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Research data management in university libraries: lifecycle-oriented practices, strategies, challenges, and demographic correlates

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Introduction

The current knowledge economy is characterized by an exponential growth in the production of knowledge as predominantly driven by research activities across various disciplines. The offshoot of these activities is the generation of vast amount of research data which necessitates the need for proper management in order to leverage its social and economic benefits. Research data are records or facts that are either collected or created, which are analyzed to produce original research results¹. They are also the product of research activities, possessing intrinsic value² for informed decision

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Last website consultation: April 17, 2026.

¹ Josiline Chigwada; Blessing Chiparausha; Justice kasiroori, *Research data management in research institutions in Zimbabwe*, «Data science journal», 16 (2017), n. 31, p. 1, DOI: 10.5334/dsj-2017-031.

² Magnus Osahon Igbinovia; Omorodion Okuonghae; Oluwayinka Esther Solanke, *Research data management in university libraries: evidence from Nigeria*, «Rajagiri journal of social development», 15 (2023), n. 2, p. 42, <<http://journals.rajagiri.edu/index.php/rssj/article/view/713/493>>.

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making. The potential of research data for effective decision making is hinged on its proper management. The management of research data (or research data management - RDM) cut across activities and processes involved in the proper management or handling of research data, to enhance its accessibility and reusability³. These processes ensure that research data are properly managed, protected and facilitated from the point of creation to the point of reuse⁴, reflecting the lifecycle concept of RDM, which cut across data creation, processing, analysis, preservation, accessibility, and re-use⁵. These activities within the RDM lifecycle are specific actions that can be used to implement the RDM initiative, which could be considered as RDM practices (RDMP).

The overall goal of RDMP is hinged on the FAIR (Findable, Accessible, Interoperable, and Reusable) principle for data stewardship, which increases the reproducibility, transparency, and impact of research data. The FAIR principle is now increasingly upheld by university libraries' involvement in RDMP, going beyond the practice to providing the enabling data infrastructure, policy formulation, access management, stimulating data sharing culture and providing capacity building for researchers in the university community. Through the FAIRness of research data, university libraries are providing added value to researchers and their parent institutions⁶. Thus, university libraries are making more impact and gaining institutional relevance through RDM initiative, which aligns with the research-objective of universities. Although few studies have empirically examined RDM in Nigerian university libraries⁷, none seems to have taken a holistic approach to evaluate the level of RDMP, taking into cognizance the various components within the research data lifecycle.

The level of RDMP in university libraries is determined by certain strategies which required empirical validation. The strategies for the deployment of RDMP could account for the uneven implementation across university libraries⁸. This reinforces the need for strategic implementation of RDM and conversely addressing possible

3 John A. Borghi; Ana E. Van Gulick, *Data management and sharing: Practices and perceptions of psychology researchers*, «PLOS ONE», 16 (2021), n. 5, p. e0252047 <<https://pmc.ncbi.nlm.nih.gov/articles/PMC8139478/>>.

4 Mohammad Azami; Ali Sadatmoosavi, and Mohammadreza Chashmyazdan, *Research data management frameworks: a systematic literature review*, «International journal of information science and management (IJISM)», 21 (2023), n. 3, p. 2, DOI: 10.22034/ijism.2023.1977759.0.

5 Angeliki Andrikopoulou; Jennifer Rowley; Geoff Walton, *Research data management (RDM) and the evolving identity of academic libraries and librarians: a literature review*, «New review of academic librarianship», 28 (2022), n. 4 p. 352, DOI: 10.1080/13614533.2021.1964549.

6 Mijke Jetten; Ed Simons; Jan Rijnders, *The role of CRIS's in the research life cycle. A case study on implementing a FAIR RDM policy at Radboud University, the Netherlands*, «Procedia computer science», 146 (2019), p. 157, DOI: 10.1016/j.procs.2019.01.090.

7 Magnus Osahon Igbinovia; Omorodion Okuonghae; Oluwayinka Esther Solanke, *Research data management in university libraries: evidence from Nigeria*, «Rajagiri journal of social development», 15 (2023), n. 2, p. 41, <<http://journals.rajagiri.edu/index.php/rssj/article/view/713/493>>; Clement Ola Adekoya [et al.], *Research data management services among librarians in Nigerian universities*, «Information development», 42 (2026), n. 1, p. 461, DOI: 10.1177/02666669231222460.

8 Andrew M. Cox [et al.], *Developments in research data management in academic libraries: towards an understanding of research data service maturity*, «Journal of the association for information science and technology», 68 (2017), n. 9, p. 2183, DOI: 10.1002/asi.23781.

individual and institutional barriers or challenges in order to strengthen RDMP in Nigerian university libraries.

While librarians are instrumental in driving RDM in university libraries, their educational qualifications and working experiences are knowledge assets that could determine the success of RDM implementation and subsequent maturity in university libraries. However, there is currently no study in the context of Nigerian university libraries that has examined the relationship between these demographic or individual-level factors and RDMP. Therefore, this study aims to establish a possible relationship between these demographic factors and the RDMP among personnel in Nigerian university libraries. In exploring this relationship, the study was anchored on the Knowledge-Based View (KBV), which conceptualizes educational qualifications and working experience as knowledge assets that could shape organisational practices (RDMP). This theoretical lens extends the analysis of RDMP beyond mere description as done by most prior studies, by offering theory-driven explanation of how these demographic factors are associated with RDMP. As such, the study provides empirical evidences that support KBV in the context of RDMP in university libraries. This application is currently lacking in librarianship research, therefore highlighting the study's theoretical contribution to the field.

This study addresses a critical knowledge gap by adopting the lifecycle-oriented assessment of RDMP, thus viewing RDMP from a multi-dimensional perspective. It also fills the current dearth of empirical evidences that integrate strategies and challenges of RDMP from an institutional lens and demographic characteristics of library professionals, within a unified framework, in providing holistic assessment of RDMP in university libraries across multiple geopolitical zones in the Southern region of Nigeria. This spread provides an insights for robust contextual application of RDM research in developing countries like Nigeria.

Research Questions

The following questions are asked to guide the conduct of the study:

1. What is the level of RDMP among personnel in Nigerian university libraries?
2. What are the strategies for the deployment of RDM in the libraries?
3. What are the challenges affecting the deployment of RDM in the libraries?

Hypotheses

The following null hypotheses were generated to guide the study at 0.05 level of significance:

Ho1: There is no statistically significant relationship between highest educational qualification and RDMP among personnel in Nigerian university libraries.

Ho2: There is no statistically significant relationship between years of working experience and RDMP among personnel in the libraries.

Ho3: Highest educational qualification and years of experience of personnel do not have a statistically significant relationship with RDMP in the libraries

Literature Review

Research data management in university libraries

University libraries are taking up new roles in RDM⁹, however, the maturity of their RDMP is influenced by institutional implementation which is slightly different

⁹ Isidore Komla Zotoo [et al.], *Research data management in China: can librarians bring a paradigm shift?*, «Open access library journal», 9 (2022), n. e8341, p. 3, DOI: 10.4236/oalib.1108341.

among countries¹⁰. Yoon and Schultz¹¹ established that RDM services are at various levels of delivery across academic libraries even in developed countries like the United States of America. Meanwhile RDM in Australia is quiet mature as Zhou¹² noted that over 30 universities within the country are rendering RDM services at varying levels, with the existence of a research data librarian in some of the universities. Also, in Spain, there is evidence of a number of RDM services in the libraries, although there are no institutional policies regarding research data¹³. It can be implied that although countries from the Global South are delivering some form of RDM services, they have not achieved full maturity level as expected.

In Nigeria, studies like that of Alex-Nmecha and Onifade¹⁴ showed that librarians are not fully prepared for the deployment of RDM in their libraries. This assertion is informed by findings from their study which revealed that most of the libraries understudied are yet to have RDM policies and the presence of knowledge/skill gap among the librarians particularly in the areas of funders' mandate, research data organization, and use of institutional repository. This knowledge/skill gap adversely influences RDMP and call for upskilling of librarians towards effective delivery of RDM services in university libraries. Also, Adekoya [*et al.*]¹⁵ found a low extent of RDM services among academic libraries in three selected States (Ekiti, Ondo and Osun) in the Western region of Nigeria, which seems to be accounted for by the skill gap and management gap in data science. Contrarily, findings from Tunmibi and Ajokotola¹⁶ showed a high level of RDM services among librarians in university libraries in Lagos State, Nigeria.

The review of previous studies seems to suggest that university libraries in the developed countries are more advanced in their RDMP, (though most of them are yet to attain RDM maturity), compared to those in developing countries like Nigeria. This points to a gap or disparity in RDMP between countries due to factors that could be nationally motivated. This aligns with the assertion that the factors which contribute to RDM maturity and

10 Andrew M. Cox [*et al.*], *Developments in research data management in academic libraries: towards an understanding of research data service maturity*, «Journal of the association for information science and technology», 68 (2017), n. 9, p. 2192. DOI: 10.1002/asi.23781.

11 Ayoung Yoon; Teresa Schultz, *Research data management services in academic libraries in the US: a content analysis of libraries' websites*, «College & research libraries», 78 (2017), n. 7, p. 926, <<https://crl.acrl.org/index.php/crl/article/view/16788/18346>>.

12 Qi Zhou, *Academic libraries in research data management service: perceptions and practices*, «Open access library journal», 5 (2018), n. eo4693, p. 2, DOI: <<https://dx.doi.org/10.4236/oalib.1104693>>.

13 Roberto Martin-Melon; Tony Hernández-Pérez; Sara Martínez-Cardama, *Research data services (RDS) in Spanish academic libraries*, «The journal of academic librarianship», 49 (2023), n. 4, 102732, p.1, DOI: 10.1016/j.acalib.2023.102732.

14 Juliet C. Alex-Nmecha; Abdurrahman B. Onifade, *Research data management practices: preparedness and challenges among librarians in Nigeria*, «Ghana library journal», 28 (2023), n. 2, p. 128, <<https://www.ajol.info/index.php/glj/article/view/259878>>.

15 Clement Ola Adekoya [*et al.*], *Data science: Developing data-savvy librarians for effective research data management*, «The reference librarian», 66 (2025), n. 1-2, p. 49, DOI: 10.1080/02763877.2025.2482086.

16 Sunday Tunmibi; Busola Olufemi Ajokotola, *Research data management services among university librarians in Lagos State, Nigeria*. «Library philosophy and practice (e-journal)», (2024), n. 8029, p. 13, <<https://digitalcommons.unl.edu/libphilprac/8029>>.

practices vary from one country to another^{17,18}. Moreover, there is need for further empirical exploration of RDMP in Nigerian university libraries, in an holistic manner, taking into cognizance the various dimensions of RDMP. This approach, which is considered as the lifecycle-oriented assessment of RDMP, is currently scarce in RDM literature.

Strategies for deploying RDM in university libraries

The strategies for effective deployment of RDM has been empirically investigated by a number of studies across education-based institutions in diverse geographical setting, suggesting possible ways university libraries can properly deploy RDM services. The empirical investigation of Mosha and Ngulube¹⁹ found that some of the strategies for implementing RDM include organisational support like the development of policies and guidelines, enhancing data security, improving the skill level of stakeholders, and providing technological infrastructure. Infrastructure as an essential component of the RDM initiatives in university libraries²⁰, include online data-management planning tool, repository for data storage and sharing²¹, communication tools and other software solutions²². Thus, the deployment of relevant technology both hardware and software is an essential strategy for the delivery of RDM in university libraries.

The development, implementation and institutionalization of RDM policy is another strategy for the effective deployment of RDM in university libraries. Such policy is crucial for the sustainability of RDM services in university libraries, reflecting the current state of RDM and the future projections²³. The development and implementation levels of RDM policy seem to vary from one country to another²⁴. The authors added that such implementation could be inspired from certain national policies like open access and data sharing policies. Institutional policy for RDM which is a strategy for successful

17 Andrew M. Cox [et al.], *Developments in research data management in academic libraries: towards an understanding of research data service maturity*, «Journal of the association for information science and technology», 68 (2017), n. 9, p. 2182, DOI: 10.1002/asi.23781.

18 Siviwe Bangani; Matthew Moyo, *Data sharing practices among researchers at South African universities*, «Data science journal», 18 (2019), n. 28, p. 1, DOI: 10.5334/dsj-2019-028.

19 Neema Florence Vincent Mosha; Patrick Ngulube, *Strategies for implementing research data management (RDM) services in Tanzania's higher education institutions (HEIs)*, «Collection and curation», 44 (2025), n. 2, p. 54, DOI: 10.1108/CC-05-2024-0027.

20 Michelle A. Krahe [et al.], *Research data management in practice: results from a cross-sectional survey of health and medical researchers from an academic institution in Australia*, «Health information management journal», 49 (2020), n. 2-3, p. 6, <<https://pubmed.ncbi.nlm.nih.gov/30857424/>>.

21 Andrew M. Cox; Ellen Verbaan, *Infrastructure for research data storage and preservation*. In: *Exploring research data management*. London: Facet, 2018, p. 147, DOI: 10.29085/9781783302802.016.

22 Eva Katharina Donner, *Research data management systems and the organization of universities and research institutes: a systematic literature review*, «Journal of librarianship and information science», 55 (2022), n. 2, p. 267, DOI: 10.1177/09610006211070282.

23 Gilbert Exaud Mushi; Heila Pienaar; Martie van Deventer, *Identifying and implementing relevant research data management services for the library at the University of Dodoma, Tanzania*, «Data science journal», 19 (2020), n. 1, p. 3, DOI: 10.5334/dsj-2020-001.

24 Andrew M. Cox [et al.], *Developments in research data management in academic libraries: towards an understanding of research data service maturity*, «Journal of the association for information science and technology», 68 (2017), n. 9, p. 2193, DOI: 10.1002/asi.23781.

RDM service takeoff and maturity in university libraries²⁵, would involve the commitment and cooperation of library shareholders across the line of hierarchy. This suggests the need for library management's involvement and coordination in RDM implementation in university libraries. Whyte in Donner²⁶ noted that RDM deployment in library needs to be initiated by management as a top-down approach.

There is need for collaborative effort for effective deployment of RDM services in university libraries. This collaboration would lead to resource and service sharing²⁷ among university libraries and other concerned units, as a strategy for RDM deployment. RDM collaboration can be between different university libraries or between university library and other institutional units within the university²⁸. This collaboration is hinged on the understanding that RDM services is not exclusively done by librarians, but in collaboration with other stakeholders in the RDM domain like the Information Technology (IT) unit and research support office²⁹. It could also be between librarians, legal officers, IT experts and personnel in the research unit/directorate³⁰. Such collaboration pulls resources (human and material) together to achieve successful RDM deployment in the university library.

Increasing awareness and education on RDM among stakeholders particularly researchers is also a strategy for effective deployment of RDM in university libraries. This awareness could improve their behavioral disposition towards RDM issues like data sharing. Such behavioral of researchers was reported by Donner³¹ to influence successful RDM initiative. Previous empirical studies have shown the need for awareness, instructions and education on RDM issues for the successful deployment of RDM services^{32,33}.

25 Kristin Briney; Abigail Goblen; Lisa Zilinski Mounteer, *Institutional, funder, and journal data policies*. In: *Curating research data, volume one: practical strategies for your digital repository*, edited by Lisa R. Johnston. Chicago: Association of college and research libraries, 2017, p. 61.

26 Eva Katharina Donner, *Research data management systems and the organization of universities and research institutes: a systematic literature review*, «Journal of librarianship and information science», 55 (2022), n. 2, p. 266, DOI: 10.1177/09610006211070282.

27 Marleen Grasse; Ania López; Nina Winter, *Landesinitiative NFDI – a central point of contact for RDM for higher education institutions in the German state of North Rhine-Westphalia*, «Data science journal», 17 (2018), n. 25, p. 6, DOI: 10.5334/dsj-2018-025.

28 Eva Katharina Donner, *Research data management systems and the organization of universities and research institutes: a systematic literature review*, «Journal of librarianship and information science», 55 (2022), n. 2, p. 262, DOI: 10.1177/09610006211070282.

29 Andrew M. Cox [et al.], *Developments in research data management in academic libraries: towards an understanding of research data service maturity*, «Journal of the association for information science and technology», 68 (2017), n. 9, p. 2183, DOI: 10.1002/asi.23781.

30 Olatokunbo Christopher Okiki; Adefunke Olanike Alabi, *Roles of librarians as research data managers in academic libraries*, «Samaru journal of information studies», 24 (2024), n. 2, p. 300, <<https://www.ajol.info/index.php/sjis/article/download/291743/274636>>.

31 Eva Katharina Donner, *Research data management systems and the organization of universities and research institutes: a systematic literature review*, «Journal of librarianship and information science», 55 (2022), n. 2, p. 261-268, DOI: 10.1177/09610006211070282.

32 Kathryn Vela; Nancy Shin, *Establishing a research data management service on a health sciences campus*, «Journal of eScience librarianship», 8(2019), n.1, p.15, DOI: 10.7191/jeslib.2019.1146

33 Bradley Wade [et al.], *Data services librarians' responsibilities and perspectives on research data management*, «Journal of eScience librarianship», 11 (2022), n. 1, p. 5, DOI: 10.7191/jeslib.2022.1226.

Challenges in the deployment of RDM in university libraries

Like other initiatives in university libraries, the deployment of RDM is faced with challenges that could pose as hindrance. RDM implementation demands financial investments for infrastructure and human resources³⁴ which are lacking in many libraries in Nigeria^{35,36} and even in developed countries³⁷. This suggests the need for university libraries to explore alternative funding options for the deployment of RDM.

The deployment of RDM in university libraries brings about changes in their internal structure, which could be challenging. Donner³⁸ affirmed that deploying RDM services changes the organisational structure within higher education institutions like university libraries. This becomes challenging as people are often resistant to change within organisational setting, even in the university domain³⁹. Other challenges hindering the deployment of RDM in university libraries include lack of institutional support, lack of RDM policy, inadequate skill set and expertise, and technological challenges⁴⁰.

The study of Alex-Nmecha and Onifade⁴¹ empirically revealed some of the challenges encountered by Nigerian librarians in RDMP. Their study showed that the predominant challenge was lack of awareness of RDM policies and guidelines among staff and researchers. On the barriers hindering the implementation of RDM services in university libraries of Pakistan, Ashiq [et al.]⁴² revealed that «lack of technological skills, inadequate

34 Eva Katharina Donner, *Research data management systems and the organization of universities and research institutes: a systematic literature review*, «Journal of librarianship and information science», 55 (2022), n. 2, p. 266, DOI: 10.1177/09610006211070282.

35 George Lukmon Abolaji; Aminat Adefunke Fadimu; Maria Adeola Babatunde, *Exploring budget constraints on collection development practices in Nigerian academic libraries*, «International journal of library and information technology (IJLIT)», 6 (2024), p. 62, <<https://www.gojamss.net/index.php/IJLIT/article/view/1110>>.

36 Yetunde Faith Olaseigbe [et al.], *Self-sustaining library services through strategic fee-based initiatives: a roadmap for academic library administrators in Nigeria*, «Communicate: journal of library and information science», 26 (2025), n. 2, p. 161, <<https://www.cjolis.org/index.php/cjolis/article/view/122>>.

37 John Cox, *The position and prospects of academic libraries: weaknesses, threats and proposed strategic directions*, «New review of academic librarianship», 29 (2023), n. 3, p. 268, DOI: 10.1080/13614533.2023.2238691.

38 Eva Katharina Donner, *Research data management systems and the organization of universities and research institutes: a systematic literature review*, «Journal of librarianship and information science», 55 (2022), n. 2, p. 266, DOI: 10.1177/09610006211070282.

39 Mamun Billah; Ann Martin-Sardesai; Zahir Uddin Ahmed, *Silent resistance to organizational change: an Australian perspective*, «Journal of public budgeting, accounting & financial management», 37 (2025), n. 6, p. 166, DOI: 10.1108/JPAFM-03-2024-0043.

40 Ranjeet Kumar Singh; Sneha Bharti; Devika P. Madalli, *Evaluation of research data management (RDM) services in academic libraries of India: a triangulation approach*, «The journal of academic librarianship», 48 (2022), n. 6, p. 102586, DOI: 10.1016/j.acalib.2022.102586.

41 Juliet C. Alex-Nmecha; Abdurrahman B. Onifade, *Research data management practices: preparedness and challenges among librarians in Nigeria*, «Ghana Library Journal», 28 (2023), n.2, p.127, <<https://www.ajol.info/index.php/glj/article/view/259878>>.

42 Murtaza Ashiq; Qurat Ul Asin Saleem; Muhammad Asim, *The perception of library and information science (LIS) professionals about research data management services in university libraries of Pakistan*, «Libri», 71 (2021), n. 3, p. 245, DOI: 10.1515/libri-2020-0098.

financial support for data preservation, poor knowledge of RDM, and lack of involvement/cooperation among concerned units of the university, topped the list».

Moreover, Sajjad and Ahmad⁴³ listed a myriad of issues hindering the implementation of RDMP in the context of Pakistan university libraries. These include data misuse, lack of interest/willingness among stakeholders like the library professionals, poor knowledge of RDM among researchers, poor involvement and collaboration among concerned units within the university community, issues in data organization and preservation, possible misinterpretation of data intellectual property, and inadequate technical skills and infrastructure.

Demographic Correlates of RDM in university libraries

The successful implementation and sustainability of RDM in university libraries could be accounted for by several factors including librarian-level variables like their educational qualification and years of working experience. Studies like that of Tenopir [*et al.*]⁴⁴ suggest that educational qualification and years of experience could be associated with research data services in academic libraries. The training of librarians, which comes from their educational qualification and years of working experience influence their readiness and responsibilities in RDM⁴⁵. While there are very scarce studies directly linking the personal factors of library personnel with their RDMP, further investigation is required to empirically assess this relationship in the context of Nigerian university libraries.

Theoretical Framework

The study is anchored on the Knowledge-Based view (KBV) of the firm which was introduced by Grant⁴⁶. The KBV suggests that knowledge is the most critical asset of a firm which could explain the performance and behaviour of members of the firm. Therefore, the firm's effectiveness and productivity will be dependent on the extent to which knowledge can be created, organized, preserved, and used within the firm's production processes. Knowledge integration into the firm's production system is thus seen as organisational advantage which is continually being explored. The KBV has been applied in prior studies, particularly in the corporate and business context^{47,48},

43 Muhammad Sajjad; Khurshid Ahmad, *Research data management practices at university libraries in Pakistan*, «Pakistan journal of humanities and social sciences», 12 (2024), n. 2, p. 1956. DOI: 10.52131/pjhss.2024.v12i2.2351.

44 Carol Tenopir; Ben Birch; Suzie Allard, *Academic libraries and research data management: current practices and plans for the future*. An ACRL White paper, 2012, p. 10, <<https://alair.ala.org/server/api/core/bitstreams/ed56a911-514e-4162-a53d-180588f0e649/content>>.

45 Ekawati Marlina; Achmad Nizar Hidayanto; Betty Purwandari, *Towards a model of research data management readiness in Indonesian context: an investigation of factors and indicators through the fuzzy delphi method*, «Library & information science research», 44 (2022), n. 1, p. 7. DOI: 10.1016/j.lisr.2022.101141.

46 Robert M. Grant, *Toward a knowledge-based theory of the firm*, «Strategic management journal», 17 (1996), n. S2, p.109–122, DOI: 10.1002/smj.4250171110.

47 Zul Azmi; Erlina Erlina; Iskandar Muda; Keulana Erwin, *Exploring the use of knowledge-based view in accounting and the business environment.*, «EkOmbis review: jurnal ilmiah ekonomi dan bisnis», 12 (2024), n. 3, p. 3203–3212, DOI: 10.37676/ekombis.v12i3.5883.

48 Maria-Cristina Stoian; Janja Annabel Tardios; Marios Samdanis, *The knowledge-based view in international business: A systematic review of the literature and future research directions*, «International business review», 33 (2024), n. 2, p. 102239, DOI: 10.1016/j.ibusrev.2023.102239.

with few studies like that of Sa'ari [*et al.*]⁴⁹ showing its application to librarianship

In the context of this current study, university libraries are increasingly considering research data as an organisational asset given their research-intensiveness. This research data is managed through RDMP for sustainable research data services, invariably enhancing the effectiveness of university libraries towards supporting the research endeavors of members of their parent institution. This is very vital as research is one of the tripartite function of every university library, others being teaching and learning. Also, when RDMP is considered as activities for which the performance of library personnel is measured, the KBV suggests that knowledge resources have the highest positive association with such performance, as implied from the study of Donald [*et al.*]⁵⁰. This shows that the RDMP of library personnel in university libraries can be explained by their knowledge capacity on research data management.

At an individual level, knowledge capacity could be dependent on educational qualifications and years of working experience. While educational qualifications provides cognitive training, work experience helps to accumulate practical skills, contextual competence, and tacit knowledge⁵¹. This implies that the educational qualification and working experience as knowledge resources could potentially be associated with the level of RDMP among university library personnel. Therefore, the KBV provides a basis for examining the relationship between library personnel's educational qualifications and working experiences (which are individual factors that enhance their knowledge base) and RDMP. This extends the application of KBV to RDMP in university libraries, an area that has been under-explored. It also provides a theoretical-based explanation for how personal factors like educational qualifications and working experience of library personnel could determine their RDMP. This underscores the need to advance the education of library personnel responsible for RDMP and also ensure that research data are managed by those who have acquired a substantial cognitive experience.

Methodology

The study adopted the descriptive correlational research design, which is a quantitative research approach to describe the situation of RDM in university libraries and how demographic factors (educational qualification and years of experience) of the personnel could be associated with the RDMP in the university libraries. The population of the study cut across library personnel, with a minimum of a bachelor's degree in Library and Information Science (LIS), from public university libraries in Ebonyi, Edo, and Ondo States, covering one state each from the three southern geopolitical zones in Nigeria. These university libraries comprised 137 library professionals who made up the target population of the study.

Although the study's participants were drawn from university library personnel in three states from the three geopolitical zones (South-East, South-South, and South-West) in the Southern region of Nigeria, the sample size remains limited. This has

49 Haziah Sa'ari [*et al.*], *Leadership, capability dynamics, and knowledge architectures in academic libraries*, «*International journal of modern education (IJMOE)*», 7 (2025), n. 28, p. 416–436. DOI: 10.35631/IJMOE.728031.

50 Donald D. Bergh [*et al.*], *Is knowledge really the most important strategic resource? A meta-analytic review*, «*Strategic management journal*», 46 (2025), n. 1, p. 3–18, DOI: [10.1002/smj.3645](https://doi.org/10.1002/smj.3645).

51 Bhargava R. Kotur; S. Anbazhagan, *Education and work-experience - influence on the performance*, «*IOSR Journal of business and management*», 16 (2014), n. 5, p. 104–110, DOI: [10.9790/487X-1653104110](https://doi.org/10.9790/487X-1653104110).

implications for generalisability of the findings from the study. As such, the results of the study should be more context-specific rather than nationally generalized. The selected states included in the study provide some level of regional diversity, reinforcing the exploratory and more context-specific nature of the investigation.

A structured or close-ended questionnaire was used to elicit data from the respondents. The questionnaire was sectioned in line with the research questions/hypotheses of the study, and items used in measuring the variables under investigation were extracted from literature. The items were measured on a four-point Likert scale of Strongly disagree (SD), Disagree (D), Agree (A), and Strongly agree (SA) with scores ranging from 1 to 4, respectively. The questionnaire was validated by two professionals in LIS and one professional from Measurement and Evaluation. The updated version of the questionnaire after validity was subjected to reliability testing, using 25 copies of the questionnaire administered to librarians in Delta and Rivers States' university libraries. The reliability coefficient in Cronbach's Alpha showed that the RDMP scale was .969, the strategies for the deployment of RDM scale was .960, and the challenges of RDM scale was .921. The questionnaire was thereafter distributed to the respondents, in compliance with the required ethical considerations (voluntary participation, informed consent, and respondents' anonymity and confidentiality).

At the end of the data collection period, a total of 107 (78%) were retrieved and considered fit for analysis. The descriptive statistics of mean ($\bar{x}$) and standard deviation (Std.) were used to analyze the research questions, while the hypotheses were analyzed using inferential statistics. Spearman's rank-order correlation was used to test hypotheses one and two, while and multiple linear regression analysis was used to test hypothesis three.

Presentation of Results

Based on the analysis of the retrieved data, the results are presented in accordance with the research questions and hypotheses guiding the study.

Answers to Research Questions

Research question one: What is the level of RDMP among personnel in Nigerian University libraries?

S/N	RDM Practices	SD	D	A	SA	$\bar{x}$	Std
1.	I am actively involved in supporting or guiding researchers during the data creation phase of their research projects.	8 7.5%	30 28.0%	52 48.6%	17 15.9%	2.73	.819
2	I have clear roles and responsibilities regarding data creation in my library.	10 9.3%	26 24.3%	54 50.5%	17 15.9%	2.73	.842
3	I take into cognizance, ethical considerations (like data anonymity and informed consent) during data creation	9 8.4%	19 17.8%	55 51.4%	24 22.4%	2.88	.855
4.	I promote researchers' use of standardized and clearly defined file formats when creating research data.	11 10.3%	21 19.6%	53 49.5%	22 20.6%	2.80	.884
Mean of Data Creation						2.79	.766

S/N	RDM Practices	SD	D	A	SA	$\bar{x}$	Std
5.	I feel confident in assisting researchers with data processing-related issues.	5 4.7%	15 14.0%	72 67.3%	15 14.0%	2.91	.680
6.	I use data processing tools like spreadsheet software and data visualization software to assist researchers in the processing of their data.	12 11.2%	33 30.8%	51 47.7%	11 10.3%	2.57	.825
7.	I provide researchers with guide on how to clean and transform their research data for improved quality and usability.	11 10.3%	29 27.1%	55 51.4%	12 11.2%	2.64	.817
8.	During the data processing stage, I help researchers manage and preserve several dataset versions following the FAIR principle.	15 14.0%	29 27.1%	54 50.5%	9 8.4%	2.53	.839
Mean of Data Processing						2.66	.674
9.	My library provides data analysis training for researchers.	30 28.0%	52 48.6%	23 21.5%	2 1.9%	1.97	.758
10.	I recommend appropriate data analysis tools for researchers.	13 12.1%	26 24.3%	53 49.5%	15 14.0%	2.65	.870
11.	I assist researchers in conducting data analysis and interpret their results for them.	23 21.5%	37 34.6%	40 37.4%	7 6.5%	2.29	.880
12.	I educate researchers on fundamental data analysis ideas (such as descriptive statistics and data visualization).	15 14.0%	34 31.8%	48 44.9%	10 9.3%	2.50	.851
Mean of Data Analysis						2.35	.656
13.	I provide researchers with services that help them prepare their data for preservation (like file format conversion and metadata generation)	13 12.1%	37 34.6%	47 43.9%	10 9.3%	2.50	.828
14.	My library practices standardization of metadata for data discoverability, integrity, Interoperability and regulatory complianc	22 20.6%	46 43.0%	29 27.1%	10 9.3%	2.25	.891
15.	I encourage and assist researchers to use persistent identifiers (e.g., DOIs) to preserve datasets.	17 15.9%	28 26.2%	50 46.7%	12 11.2%	2.53	.894
16.	My library has data storage infrastructure for archiving data like institutional repository	23 21.5%	29 27.1%	44 41.1%	11 10.3%	2.40	.940
Mean of Data Preservation		2.42	.722				
17.	I guide researchers in making their data accessible and visible	12 11.2%	28 26.2%	57 53.3%	10 9.3%	2.61	.810

S/N	RDM Practices	SD	D	A	SA	$\bar{x}$	Std
18.	I provide guidance to researchers to ensure compliance with data accessibility and sharing policy mandated by funding agencies, publishers, and institutional policies.	13 12.1%	34 31.8%	48 44.9%	12 11.2%	2.55	.849
19.	I advise researchers on various data access models (like open access, restricted access, controlled access and embargoed access) and their ramifications.	12 11.2%	26 24.3%	54 50.5%	15 14.0%	2.67	.855
20.	My library maintains adequate infrastructure (like institutional repositories and data discovery platforms) to facilitate and sustain the accessibility of research data	21 19.6%	26 24.3%	47 43.9%	13 12.1%	2.49	.945
Mean of Data Accessibility						2.58	.743
21.	I guide researchers to repositories and platforms that allow data sharing and reuse, such as Figshare and Mendeley Data.	12 11.2%	35 32.7%	51 47.7%	9 8.4%	2.53	.805
22.	I guide researchers on common data licenses (like Creative Commons licenses) to support responsible data reuse.	14 13.1%	30 28.0%	56 52.3%	7 6.5%	2.52	.805
23.	I advise researchers to explore existing datasets before creating new ones.	15 14.0%	30 28.0%	50 46.7%	12 11.2%	2.55	.871
24.	I offer guidance to researchers on locating, evaluating, and ethically reusing datasets.	11 10.3%	34 31.8%	52 48.6%	10 9.3%	2.57	.802
Mean of Data Re-use						2.54	.750
Weighted Mean of RDMP = 2.56							

Figure 1 – RDMP among the library personnel

Decision rule: 1.00 – 2.00 = Low; 2.01 – 3.00 = Moderate; 3.01 – 4.00 = High

Based on the decision rule, the weighted mean for RDMP (= 2.56) indicates a moderate level of practice among respondents. The highest mean scores are observed in data creation (= 2.79), data processing (= 2.66), and data accessibility (= 2.58), suggesting relatively stronger engagement in the initial and operational stages of the data lifecycle. This implies that respondents are fairly competent in generating, organising, and making data available for use. In contrast, the lowest mean scores are associated with data analysis (= 2.35), data preservation (= 2.42), and data re-use (= 2.54), highlighting weaker performance in more advanced and sustainability-oriented practices. These findings suggest limitations in analytical capacity and long-term data stewardship. Overall, the results underscore the need for capacity-building initiatives focused on enhancing data analysis skills, preservation strategies, and the promotion of effective data re-use practices.

Research question two: What are the strategies for the deployment of RDM in the University libraries?

S/N	Strategies	SD (%)	D (%)	A (%)	SA (%)	$\bar{x}$	Std.
1	Develop data infrastructure	7 (6.5)	51 (47.7)	21 (19.6)	28 (26.2)	2.65	.943
2	Development and institutionalization of RDM policy	4 (3.7)	47 (43.9)	27 (25.2)	29 (27.1)	2.76	.899
3	Enhancing data security	4 (3.7)	57 (53.3)	20 (18.7)	26 (24.3)	2.64	.894
4	Explore alternative funding options for RDM	4 (3.7)	52 (48.6)	27 (25.2)	24 (22.4)	2.66	.868
5	Improve collaboration for resource (human and material) and service sharing	4 (3.7)	57 (53.3)	18 (16.8)	28 (26.2)	2.65	.912
6	Increase awareness and education on RDM among stakeholders like researchers and faculty	5 (4.7)	55 (51.4)	18 (16.8)	29 (27.1)	2.66	.931
7	Involvement of library management in RDM implementation	3 (2.8)	46 (43.0)	22 (20.6)	36 (33.6)	2.85	.930
8	Promoting open science and data sharing culture	2 (1.9)	53 (49.5)	20 (18.7)	32 (29.9)	2.77	.907
9	Standardization of metadata and data documentation practices	3 (2.8)	49 (45.8)	26 (24.3)	29 (27.1)	2.76	.889
10	Strengthening capacity building and regular training programmes on RDM	3 (2.8)	45 (42.1)	25 (23.4)	34 (31.8)	2.84	.913

Figure 2 – Strategies for the deployment of RDM

The findings of the study show several strategies that university libraries need to consider in the deployment of RDM. It highlights the relevance of library management’s involvement in the effective implementation of RDM. Also, when RDM policy is institutionalized, it provides a framework for deploying RDM in the libraries. The study also showed that with improved capacity of library personnel and promoting data sharing culture, university libraries will be better positioned to deploy RDM. These all point to the fact that institutional factors are critical to the deployment of RDM in university libraries.

Research question three: What are the challenges affecting the deployment of RDM in the university libraries?

S/N	Challenges	SD (%)	D (%)	A (%)	SA (%)	$\bar{x}$	Std.
1	Inadequate data infrastructure (to collect, store, process, and manage data)	3 (2.8)	17 (15.9)	58 (54.2)	29 (27.1)	3.06	.738

S/N	Challenges	SD (%)	D (%)	A (%)	SA (%)	$\bar{x}$	Std.
2	Inadequate technical skills (skill gap)	4 (3.7)	19 (17.8)	54 (50.5)	30 (28.0)	3.03	.783
3	Lack of awareness and cooperation from researchers, faculty and concerned units within the university	10 (9.3)	18 (16.8)	56 (52.3)	23 (21.5)	2.86	.863
4	Lack of management and institutional support	6 (5.6)	20 (18.7)	54 (50.5)	27 (25.2)	2.95	.817
5	Lack of RDM policy	3 (2.8)	27 (25.2)	49 (45.8)	28 (26.2)	2.95	.794
6	Legal and ethical concerns (e.g intellectual property rights, ethical data sharing and data ownership)	6 (5.6)	23 (21.5)	51 (47.7)	27 (25.2)	2.93	.832
7	Poor data documentation and metadata inconsistencies	3 (2.8)	22 (20.6)	53 (49.5)	29 (27.1)	3.01	.771
8	Poor funding for Research Data Management (RDM)	4 (3.7)	17 (15.9)	52 (48.6)	34 (31.8)	3.08	.791
9	Poor knowledge of RDM (knowledge gap)	6 (5.6)	22 (20.6)	50 (46.7)	29 (27.1)	2.95	.840
10	Resistance to change in service structure	6 (5.6)	20 (18.7)	49 (45.8)	32 (29.9)	3.00	.847

Figure 3 – Strategies for the deployment of RDM: Challenges affecting the deployment of RDM

The findings of the study implied that most of the challenges facing RDM deployment in the libraries are predominately institutional-based (funding, data infrastructure, RDM policy, and data policy for consistency in documentation) and capacity-related issues (skill-gap and knowledge-gap). The findings imply that the commitment and coordination of university library management towards deploying RDM is crucial in significantly addressing most of these challenges.

Testing the Hypotheses

H01: There is no significant relationship between highest educational qualification and RDMP among personnel in Nigerian university libraries.

Variables	Mean	Std. Deviation	N	rho	df	Sig. (p)
Educational qualification	2.12	.683	107	.146 [*]	106	.038
RDMP (data creation, processing, analysis, preservation, accessibility and re-use)	57.10	11.956	107			

Figure 4 – Educational qualification and RDMP

*Correlation CoefficientSig. (2-tailed)

A significant positive relationship exists between educational qualification and RDMP ($r = .146^*$; $df = 106$; $p < 0.05$), although the strength of the relationship is very weak. This implies educational qualification is associated with a slight increase in RDMP among the university library personnel. The relationship is minimal suggesting that educational qualification alone would not substantially determine the level of RDMP. Therefore, the null hypothesis that stipulated «there is no significant relationship between highest educational qualification and RDP» is hereby rejected and the alternative hypothesis accepted.

Ho2: There is no significant relationship between years of working experience and RDMP among personnel in Nigerian university libraries.

Variables	Mean	Std. Deviation	N	rho	df	Sig. (p)
Years of working experience	3.33	1.080	107	.371 [*]	106	.045
RDMP (data creation, processing, analysis, preservation, accessibility and re-use)	57.10	11.956	107			

Figure 5 – Educational qualification and RDMP Years of working experience and RDMP

*Correlation Coefficient Sig. (2-tailed)

A significant positive relationship exists between years of working experience and RDM ($r = .371^*$; $df = 106$; $p < 0.05$), although the relationship is moderate in strength. This suggests that greater years of working experience are associated with higher levels of RDMP among the personnel. However, the study indicates that working experience alone will not substantially explain the level of RDMP among the university library personnel. Therefore, the null hypothesis that stipulated «there is no significant relationship between years of working experience and RDMP» is hereby rejected, and the alternative hypothesis accepted.

Ho3: Highest educational qualification and years of experience of personnel do not have a statistically significant relationship with RDMP in the libraries

Model		R	R Square	Adjusted R Square	Std. Error of the Estimate	
1		.066 ^a	.004	.015	12.044	

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	66.375	2	33.188	.229	.026
	Residual	15085.494	104	145.053		
	Total	15151.869	106			

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	53.653	5.290		10.141	.000
	Highest educational qualification	.696	1.713	.040	.406	.035
	Years of working experience	.593	1.084	.054	.547	.048

Figure 6 – Relationship between highest educational qualification and years of working experience with RDMP

a. Dependent Variable: RDMP (data creation, processing, analysis, preservation, accessibility and re-use)

The proportion of variance in RDMP explained by highest educational qualification and years of working experience is very low (Adjusted R² = 0.015), indicating that these variables jointly account for approximately 1.5% of the variation in RDMP. This suggests a weak explanatory power of the model. In terms of relative contribution, years of working experience ($\beta = 0.054$; $t = 0.547$; $p < 0.05$) slightly exceeds highest educational qualification ($\beta = 0.040$; $t = 0.406$; $p < 0.05$), although both predictors demonstrate very small effect sizes. Therefore, it can be inferred that both educational qualification and years of working experience have a statistically significant but weak explanatory power over RDMP. This implies that other factors, such as either technological, institutional, or organizational, not included in the model, likely account for the larger part of the remaining variance. Thus, highest educational qualification and working experience contribute minimally to explaining RDMP among university library personnel.

Discussion of Findings

The study showed that the RDMP among professionals in the university libraries was moderate which indicated that these libraries are providing researchers with the required services to support them, but not optimally. This implies that professionals in these libraries still need to improve their RDMP for maximum impact. Although there is a dearth of studies on the level of RDMP especially in Nigeria university libraries. The study of Adekoya [et al.]⁵² (2024) revealed that Nigerian librarians’ involvement in RDM is low. When Igbinovia [et al.]⁵³ empirically investigated RDM in Nigerian university libraries, none of the identified RDM services were covered by more than 40% of the participating libraries. This suggests that none of the

52 Clement Ola Adekoya [et al.], *Research data management services among librarians in Nigerian universities*, «Information development», 42 (2026), n. 1, p. 470, DOI: 10.1177/02666669231222460.

53 Magnus Osahon Igbinovia; Omorodion Okuonghae; Oluwayinka Esther Solanke, *Research data management in university libraries: evidence from Nigeria*, «Rajagiri journal of social development», 15 (2023), n. 2, p. 44, <http://journals.rajagiri.edu/index.php/rssj/article/view/713/493>.

libraries adequately provide RDM services. This calls for re-strategizing among university libraries in the implementation of RDM. This study, in contrast to most previous RDMP studies, offers a multi-dimensional perspective on understanding RDMP through the lens of the research data lifecycle. The study provides a comprehensive understanding of RDMP as interconnected practices that should be integrated into the library service structure for optimal service delivery. The study also reflects the knowledge imbalance among library personnel across the various stages of the research lifecycle, demonstrating the need for purpose-driven capacity initiatives toward activities at the latter stages of the cycle such as data analysis, preservation, and reuse. This will inform policy and managerial decisions regarding the design and focus of training programs aimed towards enhancing RDMP in the university libraries.

The findings of the study revealed the need to consider several strategies in the deployment of RDM. The study aligns with that of Igbिनovia [*et al.*]⁵⁴ which highlights the relevance of technological infrastructure and library personnel capacity building in achieving RDM in university libraries. The study positions library management as the ‘arrowhead’ in implementing RDM, implying that their wiliness and commitment are crucial to its deployment. One of the earliest investigations into RDM recognized library governance as a driver of RDM development⁵⁵. Also, a recent study by Dube⁵⁶ revealed that fostering data sharing culture and involvement of university leadership including library management are vital strategies in fostering effective RDM. The strategies identified for enhancing RDMP among personnel in the university libraries are predominantly institutional, which reflect the need for organisational support structures in advancing the maturity of RDMP. This suggests that the commitment of university library management to RDMP could shape library personnel’s involvement and performance. This aligns with the KBV which highlights the need for organisational structures, support systems, and policies in improving knowledge assets that shape RDMP performance among library personnel. The study, therefore, provides empirical evidence that explains the theoretical assumption that organisational strategies could potentially enhance the development of knowledge capabilities required for better RDMP among library professionals.

The study revealed several challenges like poor funding, inadequate data infrastructure, inadequate technical skills, poor data documentation and metadata inconsistencies, and resistance to change in service structure, as impediments to the deployment of RDM in the university libraries. This corroborates the findings of Igbिनovia [*et al.*]⁵⁷ that insufficient financial resources and insufficient skilled personnel are

54 Magnus Osahon Igbिनovia; Chidi Deborah Segun-Adeniran; Omorodion Okuonghae, *Research data management in university libraries: the need for data literacy and technological Revamp*, «IFLA journal», 51 (2025), n. 1, p. 74, DOI: 10.1177/03400352241280902.

55 Stephen Pinfield; Andrew M. Cox; Jen Smith, *Research data management and libraries: relationships, activities, drivers and influences*, «PLoS ONE», 9 (2014), n. 12, e114734. DOI: 10.1371/journal.pone.0114734.

56 Tinyiko Vivian Dube, *Research data management in academic libraries: Institutional repositories as a reservoir for research data*, «Library management», 46 (2025), n. 5, p. 324, DOI: 10.1108/LM-06-2024-0070.

57 Magnus Osahon Igbिनovia; Omorodion Okuonghae; Oluwayinka Esther Solanke, *Research data management in university libraries: evidence from Nigeria*, «Rajagiri journal of social development», 15 (2023), n. 2, p. 47, <<http://journals.rajagiri.edu/index.php/rssj/article/view/713/493>>.

the two most critical challenges facing librarians in the deployment of RDM in University libraries. Adekoya [et al.]⁵⁸ also noted funding as a critical challenge to the implementation of RDM in Nigerian universities libraries. Therefore, there is need to build capacity, ensures technological revamp, and establishing RDM policy for standardized practice. From the KBV perspective, these challenges are fundamental concerns that can be addressed through managerial cognition and strategic management. RDMP maturity will require coordinated efforts towards ensuring effective RDMP within the university library. The KBV contributes to organisational effectiveness through coordination of knowledge assets. To overcome the challenges associated with RDMP, there is a need for deliberate managerial actions targeted at leveraging knowledge resources accordingly.

The study also revealed that both highest educational qualification and years of working experience could be associated with RDMP in the university libraries. Although there is a scarcity of research that explicitly explored these relationships, the study of Masinde [et al.]⁵⁹ suggests that library personnel's experience could affect their management of research data. The study of Faniel and Connaway⁶⁰ revealed that on-the-job experience and continuous education (which could amount to high educational qualification) of library personnel could facilitate RDM in libraries. Although continuous education is not limited to formal education, it indicates that the knowledge gained could facilitate RDMP. The educational qualifications and work experience of library personnel are expected to build their knowledge capacity towards effective performance. From the KBV viewpoint, educational qualifications and working experience are dimensions of library personnel's knowledge capacity, which aggregate into organisational knowledge resources that drive the systemic and effective management of research data. The KBV of the firm also suggests that investment endeavors that raise the knowledge level of employees, like advances in education and gaining relevant experience, invariably increase the university libraries' effectiveness towards RDMP.

Conclusion

The study highlighted the level of RDMP from a lifecycle-oriented perspective, the strategies required to effectively deploy RDM, and the challenges affecting such deployment. The study also reveal that personal factors of the librarians (highest educational qualification and years of working experience) are associated with RDMP in the university libraries investigated. The moderate level of RDMP reflect the need for more effort towards RDM maturity in the university libraries. This reinforces the need to institutionalize RDM policy, revamp technological data infrastructure, intensity data sharing culture among stakeholders, and develop the knowledge capacity of library personnel. This knowledge capacity could be height-

58 Clement Ola Adekoya [et al.], *Research data management services among librarians in Nigerian universities*, «Information development», 42 (2026), n. 1, p. 472, DOI: 10.1177/02666669231222460.

59 Johnson Masinde [et al.], *Research librarians' experiences of research data management activities at an academic library in a developing country*, «Data and information management», 5 (2021), n. 4, p. 419, DOI: 10.2478/dim-2021-0002.

60 Ixchel M. Faniel; Lynn Silipigni Connaway, *Librarians' perspectives on the factors influencing research data management programs*, «College & research libraries», 79 (2018), n. 1, p. 108, DOI: 10.5860/crl.79.1.100.

ened by their educational qualification and prior work. This could invariably serve as reference point in identifying, developing, and deploying skilled manpower for effective RDMP in university libraries. The study's contribution to librarianship lies in its exploration of RDMP from a holistic or multi-dimensional perspective using the research data lifecycle. This provides a comprehensive understanding that RDMP is a series of interconnected activities that collectively dictate how research data is managed in university libraries.

Management involvement is crucial in addressing the challenges associated with the deployment of RDM. Library management are expected to set up the system, stimulate the process, and develop the human capacity require in the effective management of research data. This strengthens the place of university libraries as a research hub, shifting from traditional research services to a robust data-driven research support system, where they actively engage with researchers in managing research data FAIRly. The strategic involvement of university library management provides systemic coordination for setting up institutional-based strategies that leverage the knowledge resources within the library for revamping RDMP. Knowledge resources of the university libraries are the build-up of the knowledge assets of library personnel, which improve partially with educational qualifications and working experience. The study thus showed that RDMP practices in the university were to a little extent accounted for by the educational qualifications and working experience of the personnel. This gives empirical evidence to the KBV that considered knowledge assets as an essential requirement for performance within a firm. Although these demographic factors relate to RDMP among library personnel in the university libraries, the strength of their relationship is weak, implying that other factors are stronger determinants of RDMP. When considered from the KBV perspective, the study supports the understanding that individual knowledge alone will not significantly predict RDMP without organizational systems, knowledge infrastructure, managerial cognition, and coordination.

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Gestione dei dati della ricerca nelle biblioteche universitarie: pratiche orientate al ciclo di vita, strategie, sfide e correlati demografici

Il dibattito accademico sulla gestione dei dati della ricerca (RDM) ha preso in esame la crescita esponenziale dei dati, ma permangono lacune rispetto alle pratiche quando vengono analizzate attraverso la lente del ciclo di vita dei dati e al modo in cui i fattori personali dei bibliotecari si correlano a tali pratiche. Basato sulla knowledge-based view (KBV), questo studio analizza empiricamente le pratiche orientate al ciclo di vita, le strategie adottate, le principali sfide e i correlati demografici delle pratiche di gestione dei dati della ricerca (RDMP) tra il personale bibliotecario nelle tre zone geopolitiche meridionali della Nigeria. È stato adottato un disegno di ricerca descrittivo-correlazionale e impiegato un questionario strutturato per raccogliere dati da una popolazione target di 137 professionisti bibliotecari. È stato ottenuto un tasso di risposta del 78% e i dati sono stati analizzati mediante statistiche descrittive e inferenziali. I risultati indicano un livello moderato di RDMP nelle biblioteche universitarie. Le principali strategie per un'efficace implementazione delle RDMP includono il coinvolgimento della direzione della biblioteca, il rafforzamento delle competenze e l'istituzionalizzazione di politiche di RDM. Tra i fattori che ostacolano le RDMP vi sono finanziamenti insufficienti, infrastrutture dati inadeguate e carenze di competenze. Lo studio rileva inoltre che il più alto titolo di studio e gli anni di esperienza presentano una relazione statisticamente significativa, ma molto debole, con le RDMP tra il personale delle biblioteche universitarie. La ricerca offre evidenze empiriche a sostegno dell'applicazione della KBV alle RDMP nelle biblioteche universitarie, mostrando come i professionisti dell'informazione, in quanto risorse conoscitive cruciali, possano essere valorizzati per migliorare tali pratiche. Evidenzia inoltre la rilevanza di altri fattori, quali i sistemi organizzativi, la cognizione manageriale e il coordinamento, come strategie istituzionali per rafforzare le RDMP. Lo studio conclude che il supporto della direzione, infrastrutture adeguate e lo sviluppo delle capacità del personale sono elementi essenziali per promuovere le RDMP nelle biblioteche universitarie della regione meridionale della Nigeria.

Research data management in university libraries: lifecycle-oriented practices, strategies, challenges, and demographic correlates

Scholarly discourse on research data management (RDM) has addressed the exponential growth of research data, yet gaps remain regarding practices when examined through the lens of the data lifecycle and in relation to librarians' personal factors. Anchored in the knowledge-based view (KBV),

this study empirically investigates lifecycle-oriented practices, strategies, challenges, and demographic correlates of research data management practices (RDMP) among library personnel across the three southern geopolitical zones of Nigeria. The study adopted a descriptive correlational research design and used a structured questionnaire to collect data from a target population of 137 library professionals. A 78% response rate was achieved, and the data were analysed using descriptive and inferential statistics. Findings revealed a moderate level of RDMP in university libraries. Core strategies for the effective implementation of RDMP include library management involvement, capacity building, and the institutionalisation of RDM policies. Challenges such as poor funding, inadequate data infrastructure, and skills gaps constrain RDMP. The study also found that highest educational qualification and years of experience had a statistically significant but very weak relationship with RDMP among university library personnel. The study provides empirical evidence for applying KBV to RDMP in university libraries, indicating that library professionals, as critical knowledge assets, can be supported to improve RDMP. It further highlights the relevance of other factors, such as organisational systems, managerial cognition, and coordination, as institutional strategies for enhancing RDMP. The study concludes that management support, infrastructure, and personnel capacity are crucial for advancing RDMP in university libraries in the southern region of Nigeria.