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Influence of Academic Qualification on Librarians' Proficiency of New Media Technologies in Selected University Libraries in North-Eastern Nigeria.

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Abstract

The study investigated the influence of academic qualification on librarians' proficiency of new media technologies in selected university libraries in North-Eastern Nigeria. The study was guided by two research questions and a null-hypothesis. Descriptive survey research design was adopted. The population of the study was 144 librarians from seven selected University libraries in North-Eastern Nigeria. Total enumeration was used in the study. Questionnaire was used as research instrument. Descriptive statistics of frequency counts, percentage, mean and standard deviation as well as inferential statistics of Pearson Chi-square (X2) were used in analysing the data. SPSS version 23.0 software was used for the analysis. Findings from the study revealed that librarians were moderately proficient of new media technologies; their academic qualifications had influenced the proficiency of new media technologies; hypothesis tested showed that academic qualification had significant influence on librarians' proficiency of new media technologies. Recommendations were made based on the findings.

Keywords: Academic Qualification, Librarians, Proficiency, New Media, Technologies, University Libraries, Nigeria

1. Introduction

Librarianship as a profession requires expertise in handling herculean tasks such as cataloguing, classification, indexing, abstracting, bibliometrics and database searching. Library schools in Nigeria or outside the country are geared toward preparing librarians to attain higher academic

qualifications which would prepare them to render technical library and information services. Academic qualification refers to the formal education attained by librarians at various levels. Librarians obtain educational training at various library schools in universities and polytechnics and other formal institutions across the world. These include Ph.D, MLS and its equivalent, BLS or its equivalent and DLS. It is believed that the higher the academic qualification of librarians the higher their skills, expertise or proficiencies of delivering various technical information services. Babalola (2012) pointed out that the higher the training attained, the higher the degree of intellectual exposure among librarians. This might be the reason why librarians and faculty members' promotion are stringent on academic qualifications.

Quazi and Talukder (2011) revealed that people with higher level of education were more likely to be innovative than those with lower level of education. The complex nature of the university library and its pivotal position within the university environment demands that its core professional staff should have specific academic qualification and professional certifications. The emerging trend requires that professional librarians should possess academic qualifications equivalent to that of their teaching counterparts considering that these librarians have been granted academic status (Nnadozie & Onah, 2016).

Proficiency refers to the abilities or skills possessed by librarians to operate or use new media technologies to deliver library services. New media technologies require special skills for their operation by librarians, especially in the 21st century. Akeriwa, Penzhorn and Holmner (2016) indicated that librarians were proficient in using social media platforms in the University of Development Studies Library, Ghana. Baro, Idiodi and Godfrey (2013) observed that majority of librarians in Nigerian universities are acquiring technological skills and are becoming more conversant with the use of mobile phones, tablets technologies, social media platforms as well as

other virtual platforms to perform the jobs with the ultimate aim of improving the library services. Singha and Sarmah (2015) revealed that majority of the LIS professionals in Assam and Tezpur University Libraries, India had sufficient knowledge of technologies such as RSS feeds, Blogs, Wikipedia, Social networks and Podcasts. They also used these tools to keep users aware of knowledge of current subjects as well as engaged in information sharing about new arrivals and participate in discussions with library users. These studies have indicated that librarians in developing countries are trying to catch up with their counterparts in developed countries. However, Omeluzor and Oyovwe-Tinuoye (2017) reported low level of ICT proficiency among the librarians, as a large percentage of them did not have adequate ICT skills to use available online resources on the Internet and other ICT tools to deliver SDI and CAS in South-West Nigeria.

Library schools in Nigeria where librarians are trained to have over the years reviewed their curriculum to cater for courses related to information and communication technology (ICT) to train prospective librarians and keep them abreast to new technologies in the 21st century. This is aimed at making them be in tune with the realities of digital librarianship so that they could carry out the best global practices. However, studies have reported variation on the correlation between academic qualification and proficiency of new media by librarians. It is in light of this that this study was carried out with the objectives of determining the extent of librarians' proficiency of new media technologies and ascertains whether academic qualification influences librarians' proficiency of new media technologies in some selected university libraries in North-Eastern Nigeria.

1.1 Statement of Problem

Proficiency of new media entails the skills, abilities and competencies required for accessing and utilising the technologies efficiently and effectively. Librarians that possessed proficiency of new media technologies could utilise it in creating webpage content, providing user interface, helping users acquire skills as well as searching and navigating through the web in their respective libraries. The preliminary investigation conducted by the researchers revealed that the majority of librarians in the selected university libraries in North-Eastern Nigeria had low proficiency in accessing and utilising new media technologies in carrying out library services. Semode, Ejitagha and Baro (2017) reported that only a few academic librarians in Nigeria indicated possessing adequate skills in using social media technologies. This could have led to inefficient and ineffective service delivery by the librarians. Could this mean that the librarians' academic qualifications do not influence their proficiency of new media technologies? This formed the basis upon which this study was conducted to determine the influence of academic qualification on librarians' proficiency of new media technologies in selected university libraries in North-Eastern Nigeria.

1.2 Research Ouestions

The following research questions were answered in the course of the study.

- 1. What is the extent of librarians' proficiency of new media technologies in selected university libraries in North-Eastern Nigeria?
- 2. Does academic qualification influence librarians' proficiency of new media technologies in selected university libraries in North-Eastern Nigeria?

1.3 Research Hypothesis

As a guide to the study, a single null-hypothesis was formulated and tested at 0.05 level of significance.

 Academic qualification has no significant influence on librarians' proficiency of new media technologies in selected university libraries in North-Eastern Nigeria.

2. Literature Review

Proficiency of using new media entails the ability of librarians to use new media technologies in the discharge of their duties of delivering a variety of information services. Semode, Ejitagha and Baro (2017) focused on roles, skills and use of social media platforms by librarians in Nigerian tertiary institutions. Responding on the level of skills they possessed in using social media technologies, 49 of the librarians indicated that they used social media to interact with their friends and relatives; 73 of the librarians indicated that they use social media to search and navigate information using different social media platforms; 55 of the librarians indicated using information ethically on social media; while, 52 of the librarians indicated possessing the skills to evaluate information obtained through social media, 49 of the librarians indicated possessing skills of using social media to deliver library services and create contents.

In India, Singha and Sarmah (2015) conducted a comparative study of two central university libraries in Assam State to assess the use of web 2.0 tools in enhancing information services in the libraries. The two universities surveyed included Assam University Silchar and Tezpur University, Tezpur. Analysis of the results revealed that majority of the respondents had sufficient knowledge of web 2.0 tools, such as RSS feeds, Blogs, Wikipedia, social networks and Podcasts. In comparison, 86% and 75% of the respondents were aware of the web 2.0 tools respectively. Further analysis revealed that 86% of the respondents in Assam University Library used web 2.0 tools, while, 75% of the respondents in Tezpur University Library used web 2.0

tools. Moreover, 62.6% and 35.7% of LIS professionals in Tezpur University and Assam University respectively had used web 2.0 tools to keep users aware of knowledge of current subjects. 50% and 21.42% of the respondents in Tezpur University and Assam University respectively had been engaged in information sharing about new arrivals and participates in discussion with library users.

Nnadozie and Onah (2016) surveyed how librarians' academic qualification impacts the satisfaction of faculty members toward information delivery in Nigerian universities. 4,581 constituted the population which comprised 112 librarians and 4,469 faculty members across universities in South-Eastern Nigeria. The study revealed that the academic qualifications acquired by academic librarians exert a strong influence on various aspects of their work with a weighted mean of 2.7 and standard deviation 0.68 which were above the criterion mark of 2.5. The study further revealed that faculty members consider the academic qualification as necessary in the effective discharge of their functions as academic librarians in university libraries. This presupposes that the satisfaction of faculty with information service delivery depends on the academic qualification of librarians, with 95.3% level of relationship co-existing between librarians' academic qualification and faculty members' satisfaction with information services. Moreover, the result of the hypothesis tested showed the correlation analysis output from SPSS version 19 contained a p-value of 0.000 and correlation coefficient of 0.953, thus a p-value lesser than 0.05% level of significance (i.e. P < 0.05). This shows that the correlation coefficient between librarians' academic qualification and faculty members' satisfaction from information service delivery is statistically significant.

Aramide, Ladipo and Adebayo (2015) studied how demographic variables and accessibility of ICT of science teachers influence ICT utilisation Nigerian federal unity schools. Multi-factor

correlational research design was adopted during the study. All science teachers working in the 104 federal unity schools of the 36 states including Abuja formed the population of the study. The study indicated that academic qualification, years of working experience as well as ICT utilisation experience contribute positively to the utilisation of ICT. This emphasises that academic qualification, years of working experience, ICT utilisation experience, as well as ICT access, positively influence ICT utilisation. A teacher with more academic qualification could be more enlightened and exposed on adopting ICT, having better-thinking faculty as well as passion in embracing innovation than teacher with less academic qualification. Also, a teacher that has spent a considerable number of years on the job, could always be more willing to improve the job by embracing ICT and other digital technologies than those with lower years of working experience.

3 Methodology

Descriptive survey research design was adopted in the study. The population of the study was 144 which comprised of 76 librarians and 68 library officers from seven selected university libraries resident in three states in North-Eastern Nigeria. The universities were Abubakar Tafawa Balewa University, Bauchi; Bauchi State University, Gadau; Federal University, Kashere, Gombe State; Federal University, Wukari, Taraba State; Gombe State University, Gombe; Kwararrafa University, Wukari, Taraba State; and Taraba State University, Jalingo. Because of the manageable number of the population, total enumeration was used in the study. Questionnaire was used as the research instrument. Descriptive statistics of frequency counts and percentage were used to analyse the demographic data of respondents, while, mean and standard deviation were used to analyse data generated from the two research questions raised. Furthermore, inferential statistics of Pearson Chi-square (X²) was used to test the null hypothesis

at 0.05 level of significance as a criterion for accepting or rejecting the null-hypothesis. SPSS version 23.0 was used for the analysis.

4 Data Analyses and discussion

One hundred and forty-four (144) copies of questionnaire were administered on the respondents, while, one hundred twenty-three (123) representing 85% copies were properly filled, retrieved and found useable for the study.

4.1 Demographic Information of the Respondents

Respondents were asked to indicate their demographic characteristics: Table 1 showed the responses based on their age, gender, academic qualification and year of working experience.

Table 1: Demographic Variables of Respondents N = 123

Variables	Respondents	Percentage
Gender		
Male	77	62.6
Female	46	37.4
Age Range		
21-30 years	34	27.6
31-40 years	65	52.8
41-50 years	19	15.4
51 years and above	5	4.1
Academic Qualification		
PhD	2	1.6
Master degree/PGD	24	19.5
Bachelor degree	49	39.8
Diploma/Certificate	48	39.0
Years of working experience	e	
0 -4 years	37	30.1
5-9 years	44	35.8
10-14 years	23	18.7
15-19 years	11	8.9
20 years and above	8	6.5

Table 1 presents the demographic variables of the respondents. From the Table, 77 (62.6%) of the total respondents were male, while, 46 (37.4%) of the respondents were female. This showed gender disparity in the university library job / appointment. On age of the respondents, the highest responses were those within the age range of 31-40 years with 65 (52.8%) of the respondents. This could be attributed to the fact that majority of working class are youths and that is the average working age in Nigeria. The least number of responses were those with 51 years and above with only 5 (4.1%) of the respondents and this could be attributed to the fact that those with 51 years and above might have retired or left the library service for one reason or the other.

On academic qualification, the highest respondents were those with Bachelor degree in librarianship with 49 (39.8%). This could be advanced for the fact that professionalism in librarianship commences at bachelor degree level as stipulated by the LRCN decree 12 of 1995. The lowest percentage of respondents were discovered from holders of PhD with 2 (1.6%). This could be because possession of PhD degree is not easy and candidates shall be subjected to rigorous research and presentation of seminars. Above all, it could take longer years before graduation when compared to bachelor and master degrees. Moreover, from the Table, it can be seen that the highest respondents were those with 5-9 years of working experience as represented by 44(35.8%), while, the least were those with 20 years and above as represented by 8(6.5%) responses. This could be attributed to the fact that all the universities studied apart from ATBU Bauchi were established few years ago (2004-2013).

4.2 Analysis of Research Questions

Table 2: Extent of Librarians' Proficiency of New Media Technologies

Note: HP = Highly Proficient; MP = Moderately Proficient; LP = Low Proficient; NP = Not Proficient

S/N	New Media	Technologies	HP	MP	LP	NP	\overline{X}	Std	Decision
		Library 2.0 /							
		Library	53	32	31	7			Moderately
1		website	(43.1)	(26.0)	(25.2)	(5.7)	3.07	0.96	Proficient
		World Wide	58	36	28	1			Moderately
2		Web	(47.2)	(29.3)	(22.8)	(0.8)	3.23	0.83	Proficient
			44	43	27	9			Moderately
3		Search engines	(35.0)	(35.0)	(22.0)	(7.3)	2.99	0.94	Proficient
			14	42	35	32			Low
4		RSS feeds	(11.4)	(34.1)	(28.5)	(26.0)	2.31	0.99	Proficient
			23	37	29	34			Low
5		Podcast	(18.7)	(30.1)	(23.6)	(27.6)	2.40	1.08	Proficient
	Web 2.0	Instant							
	Technologi	Messaging/	56	33	25	9			Moderately
6	es	Email	(45.5)	(26.8)	(20.3)	(7.3)	3.11	0.97	Proficient
			81	27	14	1			Highly
7		Facebook	(65.9)	(22.0)	(11.4)	(0.8)	3.53	0.73	Proficient
			63	34	22	4			Moderately
8		Twitter	(51.2)	(27.6)	(17.9)	(3.3)	3.27	0.87	Proficient
			66	36	17	4			Moderately
9		Whatsapp	(53.7)	(29.3)	(13.8)	(3.3)	3.33	0.84	Proficient
			57	30	29	7			Moderately
10		Instagram	(46.3)	(24.4)	(23.6)	(5.7)	3.11	0.96	Proficient
	Social		29	40	37	17			Moderately
11	Media	Blogs	(23.6)	(32.5)	(30.1)	(13.8)	2.66	0.99	Proficient
			59	44	18	2			Moderately
12		Mobile Apps	(48.0)	(35.8)	(14.6)	(1.6)	3.30	0.78	Proficient
		Short Message	57	40	14	12		0.98	Moderately
13		Service	(46.3)	(32.5)	(11.4)	(9.8)	3.15		Proficient
	Mobile		47	37	18	21			Moderately
14	Technology	Internet call	(38.2)	(30.1)	(14.6)	(17.1)	2.89	1.10	Proficient
			33	40	41	9			Moderately
15		Google Drive	(26.8)	(32.5)	(33.3)	(7.3)	2.79	0.93	Proficient
			19	39	36	29			Low
16		Drop box	(15.4)	(31.7)	(29.3)	(23.6)	2.39	1.01	Proficient
	Cloud		18	37	31	37			Low
17	Computing	One Drive	(14.6)	(30.1)	(25.2)	(30.1)	2.29	1.05	Proficient
				_		_			Moderately
	Overall Mea		10 :- f				2.93		Proficient

Decision Rule: Mean range of 1-1.49 is for Not Proficient; Mean range 1.50-2.49 is for Low Proficient; Mean range of 2.50-3.49 is for Moderately Proficient; Mean range 3.50-4.00 is for Highly Proficient. ii. The figures in the parenthesis are the percentages of the respondents.

Table 2 presents the responses of the respondents on the extent of proficiency of new media technologies. From the Table, it was discovered that Facebook had the highest mean score with 3.53 (highly proficient) of new media technologies. This could be because Facebook is the most popular and easy to use among all the new media technologies itemised. On the other hand, One Drive with mean score of 2.29 (low proficient) attracted the least from the respondents probably because it is a recent cloud computing technology and respondents might not be conversant with it. Furthermore, the overall mean score of 2.93 implied that the respondents were moderately proficient of new media technologies. This could be attributed to the fact that new media technologies such as Facebook, Whatsapp, Twitter, Instagram, among others listed in this study were used to socialise with library users to the extent that they facilitate connectivity, interactivity, communication and sharing of information between librarians and users. This finding agrees with that of Semode, Ejitagha and Baro (2017) which studied the roles, skills and use of social media platforms by library staff in Nigerian tertiary institutions. The study found that the librarians studied were proficient in using social media to search and navigate information using different social media platforms, evaluate information obtained through social media and deliver library services and create contents. Similarly, the finding of this study supported that of Baro, Idiodi and Godfrey (2013) which reported that the librarians were familiar and proficient with web 2.0 tools such as Social Networking sites, Instant Messaging, media sharing sites, Facebook, Twitter, Blogs as well as Wikis and the services rendered using web 2.0 tools included reference services, library news/events, training resources as well as sharing images and videos with library users.

Moreover, in agreement to this finding, Singha and Sarmah (2015) studied two central academic libraries in Assam State, India and assessed the use of web 2.0 tools in enhancing information

services in the libraries. The study reported that majority of the respondents had sufficient knowledge of web 2.0 tools, such as RSS feeds, Blogs, Wikipedia, Social Networks and Podcasts. Furthermore, they had been engaged in information sharing about new arrivals and participates in discussion with library users. In contrast to this finding, Omeluzor and Oyovwe-Tinuoye (2017) assessed ICT use in selected university libraries in South Western, Nigeria and found that the level of ICT (such as Blogs, RSS feed, Ask a Librarian, Twitter, google+, email, OPAC, Facebook, and YouTube) skills for delivery of SDI and CAS to their patrons among the librarians was low; as a large percentage of them did not have adequate ICT skills to use available resources to deliver SDI and CAS.

Table 3: Influence of Academic Qualification on Librarians' proficiency of new media Technologies

S/N	Statement							OND	/NCE/
		PhD		M.Sc/PGD		BA/B.Sc/HND		Certificate	
		\overline{X}_1	Dec1	\overline{X}_2	Dec2	\overline{X}_3	Dec3	\overline{X}_4	Dec4
1	My academic qualification has a								
	significant influence on the								
	proficiency of new media.	4.00	Agree	3.38	Agree	3.61	Agree	3.46	Agree
2	My academic qualification does								
	not affect proficiency of new								
	media.	4.00	Agree	2.79	Agree	2.73	Agree	2.90	Agree
3	My academic qualification is an								
	added advantage in the								
	proficiency of new media.	4.00	Agree	3.08	Agree	3.45	Agree	3.31	Agree
4	My academic qualification and								
	degree of awareness influence								
	proficiency of new media.	3.50	Agree	2.96	Agree	3.43	Agree	3.25	Agree
5	My academic qualification is								
	indispensable on the proficiency								
	of new media.	3.50	Agree	2.92	Agree	2.86	Agree	3.10	Agree
6	My academic qualification								
	influence proficiency of new								
	media.	3.50	Agree	3.13	Agree	3.37	Agree	3.33	Agree
-	Overall Mean Score	3.29	Agree	3.24	Agree	3.23	Agree	3.04	Agree

Decision Rule: 2.50 - 4.00 is Mean range for Agree and 1.00 - 2.49 is the Mean range for Disagree

Table 3 showed the mean responses of the respondents based on the influence of academic qualification on Librarians' proficiency of new media technologies. From the Table, it can be observed that PhD holders had the highest overall mean score of 3.29 (agree), while, Diploma/NCE/Certificate holders had the least overall mean score of 3.04. It can be observed that the difference in the overall mean scores among the category of respondents was little. This implies that majority of the Librarians, agree that their academic qualifications influence the proficiency of new media technologies. However, despite possessing academic qualification, librarians require awareness, proficiency and know-how of maximum use of new media to carry out their day-to-day activities of library operations. In line with this finding, Santosh (2016) reported that the majority of librarians irrespective of their academic qualification were aware of available new media in selected Indian universities. Also, the finding agrees with that of Anunobi and Ogbonna (2012) that reported low awareness of the new media technologies among the professional members of Nigerian Library Association (NLA) in Anambra State among the factors hampering effective information service delivery.

4.3 Hypothesis Testing

Table 4: Chi-Square Result on the Significance Influence of Academic Qualification on Librarians' Proficiency of New Media Technologies.

Chi-Square Tests

	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	31.867 ^a	9	0.000
Likelihood Ratio	35.559	9	0.000
Linear-by-Linear Association	23.787	1	0.000
N of Valid Cases	123		

In Table 4, the Chi-Square result indicated that academic qualification has a significant influence on librarians' proficiency of new media technologies at 0.05 level of significance. Therefore, the

hypothesis which states that academic qualification has no significant influence on Librarians' proficiency of new media technologies in selected university libraries in North-Eastern Nigeria is rejected, because, the probability value (P = 0.000) is less than the critical value at 0.05 level of significance at a Chi-Square value= 31.87. Hence, academic qualification has a significant influence on librarians' proficiency of new media technologies in selected university libraries in North-Eastern Nigeria. This finding is very obvious, because, librarians who undergo rigorous educational training ought to be very conversant with emerging technologies and this could exert significant influence on their proficiency of new media technologies.

In agreement with this finding, Nnadozie and Onah (2016) surveyed how the librarian's qualification impacts the satisfaction of faculty members toward information delivery. The study revealed that the academic qualifications acquired by librarians exert a strong influence on various aspects of their work in terms of adopting technologies for service delivery. The study also revealed that faculty members considered the academic qualification as necessary in the effective discharge of the functions as librarians. The study further revealed that the correlation coefficient between librarians' academic qualification and the use of technology was statistically significant. Meanwhile, Babalola (2012) agreed with this finding and reported among others that, academic qualification had significant influence on productivity of librarians. In addendum, Owolabi (2013) found among others that, the level of education was highly correlated in information service delivery among librarians in the university libraries studied. This implied that librarians with higher levels of education could have higher levels of attributes and character toward their job.

However, this finding is in contrast with that of Aramide, Ladipo and Adebayo (2015) which revealed among others, that, academic qualification was negatively correlated with ICT use. The

study revealed that those respondents with lower academic qualifications as well as those with less years of working experience utilised ICT more often than those with higher academic qualifications and years of working experience.

5. Conclusion and Recommendations

The findings of this study revealed that librarians were moderately proficient of new media technologies. This could be the reason why the librarians were unable to provide effective and efficient information services to the users. This is because, for librarians to serve their users efficiently, they need to be highly proficient in adopting new media technologies which the 21st century has availed libraries with. Majority of the librarians indicated that their academic qualifications had influenced their proficiency of new media technologies. Furthermore, the hypothesis tested showed that academic qualification had significant influence on librarians' proficiency of new media technologies in the selected university libraries in North-Eastern Nigeria. Therefore, librarians require proactive efforts to keep abreast of the emerging technologies with the ultimate aim of bridging the digital gap in delivering library and information services. To tackle these issues, the following are recommended:

- Management of university libraries in North-Eastern Nigeria should provide the latest digital devices such as Smart Phones, Ipads, Laptops and other facilities to increase librarian's proficiency and facilitate access to new media technologies.
- 2. University libraries in North-Eastern Nigeria should employ more academic librarians and other ICT inclined staff, as this could result in improving efficiency and effectiveness of library and information services delivered to users.
- 3. Librarians should endevour to acquire knowledge and technical know-how in operating new media technologies as these would enhance quality service delivery in their libraries.

Furthermore, librarians with less academic qualification should embark on upgrading their qualification to be acquainted with skills regarding the use of new media technologies for library services.

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