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Information Seeking Behavior in Libraries: A Comprehensive Study

ORIGINAL ARTICLE



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Abstract

The study of information-seeking behavior in libraries is crucial for understanding how individuals search, retrieve, and utilize information in academic, professional, and personal contexts. Libraries as enduring centers of knowledge continue to play a vital role in facilitating access to information, despite the rapid digital transformation of the information landscape. This paper explores the theories and models' underpinning information-seeking behavior, examines factors influencing user engagement, and evaluates variations across academic, public, and specialized library settings. The study also highlights challenges faced by users, such as information overload, digital illiteracy and misinformation, while recognizing the central role of librarians in guiding seekers. Furthermore, it explore the future trends in information seeking behavior. Findings suggest that user behavior is

increasingly shaped by digital ecosystems, yet human guidance and literacy training remain essential to maximize the benefits of information resources.

Key Words

Information-seeking Behavior, Libraries, Digital Transformation, Information Literacy, Librarianship, Information Retrieval.

Introduction

Information is an indispensable resource in modern society, shaping education, innovation, governance, and cultural development. The manner in which individuals seek and use information has been a subject of academic inquiry for decades, leading to the emergence of a distinct field of study known as information-seeking behavior. This field explores how people recognize their information needs, identify relevant sources, evaluate information, and apply it for problem-solving or decision-making. Libraries, historically considered repositories of printed knowledge have evolved into dynamic institutions that combine traditional and digital resources. In the digital age, where information is abundant and often overwhelming, libraries serve as mediators of credible, reliable, and accessible knowledge. They provide structured environments for learning and research while supporting the development of information literacy skills.

There are three types of Libraries viz. Academic, Public and Special are now library is hybrid ecosystems where print and digital resources coexist with algorithmic discovery, research data services, and embedded instruction. Understanding how users articulate needs, choose sources, navigate interfaces, and judge relevance

is central to delivering equitable, efficient, and learner-centred services. ISB studies have a long lineage in library and information science (LIS), moving from system-centric transaction counts to user-centred models that foreground cognition, affect, and context. Contemporary challenges include fragmented discovery landscapes catalogues, discovery layers, subject databases, open web, preprint servers.

The purpose of this study is to present a comprehensive examination of information-seeking behavior in libraries and investigates theoretical frameworks, influencing factors, user patterns in different library contexts, challenges faced, the role of librarians, the impact of digital transformation, and strategies for future improvements. In doing so, it aims to highlight the evolving role of libraries and librarians in meeting diverse user needs.

Review of Literature

Ali and Jan (2020) examined the information-seeking behavior of the Postgraduate students of social science at the University of Kashmir, Srinagar. The findings showed that post-graduate students prefer ICT applications more than printed materials for information-seeking behavior. The information seekers face several difficulties when looking for information, which is characterized as hurdles that prevent them from identifying, selecting, accessing, evaluating, and using the information they require.

According to, **Gyesi (2020)** it is an important prerequisite for a library to provide efficient information resources and services to meet the information needs of the users.

According to **Kalbande (2019)** information is a cornerstone of modern civilization on which practically everyone relies. Every individual uses that information according to his or her need.

Manjunath and Babu (2018) expressed that the progress of any nation will be impossible unless and until the information is made available to people who need it. According to them Policymakers, planners, economists, farmers, instructors, and research academics, doctors, engineers, librarians, and others all demand information in their personal, professional, and daily activities.

According to **Nwobasi, Uwa, and Ossai-Onah (2013)** information needs of the information seekers are like variables that change over time. Similarly, an information requirement is defined as a knowledge gap that must be filled to make a choice or solve an issue.

Ikoja-Odongo & Mostert (2006) defined that the general information needs were related to finding a research topic, conducting a literature review, reading journals, using online research databases, and conducting other research, workshop and seminar presentations, academic activities, and life events that motivate a researcher towards information seeking

Kuhlthau's (1991) Information Search Process (ISP) introduced a groundbreaking perspective by integrating the emotional dimension of information seeking. Her findings that users experience uncertainty, confusion, and relief during searches shifted attention from purely cognitive processes to affective experiences, influencing later library service designs.

Objectives of the Study

1. To review and synthesize theoretical and empirical research on ISB in libraries.
2. To identify determinants that shape information-seeking practices in academic, public, and special libraries.
3. To examine how digital technologies and discovery tools influence search behaviour.
4. To highlight implications for library instruction, reference services, and system design.
5. To suggest methodological approaches for studying ISB in contemporary settings.

Methodology

As this is a comprehensive study, a literature-based and conceptual methodology is applied. The approach includes:

- **Surveys:** To assess resource usage, strategies, and satisfaction.
- **Transaction Log Analysis:** To study real-time search behaviors.
- **Interviews/Focus Groups:** To capture user experiences and emotional states.

Theoretical Framework

Scholars have proposed several models to explain the processes underlying information-seeking behavior. These theoretical frameworks provide insights into how individuals approach information tasks, deal with uncertainty, and evaluate outcomes.

1. Wilson’s Model of Information-Seeking Behavior

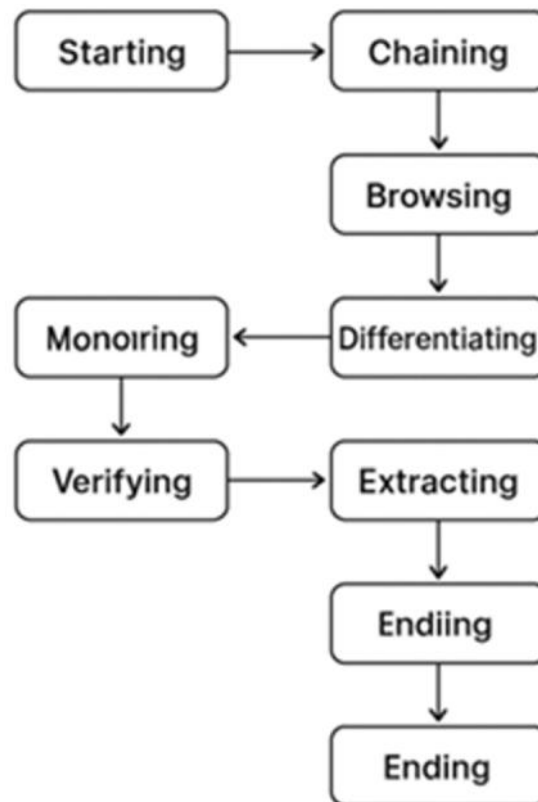
T.D. Wilson’s model (1981, 1999) is among the most cited frameworks. It emphasizes that information-seeking arises from an individual’s recognition of an information need, influenced by contextual factors such as psychological, social, and environmental variables. Wilson highlights the importance of “intervening variables” like personal motivation, accessibility, and barriers, which shape the success of the search.



Wilson’s Model of Information-Seeking Behavior

2. Ellis’s Model of Information-Seeking

David Ellis (1989) introduced a behavioral model based on empirical studies of researchers. He identified key activities in information seeking, such as *starting*, *chaining*, *browsing*, *differentiating*, *monitoring*, and *extracting*. These processes reflect the iterative and nonlinear nature of information-seeking, emphasizing strategies users adopt when navigating complex resources.



Ellis's Model of Information-seeking

3. Kuhlthau's Information Search Process (ISP)

Carol Kuhlthau (1991) advanced a user-centered approach that integrates cognitive and affective dimensions of information seeking. Her model outlines six stages: initiation, selection, exploration, formulation, collection, and presentation. Importantly, it highlights the emotional journey of information seekers, including uncertainty, optimism, confusion, clarity, and satisfaction.

4. Application to Library Usage

These models are highly applicable to library settings. Students, researchers, and community members often pass through similar stages of identifying needs, searching catalogs or databases, evaluating credibility, and applying information. Librarians play a role in reducing barriers, offering guidance, and supporting confidence in the search process.

Factors Influencing Information-Seeking Behavior

Information-seeking behavior is shaped by a multitude of interrelated factors:

1. Demographic Factors

- **Age:** Younger generations, particularly digital natives, prefer online resources, while older patrons may still rely on print.
- **Education Level:** Higher levels of education correlate with more advanced search strategies and critical evaluation skills.
- **Gender:** Studies suggest subtle differences, with female users often more collaborative in seeking help, while males may adopt independent approaches.

2. Psychological Aspects

Curiosity, motivation, self-efficacy, and prior experience strongly determine how individuals engage with information. A motivated researcher may persist in navigating complex databases, whereas a casual user may abandon the search after encountering barriers.

3. Technological Influences

The digital environment has radically transformed access. Online databases, e-journals, search engines, and institutional repositories provide instant access to vast collections. However, reliance on Google and similar platforms has also shifted behaviors, often leading to superficial searches rather than deep engagement with library resources.

Information Seeking in Different Library Settings

1. **Academic Libraries:** Students and researchers constitute the primary user base of academic libraries. Their behavior reflects curriculum demands, research projects, and scholarly publishing. Academic libraries provide access to peer-reviewed journals, databases, e-books, and institutional repositories, but users often require training in database navigation and citation management.
2. **Public Libraries:** Public libraries serve diverse communities, supporting lifelong learning, literacy, and cultural enrichment. Information-seeking behaviors here range from recreational reading to employment searches and digital literacy training. The community orientation of public libraries highlights their role as democratic institutions that bridge social and digital divides.
3. **Specialized Libraries:** Specialized settings such as law libraries, medical libraries, and corporate information centers cater to highly specific information needs. Users here often exhibit focused, problem-driven searches and demand highly reliable, up-to-date resources. Librarians in such contexts require domain expertise in addition to information science skills.

Challenges in Information Seeking

Despite vast resources, users face significant obstacles:

- **Information Overload:** The abundance of digital information often overwhelms seekers, making it difficult to filter relevant results.
- **Lack of Digital Literacy:** Many users lack advanced search skills, reducing their ability to retrieve quality information.
- **Access Restrictions:** Subscription costs limit access to scholarly databases, creating inequalities between well-funded and under-resourced institutions.
- **Misinformation:** The rise of unverified online content poses challenges in credibility assessment.
- **Language Barriers:** English dominance in scholarly communication limits accessibility for non-English-speaking users.

Implications for Libraries

- **Instructional Role:** Information literacy sessions must focus not only on tools but also on strategy, evaluation, and managing uncertainty.
- **System Design:** Discovery interfaces must prioritize usability, transparency of coverage, and relevance ranking.
- **Reference Services:** Proactive, blended, and embedded librarian support can help users overcome breakdown points.
- **Equity and Inclusion:** Libraries should provide multilingual interfaces, accessible design, and training to bridge digital divides.

The Role of Librarians in Information Seeking

Librarians are facilitators, educators, and curators in the information ecosystem. Their contributions include:

- **Reference Services:** Guiding users in refining queries and accessing relevant sources.

- **Information Literacy Training:** Teaching skills in evaluating credibility, avoiding plagiarism, and using citation tools.
- **Resource Curation:** Building balanced collections across digital and print formats.
- **Technology Integration:** Managing online catalogs, digital libraries, and AI-driven retrieval systems.

The role of librarians has shifted from custodians of books to proactive partners in research and lifelong learning.

Impact of Digital Transformation on Libraries

The digital revolution has profoundly reshaped libraries:

- **Digital Libraries:** Collections are now accessible remotely, enabling global knowledge sharing.
- **Online Catalogs & Databases:** Replacing card catalogs with OPACs and discovery systems has streamlined access.
- **Artificial Intelligence:** AI-powered tools offer personalized search results and automated recommendations.
- **Hybrid Libraries:** Many institutions now blend physical and digital services, ensuring inclusivity.

The transformation has also required new skills among librarians, including digital curation, data management, and technical support.

Strategies to Enhance Information-Seeking Behavior

To support effective information seeking, libraries can adopt the following strategies:

- **Improving Search Skills:** Workshops, tutorials, and embedded library instruction in curricula.
- **Collaborations with Technology Firms:** Integrating advanced search tools, natural language processing, and semantic web applications.
- **Personalized Services:** AI-driven profiles that suggest resources tailored to user preferences.
- **Expanding Digital Literacy Programs:** Community-based training to empower marginalized groups.
- **Open Access Advocacy:** Promoting open educational resources (OER) and institutional repositories to reduce access inequalities.

Future Trends in Information-Seeking Behavior

Emerging technologies point toward transformative changes in libraries:

- **AI-Driven Search Engines:** Intelligent systems will refine searches and anticipate user needs.
- **Voice-Assisted Information Retrieval:** Smart assistants like Alexa and Google Assistant will become integral to library services.
- **Augmented Reality (AR):** AR may support interactive navigation within libraries and immersive learning experiences.
- **Block chain Technology:** Ensuring secure, transparent, and verifiable access to information and intellectual property.

These trends suggest that libraries will continue to evolve as innovation hubs, integrating cutting-edge technologies with human-centered services.

Findings

- Search self-efficacy and perceived usability are strong predictors of satisfaction and shorter time-to-find.
- Instruction and reference interactions reduce uncertainty peaks and increase strategy variety (facet use, subject terms, citation chaining).

- Accessibility barriers and metadata inconsistencies create breakdowns; users adopt workarounds (open-web first, PDF hunting).
- Transaction logs identify high-leverage interface refinements (e.g., surfacing subject headings, better full-text indicators, clearer filters).

Conclusion

This study has explored the multifaceted nature of information-seeking behavior in libraries. Drawing upon established theoretical frameworks, it highlighted how demographic, psychological, and technological factors shape user engagement. The comparative analysis of academic, public, and specialized library settings illustrated varied user patterns, while the challenges of overload, misinformation, and literacy gaps underscored the barriers that persist.

Librarians remain pivotal in navigating these complexities, providing not only resources but also the skills and confidence required to use them effectively. Digital transformation has expanded opportunities but also necessitated continuous adaptation. The proposed strategies and emerging trends point toward a future where libraries remain essential, blending human expertise with technological innovation to ensure equitable and effective access to knowledge.

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