

COMBATING MISINFORMATION THROUGH INFORMATION LITERACY: EFFECTIVE STRATEGIES IN NIGERIAN ACADEMIC LIBRARIES

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Abstract

This study looks at successful tactics used by academic libraries to fight false information through information literacy programs. This study investigates the role of instructional programs, digital literacy training, and critical thinking frameworks in preparing students to assess information sources using a mixed-method approach that incorporates surveys of librarians and students in the Nigerian academic setting. The results show that students' capacity to recognize and detect false information is greatly enhanced by focused user education, the incorporation of information literacy into academic curricula, and active faculty collaboration. The study identifies both successes and current issues, such as heightened awareness of reliable information sources and improved librarian-faculty collaboration, alongside challenges including inadequate funding, limited digital infrastructure, and low student participation, while offering practical recommendations such as the formal integration of compulsory integration of information literacy courses into undergraduate curricula to strengthen information literacy practices in academic libraries.

Keywords: misinformation, information literacy, academic libraries, user education, digital literacy, critical thinking

Introduction

In an era characterized by rapid information proliferation and digital overload, the creation, access, and dissemination of information have undergone a profound transformation. While this democratization of information has significantly increased accessibility, it has also blurred the distinction between credible scholarship and misinformation, thereby posing serious threats to academic integrity and informed decision-making. The rise of social media, open-access platforms, and generative technologies has further reshaped how information is produced, shared, and consumed, increasing both the speed and volume of information in circulation.

This evolving information landscape has heightened the need for strong critical evaluation skills among information users. As the volume of digital content continues to expand, individuals are increasingly required to assess the credibility, accuracy, and relevance of information sources. Academic libraries, long regarded as custodians of knowledge, are uniquely positioned to address this challenge by promoting information literacy (IL) and related competencies (Association of College & Research Libraries [ACRL], 2016). Beyond providing access to reliable resources, academic libraries play a crucial role in fostering critical thinking, media literacy, and responsible information use, which are essential in today's post-truth environment.

Recent studies highlight the evolving role of academic libraries in combating misinformation. Adewojo et al. (2024) emphasize that libraries are increasingly adopting educational initiatives, technological innovations, and community outreach programmes to safeguard information integrity. Within the Nigerian context, library and information science (LIS) professionals underscore the importance of archives and credible information systems in supporting fact-checking and providing historical context for information verification. At the global level, integrated frameworks such as metaliteracy—which combines information, media, digital, and visual literacies—are gaining prominence for their ability to promote metacognitive awareness and resilience among learners in digital environments (Secker & Coonan, 2013).

Technological advancements are also enhancing information literacy instruction. Artificial intelligence (AI)-driven tools, such as automated fact-checking systems, provide users with opportunities to verify information efficiently (Curtis et al., 2025). In addition, digital literacy initiatives employing diverse approaches, including game-based learning and interactive modules, have been shown to improve students' ability to identify and resist emerging forms of misinformation, such as deepfakes. Despite these advancements, several challenges continue to hinder the effective implementation of information literacy programmes in academic libraries.

Existing studies indicate that although information literacy instruction contributes to improved student performance, related literacies such as media literacy and data literacy remain underutilized and unevenly integrated within academic library practices (Pinto, Cordón-García, & Gómez-Díaz, 2024). Furthermore, academic libraries often face constraints such as inadequate funding, limited ICT infrastructure, and fragmented programme implementation, which reduce the overall effectiveness of anti-misinformation initiatives. These challenges highlight the need for more coordinated and scalable strategies to strengthen information literacy delivery.

Against this backdrop, this study examines how academic libraries design and implement information literacy instructional strategies to equip students with the skills required to critically evaluate information sources and combat misinformation. The study also explores existing theoretical frameworks, assesses the effectiveness of current practices, and identifies key challenges, with the aim of providing practical recommendations for enhancing information literacy programmes in academic institutions.

Research Questions

This study is guided by the following research questions:

1. What strategies are used by academic libraries to promote information literacy?
2. How effective are these strategies in combating misinformation?

3. What is the level of students' awareness and skills in identifying misinformation?
4. What measures can be recommended for improving information literacy practices in academic libraries?

Literature Review

Recent studies have revealed that misinformation continues to undermine academic work and students' ability to make informed judgments. Lenoir and Anderson (2023) observe that modern information literacy instruction must extend beyond basic search skills to include critical evaluation of information sources, authorship, and underlying bias. This approach is particularly relevant within Nigerian academic environments, where students are frequently exposed to unverified online information, contributing to broader information disorder (Fallis, 2015; Wardle & Derakhshan, 2017).

Mahajan (2023) highlights that academic libraries across the world employ strategies such as information literacy workshops, integration of media literacy into curricula, and provision of access to authoritative databases to combat misinformation. These strategies help students develop the critical thinking skills necessary for assessing the credibility of digital content.

In the Nigerian context, Giginyu, Abubakar, and colleagues (2025) emphasize that librarians play a strategic role in reducing misinformation through structured information

literacy programmes, collaboration with teaching staff, and user education initiatives. However, the authors note that challenges such as inadequate funding, limited ICT infrastructure, and uneven digital competencies among students continue to affect programme effectiveness.

Similarly, Ojukwu and Saidu (2025) report that while Nigerian undergraduates demonstrate basic awareness of misinformation, many lack advanced verification skills, such as cross-checking information sources and evaluating author credibility. Their findings suggest that continuous and well-structured library instruction is essential for improving students' information evaluation skills.

Emerging research indicates that technological innovations can enhance information literacy instruction. Crivellaro (2025) notes that artificial intelligence tools are increasingly being explored by academic libraries to support fact-checking and the critical evaluation of online information. While such technologies are still developing in Nigeria, they present significant opportunities for strengthening library-based information literacy programmes.

Information literacy has emerged as a critical defence against misinformation. The Association of College & Research Libraries (ACRL, 2016) Framework emphasizes the importance of empowering learners to evaluate and use information critically. Kuhlthau's (1991) Information Search Process theory explains how users progress through stages of uncertainty, exploration, and formulation when engaging with information. Secker and

Coonan (2013) further promote critical information literacy, which encourages learners to examine issues of bias, authorship, and power within information systems.

Empirical studies further support the importance of information literacy. Metzger and Flanagin (2013) document that credibility assessment in digital environments requires advanced evaluative skills, while Wineburg and McGrew (2017) found that students often struggle to identify unreliable sources. In the Nigerian context, Baro and Keboh (2012) identified significant digital literacy gaps among undergraduates, and Jegede (2020) observed that academic libraries face infrastructural and financial constraints in implementing effective information literacy programmes. Despite global evidence supporting the effectiveness of information literacy, empirical studies focusing specifically on Nigerian academic libraries remain limited.

Overall, existing literature establishes that information literacy remains a vital mechanism for combating misinformation in academic settings. However, there is still a need for context-specific empirical studies, particularly within Nigerian academic libraries, to evaluate the effectiveness of current strategies and inform evidence-based improvements. This study therefore contributes to the existing body of knowledge by examining current information literacy practices, assessing students' competencies, and proposing practical recommendations for strengthening the role of academic libraries in mitigating misinformation.

Research Methodology

This research utilized a mixed-methods approach, combining quantitative and qualitative techniques. The focus group consisted of a population of librarians and students at the universities within Nigeria. Using a purposeful sampling strategy, 10 librarians and 100 students from these institutions were selected. Questionnaires were given to students, and interviews with librarians were done. Quantitative data were analyzed using descriptive and inferential statistics, while qualitative data were analyzed using thematic analysis.

Results

The results of the study are presented based on the research questions that guided the investigation.

Research Question 1: *What strategies are used by academic libraries to promote information literacy?*

Findings revealed that academic libraries adopt multiple strategies to promote information literacy among students. The most prominent strategies identified include user education programmes, information literacy workshops, and integration of information literacy into academic curricula.

Among these, user education programmes recorded the highest level of adoption, as indicated by the majority of student respondents. Librarians also emphasized that digital literacy training sessions and orientation programmes are frequently used to equip students with basic information evaluation skills. Additionally, collaboration between librarians and faculty members was identified as a key strategy, although it is not consistently implemented across institutions.

Research Question 2: *How effective are these strategies in combating misinformation?*

The findings indicate that the strategies employed by academic libraries are moderately to highly effective in combating misinformation. Approximately 70% of students who participated in information literacy programmes reported improved ability to evaluate information sources.

Strategies such as structured information literacy courses and practical workshops were found to be the most effective, as they provide hands-on experience in identifying credible sources. Librarians noted that interactive teaching approaches, including real-life examples of misinformation, significantly enhance students' understanding.

However, the effectiveness of these strategies is limited by irregular programme implementation and inadequate institutional support.

Research Question 3: *What is the level of students' awareness and skills in identifying misinformation?*

The study found that students possess moderate awareness of misinformation but varying levels of evaluation skills. While many students can identify obvious false information, fewer demonstrate the ability to critically assess authorship, bias, and source credibility. Students who had undergone formal information literacy training showed higher competence levels, particularly in cross-checking information sources and verifying authenticity. This suggests that exposure to structured IL programmes significantly improves students' skills.

Research Question 4: *What measures can be recommended for improving information literacy practices in academic libraries?*

Based on the findings, several measures were identified to improve information literacy practices. The most significant recommendations include the integration of compulsory information literacy courses into undergraduate curricula, which received strong support from both librarians and students. Other key measures include increased funding for library programmes, investment in ICT infrastructure, and enhanced collaboration between librarians and academic staff. Respondents also emphasized the importance of continuous awareness campaigns and professional development for librarians to keep pace with emerging misinformation trends.

Recommendations

Based on the findings of this study, the following recommendations are proposed to enhance the effectiveness of information literacy programmes in combating misinformation in Nigerian academic libraries:

1. **Integration of information literacy into Academic Curricula:** Academic institutions should incorporate information literacy as a compulsory, credit-bearing course across all disciplines. This can be achieved through collaboration between academic departments and library units to design standardized course content that emphasizes critical evaluation of information sources, digital literacy skills, and ethical use of information.
2. **Strengthening Librarian–Faculty Collaboration:** There is a need to promote stronger collaboration between librarians and teaching staff in the delivery of information literacy instruction. This can be implemented by embedding librarians into course planning and classroom teaching, as well as developing joint assignments that require students to apply information evaluation skills in their respective disciplines.
3. **Investment in ICT Infrastructure and Digital Tools:** Institutions should allocate adequate funding for the provision of modern ICT facilities, including reliable

internet access, digital databases, and fact-checking tools. This will enable libraries to deliver more effective and technology-driven information literacy programmes.

4. **Development of a National IL Framework:** Relevant educational authorities and professional bodies should work towards establishing a national information literacy framework, aligned with international standards such as UNESCO (2019). This framework should provide guidelines for curriculum design, programme implementation, and assessment of information literacy competencies across tertiary institutions.
5. **Awareness Campaigns and Student Engagement Initiatives:** Academic libraries should intensify awareness campaigns through seminars, workshops, and social media platforms to educate students on the dangers of misinformation. Interactive approaches such as competitions, quizzes, and real-life case analyses can be used to increase student participation and engagement.
6. **Adoption of Critical IL Approaches:** Libraries should adopt critical information literacy approaches that encourage students to question the authority, bias, and context of information sources. This can be achieved through problem-based learning, case studies, and reflective exercises that promote deeper analytical thinking.
7. **Continuous Professional Development for Librarians:** Librarians should be provided with regular training opportunities to enhance their competencies in digital literacy

instruction, emerging technologies, and misinformation detection strategies. Institutions can support this through workshops, conferences, and partnerships with professional organizations.

Conclusion

This study has demonstrated that academic libraries play a critical role in combating misinformation through the implementation of information literacy programmes. The findings reveal that structured instructional strategies, including user education, digital literacy training, and collaboration with faculty, significantly enhance students' ability to evaluate information sources. Despite these achievements, challenges such as inadequate funding, limited ICT infrastructure, and inconsistent programme implementation continue to hinder the effectiveness of these initiatives. Addressing these issues requires coordinated efforts at institutional and policy levels. Overall, strengthening information literacy practices in Nigerian academic libraries is essential for equipping students with the critical skills needed to navigate the complex information landscape and make informed decisions in the digital age.

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