EXTENDED ABSTRACT

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FROM QUANTUM LEAPS TO STUMBLES: UNVEILING THE JOURNEY OF ACADEMIC INQUIRY OF LIBRARY AND INFORMATION SCIENCE RESEARCHERS IN AFRICA

Abstract

Understanding the journey of researchers in LIS, with a focus on both quantum leaps and stumbles, is crucial for a well-rounded appreciation of academic development. This study there examined the quantum leaps to stumbles by unveiling the journey of academic inquiry of library and information science researchers in Africa. A qualitative method was used with data collected from 20 LIS researchers from Africa through an open ended survey. The results reveal that beyond the realm of traditional success tales, the research sheds light on the varied experiences of LIS researchers in Africa. The study promotes inclusivity and enhances the global conversation on LIS research by recognizing the successes and failures of academic inquiry in the African setting.

Keywords: Quantum Leaps, Stumbles, Academic/Research Journey, Academic Inquiry, LIS Research, LIS Researchers, Africa.

Introduction

The field of Library and Information Science (LIS) has experienced a dynamic evolution over the years, marked by both notable advancements and challenges. In the context of Africa, the journey of academic inquiry in LIS has been a fascinating exploration of quantum leaps and inevitable stumbles. This paper endeavors to shed light on the intricate narrative that encapsulates the academic pursuit of knowledge in the realm of Library and Information Science within the African continent.

Africa has witnessed significant quantum leaps in the domain of LIS research, reflecting a growing recognition of the pivotal role information plays in societal development. The emergence of innovative technologies, coupled with a heightened awareness of the importance of effective information management, has propelled African LIS researchers to the forefront of

global scholarly discourse. Noteworthy contributions encompass a range of topics, from digital libraries and information retrieval to the exploration of indigenous knowledge systems.

One prominent example is the work of Juma, Wamukoya and Wekullo (2016), who conducted a groundbreaking study on the integration of digital libraries in the educational landscape of Africa. A study by Cox and Abbott (2021) delved into the challenges faced by LIS researchers in Sub-Saharan Africa, revealing insights into the struggles associated with inadequate resources and the impact on the quality and quantity of research output.

A comprehensive understanding of researchers' journeys in Library and Information Science (LIS) allows for a holistic perspective on the academic development of the field. It enables stakeholders to appreciate both successful advancements and challenges faced by researchers, contributing to a nuanced comprehension of LIS evolution. According to Achirri (2020) and Seary et al. (2023), a comprehensive analysis of researchers' journeys is crucial for gaining insights into the multifaceted dynamics shaping academic development in LIS. Understanding the journey of researchers in LIS, with a focus on both quantum leaps and stumbles, is crucial for a well-rounded appreciation of academic development. This fine understanding informs decision-making, promotes collaboration, and contributes to the continual improvement of Library and Information Science research in Africa.

Objectives of the Study

The primary goal of this research is to unveil the complex dynamics of academic inquiry within the LIS domain in Africa. Through an examination of researchers' experiences, the study aims to capture the quantum leaps and stumbling blocks encountered, providing a nuanced understanding of the unique challenges and opportunities in the African LIS research landscape. This research seeks to explore the academic journey undertaken by Library and Information Science (LIS) researchers in Africa.

Research Questions

The study answered the following research questions:

- 1. What are the breakthroughs and events (quantum leaps) African LIS scholars have encountered in their scholarly inquiry?
- 2. What are the challenges (stumbles) African LIS scholars have encountered in their scholarly inquiry?
- 3. What is the interdisciplinary nature of LIS research in Africa?
- 4. What is the transformative journey African LIS researchers have taken so far?
- 5. What insights do African LIS Researchers have into the elements impacting their research advancement?
- 6. What crucial areas are necessary for support and improvement within the LIS academic environment and the possible way forward?

Literature Review

African LIS Researchers/Scholars Breakthroughs and Events (Quantum Leaps)

The Library and Information Science field has faced many obstacles; it has also seen significant advancement and innovation. Today, LIS research in Africa is still evolving, with an emphasis on addressing modern challenges like information literacy, digital inclusion, and the ethical use of information (Mubofu and Mambo, 2023). The context of Library and Information Science (LIS) research in Africa is characterized by a rich tapestry of developments, milestones, and the contributions of influential researchers. Scholars are investigating novel strategies to adjust to evolving information environments and advance diversity. The background of LIS research in Africa spans the struggles of colonialism to modern attempts to embrace technology and preserve local knowledge (Cox & Abbott, 2021). Prominent scholars and establishments have significantly shaped the area, and current study endeavor to tackle obstacles while leveraging the potential for the advancement of Library and Information Science in Africa.

Quantum Leaps in African LIS Research

Studies have shown that LIS research in Africa has advanced significantly (Sibiya & Shongwe, 2021; Moahi, 2007; Onyancha, 2007, etc). These studies addressed topics such as the role of LIS in community development, data management and curation, emerging technologies and innovation, education and professional development, digital libraries and information access, open access initiatives, collaboration and networking, information ethics and policy issues, and more. Regarding digital libraries and information access, for example, the impact of digital libraries on information access in Sub-Saharan Africa was studied by Singh, Abdullah, and Kaur (2021) who highlighted technological developments and implementation issues of digital projects. Chukwu et al. (2020) examined the role of library and information science (LIS) in maintaining and fostering indigenous knowledge in African communities, highlighting the significance of culturally sensitive information practices. In a similar vein, the author claimed that librarians can utilize ICTs to gather, archive, and distribute indigenous knowledge to protect traditional knowledge for future generations; encourage the affordable distribution of indigenous knowledge; develop easily navigable indigenous knowledge information systems; and offer a forum for advocating for the increased appreciation and significance of Ik to the people's economic and social cohesiveness. The efficiency of information literacy programs at West African institutions was examined by Mungwabi (2019) and Anunobi and Ukwoma (2016), who also contributed to the understanding of user education tactics in the region.

Digital libraries, technology, and creative approaches are only a few of the many elements that have contributed significantly to the revolutionary advances in African LIS research. The global LIS community has become more vibrant and integrated as a result of these developments, which have also enhanced information access and management.

African LIS Researchers and Insight into the Stumbles Encountered in Scholarly Inquiry

The stumbles African LIS researchers have experienced are unquantifiable. Some of these are reviewed in this study. Cox and Abott (2021) conducted interviews and surveys with African LIS researchers to identify challenges such as limited research funding, inadequate access to resources, barriers to collaboration, and the impact of global power dynamics on research agendas. Tella (2020) focused on the institutional challenges faced by African LIS scholars, including issues related to academic recognition, promotion criteria, research support, and publishing barriers within the global scholarly publishing system. Mutula (2009) examined the challenges of decolonizing LIS research, including the dominance of Western paradigms, epistemological biases, language barriers, and the need to contextualized research methodologies and knowledge production frameworks. The author also looked at the ethical challenges faced by African LIS scholars, such as navigating cultural sensitivities, ensuring community engagement and consent, addressing power differentials in research relationships, and upholding ethical standards in data collection and dissemination. These studies provide insights into the specific challenges encountered by African LIS scholars in their research endeavors, highlighting the need for systemic changes, institutional support, and collaborative efforts to address these challenges and foster a more inclusive, equitable, and impactful research environment within the LIS field in Africa.

Cox and Abott (2021) sought to understand how open scholarship might address the challenges faced by research in Africa, through a study based on a participatory collaborative workshop to create a partnership with librarians in Rwanda. The literature review identifies three broad perspectives on the apparent underperformance of Rwandan research: one locating the issue in the unequal scholarly communications system, a second pointing to a country deficit and a third blaming cognitive injustices. Ajiferuke (2011) provided evidence to show that the contributions of African researchers to the informetrics literature are minimal. The three main challenges identified as limiting the contributions of African scholars to the informetrics literature are lack of appropriate skills, inadequate data collection sources, and unaffordable analytical tools. To overcome these challenges, it is suggested that regular pre-conference workshops on informetrics should be organized, an African Citation Index should be developed, and the use of free analytical tools should be encouraged.

Theoretical Framework

In order to give a thorough lens through which to examine the trajectory of scholarly research in Library and Information Science (LIS) in Africa, the theoretical framework for this study synthesizes the Innovation Diffusion Theory and the Information-Seeking Behavior Model.

Innovation Diffusion Theory (IDT)

The IDT, which largely draws from Rogers' 1962 work, asserts that innovations propagate through a population according to a predictable pattern, with stages including understanding, persuasion, decision-making, implementation, and confirmation being typical examples. This theory sheds light on how novel concepts and cutting-edge innovations are embraced in particular situations.

Application to LIS Research in Africa

Innovation diffusion provides a framework for understanding the quantum leaps in African LIS research. Technological innovations and the use of digital libraries are two examples of how creative methods are being disseminated. The acceptance of these innovations is influenced by a number of elements, including perceived benefits, communication routes, and the involvement of early adopters, all of which are identified by the theory.

Information-Seeking Behavior Model

Based on the research of Wilson (1999) and Kuhlthau (1991), this model investigates the affective and cognitive facets of information-seeking behavior. With phases like start, exploration, formulation, collection, and presentation, it highlights how dynamic and iterative the information-seeking process is.

Application to LIS Research in Africa

The Information-Seeking Behavior Model can be used to assess the obstacles and difficulties African LIS researchers encounter, such as a lack of funding and inadequate infrastructure. The steps of the model correspond with the challenges that arise when generating and investigating research subjects, developing research questions, and gathering pertinent data. Knowing how researchers move through these phases might help shed light on how outside influences affect the information-seeking process.

Application to the Study

A more complex picture of the academic inquiry process in LIS in Africa can be obtained by combining IDT with the Information-Seeking Behavior Model. This is how the study makes use of various theoretical frameworks.

Quantum Leaps

IDT Perspective: The concepts of innovation diffusion are in line with the adoption of novel practices like digital libraries. This research looks into the phases of innovation adoption, identifies critical elements, and comprehends the contributions of early adopters to the acceleration of quantum leaps.

Information-Seeking Behavior:

Information-seeking behavior can be used to examine the investigation and gathering of data by researchers on new methods in LIS. This clarifies the mental and emotional processes associated with accepting novel ideas and approaches.

Stumbles and Challenges

IDT Perspective: Difficulties that LIS researchers encounter can be viewed as obstacles to the spread of innovation. The research explores the ways in which various stages of innovation adoption are impeded by issues such as inadequate finance and insufficient infrastructure, hence highlighting the difficulties associated with the diffusion process.

Information-Seeking Behaviour: The Information-Seeking Behavior Model is consistent with the challenges encountered when developing and gathering pertinent data, as well as when initiating and investigating research subjects. This viewpoint sheds light on how outside obstacles affect the cognitive and emotive processes of researchers as they search for information.

This study uses a dual theoretical framework to provide a thorough understanding of the academic inquiry journey in LIS in Africa, taking into account both the knowledge-gaining obstacles and the transformative leaps that researchers encounter.

Methodology

Design and method: A qualitative method was adopted using a descriptive design. Qualitative was considered the best method for this study to enable the researcher present an in-depth analysis of the quantum leaps and stumbles African LIS researchers have experienced.

Population and sample: The target population of the study was the entire African LIS researchers and scholars. These include the lecturers in African library schools, the academic librarians in all African universities who conduct and publish research. Since, this is a qualitative research which cannot involve the entire population; a sample of 20 African LIS scholars was taken. The best 20 LIS academics from African library schools were selected based on their H-Index Google scholar ranking. These LIS researchers are dispersed across South African, Nigerian, Kenyan, and Zimbabwean universities. Each scholar was approached directly and were asked for their informed consent, and indicated that they would all be willing to participate in the study.

Instruments for data collection: An open-ended survey was adopted. Each LIS scholar received an open-ended survey that was created and mailed to them (See the Appendix). A personal, in-depth interview with each respondent was not feasible due to their dispersion among African institutions, network problem, variation in time and schedule. Not these alone, the time for the study was very short and there is no funding for the researcher to travel round the Four

African countries to meet physically with these researchers. A pre-formulated interview guide (open-ended survey) according to the study's objectives was created. This was sent to each respondents. The amount of time taking for completion of the survey is between 10 and 15 minutes. Since every respondent could understand and speak English, the interviews were done in that language. Every respondent gave permission for their answers to be recorded while others responded in written against each item in the survey. The respondents are referred to anonymously as respondents when quoted to preserve their confidentiality.

Data analysis: All the collected data, both through the open ended survey and voice recordings were analysed thematically following the variables in the objectives of the study.

Ethical consideration: As mentioned earlier, informed consent of the respondents was sought and granted by all the respondents before the commencement of the administration of the open ended survey. The respondents were not forced to participate in the study and their individual personality was respected. The data collected from each of the respondents was anonymous since none of them was asked to say their name or mentioned their institutional affiliation. The methodology aims to capture the intricacy of the researchers' experiences while providing a rich tapestry of data for analysis.

Findings

Research Question1: What are the breakthroughs and events (quantum leaps) African LIS scholars have encountered in their scholarly inquiry? To answer this research question, respondents were asked to indicate the breakthroughs and event in their scholarly inquiry. The result reveals that:

African LIS experts have come across a number of groundbreaking occurrences that have significantly advanced the subject and added to its relevance and progress. The acknowledgement and incorporation of indigenous knowledge systems (IKS) into LIS techniques is a noteworthy advancement. Furthermore, a major achievement for African LIS experts has been the formation of regional and worldwide cooperation. Consortia, networks, and partnerships with international organisations have made it easier to collaborate on research projects, exchange knowledge, and build capacity. There has been a breakthrough in the field's effect and visibility due to the increasing international acknowledgment of African LIS studies. African academics have authored significant studies, had their work published in renowned publications, and helped develop innovative theories and useful tools.

Research Question 2: What are the challenges (stumbles) African LIS scholars have encountered in their scholarly inquiry? To answer this research question, respondents were asked to indicate the breakthroughs and event in their scholarly inquiry. The result reveals that:

African LIS researchers have encountered a number of difficulties in their academic work, which reflects the intricate and varied realities of the information environment in the area. A notable obstacle is the restricted funding and resources allocated for research in library and information science. Budgetary restrictions in higher education and research are a common occurrence in

many African nations. The digital gap and infrastructure constraints that impact information access and technology adoption in African environments present another difficulty. African researchers face difficulties due to the underrepresentation of African perspectives in academic debate and mainstream LIS literature. Similarly, obstacles to career promotion, academic standing, and professional growth for academics arise from some African universities' lack of institutional support and acknowledgment for LIS as a distinct academic discipline. Lastly, there are difficulties with ethical issues, community involvement, and cultural sensitivity in research techniques because of the intricate sociocultural contexts in which African LIS scholars work.

Research Question 3: What is the interdisciplinary nature of LIS research in Africa? To answer this research question, respondents were asked to indicate the interdisciplinary nature of LIS research and their scholarly inquiry. The result reveals that:

The diverse opportunities and problems that information workers in the region encounter are reflected in the interdisciplinary nature of library and information science (LIS) research in Africa. The connection between development studies and LIS is another important factor. African development difficulties, including inequality in education, healthcare access, and economic empowerment, call for creative information tactics. LIS research in Africa has been greatly influenced by the digital revolution, which has resulted in partnerships with computer science, data science, and artificial intelligence (AI). Furthermore, there is a lot of overlap between LIS research in Africa and ecological informatics and environmental studies, especially when it comes to sustainable information practices. Finally, information behaviour, social inclusion, and community participation are all included in the social dimension of LIS research in Africa.

Research Question 4: What are the transformative journey African LIS researchers have taken so far? To answer this research question, respondents were asked to indicate the breakthroughs and event in their scholarly inquiry. The result reveals that:

Significant changes, breakthroughs, and contributions have characterised the transformative path of African LIS scholars, shaping the field and its influence on society. Some of the major components worthy of mention in the journey so far are as follows:

From Marginalisation to Recognition Accepting Technological Innovation Empowering Communities Increasing Knowledge creation Encouraging Global involvement Taking on Societal difficulties The list is exhaustive but space is limited.

Research Question 5: What insights do African LIS Researchers have into the elements impacting their research advancement? To answer this research question, respondents were asked to indicate the insights African LIS Researchers have into the elements impacting their research advancement in their scholarly inquiry. The result reveals that:

African LIS scholars, by virtue of their experiences negotiating a variety of possibilities and obstacles within the scholarly landscape, have invaluable insights into the factors influencing the success of their study. An additional realisation pertains to the importance of teamwork and networking in furthering research objectives. African LIS scholars also stress the value of professional development programmes and capacity building in advancing research techniques, skills, and scholarly outputs. African LIS researchers also emphasise the necessity of lobbying and acknowledging the importance of LIS research in the fields of academia and policy. Furthermore, when determining study topics and methodology, African LIS scholars emphasise the significance of reflexivity, contextuality, and cultural sensitivity.

Research Question 6: What crucial areas are necessary for support and improvement within the LIS academic environment and the possible way forward? To answer this research question, respondents were asked to indicate the support and improvement necessary within the LIS academic environment and the possible way forward in their scholarly inquiry. The result reveals that:

Some major issues and potential solutions identified are as follows:

Resources and funding for research; joint ventures; building capacity and advancing professionally; promotion and acknowledgment; support is required for diversity, equity, and inclusion (dei); and that support is required for technological innovation and digital transformation.

The possible way forward suggested include; to obtain grants and resources, cooperate with international organisations, industrial partners, and funding agencies, and promotion of institutional investments in technology and infrastructure for research. Networking with academics and professionals throughout the world, coordinate collaborative research projects, create research centres or clusters, and take part in conferences, workshops, and networking events among others.

Conclusion

A subtle examination of the development, difficulties, and accomplishments of academic inquiry in the field of Library and Information Science (LIS) in Africa is captured by the title "From Quantum Leaps to Stumbles: Unveiling the Journey of Academic Inquiry of Library and Information Science Researchers in Africa". Beyond the realm of traditional success tales, the research sheds light on the varied experiences of LIS researchers in Africa. The study promotes inclusivity and enhances the global conversation on LIS research by recognizing the successes and failures of academic inquiry in the African setting.

Recommendations

The recommendations, which are based on the findings, include the creation of focused support networks, mentorship programs, and cooperative projects to increase the success and resilience of LIS researchers in Africa. These suggestions are meant to foster a more encouraging and favorable atmosphere for scholarly research in the LIS field throughout the continent.

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