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# Mapping the evidence-based landscape in Chinese library and information science: a mixed-methods assessment

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## Abstract

**Introduction.** This study systematically explores the thematic distribution, evolutionary trajectory, and future directions of evidence-based research in the Library and Information Science (LIS) discipline in China.

**Method.** A mixed-method design was employed, combining quantitative and qualitative approaches. Data were collected from 18 core CSSCI LIS journals (1999–2025). Methods included word frequency analysis, LDA topic modelling, and qualitative content analysis, with independent coding by two researchers to ensure reliability.

**Analysis.** Thematic and evolutionary analysis was conducted using LDA topic modelling at an optimal  $k=9$ , evaluated through perplexity and coherence metrics. Content analysis was performed to identify application dimensions of evidence-based systems in LIS research.

**Results.** The study identifies nine major research topics and reveals a clear shift from traditional, resource-centered themes to strategic, intelligence-aided, and application-oriented research. Evidence-based systems function through five key dimensions: perspective introduction, theoretical support, methodological innovation, diverse evidence integration and expansion of application scenarios.

**Conclusion.** Evidence-based research in Chinese LIS has evolved significantly, showing strong local adaptation and interdisciplinary integration. To enhance future development, it is essential to develop a more comprehensive understanding of evidence-based research, give higher-level attention to evidence-based research, and explore wider horizons and application spaces for its implementation.

## Introduction

Originating in medicine, evidence-based science emphasizes the prudent, precise, and judicious application of the best available research evidence to guide treatment decisions (Sackett et al. 1996), thus improving clinical outcomes. As evidence-based research and practice have advanced, their scope has extended beyond medical paradigms to encompass education, law, economics, library and information science and other fields. It has thus evolved into a shared methodological framework and guiding principle across multidisciplinary research, education, and practice.

Within China's LIS discipline, the advancement of evidence-based research has driven a paradigm shift toward evidence-centered approaches. By grounding scientific inquiry in credible and verifiable evidence, this shift enhances the responsible realization of the academic value of research outcomes, thereby supporting both practical problem-solving and disciplinary innovation. At present, evidence-based concepts and methodologies are widely applied across multiple domains, including knowledge organization, information retrieval, and both library theory and practice. As the research paradigm shifts from data-intensive to AI-enabled approaches, the production, evaluation, and application of evidence in LIS research reveal emerging trajectories toward intelligent development.

Reviewing and reflecting upon evidence-based research within China's LIS discipline serves multiple purposes. It helps illuminate the evolutionary logic of disciplinary thinking and advances the practice of responsible science. It also enhances the international community's understanding of the current state of LIS research in China. Therefore, this paper takes evidence-based research in China's LIS discipline as its focal point, with the aim of constructing a systematic analytical framework. First, it outlines the overall landscape and historical evolution of evidence-based research at the macro level in order to identify its primary characteristics. Second, it turns to specific research practices, examining the functional roles and value realization of the evidence-based science system in scholarly work. Building on this foundation, this paper outlines potential future directions aimed at enhancing the quality of evidence-based research within China's LIS discipline.

## Literature review

### Advancements and trends in evidence-based research in the global LIS field

Evidence-based librarianship (EBL), advocates using empirical data and scientific evidence to improve library decision-making and knowledge services. Initially influenced by medical library practices, EBL research explored how medical librarians supported clinicians through decision support and methodological guidance, extending their role beyond literature retrieval to include research design, quality assessment, and critical appraisal (Scherrer & Dorsch, 1999). At the practical level, EBLIP manifests in two main areas. First, it guides internal library management and service optimization, such as evidence-driven collection development and user needs surveys (Carlsson & Torngren, 2020; Tran & Guo, 2021). Second, it expands the scope of professional library services, exemplified by interdisciplinary systematic review support (Kallaher et al., 2020).

The evidence-based paradigm demonstrates strong methodological innovation in contemporary international LIS research. In Responsible Research and Innovation (RRI) assessment, evidence-based methods offer empirical foundations for understanding global research data management practices (Chen et al., 2023). In response to rapidly expanding data volumes, the international LIS community is exploring AI-enabled evidence-based practice (Cox & Mazumdar, 2024). Artificial intelligence is applied to literature retrieval to create dynamic systematic literature reviews (SLRs). At the same time, librarians are shifting toward roles such as database selection, tool training, and license agreement interpretation (Grbin et al., 2022).

## Introduction and application of evidence-based science in China's LIS discipline

In 1999, the *Journal of Sichuan Library Science* published an article titled 'information research methods in evidence-based medicine' (Wu & Li, 1999), which examined information sources, retrieval methods, and strategies for organizing, processing, and storing information in evidence-based medical research. Since then, the framework of evidence-based science has gradually permeated multiple research directions within China's LIS discipline. Among these, EBL (Zhang & Yong, 2023) emerged as an early and systematically developed branch, becoming a representative example of evidence-based research in LIS. Recent research has systematically reviewed the historical development (Wang et al., 2016) and theoretical framework (Li et al., 2023) of evidence-based librarianship both domestically and internationally. Nevertheless, discussions focusing specifically on the progress of evidence-based research within the LIS discipline remain limited (Yu & Qu, 2018).

## Application of mixed-methods research in LIS

In the late 20th century, J. Greene and colleagues provided a theoretical synthesis of the emerging practice of using qualitative and quantitative methods simultaneously, formally introducing the concept of mixed methods. As this approach gained recognition as a distinct research paradigm, the dedicated journal of mixed methods research was launched in 2007. Mixed methods research designs primarily include the convergent design, the explanatory sequential design, and the exploratory sequential design (Creswell & Clark, 2017). In terms of application purposes, it mainly serves five dimensions: triangulation, complementarity, development, initiation, and expansion (Greene et al., 1989). Furthermore, it can be examined based on the degree of method integration, temporal orientation (concurrent/sequential), and methodological emphasis (Leech & Onwuegbuzie, 2009). The application of mixed methods research within the LIS discipline is deepening, which can yield more comprehensive findings. A review of its use in LIS reveals primary application across three stages: research design, data collection, and results analysis (Fidel, 2008).

## Method

### Data source and processing

To reveal the development and impact of LIS evidence-based research in China, this study selected 18 core journals listed under the 'library, information, and documentation' category in the CSSCI (2023–2024) journal directory. Specifically, the journals archives science study and archives science from the field of archival science have not been included within the scope of this research. These core journals are recognized as influential platforms with high academic credibility and normative research practices, which helps ensure the quality and scientific rigor of the analysis.

Using 'evidence-based' or 'evidence' as search keywords, and limiting the publication period from 1999 to 2025, a total of 381 initial records were retrieved. Call for papers, conference news, and editorials were excluded based on relevance criteria; duplicate records were also removed. 306 articles closely related to evidence-based research were identified as the final sample dataset for subsequent content analysis. The research design of the combination of quantitative analysis and qualitative content annotation is shown in Figure 1.

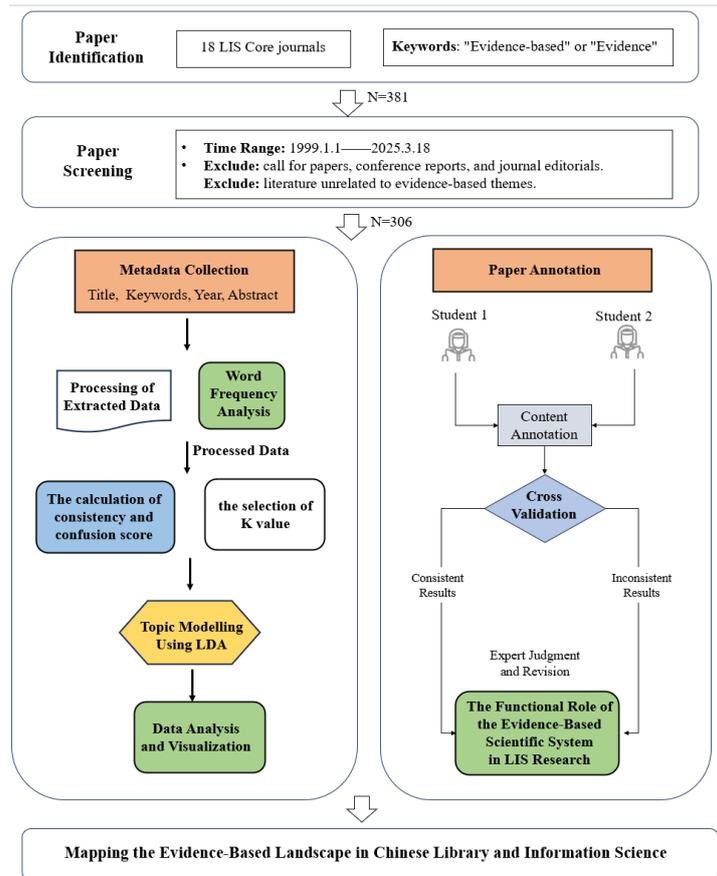


Figure 1. Research design

## Quantitative text analysis

Firstly, word frequency analysis was used to visualize the occurrence of terms related to ‘*evidence-based+*’ research. This helped identify research hotspots and general trends in the field of LIS in China. Then, LDA topic model (Jelodar et al., 2019) was applied to map the distribution of research topics and identify core research areas. Through topic evolution analysis, the developmental paths and trends of different topics over time were tracked.

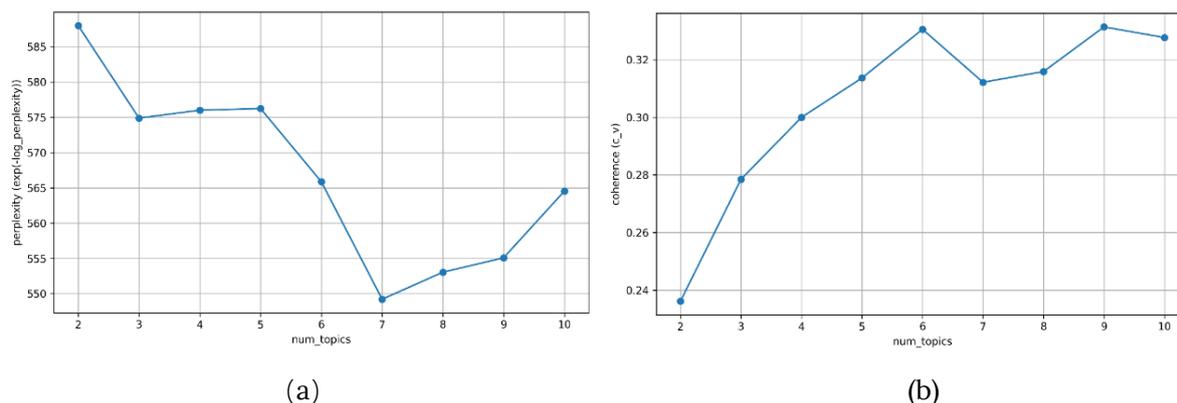
To determine the optimal number of topics (K) in the latent Dirichlet allocation (LDA) model, this study used both perplexity and topic coherence for evaluation. Iterative calculations and comparisons were conducted within the range of K values from 2 to 10, as shown in Figure 2.

### (1) Perplexity analysis

As shown in Figure 2(a), perplexity decreased significantly as the number of topics increased from 2 to 7, reaching its lowest point at K=7. Beyond that, perplexity began to rise, indicating a decline in the model’s generalization ability. Thus, based on perplexity, K=7 is the optimal value.

### (2) Coherence analysis

As shown in Figure 2(b), the topic coherence score generally increased with K. A local peak occurred at K=6, followed by a noticeable drop at K=7. The score then gradually recovered, reaching a global maximum at K=9, before slightly decreasing at K=10. This suggests that semantic consistency within topics is strongest at K=9, yielding highly interpretable topics.



**Figure 2.** Results of perplexity and coherence in LDA topic modeling

Considering both metrics, this study balanced model performance and topic interpretability. Although perplexity was minimized at  $K=7$ , the coherence score was relatively low at that point, which may reduce topic clarity. In contrast, at  $K=9$ , topic coherence reached its highest value, while perplexity increased only slightly compared to  $K=7$ , indicating acceptable generalization. Since the main goal of topic modeling is to produce interpretable themes,  $K=9$  was selected as the optimal number of topics. This ensures that the results are meaningful and easy to interpret. The LDAvis visualization in Figure 3 also confirms that  $k=9$  produces well-separated topics with good coherence.



**Figure 3.** 2D visualization of topics at  $k=9$

### Qualitative content coding

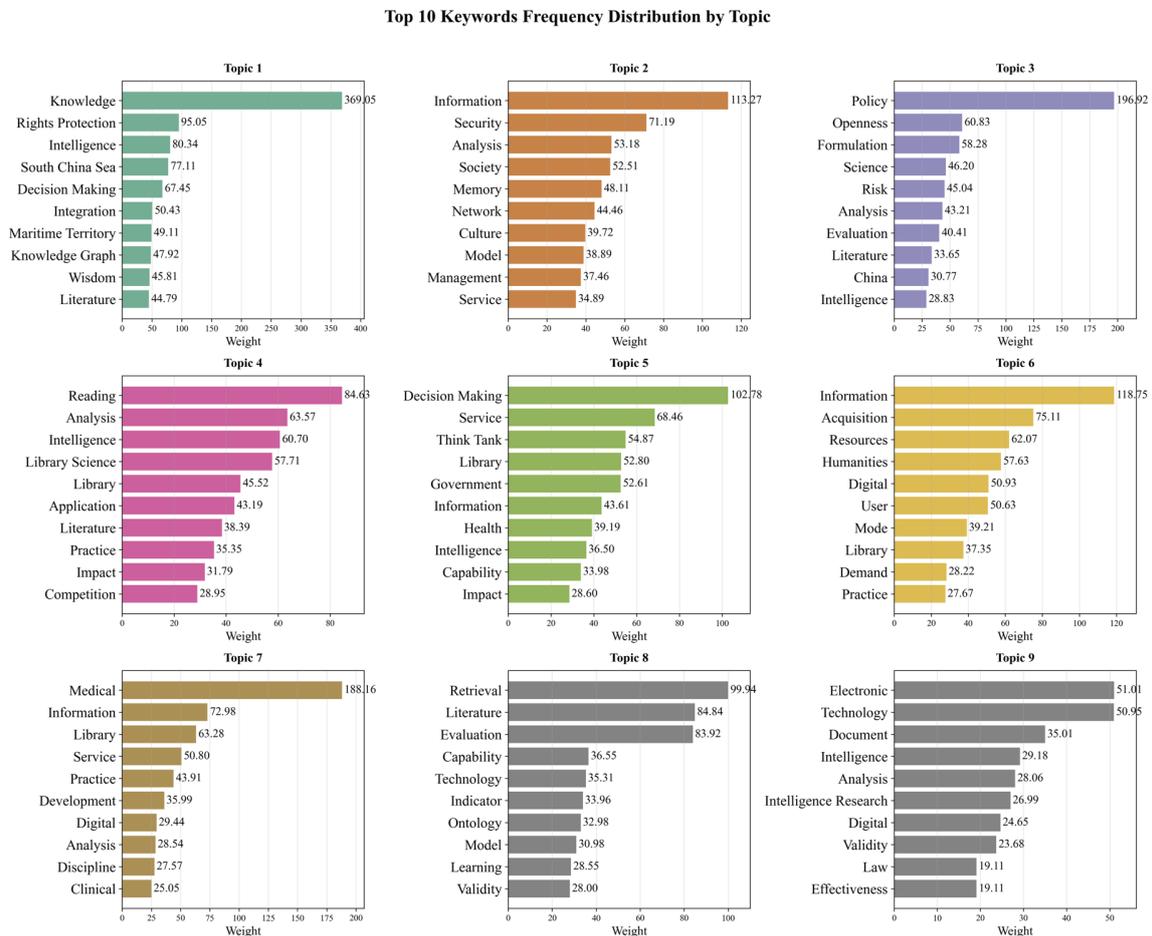
Building on the quantitative analysis, this study further employed content analysis to gain deeper insight into the role of evidence-based research in the development of LIS. Two graduate students with a background in LIS independently coded the functional roles and effects of evidence-based approaches in the literature. Any discrepancies in coding were resolved through discussion and final judgment by an expert until consensus was reached. Based on this analysis, this paper proposed targeted optimization strategies. The goal is to enhance the application of evidence-



## Topic distribution and evolution of evidence-based research in LIS

### Topic distribution characteristics of evidence-based research in LIS

LDA topic modeling was used to identify core research themes and gain a clearer picture of the evidence-based research landscape in LIS. Through this approach, nine major topics were identified. Figure 5 displays the top 10 high-frequency terms associated with each topic.



**Figure 5.** Visualization of words in each cluster forming  $k = 9$  latent topics.

After performing the LDA-based clustering analysis, the study revealed clear differences in keyword composition and semantic features across topics. To better understand their research implications, we further interpreted each topic by considering contextual meanings and semantic relationships among keywords. Based on this comprehensive analysis, the nine topics were summarized and labelled, as shown in Table 1.

Topic	Label	Top 10 terms
Topic 1	Strategic Decision Support through Multi-source Intelligence Integration	knowledge, rights protection, intelligence, South China Sea, decision-making, integration, maritime territory, mapping, wisdom, literature
Topic 2	Online Public Opinion Governance and Information Security	information, security, analysis, society, memory, network, culture, model, management, service
Topic 3	Evidence-based Policy-making and Scientific Evaluation	policy, openness, formulation, science, risk, analysis, evaluation, literature, China, intelligence
Topic 4	Library Development and Reading Services	reading, analysis, intelligence, library science, library, application, literature, practice, impact, competition
Topic 5	Think Tank Development and Decision-making Services	decision-making, service, think tank, library, government, information, health, intelligence, capacity, impact
Topic 6	Digital Resource Acquisition and User Service Models	information, acquisition, resources, humanities, digital, user, model, library, demand, practice
Topic 7	Medical Information Services and Digital Library Construction	medicine, information, library, service, practice, development, digital, analysis, discipline, clinical
Topic 8	Information Retrieval and Evaluation Techniques	retrieval, literature, evaluation, capability, technology, indicators, ontology, model, learning, validity
Topic 9	Intelligent Analysis of Electronic Records and Legal Effectiveness	electronic, technology, records, intelligence, analysis, information studies, digital, validity, law, effectiveness

**Table 1** Topic labels of latent topics in LIS evidence-based research articles

### **Topic 1: Strategic decision support through multi-source intelligence integration**

Research under this theme focuses on strategic decision-making enhanced by multi-source intelligence integration. By developing standardized evidence metadata frameworks and domain-specific ontology models, studies aim to achieve normalized description, structured extraction, and in-depth semantic association of multi-source evidence. This facilitates the construction of an evidence knowledge graph, which serves as a core infrastructure for systematically organizing and servicing evidence in complex scenarios (such as South China Sea rights protection). Ultimately, this approach improves the precision and intelligence of strategic decision-making.

### **Topic 2: Online public opinion governance and information security**

Literature in this topic addresses how social media platforms, while enabling diverse information exchange in the digital age, also contribute to the rapid spread of rumors. Research includes methods for rumor detection, modeling the dissemination of false information, evidence-integrated fake news identification, and studies on the trust and adoption of information services. Evaluation methods or models are employed to analyze information flow, polarization, and impact, providing a scientific basis for cyberspace governance.

### **Topic 3: Evidence-based policy-making and scientific evaluation**

This topic centers on evidence-based policy-making, emphasizing the systematic acquisition, graded evaluation, categorization, and integration of evidence to construct a structured policy framework. Focusing on public emergency management contexts such as the COVID-19 pandemic, it investigates the use and evolving characteristics of evidence in policy practice, along with empirical analysis of scientific literature citations in policy documents. Additionally, knowledge graph technology is used to build evidence graphs for policy support, enhancing the systematic organization and accessibility of evidence and promoting transparent, interpretable evidence-based policy processes.

#### **Topic 4: Library services and reading promotion**

Research here focuses on typical practices in libraries such as reading promotion, reference services, evidence-based acquisition, and thematic book exhibitions. It proposes integrating behavioral research methods into evidence-based library practice to better understand user needs and strengthen frontline librarians' ability to generate evidence in real-world contexts, thereby improving the adaptability of user services. Furthermore, the evidence-based concept is being actively incorporated into LIS education in China, driving a shift toward practice-oriented and evaluation-focused teaching reforms and fostering evidence-driven curricula and talent development models.

#### **Topic 5: Think tank development and decision support services**

Research under this theme focuses on the development and services of think tanks aimed at supporting decision-making. Think tanks are research organizations that seek to influence practice and policy by generating insights (Maibach et al., 2024). Specific research directions include building evidence-based decision-making systems within think tanks, enhancing intelligence capabilities in British and American policing think tanks, and optimizing the role of university libraries in think tank services. Strategies for developing evidence-based capacities in think tanks in the era of generative AI are also proposed.

#### **Topic 6: Digital resource acquisition and user services**

This topic centers on evidence-based acquisition practices. Since the research is conducted within the LIS discipline, digital resource acquisition here primarily refers to the procurement of library collections. Using case studies, researchers examine acquisition practices in leading domestic and international libraries. Methods such as surveys, interviews, and simulations are employed to gather practical evidence, thereby supporting resource acquisition and user services in libraries and similar institutions.

#### **Topic 7: Medical information services and digital library development**

This topic represents one of the earliest evidence-based research areas within LIS, focusing on the development and use of evidence-based medical information resources. By analyzing metadata and evidence types from major medical evidence platforms such as Cochrane library, best evidence, evidence-based medicine reviews, and MEDLINE, LIS scholars conduct user-centered information retrieval and literacy training. They also propose strategies for organizing and integrating digital resources to support evidence-based medical decision-making. Through field studies in regional medical libraries, service barriers are identified and improvement pathways explored to enhance the usability and systematicity of evidence-based information services.

#### **Topic 8: Information retrieval and evaluation techniques**

Research here focuses on evidence retrieval and recommendation. Key evaluation dimensions include retrieval saturation, sensitivity, reliability, redundancy, and criterion validity. By integrating knowledge graph technology, an intelligent evidence recommendation mechanism is constructed to improve the accuracy and efficiency of evidence retrieval. This is the most methodology-oriented theme, providing underlying technical support for multiple other topics and enhancing the ability of users and systems to access and evaluate high-quality information efficiently.

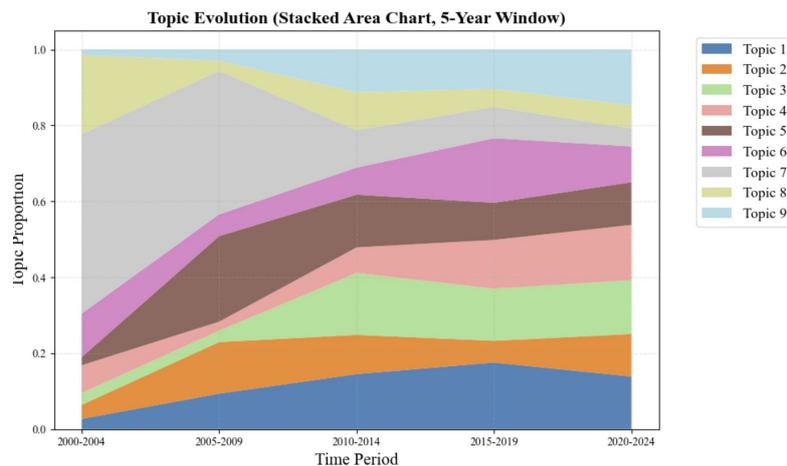
#### **Topic 9: Intelligent analysis of electronic records and legal validity**

This topic exhibits strong interdisciplinary characteristics, integrating knowledge from information science, law, and information technology. Its core aim is to address the 'legal validity' of electronic records—such as electronic contracts, government documents, and digital evidence—

in the digital age. On one hand, it focuses on preservation techniques, authentication mechanisms, and legal verification standards for electronic evidence, striving to build a complete and reliable technical chain from raw data to trustworthy evidence for decision-making. On the other hand, it examines characteristics such as evidence credibility, probative value, and legal effect, developing technical solutions and designing systems from perspectives including technical standards, legal frameworks, and trust service mechanisms.

### Topic evolution of evidence-based research in LIS

To clearly illustrate the temporal evolution of the nine research topics, this study divided the timeline into five-year intervals and mapped the topic evolution, as shown in figure 6. It should be noted that the thematic evolution analysis starts from the year 2000, as the number of evidence-based articles in the CSSCI journals was zero in 1999.



**Figure 6** Topic evolution of LIS evidence-based research in China.

#### (1) Decline and transformation of traditional core themes

In the initial research period (2000–2004), Topic 7 (medical information services and digital library development) and Topic 8 (information retrieval and evaluation techniques) dominated the field. This reflects how the primary academic focus in the early 21st century was on digitizing information resources (e.g., digital library development) and improving information access (e.g., retrieval technologies). However, the proportion of these two topics decreased significantly over time. By 2020–2024, Topic 7 had notably diminished, and Topic 8 also declined considerably, indicating a shift in research focus from foundational resource construction and retrieval optimization to more targeted practical applications.

#### (2) Rise of application and decision-support topics

In contrast to the decline of traditional themes, several application-oriented topics supporting national strategy and governmental decision-making have emerged as major research hotspots. Topic 5 (think tank development and decision support services) and Topic 1 (strategic decision support through multi-source intelligence integration) demonstrated strong growth momentum. Although these topics had a low presence in the early stages, they expanded rapidly beginning in 2005–2009 and have now become core pillars of the research field. This shift highlights how the research direction has pivoted toward high-level decision support, national governance, and strategic needs (as reflected in keywords such as think tank, decision-making, intelligence, South China Sea, and integration), emphasizing in-depth knowledge analysis and application. Topic 3 (evidence-based policy-making and scientific evaluation) is a typical rising star. It received limited attention during 2000–2004 but has since grown steadily and now constitutes a substantial share

of the research. This trend signifies increasing scholarly interest in using data and intelligence to support the formulation, evaluation, and optimization of public policies, reflecting the real-world social application of research.

### **(3) Sustained focus on evidence-based librarianship**

Another clear trend in the evolution of evidence-based LIS research is the continued emphasis on evidence-based library practices. Both Topic 6 (digital resource acquisition and user services) and Topic 4 (library services and reading promotion) have maintained steady growth. This reflects how, against the backdrop of ongoing digital transformation, user demand-driven service model innovation, collection development, and the core functions of reading promotion and knowledge dissemination remain key issues of persistent academic concern.

### **(4) Emergence of interdisciplinary and technology-driven themes**

Topic 2 (online public opinion governance and information security) and Topic 9 (intelligent analysis of electronic records and legal validity) represent typical interdisciplinary areas integrating technology, society, and law. Research interest in these topics has continued to grow over time. This indicates that, amid rapid technological evolution and an increasingly complex social environment, issues such as cyberspace governance and the legal validity and compliance of electronic documents have become practically significant and enduring research priorities.

The above analysis reveals a profound paradigm shift in evidence-based LIS research. The research focus has moved significantly from the early stage of building resources and learning retrieval to a more advanced phase of supporting decisions and promoting applications. Think tank development, strategic intelligence, evidence-based policy, and intelligent analysis have become new academic growth areas. This shift demonstrates how evidence-based LIS research has closely aligned with national development and practical application needs, playing an increasingly important role in supporting governmental decision-making and addressing complex social problems.

### **Application modes of the evidence-based system in LIS research**

To gain a deeper understanding of how evidence-based approaches are applied in LIS, this study further employed content analysis to examine how the evidence-based system provides support across different types of research.

The application of the evidence-based system in LIS research in China is first reflected in the introduction and utilization of an evidence-based perspective, which involves re-examining research issues in the LIS field through an evidence-based lens. This perspective provides a new analytical framework for LIS studies, enabling related research to systematically reconstruct and interpret core disciplinary topics from different dimensions. Second, the evidence-based system manifests in LIS as theoretical support for research. The theoretical underpinning is reflected in three forms: the introduction of interdisciplinary evidence-based theories, the construction of evidence-based theories tailored to LIS disciplinary characteristics, and the localized adaptation of evidence-based theories to the LIS discipline. Third, the evidence-based system is expressed in LIS research through the application of evidence-based research methods. The use of evidence-based methods in LIS operates on two levels: first, expanding the methodological system by introducing evidence-based research techniques and adapting existing LIS methods; second, innovating the application of research methods guided by evidence-based thinking, emphasizing the combined use of qualitative and quantitative analysis to enhance the persuasiveness of research results. Moreover, the evidence-based system is reflected in LIS research through the support of multi-source evidence. Analysis shows that common types of evidence include scientific literature, policy documents, statistical data, eye-tracking experimental evidence, expert opinions, data analysis results, citation commentary evidence, policy mention data from [Altmetric.com](https://www.altmetric.com), and

social media comments. Lastly, content analysis shows that some studies apply research results to evidence-based scenarios, developing traceable, verifiable, and verifiable functionalities. By applying research findings to evidence-based contexts, the applicability and practical utility of these findings are expanded, bridging research outcomes with real-world issues.

## Discussion

### The overall landscape of LIS evidence-based research in China

This study adopts a mixed-methods approach, integrating both qualitative and quantitative research strategies. It begins with quantitative techniques—including term frequency analysis and LDA topic modelling, aiming to identify nine core evidence-based research topics in China's LIS discipline, along with the top ten representative terms for each topic. Since LDA is an unsupervised probabilistic model, it is essential to further interpret and validate the results obtained from topic modelling. Based on further analysis, nine topic labels were refined, covering areas such as intelligence-supported decision-making, online public opinion governance, evidence-based policy formulation, evidence-based library practice, evidence-based medical information services, and think tank development.

Furthermore, the topic evolution findings reveal a clear paradigm shift in evidence-based LIS research in China—from single domains to the entire research spectrum of the discipline, resulting in a multi-dimensional and multi-context research landscape. From an evolutionary perspective, traditional themes such as evidence-based medicine and evidence retrieval have gradually diminished, while application- and decision-oriented themes have gained prominence. Throughout this shift, consistent attention has been paid to evidence-based librarianship, and new interdisciplinary themes have continued to emerge.

To further learn how the evidence-based science framework is applied in LIS research, this study employs qualitative content analysis. The findings reveal that it integrates into the knowledge production process of the discipline through five primary approaches: introducing the evidence-based perspective, providing theoretical foundations for evidence-based practice, expanding evidence sources, innovating methodological applications, and expanding evidence-based application scenarios.

### Future development paths and directions outlook

#### Form a clearer understanding of evidence-based research in LIS

Currently, the application of the evidence-based scientific framework within China's LIS discipline remains insufficiently deepened. Some studies equate the use of empirical results or reliance on scientific literature with conducting evidence-based research, thereby diluting the distinctive features of the evidence-based framework, such as evidence hierarchy, evidence quality assessment, and evidence synthesis. To better comprehend and apply the evidence-based scientific system in LIS, it is essential to foster a clearer and more consistent understanding of what constitutes 'evidence-based' within the discipline. Discussions should focus on clarifying the nature of evidence-based research, its core components, and how to implement the evidence-based framework in specific studies.

#### Give higher-level attention to evidence-based research

Further literature analysis reveals that, compared to mature evidence-based research systems abroad, China's library and information science discipline still exhibits significant gaps in research volume, thematic diversity, and evidence structure. By contrast, international EBLIP research continues to deepen its focus on evidence sources, evidence acquisition, and decision-making models. Through specialized journals such as evidence-based library and information practice, it consistently produces high-quality evidence centered on systematic reviews and empirical studies. Evidence-based LIS research in China urgently requires attention to high-quality evidence,

promoting data openness, and methodological innovation. Integrating the distinctive features of China's scientific and technological information research, future efforts should focus on key research questions such as think tank evidence-based practice and evidence-based decision-making. This approach will help gradually establish an evidence-based LIS research system that reflects local context while aligning with international standards, thereby strengthening the global influence and academic voice of Chinese LIS research.

#### **Expand broader horizons and application spaces for evidence-based research**

The development of evidence-based research in LIS should not be confined solely to addressing issues within the discipline itself. Its value is further demonstrated in interdisciplinary applications and solving real-world problems. Future research can further break through traditional boundaries by applying the distinctive achievements of LIS evidence-based research—such as evidence organization frameworks, evidence retrieval strategies, and evidence integration and analysis methods—to multidisciplinary fields like scientific and technological innovation, cultural heritage protection, data governance, and public administration. This would serve more complex decision-making scenarios. This will foster a constructive interaction between disciplinary knowledge production and national needs as well as broader social value.

### **Conclusion**

This study uses a mixed-methods approach to examine evidence-based research in the field of Library and Information Science (LIS) in China, analysing the developmental pathways and evolutionary processes of this research area. The study makes the following main contributions. First, it outlines the pattern of the evolution of evidence-based research within the Chinese LIS discipline and constructs case studies with local characteristics. Second, it reveals the role of evidence-based science in LIS research and demonstrates its application patterns in concrete practice. Through this comprehensive analysis, the study can provide representative Chinese experiences for global evidence-based research and contribute Chinese insights to international evidence-based LIS research.

However, this paper still has certain limitations. First, in the qualitative content analysis, although a procedure of independent dual coding combined with expert validation was used, the coding process inevitably remained subject to researchers' subjective influence, which may have limited the objectivity of the results.

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## Reference

- Carlsson, H., & Tornngren, T. (2020). Understanding library users via surveys and other methods—best practices for evidence-based library development. *Journal of Library Administration*, 60(8), 925-944. <https://doi.org/10.1080/01930826.2020.1820276>
- Chen, H. L., Chiu, T. H., & Cline, E. (2023). Academic libraries and research data management: a case study of Dataverse global adoption. *Information Discovery and Delivery*, 51(2), 166-178. <https://doi.org/10.1108/IDD-04-2022-0028>
- Cox, A. M., & Mazumdar, S. (2024). Defining artificial intelligence for librarians. *Journal of librarianship and information science*, 56(2), 330-340. <https://doi.org/10.1177/09610006221142029>
- Creswell, J. W., & Clark, V. L. P. (2017). *Designing and conducting mixed methods research*. Sage publications. <https://cdn.bookee.app/files/pdf/book/en/designing-and-conducting-mixed-methods-research.pdf>
- Fidel, R. (2008). Are we there yet?: Mixed methods research in library and information science. *Library & information science research*, 30(4), 265-272. <https://doi.org/10.1016/j.lisr.2008.04.001>
- Grbin, L., Nichols, P., Russell, F., et al. (2022). The development of a living knowledge system and implications for future systematic searching. *Journal of the Australian Library and Information Association*, 71(3), 275-292. <https://doi.org/10.1080/24750158.2022.2087954>
- Greene, J. C., Caracelli, V. J., & Graham, W. F. (1989). Toward a Conceptual Framework for Mixed-Method Evaluation Designs. *Educational Evaluation and Policy Analysis*, 11(3), 255-274. <https://doi.org/10.2307/1163620>
- Jelodar, H., Wang, Y., Yuan, C., Feng, X., Jiang, X., Li, Y., & Zhao, L. (2019). Latent Dirichlet allocation (LDA) and topic modeling: models, applications, a survey. *Multimedia tools and applications*, 78(11), 15169-15211. <https://doi.org/10.1007/s11042-018-6894-4>
- Kallaher, A., Eldermire, E. R., Fournier, C. T., Ghezzi-Kopel, K., Johnson, K. A., Morris-Knowler, J., ... & Young, S. (2020). Library systematic review service supports evidence-based practice

- outside of medicine. *The Journal of Academic Librarianship*, 46(6), 102222.  
<https://doi.org/10.1016/j.acalib.2020.102222>
- Leech, N. L., & Onwuegbuzie, A. J. (2009). A typology of mixed methods research designs. *Quality & quantity*, 43(2), 265-275. <https://doi.org/10.1007/s11135-007-9105-3>
- Li, L., Liu, M., & Wang, Y. (2023). Evidence-based Library and Information Practice(EBLIP): Historical Evolution and Theoretical Framework. *Library Theory and Practice*, (5), 41-46.  
<https://doi.org/10.14064/j.cnki.issn1005-8214.2023.05.006>
- Maibach, E., Roser-Renouf, C., Myers, T., Kotcher, J., & Reed, D. (2024). The “think-and-do tank” model: Action-oriented climate communication research. *Environmental Communication*, 18(1-2), 68-75. <https://doi.org/10.1080/17524032.2024.2304571>
- Sackett, D. L., Rosenberg, W. M., Gray, J. M., Haynes, R. B., & Richardson, W. S. (1996). Evidence based medicine: what it is and what it isn't. *bmj*, 312(7023), 71-72.  
<https://doi.org/10.1136/bmj.312.7023.71>
- Scherrer, C. S., & Dorsch, J. L. (1999). The evolving role of the librarian in evidence-based medicine. *Bulletin of the Medical Library Association*, 87(3), 322.  
<https://pmc.ncbi.nlm.nih.gov/articles/PMC226592/>
- Tran, C. Y., & Guo, J. X. (2021). Developing user-centered collections at a research library: An Evidence-Based Acquisition (EBA) pilot in STEM. *The Journal of Academic Librarianship*, 47(5), 102434. <https://doi.org/10.1016/j.acalib.2021.102434>
- Wang, P., Xu, J., & Yu, B. (2016). A Review on Evidence Based Library and Information Practice. *Journal of the China Society for Scientific and Technical Information*, 35(1), 98-112.  
[https://kns.cnki.net/kcms2/article/abstract?v=YQFK0XGjx42whxk8w2\\_hvPKZj\\_wUYb0WiNMD6ivSKKgC2mQAOqX7t9wLE0AYUrBymQNns9lfBC2evLzLHJSrAfCbLoJokrKzro-bSHXsPhr1bQFlvR3Hyval-Oiojof4Vv3sWb2ih9g2L31Raqr2MW4KevVH8SLY8LafwD9\\_FNaefsUh8Ebzxg==&uniplatform=NZKPT&language=CHS](https://kns.cnki.net/kcms2/article/abstract?v=YQFK0XGjx42whxk8w2_hvPKZj_wUYb0WiNMD6ivSKKgC2mQAOqX7t9wLE0AYUrBymQNns9lfBC2evLzLHJSrAfCbLoJokrKzro-bSHXsPhr1bQFlvR3Hyval-Oiojof4Vv3sWb2ih9g2L31Raqr2MW4KevVH8SLY8LafwD9_FNaefsUh8Ebzxg==&uniplatform=NZKPT&language=CHS)
- Wu, T., & Li, B. (1999). Information research methods in evidence-based medicine. *Journal of the Library Science Society of Sichuan*, (3), 50-53.  
[https://kns.cnki.net/kcms2/article/abstract?v=YQFK0XGjx41EdBlc6Qq\\_DYuAOgx\\_3J5Bm8PgBFTjkgwmRNiKdvxt9IYNrNqrBHZskjKFzKwMcUCgxLGOgn0gPmYca414UEf96Y6uC5NJAmRPjMTyNrtxYr30XmBKX5e4q\\_fwrGYQ4VMR5VZOIfI-9dhGYMc7ubyhW5FxCOVZDkIwj8IBP7mbg==&uniplatform=NZKPT&language=CHS](https://kns.cnki.net/kcms2/article/abstract?v=YQFK0XGjx41EdBlc6Qq_DYuAOgx_3J5Bm8PgBFTjkgwmRNiKdvxt9IYNrNqrBHZskjKFzKwMcUCgxLGOgn0gPmYca414UEf96Y6uC5NJAmRPjMTyNrtxYr30XmBKX5e4q_fwrGYQ4VMR5VZOIfI-9dhGYMc7ubyhW5FxCOVZDkIwj8IBP7mbg==&uniplatform=NZKPT&language=CHS)
- Yu, M., & Qu, J. (2018). Research Progress of Evidence-based Science in Library and Information Science (LIS). *Library and Information Service*, 62(20), 133-141.  
<https://doi.org/10.13266/j.issn.0252-3116.2018.20.015>  
<https://doi.org/10.13266/j.issn.0252-3116.2018.20.015>
- Zhang, Y., & Yong, S. (2023). Discussion on Evolution and Innovation of Evidence-based Library Science in China. *Journal of Jilin Provincial Institute of Education*, 39(4), 165-174.  
<https://doi.org/10.16083/j.cnki.1671-1580.2023.04.024>

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