

Post-print: Analysis of Research Information Behavior and Characteristics in the New Media Environment

Authors: Yang Gang, Yuan Gongming, Xu Yunyin

Date: 2023-08-26T00:00:00+00:00

Abstract

[Purpose/Significance] This study investigates the research information behavior of university researchers in the new media environment, analyzes the characteristics of such behavior, and provides suggestions and countermeasures for knowledge information service providers to deliver research information services. [Method/Process] A characteristic model of research information behavior in the new media environment was constructed, with university researchers selected as the survey sample. Using a questionnaire survey method, their usage of research information resources, research information acquisition behavior, research information digestion behavior, research information tracking behavior, research information exchange behavior, and research information service needs were investigated and analyzed to verify the characteristic model of research information behavior in the new media environment. [Results/Conclusion] University researchers demonstrate high dependence on new media research information resources, show the highest preference for electronic journals, and pay attention to information resource quality; research information acquisition behavior exhibits diversified channels; research information digestion behavior exhibits fragmentation characteristics; research information tracking behavior exhibits predominantly traditional channels and a singular approach; research information exchange behavior exhibits new media platform communication dominance; research information service needs on new media platforms exhibit personalized characteristics. Except for the deviation between research information tracking behavior characteristics and the model, the constructed characteristic model of research information behavior in the new media environment is basically verified.

Full Text

Preamble

Volume 62, Issue 3, February 2018

ChinaXiv Cooperative Journal

Analysis of Scientific Research Information Behavior and Characteristics in the New Media Environment

Yang Gang, Yuan Gongming, Xu Yunyin

School of Management, Jilin University, Changchun 130022

Abstract

[Purpose/Significance] This study investigates the scientific research information behavior of university researchers in the new media environment, analyzes the characteristics of their research information behavior, and provides suggestions and countermeasures for knowledge information service providers.

[Method/Process] We constructed a characteristic model of scientific research information behavior in the new media environment, selected university researchers as survey samples, and used questionnaire surveys to investigate and analyze their usage of research information resources, research information acquisition behavior, research information digestion behavior, research information tracking behavior, research information exchange behavior, and research information service needs, thereby verifying the characteristic model of scientific research information behavior in the new media environment.

[Result/Conclusion] University researchers demonstrate high dependence on new media research information resources, with the strongest preference for electronic journals and a focus on information resource quality. Research information acquisition behavior exhibits diversified pathways; research information digestion behavior shows fragmented characteristics; research information tracking behavior remains dominated by traditional approaches and single methods; research information exchange behavior is characterized by the dominance of new media platforms; and demand for new media platform research information services shows personalized characteristics. Except for the research information tracking behavior characteristics, which deviate from the model, the constructed characteristic model of scientific research information behavior in the new media environment is basically verified.

DOI: 10.13266/j.issn.0252-3116.2018.03.010

The 2017 *China New Media Development Report* indicates that as of December 2016, China's internet user population had reached 730 million, making China the country with the largest number of new media users worldwide. Taking WeChat, Weibo, and live streaming platforms as examples, by December 2016, the combined monthly active accounts of WeChat and WeChat International reached 889 million; Weibo influencer followers totaled 385 million, accounting for 52.74% of all internet users; and live streaming users reached 344 million, rep-

representing 47.12% of internet users [1]. In the future, China's new media services will emphasize contextualization, personalization, and verticalization, continuously providing users with exclusive information services. With the rapid development of new media, behaviors such as searching for, acquiring, and sharing scientific research information are gradually shifting to new media platforms. How to better utilize research information resources through new media has become a new challenge for researchers in this environment.

Currently, foreign research has produced relevant survey findings on information needs, searching, adoption, and sharing in the new media environment. R. Wakefield's empirical study found that users' primary purpose for using new media is to satisfy certain needs directly related to social and personal factors, and that information sharing behavior best fulfills these needs [2]. K. Kim investigated the influence of gender on information seeking behavior in the new media environment through a survey of 1,000 college students, finding that gender significantly affects information seeking behavior in blogs, wikis, and forums [3]. H. Zhu studied the factors influencing privacy modes in information sharing in new media environments using dynamic evolution equations, discovering that user type is a major influencing factor, with different privacy modes for general users, privileged users, and pure observers [4]. E. Buckarma examined the role of new media in information dissemination and adoption by analyzing articles published by a hospital surgery research department, revealing that new media accelerates both the speed of dissemination and adoption rates [5]. Domestic research on information behavior in new media environments is relatively scarce. Fan Min and Deng Xiaozhao identified product, subject, system, context, and environmental factors as influencing consumer information search behavior in new media environments [6]. Bie Xuejun argued that information literacy—comprising information awareness, knowledge, ability, and ethics—most significantly affects the information behavior of top innovative talents in new media environments [7]. Guo Yu proposed three typical models for enterprise knowledge sharing in new media environments: functional interaction, group interaction, and real-time interaction [8].

Some domestic studies have addressed scientific research information behavior. Sha Yongzhong used WebTrends to analyze user log files from certain scientific research institution websites, examining the spatiotemporal distribution characteristics and path preferences of researchers' information behavior in network environments [9]. Yang Gang found that reading time, interdisciplinary span of reading materials, academic conference participation, communication with others, laboratory and research office activities, and the efficiency and level of information utilization all significantly impact the research innovation capabilities of master's students [10].

2. Scientific Research Information Behavior and Characteristics in the New Media Environment

2.1 Connotation and Classification of New Media

New media, relative to traditional media, differs from traditional newspapers, broadcasts, and television by combining network technology and digital technology to deliver information to users through terminals such as computers and mobile phones [11]. Broadly defined, new media refers to any media that relies on digital information, enables interactive information dissemination, and possesses innovative forms. Narrowly defined, new media encompasses emerging media forms such as WeChat, Weibo, blogs, podcasts, forums, digital libraries, digital television, and e-books, based on the internet, smartphones, social networks, instant messaging, and desktop windows [12]. The connotation of new media is broad, making detailed classification difficult. The renowned media organization Gofen China, through media research, extensive market data analysis, industry perspectives on new media, and consumer viewpoints, has summarized a relatively accurate definition of new media. Currently, six representative categories exist in new media development: digital television, IPTV, mobile media, e-books, blogs and forums, and podcasts [13]. Based on these six categories, new media can be further subdivided to include internet television, mobile internet television, interactive network digital television, QQ, WeChat, Weibo, digital libraries, electronic journals, e-books, science and technology blogs, forums, and live streaming apps.

2.2 Scientific Research Information Behavior in the New Media Environment

Information behavior originates from information needs. The immediacy and interactivity of new media create significant relationships between users' information needs and their location, social connections, and other factors [14], leading to different information behaviors among different types of users in different contexts. In traditional media environments, the connotation of scientific research information behavior differed substantially from that in new media environments. Before 2000, researchers focused on information selection; between 2000-2010, the emphasis shifted to information needs and acquisition; the emergence of new media has broadened the connotation of scientific research information behavior. Zhou Xiuhui contends that researchers' information behavior can be summarized into four aspects: information attention, acquisition, cognition, and publication [15]. Li Wenwen argues that scientific research information behavior in the internet era includes literature searching, literature acquisition, preservation and sharing of research data, and communication during the research process [16]. Based on a synthesis of domestic and foreign research, this study posits that scientific research information behavior in the new media environment should encompass four aspects: research information acquisition, digestion, tracking, and exchange.

2.2.1 Research Information Acquisition Behavior in the New Media Environment Research information acquisition behavior in the new media environment involves information retrieval and screening driven by research information needs. At the initial stage of searching, users often have unclear information needs, which become more defined through browsing during the retrieval process. Available information is ultimately acquired through information evaluation [17]. In the new media environment, users have more channels for acquiring research information and must master more retrieval methods, determining acquisition approaches that meet their information needs through evaluation during the search and query process.

2.2.2 Research Information Digestion Behavior in the New Media Environment Research information digestion behavior in the new media environment refers to the process by which users discriminate against and internalize research information resources obtained through new media platforms according to their existing thinking patterns and knowledge structures. Information is learned and digested through changes to the digesting subject's knowledge structure. Mass information consumption in the new media era exhibits obvious fragmentation characteristics, which also influence research information digestion behavior.

2.2.3 Research Information Tracking Behavior in the New Media Environment Research information tracking behavior in the new media environment involves researchers' attention to dynamic information in their research fields, primarily aided by new media platforms. With the development of digital technology, the rise of new media information tracking services such as RSS subscriptions and digital library Alerts has made research information tracking more humanized and intelligent. During this process, research subjects continuously obtain and absorb the latest information and resources in their fields, understanding domestic and international research trends to make their research more cutting-edge.

2.2.4 Research Information Exchange Behavior in the New Media Environment Research information exchange behavior in the new media environment includes discussion of research knowledge and sharing of research information resources. Exchange primarily relies on social networks such as WeChat and blogs, while resource sharing more often utilizes new media platforms like Email, QQ, and WeChat. Research information exchange in the new media environment has informal characteristics, embedded in various research information behaviors, enhancing the speed and efficiency of research information dissemination.

2.3 Characteristic Model of Scientific Research Information Behavior in the New Media Environment

Information behavior systems in the new media environment, composed of multiple interconnected modules, can be divided into user-driven and content-driven types [18]. Song Yumei constructed a university library user information behavior model comprising four modules: information query, acquisition, utilization, and management [17]. L. Pinto studied interactions among users and between new media, constructing a social network information diffusion model based on the Hawkes model [19].

The paradigm of scientific research information behavior in the new media environment is undergoing fundamental transformation. Based on domestic and foreign research and the above analysis, this study constructs a characteristic model of scientific research information behavior in the new media environment (see Figure 1 [Figure 1: see original paper]) to provide theoretical foundation for subsequent investigation and verification of university researchers' research information behavior characteristics.

3. Empirical Analysis

3.1 Sample Selection

Through searching and collecting research achievements from the past three years across various disciplines in CNKI, Wanfang Data Knowledge Service Platform, VIP Chinese Journal Full-text Database, and Superstar Digital Library, this study found that university researchers account for approximately 85% of those conducting scientific research activities. Considering both the representativeness of survey samples and feasibility of investigation, this study selected university researchers from the three northeastern provinces of China as survey respondents, including master's students, doctoral students, and young teachers (generally defined as university teachers under 50 years old) from major universities.

The questionnaire design covered basic respondent information, usage of information resources in the new media environment, research information acquisition behavior, research information digestion behavior, research information tracking behavior, research information exchange behavior, and research information service needs. Respondents were selected from master's students, doctoral students, and young teachers in major universities across the three northeastern provinces, covering "985 Project," "211 Project," and ordinary institutions, and including researchers in science, engineering, agriculture, medicine, humanities and social sciences, and arts. The survey period was from May 1, 2017, to June 1, 2017. Survey methods combined on-site questionnaires and online surveys. A total of 455 questionnaires were collected, with 436 valid questionnaires, yielding a validity rate of 95.82%.

3.2 Sample Descriptive Statistical Analysis

To ensure the validity of collected questionnaires, descriptive statistics were first conducted on valid samples to support the research and provide evidence for the application of survey results, ensuring practical value. Basic information of valid respondents is shown in Table 1 .

In terms of researcher types, the sample included 75 master's students, 152 doctoral students, and 209 young teachers, with a ratio of approximately 1:2.03:2.79. According to statistical results of research achievements in various databases, the actual ratio of master's students, doctoral students, and young teachers is approximately 1:1.89:3.01, indicating that the sample composition closely matches the expected distribution. Regarding master's student categories, the sample included 55 academic master's students and 20 professional master's students, with a ratio of 2.75:1. According to comprehensive statistics on graduate student admissions in the three northeastern provinces [20-22], the actual ratio of academic to professional master's students is approximately 2.98:1, showing that the sample composition closely reflects reality. In terms of disciplinary distribution, science, engineering, agriculture, and medicine accounted for 61.47%; humanities and social sciences for 28.21%; and arts for 10.32%. Therefore, this survey may have greater reference value for studying new media research information behavior among researchers in science, engineering, agriculture, and medicine. In summary, the quality of valid samples collected in this survey shows high consistency with the target research population, effectively supporting the investigation and analysis.

3.3 Statistics on Information Resource Usage in the New Media Environment

This study primarily employs usage frequency dimensions to analyze university researchers' research information behavior in the new media environment, aiming to understand the role and function of new media in this context.

3.3.1 Analysis of Resource Usage Preferences Based on new media classification and research activity characteristics, this study categorized new media information resources available to university researchers into six types: electronic journals, e-books, blog resources, forum resources, Weibo resources, and WeChat resources. The survey indicates that electronic journals are currently the most frequently used resource type in research activities, with a proportion as high as 73.85%, followed by e-books at 15.83%, while blog, forum, Weibo, and WeChat resources account for only 10.32%. This demonstrates that university researchers currently have very high dependence on and preference for electronic journals, while other emerging media play a smaller role in meeting research information resource needs (see Table 2).

3.3.2 Analysis of Usage Frequency by Researcher Type From a disciplinary perspective, researchers in science, engineering, agriculture, and

medicine, as well as those in humanities and social sciences, show usage frequency distributions basically consistent with the overall pattern, demonstrating high preference for electronic journals. Researchers in arts show slightly different usage frequencies, with electronic journal usage slightly lower than the overall average and blog, forum, Weibo, and WeChat resource usage slightly higher. This deviation may be attributed to the research characteristics of arts disciplines, which may require more informal channels for collecting research information resources (see Table 3).

3.3.3 Analysis of Research Information Resource Concerns New media research information resources differ significantly from traditional resources, offering greater volume, timeliness, and interactivity compared to print resources [23]. The fundamental reason for university researchers' higher preference for new media research information resources is that these resources meet their needs for certain characteristics. As shown in Table 4, the top four concerns for university researchers are authority (21.56%), timeliness (20.64%), relevance (20.18%), and authenticity (16.97%). This indicates that driven by the internet and big data environments, massive research information resources have emerged, and the pace of cutting-edge research topic innovation has accelerated. University researchers have higher quality requirements for these vast information resources, hoping to obtain more authoritative, cutting-edge, and authentic research information resources through new media. Additionally, university researchers' needs for research information are gradually becoming personalized, focusing primarily on their own research topics when acquiring resources.

Survey results from the usage frequency dimension show that university researchers have high dependence on new media research information resources, with the strongest preference for electronic journals. Moreover, they have increasingly high quality requirements for new media research information resources, with strong expectations for authority, timeliness, relevance, and authenticity. This demonstrates that in the new media digital era, searching for and screening available and accessible information resources is crucial for improving research quality and knowledge creation efficiency.

4. Analysis of University Researchers' Research Information Behavior Characteristics in the New Media Environment

4.1 Characteristics of Research Information Acquisition Behavior

In the new media environment, pathways for acquiring research information resources are more extensive and intelligent. This study categorized acquisition pathways into traditional libraries, network digital libraries, specialized databases, academic blogs and forums, Weibo and WeChat, search engines, and open access websites. The survey shows that search engines are the most fre-

quently used pathway (30.05%), followed by specialized databases (24.77%) and network digital libraries (20.18%). These three major pathways reflect university researchers' primary needs for research information. Additionally, among occasionally used pathways, academic blogs and forums and open access websites each account for nearly 50%. In traditional media environments, research information acquisition pathways were primarily libraries, interlibrary loans, and specialized databases, with high user loyalty to these channels and heavy dependence on library collections for querying research information, along with high demands for full-text acquisition [24]. Comparing the two environments reveals that the new media environment not only increases the number of acquisition pathways but also demonstrates diversified channels for acquiring research information resources.

However, university researchers also encounter obstacles when using new media platforms to retrieve and acquire research information resources. Nearly 70% consider the lack of effective information resources, incomplete mastery of effective pathways, and incomplete grasp of retrieval methods as the biggest obstacles. This indicates that, on one hand, new media platforms currently lack sufficient information resources to assist university researchers' research activities; on the other hand, researchers do not comprehensively master the pathways to effective information resources or understand effective retrieval methods for various platforms.

In response to these characteristics and obstacles, knowledge information service providers should develop integrated resource service models for new media platforms. This includes constructing various research resource knowledge bases, developing programs and systems for collecting resources from open access websites and search engines, and embedding resource collection and management tools such as Sticker, Collector, NCollectorStudio. Additionally, building linking functions between research resource knowledge bases and network search engines, digital libraries, and specialized databases, as well as adding single-source retrieval, cross-database retrieval for homogeneous sources, cross-database retrieval for heterogeneous sources, and integrated data source-guided retrieval to new media research information acquisition platforms, while providing retrieval consultation services.

4.2 Characteristics of Research Information Digestion Behavior

In the new media era, the public's reading and processing of information exhibits fragmented characteristics, with knowledge system construction following the "80/20 principle," meaning that a small amount of knowledge acquisition supports the entire knowledge system. The survey found that nearly 75% of researchers only read abstracts or selected parts of documents, with very few engaging in intensive reading. In traditional media environments, researchers' learning processes for discovering research information exhibited systematic characteristics [25], as users would discriminate, classify, and sort acquired literature resources before conducting systematic and in-depth research. In contrast,

the new media environment leads users to expect direct and usable research information resources obtained through new media platforms, bypassing cumbersome screening processes. Users' digestion methods for research literature resources acquired through new media exhibit fragmented characteristics.

To accommodate users' fragmented learning and digestion characteristics for research information resources, auxiliary analysis and learning digestion service functions should be provided. A semantic analysis system for research information resources should be designed based on research information resource knowledge bases, offering services such as word segmentation annotation, entity extraction, abstract extraction, keyword extraction, and word frequency statistics for research information resources from digital libraries and specialized databases. This assists users in learning and digesting relevant research information resources, thereby improving research efficiency.

4.3 Characteristics of Research Information Tracking Behavior

Scientific research is a time-sensitive endeavor, making research information tracking an important component of university researchers' information behavior. This study categorized tracking pathways into electronic journals and magazines, digital library research dynamic notifications, academic blogs and forums, Weibo and WeChat, academic conferences, and advisors/colleagues/classmates. The survey shows that nearly half of researchers regularly choose advisors and surrounding colleagues/classmates as their primary tracking pathway, while 33.03% track research information dynamics through reading electronic journals and magazines. Among occasionally used pathways, academic conferences account for 34.86%. In traditional media environments, research information tracking pathways were primarily peers or academic conferences [16]. Survey data reveal that while new media environments have increased the number of research information tracking pathways, university researchers' choices remain dominated by traditional approaches. Regarding tracking methods, 80.50% adopt personal active searching and browsing, while very few use RSS subscriptions or digital library Alerts tracking reminders, indicating that users' tracking methods lack intelligence.

In response to the current status of research dynamic tracking using new media, research information service providers should strengthen the promotion of using academic blogs, forums, WeChat, and Weibo for research information tracking. Combined with various stages of the research process, micro-service functions for research information dynamic tracking should be constructed to push expert and research achievement dynamic information related to users' research themes. Additionally, intelligent information tracking methods such as RSS subscriptions and digital library Alerts should be promoted across platforms to enable users to obtain highly timely and relevant new media research information dynamics.

4.4 Characteristics of Research Information Exchange Behavior

Research information exchange behavior includes both discussion and sharing of research information resources. This study categorized exchange pathways into QQ/WeChat/Weibo, academic blogs and forums, Email, academic conferences, and written correspondence. The survey shows that among frequently used pathways, Email accounts for 33.49%, QQ/WeChat/Weibo for 30.05%, and academic blogs and forums for 22.48%. In traditional media environments, research information exchange modes were primarily formal exchanges—academic knowledge exchanges in formal settings where academic viewpoints or research conclusions were presented, with full responsibility and ownership [26]. In the new media environment, informal methods have become important channels for knowledge and information sharing, with private relationships or informal settings greatly promoting knowledge and information dissemination [27]. The survey indicates that new media platforms have become important pathways for research information resource exchange and sharing, offering greater immediacy and interactivity than traditional media environments. However, obstacles exist when university researchers use new media for research information exchange, with the two most prominent issues being lack of quality resources and insufficient depth of discussion.

To improve the smoothness of research information exchange using new media, a P2P (peer-to-peer) sharing network should be constructed centered on specialized databases, digital libraries, open access websites, and search engine research information sources, with informal exchange platforms such as Email, WeChat, Weibo, and QQ as channels. Users should be allowed to add tags to research literature and other information resources, and file download and sharing technologies should be used to build comprehensive research information resource dissemination and sharing functions, thereby improving the utilization of quality research information resources.

4.5 Characteristics of New Media Platform Research Information Service Demand

Based on the application of new media platforms in university researchers' research information resource acquisition, tracking, exchange, and sharing, as well as existing obstacles, this study further explored researchers' expectations for new media platform research information resource services. The survey shows that the most anticipated services are resource clustering by research theme and by research field experts. In traditional media environments, limited by resource platforms and information technology, users had stronger demands for intelligent information services and expected to obtain complete and sufficient information resources [28]. In new media environments, information service platforms have become more diversified and intelligent, greatly reducing the difficulty of obtaining complete information resources. Survey results show that university researchers' expectations for new media in research information resource services exhibit personalized characteristics, anticipating resource classification

according to research topics and showing certain demands for consultation and interaction.

Research knowledge information service providers should leverage new media platforms to implement personalized customization services to meet users' personalized research information resource needs. Personalized research information services should include research theme resource clustering services, research field expert resource clustering services, and the design of personalized customization spaces in digital libraries, specialized databases, and open access website platforms. By collecting user browsing and download logs and using big data analysis technology to analyze users' concerned topics, trends, and field experts, the latest dynamic information, literature resources, and expert activities can be automatically downloaded and stored. Users only need to log in periodically to check, while simultaneously launching relevant personalized service apps across platforms to help users obtain timely and immediate services.

5. Research Conclusions

Through research on new media concepts and summarization of information behavior in new media environments, this study constructed a characteristic model of scientific research information behavior in the new media environment from five dimensions: research information acquisition, digestion, tracking, exchange behavior, and research information service needs. Using questionnaire surveys, 436 university researchers from the three northeastern provinces were studied to verify the constructed model. The study found that university researchers have high dependence on new media research information resources, with the strongest preference for electronic journals and a focus on information resource quality; research information acquisition behavior exhibits diversified pathways; research information digestion behavior shows fragmented characteristics; research information tracking behavior remains dominated by traditional approaches and single methods; research information exchange behavior is characterized by the dominance of new media platforms; and demand for new media platform research information services shows personalized characteristics. Except for research information tracking behavior characteristics, which deviate from the model, the constructed characteristic model of scientific research information behavior in the new media environment is basically verified. Following empirical analysis of research information behavior characteristics in the new media environment, corresponding suggestions and countermeasures are proposed for effectively utilizing new media to provide knowledge information services.

Based on survey results of university researchers' research information behavior in the new media environment, this study proposes suggestions and countermeasures for future knowledge information services but does not elaborate on specific implementation methods. Future research will combine computer technology, network application technology, and database technology to implement the designed new media research information service models or functions in actual service construction, helping university researchers more effectively utilize

new media for research activities and improving research and knowledge creation efficiency.

References

- [1] Chinese Academy of Social Sciences. *China New Media Development Report (2017)* [EB/OL]. [2017-07-11]. http://tt.cssn.cn/zk/zk_{zkg}/201707/t20170705_{3569552}3.shtml.
- [2] WAKEFIELD R, WAKEFIELD K. Social media network behavior: a study of user passion and affect [J]. *Journal of strategic information systems*, 2016, 64(2): 140-156.
- [3] KIM K, SIN S. Use of social media in different contexts of information seeking: effects of sex and problem-solving style [J]. *Information research*, 2015, 20(1): 99-104.
- [4] ZHU H, HUANG C, LU R, et al. Modelling information dissemination under privacy concerns in social media [J]. *Physica A: statistical mechanics and its applications*, 2016, 449(1): 53-63.
- [5] BUCKARMA E, THIELS C, CABRERA D, et al. Influence of social media on the dissemination of a traditional surgical research article [J]. *Journal of surgical education*, 2017, 74(1): 79-83.
- [6] FAN Min, DENG Xiaozhao. Research on consumer information search behavior in network environments [J]. *Modern intelligence*, 2011(12): 37-40.
- [7] BIE Xuejun, LI Zuchao, WANG Mengxuan. Composition and cultivation of information literacy for top innovative talents in new media environments [J]. *Modern university education*, 2016(6): 103-108.
- [8] GUO Yu, WANG Xiwei, YANG Mengqing, et al. Research on enterprise knowledge sharing models in new media environments—from the perspective of information ecological niche [J]. *Library and information service*, 2016, 60(15): 14-20, 70.
- [9] SHA Yongzhong, YAN Jinsong, SU Yun. Analysis of information behavior of scientific researchers in network environments [J]. *Library and information service*, 2012, 56(24): 77-82.
- [10] YANG Gang, MA Ran, ZHANG Jiashuo, et al. Study on the relationship between information behavior and research innovation ability of master's students—taking Jilin University as an example [J]. *Library and information service*, 2015, 59(7): 6-13, 19.
- [11] MA Xinchun, FENG Ying. Research on influencing factors of new media information quality based on grounded theory [J]. *Information science*, 2017(4): 32-36, 48.
- [12] WANG Xiwei, GUO Yu, WEI Junwei, et al. Application and comparative analysis of new media in information and knowledge management fields at home

- and abroad [J]. *Library and information service*, 2015, 59(7): 6-13, 19.
- [13] Baidu Baike. New media [EB/OL]. [2017-10-22]. <https://baike.baidu.com/item/新媒体/6206?fr=aladdin>.
- [14] LITOU I, BOUTSIS I, KALOGERAKI V. Efficient techniques for time-constrained information dissemination using location-based social networks [J]. *Information systems*, 2017, 64(1): 321-349.
- [15] ZHOU Xiuhui, ZOU Jinhui. Qualitative research on information behavior based on sense-making theory—taking textile discipline researchers at Tianjin Polytechnic University as an example [J]. *Library work and study*, 2015(12): 85-88.
- [16] LI Wenwen, CHENG Ying. Analysis of researchers' information behavior and its implications for library personalized research services [J]. *Information science*, 2017(1): 74-77, 105.
- [17] SONG Yumei. Analysis of university library service models based on user information behavior research [J]. *Library*, 2014(2): 98-100, 143.
- [18] CHEN R, SHARMA S. Understanding user behavior at social networking sites: a relational capital perspective [J]. *Journal of global information technology management*, 2015, 46(2): 25-45.
- [19] PINTO L, CHAHED T, ALTMAN E. A framework for information dissemination in social networks using Hawkes processes [J]. *Performance evaluation*, 2016, 103(1): 86-107.
- [20] Kaoyan.com. Liaoning graduate student admission ratio [EB/OL]. [2017-06-15]. <http://www.kaoyan.com/baolubi/liaoning/>.
- [21] Kaoyan.com. Jilin graduate student admission ratio [EB/OL]. [2017-06-15]. <http://www.kaoyan.com/baolubi/jilin/>.
- [22] Kaoyan.com. Heilongjiang graduate student admission ratio [EB/OL]. [2017-06-15]. <http://www.kaoyan.com/baolubi/heilongjiang/>.
- [23] SHAH C. Collaborative information seeking [J]. *Journal of the association for information science and technology*, 2014, 65(2): 215-236.
- [24] LU Xiaoli. Research on graduate students' scientific research information needs and information behavior [D]. Hefei: Anhui University, 2010.
- [25] LIN Jian. On information selection in science and technology communication [D]. Beijing: Renmin University of China, 2000.
- [26] TIAN Ning. Research on university scientific research user information behavior in network environments [J]. *Hebei sci-tech library journal*, 2014, 27(4): 21-23, 14.
- [27] ZHANG Xiangxian, GUO Shunli, LI Kun. Analysis of knowledge sharing

mechanisms for university library subject service teams in new media environments [J]. *Library development*, 2017(5): 79-86.

[28] HU Rui. User information needs and behavior in the digital age [J]. *Science & technology vision*, 2013(8): 95.

Author Contributions:

YANG Gang: Responsible for research design, overall paper structure, and final revision;

YUAN Gongming: Responsible for paper writing and revision;

XU Yunyin: Responsible for paper writing and literature search.

Preliminary Notice for the 2018 National Academic Symposium on New Service Capacity Building for Libraries

To all libraries:

Library development is transitioning from a resource-driven to a service-led era. The fundamental issue in library development is service, and the core of service is service capacity. Library service capacity must be driven by user needs, extending and expanding from traditional literature, physical space, and in-library services to embedded, in-depth knowledge services such as subject services, intelligence services, data services, publishing services, think tank services, and smart services. This transformation will enable significant changes in libraries and library services, enhancing service functions and effectiveness.

Therefore, the “National Academic Symposium on New Service Capacity Building for Libraries” will be held in Guangzhou from March 29 to April 1, 2018. The conference is organized by the Academic Research Committee of the China Society of Library Science, and co-organized by the User Research and Service Professional Committee of the Academic Research Committee, Guangdong Provincial Science and Technology Library (Guangdong Provincial Institute of Science and Technology Information and Development Strategy), and the *Library and Information Service* Magazine. The conference will invite important experts, scholars, and frontline practitioners in domestic library service fields to discuss theoretical and practical issues concerning the enhancement of new service capabilities for libraries under new circumstances, summarize and share successful explorations made by various libraries in recent years, and analyze and address new problems and challenges in current and future new service capacity building.

1. Conference Theme: New Service Capacity Building for Libraries

2. Time and Location:

- Time: March 29-April 1, 2018 (2-day conference, registration on March 29, departure on April 1)

- Location: Guangzhou, Guangdong Province

- Agenda: Opening ceremony, keynote speeches, case studies, Q&A interaction

3. Participants: Library directors, deputy directors in charge of services, department heads, librarians, experts and scholars engaged in library service research, graduate students; chief editors, deputy chief editors, and editors of library and information science academic journals; relevant enterprise representatives and technical personnel.

4. Topics:

- Changes in user needs and new requirements for library service capacity
- Development models and innovative trends in subject services
- Intelligence analysis and intelligence research services
- Data analysis, mining, and knowledge discovery
- “Library publishing” and publishing services
- Library think tank functions and think tank services
- Smart libraries and intelligent library services
- New library service system construction and service evaluation

Further details will be provided in subsequent notices.

Library and Information Service Magazine

January 2018

Note: Figure translations are in progress. See original paper for figures.

Source: ChinaXiv — Machine translation. Verify with original.