

ALIA



## RELEVANCE 2020

LIS RESEARCH IN AUSTRALIA





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*Relevance 2020: LIS research in Australia*

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[www.alia.org.au](http://www.alia.org.au)

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## PREFACE

The Relevance 2020 series of research events in 2016 was a joint initiative of the Australian Library and Information Association (ALIA) and Charles Sturt University (CSU). It came about as a result of discussions between our two organisations about gaps in library and information science knowledge and the need for further development of the LIS research infrastructure in Australia.

The timing was fortuitous, with the ARC-funded LISRA project underway (<http://lisresearch.org.au>), consultation on the Australian Government National Research Infrastructure Roadmap in progress, and the imminent launch of ALIA's new journal (the Journal of the Australian Library and Information Association, JALIA).

We are indebted to the library schools and libraries at Curtin University, Queensland University of Technology, RMIT, UTS and the University of South Australia for hosting the events; to the individuals who spoke frankly about their own research experiences, and to the 172 participants who gave their time to be part of the discussion.

We would also like to acknowledge the generous financial support of the CSU Faculty of Arts and Education, and the commitment to the project demonstrated by the ALIA Research Advisory Committee. Our special thanks to Dr Linh Nguyen, who was commissioned to write this report, and to Brenda Currie, who served as the project manager.

We hope that the Relevance 2020 events and this report will result in even greater participation in LIS research by practitioners and academics, and that it will help to prompt greater collaboration between these two groups.

**Professor Philip Hider**

Head, School of Information Studies  
CHARLES STURT UNIVERSITY

**Sue McKerracher**

Chief Executive Officer  
AUSTRALIAN LIBRARY AND INFORMATION ASSOCIATION

## EXECUTIVE SUMMARY

This report provides the results of six Library and Information Science (LIS) research events in Australian capitals in late 2016 that had the main purpose of connecting academics, researchers and practitioners in order to help align future research projects and activities in the Australian LIS profession.

## SOURCES

Collected data included audio-visual recordings, butcher papers, Post-it notes, field notes, and post-event quick surveys, which were thematically analysed and summarised.

## FINDINGS

There were 172 participants from LIS schools, academic, special, TAFE, school, public and state libraries. This demonstrated a high degree of interest in LIS research from library and information professionals across the sector.

Ninety-six topics were identified as priority research areas and broadly categorised into 16 subjects, in which role, management, and information services were identified as the most commonly prioritised areas. However, participants were generally not aware of the broad spread of research carried out in the sector over the last five years, and some of these topics had already been explored, with the results available through publications or institutional repositories.

Practitioners found the interaction with academics particularly useful when it came to developing a research question. This mentoring was felt to be lacking in the sector.

As might be expected, practitioners approached research from a practical viewpoint, whereas academics were more theoretical in their approach. This was noted as a difference that needed to be understood in order to enable successful collaboration.

Seven barriers to research and collaboration were identified:

- Awareness and perception
- Connection and relationship
- Funding
- Passion and enthusiasm
- Research culture and support
- Research expertise
- Shared understanding and interest

There were 37 enablers for research and collaboration. The top forms of support identified by participants were:

- Funding
- Time
- Mentoring
- Research training
- Institutional support

## RECOMMENDATIONS

It is recommended that:

- Libraries and librarians should change the perception of their roles to include research as part of their role specification. This would be a powerful catalyst for a more dynamic, evidence-based profession.
- LIS schools and academics should be active players in fostering collaboration between academia and practice. Applied research should not be regarded as less important than research of a more theoretical nature.
- More consideration might be given by LIS academics to some of the priority areas for their practitioner counterparts, such as information services and the promotion of these services.
- ALIA should continue to play a role that bridges the gap between academic and practitioner needs. Consideration should be given to a central database of research ideas and experts, and to strategically providing further funding opportunities to members.

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# 1. INTRODUCTION

It has been commented that theory without practice is empty and practice without theory is blind. The premise of this report is that theory and practice should go together, with each informing the other for their mutual benefit and development. However, research, which is often done in the academia, does not always originate from practice, solve problems in practice, or guide practice. In addition, practitioners are not always well placed to use research to inform their work due to a culture that may assume that research belongs to an ivory tower and is not relevant to practice. For this reason, a closer dialogue between academics and practitioners can play a crucial role in increasing both the quality and quantity of applied LIS research.

Whilst some endeavours have been made, such as the *ALIA LIS research environmental scan* by Middleton and Yates (2014), in order to inform the direction for collaboration between practitioners and academics, such collaboration has not become a mainstream in library practice. Building upon this scan and aiming at stimulating more dialogue between practitioners and researchers, the Australian Library and Information Association (ALIA) and Charles Sturt University (CSU) partnered to organise a series of open consultations in six Australian capital cities, held from 20 September 2016 to 23 November 2016, working with host LIS schools and departments in each location. The aim of these events was to connect academics and researchers from all Australian universities involved in LIS with employers and practitioners from across the profession. It was expected that these events would help align future research projects more closely with the needs of LIS institutions and connect academics with practitioners to encourage more joint research-in-practice projects.

This report summarises the content and outcomes of the consultations, providing an overview of the six events, a list of priority research areas, and recommendations for building a richer research culture in the Australian LIS field.

## 2. OVERVIEW OF RELEVANCE 2020 EVENTS

### 2.1 DEMOGRAPHICS

One-day events took place in six capital cities, namely Adelaide, Brisbane, Canberra, Melbourne, Perth, and Sydney. There were representatives from universities and TAFEs, and public, state, special and school libraries. Participants included practitioners, employers, students, academics and teachers. Details are presented in *Table 1* below.

TABLE 1: PARTICIPANTS IN RELEVANCE 2020 IN SIX CAPITAL CITIES

SECTORS / DELEGATES	LOCATIONS						TOTAL
	ADELAIDE	BRISBANE*	CANBERRA*	MELBOURNE	PERTH	SYDNEY	
ACADEMIC LIBRARY	11	2	1	13	15	12	54
RESEARCHERS	4	5	6	7	8	8	38
SPECIAL LIBRARY	4	3	3	4	2	3	19
TAFE LIBRARY	1	4	0	5	2	5	17
SCHOOL LIBRARY	0	3	2	3	1	8	17
PUBLIC LIBRARY	0	0	4	1	4	0	9
STUDENTS	0	3	0	1	1	4	9
STATE LIBRARY	2	2	0	0	2	1	7
OTHERS	0	0	1	0	1	0	2
<b>TOTAL</b>	<b>22</b>	<b>22</b>	<b>17</b>	<b>34</b>	<b>36</b>	<b>41</b>	<b>172</b>

It should be noted that the Brisbane and Canberra events each had several online participants. In a few cases, a participant was working as both a practitioner and an academic. In such cases, the first job title was used to classify them according to the categories in *Table 1*.

## 2.2 OPENING PRESENTATIONS

Except for the first event, which took place in Brisbane, the following three presentations were reiterated at the beginning of all events.

Sue McKerracher, CEO of ALIA, introduced the day by presenting an overview of LIS research in Australia. She briefly spoke about the stakeholders who are involved in LIS research including LIS schools, institutions, associations, practitioners and consultants. In particular, she provided some examples of what ALIA has been doing to encourage and support LIS research in Australia in terms of environmental, infrastructural, and financial support.

Professor Philip Hider or a colleague from the School of Information Studies, Charles Sturt University, continued with a brief talk about the recent research project carried out by Middleton and Yates (2014), through ALIA's Research Advisory Committee, investigating the nature of Australian LIS research carried out between 2005 and 2013. In the form of an environmental scan, this project identified the research topics that had been undertaken, the types of research, how research activities were carried out and disseminated, and so on. The scan was expected to inform the direction that would enable LIS practitioners, academics, and organisations to work together in a more connected way. Further details can be found at: <https://www.alia.org.au/sites/default/files/ALIA-LIS-Research-Environmental-Scan.pdf>.

Then, Professor Helen Partridge, Pro Vice-Chancellor, University of Southern Queensland, and/or Professor Lisa Given, Charles Sturt University, introduced the "LISRA" project that is in progress and of which they are co-leads. The project aims to encourage and enable research culture and practice in the Australian LIS profession. As part of the project, practitioners and academics are encouraged to get involved in a range of activities. For example, the project team has organised a video competition that heightens the vital role of research in the LIS profession. The team is providing LIS professionals with opportunities to raise any research ideas or topics that they wish to discuss in a series of webinars. The team is also inviting LIS practitioners to share their research stories via an online national survey, and offering funding and ongoing support for a number of collaborative research projects. Find out more about LISRA project at [www.lisresearch.org.au](http://www.lisresearch.org.au).

## 2.3 EXAMPLES OF APPLIED LIS RESEARCH IN AUSTRALIA

In addition to the three initial presentations, the day included a number of invited presentations, which provided examples of current and recent research projects and activities across the sector and the country. The following subsections summarise these presentations, as they were delivered at each event.

### 2.3.1 ADELAIDE

Heather Brown, Assistant Director, Paper & Books, Artlab Australia, talked about her research project, covering approaches to preservation management in Australian national and state libraries, which received an ALIA Research Grant Award in 2015. Heather disclosed that her research idea originated from daily activities: professional work, formal and informal conversations. Turning a research idea into a researchable topic was a long journey. She faced many challenges such as managing time, getting to know research methods, and looking for funding. In addition, she had to keep a balance between professional work, research, and personal life. However, with support from institutions, colleagues, friends, and family, her research has gained fruitful results. She concluded that an open mind in combination with curiosity and a passion for research will make research possible.

Liz Walkley Hall, Open Scholarship and Data Management Librarian, Flinders University, continued with a talk about her research journey in her role as Chair of Research Working Group at Flinders University Library, a group of practitioner-researchers focusing on practical research topics. She shared that though doing research is not a straightforward process, it is not as hard as people might think. However, it requires plenty of time, management, support and peers, as well as the support of one's family. Doing research can also be lonely, so connection and collaboration are important. Liz emphasised that doing research is challenging but rewarding as it could open up new opportunities. Moving out of a comfort zone and being willing to try something new will make research happen. An example would be Liz and her six-year-old research group's successful implementation of a series of projects that have resulted in dozens of conference papers and journal articles.

### 2.3.2 BRISBANE

Dr Gillian Hallam, Adjunct Professor, Queensland University of Technology, talked about two research projects that she carried out recently. The first project, for the Australian Government Libraries Information Network (AGLIN), aimed to propose future options for government libraries and research services that would provide clients with efficient and cost-effective access to information for government business. She employed a series of data collection techniques including environmental scanning, survey, focus group, interview, and consultation with different stakeholders such as library staff, library managers, and clients. The research suggested five options for government library services that helped libraries to take advantage of their strengths and achieve strong and sustainable government library and research services to improve access to government information.

The second project focused on the public library sector. The project conducted one survey with library staff and another with library managers throughout the state of Victoria. The project aimed to identify the knowledge, skills and attributes that Victorian public library staff need today, and the emergent skillsets they will require in the future. The study resulted in a framework consisting of different sets of skills. The result will help practitioners and managers better prepare for the future. Find out more about her work at:

[www.gillianhallam.com.au/projects](http://www.gillianhallam.com.au/projects).

### 2.3.3 CANBERRA

Jan Bordoni, Assembly Librarian of the Legislative Assembly for the Australian Capital Territory, also talked about the AGLIN research project (see above). Jan provided an overview of the federal government environment and described how the surveys and focus group discussions enabled the project to develop a sustainable model for government libraries. She also shared her experiences of working collaboratively on such a research project.

Roxanne Missingham, University Librarian, Australian National University, followed on with a brief talk about her recent research project on libraries and the Asia Century, supported by an ALIA Research Grant Award in 2013. She interviewed people in business organisations to gain a deeper understanding of their information needs in relation to Asia, and of how libraries can communicate research output about Asia that will help Australians develop the skills and knowledge needed to do business in the region.

Finally, Olivia Neilson, a Teacher Librarian in the ACT, briefly spoke about her collaboration with colleagues on a project that aims to have a qualified teacher librarian for every school in the ACT. She shared the experience of getting the job done through a series of tasks such as conducting a survey with schools, raising awareness and getting support from politicians, principals, and school leaders. The project has produced some fruitful results.

### 2.3.4 MELBOURNE

Amanda Lawrence, Research and Strategy Manager, Australian Policy Online, shared her story about how she got involved in research. As a practitioner of about 10 years standing, she has had opportunities to work collaboratively with established academics on a number of national and institutional research projects. There were challenging moments when dealing with issues such as how to collect and analyse data, how to write and communicate research findings, and so forth. She learned that the main issue was not so much the research itself, but the infrastructure needed to support it. It is important to keep looking, have an open mind, and to think outside the box for openings that lead to research opportunities.

Pru Mitchell, Manager of Information Services, Australian Council for Educational Research, went on with a presentation about her recent translational research project, which aimed to translate research findings into evidence-based practice, and to foster engagement and

conversation between researchers and practitioners. She talked about her research journey that involved a series of steps, from time management, framing the research question, looking for partners and funding, to disseminating the outcomes. She shared a lesson that, no matter how much time and how many resources you spend on the research, its outcomes need to be disseminated and promoted so that the research can be relevant to the real world. Further details can be found at: [www.acer.edu.au/epp/translational-research](http://www.acer.edu.au/epp/translational-research).

Finally, Cindy Tschernitz, Executive Officer, School Library Association of Victoria, briefly spoke about the difficult circumstances that school libraries are facing. According to her observations, and also from some of the surveys of school libraries, while many libraries have teacher librarians, librarians, and library technicians, others lack qualified LIS staff. In addition, money, collaboration, guidelines, frameworks and standards that help school libraries to function properly may also be missing. In conclusion, it seems there are definitely issues in the school library sector that need to be researched.

### 2.3.5 PERTH

Alissa Sputore, Assistant Library Manager, Reid Library, University of Western Australia, shared her story about how she got involved in research, and had a research paper accepted and presented at the 2015 IFLA World Library and Information Congress in Cape Town, South Africa. Having research results disseminated is significant, but how the research was done is important too. Her research project aimed to discover how university libraries are involved in collaboration, the nature of collaboration, and its benefits. Alissa said that conducting a piece of research is a long journey, especially for practitioners who don't have much research experience. Challenges might include dealing with a huge volume of literature, struggling with research methods, framing research questions, and managing time. There were many questions and concerns about what, why, and how to implement a research task. However, with a passion for research combined with assistance from senior colleagues and peers, her research project had yielded fruitful results.

Dr Barbara Combes, Charles Sturt University, followed with a talk about current research work being carried out by the School Library Association Coalition (ALIA, the Australian School Library Association and the state-based library associations). The project aims to discover the impact of school libraries and teacher librarians. The research could examine various aspects of school libraries, from learning resources and personnel to facilities. It was initially found that there are a number of issues such as a shortage of qualified staff and a lack of funding. She stressed that the library community needs to help people understand that the internet is not a one-stop shop for information, and that libraries are able to provide them with additional useful resources and contribute to students' success.

Finally, Dr Gaby Haddow, Senior Lecturer, Curtin University, introduced a new journal, the Journal of the Australian Library and Information Association (JALIA), which is a merger of the Australian Library Journal (ALJ) and Australian Academic and Research Libraries (AARL), and will be ALIA's only journal from early 2017. The new journal will provide content not only for researchers but also for practitioners and research students, with opportunities to publish their work of different types, from theoretical and practical research to opinions and summaries of research projects. She introduced the editorial team who will serve the new journal after the merger and invited LIS professionals to submit their work to the journal. The journal is expected to create a good balance of content to better reflect the aims and scope of the profession.

#### 2.3.6 SYDNEY

Brenda Burr, Library Manager, Wodonga TAFE, talked about a recent study in the VET library sector in a period of budget cuts. In responding to the shortage of funding, the ALIA VET Libraries Advisory Committee conducted a national survey of TAFE libraries, which was part of several ALIA research projects aimed at gaining a better understanding of the current status of VET libraries and the challenges they were facing. The projects resulted in a set of guidelines that provide a baseline for library operations in Australian VET libraries. This evidence-based approach was expected to inform the direction VET libraries need to take in order to survive in a tough environment, while still embracing new technologies, resources, and services to provide the best client experience.

Dr Bhuva Narayan, Senior Lecturer, University of Technology Sydney, continued with a talk about an ALIA group called LARK (Library Applied Research Kollektive), which fosters evidence-based practice and applied research in library and information studies. Led by Suzana Sukovic – the author of a newly published book, *Transliteracy in complex information environments* – the group connects researchers and practitioners who have a shared interest in LIS research through its online and face-to-face activities. Bhuva also spoke about her research collaboration with practitioners at the UTS library. She disclosed that there are many different ways to do research because people do many research-related activities as part of their everyday professional activities. A research project can originate from a daily issue faced by practitioners. Once practitioners and researchers connect they can definitely turn an idea into research. The series of research outputs that Bhuva and her colleagues has published is an example of a fruitful collaborative research activity.

## 2.4 DISCUSSION

*Table 1* indicates a wide range of representation and demonstrates the strong interest in LIS research from professionals across both sectors and states.

The talks by invited speakers demonstrate that a number of applied research projects are being carried out across Australian LIS, that there are some active research groups, and that it is possible for practitioners not only to undertake research, but also to publish out of it.

The practical nature of the events gave rise to some positive feedback among participants. The post-hoc online surveys indicate that most participants found the events useful. Among 20 responses from the six events, 12 strongly agreed that the event was satisfactory, 7 agreed and 1 strongly disagreed. Those who were satisfied with the event shared that they enjoyed “hearing about real life examples of research”, benefited from “the researcher-practitioner research focused conversations”, and appreciated “networking opportunities and sharing of research ideas”. Participants also expressed interest in some aspects of future events such as having “more managers from libraries invited” and “hearing more from each academic about what they are interested in and work they have done”.



## 3. DATA COLLECTION AND ANALYSIS METHODS

### 3.1 DATA COLLECTION

The data was collected from different sources and in different ways. Details of the process are as follows:

- Audio-visual data: discussions at all six events were audio recorded. Depending on the number of participants and groups at each event, from four to seven voice recorders were placed on each table to capture conversations. In addition, a video recorder was used for the Canberra and Adelaide events.
- Paper-based data: butcher papers, Post-it notes, and board markers were used by participants to write down ideas that were discussed. All materials were collected at the end of the session.
- Field notes: field notes were conducted by the rapporteur who observed the events and noted down noticeable information.
- Post-event survey: a very short online survey was carried out after each event. This was designed to get feedback from participants.

### 3.2 DATA ANALYSIS

Audio-visual data (eg from the presentations) were partly transcribed. The conversations and speeches involving the whole room were listened to, as were those involving each group into which the participants were divided. The main concepts emanating from these conversations were noted down for an initial "feel" for the data. The transcripts and other sources of data were then analysed using thematic analysis, a technique for identifying, analysing and reporting patterns (themes) within data. Summarising and conceptualising techniques were also used when relevant to support analysis. In addition, Post-it notes were analysed quantitatively to identify participants' needs for research support.

## 4. RESEARCH GAPS

### 4.1 PRIORITY RESEARCH AREAS

The participants at each event worked in groups to identify topics or issues that they thought their workplace and profession needed to research as a priority. The combined results show that participants were interested in a vast array of areas. Ninety-six topics were identified, which were then categorised into broad headings using the subject categorisation employed by Middleton and Yates (2014). *Table 2* sets out examples of topics specified by the participants under each of the headings.

TABLE 2: PARTICIPANTS' RESEARCH AREAS OF INTEREST

Subject headings (Middleton & Yates, 2014)	Examples of topics
CURATION	Collection evaluation, digitisation
EDUCATION	Librarianship MOOCs, skill gaps of new graduates, requirements towards LIS graduates
HISTORY	Future scenarios, effects of eBooks
INFORMATION BEHAVIOUR	Open access and libraries, public engagement with special collections, makerspaces
INFORMATION LITERACY	Consumer health literacy, literacy and numeracy in school libraries, digital capability of different groups in organisations
INFORMATION ORGANISATION	Data management, research data management
INFORMATION RESOURCES	Provision of resources, open access publishing
INFORMATION RETRIEVAL	Users' information retrieval practices
INFORMATION SERVICES	Digital information services, health services in libraries, meeting user needs, needs of users and non-users, older age groups, usability evaluation, service evaluation
INFORMATION THEORY	Library models, cross disciplinary research
MANAGEMENT	Bullying in the industry, academic library spaces, workforce shortages, management and funding models, early career librarianship, funding cuts and impact on libraries, LIS profession and gender issues, management and leadership in libraries, libraries and ROI (Return On Investment)
PROMOTION	Promoting library services, raising library profiles, chancellery support, advocacy, attracting non-users to libraries, engaging with clients in an ever-changing virtual world
REGULATION	Older rules vs new technologies, privacy
ROLE	Redefinition of libraries, changing nature of libraries, libraries/librarians role, long-term impact of lack of libraries within communities, value of libraries, Google related issues, value of librarians understanding research, research as everyday practice
TRAINING	Staff skills, training librarians, training courses vs industry requirements

The number of times each heading was assigned to the participants' topics is given in the following *Table 3*, which also shows the number of recent publications of Australian LIS research according to Middleton and Yates (2014). These publications are differentiated into those by local academics in ALIA-accredited university departments (A) and those by local practitioners (P) (Middleton & Yates, 2014).

TABLE 3: LIS PRIORITY RESEARCH AREAS BROADLY CATEGORISED

Subjects	Middleton & Yates (2014)		Number of times mentioned by Relevance 2020 groups
	Local LIS academics as primary authors (A)	Practitioners as primary authors (P)	
Role	32	221	16
Management	35	256	15
Information services	10	156	14
Promotion	3	33	10
Information literacy	38	74	9
Information behaviour	29	49	7
Training	2	28	5
Education	37	15	3
History	12	40	3
Information organisation	8	34	3
Curation	12	28	2
Information resources	17	162	2
Information theory	11	6	2
Others	8	46	2
Regulation	4	35	2
Information retrieval	11	16	1
<b>Total</b>	<b>269</b>	<b>1157</b>	<b>96</b>

## 4.2 SPECIFIC RESEARCH QUESTIONS

Following the identification of priority research areas, participants were asked to turn a priority research topic of their choice into one or more research questions, with the assistance of those experienced researchers present in their groups, who played a mentoring role. As a result, a number of research questions were proposed. Examples of these questions are showed in *Table 4* below.

TABLE 4: EXAMPLES OF RESEARCH QUESTIONS

Subjects	Examples of research questions
Curation	Not identified
Education	Are library qualifications relevant in the 21st century?
History	What effects have the introduction of ebooks had on libraries?
Information behaviour	Do data management plans affect research behaviour and practice?
Information literacy	What can libraries do to improve digital and information literacy levels among low SES groups of users?
Information organisation	How can LIS professionals/libraries help the organisation to capture and manage informal communication and knowledge?
Information resources	To what extent do libraries allow clients to participate in the collection development?
Information retrieval	How do libraries improve knowledge discovery by modelling information?
Information services	How do we understand mobile learning (How do we help students make use of smartphones for learning)?
Information theory	What are new models for measuring the value of information and information management in the public interest?
Management	What funding models would be needed to build a sustainable government or special library service?
Promotion	How do libraries demonstrate their value?
Regulation	To what extent are government libraries valued in evidence-based policy making?
Role	What is the role of secondary school librarians? Where there is no position description, how do we document what they are doing?
Training	What are library-trained people doing?

These are examples of research questions generated by particular practitioners rather than an exhaustive list of questions. They may, however, illustrate some of the practitioners' specific areas of interest.

## 4.3 DISCUSSION

It should be noted that participants were provided with a copy of the *ALIA LIS research environmental scan* report (Middleton & Yates, 2014), which shows the broad range of LIS research conducted in recent years, as advance reading prior to the events.

The most important research “gaps” identified by the participants do not altogether reflect those subject areas that LIS academics and practitioners have been publishing in recent times, according to Middleton and Yates (2014). On the other hand, there would appear reasonably close correlation between the participants’ priorities and those of published practitioners, as indicated by column “P” of table 9 of Middleton and Yates (2014). “Role” and “management” were also areas commonly published in by Australian LIS academics, but other areas, such as “information services” and “promotion”, that featured prominently in the participants’ priorities, appear to be much less of an interest for the academics, or at least over the reference period of the report by Middleton and Yates.

Table 2 and group discussions suggest that practitioners wished to see a variety of issues researched. Many of the topics originated from the day-to-day activities of practitioners. In their opinion, if these issues or topics are addressed, librarians will become more productive; the operation of libraries will be more effective; and ultimately libraries will better meet customers’ demands. In fact, some issues can be explored by either a theoretical or practical approach. However, practitioners tend to have a practical perspective, meaning that they expect to solve a specific issue or have a solution for a problem rising from their own workplace.

Some of the questions presented in Table 4 are quite general, but others are specific and connected to a particular organisation or context. In practice, it is more feasible for academics to collaborate with practitioners to address “broad enough” questions, that is, ones with solutions that have the potential to impact on the profession, or a segment of the profession, as a whole. This is an issue that practitioners and academics may need to address, from the outset, if they desire to collaborate.

## 5. DEVELOPING A RESEARCH CULTURE

### 5.1 BARRIERS FOR RESEARCH AND COLLABORATION

As part of each event, participants were broken into groups and asked to discuss obstacles and challenges that hindered practitioners from doing research and working with academic researchers. They came up with a mass of barriers that were categorised into seven themes as presented in following *Table 5*.

TABLE 5: BARRIERS FOR RESEARCH AND COLLABORATION

Barriers	Comments
Awareness/perception	Post-qualification, the demands of the workplace can overwhelm practitioners and push research to one side. Research might not be on the radar for some managers and organisations. In addition, library managers and librarians' perception of their roles has a great impact on research (library is a research organisation vs library is an organisation providing research support; a librarian is a practitioner vs a researcher; librarians as collaborators vs assistants).
Connection/relationship	Connection, networking, opportunities to communicate with colleagues, identifying people with similar interests, and keeping updated with current practice and future trends are crucial. Professional networks and informal conversations via Twitter and Facebook are good ways to keep connected that may lead to research collaborations.
Funding	Limited research funding may prevent practitioners and academics from accessing research opportunities, attending research events, and doing research.
Passion/enthusiasm	Time, money and other resources are necessary for research and collaboration but motivation, passion, and enthusiasm might be determining factors.
Research culture/support	Research cultures at workplaces, institutional, managerial, and support are essential. Librarians value encouragement, recognition, freedom to explore, favourable environments, time for research, and opportunities to be part of the research committee. In addition, family support (eg understanding, sharing, and balancing family commitments) is also an important factor.
Research expertise	Gaining confidence, identifying research needs, defining research problems, getting to know research methodologies, working with a huge volume of data, and dealing with ethics and intellectual property in research might be practitioners' concerns. Additionally, seeking research opportunities, writing research grants applications, and carrying out the research might also be challenges to practitioners.
Shared understanding/interest	Academics and practitioners have different perspectives and expectations (one tends to focus on theoretical aspects while the other wants practical solutions). Another issue is that researchers and practitioners often attend different types of events. This lessens opportunities to network, share, and understand each other leading to both academics and practitioners being less informed of the others' interest. Furthermore, research terminologies can be intimidating so plain English is preferred by practitioners.

## 5.2 ENABLERS FOR RESEARCH AND COLLABORATION

Besides identifying barriers, participants also identified catalysts, advantages, and ways of assistance that put practitioners in a better position to do research and collaborate with academics. Enablers are thematised and presented in *Figure 1* below.

FIGURE 1: ENABLERS FOR RESEARCH AND COLLABORATION

Accepting risk and fail in research	Having a passion for research
Accessing prioritised research topics	Having common goals
Access to support resources	Having family and peer support
Attending professional events	Having management support (time, freedom, and workload)
Balancing work and life	Having motivation and passion
Being active librarians	Having qualifications, skills and expertise
Being open to opportunities	Having supportive environments
Being prepared	Improving technical and methodological skills
Building collaborative groups	Including research duties in practitioner's description of role
Building confidence through participating in projects	Managing time
Changing perceptions of libraries and librarians	Mentoring
Collaborating between academics and practitioners	Networking and sharing
Creating research cultures in the workplace	Participating in professional development programs
Developing an expertise database	Promoting alumni activities
Developing sector-wide networks	Pursuing research methodology courses
Enabling practitioners to participate in academic tasks	Recognising and valuing practitioners' research work
Encouraging librarians to do research	Sharing rather than being competitive
Funding	Taking advantage of social media
Getting out of the library	

### 5.3 SUPPORTING RESEARCH

Except for the first event in Brisbane, participants at each event were later divided into one group of academics and three or more groups of practitioners (with at least four people in each group). They were asked to look at the research infrastructure that was identified earlier and/or identify new things that they needed for research. Each group created a “hierarchy of needs” to reflect their preferences. All hierarchies were analysed to see whether there was variation in preferences of academics and practitioners. The analysis of hierarchies also aimed to identify a list of things that participants viewed as important for research.

Overall, there were both similarities and differences between the needs of academics and those of practitioners. Whilst the group of academics in Adelaide, for example, viewed financial resources for research as the most important need, practitioners most valued recognition of research endeavours and support for development of research proposals. Another example of differences could be seen at the Canberra event. While academics most appreciated the support of research assistants who could help them identify literature and provide them with assistance in various research activities, practitioners viewed time for research and a database of like-minded researchers and practitioners as the most important. One more difference was that academics in Perth placed money and time at the bottom level of the hierarchy, while these were at the top levels for practitioners.

The comparison and analysis also revealed that there were shared perspectives in two groups. For instance, both academics and practitioners in Sydney favoured things such as institutional supportive policies, partners to collaborate with, ALIA’s support, and networking opportunities. Similarly, Perth participants appreciated mentorship and assistance from senior colleagues. In short, there were few points in common and many differences in the needs of practitioners and academics. Therefore, ALIA and other stakeholders will need to identify ways to connect these two groups and develop a shared understanding and interest in order to engender a strong collaborative research relationship.

Although the hierarchies of needs were visual they did not provide detailed information that could be used to gain a picture of the participants’ overall preferences and expectations around research. In order to bring these aspects to light, preferences and expectations of participants were quantitatively analysed using indexation, with more “importance” points awarded to those factors placed higher up the hierarchy (there were up to six levels). This process generated a list of factors (forms of support) and their corresponding “weights”, as presented in following *Table 6*.



TABLE 6: FORMS OF SUPPORT PREFERRED BY PRACTITIONERS AND ACADEMICS

Factors (forms of support preferred)	Points
Funding	83
Time	70
Mentoring	56
Research training	44
Institutional support	43
Collaboration	37
Current research awareness tools	25
Database of research contacts	20
Encouragement and recognition	17
Passion for research	14
Networking opportunities	13
Valuing research	12
Redefining job description	11
Transparent research process	11
Research culture	9
Current research awareness	8
Dissemination of research	8
Research-practice connection	8
Cross sectorial discussions	7
Curiosity	7
Practitioner-researcher e-connection	7
Permission to research	6
Research assistants	6
Simpler ethics approval process	6
Supportive co-workers	6
ALIA advocacy	5
Confidence and motivation	5
Opportunities to publish research	5
Research in progress register	5
ALIA's research guidelines	4

Factors (forms of support preferred)	Points
Experimental lab	4
Professional development opportunities	4
Research interest database	4
Support network	4
Supportive policies	4
Affordable research and conference fees	3
Australian open access library journal	3
Online communication channel	3
Research career opportunities	3
Research data support	3
Research skills and knowledge	3
Family support	2
Professional research network	2

## 5.4 DISCUSSION

While the number of barriers is fewer than that of enablers, they appear to be major issues that need to be solved in order to put practitioners in a better position to do research and collaborate with academics. An individual enabler cannot remove all the barriers. Instead, a series of enablers should be used so that a research culture can be established amongst the many different stakeholders. The “Awareness/perception” barrier, for example, is affected by the approaches taken by library managers, who have the power to accept (promote) or disregard research in the workplace. Other librarians’ attitudes and views on research also have a major influence on the success of the research culture development. These two main stakeholders need to re-position themselves to be fully aware of what they are and what they want to be (practitioners or researchers, research assistants or research collaborators, or practitioner-researchers). Such important issues need to be clear as they guide the way library managers and librarians work with other stakeholders such as higher managers in their organisations and library clients.

Other barriers, “Connection/relationship” and “Shared understanding/interest” for instance, involve not only practitioners, but also academics, their potential collaborators. A research partnership can be established and become strong if both parties find something in common and aim at a shared goal. For example, one may have “Research expertise” but lack “Funding”. The “Connection/relationship” will then bring them together and possibly lead to collaboration if there is a “Shared understanding and interest”.

In consideration of what practitioners and academics need for research, the analysis of the hierarchies of needs suggests that the expectations and preferences of the two groups are very diverse. Their needs for research depend on various aspects such as the sources of funding they can access, organisations they work for, and individual research expertise. The variation leads to the point, made earlier, that a single enabler will not help meet all these needs. However, it is possible to have a more specific idea of what practitioners and academics prefer, as well as the weight of their preferences, as presented in Table 6.

Though funding for research was not always put at the top of the hierarchies, it appeared somewhere in most of them. Research requires money for activities such as attending research conferences, collecting data, pursuing research courses, and accessing tools and equipment. Interestingly, a large amount of money is not always necessary. Many practitioner participants noted that opportunities to access small grants would be sufficient. While such grants require less time, expertise, and resources, they are opportunities for practitioners to gain more confidence, develop their research skills, and create a habit of doing research.

Time is the second most wanted form of support. This is especially the case for practitioners. While research is part of academics' jobs, it is not often included in practitioners' job descriptions. In many cases, practitioners must do research outside working hours because they have their own everyday professional activities to do. Therefore, enablers such as reducing workload, increasing time for research, and simplifying ethics approval processes are highly appreciated by practitioners. Also, participants (especially practitioners) valued mentoring and research training programs, different means of support from their organisations, and collaboration, as other important elements of support.

## 6. RECOMMENDATIONS

In order to develop a research culture in the Australian library and information profession, this section makes some recommendations. In general, the recommendations focus on ways to remove or lower barriers, develop and take advantage of enablers, and take forms of research support into account. As mentioned earlier, there are different stakeholders in LIS research and no single stakeholder or method can solve all problems. The following recommendations should be considered by stakeholders to help Australian LIS research move forward.

**Libraries and librarians** could think differently about their roles, accepting research as a crucial part of the librarian's job. The integration of research into the job of library professionals in combination with encouraging and supportive policies would nurture enthusiasm and ignite passion for research in the workplace. Managerial support coupled with encouragement and recognition would create a favourable environment. The benefits of research for the institution include more efficient ways of working, better informed staff, kudos and reputation of the organisation in the sector, and evidence of value and impact of the library and information service for advocacy.

**LIS schools and academics** should be active players who create connections and develop a good relationship with the industry. They should build a strong partnership with libraries and librarians to develop research initiatives such as mentorship programs and research training courses. These activities build up practitioners' research skills and help them become more confident in doing research. Such practical activities are meaningful as they develop a mutual understanding between the two parties, help to identify common interest, and can ultimately lead to research collaboration. This close relationship may also provide academics with new sources of data. Further, LIS academics should endeavour to address the research priorities of practitioners, as indicated by the topic list in Table 2, noting in particular strong interest in areas such as the role of libraries and librarians, management, and information services.

**ALIA** should continue to play the role of a supporter who bridges the gap. Its mission is to communicate the importance of research in the profession, raise awareness in the LIS and wider communities, and canvass financial and political support from governments and other stakeholders. With the appropriate funding, ALIA could also develop and administer a central database where practitioners, academics, and interested parties across Australia can get information about sources of research funding, potential research ideas, research partners and so forth. The database could act as a broker that connects and matches people with people, ideas with ideas. In addition, ALIA could consider offering more small research grants instead of fewer major grants. This would ultimately increase the number of opportunities for people, particularly practitioners, to access funding for research.

## 7. CONCLUSION

The main purpose of the 2020 Relevance research project was to bring LIS research closer to practice. It aimed to inform LIS practitioners, academics, and related stakeholders of directions for future research projects and suggest ways in which applied research could be more effectively supported. The findings and recommendations presented in this report are intended to provide a reference point for practitioners, academics, and other stakeholders who wish to contribute to and develop a sustainable LIS research culture in Australia. It is hoped that they represent the first of many more steps in this direction, and the beginnings of a rich and sustained conversation.

## REFERENCES

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