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(JISTM)**www.gaexcellence.com/jistm**AI-DRIVEN PERSONALIZATION OF LIBRARY CONTENT
ON SOCIAL MEDIA: A LITERATURE REVIEW OF USER
ACCEPTANCE AND ETHICAL CONCERNS**

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Abstract:

Artificial intelligence (AI) offers libraries opportunities to personalize social media content and enhance information services, but its use raises concerns about user acceptance, privacy, bias, transparency, and accountability. This study reviews the literature on AI-driven personalized library content on social media to identify factors influencing user acceptance, examine ethical concerns, and develop recommendations for responsible implementation. A structured literature review was conducted using Scopus AI. The findings identify perceived usefulness, ease of use, trust, personalization quality, privacy, transparency, and AI literacy as key considerations in user acceptance. Major ethical concerns include privacy, algorithmic bias, and misinformation. The review suggests that responsible AI personalization requires transparent data practices, user consent, human oversight, bias monitoring, and clear institutional policies. The study consolidates current knowledge on user acceptance and ethical considerations and provides practical directions for responsible AI implementation in library social media.

DOI: 10.35631/JISTM.1144029 **Keyword:**Artificial Intelligence (AI), Social Media, AI Literacy, Library
Services, User Acceptance, Ethics

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Introduction

The distribution of artificial intelligence (AI) technologies has transformed the majority of fields, including information processing, medicine, and education. At university libraries, AI technologies increasingly aid in the search for information, enhance cataloging, and enable personalized content (Joselin et al., 2024; Sivasankari et al., 2024). As social media becomes a main hub for research communication and dissemination, libraries are beginning to incorporate AI in the personalization and dissemination of information according to user requirements. This is one of the bigger hyper-personalization online service movements as a step towards the ultimate level of user satisfaction and engagement (Wang, 2024). Artificial intelligence (AI) technologies in library services have been an exemplar of information curation, dissemination, and consumption. Social media, being a two-way communication tool for user engagement, has become an activity hub for libraries to talk back to their public. In particular, AI-based social media personalization holds huge potential in re-engineering the user experience through the capabilities of libraries in offering adaptive feedback, context-aware content, and tailored recommendations (Adewojo & Dunmade, 2024; Bonal, 2024). Big data analysis and emotional AI (EAI) also intensify personalization within the library setting, with customer engagement moving to an even more tailored domain beyond regular service (Bonal, 2024; Pavlíek, 2024). The advancement of libraries incorporating AI technologies in their social media interactions has prompted a focus on acknowledging both the advantages and ethical considerations involved. While AI improves user experience via tailored educational content and suggestions, it raises concerns related to privacy, bias, transparency, and trust (Adewojo & Amzat, 2024; Mannheimer et al., 2024).

The two-sided nature of AI applications requires careful consideration of their deployment in library environments, particularly in the social media environment, where user activity and information sharing are very interactive. AI-driven personalization may not only tailor both

user experience and business outcomes but also raise critical and pressing ethical concerns. Privacy, algorithmic bias aversion, openness, and intellectual freedom to be protected are the priorities for libraries to achieve a balance between technology and ethics (Lo, 2023; Kavak, 2024; Smith, 2021). Personalization or freedom to build bubbles of information entails reconsidering AI applications in social media policy in libraries.

While many studies target the advantages of AI deployment in libraries, i.e., automating tasks and improving user-centric service delivery (Mannheimer et al., 2024; Adewojo & Dunmade, 2024), user acceptance research and ethical issues related to AI-driven social media personalization remain at a minimal level. Privacy (Kavak, 2024), bias (Smith, 2021; Lo, 2023), and accountability literature remain in stand-alone places rather than being fully integrated into an intellectual framework that encompasses user acceptance and ethics.

A discussion of this gap shows that the literature needs to be re-examined critically regarding AI-driven personalized library content on social media, particularly highlighting the aspects of user acceptance and ethical issues. Therefore, this paper has three main objectives:

- (1) to determine factors and dimensions leading to user acceptance of AI-generated personalized content on social media platforms of libraries;
- (2) to identify ethical concerns that libraries have to face in the implementation of such technologies;
- (3) to make recommendations for an ethical use of AI in library social media.

This research gives a new perspective to the topic by synthesizing the past literature on user attitudes and ethical problems of AI-based personalization in libraries and offering practical solutions which can be utilized by library professionals, policymakers, and scholars. The results are expected to help but put together well-balanced, user-friendly, and ethically grounded social media campaigns that reflect library promotion without compromising trust and intellectual freedom.

The paper begins with an explanation of the research methods that were used to gather literature in Section 2. Section 3 discusses the research results on user acceptance factors, outlining these results to offer practical recommendations for writing.

Methodology

Research Design

This study employed a structured literature review to examine AI-driven personalization of library content on social media. The review focused on two dimensions: factors influencing user acceptance and ethical concerns associated with AI-driven personalization. The identified literature was systematically screened, categorized, and thematically synthesized to develop an integrated understanding of the research area and formulate recommendations for responsible AI implementation in libraries.

Database and Search Strategy

Scopus was used as the primary literature database, with Scopus AI supporting the identification and discovery of potentially relevant literature (Ciule, et al., 2025). Scopus was

selected because of its broad coverage of scholarly publications across library and information science, computer science, information systems, and related disciplines. The search was conducted in March 2025 using two complementary natural-language queries through Scopus AI.

The first search, conducted on 20 March 2025, examined how libraries use artificial intelligence to personalize social media content and the associated ethical and user acceptance issues. The second search, conducted on 25 March 2025, focused specifically on user acceptance and ethical concerns related to AI-driven personalized library content on social media. The results from both searches were combined for subsequent screening and analysis.

Search Terms and Search Process

To support the Scopus AI-assisted literature discovery process, predefined search terms were developed around the core concepts of social media, content personalization, libraries, artificial intelligence, user acceptance, and ethical concerns. No publication-year restriction was imposed. Two complementary searches were conducted in March 2025. The first search focused on the application of AI for personalized library content on social media, while the second focused specifically on user acceptance and ethical concerns. The first search used the following search string:

("social media" OR "digital platforms" OR "online networks" OR "social networks") AND ("content" OR "information" OR "material" OR "data") AND ("personalization" OR "customization" OR "tailoring" OR "adaptation") AND ("libraries" OR "library services" OR "public libraries") AND ("artificial intelligence" OR "AI" OR "machine learning" OR "deep learning")

The second search used the following search string:

("user acceptance" OR "user adoption" OR "acceptance model" OR "technology acceptance") AND ("artificial intelligence" OR "AI" OR "machine learning" OR "intelligent systems") AND ("personalized content" OR "customized content" OR "tailored content" OR "adaptive content") AND ("library" OR "information service" OR "information retrieval" OR "digital library") AND ("social media" OR "social network" OR "online platform" OR "digital communication") AND ("ethical concerns" OR "ethical issues" OR "ethical implications" OR "moral considerations")

The two search strategies complemented each other by addressing both the technological application of AI-driven personalization and the human and ethical dimensions of its use in library social media.

Inclusion and Exclusion Criteria

Publications were considered for inclusion when they addressed one or more of the core areas of the study: artificial intelligence in libraries, social media in library services, personalized or customized content, user acceptance of AI-enabled technologies, or ethical issues associated with AI and personalization. Publications that did not provide substantive relevance to these areas were excluded. The search and screening process resulted in 55 publications being selected for the review. These comprised 19 journal articles, 14 conference papers, 19 book

chapters, and 3 review articles. The inclusion of multiple publication types enabled the review to capture a broad range of scholarly perspectives on AI, personalization, user acceptance, and ethical issues in library contexts. The literature was assessed and reviewed for three main objectives:

1. To examine dimensions for user acceptance.
2. To identify the ethical challenges in AI applications in libraries.
3. To propose recommendations for the ethical use of AI in library social media practices.

Literature Screening and Selection

The literature identification and screening process was reported using the general principles of the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) to enhance transparency in the identification, screening, eligibility assessment, and inclusion of publications. The two Scopus AI-assisted searches identified 55 relevant records. The identified records were assessed against the established relevance criteria, and no records were removed during the screening process. Thus, all 55 records were retained for the literature synthesis. Figure 1 presents the literature identification and selection process, including the database, search process, number of records identified, and final number of publications included in the review. Scopus AI was used to assist literature discovery rather than to determine the final inclusion of publications. The researchers evaluated the identified publications against the predefined relevance criteria and made the final decisions regarding inclusion. Thematic categorization and interpretation were also conducted by the researchers.

Data Extraction and Thematic Synthesis

The selected publications were examined and organized according to the objectives of the study. Relevant findings were extracted and grouped into four broad areas: user acceptance, technological considerations, ethical concerns, and implementation recommendations. The user acceptance synthesis focused on factors including perceived usefulness, ease of use, trust, personalization quality, privacy concerns, transparency, and AI literacy. The ethical synthesis examined privacy, algorithmic bias, transparency, misinformation, accountability, intellectual freedom, consent, and regulatory requirements. Recurring themes and relationships among these issues were then identified across the selected literature. This thematic synthesis provided a consolidated understanding of the factors associated with user acceptance and the ethical conditions that should be considered when implementing AI-driven personalization in library social media.

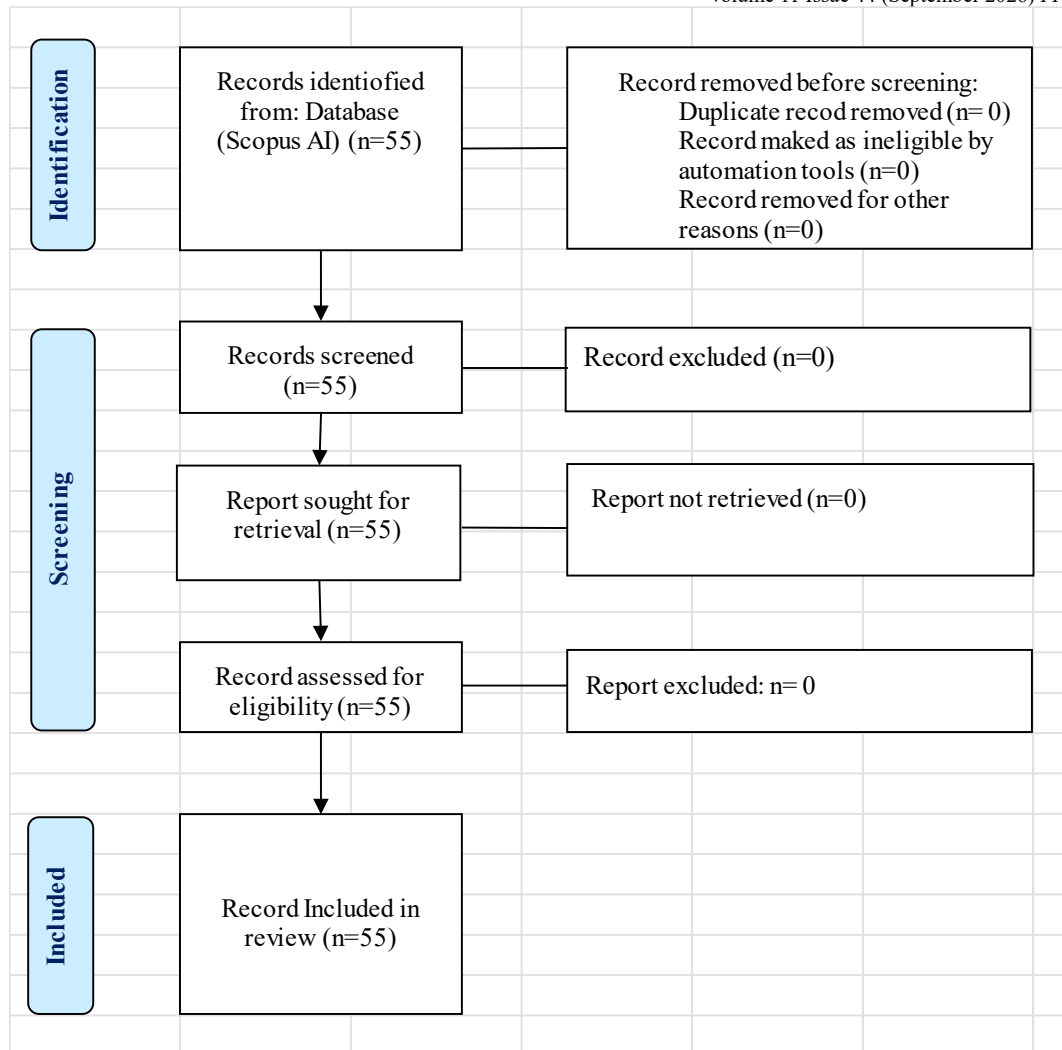


Figure 1. PRISMA Flow Diagram for Literature Selection and Screening Process

Concept Mapping

The concept mapping method was used to categorize the topic of the literature review into major themes and sub-themes for a detailed examination. The main node “AI in Library Social Media Personalization” consists of three major themes: Technological Impact, Ethical Concerns, and User Acceptance. Sub-themes under the Technological Impact consist of the use of social media platforms, AI literacy, job satisfaction, and AI algorithms. Ethical issue’s theme includes regulation and governance, algorithm bias, transparency, and privacy. Sub-theme under user acceptance deals with trust in AI systems, perceived usefulness, ease of use, and privacy concerns.

Table 2: Concept Mapping of Key Themes and Sub-Themes on AI in Library Social Media

Theme	Sub-Themes
Technological Impact	Social media platforms, AI literacy, job satisfaction, AI algorithms
Ethical Issues	Regulation and governance, bias in algorithms, transparency, privacy concerns
User Acceptance	Trust in AI systems, perceived usefulness, ease of use, privacy concerns

Results and Discussion

Factors Influencing User Acceptance of AI-Driven Personalization

These were the most profound determinants of social media adoption of personalized AI-produced content for libraries. They identified these as ease of use, usefulness, trust, privacy, and quality of personalization. Among these factors, perceived usefulness was frequently emphasized in the reviewed literature, particularly when users perceived personalized content as relevant, timely, and beneficial (Venkatesh et al., 2012). Additionally, perceived ease of use helped in shaping user adoption. The users who experienced ease in using the AI-based recommendations were satisfied and enjoyed long-term usage (Gefen et al., 2003). AI-based personalization of content for users on library social networking sites is facilitated by some key defining concepts like perceived usefulness, ease of use, transparency, trust, and perceived risk of privacy. Transparency and explainability of AI suggestions are also necessary because if they can view how they're working through their data and why they're suggesting something, then they're going to be more open to their suggestions (Asthana et al., 2024).

They are also found to be attracted to information that is seen to be useful and relevant, suggesting perceived usefulness continues to have a major role in influencing acceptance, to inform current models of technological acceptance. User acceptance rested heavily on trust in applied AI systems in libraries. Users were focused on bias, misinformation, and manipulation, which can be negative for trust unless dispersed (Rallabandi et al., 2023). Otherwise, AI literacy would be dominated. Increased user understanding of AI technologies also makes them more open to tailored services but needs to be safeguarded with ethics and endowed with well-proven guidelines such that they are not exploited through data abuse or misuse (Hermann, 2021). Trust and literacy are hence not only adoption drivers but also ethical concerns that must be addressed by libraries.

Privacy concerns also play a huge role in determining user acceptance. The majority of users complain about the collection and use of personal sensitive information, particularly if they feel that they are unaware or powerless regarding the use of such information (Kozyreva et al., 2021). Transparent or intrusive AI personalization models decrease user comfort and acceptance levels. Libraries, therefore, need to possess robust privacy protection measures, clear consent practices, and clear communication of data collection behaviors to gain the confidence of users (Liu, 2023). Users will be more inclined to accept when they believe libraries respect their privacy limits and provide them with space to opt out. Ethical concerns of fairness, responsibility, and bias also affect user acceptance. The literature states that users are afraid of algorithmic bias and exclusion or misrepresentation possibilities in AI-driven

content (Adewojo & Amzat, 2024). Ethical use of AI involves libraries constantly looking out for unwanted discrimination by algorithms and verifying the inclusivity of content curation.

The accountability configurations where libraries publicize who are in the business of AI oversight generate trust and increased willingness to accept the deployment of AI (Mannheimer et al., 2024). The law and institutional rules have been identified as external elements that motivate the user's acceptance. Human rights, laws on data protection, and ethical standards for the use of AI guide the development and delivery of tailored content services to individual needs by the libraries (Krönke, 2020).

If the users see that the authorities keep to the law and ethics, then they will probably find AI-based services acceptable (Ivanović, 2024). This is a clue as to what role libraries must play to ensure that AI processing complies with the standards and in the meantime being efficient, the libraries should also be providing transparency and guiding users in boosting adoption. Trust shapes the effect of technology on the consumer's willingness to adopt and use personalized content. User adoption happens at the moment when the use of AI is understandable and produces accurate content (Lankton et al., 2015). The literature also indicates that personalization quality, particularly the perceived accuracy and relevance of recommended content, is an important consideration in users' evaluations of personalized services. As stated by Xu et al. (2011) the effectiveness of personalization enhances loyalty and motivates further visits. Besides that, the library users' age, their level of computer literacy, and the use of social media by libraries were factors that affected the degree of acceptance. The younger, computer-literate users are those who mainly prefer AI-based personalization, whereas which is the opposite case with the elderly, who are more careful and resort to content suggestions mediated by a human.

This kind of generation gap was perfectly consistent with the technology readiness model, where the individuals' attitudes towards adopting technology were the main driving force that led to acceptance (Parasuraman & Colby, 2015). The effective use of AI-driven personalized content on library social media platforms needs to be a mix of technological innovation and human-oriented design. Clarity of privacy statements must be prioritized, investment in clear AI technologies should be made, and digital literacy programs should be provided to make users better equipped.

The Ethical Challenges Libraries Face In Implementing Such Technologies

Libraries are also embracing AI technologies to recommend and engage with users, but the ethical concerns regarding privacy, transparency, and bias were the most significant challenges (Rallabandi et al., 2023). The most apparent privacy concerns are where users feel uneasy regarding the manner in which information about them is collected, stored, and used in ways they can't quite discern. Overcoming these concerns calls for transparent data-use communication and obtaining informed consent (Liu, 2023).

At the top of the ethical concerns is the issue of content control and manipulation of user behavior by AI code (Rallabandi et al., 2023). Libraries, tasked with ensuring intellectual freedom and neutrality, will be inadvertently spreading misinformation or bigotry if AI algorithms are not suitably chosen. Biased AI algorithmic inputs can yield discriminatory or biased content suggestions that reinforce stereotypes or omit diverse viewpoints (Rallabandi et al., 2023). This outcome commends the existing literature for emphasizing that libraries should

explore AI algorithms to achieve content neutrality and diversity (Hermann, 2021). Moreover, computer-based cataloging and classification systems grounded on AI provide actual transparency and address bias issues, which lead to unintentional discrimination or misdescription of library materials (Adewojo & Amzat, 2024).

The second most major ethical problem is the mass personalization of low-quality user and library professional AI literacy material. Hermann (2021) posits that although AI technologies have the capability to enhance user experience through customization, they may also influence users if users are not conscious enough to recognize and identify algorithmic influence. Libraries ought to therefore care about AI literacy with the hope of amplifying critical involvement and not entrenching damage. Furthermore, library applications of AI ought to be ethical through continually questioning issues of consent and availability to ensure that all most especially vulnerable individuals, equally benefit from services tailored for them (Mannheimer et al., 2024).

Privacy issues are the biggest challenge, especially for AI chatbots and inference-based personalization. Using AI chatbots for social media exposes users to data bias, privacy violations, and loss of control over their information (Liu, 2023). Libraries must walk the thin line between leveraging users' data for the improvement of services without violating users' right to privacy. Asthana et al. (2024) discuss how people are uncomfortable with AI judgments derived from their own information, with more openness about and consent-based processing of information.

Aside from ethics and privacy challenges, legal and regulatory challenges are a complex business. Krönke (2020) sheds light on how libraries fall under the laws of fundamental rights protection and proper content filtering on social media. Libraries must balance their AI use within national law regimes and global regulations, including those by Ivanović (2024), that mandate data minimization and enable end-users to opt out of personalization. Legality is invoked in a bid to create trust and integrity in library online activity. Misinformation and content moderation were also significant ethical issues. Library posting of social media content by way of AI may propagate false information if not well-vetted (Pavliček, 2024).

Libraries face huge ethical concerns in embracing AI-driven personalized content on social media. The biggest issues are algorithmic bias, manipulation of the user, privacy invasion, and legality. These may be tackled by having end-to-end AI literacy among library professionals, an open data governance policy, enabling users to use data, and strict adherence to the law. Next-generation libraries need to evolve holistic ethical codes of conduct and create control systems that will enable the integration of AI-based services in ways that will promote equality, inclusiveness, and trustworthiness for digital library settings. Perceived ethical responsibility and empowerment also had an effect on adoption by the users. The consumers were better accepting of AI personalization when they were provided with control over their content selection and data-sharing conditions (Qaruty et al., 2023). Encouraging user acceptance and trust can be effectively done in a way that is in line with ethical guidelines that prioritize user agency and responsible AI innovation by equipping users with AI literacy and giving them transparent options for customization (Hermann, 2021).

Relationship Between User Acceptance and Ethical Concerns

The reviewed literature indicates that user acceptance of AI-driven personalization involves both technological and ethical considerations. From the technology acceptance perspective, perceived usefulness and ease of use are established determinants of technology adoption (Venkatesh et al., 2012). In the reviewed literature, these factors were associated with users' perceptions of the relevance, accessibility, and usefulness of AI-generated personalized content. However, AI personalization also introduces uncertainty regarding data use, automated recommendations, and decision-making, making trust an important consideration in user acceptance (Gefen et al., 2003).

Ethical concerns can directly influence this trust. Privacy is particularly important because personalization may require the collection and analysis of user information. Users may become less willing to engage when they have limited awareness or control over how their data are used (Kozyreva et al., 2021). Similarly, transparency and explainability can reduce uncertainty by helping users understand the use of AI and the basis of personalized recommendations (Asthana et al., 2024). Algorithmic bias, misinformation, and manipulation may further undermine confidence in AI-enabled services (Rallabandi et al., 2023; Adewojo & Amzat, 2024). In library environments, these concerns are particularly relevant because privacy, fairness, intellectual freedom, and professional accountability are central to responsible information services (Lo, 2023; Mannheimer et al., 2024).

Overall, the findings suggest that technological value and ethical safeguards are complementary dimensions of AI acceptance. Perceived usefulness and ease of use may encourage acceptance, while trust is influenced by privacy protection, transparency, fairness, and accountability. Therefore, AI-driven personalization in library social media should not focus solely on delivering relevant content. It should also provide transparent data practices, meaningful user choice, human oversight, and mechanisms for addressing bias and errors. This relationship represents a conceptual synthesis of the reviewed literature rather than an empirically tested causal model.

Recommendations For Ethical AI Adoption In Library Social Media Practices.

The use of artificial intelligence (AI) for personalizing library social media content raises a number of ethical and governance issues. The suggestions below are based on the literature review, and the main issues raised fall under these seven areas: ethical issues, legal issues, librarian roles, AI uses, algorithmic bias, user transparency and acceptance, and policy implications. Each of the themes is further explained to demonstrate its significance, consequences, and correspondence with the literature.

Ethical Considerations of Artificial Intelligence in Social Media and Libraries

Embedding AI in libraries must be accompanied by ethical considerations. Recent studies revealed that algorithmic bias, spread of misinformation, and violation of intellectual freedom have negatively affected public trust in library services (Ghosh et al., 2024; Mannheimer et al., 2024). In this era of AI-facilitated access to information, libraries must incorporate value-sensitive design ethics that emphasize equity, inclusiveness, and fairness. Continuous ethical assessment and forming AI ethics committees will be ways to ensure that the ethical guidelines are met. Saeidnia (2023) and Nah et al. (2024) point out that equity in AI requires openness

about data practices and the use of diverse data sets to counteract discriminatory tendencies. Hence, libraries can be encouraged to carry out measures such as open algorithmic documentation, fairness audits from time to time, and ethical foresight assessments to predict any negative consequences (Bubinger & Dinneen, 2024). These steps will demonstrate the library's commitment to supporting intellectual freedom and building user trust in digital environments.

Regulatory Challenges and Policy Formulation

Regulatory ambiguity is one present challenge for ethical AI deployment in libraries. The institution needs to deal with the complicated data protection laws and changing AI governance frameworks (Bradley, 2022; Ivanović, 2024). To address this challenge, libraries should develop institution-specific AI policy frameworks aligned with national legislation and international ethical standards, based on the principles of privacy, accountability, and fairness. Michalak (2023) emphasized the critical role of librarians as advocates in AI policymaking, ensuring that library perspectives inform broader regulatory discourse. Clear internal protocols concerning consent management, data retention, and algorithmic accountability can help libraries maintain compliance while safeguarding user rights. Incorporating guidance from global frameworks such as the UNESCO Recommendation on the ethics of Artificial Intelligence (2021) can further align institutional practice with global ethical norms.

Functions and Involvement of Librarians

Librarians are very important as technical and ethical mediators in the alignment of user expectations with responsible AI. Besides policy formulation, success depends on the continual development of capacity in AI knowledge, data ethics, and human-AI partnerships (Mannheimer et al., 2024; Bradley, 2022). Subaveerapandiyana and Gozali (2024) report that a large number of library professionals, especially in developing countries, are worried about the issues of privacy, bias, and user trust in the use of AI-driven personalization. These issues can only be addressed through the involvement of a comprehensive strategy of staff development coupled with the awareness of the workings of AI in personalized content delivery. Educating both librarians and users about AI helps with usage, preparation, and ethical engagement focused on the library environment. Hermann (2021) argues that providing users with transparency and control over their data interaction enhances trust and facilitates responsible uptake. These findings indicate that librarian preparedness and user awareness are the keys to the ethical integration of AI in libraries.

Applications of AI in Libraries

The use of artificial intelligence (AI) in libraries through systems for recommendation, metadata generation, and virtual reference services not only helps information retrieval but also improves user interaction when based on ethical standards (Ghosh et al., 2024; Joselin et al., 2024). The integration must focus on transparency, explainability, and humanness. The libraries must adopt hybrid methods that combine human expertise with AI capabilities, thereby increasing algorithmic proficiency with contextual accuracy and removing prejudices. Karthick et al. (2024) and Sivasankari et al. (2024) mentioned the importance of developing systems that enhance accessibility without overly personalized aspects that might restrict user exploration. Introducing user feedback features and explainable AI capabilities enables the libraries to fine-

tune the system and assert the alignment of personalization with user values and organizational goals.

Algorithmic Bias and Mitigation Strategies

The source of bias lies in the data fed into the algorithm or the unclear decision variables, thus resulting in exclusionary or misleading outputs (Rallabandi et al., 2023; Mehrabi et al., 2022). To overcome this problem, libraries need to deploy bias mitigation frameworks inspired by universal design and fairness concepts (Saeidnia, 2023). Tasks shall include load tests for bias and data provenance monitoring as well as the use of representative datasets that accurately depict the diversity of the user communities. Bradley (2022) underscores the need for interdisciplinary cooperation among computer scientists and librarians to weave ethical considerations into the development of systems. The library's ability to maintain neutrality and diversity in information access while promoting algorithmic fairness ensures that personalization is advantageous for all users.

Transparency and User Acceptance

Users' sentiments towards personalization based on AI are considerably influenced by their perception of transparency and control. User awareness of the working of recommendation systems and of the possibility to tune or cease personalization have been shown to build trust and commitment (Asthana et al., 2024; Grandinetti, 2023; Pavlíček, 2024). Libraries should consider the use of explainable AI (XAI) systems for which the explanation of AI decisions and data usage can be clearly communicated. Interactive dashboards and features providing justifications for recommendations improve users' knowledge of system capabilities. This not only helps in obtaining informed consent but also provides an opt-out option while also satisfying user autonomy and ethical management standards. These aspects can be reconciled with technology acceptance models where transparency and trust support adoption.

Recommendations for Library Policies

Utilization of AI in the library setting has to be conducted on the basis of Sustainability and ethics, thereby calling for the existence of strong governance systems. More and more evidence is pointing to the fact that institutional policies must be in harmony with regional and international standards (Lo, 2023; Ivanović, 2024). Libraries have to come up with multi-stakeholder forums on AI governance involving librarians, IT staff, policymakers, and also the users' representatives. These kinds of institutions may carry out ethical impact assessments, ensure compliance, and keep updating institutional policies in view of technological and social changes. Assurance of responsibility, equity, and transparency can be achieved through ongoing monitoring by means of ethical audits, stakeholders' feedback, and policy assessment. Bradley (2022) is firm in his belief that mapping international best practices with domestic institutional environments is what helps libraries in taking on responsible innovation while at the same time securing privacy and public trust.

Table 3: Thematic Synthesis of Key Issues and Recommendations for Responsible AI Use in Libraries

No.	Theme	Descriptions	References
1	Ethical Issues of AI in Social Media and Libraries	- The most significant ethical issues are discrimination, misinformation, intellectual freedom, and algorithmic bias. - Responsible and ethical use of AI is required to avoid reinforcing discrimination. - Fairness, transparency, and inclusivity in the development and deployment of algorithms are given priority.	Ghosh et al., 2024; Karthick et al., 2024; Mannheimer et al., 2024; Bradley, 2022; Ivanović, 2024; Lo, 2023; Saeidnia, 2023; Rallabandi et al., 2023; Hoffmann et al., 2018; Nah et al., 2024
2	Regulatory Challenges and Policy Development	- Imperative to address data protection legislation and regulation of AI. - Requirement to develop library-specific AI policies in reaction to bias, privacy, and ethical use. - Policymaking librarianship in the form of regulatory frameworks and librarian participation - Librarians are most valuable in developing and implementing ethical AI policies.	Bradley, 2022; Ivanović, 2024; Lo, 2023; Michalak, 2023; Saeidnia, 2023
3	Librarian Roles and Participation	- Librarians are also entrusted with the task of educating stakeholders and maintaining information ethics and privacy within library spaces.	Mannheimer et al., 2024; Michalak, 2023; Bradley, 2022
4	Applications of AI in Libraries	- AI is utilized for information search, the generation of metadata, recommendation systems, and accessibility increase. - Enhances filtering and personalization but requires ethical oversight..	Ghosh et al., 2024; Karthick et al., 2024; Joselin et al., 2024; Sivasankari et al., 2024
5	Bias in Algorithms and Countermeasures	- Algorithmic bias can promote discrimination and misinformation. - Emergency appeal for universal design, clear data collection, and algorithmic equity.	Rallabandi et al., 2023; Hoffmann et al., 2018; Nah et al., 2024; Saeidnia, 2023; Bradley, 2022; Yapo & Weiss, 2018
6	Transparency and Users' Acceptance	- AI process transparency gains users' confidence and data cooperation. - Social media sites and libraries must stress efforts to be transparent.	Asthana et al., 2024; Pavlíček, 2024; Grandinetti, 2023

7	Policy Recommendations for Libraries	- Libraries must actively develop AI policies to guard privacy, advance algorithmic justice, and enable responsible AI usage.	Lo, 2023; Bradley, 2022; Ivanović, 2024
		- Global policy comparisons yield library policy best practices.	

Table 3 presents literature review-based main themes based on the seven thematic areas. The analysis shows that current research addresses ethical issues, including algorithmic bias, data privacy, regulatory contexts, and librarians' evolving roles in AI governance. Transparency and user trust are vital elements of AI-enabled personalization for libraries. The literature on the use of AI in library social media indicates the need to explore inclusive approaches which can simultaneously promote personalization and ethical accountability.

Conclusion

This study reviewed literature that focuses on the use of AI-driven customized content on library social media platforms, with attention to ethical concerns, user adoption, and optimal practices for successful usage. The findings showed the need for AI literacy, ethical awareness, and partnership with technology producers to ensure equal, open, and privacy-conscious AI applications in library settings.

However, this study is grounded in a review of the literature and not empirical findings, and this might restrict its generalizability across various regions, cultures, and library types. The absence of evidence derived from users might restrict understanding of real-world experiences and attitudes toward personalization through AI. The use of Scopus AI may have influenced the identification of relevant literature because AI-assisted retrieval is dependent on the database coverage, query formulation, and underlying retrieval mechanisms of the platform. Consequently, relevant publications indexed in other databases may not have been identified. The study therefore treats Scopus AI as an assisting tool for literature discovery rather than as a substitute for researcher judgement. The final selection and thematic interpretation were conducted by the researchers.

Therefore, future research should employ empirical methods, including surveys, interviews, and case studies, in various library contexts to confirm and expand on these findings. Studies that compare academic, public, and special libraries would account for contextual variations in AI adoption. Studies should study the structure of AI personalization to broaden access and participation to diverse and underrepresented groups, while information equity persists. Longitudinal studies would be needed to measure user trust and acceptance changes as libraries adopt AI technologies.

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