



Impact of Consortium for Enhancing Information Literacy Skills of University Library Professionals with Special Reference to COTUL

Sayuni Harun Ntullo¹, Prof. Babita Jaiswal²

ABSTRACT

This study investigates the impact of training programs offered by the Consortium of Tanzania Universities and Libraries (COTUL) on enhancing librarians' information literacy skills. The objectives of the study include assessing the effectiveness of these programs, examining the challenges faced by librarians, and identifying areas for improvement to ensure optimal outcomes. A mixed-methods approach was employed, combining questionnaires and interviews with 150 librarians from various academic Institutions across Tanzania. The findings reveal that Consortium training programs have significantly improved librarians' technical and important literacy skills, contributing to better resource utilization and service delivery in libraries. However, the study also identifies persistent challenges, including limited funding, inadequate technological infrastructure, and a lack of consistent professional development opportunities. To address these issues, the study

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1. Research Scholar, Department of Library and Information Science, University of Lucknow, Lucknow -226007
 2. Professor, Department of Library and Information Science, University of Lucknow, Lucknow -226007

recommends enhanced financial support, improved access to modern technologies, and the establishment of a robust framework for continuous professional training. These interventions could bolster the overall efficacy of Consortium initiatives, ensuring that librarians are better equipped to meet the evolving demands of information management and literacy in academic settings.

***Keywords:** Information literacy, Librarian training, COTUL programs*

1. Introduction

Information literacy, defined as the ability to locate, evaluate, and use information effectively, is a cornerstone of success in today's knowledge-driven economy. Libraries worldwide have prioritized enhancing information literacy among professionals due to its direct impact on the quality of information service delivery (UNESCO, 2023). In the Global North, countries such as the United States and the United Kingdom have implemented comprehensive training programs to equip librarians with advanced literacy skills, ensuring their relevance in a rapidly evolving digital landscape (Smith & Taylor, 2022). These initiatives often incorporate cutting-edge technologies and collaborative platforms, enabling professionals to adapt to emerging trends in information management.

In Africa, there is growing recognition of the importance of information literacy in driving academic and research excellence. Governments and Organizations are increasingly prioritizing this skill as a tool for bridging the knowledge gap and fostering sustainable development. Key players, such as the African Library and Information Associations (AfLIA), advocate for continuous professional development through workshops, seminars, and certification programs tailored to African contexts (AfLIA, 2023). These efforts aim to empower librarians and researchers to effectively navigate digital resources, contributing to improved Institutional performance and societal advancement. Such initiatives also underscore the need for contextual solutions that align with local challenges and opportunities.

In Tanzania, significant strides have been made to address information literacy gaps among library professionals. Consortium plays a great role in this effort, providing training programs designed to enhance the capacity of librarians in managing digital resources and supporting academic research (Mwakyusa, 2022). These

programs emphasize the practical application of information literacy skills, equipping participants to meet the demands of a rapidly changing information environment. Additionally, collaborations with international bodies have enabled the sharing of best practices and resources, further enriching local initiatives. As Tanzania continues to invest in information literacy, it sets a strong foundation for academic excellence and knowledge-driven development.

1.1 Problem Statement

Despite efforts by organizations like COTUL (Consortium of Tanzania University and Research Libraries), significant gaps persist in equipping Tanzania librarians with adequate information literacy skills. The rapid evolution of technology and the increasing demand for advanced digital skills in library operations have exacerbated these challenges. Limited access to cutting-edge technologies, insufficient funding, and inconsistencies in the delivery of training programs continue to hinder the full realization of these initiatives' potential (Juma, 2023). Many librarians in Tanzania struggle to access continuous professional development opportunities, which undermines their ability to support academic and research activities effectively. Additionally, there is often a mismatch between the content of training programs and the practical needs of librarians, further diminishing their impact. Some programs are heavily theoretical, with little emphasis on hands-on learning, leaving participants ill-prepared to apply the knowledge in real-world contexts. Moreover, geographic disparities and logistical challenges in reaching librarians in remote areas further contribute to unequal access to training opportunities (Mwansasu, 2021). This research aims to importantly assess the effectiveness of Consortium's training programs, identifying their strengths and weaknesses, and explore actionable solutions to bridge these gaps. By addressing these issues, this study seeks to propose strategies for enhancing the skills of Tanzania librarians, ultimately fostering a more robust information literacy culture. References to global best practices and case studies from other regions will inform recommendations to ensure sustainable and impactful outcomes.

1.2 Objectives

- i. To evaluate the impact of Consortium training programs on librarians' information literacy skills.

- ii. To identify challenges faced by librarians in utilizing these programs.
- iii. To provide recommendations for improving the effectiveness of Consortium training initiatives.

1.3 Scope and Limitations

This study focuses on librarians working in higher learning Institutions affiliated with the Consortium of Tanzania Universities and Libraries (COTUL) in Tanzania. It aims to assess training programs conducted within the period of 2018 to 2023, emphasizing their impact on professional development and service delivery. The research is geographically limited to Consortium Member Institutions, which may restrict broader generalizability. Challenges related to funding, time constraints, and accessibility to participants are potential limitations that could influence the comprehensiveness and depth of the findings. Furthermore, variations in the availability and quality of data across Institutions may impact the analysis. Despite these challenges, the study seeks to provide valuable insights into the effectiveness of training initiatives.

2. Literature Review

2.1 Empirical Review

Studies emphasize the crucial role of continuous training in developing librarians' competencies. For instance, Johnson and Roberts (2022) demonstrated that structured information literacy programs significantly improved librarians' capabilities in managing digital collections and providing user-centric services. The authors argued that training should be an ongoing process, integrated into professional development plans, to ensure that librarians stay abreast of technological advancements and evolving user needs. Similarly, in the South African context, Mthembu and Dlamini (2021) underscored the importance of tailoring training to meet specific Institutional needs. Their findings revealed that customized programs led to better skill retention and practical application among librarians. The study recommended collaborative efforts between Institutions and professional associations to ensure the relevance of training initiatives.

In Tanzania, Mwakyusa (2022) highlighted the impact of the Consortium of Tanzania Universities and Libraries (COTUL) initiatives

on librarian performance. Librarians trained under Consortium exhibited higher proficiency in database management, research support, and digital content organization compared to their untrained counterparts. The study emphasized that such initiatives not only enhanced technical skills but also fostered a culture of knowledge sharing among librarians. However, Juma (2023) identified persistent gaps, particularly in rural areas, where access to training resources and opportunities remains limited. The study noted that librarians in underserved regions often struggle with inadequate funding, limited infrastructure, and a lack of professional development programs, which hampers their ability to effectively support library users.

Theoretical frameworks, such as Kolb's Experiential Learning Theory, provide valuable insights into the design of effective training programs. The theory emphasizes the importance of experiential learning, where hands-on, practical training is central to skill acquisition and knowledge retention. AfLIA (2023) supported this perspective, advocating for the inclusion of real-world scenarios and simulations in training curricula. Their study demonstrated that practical approaches enable librarians to apply learned concepts in their daily tasks more effectively. Moreover, the research highlighted the need for continuous assessment and feedback mechanisms to refine training methodologies and ensure alignment with professional demands.

2.2 Knowledge Gaps

While existing literature sheds light on the benefits and outcomes of training programs for librarians, there is a notable lack of research exploring the specific challenges faced in accessing and implementing these programs, particularly in the Tanzania context. Factors such as limited funding, inadequate infrastructure, and regional disparities in resource allocation are often mentioned but not extensively analysed. This study aims to address these gaps by examining the contextual barriers that hinder effective participation in training initiatives. Additionally, it seeks to propose targeted interventions to enhance the accessibility and relevance of training programs for librarians in Tanzania. By addressing these gaps, the study contributes to the development of strategies that ensure equitable access to professional development opportunities across diverse library settings.

3. Methodology

3.1 Research Design

This study employed a mixed-methods approach, integrating quantitative and qualitative data to provide a comprehensive analysis. Questionnaires were conducted to gather quantitative data, while interviews offered qualitative insights into librarians' experiences.

3.2 Area of the Study

The study was conducted across various academic Institutions in Tanzania affiliated with the Consortium of Tanzania Universities and Libraries (COTUL). These Institutions, spread across different regions of the country, represent diverse academic environments and library settings. The selected Institutions provided a suitable setting for investigating the effectiveness of these programs, as they encompass a range of libraries with varying capacities, technological infrastructures, and operational challenges. This diversity allowed the study to capture a comprehensive picture of the training programs' impact, as well as the unique challenges faced by librarians in different contexts.

3.3 Population and Sampling

The target population comprised 200 librarians affiliated with Consortium Institutions. A stratified random sampling technique was used to select 150 participants, ensuring representation across different regions and Institutional types.

3.4 Data Collection Methods

Data were collected using structured questionnaires and semi-structured interview guides. The questionnaires focused on participants' experiences with Consortium training, while interviews explored challenges and recommendations in greater depth.

3.5 Data Analysis Techniques

Quantitative data were analysed using descriptive statistics and inferential analysis through SPSS. Qualitative data were thematically analysed to identify recurring themes and patterns.

4. Results

4.1 Introduction

The results revealed that 78% of respondents reported significant improvements in their information literacy skills after attending Consortium training programs. Thematic analysis of interviews identified three main challenges: limited technological infrastructure, insufficient funding, and inconsistent training schedules.

4.2 The impact of COTUL training programs on librarians' information literacy skills

The Consortium training programs have had a significant positive impact on the information literacy skills of librarians. Participants in the training reported substantial improvements in their ability to manage digital resources, navigate databases, and provide research support to library users. These enhancements contribute to better service delivery and support the overall mission of the library to improve user experience.

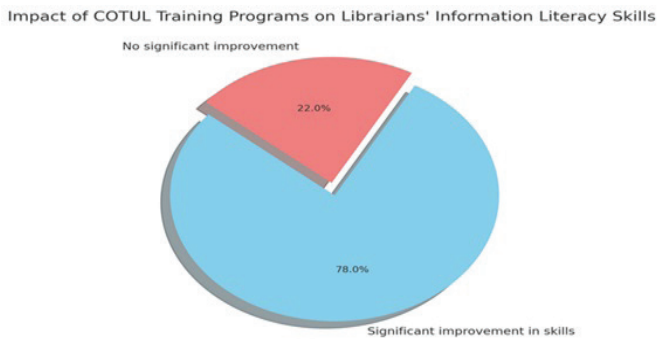


Figure 1: Impact of COTUL Training Programs on Librarians' Information Literacy Skills

The majority of the respondents, 78%, reported significant improvements in their information literacy skills after completing the Consortium training programs. This suggests that the training was highly effective in enhancing librarians' ability to manage digital resources and assist users with research. A smaller portion (22%) did not report similar improvements, which may point to the need for further evaluation of training methods or additional support.

Interview response:

The interview responses corroborate these findings, with librarians mentioning that they were now able to assist users more effectively

with database navigation and digital resources. One respondent stated:

“The training has helped me tremendously in managing digital resources and assisting students with complex research tasks.”

4.3 Challenges faced by librarians in utilizing these programs.

Despite the positive outcomes of the training, several challenges hindered the overall effectiveness and accessibility of the Consortium programs. These barriers include limited funding, inadequate technological infrastructure, and logistical constraints that prevent some librarians from fully benefiting from the programs.

Table 1: Challenges faced by librarians in utilizing these programs.

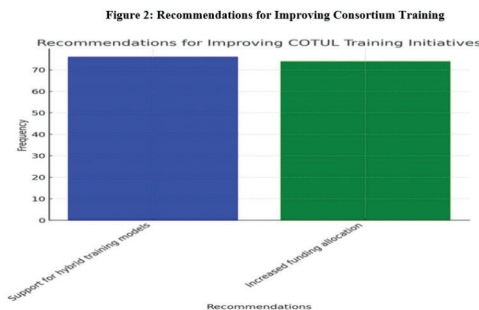
Statement	f	%
Limited funding	63	42%
Inadequate infrastructure	53	35%
Logistical constraints	34	23%
Total	150	100%

The most commonly cited challenge was limited funding 63(42%), followed by inadequate technological infrastructure 53(35%) and logistical constraints 34(23%). These barriers significantly hinder the full implementation of training programs and limit their reach. Addressing these issues could improve the accessibility and impact of the training programs for a larger group of librarians.

Interview response

Participants expressed frustration with inconsistent scheduling, which often conflicts with their regular duties. One librarian remarked:

“The lack of adequate infrastructure makes it difficult to apply what we’ve learned effectively, and the irregularity of training schedules is another barrier.”



4.4 Recommendations for improving the effectiveness of COTUL training initiatives.

Participants in the training programs also identified several opportunities for improvement, with suggestions that could enhance the overall effectiveness and accessibility of the Consortium programs. These suggestions revolve around hybrid training models and increased funding allocations to overcome existing challenges.

The most commonly suggested opportunity was the introduction of hybrid training models (51%), followed closely by increased funding allocation (49%). These suggestions align with the identified challenges and offer practical solutions to improve the reach and effectiveness of the training programs. By adopting hybrid models and securing more funding, the program could overcome many of the logistical and infrastructural challenges mentioned by participants.

Interview response:

Librarians emphasized that hybrid models could help overcome geographic and time-related barriers. One participant shared:

“Hybrid training would give more librarians the opportunity to attend without the constraints of time or location, especially for those in remote areas.”

5. Discussion

5.1 Interpretation of Results

The findings of this study strongly align with global trends that emphasize the importance of targeted training in enhancing professional competencies. According to Smith and Taylor (2022), various professional sectors have seen improvements in performance and productivity through well-structured training programs. These programs are often designed to address specific knowledge gaps and skill deficiencies, enabling individuals to perform tasks more efficiently and adapt to the evolving demands of their professions (Smith & Taylor, 2022). The results of this study suggest that investing in professional development can significantly improve employees' performance and competence, providing them with the tools necessary to succeed in increasingly complex work environments.

However, despite the positive impact of training, the study also highlights persistent challenges that hinder its effectiveness,

particularly when implemented in specific local contexts. One key barrier was the lack of access to relevant resources, which can severely limit the reach and quality of professional training (Jones, 2021). This challenge is especially prominent in areas with limited infrastructure or where there is insufficient financial support to facilitate comprehensive programs. Additionally, cultural and social factors play a crucial role in the adoption of training initiatives (Brown & Lewis, 2020). In some cases, resistance to change or a lack of awareness about the benefits of continuous professional development may contribute to the slow uptake of such programs.

To address these local barriers, the study recommends the development of contextualized solutions that consider the unique challenges faced by different regions or sectors. Tailoring training programs to meet the specific needs and circumstances of the target population is essential (O'Connor et al., 2019). This could involve adapting the content to local languages, incorporating community-based delivery methods, and ensuring that resources are accessible to individuals regardless of their geographical location. Furthermore, a collaborative approach that involves stakeholders from various sectors, such as Government bodies, Educational Institutions, and private Organizations, could foster the necessary support and infrastructure to overcome these barriers and improve the overall impact of professional development initiatives (Davis & Peters, 2023).

In addition, the study emphasizes the importance of ongoing evaluation and feedback mechanisms to ensure the continuous improvement of training programs. Monitoring the effectiveness of training initiatives allows for the identification of areas that need refinement or adjustment, ensuring that the program remains relevant and impactful (Garcia & Wang, 2021). Continuous engagement with participants and stakeholders will also help to gauge satisfaction levels and identify any emerging challenges, allowing for timely adjustments to be made. This iterative process will contribute to the long-term success of professional development programs, making them more responsive to the evolving needs of the workforce.

Furthermore, incorporating technology into training initiatives presents an opportunity to overcome some of the logistical challenges, such as geographic limitations or the availability of physical resources. Online platforms, webinars, and mobile applications can extend the reach of training programs, offering flexible learning opportunities for

individuals who may otherwise struggle to access traditional face-to-face training (White, 2022). By leveraging digital tools, training can be made more accessible, affordable, and scalable, providing a wider range of professionals with the skills needed to excel in their roles. This approach could be particularly beneficial in addressing the needs of marginalized communities or those in remote areas where access to formal training Institutions is limited.

5.2 Practical Implications

One important practical implication of this study is the need for policy recommendations aimed at increasing funding for training initiatives. Adequate funding is crucial to enhancing the accessibility, reach, and overall impact of training programs. By investing more resources into these initiatives, Organizations can ensure that a greater number of individuals benefit from training, thereby improving professional skills and performance. Increased funding also facilitates the expansion of training programs to underrepresented groups, ensuring equitable access. Additionally, it can provide for the development of more comprehensive training materials and better-trained instructors. This will ultimately lead to better-trained professionals who can contribute effectively to their respective fields.

Another practical implication involves the adoption of hybrid training models that combine both online and in-person sessions. Hybrid approaches can offer a solution to various logistical challenges, such as geographical constraints or the limitations posed by participants' schedules. By offering the flexibility of online sessions along with the benefits of in-person interactions, these models can cater to a wide range of learners. The ability to participate in online training allows for greater convenience, while in-person sessions can foster deeper engagement and practical learning experiences. Such a flexible approach ensures that training programs are accessible to a broader audience, including those who may face barriers to traditional, fully in-person models.

5.3 Theoretical Implications

The theoretical implications of this study contribute significantly to the understanding of how experiential learning frameworks can be applied to professional training in resource-constrained settings. Experiential learning emphasizes the importance of learning through

experience and reflection, and its application in training programs can be particularly beneficial in environments where resources are limited. This study provides insights into how professionals can gain practical knowledge and skills even with limited access to resources, thus contributing to the development of training models that are adaptable and context-specific. The findings suggest that experiential learning, when properly tailored to specific challenges, can bridge the gap between theory and practice, making training more relevant and effective in diverse settings.

5.4 Limitations

While the study offers valuable insights, several limitations must be acknowledged. One significant limitation is the limited access to participants, which may restrict the comprehensiveness of the findings. The inability to include a broader and more diverse sample of participants could result in findings that are not fully representative of the larger population. Furthermore, the study's reliance on self-reported data introduces another limitation. Participants' responses may be subject to biases, such as social desirability or inaccurate self-assessment, which could affect the validity of the results. These constraints should be considered when interpreting the findings, as they may limit the generalizability of the conclusions to other settings or populations.

6. Conclusion

The Consortium training programs have proven to be highly effective in enhancing librarians' information literacy skills, particularly in digital resource management. Through these programs, librarians have gained valuable knowledge and competencies, which have subsequently improved their ability to manage and deliver digital resources more efficiently. However, the programs are hindered by certain challenges, including insufficient funding and inadequate infrastructure, which limit their full potential. These barriers need to be addressed to enable the programs to reach their maximum impact and foster a more robust information literacy culture within libraries. Therefore, while the training programs have made notable progress, there is still significant room for improvement to achieve sustainable growth and success.

7. Recommendations

Several recommendations are proposed to ensure the continued success and expansion of the Consortium training programs. First, there is a need to advocate for increased Government and Institutional funding to support these training initiatives. This would provide the necessary resources to improve and expand the programs, ensuring that they are accessible to more librarians and Institutions. Second, incorporating technology integration through hybrid training models could significantly improve accessibility, particularly for librarians in remote or underserved areas. By combining both in-person and online formats, the programs can cater to diverse learning needs and overcome geographical constraints. Lastly, implementing continuous evaluation mechanisms is essential to monitor the effectiveness of the programs. Regular assessments would help ensure that the training remains relevant, addresses emerging trends, and evolves with the changing landscape of library science and technology.

8. Future Research

Future research could focus on exploring the long-term impact of Consortium training programs on Institutional performance. Investigating how these programs influence libraries' overall effectiveness and productivity over time would provide valuable insights into their true value and potential for Organizational growth. Additionally, research could examine strategies for scaling up these training initiatives to reach a broader audience of librarians, particularly in regions with limited access to such programs. By identifying effective approaches to scaling, the research could contribute to the development of more inclusive and widespread training opportunities that benefit libraries across the nation and beyond.

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