

## Chinese researchers' cognition and use of institutional repositories

**Authors:** Haiyan Song, Shao Chengjin, Gu Liping, Zhang Dongrong, Pan Wei, Huang Wenli, Jiang Lili, Chen Tiantian, Zhang Hao

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### Abstract

**[Objective]** To understand domestic researchers' awareness of IR and their attitudes, conditions, and expectations regarding depositing research outputs into IR. **[Methods]** Focusing on the “depositor” user group, this study targeted researchers from domestic educational and research institutions, obtaining survey data from over 1,500 researchers across more than 60 institutions through quota sampling. SPSS was used to analyze the reliability and validity of the survey data, and data analysis was conducted. **[Results]** Within the scope of this survey, we obtained an understanding of domestic research and educational personnel' s awareness of IR and their attitudes, conditions, and expectations toward depositing academic achievements into IR. Based on the survey data, some differences were identified between researchers from professional research institutions and universities regarding depositing attitudes, methods, and conditions. **[Limitations]** The overall survey scale is limited, particularly with a relatively small sample of university users. The conclusions are based on the obtained survey data and may not be generalizable to broader user groups. **[Conclusion]** The survey basically achieved the expected outcomes. Based on the results, considerations for promoting IR practice in China and enhancing the application of IR outcomes are proposed.

### Full Text

## Survey and Analysis on Cognition and Usage of Institutional Repositories Among Researchers in China

Song Haiyan<sup>1</sup>, Shao Chengjin<sup>1</sup>, Gu Liping<sup>2</sup>, Zhang Dongrong<sup>2</sup>, Pan Wei<sup>1</sup>, Huang Wenli<sup>1</sup>, Jiang Lili<sup>1</sup>, Chen Tiantian<sup>1</sup>, Zhang Hao<sup>1</sup>

<sup>1</sup>Shanghai Jiao Tong University Library, Shanghai 200240, China

<sup>2</sup>National Science Library, Chinese Academy of Sciences, Beijing 100190, China

**Abstract:**

This study investigates Chinese researchers' awareness of Institutional Repositories (IRs) and their attitudes, conditions, and expectations regarding depositing research outputs into IRs. Focusing on the "depositor" user group, the survey targeted researchers from educational and scientific institutions across mainland China. Using quota sampling, data were collected from over 1,500 researchers at more than 60 institutions. SPSS was employed to analyze the reliability and validity of the survey data, followed by comprehensive data analysis. The results reveal the current state of awareness, attitudes, conditions, and expectations among Chinese researchers and educators regarding IRs and academic output deposition. Based on the survey data, notable differences were identified between researchers from professional research institutions and universities in terms of deposition attitudes, methods, and conditions. The limitations include the relatively limited overall survey scale, particularly the small sample of university users. The conclusions are based on the obtained survey data and may not be generalizable to broader user groups. The survey largely achieved its intended objectives, and based on the findings, reflections are offered on advancing IR practices and enhancing IR applications in China.

**Keywords:** Institutional Repository; User Survey; Usage Cognition; China; Researchers

**Classification Number:** G250

## 1. Introduction

Institutional Repositories (IRs) have emerged as a product of new scholarly communication paradigms in the digital age, bearing the critical responsibility of preserving institutional knowledge assets and supporting open knowledge sharing. They are gradually becoming essential infrastructure for institutional knowledge management and important components of novel academic information exchange and evaluation systems. An IR based at a university or research institution provides a suite of services for managing and disseminating digital resources created by the institution and its members, including long-term preservation, organization, retrieval, publication, and distribution [1]. Crow argues that IRs collect digital collections from one or more university communities and preserve their intellectual outputs, representing a key component in reforming scholarly communication systems [2]. Shearer proposes that a crucial goal of IRs is to provide reasonable access to scholarly materials without economic barriers amid existing academic publishing models [3]. As IR construction and usage have become more widespread, academic institutions increasingly recognize their benefits. Ezema suggests that IRs can enhance researcher visibility, elevate university academic status and rankings, and promote research dissemination [4].

Originating from the open access movement, the significance of IRs has far exceeded open access itself, evolving from a simple response to the scholarly publishing crisis toward a fundamental reconsideration and process reengineering of

scholarly communication and dissemination mechanisms [5]. Consequently, IRs have gained significant attention and active promotion from academic research institutions. According to statistics, as of October 30, 2013, 2,484 institutional repositories were registered in OpenDOAR (Directory of Open Access Repositories) worldwide [6]. In China (excluding Taiwan), 36 institutions have registered IRs, including the University of Hong Kong, Hong Kong Polytechnic University, dozens of research institutes within the Chinese Academy of Sciences system, Peking University, Xiamen University, and the University of Macau.

## 2. Research Background and Context

As awareness of IR functions and roles continues to grow, related empirical research has deepened, providing robust support for improving IR policies, functionalities, content systems, and promotion strategies.

Internationally, Lynch et al. analyzed IR deployment across U.S. research institutions in a 2005 *D-Lib Magazine* article [7], while Markey et al. conducted a census analysis of U.S. IRs in 2007 [8]. In 2013, Ezema identified 15 common document types stored in IRs [4]. Additionally, some empirical research has focused on researchers' self-archiving cognition and behaviors.

Domestically, Li Lin conducted a survey in 2006 on Chinese researchers' attitudes and willingness toward open access to scientific information, targeting both IR builders and depositors, marking a large-scale survey that launched IR construction within the Chinese Academy of Sciences system [9]. Subsequently, from June to August 2007, He Yan investigated self-archiving behaviors and related influencing factors among researchers at the University of Science and Technology of China and within the Chinese Academy of Sciences [10]. In 2008, Han Ke and Zhu Zhongming surveyed researchers' cognition of IRs and their service requirements [11]. In 2009, Zeng Su et al. conducted research on IR planning, construction, and challenges, analyzing cognitive and demand differences among researchers, library and information professionals, and decision-makers [12]. In 2011, the CALIS Management Center and Peking University Library conducted a centralized survey on the construction status of IRs in Chinese universities [13], while Feng Yinghua surveyed researchers from three universities in Changzhou from a user perspective [13]. These surveys have provided valuable references for IR construction in relevant institutions from multiple perspectives.

In October 2012, under the joint advocacy of the National Science Library of the Chinese Academy of Sciences and Peking University Library, the China IR Implementation Group was established, marking a new chapter in IR construction, development, and services in China. At its inception, the group determined to conduct a nationwide Chinese IR user survey. Under the group's coordination, the Shanghai Jiao Tong University Library and the National Science Library of the Chinese Academy of Sciences took the lead in developing the survey protocol, designing the questionnaire, and coordinating implementation.

With participation from 14 member libraries of the working group, the Chinese IR User Survey was officially conducted from May 21 to June 25, 2013, involving over 1,500 researchers and teaching faculty from more than 60 institutions across mainland China.

### 3. Survey Framework

The Chinese IR User Survey focused on the “user” group as depositors (hereinafter referred to as users), including faculty, researchers, and graduate students at the master’s level and above. The primary objective was to understand Chinese researchers’ awareness of IRs and their attitudes and expectations regarding depositing research outputs, thereby providing valuable references for IR construction, development, and policy formulation in China.

#### 3.1 Survey Content and Design

The survey primarily employed questionnaires, focusing on two key aspects: (1) Chinese researchers’ overall cognition of IRs, aiming to understand how cognition varies across different institutions, identities, disciplines, and age groups; and (2) influencing factors and desired conditions for depositing research outputs into IRs. The questionnaire content was designed around these two objectives, comprising an introduction, relevant concepts and terminology, questions, and demographic information. The core section included 19 questions, covering single-choice, skip-logic, multiple-sequence, and open-ended formats. Demographic information facilitated differentiation of user characteristics by gender, age, identity (professional title), education level, discipline, and region.

#### 3.2 Survey Method

During implementation, considering that member units of the China IR Implementation Group essentially represent major types of domestic educational and research institutions and each maintains a stable base of research author users, quota sampling—a non-probability sampling method—was adopted for determining survey participants. This approach enhanced operational feasibility while ensuring user representativeness. Regarding sample size, the survey built upon the 14 member units of the China IR Implementation Group, with each unit selecting and identifying research output authors from its own institution and other institutions. Within each institution, user selection also employed proportional sampling based on disciplinary affiliation, professional title, gender, and other demographic characteristics to ensure adequate sample size and representativeness.

#### 3.3 Questionnaire Distribution and Collection

To ensure survey validity, both paper and electronic questionnaires were used. Paper questionnaires were distributed and collected in person by member units to researchers within their institutions. To ensure standardization, collected

paper questionnaires were coded and re-entered via the Shanghai Jiao Tong University Library's questionnaire platform. Electronic questionnaires were provided for users outside member units, collected through both point-to-point email distribution and web-based surveys hosted on the questionnaire platform. Electronic questionnaire data were stored on the platform, and both types of questionnaires were aggregated, exported, and analyzed uniformly. The survey collected 1,516 valid questionnaires, including 885 paper questionnaires (58.4% of the total) and 631 electronic questionnaires. Among electronic submissions, 437 were collected via email (28.8% of the total) and 194 via web-based completion (12.8% of the total).

### 3.4 Sample Data Quality Analysis

Data validity is fundamental to survey analysis and evaluation. After aggregating all survey data, SPSS was used to analyze reliability and validity. As shown in Figure 1 [Figure 1: see original paper], the analysis distinguished between two scenarios: including and excluding skip-logic questions.

**Figure 1** presents reliability and KMO analysis for both scenarios. The results show that regardless of whether skip-logic questions were included, the questionnaire's Cronbach's coefficient exceeded 0.8, indicating high internal consistency. Additionally, the KMO value for structural validity testing exceeded 0.8, and Bartlett's test of sphericity showed  $P < 0.01$ , demonstrating sufficient correlation among variables and suitability for factor analysis.

## 4. Analysis Results

### 4.1 Survey Participant Profile

Among survey participants, researchers under 40 years old constituted the primary group, accounting for nearly 85% of the total—precisely the main demographic using institutional repositories. However, participation from more senior researchers aged 45–49 and 50–54 was relatively limited, despite this group being highly productive and representing a significant force in institutional repository content deposition. In terms of education level, master's degree students and PhD candidates comprised the largest group at 45.8%, followed by PhD holders and postdoctoral researchers at 28.2%. Geographically, Beijing accounted for the largest proportion at 47.6%, followed by Shanghai, Sichuan, Hubei, and Liaoning. By discipline, according to the Ministry of Education's classification system for degree conferral and talent cultivation, engineering and science users represented the largest proportions at 26.8% and 26.2% respectively, followed by management, medicine, agriculture, and law.

### 4.2 Cognition and Usage Willingness Analysis

#### (1) IR Awareness

This aspect primarily examined whether users knew about and understood IRs

and their purposes. As shown in Figure 2 [Figure 2: see original paper], over 60% of users were aware of IRs, indicating relatively high awareness among respondents. However, 40% were unclear or completely unaware of IR purposes, with 30% having never heard of IRs. This underscores that intensified promotion and outreach remain critical tasks for IR development in mainland China. Additionally, over 40% of users knew their institution had an IR, while more than 10% knew their institution had not yet established one. Notably, over 40% had never inquired about their institution's IR status, further validating the necessity of promotional efforts.

### **(2) IR Usage and Access Methods**

This section investigated whether and how users accessed IRs and their common access pathways. The results show that 43% of users had used IRs, while 55.7% had not. Only 20.8% had used IRs and clearly understood how to use them. Among IR users, the most common access method was through library or information center webpage links (35%), followed by direct access via the IR homepage (20%). This indicates that researchers widely accept libraries as the primary institutions for IR construction and management. The fact that approximately one-fifth of IR users could access repositories directly through institutional homepages also suggests this subgroup possesses substantial IR familiarity. User access pathways are illustrated in Figure 3 [Figure 3: see original paper].

### **(3) Reasons for IR Usage and Commonly Used Resource Types**

This aspect examined primary reasons for IR usage and frequently accessed resource types through multiple-choice ordered questions. Results indicate that users access IRs primarily because of rich resources, high resource quality, open access, and convenient retrieval. Commonly used resource types in IRs are shown in Figure 4 [Figure 4: see original paper]. Traditional academic literature—including journal articles, conference papers, dissertations, monographs and edited volumes, research reports, and patent documents—constitutes the first tier of resources. Second-tier resources, with average usage demand reaching 75%, include multimedia materials (audio/video) and lecture slides to meet teaching needs. Third-tier resources, with approximately 58% average demand, comprise working notes, experimental data, and internally distributed materials. These resource types represent key focus areas for future IR construction.

## **4.3 Deposition Willingness, Conditions, and Expectations**

This survey emphasized researchers' willingness to deposit their academic outputs into IRs, associated conditions, and expectations.

### **(1) Deposition Willingness**

Survey results indicate that approximately 90% of users were willing to deposit their research outputs into IRs. However, 30.7% preferred limited open access, meaning they had specific conditional requirements for deposition. Additionally, 6.2% did not explicitly express willingness, and 1.5% clearly indicated unwilling-

ness to deposit. These findings demonstrate that Chinese researchers generally hold positive attitudes toward depositing their research outputs into IRs, while also reflecting considerable concern about intellectual property protection.

## **(2) Reasons for Willingness/Unwillingness to Deposit**

The survey revealed that the top three reasons motivating users to deposit their outputs into IRs were: promoting personal output sharing and dissemination, preserving academic achievements long-term, and endorsing open sharing practices. Conversely, factors troubling or influencing unwillingness to deposit primarily included lack of understanding about IRs, complex submission procedures, and concerns about plagiarism or commercial misuse.

## **(3) Deposition Methods**

Based on researchers' supportive attitudes toward IR deposition, this section examined their preferred deposition methods, as shown in Figure 5 [Figure 5: see original paper]. The majority of users preferred depositing through authorized teams or delegates (such as librarians). Second, 51.4% favored submitting to management departments for subsequent IR manager deposition. Third, 48% hoped to implement self-archiving. Finally, 29.7% suggested completing deposition through platform data migration. These results indicate that convenient deposition methods and processes are primary factors affecting user willingness, though the degree of user control over deposition procedures also significantly influences method selection.

## **(4) Quality Control and Data Standardization**

This aspect examined whether depositors desired quality control and data standardization for deposited outputs. Results show that nearly 90% of users considered quality control and data standardization necessary, with 46.5% viewing it as very necessary and 41.4% as necessary. Only 2.1% considered such measures unnecessary.

## **(5) Open Access Conditions and Scope**

This section investigated users' expectations regarding the scope and degree of access to deposited outputs. Expected IR access scope and timeframes are shown in Figure 6 [Figure 6: see original paper]. Regarding access scope, only 27.1% of users were willing to have IR resources completely open, while approximately 71% expected restrictions, including 26.1% preferring IP-range limited access, 24.5% favoring login-based access, and 20.8% supporting multiple restriction measures. Regarding access timeframe, 33.0% were willing to implement open sharing immediately upon deposition, approximately 30% preferred three-to-six-month embargoes, 20.7% required one-year embargoes, and 10.4% did not specify preferences. These divergent views reflect unresolved tensions between intellectual property protection and dissemination needs, necessitating multi-level and multi-scope access policies on IR platforms.

## **(6) Full-text Browsing/Downloading**

This aspect examined conditions under which depositors expected full-text access to their deposited outputs. Results show that 47.4% of users were willing to

have full-text browsing completely open, while over 50% expected restrictions on browsing permissions. Meanwhile, only 28.4% were willing to have full-text downloading completely open without restrictions, while approximately 70% expected limitations through IP ranges, login requirements, or other methods, as shown in Figure 7 [Figure 7: see original paper].

### **(7) Resource Types for Deposition**

This section examined the types of outputs users were willing to deposit into IRs. Results indicate that depositors showed high willingness to deposit journal articles, conference papers, dissertations, monographs and edited volumes, research reports, and patent documents. Multimedia materials (video/audio) and lecture slides ranked second, while working notes, experimental data, and internally distributed materials received lower acceptance. These deposition preferences largely align with usage patterns for resource types.

### **(8) Perceived IR Functions**

This aspect examined depositors' attitudes toward IRs' primary functions. Results indicate that users viewed five major functions as similarly important: collecting, preserving, and presenting individual or institutional outputs; facilitating sharing of individual or institutional outputs; supporting management and evaluation of outputs; expanding influence of outputs; and facilitating collaboration. However, significant differences emerged in the degree of importance assigned to these functions, as shown in Figure 8 [Figure 8: see original paper].

## **5. Differences Between Research Institutions and University Users**

The survey included approximately 1,000 users from professional research institutions and about 500 from universities. Although the sample sizes were unbalanced, analyzing differences between these two user groups helps guide future IR development priorities for each institution type. It should be noted that due to survey scope and participant limitations, conclusions are primarily based on the current sample.

### **5.1 Cognitive Differences**

Within the current survey scope, users from both professional research institutions and universities demonstrated some awareness of IRs, but significant differences emerged regarding those who had "never heard of IRs." Among research institution users, 26.8% had never heard of IRs, compared to 40.8% among university users, as shown in Figure 9 [Figure 9: see original paper]. This indicates that greater promotion and outreach efforts are needed among university users.

### **5.2 Usage Willingness Differences**

As shown in Figure 10 [Figure 10: see original paper], within the current survey scope, the top three reasons for research institution users' willingness to use IRs

were rich resources, convenient access, and academic output promotion. For university users, the primary reasons were rich resources, cost reduction, and academic output promotion. The differences in “convenient access” and “cost reduction” suggest that research institution users value IRs’ convenience for information retrieval, while university users appreciate the low cost of resource acquisition.

### 5.3 Deposition Factor Differences

Within the current survey scope, the top three factors motivating research institution users to deposit outputs into IRs included personal output sharing and dissemination, academic achievement preservation, and endorsement of sharing practices. University users’ primary motivations were personal output sharing and dissemination, academic achievement preservation, and academic output management. Both groups reached consensus on sharing and preservation, but research institution users showed greater recognition of IRs’ sharing functions, while university users were more receptive to IRs’ role in academic management. Regarding unwillingness to deposit, research institution users were primarily concerned about lack of understanding, increased workload, and complex submission procedures, whereas university users focused on lack of understanding, concerns about plagiarism or commercial misuse, and complex submission procedures, as shown in Figure 11 [Figure 11: see original paper]. This suggests that research institution users view deposition as increasing workload, while university users worry more about potential misuse of their outputs.

### 5.4 Deposition Method Differences

Within the current survey scope, research institution users preferred deposition methods including submission to management departments, authorized teams or delegates, and submission to IR managers. University users more strongly endorsed authorized teams or delegates, self-archiving, and submission to management departments, as shown in Figure 12 [Figure 12: see original paper]. Notable differences were observed in preferences for self-archiving and direct submission to IR managers, with university users showing greater inclination toward self-archiving.

## 6. Conclusions and Reflections

As the first large-scale user survey of professional research institution and university researchers in mainland China, the Chinese IR User Survey largely achieved its intended objectives.

### 6.1 Achievements and Limitations

The survey participants included researchers from both professional research institutions and higher education institutions, enabling the data to reflect the

needs and characteristics of researchers from different institutional types. Focusing on depositors as the primary survey target enhanced the relevance of the investigation and provided valuable references for systematic policy formulation and planning. Moreover, both professional research institution and university users reached consensus on IR functions and cognition, with certain commonalities observed across disciplines. However, users from specific disciplines expressed confusion and differences regarding deposition conditions and procedures. These findings authentically reflect the current state of IR development and application in China, representing the 普及 and development level of institutional repositories domestically. The survey, covering over 60 institutions nationwide, represents the first of its kind in China in terms of user participation and scale, accumulating valuable data to promote IR development and usage.

However, several limitations exist. In terms of scope, although representative institutions were selected from both professional research institutions and universities, they represent only a portion of the nation's extensive educational and research institutions. Consequently, survey conclusions are primarily based on the current dataset and require further research to determine applicability to broader user groups. Regarding sample distribution, the university user sample was smaller compared to research institution users, and participation across disciplines was not fully balanced. In terms of methodology, the combination of paper and electronic questionnaires, with most data derived from paper surveys, lacked strict process control. While the sample size reached a certain scale, the effective response rate for some questions was reduced, potentially impacting the precision of related analyses.

## 6.2 Implications and Considerations

In recent years, compared to international developments and practices in Hong Kong and Taiwan, IR construction and development in mainland China has been uneven. Researchers have analyzed the “cold phenomenon” of domestic IR practice, attributing it to lack of policy support, intellectual property issues, institutional management problems, and weak open access awareness among scholars [15]. The current user survey reveals several common issues and phenomena requiring attention.

### (1) Strengthen Guidance and Broadly Promote IR Significance and Value

Promotion should extend beyond IR resources to fundamentally excavate IR value and significance, guiding researchers at multiple levels to correctly understand IRs. Additionally, efforts should target institutional managers, academic support providers, and research administrators to publicize IR significance, emphasize IR construction and usage, and leverage IRs' role in scholarly communication.

### (2) Emphasize Practice and Systematically Advance IR Application and Promotion

Compared to theoretical research achievements, IR practical development has lagged slightly during its decade-long development in China. While users have gained awareness and understanding of IRs, they lack practical experience with construction and application. Therefore, to accelerate IR practical construction and expand social influence, greater emphasis on IR practice is needed, with systematic planning and implementation from institutional decision-making and research management to content construction and technical support, promoting diversified IR practices.

### **(3) Ground in Service and Deeply Enhance IR Quality and User Experience**

IRs are positioned to store institutional knowledge assets and outputs, yet diverse resource types create varying user experiences in retrieval, access, and utilization. Therefore, enhanced quality control and content development are needed to provide users with higher-quality, standardized resources. Simultaneously, IR platforms must improve retrieval and access capabilities, integrate seamlessly with search engines and commercial databases, and enhance overall user experience.

### **(4) Improve Management and Effectively Optimize IR Processes and Mechanisms**

IR construction, usage, and promotion require continuous optimization of processes, management mechanisms, and service mechanisms. For example, policies should guide IR storage to encourage researcher contributions; IR utilization and dissemination should be standardized to improve content quality; technical platforms should be enhanced to improve user experience; and incentive, management, and evaluation mechanisms should be perfected to boost user participation.

In conclusion, IRs represent more than hardware and software—they require corresponding management and services. An effective IR results from collaborative efforts among librarians, IT experts, archivists, researchers, research managers, and policymakers. The Chinese IR User Survey results can help IR builders, managers, and service providers understand researchers' attitudes and expectations toward IRs, offering valuable references to further promote IR development and application in mainland China.

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The China IR User Survey was planned, organized, and guided by the China IR Implementation Group. Under the group's coordination, over 60 research and educational institutions actively participated in the survey, ensuring the collection of rich and valuable data. We express our sincere gratitude to all participants.

#### **Member Units of China IR Implementation Group:**

National Science Library, Chinese Academy of Sciences; Tsinghua University Library; Peking University Library; Xiamen University Library; Shanghai Jiao Tong University Library; Chinese People's Liberation Army Medical Library;

Institute of Scientific and Technical Information of China; Geological Library of China; Documentation and Information Center, Chinese Academy of Social Sciences; Agricultural Information Institute, Chinese Academy of Agricultural Sciences; Medical Information Institute, Chinese Academy of Medical Sciences; Information Center, Institute of High Energy Physics, Chinese Academy of Sciences; Information Network Center, Institute of Mechanics, Chinese Academy of Sciences; Library, Institute of Hydrobiology, Chinese Academy of Sciences.

**Major Research and Educational Institutions Participating in the China IR User Survey (in no particular order):**

*Chinese Academy of Sciences:* Institute of Semiconductors, Changchun Institute of Optics, Fine Mechanics and Physics, Chengdu Institute of Biology, Chengdu Institute of Mountain Hazards and Environment, Institute of Zoology, Institute of High Energy Physics, Institute of Engineering Thermophysics, Guangzhou Institute of Geochemistry, Cold and Arid Regions Environmental and Engineering Research Institute, Hefei Institutes of Physical Science, South China Botanical Garden, Institute of Metal Research, Institute of Modern Physics, Institute of Mechanics, Institute of Policy and Management, Institute of Tibetan Plateau Research, Shanghai Institute of Microsystem and Information Technology, Shenyang Institute of Applied Ecology, Institute of Hydrobiology, Xishuangbanna Tropical Botanical Garden, Institute of Psychology, Purple Mountain Observatory.

*Chinese Academy of Agricultural Sciences:* Institute of Animal Science, Agricultural Information Institute, Institute of Agricultural Resources and Regional Planning, Institute of Vegetables and Flowers, Sichuan Bill Agricultural Science and Technology Consulting Center, Sichuan Agricultural Information and Rural Economy Research Institute, Institute of Crop Sciences.

*Chinese Academy of Tropical Agricultural Sciences:* Haikou Experimental Station, Institute of Environment and Plant Protection, Institute of Scientific and Technical Information, Institute of Agricultural Machinery, Institute of Tropical Crop Variety Resources.

*Chinese People's Liberation Army Medical Library and Related Units, Geological Library of China and Related Units, Institute of Scientific and Technical Information of China, Chinese Academy of Social Sciences and Related Units, Chinese Academy of Medical Sciences.*

*Universities:* Peking University, Beijing University of Technology, Beihang University, Beijing Institute of Technology, Capital Medical University, Southeast University, Fudan University, Guangdong University of Technology, Henan University of Science and Technology, Jimei University, Tsinghua University, Shanghai University, Shanghai Jiao Tong University, Tongji University, Wenzhou University, Xiamen University, Zhejiang University, Zhengzhou Animal Husbandry Engineering College, China Agricultural University.

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## Author Contributions

Pan Wei, Gu Liping, Zhang Dongrong: Proposed research ideas, organized and designed survey protocol, coordinated implementation of surveys for research institutions and universities.

Song Haiyan, Pan Wei: Primary authors of survey protocol, organized questionnaire design, participated in data analysis and paper writing/revision.

Shao Chengjin, Huang Wenli, Jiang Lili, Chen Tiantian, Zhang Hao: Participated in questionnaire design, data analysis, and paper writing.

Pan Wei, Song Haiyan, Gu Liping, Zhang Dongrong: Responsible for final paper revision.

**Corresponding Author:** Pan Wei, E-mail: wpan@lib.sjtu.edu.cn

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## Survey and Analysis on Cognition and Using of Institutional Repository for China Mainland Researchers

Song Haiyan<sup>1</sup>, Shao Chengjin<sup>1</sup>, Ku Liping<sup>2</sup>, Zhang Dongrong<sup>2</sup>, Pan Wei<sup>1</sup>, Huang Wenli<sup>1</sup>, Jiang Lili<sup>1</sup>, Chen Tiantian<sup>1</sup>, Zhang Hao<sup>1</sup>

<sup>1</sup>Shanghai Jiao Tong University Library, Shanghai 200240, China

<sup>2</sup>National Science Library, Chinese Academy of Sciences, Beijing 100190, China

**Abstract:** [Objective] Understanding concepts on IR of China Mainland researchers, and their attitudes, conditions and expectation for submitting and storing their research productions to IR. [Methods] Focusing on “submit role” users, the paper takes the researchers of educational & research institutions as survey object, obtains survey data from more than 1,500 researchers of 60 institutions by quota sampling method. And uses SPSS for reliability and validity analysis, and makes data analysis according to the survey objectives. [Results] Obtaining concepts on IR of China Mainland researchers, and their attitudes, conditions and expectation for submitting and storing their research productions to IR. Also, based on the data, discovering usage and concepts differences between research institutions and universities communities. [Limitations] There is small percentage of users from universities, and as far as the national scientific institutions and university communities, it needs more data to support the survey. The findings are just based on the survey data, they may not be applicable to a wider range of user groups. [Conclusions] The survey achieves its desired results, and according to the survey data, it brings out suggestions on promoting IR practice and enhancing IR applications.

**Keywords:** Institutional Repository(IR); User survey; Usage cognition; China; Researchers

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

*Source: ChinaXiv –Machine translation. Verify with original.*