

Exploring librarians' perceptions of ChatGPT integration in South Korean Libraries

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ABSTRACT

Generative AI technologies such as ChatGPT have attracted growing attention in library and information services due to their potential to enhance user support and operational efficiency. However, limited research has examined how librarians perceive and negotiate the adoption of ChatGPT within professional library contexts. This study explores: (i) how librarians perceive the use of ChatGPT in library services and operations; and (ii) how they evaluate the infrastructural conditions, necessary competencies, and training needs for implementing ChatGPT in library environments. Data were collected through focus group discussions with librarians from public and academic libraries in South Korea and analysed using qualitative content analysis. The findings reveal six major themes: ChatGPT adoption in libraries, application of ChatGPT to user services, utilisation of ChatGPT in library operations, implementation conditions, requirements for effective ChatGPT implementation, and future directions for ChatGPT in libraries. Participants generally viewed ChatGPT as a potentially useful tool for enhancing user services and improving work efficiency. However, they also expressed concerns regarding reliability, professional responsibility, workload, and institutional readiness. The findings further highlight the importance of information literacy, technical competencies, training, organisational support, and implementation guidelines for successful adoption. The study suggests that the integration of generative AI in libraries should be understood not merely as a technological innovation but as a professional and organisational transformation. By foregrounding librarians' perspectives, this study contributes qualitative insights into the responsible and sustainable adoption of generative AI in library environments.

Keywords: ChatGPT in libraries; Librarian perceptions; User services; Technology adoption; Generative AI.

INTRODUCTION

The emergence of ChatGPT, a large language model (LLM)-based conversational AI, has significantly influenced discussions of digital transformation in higher education and information institutions. Its capabilities in generating coherent text, responding to queries contextually, and synthesising information at scale have led to growing interest in its potential applications within academic environments (Houston & Corrado, 2023). Libraries, as central institutions for information access and literacy, are increasingly regarded as relevant contexts for AI adoption, particularly through applications such as ChatGPT that support reference, instruction, and user services at scale (Li & Coates, 2024).

Research suggests that AI-powered tools may help address certain service limitations in traditional library settings, including limited staff availability and inconsistent response quality (Vogus, 2023). In particular, the ability of ChatGPT to operate beyond standard reference hours has been discussed as a means of supporting continuous service provision for users across different time zones and disciplinary contexts (Li & Coates, 2024). Libraries, as key institutions in the provision of information, are also experiencing ongoing changes associated with the expansion of intelligent digital services such as ChatGPT. In this context, the ability to understand and apply artificial intelligence within professional practice is increasingly discussed as an important competency in contemporary information environments.

Despite these advantages, the integration of ChatGPT into library operations remains contested. Concerns include hallucinated outputs, an inability to discern emotional context, and overreliance on AI in place of human expertise. Nonetheless, librarians and researchers acknowledge its supplementary value, particularly when it is implemented with ethical safeguards and human oversight (Ramabina, 2024). Globally, surveys show uneven AI readiness among library professionals. A cross-country study (Italy, Mexico, Bangladesh, Bulgaria) found that while 68% of librarians were aware of ChatGPT, only 21% had received institutional training on AI, and formal policy adoption remains rare (Lau et al., 2024). In South Korea, "ChatGPT adoption in libraries remains in the early stage of discussion, with few active implementations or research activities" (Kim et al., 2023). Despite this growing body of international survey-based research, there remains a lack of in-depth qualitative studies that examine how librarians themselves perceive, interpret, and negotiate the adoption of ChatGPT within specific national and institutional contexts, particularly in South Korea.

Despite growing interest in the adoption of generative AI technologies such as ChatGPT in library services (Dwivedi et al., 2023; Houston & Corrado, 2023), there is still no clear understanding of how librarians perceive and interpret these technologies within their professional practice. Existing studies have largely focused on general awareness or technical feasibility, offering limited insight into librarians' lived experiences of service integration, professional responsibility, and organisational readiness (Lau et al., 2024; Ramabina, 2024). In particular, questions remain about how librarians assess the practical value of ChatGPT for user services, the challenges associated with implementation, and the competencies and infrastructural conditions required for effective use. Without addressing these issues from the perspective of practising librarians, efforts to introduce generative AI into library environments risk overlooking critical professional and institutional considerations.

This study is guided by a socio-professional perspective on technology adoption, which emphasises how professional values, institutional responsibilities, and organisational contexts shape the interpretation and use of emerging technologies (Orlikowski, 1992). In this study, librarians' perceptions are understood to encompass cognitive evaluations of ChatGPT, affective responses such as expectations and concerns, and behavioural orientations towards its use and implementation (Rosenberg & Hovland, 1960). From this perspective, the adoption of ChatGPT is seen not merely as a technical issue but as a professional and organisational process. Accordingly, this study examines how librarians perceive, evaluate, and negotiate the opportunities and challenges associated with ChatGPT within contemporary library environments.

LITERATURE REVIEW

Generative AI in the socio-professional context of libraries

ChatGPT, a generative AI based on large language models, represents a significant advancement in conversational artificial intelligence, with growing influence across both technological and social domains. Unlike traditional chatbots that rely on fixed responses, ChatGPT generates context-aware and adaptive outputs based on user input, enabling more dynamic human–computer interaction (Abankwa, 2023; Nath et al., 2024; García-Alonso et al., 2024). These capabilities have been discussed in relation to digital learning, communication, and information services, highlighting its potential relevance in library settings. Libraries, in particular, require information professionals to mediate between automated systems and users while ensuring accuracy, accountability, and trust, making the adoption of tools such as ChatGPT a critical area of inquiry.

ChatGPT is based on large language models (LLMs) trained on extensive text data to capture linguistic patterns and semantic relationships. Through fine-tuning, these models generate context-sensitive and coherent responses aligned with user intent. As a result, ChatGPT has been applied in knowledge-intensive domains such as education, healthcare, and research communication (Kalyan, 2024; Ju et al., 2023; Han, 2023). In library settings, these capabilities raise important questions about how librarians interpret, evaluate, and supervise AI-generated information within professional service contexts.

ChatGPT's generative capabilities enable it to produce diverse forms of content, including essays, summaries, and technical explanations, based on user input. This has enhanced productivity and supported cognitive and creative tasks across domains such as education, journalism, and business communication (Pérez-Núñez, 2023; Yigci et al., 2025). Recent studies further highlight its role in addressing information needs and supporting user-driven content creation, while also raising expectations and concerns regarding its use in learning environments (Na & Lee, 2024; Wen et al., 2025). In library contexts, these developments suggest potential transformations in reference services and instructional support, prompting librarians to reconsider their roles in guiding, contextualising, and evaluating AI-generated content.

ChatGPT's versatility has driven its adoption across public and private sectors, supporting multilingual communication, domain-specific applications, and integration with digital systems. It has been used in areas such as education, business communication, and customer service to automate tasks and enhance efficiency (Cotton et al., 2024; Dwivedi et al., 2023).

Despite the growing body of literature on the technical capabilities and societal implications of generative AI, relatively little attention has been paid to how librarians themselves perceive and negotiate the integration of such technologies within everyday professional practice. In particular, there is a lack of qualitative research examining librarians' interpretations of generative AI in relation to service responsibility, workload, and institutional readiness. This gap underpins the present qualitative study, which foregrounds librarians' voices and professional perspectives in discussions of generative AI adoption in libraries.

ChatGPT in library

Despite the growing literature on generative AI, limited empirical attention has been paid to how librarians perceive and engage with ChatGPT in professional practice. In particular, qualitative insights into librarians' interpretations of generative AI in relation to service responsibility, workload, and institutional readiness remain scarce. ChatGPT, as a context-aware conversational AI, has been increasingly adopted across sectors because of its ability

to generate human-like responses and support personalised interaction (Ramabina, 2024; Yigci et al., 2025).

In library contexts, its potential applications have stimulated renewed interest in AI-driven service innovation, particularly in areas such as reference services, information literacy instruction, and content creation. Recent conceptual discussions further suggest that ChatGPT may transform a broader range of library functions, including search and discovery, cataloguing, metadata generation, and content development. At the same time, scholars have highlighted concerns regarding privacy, algorithmic bias, and ethical responsibility that must be addressed for its effective and responsible implementation in library settings (Lund & Wang, 2023).

Existing studies on AI in libraries highlight benefits such as enhanced service accessibility, personalisation, and operational efficiency, while also emphasising risks related to bias, privacy, and ethical responsibility (Sugiono, 2021; Adetayo et al., 2025; Lund & Wang, 2023). Research further suggests that ChatGPT can improve response quality in reference services and support various academic and information tasks, although professional mediation remains essential.

Recent studies also indicate a gap between growing awareness of generative AI and limited institutional readiness, including insufficient policies, training, and implementation strategies (Lau et al., 2024). A recent systematic review further identified funding constraints, staff training needs, and institutional support as major barriers to AI adoption in academic libraries, highlighting the importance of organisational readiness alongside technological development (Ayinde et al., 2026). In the South Korean context, research remains at an early stage, with emerging evidence suggesting potential applications in education, user services, and library operations (Kim et al., 2023).

Taken together, the literature suggests that while ChatGPT holds significant potential for transforming library services, its integration requires careful consideration of ethical, professional, and institutional factors. However, empirical research on librarians' perceptions and experiences remains limited. This study addresses this gap by examining how librarians in South Korea interpret and respond to the adoption of ChatGPT in real-world library contexts.

METHODS

This study aims to examine librarians' perceptions of adopting ChatGPT in library services. Specifically, it has two objectives: (i) to explore librarians' perceptions of the use of ChatGPT in user services and practical library operations, and (ii) to examine their views on the infrastructural conditions, competencies, and training needs required for its implementation. The interview domains were informed by prior studies on librarians' attitudes towards emerging technologies (Kwon & Koo, 2020), but they were not used as predetermined coding categories. The final themes were developed inductively from the coded data.

A qualitative approach was employed using Focus Group Discussions (FGDs) with practising librarians from public and academic libraries in South Korea. The interview questions were designed to align with the research questions, with items addressing perceptions of ChatGPT use corresponding to RO1, and those related to infrastructure, competencies, and implementation conditions corresponding to RO2 (see Appendix 1). Consistent with the socio-professional perspective, the research questions and interview guide focused on

librarians' professional practice, their perceptions of opportunities and concerns, and the organisational conditions required for ChatGPT implementation. The coding remained inductive, with the framework used primarily to guide the interpretation of the resulting themes.

Participants were recruited through purposive and snowball sampling. Initial participants were contacted via professional networks, and additional participants were recruited through referrals. A total of nine librarians participated in the study. To support more intensive and interactive dialogue, participants were divided into three small groups (three participants per group), and three separate FGD were conducted.

The discussions were held between 24 April and 6 May 2023 via online video conferencing. Each session lasted approximately 60 to 90 minutes. Details of the participants are provided in Table 1. The final sample comprised six public and three academic librarians; this distribution reflected participant availability and the purposive and snowball recruitment process rather than a predetermined quota (see Table 1). Information on participants' specific job roles or positions and highest educational qualifications was not collected as part of the study records and therefore could not be reported in Table 1.

Table 1: Participant demographics

ID	Gender	Years of experience	Library type	FGD group
A	F	20	Public	Group 1
B	M	4	Public	Group 1
C	M	4	Public	Group 1
D	F	9	Public	Group 2
E	F	25	Public	Group 2
F	M	10	Academic	Group 2
G	M	1	Academic	Group 3
H	M	3	Academic	Group 3
I	M	15	Public	Group 3

The discussion topics included general perceptions of ChatGPT, anticipated benefits and limitations, implementation challenges, required competencies, and infrastructural needs. The interview protocol was adapted from Kim et al. (2023) and refined for the context of the present study. All sessions were audio-recorded and transcribed. The researcher reviewed and corrected the transcripts to ensure accuracy. Data were analysed manually using inductive qualitative content analysis (Elo & Kyngäs, 2008). Meaning units relevant to the research questions were identified and coded; similar codes were grouped into sub-themes, and related sub-themes were synthesised into six overarching themes. No qualitative analysis software was used. The author conducted the coding, while three experts in library and information science reviewed the coding structure, theme development, and interpretive coherence and suggested refinements. This study involved adult participants and posed minimal risk. Informed consent was obtained from all participants, and confidentiality and anonymity were strictly maintained.

RESULTS

Based on the qualitative analysis, six major themes, 12 sub-themes, and 41 codes were identified. Table 2 summarises the thematic structure derived from the FGD data.

RO1: Librarians' perceptions of ChatGPT use in user services and library operations

Table 2 summarises librarians' perceptions of ChatGPT adoption, its potential applications in user services and library operations, and the anticipated benefits and limitations.

Table 2: Librarians' perceptions of ChatGPT adoption in user services and library operations

Theme	Sub-Themes	Codes
ChatGPT adoption in libraries	Feasibility of using ChatGPT in libraries	Positive perceptions of ChatGPT
		Concerns about the use of ChatGPT
		Possibility of using ChatGPT
		Passive and tentative experience
Application of ChatGPT to user services	Expected user services	Emerging technology Education Services
		Use in cultural programming
		Library user instruction services
		Subject-specific services
	Concerns about anticipated limitations and issues	Concerns over librarian workload burden
		Concerns about bias by language or prompt
		Effectiveness of using ChatGPT
		Ethical concerns about ChatGPT
		Lack of user interest in ChatGPT
		Issues with users using ChatGPT
		Widening of the digital divide
Utilisation of ChatGPT in library operations	Expectation of overall improvement in library operational efficiency	Simplification of tasks
		Centralized system management in libraries
	Expectations for efficient collection management tasks	Selection of requested books
		Cataloguing tasks
	Anticipated limitations and problems	Accuracy issues of ChatGPT
		Maintenance and management issues of ChatGPT
		Justification for using ChatGPT
		Environmental issues in public libraries

1) ChatGPT adoption in libraries

Feasibility of using ChatGPT in libraries

Librarians expressed both positive expectations and concerns regarding the use of ChatGPT. Participants highlighted its ability to generate diverse, context-aware responses, viewing it as a useful, flexible tool that can be naturally integrated into existing library workflows. Rather than perceiving it as a disruptive innovation, many regarded ChatGPT as an extension of ongoing technological developments in libraries.

At the same time, concerns were raised about its reliability and broader implications. Participants questioned the accuracy of its outputs and expressed unease about the evolving nature of AI, particularly its potential influence on users' thinking and decision-making. These mixed perceptions reflect an early stage of adoption, characterised by cautious optimism and underlying apprehension.

"ChatGPT does not stick to a fixed perspective. When I ask the same question, it gives me multiple types of responses – from different angles. It feels like it is actually thinking. I was not necessarily looking for a particular answer, but it made me feel like the system was genuinely considering various possibilities" – Librarian E

"One of the things digital experts often warn about is how easily our thinking can be misled. I sometimes wonder – if ChatGPT really 'wanted to', could it manipulate us? Even though it does not have a physical form, it feels like it could become a kind of monster that controls human consciousness" – Librarian E

Librarians recognised the potential value of ChatGPT in library contexts, particularly for user-facing services. Participants noted that its ability to provide natural, conversational responses aligns well with service-oriented functions such as user guidance and information curation. Some also highlighted its potential to improve efficiency in daily tasks. However, actual use remains tentative. While participants acknowledged its usefulness, their engagement with ChatGPT was largely exploratory rather than fully integrated into library workflows. This cautious approach was shaped by uncertainty regarding professional responsibility, institutional expectations, and the absence of clear guidelines.

"In terms of services offered to library users, we could definitely provide something like curation through ChatGPT. Right now, I am actually thinking about how to teach students to use it. I am interested, and it has definitely made my work easier. But I am still figuring out how to effectively connect it to user-facing services" – Librarian F

"If you think about the technology behind ChatGPT, it is clearly something that libraries need. Considering user enquiries and services, the ability to offer natural, conversational responses makes it seem like ChatGPT could be integrated immediately – it is that necessary" – Librarian G

2) Application of ChatGPT to user services

a. Expected user services

Librarians identified several potential areas for applying ChatGPT in user services, including educational programmes, cultural activities, user instruction, and subject-specific support. In public libraries, ChatGPT was primarily used in introductory educational programmes, often delivered as short, one-off sessions focused on basic understanding. Participants emphasised the importance of extending such programmes to older adults to help address the digital divide.

Librarians also suggested that ChatGPT could be incorporated into cultural programming, particularly for idea generation and content development, although its current limitations restrict more advanced creative applications. In user instruction services, ChatGPT was viewed as a useful supplementary tool – especially for basic guidance and chatbot-based interactions – but not as a replacement for librarian-led instruction, due to concerns about accuracy and user trust.

In academic library contexts, participants noted its potential for subject-specific support, where ChatGPT could assist in providing information across diverse disciplines. However, in public libraries, its role was seen as more general and inclusive rather than highly specialised.

"We ran a ChatGPT programme as an introduction to new technology... it ended up being more of an overview" – Librarian C

"ChatGPT could be used like a chatbot for basic user education or FAQs... but for now, it can only be a supplementary tool" – Librarian D

"In specialised subject areas, I think ChatGPT could be a helpful assistant" – Librarian H

b. Concerns about anticipated limitations and issues

Librarians raised a range of concerns regarding the use of ChatGPT in library contexts, particularly in relation to reliability, workload, and broader ethical and social implications. A primary issue was the additional workload required to verify AI-generated information. Participants noted that the need for fact-checking and correcting inaccurate outputs could increase, rather than reduce, the operational burden.

Concerns about reliability and trust were also prominent. Librarians emphasised that the probabilistic nature of ChatGPT's responses makes it difficult to ensure accuracy in user services, raising issues of accountability and potential declines in user satisfaction.

Ethical concerns were similarly highlighted, particularly regarding misinformation, authorship, and the responsible use of AI-generated content. Participants further identified challenges related to user behaviour and accessibility. Some noted that low levels of digital literacy and limited user interest – especially among older populations – could hinder the effective adoption of ChatGPT. Others warned that over-reliance on AI may reduce critical evaluation of information and potentially widen the digital divide between users with differing levels of technological competence.

“Because we have to review what ChatGPT answers, it might end up requiring even more effort” – Librarian D

“If ChatGPT provides false information, who is responsible? That ambiguity will definitely become a problem” – Librarian G

“ChatGPT can be a great support tool, but it also makes you realise the growing gap between those who know how to use it well and those who do not” – Librarian F

3) Utilisation of ChatGPT in library operations

a. Expectations of overall improvement in library operational efficiency

Librarians identified ChatGPT's potential to support practical library operations, particularly by simplifying routine tasks and improving efficiency. Participants noted that the tool could assist in organising information, summarising online resources, and preparing documents such as reports or promotional content. These functions were primarily viewed as supportive, helping to reduce routine cognitive labour while still requiring human oversight to ensure accuracy.

Some participants also anticipated the possibility of integrating ChatGPT into centralised library management systems. They suggested that a shared AI-based system could improve consistency in responding to user enquiries and enhance information management across institutions. However, such implementation would require institutional collaboration, standardised data, and clear governance structures.

“I think ChatGPT might be helpful for organising materials or compiling reports. It could be useful for collecting and structuring information” – Librarian C

“If we had a shared system based on ChatGPT, it could answer queries across libraries, but it would require formal agreements and a large dataset” – Librarian G

b. Expectations for efficient collection management

Librarians noted that ChatGPT could support collection management and cataloguing tasks by helping to identify duplicate acquisitions, suggesting alternative titles, and detecting errors in manually processed records. They saw such functions as particularly useful for improving efficiency and accuracy in routine technical work, especially in cases involving foreign-language materials or complex subject classification. However, participants

emphasised the need to understand the underlying selection criteria and ensure reliability before practical adoption.

"We sometimes end up buying the same book twice. ChatGPT could help filter those and even recommend similar books, though we'd have to understand how it makes its choices"
– Librarian H

"Cataloguing is all manual here, so mistakes happen. If ChatGPT could catch those errors and provide information about original texts for foreign books, or help classify difficult subjects, it would be a big help" – Librarian

c. Anticipated limitations and concerns

Librarians raised concerns about the practical limitations of using ChatGPT in library operations. A key issue was its insufficient accuracy for official tasks, which require accountability and may involve high-stakes decisions. Participants noted that errors – such as generating incorrect or non-existent information – could increase verification work and reduce trust in its outputs.

Institutional factors were also identified as important constraints. Differences in funding and support across libraries could lead to inconsistent implementation and unequal service quality. In addition, some librarians questioned the necessity of adopting ChatGPT at its current stage, viewing it as a supplementary tool rather than a core system because of ongoing reliability concerns. Organisational conditions, such as staff turnover in public libraries, were also seen as potential barriers to sustainable integration.

"ChatGPT is not accurate enough yet... it is only useful for quick reference, not for real tasks that require responsibility" – Librarian B

"Each institution supports its library differently... if ChatGPT is introduced, these differences could create problems" – Librarian H

Taken together, the findings in this section address the first research question by showing how librarians assess the practical feasibility, limitations, and institutional conditions required for implementing ChatGPT in library operations. While participants recognised the potential of ChatGPT to support task simplification, collection management, and system-level efficiency, they consistently emphasised that such benefits are contingent on accuracy, accountability, and sustainable management structures. Concerns related to data reliability, system maintenance, organisational inequality, and staff turnover indicate that operational adoption of generative AI cannot be approached as a purely technical solution. Rather, librarians conceptualised ChatGPT implementation as an organisational and governance issue that requires clear justification, institutional coordination, and long-term professional continuity.

RO2: Evaluating infrastructural conditions, necessary competencies, and training needs for implementing ChatGPT in library environments

Table 3 presents librarians' perceptions of the competencies, infrastructural requirements, implementation conditions, and future expectations associated with ChatGPT adoption in libraries.

Table 3: Librarians' evaluations of conditions, competencies, and training needs for ChatGPT implementation

Theme	Sub-themes	Codes
Implementation conditions	Need for appropriate external support	Budget Devices Personnel Promotion
	Efforts within the library sector	Need for research and guidelines Need for improvement of the library's internal environment
Requirements for effective ChatGPT implementation	Competencies required	Information literacy skills Technical competencies Justification for librarian training Need for librarian workshops
	Supportive infrastructure	Need for education on how to use ChatGPT Need for a supportive learning environment for librarians
Future considerations for ChatGPT implementation	Expected direction of ChatGPT utilization	Need for integrated services with ChatGPT Improving reliability and accuracy of ChatGPT's responses Need for Korean language support in ChatGPT Need for personal information protection features in ChatGPT
		Professional implications of ChatGPT adoption Changing roles of librarians Awareness of ChatGPT among librarians

1) Implementation conditions

a. Need for appropriate external support

Librarians emphasised that the successful adoption of ChatGPT in libraries depends on sufficient institutional resources and support. A primary concern was the lack of stable funding, particularly in public libraries, where limited budgets constrain the introduction and maintenance of new technologies. Participants noted that implementation would involve various costs, including subscriptions, device procurement, system maintenance and staff training. They also highlighted the need for appropriate technological infrastructure. While current access to ChatGPT largely relies on users' personal devices, increasing demand may require libraries to provide dedicated equipment and facilities to support AI-based services.

In addition, librarians stressed the importance of securing adequate personnel to monitor and verify AI-generated outputs, particularly during the early stages of implementation. Some participants suggested that long-term sustainability may depend on centralised management structures or support from national-level institutions. Finally, promotion was considered an essential condition for successful adoption. Participants emphasised that

users must be informed about the availability and value of ChatGPT-based services to encourage awareness, acceptance and continued use.

"We need a proper budget... subscriptions, equipment, maintenance, training – everything costs money" – Librarian D

"Right now, users rely on their own devices, but if demand grows, libraries may need to provide dedicated equipment" – Librarian D

"Smaller or school libraries often have just one person managing everything... realistically, national institutions should handle this kind of service" – Librarian G

b. Efforts within the library sector

Librarians emphasised the need for research and formal guidelines to support the use of ChatGPT in library contexts. In the absence of clear protocols, participants expressed hesitation about integrating the technology into their workflows. Research was viewed as a means of improving understanding of ChatGPT's capabilities and limitations, while guidelines were considered essential for providing practical direction, particularly for frontline staff.

The findings also highlighted the importance of organisational readiness. Beyond individual competencies, successful implementation was seen to depend on institutional structures, including updated systems, supportive policies, and a willingness to adopt new technologies. Some noted that, despite growing interest in AI, libraries have been slow to incorporate it into formal service strategies because of uncertainty and resistance to change.

"More research would increase our chances of understanding and utilising this technology" – Librarian C

"For frontline staff, clear guidelines are absolutely necessary" – Librarian E

"We need organisational readiness and updated systems to support new technologies" – Librarian D

2) Requirements for effective ChatGPT implementation

a. Competencies required

Librarians emphasised the importance of developing both information literacy and technical competencies to use ChatGPT effectively in library services. Participants noted that librarians must go beyond basic information provision by critically evaluating the accuracy, reliability, and relevance of AI-generated content. In particular, questioning and search formulation skills were identified as essential, as the quality of ChatGPT's outputs depends heavily on the input provided.

In addition to these cognitive skills, librarians highlighted the need for technical proficiency in understanding and operating AI tools. Participants expressed a shared expectation that adapting to emerging technologies is an inherent part of professional responsibility, requiring continuous learning and skill development.

"We need media and digital literacy to judge the reliability of what a chatbot says. Librarians must be able to verify the truthfulness of the data" – Librarian H

"ChatGPT is just a tool – for now. But using it effectively starts with knowing how to ask the right questions" – Librarian E

“During training, no one asks about our current skill level. If a skill is necessary, we are expected to learn it – no questions asked. If a service is essential to the library, then we have an obligation to master it” – Librarian G

b. Supportive infrastructure

Librarians emphasised the need for structured training and continuous professional development to use ChatGPT effectively in library services. Participants noted that training should not only cover basic operational skills but also deepen understanding of the tool’s capabilities and limitations. Given differences in learning capacity, tailored approaches were considered necessary to ensure effective knowledge transfer.

Beyond initial training, librarians highlighted the importance of sustainable learning systems, including ongoing education, workshops, and collaborative study environments. Participants stressed that continuous learning is essential for adapting to rapidly evolving technologies and integrating them into professional practice.

“I always tailor the lessons; people absorb things differently, so the training has to reflect that” – Librarian G

“The first thing to teach is how to use it; once librarians can use the tool, they can apply it effectively” – Librarian C

“That kind of collaborative study model is definitely needed” – Librarian D

3) Future considerations for ChatGPT implementation

a. Expected direction of ChatGPT utilization

Librarians emphasised the need for further development of ChatGPT to support its effective integration into library services. Participants highlighted the importance of enhancing system functionality through integration with other technologies, such as voice recognition and image-based services, to improve usability and user interaction.

However, the most critical requirement identified was the improvement of reliability and accuracy. Librarians stressed that, regardless of multimodal capabilities, the value of ChatGPT depends fundamentally on the quality and trustworthiness of the information it provides.

Participants also pointed to the need for localisation and ethical safeguards. In particular, improvements in Korean language processing were considered essential for effective communication with users. Additionally, concerns were raised about data privacy, with librarians emphasising the need for clear policies regarding data storage, usage, and protection.

“I hope ChatGPT will integrate more features... if it becomes more expansive, it could take root in library services” – Librarian D

“If the information is incorrect, the entire service loses its value” – Librarian G

“There must be clear discussions about how data is stored and how secure it is” – Librarian H

b. Professional implications of ChatGPT adoption

Librarians generally agreed that ChatGPT is unlikely to replace their professional roles because of its current limitations in reliability and accountability. Instead, participants emphasised that human intervention remains essential, particularly in ensuring the accuracy and trustworthiness of information.

At the same time, librarians recognised that the adoption of ChatGPT would lead to changes in their roles. As library services expand beyond traditional information provision, the responsibilities of librarians are expected to evolve accordingly. Rather than diminishing their roles, ChatGPT was viewed as a catalyst for transformation, creating opportunities for librarians to engage in more advanced, service-oriented functions.

"People who think ChatGPT will make librarians obsolete probably haven't really used it... the role of the librarian won't diminish" – Librarian G

"Libraries are no longer just about lending materials... our roles will need to expand as services evolve" – Librarian C

"I think it's not a reduction in role, but a transformation" – Librarian D

DISCUSSION

Interpreted through the socio-professional lens adopted in this study, the findings illustrate how librarians' perceptions – encompassing cognitive appraisals of utility, affective responses such as expectations and concerns, and behavioural orientations towards use and implementation – are negotiated within their professional and institutional contexts. This study examined South Korean librarians' perceptions of ChatGPT adoption in library services, focusing on how generative AI is interpreted and negotiated within these contexts. The findings reveal an inherently ambivalent stance, characterised by the coexistence of optimism about ChatGPT's potential and concern about its implications for professional responsibility, workload, and service quality. When aligned with the research questions, this ambivalence can be interpreted as a structural response to the introduction of generative AI into a domain governed by strong epistemic norms.

While participants acknowledged its utility in enhancing efficiency and supporting user services, they consistently emphasised its limitations in reliability and accountability. This pattern aligns with recent international research highlighting cautious acceptance of generative AI in knowledge-intensive professions (Lau et al., 2024; Ramabina, 2024). Similarly, Patra et al. (2025) found that library professionals generally expressed positive attitudes towards the integration of ChatGPT in library services while simultaneously raising concerns regarding privacy, ethics, and implementation challenges. These findings are also consistent with Kim et al. (2023), who identified potential applications of ChatGPT in Korean school libraries, including reading education, personalised book recommendations, curriculum collaboration, and acquisition-related tasks. The present study adds to this literature by showing that expectations of practical utility are closely accompanied by concerns about reliability, professional accountability, and the additional verification work required to ensure the accuracy of AI-generated information.

Participants also anticipated that future library applications of ChatGPT will increasingly depend on integration with complementary technologies, including multimodal interfaces and library information systems. However, librarians consistently emphasised that technological expansion alone is insufficient unless accompanied by improvements in the reliability and accuracy of AI-generated information. This finding suggests that future development priorities in library settings should focus not only on expanding functionality but also on strengthening the trustworthiness of AI-supported services.

These ongoing concerns regarding reliability and accountability point to a deeper structural tension. Libraries operate within an epistemic framework grounded in verification, authority, and accountability, whereas generative AI systems produce probabilistic outputs that are not inherently reliable. The coexistence of these two logics – verification-based

knowledge systems and probability-based AI generation – creates a fundamental incompatibility that cannot be resolved through technical improvement alone. Instead, it requires institutional negotiation, including the development of governance mechanisms, ethical standards, and professional guidelines.

The issue of workload further reinforces this interpretation. Contrary to the dominant narrative that AI reduces labour, participants frequently described ChatGPT as generating additional work through the need for verification, contextual adaptation, and ethical oversight. In the present study, this additional verification and oversight work can be understood as a less visible form of professional labour generated by AI adoption. Importantly, this burden appears to be structurally produced: in the absence of institutional frameworks, the responsibility for managing AI outputs is shifted onto individual librarians. Thus, workload concerns should be understood not as a failure of the technology itself but as a consequence of incomplete organisational integration. This finding also suggests that libraries may need to clarify how responsibility for monitoring and verifying AI-generated outputs is allocated within librarians' existing work roles.

In relation to RO2, the findings underscore the importance of institutional context in shaping ChatGPT implementation. Participants emphasised that successful adoption depends on organisational resources, infrastructure, training, guidelines, and institutional support. These findings suggest that ChatGPT implementation should be adapted to the specific conditions of individual libraries rather than treated as a uniform process. The findings also point to a broader transformation of professional roles. Librarians did not perceive ChatGPT as a replacement but rather as a catalyst for redefining professional practice. The increasing importance of competencies such as critical evaluation of AI outputs, prompt formulation, and ethical decision-making indicates a shift towards more interpretive and supervisory roles. From this perspective, generative AI does not diminish librarianship but reshapes it, elevating the importance of human judgement and contextual interpretation.

Furthermore, the findings clarify several practical directions for future ChatGPT use in libraries. Participants emphasised the need for improved Korean language support, greater reliability and accuracy of responses, and stronger personal information protection. These findings suggest that future implementation should pay close attention not only to system functionality but also to language performance, information reliability, and clear policies regarding data storage and security. Finally, the study highlights that the successful integration of ChatGPT depends less on technological sophistication than on institutional readiness. While recent advancements have improved system capabilities, fundamental concerns regarding trust, accuracy, and accountability remain unresolved. This suggests that technical development alone is insufficient. Instead, effective adoption requires the establishment of clear guidelines, sustainable training systems, and participatory governance structures that actively involve librarians in shaping how AI is used in practice.

Taken together, these findings suggest that the adoption of ChatGPT in libraries should be understood not as a simple technological transition but as a process of institutional and professional transformation. By foregrounding the socio-professional dimensions of AI adoption, this study contributes to the growing body of research on generative AI in library and information science, offering context-sensitive insights into its implementation in the Korean setting.

CONCLUSIONS

This study examined librarians' perceptions of adopting ChatGPT in library services through FGDs with public and academic librarians in South Korea. The findings show that librarians hold ambivalent attitudes towards generative AI, simultaneously recognising its potential to enhance service efficiency and user engagement while expressing concerns about reliability,

professional responsibility, and increased workload. The findings also indicate that institutional conditions, including available resources, training opportunities, and service priorities, may shape how ChatGPT is implemented. Accordingly, generative AI integration should be adapted to the specific context of each library rather than applied uniformly across institutions. The study also underscores the importance of AI literacy, organisational support, and clear institutional guidelines. Librarians emphasised that the effective use of ChatGPT requires not only technical competencies but also critical evaluation skills and ethical judgement. Without appropriate infrastructure, training, and policy frameworks, AI tools risk increasing professional burdens rather than alleviating them.

Several limitations should be acknowledged. This study is based on three FGDs conducted in the first half of 2023 with a relatively small sample of nine librarians, including only three academic librarians. In addition, the coding was conducted by a single researcher, although three experts in library and information science reviewed the coding structure and interpretations. Because generative AI has developed rapidly since the data were collected, the findings should be interpreted in relation to the technological and institutional context of 2023. Future research should expand the scope to include larger and more diverse samples, longitudinal designs, additional stakeholder perspectives, and comparative studies across different library and national contexts.

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CONFLICT INTEREST

The author declares that they have no competing interests.

ETHICAL APPROVAL AND INFORMED CONSENT STATEMENTS

This study involved adult professionals participating in low-risk qualitative discussions. No formal IRB review or institutional exemption determination was obtained for this study. Before data collection, all participants were fully informed of the study's purpose, procedures, voluntary nature, and the audio recording of the focus group discussions. Informed consent, including explicit permission for audio recording, was obtained from all participants before data collection, and confidentiality and anonymity were strictly maintained throughout the research process.

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Appendix 1: Interview guide

Research questions	Interview questions
RQ1. How do librarians perceive the use of ChatGPT for user services and practical library operations?	What are your overall perceptions of introducing ChatGPT in libraries? Do you think ChatGPT can be used effectively in library services? Why or why not? In which library user services could ChatGPT be applied? What benefits do you expect from using ChatGPT in user services? What concerns or limitations do you anticipate regarding the use of ChatGPT in library services? How could ChatGPT be used in practical library operations and management tasks? What benefits and challenges do you foresee in applying ChatGPT to collection management, cataloguing, and administrative work? How do you think ChatGPT will affect the future role of librarians effectively?
RQ2. How do librarians evaluate the infrastructural conditions, necessary competencies, and training needs for implementing ChatGPT in library environments?	What competencies should librarians possess to use ChatGPT? What kinds of education or training are needed for librarians? What organisational, technical, and financial support would be necessary for implementation? What policies, guidelines, or institutional preparations should be established before adopting ChatGPT? What improvements would you like to see in future versions of ChatGPT? What conditions are necessary for the responsible and sustainable use of ChatGPT in libraries?