80
6	Digital asset management	12	3.31	30	8.26	46	12.67	100	27.55	175	48.21
7	Web design	24	6.61	22	6.06	84	23.14	85	23.42	148	40.77

Source: Field Survey, 2022

Table 1 shows the demographic distribution of the respondents. The respondents have varying educational qualifications, status and years of working experience. 48.48% claimed to have MLS, MSc, and MIM, 31.4% claimed to have B. Tech., BLs, and B.Sc., 5.79% have Ph.D., 20.11% and the remaining 6.61% have GCE respectively. Also, majority of 13.77% have below one (1) Year, 27.55% have between 1-5 years of working experience, while 17.36% have from 6-10 years working experience. Only 41.32% of the respondents have worked from 10 years and above. Also, 19.56% indicated they are principal librarians, senior librarian and senior Library assistant, 42.42% indicated they are higher library officer, chief library officer and Librarian I and 38.02% indicated that they are Librarian II, assistant librarian and library assistant respectively. This implies that the librarians has attained some form of knowledge for librarians for job performance, they have worked for a considerable period of time and have attained the required qualification to be able to acquire the knowledge for librarians for job performance. This is in line with Antony and Elangkumaran (2020) who proposed that respondent's level of education is a crucial factor to determine the quality of data obtained from a survey and level of education was categorized according to the highest qualification the respondents obtained, namely Bachelors, Masters or Doctoral degrees.

Figure 1 Types of knowledge possessed by librarians. The study established the knowledge possessed by Librarians after the training received. The researcher seeks to find out the type of knowledge that they can use adequately on their job performance to know whether they have adequately assimilated what was taught or not after undertaken the trainings.

The findings in figure 1, revealed that majority of the respondents (60.61%) have possessed Knowledge on open information resource, lib-guides and institutional repository. This could be that they have been trained, taught and have an understanding of these knowledge for librarians but have no knowledge of online skills for librarians but general knowledge for librarian which can affect their job performance especially in an online environment. The reason behind this might be inadequate facilities of ICT infrastructure in the training. This findings are in support of Librarians having the required knowledge for librarians in an online environment for effective job performance by Masreket (2012) explained that majority of the respondents

possessed strong leadership abilities, abilities in skills for conflict management in solving problems, interpersonal skills and skills in making decisions. This category of respondents may not have necessary knowledge-based skills for librarians to be able to carry out their duties effectively and efficiently in an online environment. Conversely, few Librarians (30.05.38%) confirmed they have acquired knowledge of RDA tools, OCLC, data visualization and screen casting. This implies that just nearly more than a quarter of the respondents do possess the online knowledge for librarians. The reason could be that the training was not online based training for the attainments of the online knowledge. This finding is in line with Batool and Ameen (2010) who explained that all personnel should have a basic understanding of the internet, including networks and how to incorporate the internet into their duties. The margin between those that have possessed the knowledge is attributed to the fact that majority of the respondent have no online knowledge for librarians and therefore would not be able to carry out their job effectively in an online environment and so their performance will equally be low because they lack the knowledge needed in an online environment due to the advent of ICT and modern librarianship. This is in line with Ajidahun (2009), who affirmed that library schools in Nigeria do not provide enough technology and electronic skills to librarians.

Figure 2: Adequate knowledge for librarians. The researcher sought to examine how adequately they have acquired the knowledge-based skill after undergoing the programs for effective job performance. This is to determine their expertise in the skills acquired. A non-categorical data was used to define the extent to which they have adequate knowledge or not for effective job performance.

The study found out that majority more than half of the Librarians (68.87%) have no adequate knowledge for librarians after undertaken the training therefore they do not possess the adequate knowledge for librarians to improve upon their job performance and therefore would experience low performance. The reason could be that from observation, the researcher discovered that they could not perform their duties efficiently and effectively especially in the area of customer service delivery in the libraries. While few of the librarians (31.13%) indicate they have adequate knowledge. This could be attributed to the fact that they must have undergone some training on their own through peer group discussions on the job. The finding shows that most of the librarians more than half of the respondents have no adequate knowledge for librarians. This implies that they have not received the adequate training to attain the knowledge for librarians and they have also no practical knowledge of the online skills.

This implies only a few of the librarians have acquired the knowledge adequately, therefore only few librarians can perform their library routine work effectively, and for librarians to perform their duties effectively and efficiently they must have adequate knowledge for librarians for effective job performance. This study is in line with the study by Ezeani (2013) that the changes brought about by the introduction of ICT required not only on the inquiry into the skills and competences of Librarians, but also pushed them to learn a wide range of talents. This similar study by Barber and Rizvi (2013) explains that librarians must stay up with technology advances because user skills and knowledge have evolved. This is in line with Batool and Ameen (2010) who examined the positions of librarian's technical competencies. They observed that all the librarians that had skills in word-processing were hardware computer specialists, with knowledge of online public access catalogs, MARC and Web Dewey. Also they stated about the major hindrances for learning technology were a lack of curriculum coverage, outdated courses, and training workshops.

Findings from Table 2: The extent to which they have applied the knowledge for effective job performance. The respondents were asked the extent to which they have applied the knowledge for effective job performance. The findings indicates that few Librarians (14.88%) had very frequently utilized content curation management knowledge after attending the CSDP for effective and efficient job performance. This could be attributed to the fact that the training was not enough or there was no enough time to practice what has been learnt for their job performance. However, a considerable number of Librarians (19.28%) confirmed they have rarely utilized content curation management knowledge for job performance. Similarly, majority more than half of the Librarians (65.84%) have indicated that they very rarely or never applied the skills acquired from the training. They were uncertain on the extent of the application of content curation management knowledge which enables them to apply the skills after attending the programs for effective and efficient performance on their jobs. This might be due to the shortcoming of practical knowledge or inadequate skills of the trainers. Librarians to a large extent have failed to utilize it on their job to enable them perform effectively on their job and could be due to lack of adequate modern software applications and obsolete systems used in carrying out their routine activities, therefore there would be low output in terms

of the application of the knowledge even after attending the trainings for efficient and effective job performance. Therefore this implied that more practical training sessions should be organized regularly for librarians and current software applications should be provided to enhance their job performance. The findings concur with a study by Mathews and Pardue (2009), that carried out a research from the American Library Association online employment list in India from October 2007 to March 2008 on content study of randomly chosen job advertisements. This study emphasized the importance of project management, system development, development of the web, and system applications in librarian employment needs. According to the research, librarians must have a certain level of technological knowledge. Furthermore, the study found that, little proportions of Librarians (13.5%) respectively have very rarely utilized competitive intelligence to a higher degree after attending continuous staff development program. These categories of Librarians who have attained these skills and apply them are few and therefore are ineffective and inefficient in their job performance after attending the training organized by their various institutions. This therefore would make their performance to be very low in terms of application of the skills. Meanwhile, slightly more than half of the respondents (57.57%) stated that, competitive intelligence is often slightly rarely used by Librarians in enhancing job satisfaction. However, some of the Librarians (28.93%) provided that they have never utilized competitive intelligence on their job effective job performance after attending CSDP and that indicates that they are not competent in using the knowledge acquired. This affirmed a low level of utilization as well as proving low output in terms of their job performance and this could be due to the fact that most of the knowledge is unfamiliar to them and they have not been taught during the training sessions. Similarly, few of the respondents (21.76%) acclaimed that knowledge of scanning procedures were very frequently utilized to a large extent after attending continuous staff development program. In the same vein, slightly fifty percent of the Librarians (42.98%) affirmed that they have applied the skills always and very frequently after attending continuous staff development program for effective job performance. More so, a good number of Librarians (35.26%) indicated they have never applied the knowledge of scanning procedures after attending training to promote efficient job performance. This could be because there are no resources to scan or there are no modern scanners to scan the resources. This study is in line with Onyia and Aniogbolu (2011) who investigated the impact of library workers continuous training on job performance in the polytechnic library in delta state of Nigeria. The findings discovered that the organization's development and training and staff development organizations had an important impact on employee job performance. An organized development of staff strategy assists in providing library employees with new technological abilities required to improve work performance and minimize skill obsolescence. However, limited numbers of Librarians (19.84%) clearly affirmed that after attending the trainings, they have frequently applied the knowledge of digital file format for effective job performance. Meanwhile, majority of the Librarians (56.19%) declared that after attending staff training, they rarely applied the knowledge of digital file formats to enhance their job performance, certain Librarians (23.97%) attested non-usage of knowledge acquired after attending the trainings on digital file formats. Nonetheless, majority of the Librarians (60.6%) have indicated that they have applied excellently the knowledge gained from the training on collection management system skills for effective job performance. This therefore indicates that most of the librarian have applied this competency very frequently and therefore very conversant with the skill but have no knowledge of the basic online skills and therefore would have low output in terms of application of the online skills. Also, few Librarians (39.4%) confirmed that they have never utilized knowledge gained on collection management system for effective job performance. However, this indicates that the application of the skills would not affect their service delivery since majority of the librarians have not applied this skills very frequently. Furthermore, few Librarians (11.57%) respectively opined that, knowledge obtained from the trainings on digital asset management is remarkably utilized to improve job performance. Although, certain Librarians almost half of the respondents (40.22%) agreed that they rarely and very rarely applied digital asset management even after undertaken the training job performance. This implies that they have not acquired and applied the major online skills for librarians for effective job performance. Meanwhile, a good number of Librarians (48.21%) were certain that they have never applied the knowledge of digital asset management for effective job performance after undertaken the training. Similarly, limited proportions of Librarians (12.67%) singly, were in solidarity that very often upon return utilized the knowledge of web-design for job performance. However, a good number of Librarians (46.56%) stated that the application of knowledge of web-design was very rarely utilized while; majority of the Librarians (40.77%) attested that they have never applied of web-design even after the program. This implies that the training had no impact on their application of online skills and therefore would be low job performance. Therefore more training should be organized frequently for adequate knowledge for effective job performance. As maintained by Ayoku and Okafor (2015), library

workers in the universities in Nigeria see themselves as having strong skills in word-processing activities and the use of e-mail, but they do not have knowledge on how to access and classify e-resources, and unfamiliar with topic accesses. Databases that are specialized and helps in the acquisition of open-access library databases, having little understanding of the database administration, no expertise in designing the web, and unfamiliarity with the web design apps.

Conclusion

The study concludes that while knowledge for librarians has contributed greatly towards the improved exploitation of information and available resources of libraries and information centers as it help libraries streamline their day to day operations, improve their visibility and involvement in the larger institution and assume leadership role in helping to capture the institutional memory. Librarians should not focus on theoretical part of the profession, but should emphasize on the application of knowledge of Librarianship to their jobs. Librarians should be able to access hardware and software as well as comprehends critical and information science principles practically. This would help in the acquisition and application of the knowledge gained after undertaken the training for job performance.

Recommendations

1. More training should be organized for the acquisition of the knowledge for Librarian should be giving opportunity to attend the training regularly to help update their knowledge and skills.
2. Mentorship and workshop should always be organized internally. There should provision for library policies in the area of training and retraining of Librarians to help acquire adequate knowledge for job performance.
3. There should always be a provision for putting theoretical knowledge into practice. There should always be exchange of knowledge acquired from the training to the supporting staff. There should be adequate Information Technology infrastructures

References

- Kumar, M. (2009). Academic Libraries in electronic environment: Paradigm shift. A paper presented at the International Conference on Academic Libraries (ICAL) held at the University of Delhi, India. P. 105 IT News Africa (2010). <http://www.itnewsafrika.com> accessed 14/1/2010
- Ajidahun, C.O. (2009), The training, development and education of library manpower in information technology in university libraries in Nigeria, *World Libraries*. 17, 75- 90.
- Ayoku, O.A. & Okafor, V.N. (2015) "ICT skills acquisition and competencies of librarians: implications for digital and electronic environment in Nigerian universities libraries", *The Electronic Library*, 33 (3) pp. 502-523.
- Barber, M., K. Donnelly and S. Rizvi. 2013. *An avalanche is coming: higher education and the revolution ahead*. London, England: Institute for Public Policy Research.
- Batool,S.H.& Ameen,K.(2010),"Status of technological competencies: a case study of university librarians", *Library Philosophy and Practice (e-Journal)*. 466, available at:<http://digitalcommons.unl.edu/libphilprac/>
- Duarah, K & Mazumder, N. R. (2015) Need of training for library and Information professionals in the IT – based knowledge society. In.*Role of Library and Library professionals in the knowledge society*, 362, (pp.242- 249). New Delhi: Aayu Publication.
- Emiri, O. (2015),"Digital literacy skills among librarians in university libraries in the 21st century in Edo and Delta states, Nigeria", *International Journal of Scientific and Technology Research*, 4 (8). pp. 1-20
- Ezema, I. J., Ugwuanyi, C. E. & Ugwu, C. I.(2014).Skill requirements of academic librarians for the digital library environment in Nigeria. a case of University of Nigeria, Nsukka; *International Journal of library and Information Science*. 3(1), 17-39

- Ezeani, C.N.(2013). Envisioning Future Libraries: Can Nigerian Libraries Stay within the Curve? A Key Note Address presented at the 13th Conference/Annual General Meeting of the Nigerian Library Association (NLA) Enugu State Chapter. National Library of Nigeria, Enugu.
- Farooq, M. U., Ullah, A., Iqbal, M., & Hussai, A. (2016). Current and required competencies of university librarians in Pakistan. *Library Management*, 37, 410– 425 International Federation of Library Associations (IFLA). (2012a). IFLA Code of Ethics for Librarians and other Information Workers (full version). www.ifla.org/news/ifla-code-of-ethics-for-librarians-and-other-information-workers-full-version
- Koontz, C. & Gubbin, B. (Eds.). (2010). *public library service guidelines* (2d ed). Berlin: De Gruyter/Saur.
- Masrek, M.N., Johare, R., Saad, M.S.M., Rahim, H. and Masli, J.B. (2012), “The required competencies of para-professionals in library services of Sarawak state libraries”, *IBIMA Business Review*, available at: <http://ibimapublishing.com/articles/IBIMABR/2012/451192/>
- Mathews, J.M. and Pardue, H. (2009), “The presence of IT skill sets in librarian position announcements”, available at: www.ala.org/ala/mgrps/divs/acrl/publications/crljournal/preprints/Mathews-Pardue.pdf (accessed 22 April 2009).
- Onyia, N. G., & Aniogbolu, C. A. (2011). The effects of training and retraining on job performance: The Delta State Polytechnic, Ogwashi Uku Library staff experience. *International Journal of Labor and Organizational Psychology*, 5(1 and 2), 103–113.
- Rodríguez-Bravo, B. et. al., (2015) “Digital Transition of Teaching Learning Resources at Spanish Universities,” *El Profesional de la Información* 24, no. 6 (2015): 737–48.
- Saleh, A, G. (2012). Employers’ expectation of library education in Nigeria. *Library Philosophy and Practice*, Available at: http://Unllib.Unl.edu/lpp/gambo_saleh.htm Accessed on 3rd. June 2012