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The Implementation of Research Findings for LIS Professional Practices in Selected Academic Libraries in Sub-Saharan Africa

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RE-IMAGINING LIBRARY AND INFORMATION SERVICES IN THE DIGITAL ERA

Proceedings of the

26th Standing Conference of Eastern, Central and Southern African Library and Information Associations (SCECSAL XXVI) held on 22nd — 26th April 2024 in Mombasa, Kenya

Editors

Tom Kwanya, Irene Muthoni Kibandi, Peter Gatiti

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CONTENTS

Library of Congress Cataloging-in-Publication Data
Peer Reviewersv
Acknowledgementsvi
Prefacevii
Best Practices in Records and Information Management
Records Management Practices and Service Delivery: A Case of Academic Registrar's Department at the All-Saints University Lango Kenneth Abong*; David Luyombya**
Digitising Murumbi Africana Collection at the Kenya National Archives and Documentation Service for Posterity and Ubiquitous Access Wekalao Ben Namande
Emerging LIS Roles in the Digital Era19
3. Bridging the Digital Gap: Digital Literacy for Maximising E-Resource Usage at Kenya Revenue Authority Library Mwendwa Mary*; Surtan Faith**; Wekalao Ben Namande***
4. Awareness of Professional Ethics in the General Publishing Industry in Uganda Joachim Bibuli*; Alice Gitta Kutyamukama**; Sarah Kaddu***
5. The Use of Technology in the Preservation of Institutional Memory of Libraries Lilian Gisesa
6. A Competency Index for Health Librarians in Kenya Nelly Muhonja*;Tom Kwanya**40
Information Ethics and Practices60
7. The Awareness of Copyright Laws at the University of Venda Library Maropene Thomas Ramabina*; Zawedde Nsibirwa**
8. The Perceptions of Law Students on the Information and Digital Literacy Programme at the University of Namibia Chiku Mnubi-Mchombu*; Linda Ndapandula Mbangula**
9. Information Ethics Adoption in Managing Open Access Electronic Resources by Zimbabwean University Libraries Howard Hogo*; Ruth Hoskins**
10. Exploring eResearch Knowledge and Practices of Information Specialists at a South African Private Higher Education Institution Edmont Pasipamire*; Brenda van Wyk**
11. Managing Open Access Institutional Repositories in Higher Learning and Research Institutes in Tanzania: Prospects and Challenges Wulvstan Pius Mtega*: Grace Emmanuel Msoffe**

	12. Integrated Information Governance Framework for Air Traffic Navigation Services in South Africa Refiloe Mabaso
	13. Optimising Library Policies as an Ethical Principle for Successful Management of Libraries in Kenya: A Content Analysis Benjamin Opicho Kemboi
	14. Futuristic View of Robotics in Enhancing Library Accessibility for Differently-Abled Users in Kenya and South Africa Villary Atieno Abok*; Daniel Rankadi Mosako**
	15. Copyright Practices in Academic Libraries: Insights from the Aga Khan University Esther Wanyingi*; Arnold Mwanzu**; Peter Gatiti***
R	esearch and Digital Literacy144
	16. Information Technology Trends, Challenges and Opportunities in Libraries Naomy Mwaurah*; Nyambura Gathama**; Ben Namande***
	17. Transformative Initiatives in Scholarly Communication: A Comprehensive Analysis of Crossref's Research Nexus, GEM Program, and PLACE Mercury Shitindo
	18. Effectiveness of Reference Management Software in Enhancing Research Quality in Universities in Nairobi County, Kenya Samuel Kairigo*; Everlyn Anduvare**
L	IS Education and Training in a Digital Era183
	19. Framework for Knowledge Management Curriculum in Africa Joseph Kiplang'at*; Elisam Magara*
	20. Integrating Artificial Intelligence Literacy in Library and Information Science Training in Kenyan Academic Institutions Rachel Kagoiya*; Sally Chepchirchir**
	Academic Institutions Rachel Kagoiya*; Sally Chepchirchir** 203 21. Information Literacy Skills Curricula and Policy for Medical Undergraduate Students at Moi University and University of Nairobi
	Academic Institutions Rachel Kagoiya*; Sally Chepchirchir**
R	Academic Institutions Rachel Kagoiya*; Sally Chepchirchir** 203 21. Information Literacy Skills Curricula and Policy for Medical Undergraduate Students at Moi University and University of Nairobi
R	Academic Institutions Rachel Kagoiya*; Sally Chepchirchir** 203 21. Information Literacy Skills Curricula and Policy for Medical Undergraduate Students at Moi University and University of Nairobi Evans Motari Momanyi*; Emily Ng'eno**; Joseph Kiplang'at*** 213
R	Academic Institutions Rachel Kagoiya*; Sally Chepchirchir** 203 21. Information Literacy Skills Curricula and Policy for Medical Undergraduate Students at Moi University and University of Nairobi Evans Motari Momanyi*; Emily Ng'eno**; Joseph Kiplang'at*** 213 226 227 22. Using the Scholarly Communication Service to Enhance Research Support to UKZN Academics
R	Academic Institutions Rachel Kagoiya*; Sally Chepchirchir** 203 21. Information Literacy Skills Curricula and Policy for Medical Undergraduate Students at Moi University and University of Nairobi Evans Motari Momanyi*; Emily Ng'eno**; Joseph Kiplang'at*** 213 esponsive Information Service and Products 226 227 22. Using the Scholarly Communication Service to Enhance Research Support to UKZN Academics Nonhlanhla Ngcobo 228 23. A Bibliometric Analysis of Academic Writing and Scholarly Communication in Sub-Saharan African Institutions of Higher Learning
R	Academic Institutions Rachel Kagoiya*; Sally Chepchirchir** 203 21. Information Literacy Skills Curricula and Policy for Medical Undergraduate Students at Moi University and University of Nairobi Evans Motari Momanyi*; Emily Ng'eno**; Joseph Kiplang'at*** 213 226 227 22. Using the Scholarly Communication Service to Enhance Research Support to UKZN Academics Nonhlanhla Ngcobo 228 23. A Bibliometric Analysis of Academic Writing and Scholarly Communication in Sub-Saharan African Institutions of Higher Learning Augustine Gitonga*; Peter Gatiti** 236 24. Attitude of Undergraduate Students Towards the use of E-Resources at Sokoine University of Agriculture, Tanzania

•	a
•	,

Provision of Library Services to the Marginalised Population: A Case of Selected Namibian Community Libraries Esther Ndapewa Tobias	69
27. Information Behaviour of African Immigrants in Sunnyside, Pretoria, South Africa Marjorie Mandu Molaudi	79
28. Awareness of Linked Data Among Professional Librarians in Uganda Winny Akullo*; Zawedde Nsibirwa**28	84
29. The Role of Internet of Things in Shaping TVET Libraries in Kenya Benjamin Opicho Kemboi*; Kentrone Mercy Ayilo**	93
30. Frameworks for Enhancing Access to Information Resources in Public Institutions in Uganda Sylvia Namujuzi*; David Luyombya**	00
31. Care and Inclusion of Users with Special Needs in Kenya's Academic Libraries Janet Njoora*; Thomas Oluoch**	09
32. The Role of Academic Libraries in Supporting Research and Postgraduate Services in Kenyan Universities Wamahiga M. George	17
Technology and Innovation32	26
33. The Implementation of Research Findings for LIS Professional Practices in Selected Academic Libraries in Sub-Saharan Africa	
Jackline Kiwelu*; Justina E. Ogbonna CLN, SOMAC*; Gadiel Ketto***	27
34. Applying SWOT Analysis to Assess Drivers and Barriers to Using E-resources Among Selected Academic Libraries in Uganda	
Bosco Apparatus Buruga*; Ali, Guma**; Ronald Izaruku***	37
35. Integration of Expert Systems in TVET Libraries Amidst 4IR Era in Kenya Wilson Kabucho Wambui*; Ben Wekalao Namande**	51
36. Policy Challenges in Establishing Institutional Repository: Business Process Modelling of Universities in Uganda	
Kizito Ongaya*; Emily Bagarukayo**; Benedict Oyo***; David Okello Owiny****	57

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As the Kenya Library Association, we are forever grateful to the delegates, sponsors, volunteers, and other service providers who contributed in any way to making the conference a success. We hope that the conference experience was memorable and that the networks initiated will be maintained and maximised for the benefit of our profession and user communities, fostering future collaboration and growth.

Prof Peter Gatiti

Chair, Kenya Library Association & Chair SCECSAL Council

VIII

PREFACE

The information universe, within which libraries currently operate and offer services, is not just dynamic and volatile, but also brimming with transformative potential. Rapid technological advancement, technology-savvy and impatient patrons, vast volumes of information, and increasing pressure on libraries to demonstrate return on investment are some factors catalysing this change. Information professionals have been pushed back to the drawing board. To remain relevant, they must re-imagine the substance and delivery of information services and products. The digital era offers diverse opportunities and channels for tailored, proactive and prompt information products and services. How well information professionals harness these opportunities depends on their creativity.

This publication is a comprehensive resource, a collection of 36 creative cases that provide invaluable insights on how to deliver information products and services in the digital era. Each of the 37 papers in these proceedings is a treasure trove of knowledge, discussing issues crucial to mastering the ropes of service design and delivery in the digital information era. The papers are grouped into seven categories and sections, providing a structured and comprehensive approach to the topic.

The papers on the best practices in the records and information management category present invaluable insights on redesigning organisational records and archives through emerging information and communication technology tools and techniques. These technologies facilitate the strategic collection, classification, preservation and dissemination of organisational records and national archives. This transformation turns records and archives from costly to valuable assets for operational and strategic endeavours, underscoring the potential benefits of adopting new technologies and techniques.

Information workers have always been the bridges between information and its users. Their role has been crucial in identifying, collecting, organising, and disseminating materials for users who visited the information centres. However, the situation has evolved, and so have their roles. The focus of the information centres has shifted from collections to connections, and information professionals are at the forefront of this change. The second set of papers in this publication elaborates on the changing and increasingly important roles that library and information sciences professionals have to shoulder in this digital era, making them feel valued and integral to the industry.

Information is power and should be handled with utmost care. Ethical, legal, and moral guidelines regulate information production, organisation, dissemination, and preservation. As information users become more aware of their rights, information professionals and service providers need to stay abreast of their obligations. The papers on information ethics share ideas on how to avoid ethical, legal, and moral conflicts in information service design and delivery.

Research is the source of new ideas and innovations driving socioeconomic development. Available evidence shows that many people currently do not begin or complete their information-seeking with libraries. Therefore, it is incumbent on libraries and information centres to reposition themselves in the core of the information universe as sources of credible research data. Skills and competencies to contribute and manage research data are essential for contemporary information professions. Papers in this collection highlight essential research insights for the progressive information worker.

There are papers on education and training programmes and approaches that build the digital-era capacities of information workers to conceptualise, develop, and deliver responsive and futuristic information services and products in this age and into the future using both conventional and technological platforms.

All the papers were peer-reviewed using a double-blind approach. The editors have made all efforts to ensure that the papers are of the highest scholarly standard possible. However, we apologise for any errors which may have escaped undetected. We wish you an insightful reading.

33. THE IMPLEMENTATION OF RESEARCH FINDINGS FOR LIS PROFESSIONAL PRACTICES IN SELECTED ACADEMIC LIBRARIES IN SUB-SAHARAN AFRICA

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Abstract

Implementing research findings influences professional growth, provides evidence, and improves practice. Time and money go to waste if research findings are not adequately used. This study was set to understand how LIS Masters and PhDs research findings influence professional practices in academic libraries. The qualitative study used an online semi-structured interview to collect data from twelve (12) selected academic libraries in the Sub Sahara, Africa. Data was analysed thematically. The participants of this study attest that research findings from Master's and PhD students are integrated into activities and provide evidence for decision-making. However, no precise mechanism supported the implementation of the findings. Funding, lack of awareness, and resistance to change hindered the implementation of the research. There is no clear link between the researchers and the academic libraries. Academic libraries studied, tracked, and preserved the research using institutional repositories, though they neither have a clear research agenda nor are aware of their parent institutions' research agenda. The study recommends that academic libraries, to implement research findings effectively, can follow an eight-step-by-step procedure of best principles of implementation science, advocate, and collaborate with partners to secure funds for research. Though researchers have the freedom to decide the research problem, academic libraries should have a voice in some of the research to ease the implementation of the findings. Library schools should include the implementation of research findings or evidence-based practice as part of the research chain to spur innovation and creativity in LIS.

Keywords: Research outcomes, evidence-based practice, LIS professional growth, knowledge translation

1 Introduction

Implementation is a general term used by various disciplines. "The word "implement" comes from the Latin "implore," meaning to fulfil or to carry into effect." This definition helps to understand research implementation broadly, as it is about research effectiveness in practice, policy making, and usage. This study examines research implementation from the angle of using or adopting research recommendations, interventions, and innovations (Hewitt-Taylor et al., 2012). Implementation is a concept developed from a desire to use research for professional practices (Kent, 2019). Scholars in literature attest that there is a gap between translating research into practice and policy, which needs to be closed, and the interest in rectifying the anomaly is growing (Boaz et al., 2011; Joyce & Cartwright, 2020; Kent, 2019). Over the years, scholars have developed theories, frameworks, and models to help understand and develop strategies for implementing research into practice (Nilsen, 2015).

In Library and Information Science (LIS), like any other discipline, research helps professional growth, evidence-based decision, policy-making and practice (Kennedy & Brancolini, 2018). Through research, new ideas, theories, and innovations are realised and, when implemented, effectively improve service delivery. Hoffmann et al. (2014) argue that the need for academic librarians to participate individually

or collaboratively in research for personal or library growth can no longer be overemphasised. These scholars further explain that scholarship is a professional responsibility for many academic librarians for employment, promotion, and career development.

Library and Information Science schools in the selected countries in Sub Sahara Africa teach research processes and empower their students with the skills to carry out research, starting from the bachelor's degree to PhD levels. Academic libraries in universities are mandated to support researchers from all fields in accessing and using information resources to carry out research. Academic librarians must research and publish to contribute to professional growth and community development. Master's and PhD research costs money in fees, data collection, analysis and report writing. It also costs much time for the students and the supervisors; therefore, it is essential for the findings and the recommendations to be used in the profession. The information generated through research must be accessed and used to influence practice. Genoni et al. (2004) observe that there is a gap between research and practice not only in LIS but also in other disciplines. This observation was confirmed by Etomaru et al. (2022) and Elueze (2016) that research findings are not used as desired. Lack of time and motivation hinder librarians from embracing research implementation in their daily professional work (Luo, 2018). This study categorically looks at the Master's and PhD research carried out in the academic libraries in selected Sub Sahara Africa to evaluate how the research contributes to professional growth, decision-making, policy-making and information practices in these libraries.

2 Literature review

This study reviewed the literature on the theoretical perspective of implementation and its relationship with research implementation in academic libraries.

2.1 Research implementation theoretical perspective

Implementation theory developed from a desire to use research in health care practice and evidence-based medicine (Nilsen, 2015). Over the years, scholars have come up with theories, frameworks, and models to help understand and develop strategies for the implementation of research into practice in health sciences and other disciplines (Moullin et al., 2020; Nilsen, 2015; Titler et al., 1994). (Nilsen, 2015). However, in literature research, implementation theory is rare in other disciplines unrelated to health sciences.

This study finds the implementation theory or model by Titler et al. (1994) more relevant to explaining the research process in professional practice. Implementation of research requires outer and inner factors to be considered for its success or failure (David et al., 2013; Madrigal et al., 2022; McHugh et al., 2020; Moullin et al., 2020). The factors to consider include funds, political will, peer pressure and policies as outer factors (Bruns et al., 2019; David et al., 2013; McHugh et al., 2020), while institutional culture, leadership, funds or budgets, dedicated staff, and office as inner factors (David et al., 2013). The research implementation is done in three major phases (Damschroder & Hagedorn, 2011; Nilsen, 2015; Saldana, 2014; Titler et al., 1994), and each phase needs the outer and inner factors (Titler et al., 1994). Pre-implementation or preparation, implementation, and post-implementation phases (Nilsen, 2015; Titler et al., 1994). The pre-implementation phase comprises the finding phase, where the institutions determine the research needs or gaps, the available evidence and the required modalities or strategies to implement to put the evidence into practice. The implementation phase involved implementing the strategies agreed on to ensure the evidence or the findings in the research are used in the right place for the right reason. The post-implementation phase is when a sustainable strategy is established, including monitoring, evaluating and ensuring the process is maintained.

2.2 Implementation of research in the context of academic libraries

Literature about implementing research findings and recommendations in academic libraries is scarce. More research is needed to close the gap between research and practice in academic libraries, especially in Sub-Saharan Africa.

Historically, librarians, like other professions, are known for doing research either as students or as workers and communicating it in the form of reports, theses, dissertations, journal articles, books and the like (Cox & Verbaan, 2016; Kennedy & Brancolini, 2018). Librarians acquire the best resources to support students, researchers, academicians, and faculty with information and improve services to the community. Little is documented about librarians acquiring resources to facilitate their research and improve skills and practice (Walster et al., 2016). On the other hand, little is known in most academic libraries how the research carried out in these libraries is implemented.

However, the situation is changing; academic librarians are not only getting engaged in research but also thinking about the implementation of this research to improve service, practice and decision-making in the form of "evidence-based practice, assessment, and accountability" (Kennedy & Brancolini, 2018, p. 822).

Furthermore, more libraries worldwide are adopting scholarly research as a requirement for tenure and promotion for academic librarians, especially in the USA, Canada, Australia and the UK, where young professionals find it challenging. Early career librarians need mentorship and training in research to cope. In Canada, research carried out about library administrator's engagement in academic librarianship revealed that the administrators need to be engaged to reduce some of the challenges academic librarians researchers are facing in the form of allocation of time, funds and motivation (Berg et al., 2013; Kennedy & Brancolini, 2018; Luo, 2018). These findings are not far from the recommendation by research implementation theorists that there is a close relationship between the outer and inner factors, which include funds, time, and motivation for research implementation to be successful (David et al., 2013; Madrigal et al., 2022; McHugh et al., 2020; Nilsen, 2015; Titler et al., 1994). Though the literature reports general research implementation theories, research implementation in health sciences, and what is required to implement findings, no study looked specifically at how master's and PhD research are integrated into LIS professional practice, the mechanism/policies or procedures for implementing research findings in academic libraries in the context of Sub-Saharan Africa, which is the gap this study is addressing.

2.3 Objective of the study

The research aims to investigate the influence of research findings from Masters' and PhD studies on the professional practices within selected academic libraries in Sub-Saharan Africa to propose or recommend a mechanism of findings implementation into practice. Specifically, the objectives are as follows:

- To examine the existence of a research agenda within the libraries that guides the implementation of research findings derived from Masters' and PhD studies.
- To assess the volume and scope of research conducted within these libraries over the past decade, providing insight into the extent of scholarly output.
- To analyse how findings from Masters' and PhD studies are integrated into the day-to-day practices of library and information science (LIS) professionals, thereby shaping their workflows and decision-making processes.
- To identify challenges encountered during the implementation of research findings, shedding light
 on potential barriers and areas for improvement in translating academic research into practical
 applications.

3 Methodology

The study was carried out from January to August 2023. It was qualitative; an online semi-structured interview was used to collect the required data. The participants were selected through a convenient sample method, where the participants who were easily reached and willing to participate in the study were examined. A convenient sampling method is a non-probability method for qualitative studies. Participants

are chosen when they are willing or have time and are available geographically to be part of the study. The study included twelve academic libraries in Sub Sahara that were conveniently selected. The participants were university librarians, senior librarians, and assistant librarians who had enough experience to provide the required data for the study. The participants were from selected academic libraries in Sub-Saharan Africa whose names are not revealed in this study for ethical purposes. The participants were from Uganda, Tanzania, Kenya, Zambia, South Africa, and Nigeria academic libraries.

The data analysis was done thematically based on the themes that arose from participants' opinions and research questions. Thematic data analysis is an approach qualitative researchers use to interpret and present meaning from data (Grbich, 2013). The researchers closely examined the data, grouped the common ideas identified about the research questions, generated themes, and compiled the findings in tables (Grbich, 2013) for easy understanding and explanations.

4 Findings

The study's findings are presented according to the summary of the themes.

4.1 Masters' and PhD research findings implementation into academic libraries in Sub Sahara Africa

The implementation process of the research findings starts with tracking the research itself. The participants were asked how their library followed up the LIS Master's and PhD research in their university libraries. The researchers intended to find out how the research was carried out in the academic libraries and how it was tracked. The responses are as reported in table 1 below:

Tab	le 1:	Track	king th	ne res	earch	in ac	ademi	ic li	braries	

No.	Responses
01	We have an IR tool to track the research.
02	No, I do not know, or I have never had students carry out a study in our library.
03	Reviewed journals as part of their academic track
04	Researchers are requested to make the research available in the library before it is disseminated.
05	There is no intended effort to be given a report.

According to Table 1 above, the participants gave various ways they track the masters and PhDs research carried out in their libraries. Some said they use institutional repositories (IR) to track and preserve the research. Meanwhile, others did not know anything about tracking the research in their libraries. The participants were asked whether they were aware of the number of studies either at Masters' or PhD levels that were carried out from 2014 to 2023 September. Though participants indicated their awareness of the studies carried out, and they could estimate the number of the studies, some librarians expressed that they were not aware.

The library research agenda can be adopted from the overall university research agenda or have its own. Some participants said they have a research agenda or strategy, while others do not. Meanwhile, other participants said they were not sure.

The participants who said they were aware of the research agenda and tracked the Masters and PhDs dissertations or thesis were asked to mention the major findings and recommendations in them. These findings bring an understanding of areas of professional focus or practice where the findings can be applied. The findings are summarised and presented in Table 2 below:

Table 2: Research focus

No.	Response
01	Library practice (librarianship) includes changes in policies and standards (e.g., budget allocation and adhering to Academic Research Libraries guidelines (ACRL).
02	Awareness of the library resources.
03	Information Literacy
04	Library systems/ ICTS

Table 2 above indicates the focus of research carried out in academic libraries in Sub-Saharan Africa. Most of the findings and recommendations focused on changing policies, standards, and budget allocations and improving library guidelines, information literacy, awareness, and library systems or ICTs.

4.3 Implementation of library research in the academic libraries

The researchers explored how the research findings were implemented in the academic libraries studied. These findings were to inform a step-by-step practice on how research findings can be implemented in academic libraries. The findings are summarised in table 3 below:

Table 3: Research implementation

No.	Responses
01	Nothing is done
02	Integrating it with the library working groups/activities
03	Very little is implemented. Some recommendations require funds, which libraries are still looking for to be implemented.
04	Use the research findings as evidence-based for decision-making and practice.

Table 3 above indicates how Master's and PhD research findings are implemented in academic libraries. Participants mentioned integrating the findings into library work groups or activities, while others said the research has enabled them to be evidence-based in their decisions and practices.

4.4 Challenges encountered when implementing research findings in academic libraries

The study examined the challenges and difficulties selected academic libraries in Sub Sahara Africa experienced when implementing research findings from Masters and PhDs. The findings are presented in table 4 below:

Table 4: Challenges in research implementation

No.	Challenges
01	Lack of funding, budget
02	No framework or system to track the research
03	Resistance to change, the library cannot accommodate the findings and recommendations.
04	No clear research agenda in the library.
05	Lack of cooperation with faculty.
06	Lack of awareness of the need to keep track of the research carried out in the library.

The selected academic libraries where research was carried out were asked to mention the challenges they experienced while implementing the research findings and recommendations in professional practices. Six groups of challenges were recorded, as seen in Table 4 above. Some participants said the research findings and recommendations required much money, which the library could not afford because they were not implemented.

It was challenging to keep track of the research that was carried out. The failure to have a clear library research agenda made it challenging to implement research in academic libraries.

5 Discussions

The discussions are presented about the findings presented above.

5.1 The library research strategy or agenda

For research findings integration in academic libraries to be well implemented, it is essential for an academic library to have a research agenda (Peters et al., 2013) or at least adopt the parent institution agenda and come up with a strategy on how to incorporate it with the research carried out in the libraries. This helps the library to have direction for the research and channel it well in the areas of need, which will also make the research relevant to the needs of the libraries. Therefore, since academic libraries are there to support and carry out research, they should have a research agenda providing guidance. Adopting a principle or policy/strategy for implementing science/research will ensure that research becomes part of the academic libraries in Sub-Sahara Africa. The research agenda is a pre-implementation phase where the implementation process is defined. The outer and inner factors such as funding, budgets, staffing, time and other resources required are put in place as recommended by David et al. (2013) (Madrigal et al., 2022; McHugh et al., 2020; Nilsen, 2015; Titler et al., 1994).

5.2 Improve library practices as evidence

Participants mentioned integrating the findings into the library work groups or activities, while others as evidence to influence practice and improve services and decisions. These findings align with those of (Kennedy & Brancolini, 2018) that research influences evidence-based practice and makes the institution operate in the right direction.

The research participants mentioned the challenges experienced while implementing the research findings and recommendations in the professional practices, such as lack of funds, lack of research strategy, budgets, some recommendations needing vast sums of money and resistance to change. These findings agree with other scholars who suggest in the literature that research implementation requires budget support in various phases, from pre-implementation to implementation phases and sustainability or post-implementation (Nilsen, 2015; Titler et al., 1994).

Generally, what is already known is that it is essential to integrate research findings into professional practice; however, how the research findings are to be integrated to influence LIS professional practice in academic libraries is not well known where this study fits. The study emphasises the importance of academic libraries in Sub-Saharan Africa having their research agenda or aligning closely with the research agenda of their parent institutions for effective implementation of the findings. This ensures that library research efforts are relevant to the library practices.

Highlighting the challenges faced in implementing research findings into library practices, particularly in Sub-Saharan African academic libraries, such as lack of funds, absence of a precise research implementation mechanism, budget constraints, and resistance to change, creates awareness among administrators when they intend to implement research findings.

Drawing upon existing literature to support the argument, such as Peters et al. (2013), David et al. (2013), Kennedy and Brancolini (2018), Nilsen (2015), and Titler et al. (1994), the study provides a comprehensive understanding of the importance of implementing research findings for professional growth, and improved practice for academic libraries. It provides a contextualised perspective on academic library research practices and specific challenges to Sub-Saharan Africa, which may differ from those faced by libraries in other regions due to resource limitations and varying institutional contexts.

6 Conclusion

For smooth and efficient professional practices in academic libraries, there should be clear-cut ways of not only tracking all the LIS Master's and PhD students' research relating to academic libraries functions and services but also ways of implementing the results and recommendations from the research with budget lines and precise mechanisms. This means that there should be a unit created in every academic library with a clear mandate to oversee the tracking, analysing, implementing, building capacity, recommend different functional monitoring, and evaluate the implementation into professional growth.

7 Recommendations to academic libraries in Sub-Saharan Africa

Below are the recommendations that participants gave to academic libraries regarding implementing research findings.

- Libraries should advocate, lobby, and collaborate with other partners to secure more funds. They
 should also look for funding beyond their parent institutions.
- Align library services with the best available evidence.
- Adopt the best principles of implementation science because research brings out ideas that improve library practices and operations. Through research, areas of weakness are identified and can be improved.
- Every library should have a clear research agenda. This agenda will ensure that efforts contribute to the development of the library and the university.
- Professional bodies should create awareness among academic libraries. The participants must create awareness of implementing research findings across academic libraries in Sub-Saharan Africa.
- Academic libraries should develop an inventory of all the research and identify the findings suitable for integration into library practices.

As part of the recommendations given by the participants above, the researchers find this study to have a practical implication for narrowing the gap between research findings and practice in academic libraries in Sub-Saharan Africa. Implementation of research findings should be encouraged and supported in libraries to improve practice and contribute to better services. The library administrators should have a policy on research implementation and agenda in academic libraries to monitor and provide financial, time and moral support to the researchers. The libraries where this research is carried out should benefit from the findings and manage how these findings and the recommendations are implemented. Through this study, the researchers propose an eight-step procedure for integrating Master's and PhD research findings implementation in academic libraries for professional practice in Sub-Saharan Africa and beyond, as seen in Figure 1 below. The researchers believe that by following these steps while localising them to the specific context of academic libraries in Sub-Saharan Africa, research findings can be effectively implemented to improve LIS professional practices and ultimately enhance the quality of library services. Furthermore, the researchers suggest that library schools implement research findings or evidence-based practice as part of the research chain to spur innovation and creativity and encourage action research in LIS.

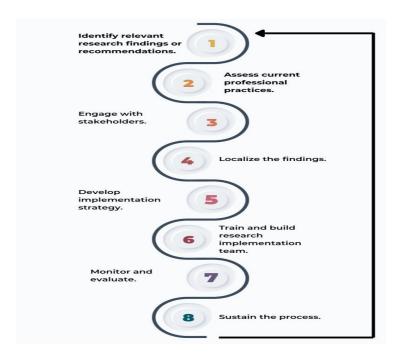


Figure 1: A model for implementing research findings in academic libraries

- Identify relevant research findings or recommendations: The starting point is to review and
 identify the existing research findings in the Masters and PhDs relevant to the specific needs
 according to the area of focus in the academic libraries in Sub-Saharan Africa.
- Assess current professional practices: Before implementing any findings, it is essential
 to understand the current practices and activities within the selected academic libraries. The
 assessment helps to identify areas of practice or where the findings can be integrated.
- Engage with stakeholders: Working with other stakeholders within and outside the academic
 libraries will ensure necessary support, including finances and sustainability of the process,
 and avoid resistance to change. Depending on the nature of the findings or the area of focus,
 stakeholders like the university administration department, university librarian, faculty, students,
 and IT department may be consulted for necessary support.
- Localise the findings to the specific library need: It is essential to bring the research findings home or in the local context to fit well with the library's vision, mission, and goals. The adaptation will help consider certain factors, such as a unit to spearhead the implementation and the resources, technology, culture, and practice needs.
- Develop an implementation strategy: Based on the research findings and the local context, developing specific strategies for implementing changes within academic libraries is essential. These strategies may include policies, procedures, plans, services, or infrastructure.
- Train and build a team: Implementing new professional practices may require training and building capacity for library personnel. Mentorship programmes, workshops, seminars, and official online or offline courses help librarians have the necessary skills and knowledge to implement changes effectively. Having a dedicated library personnel team to spearhead research findings implementation, innovation, and creativity will make integrating research findings into library practices easier.

- Monitor and evaluate: Throughout the implementation process, monitoring progress and evaluating the impact of the changes is essential. This can involve collecting data on usage statistics, user satisfaction, and other relevant metrics to assess the effectiveness of the implemented strategies.
- Sustain the process: After monitoring and evaluating the implementation, there could be areas in
 the professional practices identified that need improvement or updating, which will require more
 research. Therefore, the library research agenda can include those areas that need improvement
 and further research. Sustained research life in academic libraries will make libraries evidencebased, innovative, creative, trendy, efficient and more effective in the changing and growing world
 of information.

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