

Training and Skill Requirements of Librarians for Implementing Resource Description and Access (RDA) in Public University Libraries in Southeast Nigeria

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ABSTRACT

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Objective: This study examined the training and skill requirements of librarians for the implementation of Resource Description and Access (RDA) in public university libraries in South-East Nigeria.

Methods: The study adopted a correlational research design and involved a population of 297 librarians from eight public university libraries. A proportionate stratified random sampling technique was used to select 154 academic and non-academic librarians. Data were collected using a researcher-developed questionnaire based on a 4-point rating scale, along with an unstructured interview. The questionnaire was validated and pretested for reliability using the Cronbach's Alpha formula, yielding a reliability coefficient of 0.91. A 93% response rate was achieved, with 143 validly completed questionnaires and unstructured interview responses obtained from five Heads of Processing Units (Cataloguing and Classification). The questionnaire data were analyzed using descriptive statistics, including frequency counts, mean scores, standard deviations, and Pearson Product-Moment Correlation (PPMC). A single null hypothesis was tested using simple linear regression at the 0.05 level of significance. Interview responses were qualitatively transcribed to support the results of the quantitative analysis.

Results: The study revealed that librarians require training across all areas of the RDA standards, including the migration from AACR2 to RDA and the implementation of RDA data element guidelines. It also indicated that librarians need a foundational understanding of the RDA structure and rules, metadata development skills for working with metadata tools and standards such as Dublin Core and MODS, as well as database management skills for safeguarding sensitive bibliographic records— all essential for the effective implementation of RDA. The study showed that there was no significant implementation of RDA by the librarians. They remained largely at the planning stage, considering retrospective data changes required for the transition from AACR to RDA, deciding whether or not to adopt RDA, and addressing budgetary issues related to the shift. A high level of unpreparedness was observed in key areas of RDA implementation, such as the acquisition of RDA toolkits and the installation of RDA-related software. The study further revealed that poor funding of public university libraries, lack of access to modern technologies such as RDA toolkits, and the lackadaisical attitude of some librarians toward innovative services were the major factors contributing to the inadequate training and skill development necessary for RDA implementation in university libraries.

Conclusion: It is concluded that librarians' training has a weak but statistically significant positive relationship with the skill requirements for the implementation of RDA in public university libraries in South-East Nigeria. The study recommended that the management of public universities should provide adequate funding to the university libraries for the acquisition of essential resources such as RDA toolkits and reliable internet connectivity. Furthermore, the management of public university libraries, in collaboration with library associations, and other professional bodies, should prioritize the training and retraining of librarians. This can be achieved by encouraging participation in conferences, seminars, workshops, and webinars on RDA to help librarians learn about and become familiar with RDA guidelines, standards, policies, and related components.

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Introduction

Librarianship all over the world, has greatly evolved with new systems, approaches and technologies. The emerging systems and technologies have shaped the ways in which basic operations and services in the university libraries such as cataloguing and classification are carried out, as well as the skills and competencies required by librarians as managers in information generation and dissemination for effective library services delivery. As a matter of fact, the present changing environment in which university libraries exist requires more digital, analytical, innovative and perceptive abilities than ever before (Akwang et al., 2024). This is because the university libraries of the modern society are expected to play more catalytic and transformative roles as the essential vehicles for galvanizing effective teaching, learning, research and community services (Arua & Udoh, 2019; Udoh et al, 2023). They are established with the core mandates of acquiring, processing and disseminating information resources in both print and non-print formats for the teeming users. Due to various changes and innovations, university libraries are greatly challenged, thereby forcing librarians to think differently towards the acquisition of new skills and competencies. It becomes necessary to meet library users' increasing expectations for more satisfactory services, and at the same time, librarians' increasing requirement for more technical and critical abilities to meet the changing procedures in knowledge organization for enhanced users' satisfaction. It particularly calls for improved training of librarians for the acquisition of relevant skills to implement emerging technologies and procedures such as resource description and access (RDA) standards in the university libraries.

Librarians' training for implementation of RDA refers to the whole gamut of processes through which necessary knowledge, expertise and skills are acquired for use of the new cataloguing and classification rules in organizing the universe of knowledge. Librarians' training could take a variety of formal or informal methods such as workshops, seminars, conferences, webinars, on-the-job-training, job rotation, and other training techniques, which could be online or offline. It may also involves discussing with librarians knowledgeable in resource description and access, visiting libraries that are already using the RDA standards, undertaking online training via YouTube, undergoing offline training with downloaded training materials, using webcasts, podcasts and RSS feeds (Ahonsi, 2014; Mansor & Ramdzan 2014; Richard et al., 2024). Effective training generally helps in boosting librarians' knowledge, aptitude and confidence in all aspects of librarianship. It characteristically galvanizes librarians' readiness and confidence in implementing the resource description and access codes in descriptive and subject cataloguing in the university libraries. It also equips librarians in dealing with knowledge gap that hitherto exist and hinders the adoption of the new cataloguing standards in university libraries.

Resource description and access embeds new procedures and rules for knowledge organization in libraries for enhanced access, retrieval and utilization of library resources. Resource description and access (RDA) is a bundle of instructions, guidelines and data elements based on the Functional Requirements for Bibliographic Records (FRBR) and Functional Requirements for Authority Data (FRAD) that provides semantics of well-structured metadata, which help users to access and retrieve information in the libraries (Ahonsi, 2014; Omosekejimi et al., 2022). Similarly, Madukoma et al. (2023) described RDA as a metadata creation and management which is vital in managing resource discovery to both librarians and library users. Resource description and access (RDA) is web-based cataloguing guidelines available on the Internet with more electronic contents. It represents another innovative technology for effective provision of electronic information services in university libraries (Mensa et al., 2023), developed in line with unique set of objectives and principles based on the statement of International Cataloguing Principles (ICP). It practically brings about newer roles, skillsets and compliance with new technologies for librarians in university libraries. This underscores the position of Moulaison, as cited in Bamidele et al. (2020), who noted that RDA evolved to describe all types of entities and relationships in the bibliographic universe that meet the needs of users around the world. Its primary objectives are to increase efficiency, position the community for the future by making bibliographic data accessible on the web and also help information users to easily and more conveniently find information they need. It equally enhances efficiency in data capturing, storage and retrieval in university libraries for improved users' satisfaction.

Effective implementation of RDA in university libraries requires high level of skills and competencies in information technologies, especially internet related skills such as browsing skills, as well as database and software application skills. This underscores the position of Richard et al. (2024), who pointed out that librarians' training on RDA is quite propelling and noteworthy because most Nigerian university libraries are yet to adopt the RDA in their cataloguing tasks since it was launched in June 2010 and implemented by libraries in advanced countries in 2013. Training enhances librarians' skills and competencies, which help in the implementation of resource description and access such as installation of a package of data element guidelines and instructions for creating library and cultural heritage resource metadata that are well-formed according to international model for user-focused linked data applications (Oliver, as cited in Haliru & Sokari, 2016). Possessing adequate skills helps librarians in the process of discerning the various stages of resource description and access implementation such as exploration (like determining readiness, identifying needs and priorities, as well as assessing resources); installation (such as obtaining RDA toolkit, setting up infrastructure, and developing policies and procedures); initial implementation (such as piloting RDA implementation, refining workflows and policies and expanding RDA implementation to other parts of the library's collection); and full implementation (such as achieving consistency and quality, maintaining

RDA implementation and staying current with RDA and best practices in library cataloguing (Fixsen et al., as cited in Olorunkalu, et al. 2023).

This accentuates the fact that possessing relevant skills by librarians is indispensable in effective implementation of RDA cataloguing standards. It requires a combination of sound technical competencies and proficiencies in digital technologies and metadata creation since RDA is a Web-based system. It is necessary for librarians to possess a strong understanding of bibliographic concepts, and the ability to communicate and collaborate effectively with library staff and users of the library. It specifically requires such skills as mark-up languages skills such as skills for use of eXtensible, HTML, RDF, SGML, etc.; metadata development skills, tagging and multimedia indexing skills, as well as user interface development and maintenance skills (Haliru & Sokari, 2016). It further entails that librarians need to be versatile in data mining and database management, with adequate understanding of search engines such as Google, as well as proficiency in the use of Boolean logic, use of online cataloguing tools and basic programming. They should also possess effective collaboration skills to leverage on knowledge exchange opportunities (Amadi et al., 2024); and digital literacy skills for the helpful manipulation of available digital tools for enhanced online cataloguing services (Udoh et al., 2020; Udoh & Okafor, 2022). Possessing adequate skills is quite essential for librarians to effectively interpret and understand RDA codes to create access points for ease of access, retrieval and use of library resources. This further enhances effective service delivery and users' satisfaction in the university libraries. Therefore, based on the above background, this study was conducted to ascertain librarians' training and skill requirements for implementation of RDA in public university libraries in South-East, Nigeria.

Statement of the Problem

It is a general understanding that the implementation, adoption or integration of emerging technologies or systems in organizational setting for effective services delivery is highly dependent on the level of skills and competencies possess by the staff, and this in turn hinges on the level of effectiveness in the training process of the concerned staff. This suffices it to say that effective implementation of RDA in university libraries is a product of deliberate and meticulous training of librarians as a means through which they can acquire and/or improve their skills, knowledge, capacities and confidence. However, in spite of the importance of training on librarians' ability to acquire requisite skills for implementation of RDA in university libraries, studies revealed that most Nigerian librarians do not possess adequate skills in resource description and access due to inadequate requisite training opportunities (Ahonsi, 2014; Haliru, 2015; Haliru & Sokari, 2016; Omosekejimi et al., 2022). It was also reported in Akwang and Udoh (2024); as well as Mensa et al. (2023) that one of the major challenges to the adoption of innovative technologies in services delivery in university libraries is lack of dedicated training

and retraining of librarians. The above submissions specifically underpin the fact that there is a high need for training of librarians to acquire necessary skills and competencies for implementation of resource descriptive and access for enhanced services delivery. As a matter of fact, the high training gap of Nigerian librarians is a source of serious concern since it has the potential to negatively affect the university libraries in competing favorably with their global counterparts in this digital age. This may hinder librarians' ability to perform their responsibilities effectively as well as mediate with users in knowledge organization and information sharing for effective satisfaction of users' needs. It is also very worrisome because inadequately trained librarians can hardly adjust to critical paradigms in their cataloguing responsibilities through the implementation of resource description and access for enhanced information search, retrieval and utilization like their counterparts in the developed countries. Thus, based on the above backdrop, this study examined librarians' training and skill requirements for implementation of RDA in public university libraries in South-East, Nigeria.

Objectives of the Study

The main objective of this study was to assess librarians' training and skill requirements for implementation of RDA in public university libraries in South-East, Nigeria. The specific objectives of the study were:

- To examine the areas of training required by librarians for implementation of RDA in public university libraries in South-East, Nigeria.
- To determine the skills required by librarians for the implementation of RDA in public university libraries in South-East, Nigeria.
- To ascertain the extent of implementation of RDA by librarians in public university libraries in South-East, Nigeria.
- To identify the factors militating against librarians' training and skill requirements for implementation of RDA in public university libraries in South-East, Nigeria.
- To determine the relationship between librarians' training and skill requirements for implementation of RDA in public university libraries in South-East, Nigeria.

Research Questions

The following research questions guided the study:

- What are the areas of training required by librarians for implementation of RDA in public university libraries in South-East, Nigeria?
- What are the skills required by librarians for the implementation of RDA in public university libraries in South-East, Nigeria?
- What is the extent of implementation of RDA by librarians in public university libraries in South-East, Nigeria?

- What are the factors militating against librarians' training and skill requirements for implementation of RDA in public university libraries in South-East, Nigeria?
- What is the relationship between librarians' training and skill requirements for implementation of RDA in public university libraries in South-East, Nigeria?

Hypothesis

A single null hypothesis was formulated and tested at 0.05 level of significance.

H01: Librarians' training has no significant relationship with the skill requirements for implementation of RDA in public university libraries in South-East, Nigeria.

Literature Review

Resources description and access (RDA) is an emerging procedure developed for enhanced and better knowledge organization in libraries. Resource description and access (RDA) is built on the principles of Anglo-American Cataloguing Rules Second Edition's (AACR2) structures, with distinct and novel characteristics that makes it a better standard for cataloguing for modern libraries (Ahonsi, 2014; Ezema et al., 2022; Olorunkalu et al., 2023; Saliu, 2021). It is compatible with internationally established principles, models, and standards, suitable for a range of encoding schemas, such as MODS, Dublin Core, ONIX and MARC. It allows library bibliographic records to be integrated with those produced by other metadata communities in anticipation of migration to the digital environment beyond library catalogue. It is designed to assists both library staff and library users in enhancing easy search and retrieval of different and specific information in bibliographic records. Tosaka and Park, as cited in John-Okeke (2019) opined that RDA provides a comprehensive set of general instructions and guidelines that are logically defined, easier to use, and more adaptable in describing all types of resources designed for digital and non-digital environment while simplifying cataloguing rules and minimizing special rules for describing specific types of materials. It primarily focuses on improving and expanding the library catalogues' influence to the Internet, where the content is more electronic (Tillet & Congress, as cited in Haliru & Sokari, 2016). It is a highly technology-based cataloguing toolkit, an integrated browser-based online product that allows users to interact with a collection of cataloguing documents and resources. It has the main aim of providing a set of guidelines and instructions for formulating data to support resource discovery, while enhancing the visibility of institutions through shareability of information. Librarians can only effectively implement resource description and access if they are well-trained and equipped with relevant skills, aptitude, knowledge and competencies.

This means that librarians' training and skills' acquisition is sine-qua-non for implementation of RDA in university libraries. Librarians' training embodies formal and informal activities, processes and techniques adopted by university libraries and librarians to improve and increase

skills, capacities, aptitude and attitude of librarians for enhanced service delivery (Richard et al., 2024). It could be accessed through formal education and learning opportunities in the workplace, using both external and internal processes, including observing how others perform certain tasks (Amisano, 2017). It is considered as an organized planning process through which librarians learn useful technical and evolving skills to impart knowledge, develop skills, change attitudes and improve behaviour (Oseji, 2020). Training of librarians for RDA is necessary in order to enable librarians surmount numerous problematic and challenging situations pertaining to the new cataloguing standards and codes. Training on RDA enables librarians to be proficient and acquire internet skills and understanding of search engines like Google, etc., proficiency in the use of Boolean logic, use of online cataloguing tools and basic programming, as well as use of mark-up languages (eXtensible, HTML, RDF, SGML, etc.), metadata development, tagging and multimedia indexing, user interface development and maintenance, data mining and database management (Haliru & Sokari, 2016). It further corroborates Fati and Aderitimin (2017) who opined that librarians' training on RDA helps in acquiring basic computer literacy skills such as ability to turn on/off a computer, monitor and printer, use Windows operating system, use Macintosh operating system and ability to use Disk Operating System (DOS) commands, ability to start a software program, copy files, manage folders/directories on hard drives and set up a new personal computer facilities for effective use of technologies including RDA in services delivery to users in university libraries.

However, Richard et al. (2024) investigated librarians' training needs in information technology application and services delivery in public university libraries in Akwa Ibom State, Nigeria. The study revealed that librarians' training on Resource Description and Access application has a weak but positive significant relationship with services delivery in public university libraries in Akwa Ibom State, Nigeria. It recommended that university library management should pay more attention to librarian training on key aspects of information technologies such as resource description and access to enhance effective service delivery in university libraries, while concluding that training is fundamental in acquiring skills for application of information technologies and service delivery in university libraries. Another study was conducted on librarians' ICT competence and implementation of RDA in academic libraries in South-West, Nigeria by Olorunkalu et al. (2023). The study indicated that ICT skills, internet skill and competence, ability to use search engines such as google, meta, and ability to use e-mail to disseminate information with colleagues and others as the competencies for implementation of resources description and access in university libraries. It concluded that librarians' ICT competence is vital component for higher implementation of RDA in academic libraries. It recommended that management of academic institutions in conjunction with the academic libraries should uplift the level of librarians' ICT competence in the academic libraries by sponsoring them for further their education, regular attendance at seminars, workshops and

conferences, while librarians on their part should actively participate in a web-based CPD programmes via webinars, zoom, massive open online courses, social media platforms, etc.

Yeboah et al. (2023) surveyed the readiness of Ghanaian university libraries towards the adoption and implementation of Resource Description and Access. The study revealed an overwhelming level of unpreparedness in skills acquisition among Ghanaian university libraries to implement the standards. It recommended that university library management and leaders of professional library organizations should designate RDA preparatory periods and ensure collaborations with libraries in order to enhance the implementation of RDA standard. Omoisejimi et al. (2022) also examined cataloguers' awareness, ICT skills and use of RDA in university libraries in South-South, Nigeria. The study revealed that cataloguers in university libraries in South-South, Nigeria, were aware of the existence of RDA but the extent of cataloguers' awareness of RDA in university libraries was low. It showed the librarians lack basic ICT skills such as the ability to use Windows operating system, Macintosh operating system and Disk Operating System (DOS) commands to apply RDA in service delivery. It indicated that the extent of librarians' use of RDA for cataloguing of information resources in university libraries in South-South, Nigeria, was very low. It pointed out that the librarians lack requisite ICT facilities, lack access to RDA toolkits, and necessary RDA training for familiarity with RDA rules and guidelines.

In another related study, Isibika et al. (2021) investigated the perceived training needs assessment of librarians in Tanzanian academic libraries. The study showed that librarians require high level of training to enhance their ICT and technical skills, especially on database management, advanced search, information organization, etc. It revealed that adequate training can benefits librarians by keeping them up-to-date with new trends in the profession and help them to build their capacity in order to effectively respond to users' changing needs and preferences in the libraries. The study identified lack of transparency and fairness in selecting employees for training, lack of prospects for training, and lack of supportive organizational culture as some of the major barriers to the training needs of librarians in academic libraries. Saliu (2021) equally surveyed the awareness and use of RDA among librarians in Nigeria libraries, and reported that though majority of the librarians were aware of resources description and access, but the awareness does not influence usage, since majority of the librarians have not used RDA. It recommended availability of network, training on RDA, access to computer, effective bandwidths, computer skill, etc., as the requirements for use of resource description and access in the university libraries. Bamidele et al. (2020) further studied the awareness of RDA among cataloguers in Nigeria. The study showed that majority of cataloguers were aware of RDA, and were satisfied with the RDA guidelines and instructions because they have been trained on the use of RDA. It revealed that majority of the cataloguers affirmed that RDA has not

been implemented in their libraries. It recommended that RDA training and implementation should be the focus of policy makers in the libraries in Nigeria while, professional librarians should be encouraged to attend conferences, seminars and workshops on RDA regularly in order to stay relevant professionally.

Aboyade and Eluwole (2018) examined the implementation of RDA in Nigeria with a focus on awareness, cataloguers' perception and challenges. The study revealed that librarians and cataloguers in academic libraries in Southwest Nigeria are aware of, and enthusiastic about the implementation of resource description and access. It identified epileptic power system, poor funding, and inadequate ICT facilities as some of the challenges hampering the implementation of resource description and access in the university libraries. The study recommended that adequate funds should be provided to libraries to train librarians on RDA, acquire RDA toolkit and provide functional and steady power system for the smooth implementation of RDA in Nigeria. It is also as Haliru and Sokari (2016) investigated RDA training needs for librarians in university libraries of North-western Nigeria. The study showed that the level of RDA skills of librarians was very low. It indicated that librarians greatly require training in all aspects of resource description and access. The study recommended that librarians should be trained on the use of RDA for cataloguing, particularly in the areas where they lack the technical knowhow such as the use of internet, development of metadata and tagging, while university library management should solicit support from TETFund to bank roll the training and purchase RDA toolkits.

Santos (2016) equally studied the status of RDA implementation in Philippine academic libraries. The study revealed that librarians from institutions within or near Metro Manila (urban cities of Philippine with larger libraries) were more advanced in the implementation of RDA while librarians from farther areas such as in the Visayas and Mindanao (semi-urban and/or rural areas) were slower in transition to RDA. It indicated that majority of the librarians were still in the stage of training and learning about the new RDA code, while a small fraction of the librarians from larger libraries agreed that they have moved beyond trainings to the stage of creating their own cataloguing policies for adoption of RDA. This is furthermore as Oguntayo and Akinniyi (2016) studied awareness, knowledge and implementation of RDA in academic libraries in Nigeria, and reported that the librarians were only aware of topics relating to the overview and development of RDA. Atilgan et al. (2015) examined the perception and expectations of cataloguers on implementation of RDA in Turkey libraries. The study revealed that more than half of the librarians had no idea or did not understand the statement about RDA vocabularies, RDA element sets and its terminologies. It showed further that a few librarians in Turkey libraries understand RDA implementation processes, noting that it creates stress for their libraries and for their workspaces.

From the above reviewed studies, a clear need for a study on the training of librarians and skills requirements for implementation of resource description and access in university libraries was conspicuously discovered. This was because in most of the reviewed works, attention was focused more on awareness and adoption of RDA in libraries. This was notwithstanding the importance of librarians' training and ingrained need for skills and competencies for implementation or adoption of RDA in university libraries. The dearth of literature on the subject matter was also observed, in general, while literature was silent on the situation of librarians' training and skill requirements for implementation of RDA in public university libraries in South-East, Nigeria, since there was no empirical study within the reach and access of the researcher. Thus, this study intends to fill the observed gap in literature.

Materials and Methods

The correlational research design was adopted for this study, with a population of two hundred and ninety-seven (297) librarians from eight (8) public university libraries in Abia, Ebonyi, Enugu and Imo States in South-East, Nigeria. The public university libraries include four (4) federal university libraries, namely; Michael Okpara University of Agriculture, Umudike (MOUAU) library, Abia State; Alex Ekwueme Federal University, Ndufu-Alike, Ikwo, (AE-FUNAI) library, Ebonyi State; University of Nigeria, Nsukka (UNN) library, Enugu State; and Federal University of Technology, Owerri (FUTO) library, Imo State; as well as four (4) state university libraries, namely; Abia State University, Uturu (ABSU) library, Abia State; Ebonyi State University (EBSU) library, Ebonyi State; Enugu State University of Science and Technology (ESUST) library, Agbani, Enugu State, and Imo State University (IMSU) library, Owerri, Imo State.

The population comprises one hundred and sixty-nine (169) academic and one hundred and twenty-eight (128) non-academic librarians. This population focuses on those with a minimum of first degree in Library Science (BLS) or Library and Information Science (B.LIS). This is predicated on the assumption that these categories of library personnel have a fair knowledge and some level of familiarity with RDA and its implications for knowledge organization in the university libraries. The proportionate stratified random sampling technique was used in selecting 154 academic and non-academic librarians, representing 52% of the population. The population distribution and sample size were further represented in the Table 1 below:

Table 1. Population Distribution and Sample Size

S/N	Institutions	Population			Sample Size		
		Academic librarians	Non-Academic Librarians	Total	Academic librarians	Non-Academic Librarians	Total
	Federal University Libraries						
1	MOU AU	26	17	43	13	9	22
2	AE-FUNAI	9	13	22	5	7	12
3	UNN	53	53	106	27	27	54
4	FUTO	48	14	62	24	7	31
	Sub-Total	136	97	233	69	50	119
	State University Libraries						
5	ABSU	7	5	12	4	3	7
6	EBSU	9	13	22	5	7	12
7	ESUST	9	8	17	5	4	9
8	IMSU	8	5	13	4	3	7
	Sub-Total	33	31	64	18	17	35
	Grand Total	169	128	297	87	67	154

The researcher employed a self-developed questionnaire with closed-ended questions designed on a 4-point rating scale and an unstructured interview for data collection. The questionnaire is titled, **“Librarians’ Training and Skill Requirements for Implementation of RDA Questionnaire - LTSRIRDAQ.”** It contains a total of fifty-three (54) item statements in four (4) clusters in line with the specific objectives and corresponding research questions of the study. The questionnaire was subjected to validation to ensure its appropriateness and suitability, and pretested for reliability using 15 academic and non-academic librarians each from the University of Uyo (UNIUYO) and Akwa Ibom State University (AKSU) libraries. Their responses were analyzed using Cronbach Alpha formula, which yielded 0.91 reliability coefficient index. 154 copies of the questionnaire were distributed to the respondents by the researcher, with the assistance of a research assistant recruited from the respective university libraries for the purpose of this study. Out of the 154 copies of the questionnaire distributed, a total of 143 copies, representing 92.86% (approximated to 93%) response rate were validly completed and retrieved for the study. On the other hand, unstructured interviews were conducted on five (5) Heads of Processing/Cataloguing and Classification Units of five (5) of the university libraries to validate the responses to the questionnaire. The raw data collected for the study were coded using the Statistical Package for Social Science (SPSS version 29), while responses to research questions 1-4 based on the questionnaire items were analyzed using descriptive statistics of frequency counts, mean scores and standard deviations with a criterion mean of 2.50. Equally, research question 5 was analyzed using Pearson Products Moment Correlation (PPMC) to determine the correlation coefficient of the relationship between librarians’ training and skill requirements for implementation of RDA in public university libraries in South-East, Nigeria. The degree of the

relationship for the correlation between the variables was determined and interpreted using Creswell's (2014) correlation coefficient scale of (r) $\pm 0.00 - 0.20$ = very low relationship; $\pm 0.21 - 0.40$ = low relationship; $\pm 0.41 - 0.60$ = moderate relationship; $\pm 0.61 - 0.80$ = high relationship, and $\pm 0.81 - 1.00$ = very high relationship. The single null hypothesis was tested using simple linear regression at 0.05 level of significance, with a decision rule suggesting the rejection of the null hypothesis if the P-value is less than the Alpha value at 0.05 level of significance or otherwise, accepting the null hypothesis. More so, responses to the unstructured interviews were transcribed and interpreted qualitatively to confirm and/or refute the results of the quantitative findings in order to achieve a more reliable outcome for better generalizations.

Results

The results of the study were presented in line with the total number copies of questionnaire distributed, completed and retrieved. This is shown in Table 2 below as analyzed with the simple percentage statistics for better understanding.

Table 2. Questionnaire Distribution and Retrieval Rate by Institution s

S.N.	Institutions	CQD		Total	CQR		Total	% of QR
		AL	NAL		AL	NAL		
	Federal University Libraries							
1	MOUUAU	13	9	22	13	7	20	13.99 (14%)
2	AE-FUNAI	5	7	12	4	7	11	7.70 (8%)
3	UNN	27	27	54	26	25	51	35.66 (36%)
4	FUTO	24	7	31	22	7	29	20.28 (20%)
	Sub-Total	69	50	119	65	46	111	77.62 (78%)
	State University Libraries							
5	ABSU	4	3	7	4	2	6	4.20 (4%)
6	EBSU	5	7	12	4	6	10	6.70 (7%)
7	ESUST	5	4	9	5	4	9	6.29 (6%)
8	IMSU	4	3	7	4	3	7	4.90 (5%)
	Sub-Total	18	17	35	17	15	32	22.38 (22%)
	Grand Total	87	67	154	82	61	143	100%

Keys: *CQD* = Copies of Questionnaire Distributed; *CQR* = Copies of Questionnaire Retrieved; *AL* = Academic Librarians; *NAL* = Non-Academic Librarians; *% of QR* = Percentage of Questionnaire Retrieved.

Data in Table 2 shows the copies of the questionnaire distributed to the 154 librarians across the eight (8) university libraries investigated and their corresponding response rates. It indicates that out of the 154 copies of the questionnaire distributed, 143 copies were successfully and validly completed and retrieved for the study. In the overall, the response rate indicated that federal government owned university libraries had the highest number of academic and non-academic librarians, making up 78% of the total response rate, while state government owned university libraries had a total of 22% rate of response. It specifically reveals that out of the 119 copies of the questionnaire distributed to librarians from the federal government owned university libraries, 111 copies with University of Nigeria, Nsukka (UNN - 51, 36%); Federal University of Technology, Owerri (FUTO - 29, 20%); Michael Okpara University of Agriculture,

Umudike (MOUAU -20, 14%); and Alex Ekwueme Federal University, Ndufu-Alike, Ikwo, (AE-FUNAI - 11, 8%) were completed and returned. On the other hand, out of the 35 copies distributed to librarians in state-owned university libraries, 32 copies with Ebonyi State University (EBSU - 10, 7%); Enugu State University of Science and Technology (ESUST - 9, 6%); Imo State University (IMSU - 7, 5%) and Abia State University (ABSU - 6, 4%) were completed and returned. This result shows a good participation and positive responses by the librarians to the research questionnaire, which was significantly reliable in drawing generalizations about the librarians' training and skill requirements for implementation of RDA in public university libraries in South-East, Nigeria.

Research Question 1: What are the areas of training required by librarians for implementation of RDA in public university libraries in South-East, Nigeria?

Table 3. Mean and standard deviation responses on the areas of training required by librarians for implementation of RDA in public university libraries in South-East, Nigeria (n = 143)

S.N.	Item Statements	SA	A	D	SD	Mean	Std. Dev.	Remarks
	The areas of training I require for implementation of RDA in our university library include:							
1	Training on how to use the internet for cataloguing	50	79	13	1	3.24	0.64	Agreed
2	Training on the general overview of RDA	58	66	17	2	3.26	0.72	Agreed
3	Training on the structure of RDA	61	63	14	5	3.26	0.78	Agreed
4	Training on the Functional Requirements for Bibliographic Records (FRBR)	66	56	14	7	3.27	0.83	Agreed
5	Training on the Functional Requirements for Authority Data (FRAD)	55	74	14	0	3.29	0.64	Agreed
6	Training on RDA guidelines	71	56	14	2	3.37	0.72	Agreed
7	Training on RDA data encoding schema	64	45	34	0	3.21	0.80	Agreed
8	Training on RDA search strategies	74	57	8	4	3.41	0.72	Agreed
9	Training on RDA data mining rules	78	57	8	0	3.49	0.60	Agreed
10	Training on RDA metadata and tagging	75	61	7	0	3.48	0.59	Agreed
11	Training on RDA attributes, entities, relationships and user tasks	89	43	11	0	3.55	0.64	Agreed
12	Training on how to group similar records with RDA to display diverse expressions of the same work	73	53	14	3	3.37	0.75	Agreed
13	Training on installation of RDA data element guidelines and instructions package	67	60	16	0	3.36	0.68	Agreed
14	Training on how to migrate from AACR2 to RDA	77	54	10	2	3.44	0.69	Agreed
	Cumulative mean					3.36	0.70	Agreed
	Criterion mean					2.50		

Source: Researcher's Field Survey, 2025

Data in Table 3 shows an overall affirmation with the items investigating the areas of training required by librarians for implementation of RDA in public university libraries in South-East, Nigeria. It indicated a higher cumulative mean of 3.36 and cumulative standard deviation of 0.70

against the 2.50 criterion mean, which reveals that the librarians demand for training in all areas of the RDA standards in the public university libraries in South-East, Nigeria, is very high. The result specifically reveals the areas of higher training requirements by the librarians to include RDA attributes, entities, relationships and user tasks (3.55, 0.64); RDA data mining rules (3.49, 0.60); RDA metadata and tagging (3.48, 0.59); migration from AACR2 to RDA (3.44, 0.69); RDA search strategies (3.41, 0.72), installation of RDA data element guidelines and instructions package (3.36, 0.68), amongst others. The result of the quantitative analysis was given further credibility through the transcribed responses to the unstructured interview sessions held with the Heads of Processing (Cataloguing and Classification) Department of the university libraries, who pointed out that training is indispensable for librarians to implement RDA in their libraries. The Heads of the Cataloguing and Classification Departments of the university libraries disclosed that they need training on how to convert AACR2 to RDA, install RDA software in their system and the various areas of the new cataloguing standards in order to enable them migrate from the current traditional cataloguing practices in line with the changing trends in their cataloguing functions.

Research Question 2: What are the skills required by librarians for the implementation of RDA in public university libraries in South-East, Nigeria?

Table 4. Mean and standard deviation responses on the skills required by librarians for implementation of RDA in public university libraries in South-East, Nigeria (n = 143)

S.N.	Item Statements	SA	A	D	SD	Mean	Std. Dev.	Remarks
	The skills I require to implement RDA in our university library include:							
1	Basic knowledge of RDA structure and rules	82	53	8	0	3.52	0.60	Agreed
2	Word processing skills	62	66	15	0	3.33	0.66	Agreed
3	Online search skills for downloading RDA standards	68	70	5	0	3.44	0.56	Agreed
4	Markup language skills like the skills to use HTML, RDF, SGML, etc., for structuring metadata	47	70	24	2	3.13	0.73	Agreed
5	Metadata development skills for understanding metadata tools and standards like Dublin Core, MODS, etc.	74	59	10	0	3.45	0.62	Agreed
6	Tagging and multimedia indexing skills	63	58	22	0	3.29	0.72	Agreed
7	Data mining skills for data processing	77	52	14	0	3.44	0.67	Agreed
8	Database management skills for protecting sensitive bibliographic records	73	62	8	0	3.45	0.62	Agreed
9	Subject analysis and classification skills	71	60	12	0	3.41	0.64	Agreed
10	Interpersonal relationship skills for communicating with colleagues and users	44	64	25	10	2.99	0.88	Agreed
11	Collaboration skills for interfacing with others	73	37	32	0	3.29	0.81	Agreed
12	Critical thinking skills	76	56	11	0	3.45	0.64	Agreed
13	Adaptability skills for easy adjustment to new requirements	60	52	20	11	3.13	0.93	Agreed
	Cumulative mean					3.33	0.70	Agreed
	Criterion mean					2.50		

Source: Researcher's Field Survey, 2025

The data in Table 4 reveals the mean and standard deviation responses on the skills required by librarians for implementation of RDA in public university libraries in South-East, Nigeria. It indicates an overall agreement with the various categories of skills as necessary requirements for librarians to implement the RDA, with a higher cumulative mean of 3.33 and standard deviation of 0.70 against the 2.50 criterion mean.

The result implies that possessing the requisite skills is paramount for librarians to implement the RDA standards in university libraries. It specifically reveals that all the skills rated were higher than the 2.50 criterion mean, with basic knowledge of RDA structure and rules (3.52, 0.60); metadata development skills for understanding metadata tools and standards like Dublin Core, MODS, etc. (3.45, 0.62); database management skills for protecting sensitive bibliographic records (3.45, 0.62); critical thinking skills (3.45, 0.64); online search skills for downloading RDA standards (3.44, 0.56); data mining skills for data processing (3.44, 0.67); subject analysis and classification skills (3.41, 0.64), amongst others, as the major skills required by the librarians for implementation of RDA in the public university libraries.

The results of the quantitative analysis were validated by the transcribed responses to the unstructured interview sessions with the Heads of the Processing (Cataloguing and Classification) Department of the university libraries. The transcribed responses disclosed that the librarians generally require a wide range of competencies, abilities and skills in dealing with the RDA standards, interpreting the codes, and assigning subjects to various information and knowledge resources in the university libraries. Particularly, they noted that basic ICT skills like word processing skills, online search competencies, metadata analysis skills, and database management skills are indispensable in dealing with the various elements of the RDA. They also harped on the need for sound interpersonal relationship and communication skills, especially in the aspects of training library users in the use of the RDA standard for retrieving and utilizing information and knowledge resources in the university libraries.

Research Question 3: What is the extent of implementation of RDA by librarians in public university libraries in South-East, Nigeria?

Table 5. Mean and standard deviation responses on the extent of implementation of RDA by librarians in public university libraries in South-East, Nigeria (n = 143)

S.N.	Item Statements	VHE	HE	LL	VLE	Mean	Std. Dev	Remarks
	The extent of implementation of RDA in our university library is:							
1	Our library is at the stage of deciding whether to implement RDA or not	38	70	29	6	2.98	0.80	Agreed
2	Our library is acquiring RDA materials such as the RDA toolkit, etc.	8	35	66	34	2.12	0.84	Disagreed
3	Our library is planning for retrospective data changes for a shift from AACR to RDA	63	47	29	4	3.18	0.85	Agreed
4	Our library is addressing budget issues pertaining to the shift from AACR to RDA	49	47	31	16	2.90	1.00	Agreed
5	Our library is considering staff readiness in terms of skills to implement RDA	7	20	71	45	1.92	0.81	Disagreed
6	Our library is examining possible system changes to implement RDA	6	34	87	16	2.21	0.69	Disagreed
7	Our library is testing RDA in our current cataloguing practices	8	24	91	20	2.14	0.72	Disagreed
8	Our library is training librarians on RDA for implementation	15	58	70	0	1.62	0.67	Disagreed
9	Our librarians are well-trained and ready for RDA implementation	5	19	84	35	1.96	0.72	Disagreed
10	Our library is offering training and seminars to users about RDA	0	10	91	42	1.78	0.57	Disagreed
11	Our library is converting bibliographic records from AACR to RDA	0	24	81	38	1.90	0.65	Disagreed
12	Our library is setting up necessary infrastructure such as new cataloguing software and databases to support RDA implementation	5	48	78	12	2.32	0.68	Disagreed
13	Our library is developing policies and procedures for RDA implementation	14	25	69	35	2.13	0.90	Disagreed
14	Our library is making necessary adjustments to the workflows and policies for RDA implementation	1	9	75	58	1.67	0.63	Disagreed
15	Our library is fully implementing RDA	3	10	102	28	1.92	0.59	Disagreed
16	Our library is updating latest developments and best practices for RDA	8	18	93	24	2.07	0.72	Disagreed
	Cumulative mean					2.18	0.74	Disagreed
	Criterion mean					2.50		

Source: Researcher's Field Survey, 2025

Data in Table 5 shows the mean and standard deviation responses on the extent of implementation of RDA by librarians in public university libraries in South-East, Nigeria. In the overall, the result reveals a no extent of implementation of RDA by librarians in public university libraries, with a cumulative mean of 2.18 against the criterion mean of 2.50. The result indicates that the librarians only agreed that their university libraries were merely at the stage of planning for retrospective data changes for a shift from AACR to RDA (3.18, 0.85); deciding whether or

not to implement RDA (2.98, 0.80) and addressing budget issues pertaining to the shift from AACR to RDA (2.90, 1.00). This reflects a high level of unpreparedness of public university libraries and librarians in South-East, Nigeria, in terms of setting up necessary infrastructure such as new cataloguing software and databases to support RDA implementation (2.32, 0.68); testing RDA in the current cataloguing practices (2.14, 0.72); developing policies and procedures for RDA implementation (2.13, 0.90); acquiring the RDA materials like RDA toolkits (2.12, 0.84); training librarians on RDA for implementation (1.62, 0.67), amongst others.

The result was affirmed by the transcribed responses of the Heads of the Processing (Cataloguing and Classification) Department of the public university libraries, who remarked with regret, the obvious lack of interest of management of their university libraries in initiating actions towards implementation of the Web-based cataloguing standards. Particularly, the Heads of the Processing (Cataloguing and Classification) Department of the public university libraries, in their separate but unanimous responses disclosed that their university libraries still rely on the AACR2 cataloguing scheme due to lack of training on RDA systems as well as lack acquisition and adoption of the RDA toolkits for use in their libraries.

Research Question 4: What are the factors militating against librarians' training and skill requirements for implementation of RDA in public university libraries in South-East, Nigeria?

Table 6. Mean and standard deviation responses on the factors militating against librarians' training and skill requirements for implementation of RDA in public university libraries in South-East, Nigeria (n = 143)

S.N.	Item Statements	SA	A	D	SD	Mean	Std. Dev.	Remarks
	The factors militating against librarians' training and skill requirements for implementation of RDA in our university library include:							
1	Inadequate funding of the university library to handle RDA issues	88	55	0	0	3.62	0.49	Agreed
2	Lack of requisite RDA toolkits to facilitate librarians' training purposes	79	61	3	0	3.53	0.54	Agreed
3	Lack of Internet connectivity to support librarians' training	76	53	14	0	3.43	0.67	Agreed
4	Lack of requisite technology literacy skills by librarians	94	43	6	0	3.62	0.57	Agreed
5	Lack of requisite functional ICT facilities to implement RDA	64	79	0	0	3.45	0.50	Agreed
6	Lack of constant power supply	62	48	33	0	3.20	0.79	Agreed
7	Lack of management commitment to providing requisite technologies	71	58	14	0	3.40	0.66	Agreed
8	Lack of management support for librarians' training	62	64	17	0	3.31	0.68	Agreed
9	Librarians' resistance to change	75	51	14	3	3.38	0.75	Agreed
10	Lack of librarians' interest for training on RDA	23	43	56	21	2.48	0.93	Disagreed
11	Lack of supportive organizational culture and policy for training	78	47	12	6	3.38	0.81	Agreed
	Cumulative mean					3.35	0.67	Agreed
	Criterion mean					2.50		

Source: Researcher's Field Survey, 2025

The data in Table 6 indicates the mean and standard deviation responses on the factors militating against librarians' training and skill requirements for implementation of RDA in public university libraries in South-East, Nigeria. It shows a higher cumulative mean of 3.35 against the criterion mean of 2.50, which implies that the various items of investigation constitute strong impediments to librarians' training and skill requirements for implementation of RDA in the public university libraries. It specifically reveals that all the items except lack of librarians' interest for training on RDA (2.48, 0.93) are factors hampering librarians' training and skills acquisition for implementation of RDA in public university libraries. The result essentially highlighted inadequate funding of the university library to handle RDA issues (3.62, 0.49); lack of requisite technology literacy skills by librarians (3.62, 0.57); lack of requisite RDA toolkits to facilitate librarians' training purposes (3.53, 0.54); lack of requisite functional ICT facilities to implement RDA (3.45, 0.50); lack of Internet connectivity to support librarians' training (3.43, 0.67); lack of management commitment to providing requisite technologies (3.40, 0.66), etc., as the major factors militating against librarians' training and skill requirements for implementation of RDA in public university libraries in South-East, Nigeria. The transcribed responses from the Heads of the Processing (Cataloguing and Classification) Department of the public university libraries also corroborates the results of the quantitative analysis, pointing out poor funding of public university libraries, lack of dedicated training and retraining of librarians, lack of modern technologies like RDA toolkits, lack of management support to university libraries and lackadaisical attitude of librarians to innovative services are the overriding obstacles to implementation of RDA in their university libraries.

Research Question 5: What is the relationship between librarians' training and skill requirements for implementation of RDA in public university libraries in South-East, Nigeria?

Table 7. Correlational coefficient of the relationship between librarians' training and skill requirements for implementation of RDA in public university libraries in South-East, Nigeria

		LTRDA	SRIRDA
LTRDA	Pearson's Correlation Sig. (2tailed)	1	0.100
	N	143	143
SRIRDA	Pearson's Correlation Sig. (2tailed)	0.100	1
	R ²	0.010 (10%)	
	N	143	143

LTRDA = Librarians' Training on Resource Description and Access

SRIRDA = Skill Requirements for Implementation of Resource Description and Access

N = Number of Observations

R = Correlation Coefficient

R² = Coefficient of Determination

Data in Table 7 reveals a very low extent of relationship between librarians' training and skill requirements for implementation of RDA in public university libraries in South-East, Nigeria, as indicated by the correlation coefficient (r) of 0.100, which is positive and falls within the

correlation coefficient limit range of $\pm 0.00 - 0.20$. The coefficient of determination (r^2) of 0.010 shows that 10% of the variance observed in the skill required for implementation of RDA in public university libraries in South-East, Nigeria, is accounted for by the librarians' training. This implies that librarians' training to a very low extent but positively relates with the skill required for implementation of RDA in public university libraries in South-East, Nigeria. The result was validated by the test of the single null hypothesis as shown in Table 7 below.

Test of Hypothesis

The single hypothesis was tested at 0.05 level of significance

Table 8. Simple regression analysis of the relationship between librarians' training and skill requirements for implementation of RDA in public university libraries in South-East, Nigeria

<i>Model</i>	<i>Df</i>	<i>Sum of Square</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>
Regression	1	9.279	9.279	1.423	0.235
Residual	140	912.609	6.519		
Total	141	921.887			

The data in Table 8 shows a P-value of 0.235, which is numerically greater than the Alpha value of 0.05, but not statistically strong enough to cause an acceptance of null hypothesis. Since the P-value of 0.235 is not statistically strong enough, the earlier postulated null hypothesis was rejected while the alternate hypothesis was accepted. Thus, librarians' training has a weak but positive significant relationship with the skill required for implementation of RDA in public university libraries in South-East, Nigeria.

Discussion

The finding of the study revealed that the librarians demand for training in all areas of the RDA standards in the public university libraries in South-East, Nigeria, is very high. It showed the areas of higher training requirements by the librarians to include RDA attributes, entities, relationships and user tasks; RDA data mining rules; RDA metadata and tagging; migration from AACR2 to RDA; RDA search strategies; installation of RDA data element guidelines and instructions package, amongst others. The result was validated by the transcribed responses to the unstructured interview sessions held with the Heads of Processing (Cataloguing and Classification) Department of the university libraries, who pointed out that training is indispensable for librarians to implement RDA in their libraries, with emphasis on training on how to convert AACR2 to RDA, install RDA software in their system and the various areas of the new cataloguing standards to enable them migrate from the current traditional cataloguing practices to the Web-based cataloguing practices. The finding agrees with Isibika et al. (2021), who investigated the perceived training needs assessment of librarians in Tanzanian academic libraries, and reported that librarians require high level of training to enhance their ICT and technical skills, especially in information organization and advanced search, since adequate

training can benefit librarians by keeping them up-to-date with new trends like implementation of RDA for enhanced capacity building in the libraries. It gives credence to Haliru and Sokari (2016), who investigated RDA training needs for librarians in university libraries of North-western Nigeria, and reported that librarians greatly require training in all aspects of resource description and access in university libraries. The finding deeply stresses the need for training of librarians on RDA for shaping librarians' ideas and understanding about RDA vocabularies, element sets and its terminologies as pointed out by Atilgan et al. (2015). The importance of training of librarians on RDA as revealed in this study can also be confirmed by Yeboah et al. (2023), who surveyed the readiness of Ghanaian university libraries towards the adoption and implementation of Resource Description and Access, and reported an overwhelming level of unpreparedness in skills acquisition among Ghanaian university libraries to implement the standards.

On the skills required by librarians for implementation of RDA in public university libraries in South-East, Nigeria, the finding of the study showed that the librarians require a wide range of skills such as basic knowledge of RDA structure and rules; metadata development skills for understanding metadata tools and standards like Dublin Core, MODS, etc.; database management skills for protecting sensitive bibliographic records; critical thinking skills; online search skills for downloading RDA standards; data mining skills for data processing; subject analysis and classification skills, amongst others. The result was affirmed by the transcribed responses to the unstructured interview sessions with the Heads of the Processing (Cataloguing and Classification) Department of the university libraries, which indicated that the librarians generally require competencies, abilities and skills in dealing with the RDA standards, interpretation of RDA codes, and assigning subjects to various information and knowledge resources in the university libraries. The finding substantiates the earlier study conducted by Olorunkalu et al. (2023), who indicated ICT skills, internet skill and competence, ability to use search engines such as google, meta, as well as ability to use e-mail to disseminate information with colleagues and others as the competencies for implementation of resources description and access in university libraries. It further corroborates Fati and Aderitimin (2017), as well as Omoisekejimi et al. (2022), who identified basic computer literacy skills such as ability to turn on/off a computer, monitor and printer and use Windows operating system, ability to start a software programme, copy files, manage folders/directories on hard drives and set up new personal computer facilities as the skills required for using RDA in services delivery to users in university libraries.

The findings of the study indicated that there was no significant implementation of RDA by librarians in public university libraries. The libraries and their librarians were primarily at the planning stage, considering retrospective data changes required for the transition from AACR to

RDA, deciding whether or not to adopt RDA, and addressing budgetary concerns related to the shift. This reflected a high level of unpreparedness of public university libraries and librarians in South-East, Nigeria, in terms of the core areas of RDA services setting up necessary infrastructure such as new cataloguing software and databases to support RDA implementation, developing policies and procedures for RDA implementation, acquiring the RDA materials like RDA toolkits, etc. The result was affirmed by the transcribed responses of the Heads of the Processing (Cataloguing and Classification) Department of the public university libraries, who remarked with regret, the obvious lack of interest of management of their university libraries in initiating actions towards implementation of the Web-based cataloguing standards. This finding is in line with Yeboah et al. (2023), who surveyed the readiness of Ghanaian university libraries towards the adoption and implementation of Resource Description and Access, and reported an overwhelming level of unpreparedness in skills acquisition among Ghanaian university libraries to implement the standards. It also aligns with Omosekejimi et al. (2022), which revealed that cataloguers in university libraries in South-South, Nigeria, were aware of the existence of RDA but the extent of librarians' use of RDA for cataloguing of information resources in university libraries in South-South, Nigeria, was very low. It gives credence to Bamidele et al. (2020), who revealed that majority of the cataloguers affirmed that RDA has not been implemented in their libraries. The finding is equally in agreement with Santos (2016), who studied the status of RDA implementation in Philippine academic libraries, and reported strong disparity in RDA implementation among institutions based on geographical location between librarians from institutions within or near Metro Manila and Visayas and Mindanao, while the majority of the librarians were still in the stage of training and learning about the new RDA codes.

The finding of the study indicated that various major factors such as inadequate funding of the university library to handle RDA issues, lack of requisite technology literacy skills by librarians, lack of requisite RDA toolkits to facilitate librarians' training purposes, lack of requisite functional ICT facilities to implement RDA, lack of Internet connectivity to support librarians' training, lack of management commitment to providing requisite technologies, etc., militate against librarians' training and skill requirements for implementation of RDA in public university libraries in South-East, Nigeria. The result was confirmed by the transcribed responses from the Heads of the Processing (Cataloguing and Classification) Department of the public university libraries, who pointed out poor funding of public university libraries, lack of dedicated training and retraining of librarians, lack of modern technologies like RDA toolkits, lack of management support to university libraries and lackadaisical attitude of librarians to innovative services are the overriding obstacles to implementation of RDA in their university libraries. The finding agrees with the Aboyade and Eluwole (2018), as well as Omosekejimi et al. (2022), who identified epileptic power system, poor funding, inadequate ICT facilities, librarians lack requisite ICT

facilities, lack access to RDA toolkits, amongst others as some of the challenges hampering the implementation of resource description and access in the university libraries.

The finding of the study revealed a weak but positive significant relationship between librarians' training and skill requirements for implementation of RDA in public university libraries in South-East, Nigeria. The finding is in line with Richard et al. (2024), which discovered that librarians' training on Resource Description and Access application has a weak but positive significant relationship with services delivery in public university libraries in Akwa Ibom State, Nigeria. It also in a way, agrees with Olorunkalu et al. (2023), which revealed that librarians' ICT competence is vital component for higher implementation of RDA in academic libraries.

Conclusion

Librarians' training is a necessary process through requisite skills, knowledge and competencies can be acquired for the implementation of RDA as an innovative tool in knowledge organization for enhanced information access, retrieval and use in the university libraries. Resource description and access (RDA) is a modern paradigm for all libraries and librarians, which promises a comprehensive set of general guidelines that are logically defined, easier to use, and more adaptable in describing all types of resources designed for digital and non-digital environment. RDA standards simplify cataloguing rules and minimizes special rules for describing various types of information materials in the university libraries. It aims at ensuring the visibility of institutions through shareability of information, and requires adequate competencies and aptitudes from librarians for its implementation in the university libraries.

This study revealed that there is a strong demand among librarians for training in all areas of the RDA standards, in order to facilitate the transition from AACR2 to RDA and to effectively manage other aspects of web-based cataloguing practices. The study also indicated that librarians require a broad range of skills for the effective implementation of RDA. These include a foundational understanding of the RDA structure and rules; metadata development skills for working with standards such as Dublin Core, MODS, and others; database management skills for securing sensitive bibliographic records; online search skills for accessing RDA standards; and subject analysis and classification skills.

The study showed a no extent of implementation of RDA by librarians in the public university libraries, as the librarians are merely at the stage of planning for retrospective data changes for a shift from AACR to RDA, deciding whether or not to implement RDA, and addressing budget issues pertaining to the shift from AACR to RDA, with a high level of unpreparedness in the core areas of RDA implementation such as setting up necessary infrastructure like installation of

cataloguing software and databases to support RDA implementation, developing policies and procedures for RDA implementation, acquiring the RDA materials like RDA toolkits, etc.

The high level of unpreparedness in librarians' training and skill requirements for RDA implementation in the university libraries was attributable to poor funding of public university libraries, lack of dedicated training and retraining of librarians, lack of modern technologies like RDA toolkits, lack of management support to university libraries and lackadaisical attitude of librarians to innovative services. In conclusion, the study revealed a weak but positive significant relationship between librarians' training and skill requirements for implementation of RDA in public university libraries in South-East, Nigeria. Therefore, this situation has a strong implication on the ability of the public university libraries in South-East Nigeria, to meet the evolving needs of library users in effectively supporting their learning, teaching and research activities in line with global expectations.

Recommendations

Based on the findings of the study, the following recommendations were made:

- Management of public universities should provide adequate funding to the university libraries to enable them acquire necessary tools including RDA toolkits to facilitate the implementation of RDA standards in the libraries.
- Management of public universities in collaboration with university libraries should provide requisite ICT facilities such as internet connectivity and constant power supply to enhance the implementation of RDA in the libraries.
- Management of public university libraries in conjunction with Librarians Registration of Nigeria (LRCN), library associations and professional bodies should prioritize the training and retraining of librarians by encouraging attendance to conferences, seminars, workshops and Webinars on RDA to enable them to learn and familiarize themselves with RDA guidelines, standards, policies and other necessary elements.
- Library and Information Science (LIS) curriculum should be expanded by those concern to include RDA as the new cataloguing standards to provide the background for acquiring skills, knowledge and competencies by LIS graduates. This will equip them to become librarians with RDA expertise in line with modern cataloguing practices and effective professional work experience in whatever type of libraries they find themselves.
- Librarians should consciously build their interests in emerging technologies, especially in implementing the RDA standards and codes since cataloguing of digital and non-digital information resources is ingrained in effective services delivery in the university libraries.

Data Availability Statement

Data available on request from the authors.

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Ethical considerations

The study was conducted with due respect to all authorities, given consideration to the confidentiality of respondents' private information. The consent of the university library authorities was duly sorted and obtained before the questionnaires were distributed while only respondents participated in the study. The researcher avoided any form of data fabrication and falsification.

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Conflict of interest

The author declares no conflict of interest.

References

- Aboyade, W. A., & Eluwole, O. A. (2018). Implementation of Resource Description and Access (RDA) in Nigeria: Awareness, cataloguers' perception and challenges. *Journal of Applied Information Science and Technology*, 11(2). 79-86. <https://www.jaistonline.org/11vol2/9.pdf>
- Ahonsi, A. (2014). Resource Description and Access (RDA) handbook for facilitating the understanding of RDA rules by librarians and cataloguers in English Speaking countries in sub-Saharan Africa. *Project, Graduate School of Library and Information Science, University of Illinois, Library and Information Science, Urbana-Champaign*. <https://www.ideals.illinois.edu/bitstream/handle/2142/50025/>
- Akwang, N. E., & Udoh, I. U. (2024). Librarians' technology literacy skills with the use of electronic information resources for research activities in university libraries: A correlational study. *Asia Journal of Education and Social Studies*, 50(8), 580-94. <https://doi.org/10.9734/ajess/2024/v50i81557>
- Akwang, N. E., Udoh, I. U., & Tsenongu C. T. (2024). Librarians' skills and contributions to digital citizenship education in academic institutions in Akwa Ibom State Nigeria. *OMANARP International Journal of Library & Information Science*, 1, 69-83.
- Amadi, E. C., Udoh, I. U., & Ukpogon, C. A. (2024). Factoring in collaboration for quality services delivery in contemporary libraries. In F. E. Etim, I. I. Ekoja, & F. A. Onifade (Eds.), *Contemporary practices for sustainable library and information services: A Festschrift in Honour of Professor Ahiaoma Ibegwam*. CELIMAT Publishers.
- Amisano, C. (2017). Relationship between training and employee performance. <https://bizfluent.com/facts-5848845-relationship-between-training-employee-performance.htm>
- Arua, U., & Udoh, I. U. (2019). Administration and management of Nigeria university libraries. In: N. O. Nnadozie, C. P. Uzuegbu, M. C. Nwosu, K. N. Igwe & J. O. Akidi (Eds.), *University librarianship: Issues and perspectives, A Festschrift in Honour of Professor Raphael U. Ononogbo*. Zeh Communications.
- Atilgan, D., Özel, N., & Çakmak, T. (2015). RDA in Turkey: Perceptions and expectations on implementation. *Italian Journal of Library and Information Science*, 6(2), 163-179
- Bamidele, I. A., Madukoma, E., & Onoyeyan, G. (2020). Awareness of Resource Description and Access (RDA) Among Cataloguers in Nigeria. *Jewel Journal of Librarianship*, 15(2), 1-11. <https://www.jeweljournals.com>

- Creswell, J. W. (2014). *Research design: Qualitative, quantitative and mixed methods' approaches* (4th Ed.). Thousand Oaks: Sage
- Ezema, A. L., Ekenna, U. C., & Ogbuabor, D. C. (2022). Resource description and access (RDA): Cataloguing standard for the digital era. *Nasarawa Journal of Library and Information Science*, 6(1), 121-129.
- Fati, O. I., & Adetimirin, A. (2017). Influence of computer literacy skills on OPAC use by undergraduates in two universities in Nigeria. *International Journal of Academic Library and Information Science*, 5(1), 27-37. <http://doi.org/10.14662/IJALIS2017.002>
- Haliru, Z. A. & Sokari, V. (2016). Resource description and access (RDA) training needs for librarians in university libraries of North-Western Nigeria. *The Nigerian Cataloguer*, 3, 75-86.
- Haliru, Z. A. (2015). Awareness and perceptions of resource description and access (RDA) among librarians in university libraries in North-West zone, Nigeria. *MLS thesis*. Bayero University Kano.
- Isibika, I. S., Zhu, C., Smet, E., & Musabila, A. K. (2021). Perceived training needs assessment of librarians in Tanzanian academic libraries aimed at introducing microlearning intervention to training. *The International Journal of Training Research*, 19(2), 107-124. <https://doi.org/10.1080/14480220.2021.1896565>
- John-Okeke, R. C. (2019). Preparedness of academic libraries in Nigeria for the implementation of Resource Description and Access (RDA). *NAU Journal of Library and Information Science*, 3(1), 42-53. <https://journals.unizik.edu.ng/lrj/article/view/51>
- Madukoma, E., Unegbu, V. E., & Olorunkalu, O. A. (2023). Librarians' readiness and implementation of Resource Description and Access (RDA) in academic libraries in South-West, Nigeria. *Global Journal of Applied, Management and Social Sciences (GOJAMSS)*, 25, 94 – 107
- Mansor, Y., & Ramzdan, E. (2014). RDA perceptions among Malaysian cataloguers. *Library Review*, 63(3), 176-188. <https://doi.org/10.1108/LR-06-2013-0085>
- Mensa, C. P., Udoh, I. U., & Osiebe, P. O. (2023). Systematic analysis of adoption of innovative technologies in the provision of electronic information services in public university libraries in Akwa Ibom State, Nigeria. *Library Philosophy and Practice* (e-journal). Article 8080. <https://digitalcommons.unl.edu/libphilprac/8080>

- Oguntayo, S. A., & Adeleke, A. A. (2016). Awareness, knowledge and implementation of RDA in academic libraries in Nigeria. *Compendium of papers presented at the 36th annual seminar/workshop, Implementing RDA in Nigerian libraries: Practical steps towards visibility*, 89-103.
- Olorunkalu, O. A., Madukoma, E., & Unegbu, V. E. (2023). Librarians' ICT Competence and resource description and access (RDA) in academic libraries in South-West, Nigeria. *International Journal of Library and Information Technology*, 4(1), 81 – 93
- Omorekejimi, A. F., Nweke, A. C., Omoadoni, O. R. (2022). Cataloguers' awareness, ICT skills and use of resources description and access (RDA) in university libraries in South-South, Nigeria. *Library Philosophy and Practice* (e-journal). Article 7397. <https://digitalcommons.unl.edu/libphilprac/7397>
- Oseji, N. A. (2020). Training of librarians for service delivery in the digital age in federal university libraries in North Central Nigeria. *Niger Delta Journal of Library and Information Science*, 1(1). <https://ndjlis.fuotuo.ke.edu.ng/index.php/ndjlis/article/view/7>
- Richard, E. O., Akpan-Atata, E. A., & Enidiok, M. S. (2024). Investigating the relationship between librarians' information technology training needs and service delivery in public university libraries in Akwa Ibom State, Nigeria. *Niger Delta Journal of Library and Information Science (NDJLIS)*, 5(2), 1-17. <https://doi.org/10.5281/zenodo.14786990>
- Saliu, S. A. (2021). Awareness and use of Resources Description and Access (RDA) among librarians in Nigeria libraries. *Library Progress (International)*, 41(1), 120-129. <https://doi.org/10.5958/2320-317X.2021.00013.1>
- Santos, Y. T. P. (2016). A report on the status of Resource Description and Access (RDA) implementation in Philippine academic libraries. *Journal of Philippine Librarianship*, 36, 15-25.
- Udoh, I. U., & Okafor, V. N. (2022). Information literacy and digital literacy skills of 21st century Library and Information Science professionals. In: N. Singh & S. Singh (Eds), *Smart libraries and information management in digital environment, Vol. II*. B.R. Publishing Corporation.
- Udoh, I. U., Akwang, N. E., & Chukwueke, C. (2023). University undergraduates' awareness and utilization of electronic databases in university libraries in Akwa Ibom State, Nigeria. *Library Philosophy and Practice* (e-journal). Article 8076. <https://digitalcommons.unl.edu/libphilprac/8076>

- Udoh, I. U., Ekpenyong, G. E, & Olowookere, S. (2020). Digital literacy skills of undergraduate students of library and information science on the utilization of electronic information resources in two federal universities in Nigeria. *Library Philosophy and Practice* (e-journal). Article 4269. <https://digitalcommons.onl.edu/libphilprac/4269>
- Yeboah, E. B., Onyancha, O. B. & Mhlongo, M. (2023). Readiness of Ghanaian University Libraries Towards the Adoption and Implementation of Resource Description and Access. *African Journal of Library, Archives and Information Science*. <http://doi.org/10.4314/ajlais.v33i2.3>