

Use of research by librarians and information professionals

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Abstract

The study's aim is twofold: first to determine the extent to which Australian library and information professionals produce research literature (specifically journal articles); and second to explore the status of the use of research literature by library and information science (LIS) practitioners as evidence for their practice. All articles published in the field of LIS in 2015 by Australian authors were analysed and seven interviews were conducted with Australian librarians. Out of 152 articles published in 2015 by Australian authors, 37 articles (20.3%) were authored by at least one practitioner, 29 articles (15.9%) were fully authored by practitioners, and eight articles were joint work by faculty members and practitioners. Australian LIS journals played an important role in providing a venue for the publication of articles authored by practitioners. Interviews showed that the use of research literature as evidence is not yet an institutionalised practice in the profession. Practitioners' expectations of research literature generated by academic researchers is not high for they believe academic research lacks relevance, applicability, and coverage, and is sometimes aspirational. They find commissioned research, practice-led research and professional research more valuable than academic research. Mailing lists play an important role in the dissemination and identification of research that is useful for practitioners. Research collaboration between practitioners and researchers should be facilitated and encouraged.

Keywords: Library and information science (LIS), Evidence-based practice, research, journal articles, practitioners, Australia, librarians

Introduction

The issue of the use of research output (research literature), as one of the elements of evidence-based practice, has been the concern of the library and information science (LIS) community for a few decades. More than 40 years ago, Maguire (1975) stated that "librarianship as a discipline has obviously not sufficiently addressed the problem of diffusion and application of the results of research" (p. 293). Almost three decades later Turner (2002) claimed that there is not just a gap between research and practice in LIS, but a "communication chasm." Haddow & Klobas, (2004, p. 30) stated that "communication between research and practice is flawed".

Researchers and practitioners in different countries have been trying to close the gap between research and practice for some time. In Australia, the Australian Library and Information Association (ALIA) has been trying to promote evidence-based practice. They held a seminar on the issue in 2000 (ALIA Board of Education, 2000) and in 2016 they actively tried to promote evidence-based practice among practitioners through initiatives such as Relevance 2020 (Nguyen, 2017). However, there are still things to be done. The focus of most of the existing literature on the subject has been on health information professionals (Roddham, 2004). We still do not have full knowledge about the level of involvement of library and information professionals (practitioners in general) in the production of LIS research literature or about the use, or possible barriers to the use, of research literature by practitioners.

This study aims to address these two issues in the Australian context. The study, therefore, has two aims. First it seeks to determine the extent to which Australian library and information professionals produce research literature, specifically journal articles. The second aim is to explore the status of the use of research literature by LIS professionals as evidence for their practice and to identify barriers, if any, to its use. The study will help improve the mutual understanding of researchers and practitioners and can help remove barriers that might hinder the use of research by practitioners. The study will also clarify how useful research literature is for practitioners and what role it plays as evidence in their practice.

Literature Review

There are some theoretical and point-of-view papers on evidence-based librarianship including the works by Eldredge (2000, 2006), Todd (2006), Booth (2006), and Clare, Partridge, and Edwards, (2008) that discuss the concept and the process of evidence-based librarianship and whether LIS is ready for evidence-based practice. However, one barrier to the evidence-based practice is the gap between research and practice. In a review of the literature, Haddow & Klobas (2004) identified 11 different types of gap in the communication of research to practice. The gaps included a knowledge gap, a cultural gap, a motivation gap, a relevance gap, an immediacy gap, a publication gap, a reading gap, a terminology gap, an activity gap, an education gap, and a temporal gap. They suggested a range of strategies for closing the gap including increasing involvement of practitioners in research and improving communication of research to practice.

Besides these theoretical and review papers, there have also been a few studies on different aspects of evidence-based practice by librarians, for instance practitioners' understanding of the research literature and their perceptions of evidence. Partridge, Thorpe and Edwards (2007) in a phenomenographic study interviewed six librarians about their experience of evidence-based practice. They found that LIS professionals had four different ways of experiencing evidence-based practice: 1) evidence-based library and information practice (EBLIP) was not relevant; 2) EBLIP was learning from experience; 3) EBLIP was service improvement; and 4) EBLIP was all consuming.

Research literature is part of the evidence that is to be used by practitioners. For practitioners to use the research literature they need to understand it well. Pymm and Hider (2008) surveyed how well Australian academic librarians understand LIS journal articles. The results indicated a relatively high level of understanding of the articles, indicating that terminology was not a problem, and two thirds of the articles were rated as relevant to the profession. Schlögl and Stock (2008) used survey and citation analysis to look at LIS journals from both readers' and authors' perspectives. They found that practitioners played an active role both as readers and as authors of articles in LIS journals; and that there was only a low level of information exchange between practitioner and academic journals.

One of the seminal works on evidence-based practice is the PhD dissertation by Koufogiannakis (2013) on academic librarians. Her grounded theory study covered three areas including 1) the concept of evidence and the sources of evidence that are used by academic librarians in their decision making; 2) how academic librarians use evidence, namely to convince in individual or group decision making; and 3) determinants of evidence use in decision making. The study resulted in a model of evidence-based practise in LIS.

In a recent study in Australia, Miller et al. (2017) used grounded theory to develop a new model of experiencing evidence-based practice in the academic library context. Their model consisted of six categories of experiences: empowering, intuiting, affirming, connecting, noticing and impacting. Apart from the study by Pymm and Hider (2008) on librarians' understandings of journal articles (discussed above), there has not been much research in this area in Australia. ALIA, as part of the scan of LIS research environment (Middleton and Yates, 2014), has presented some statistics on the contribution of practitioners in research output but we do not know much about the barriers and challenges of applying research evidence in practice and specifically the use of research literature by practitioners. There are general indications in past studies elsewhere that the research produced by academics is not very applicable or useful for practitioners.

Methods

This study is composed of two parts. The first part was a simple bibliometric study of articles published by Australian authors in ISI ranked journals in the field of LIS in 2015. A search was done (on 27 October 2016) in Social Science Citation Index (Web of Science) for all items published in English in 2015 in the category of "Information Science & Library Science" by any authors with an Australian affiliation. The search resulted in 271 items. After removing book reviews, editorials, letters and conference proceedings, 182 articles and reviews written by 525 authors remained for the analysis.

The second part was a generic qualitative study that used interviews for data collection. Seven semi-structured phone interviews were conducted with librarians and information professionals. Participants were selected using purposive sampling with the aim of increasing data diversity so professionals from different sectors including public library, academic library, and special libraries were included. Participants were all women: two from public libraries, two from academic libraries, two from government special libraries, and one from a museum. The interviews were recorded and analysed using thematic analysis

techniques. The interviews covered issues related to the participants' level of use of LIS research literature, and reasons for use and/or non-use of the literature. Expectations of practitioners from the research literature and attributes that they think the literature should have were discussed. The interview protocol is presented in Appendix 1. Quotations from the interviews in the article are numbered as Informer 1, Informer 2 and so on.

Results

The study of 182 articles published by Australian authors revealed the following results.

- 37 articles (20.3%) were authored by at least one practitioner.
- 29 articles (15.9%) were fully authored by practitioners, eight were joint work by faculty members and practitioners.
- 81 authors authored the 37 articles, out of them 13 were not practitioners.
- 32 articles (out of 37 authored by practitioners) were published in Australian LIS journals including 23 articles in *Australian Library Journal*, and nine articles in *Australian Academic and Research Libraries*.

The fact that a fifth of the Australian LIS articles were authored by practitioners means Australian practitioners are active in producing research output and sharing their experiences. Also the fact that 86.5% of articles written by practitioners were published in Australian LIS journals (which were published by ALIA) means that ALIA's journals have been successful in providing a venue for the publication of practitioners' voices. This suggests that ALIA's new publication, *Journal of the Australian Library and Information Association*, should strive to maintain its role as a platform for disseminating practitioner-led research rather than become another research journal dominated by academic authors.

The results of the interviews are presented below under three major themes.

Use of evidence

Librarians use a range of evidence in their decision making including reports, research articles, data/statistics, quotes, surveys, and expert opinion within the organisation. These sources of evidence could be divided into internal and external sources of information. Internal sources include reports, business plans, surveys as well as colleagues in the same institutions. External sources include articles, reports, other institutions documents, and colleagues and experts in other institutions that are accessed through networking, conferences, mailing lists and so on. One interviewee mentioned "The advice of a conservator regarding the housing of our Rare Book Collection" as an example of using colleagues' and expert opinion as evidence. Mailing lists and Listserves appeared to be particularly popular and effective among librarians both for getting notified about important and useful research and for getting in touch with peers for various purposes.

The type of evidence used depends on the task and the need for information. The example below describes the evidence seeking for a decision about what to offer in a physical library space.

If we are looking at what [we] should be offering in the physical library space we would look at published research on what other libraries have been doing, we would often undertake a statistical survey, we would look at foot traffic, we would look at use of resources, we would look at presentations from colleagues at other libraries and we would seek a wide range of information. (Informer 3)

The type of evidence used also depends on the type of library and the availability of different types of evidence. For instance, research and publications about government libraries are very scarce and therefore librarians in government libraries mostly rely on their internal evidence for decision making.

Also part of evidence is to see what is happening in other libraries. We are part of a library association and we listen to what's happening in other libraries. We interact with each other. We see if things in other libraries are applicable for us. And then obviously any other research that might come up. We focus mostly on our own evidence as opposed to going I guess to journal articles and things like that to see what we should be doing. First of all there isn't a great deal of literature on government libraries or parliamentary libraries; there isn't much there, and even if we are looking at trends I certainly monitor and I know the staff do as well, we monitor trends that [are] happening, and try to consider what impact they might have on our own library. But in terms of actual decision making the evidence is the real evidence that we are collecting ourselves for our uses. The raw data, the real data is our primary source of information or evidence. (Informer 1)

The raw data as described in the above quotation include a wide range of data that librarians collect about their operations. For instance, for reference and research queries they record information about them, things like which area the user is in, the nature of the query, how long the query took, and so on and then are able to produce statistics based on that. They do not use just the statistics. When the decision is about a new service, they pilot the service and rely on locally generated evidence. They also talk to people and ask them what they want.

For other types of libraries such as academic libraries where there is a rich body of literature, the process of seeking and consulting evidence involves looking at the literature as well.

I normally conduct some background research as well, often starting with an internet search to gather information (e.g. searching for policies of other institutions if I were making a policy related decision, looking at library suppliers' websites if I were looking to compare suppliers, etc.) I may consult internal information resources e.g. reports, surveys, business plans, budgets, planning documents. I may also conduct a literature search if it seems relevant. For instance, a few years ago when I was looking at increasing our use of social media I searched for articles with examples of special libraries using social media. I draw on a combination of the above

and my own professional experience to make recommendations. (Informer 2)

Research as evidence

When it comes to the use of research, librarians put the highest value on commissioned research, practice-led research, and professional research by places such as JISC (Joint Information Systems Committee). The research done by academics seems to have some problems that hinder its use by practitioners. One is that it lacks relevance to the issues, problems and concerns of practitioners. In some areas (especially special libraries and government libraries) there is also a big lack of research and there are not enough publications to be used. One issue is that access to the government libraries is limited for those who are outside those government bodies. Therefore, academic researchers only undertake research about government libraries when they have a connection to those bodies, for instance, a link with librarians working there. In the case of other areas such as academic libraries and public libraries where the research literature is richer, they find some useful publications.

The other problem is that practitioners find academic research aspirational and not applicable to their situation. The following quotations show what librarians think of academic research and whether they find it useful.

Sometimes academic output seems more aspirational than practical. Although I appreciate aspirational literature, practical articles such as case studies on topics in special libraries are more useful to me. (Informer 5)

I do look at journal articles, but I am not finding the type of journal articles that I need. (Informer 7)

I do a quick look at the literature to see what other people are saying but I often don't find that quite helpful quite frankly in a lot of papers. I don't think I've necessarily come to a conclusion on the basis of any librarian kind of literature because most of it does not seem, I don't know, particularly useful in many ways. (Informer 4)

When I research journal articles I am not really finding information that can really tell me how I can improve our services. (Informer 6)

As mentioned above, in certain areas the research literature is richer from the perspective of practitioners and the practitioners' attitude towards research is not as negative. For instance, things are better in the domain of academic libraries:

From what I can see the research by academics on academic libraries is quite useful. I think there is a lot on that. Public libraries are also covered well. Law libraries a little less. (Informer 1)

The question is if practitioners do not find academic research generally very useful for their practice, what do they consider as good research and what are their expectations of research? A few characteristics emerged from the interviews. First of all, they want research

to ask the right question, an interesting question that they find relevant to what they do. The research should relate generally to what they are doing.

Asking an interesting question, it's well-formed research, statistically valid and provides an important perspective on issues, but a lot of it goes to me to asking interesting and different questions. (Informer 3)

They also want research to show some comprehension and understanding. This means that the research should have some theoretical underpinning and be based on the literature of the subject area. The research itself needs to be evidence-based in order to be used as evidence for practice.

I think what it needs is a good theoretical underpinning, showing some kind of comprehension. Because there is no one answer to most of these questions, there are many approaches. Either they are explicit about the approach they are taking or showing some understanding that there are many approaches. I actually think that it's far more useful to look beyond this industry for insight into how the world is and what that might mean for our industry, and that goes for user behaviour, what kind of work is going to be in the future. (Informer 4)

Most of the interviewees tended to prefer that quantitative evidence be accompanied by qualitative evidence. This is not to say they do not like or use quantitative research but they also want to see the context so even when there is quantitative evidence they prefer if it is accompanied by qualitative evidence.

I think quantitative is important but overlaying it with some qualitative thinking adds to it. (Informer 4)

I don't trust quantitative research on its own, because it could be a bit misleading. Sometimes it depends on the question that you are actually asking or the information that you are gathering. The interpretation might be limited. I personally really like qualitative research, however, it depends on who's been spoken to, which groups or individuals have been spoken to, all that information so I think it is really getting context as well as quantitative information. Not just relying on any one of them individually, I think you need to do it as holistic as possible. (Informer 7)

Practitioners sometimes find it useful to look beyond the field of LIS and look at other industries for inspiration or things that they can apply to their own practice. Sometimes things from a broader business management or writings that have a broader approach can be useful and can provide insight. A lot of the time they find academic research limited.

I actually think looking more broadly at literature outside this industry and at the more theoretically academic work might be quite useful. (Informer 5)

Challenges

Librarians face some challenges in the use of research as evidence for their practice. One main challenge is the lack of research evidence in certain areas. For instance, while a great deal of research is done on academic libraries, there is not sufficient research about special libraries and government libraries. The other issue that a few of the interviewees mentioned is that sometimes there is too long a gap between the research and its publication and, therefore, the published articles lose their relevance and applicability. For librarians that do not work in academic or special libraries, access to research can be a problem as they do not have subscriptions to journals and scholarly databases. This is usually the case for public librarians. Some of the librarians also find it hard to “stay on top of what is out there”. Given the limited amount of time they have and the volume of research and information generated in certain areas, keeping up with developments and publications can be an overwhelming task.

As mentioned above, research that is done locally by practitioners and practitioner-led research is valued by librarians. They want to be able to do research but a major barrier is the lack of time to undertake research. Also, sometimes they do not get the support they need to be able to undertake research.

Having the time to undertake research or write up seems to me more difficult in a world when we have less resources in the library than we used to have; and I guess it seems to me that the discussion between practitioners and researchers in Australia has been somewhat limited possibly just because of time reasons (Informer 2)

...Obviously we can't do the analysis ourselves because we don't have the skills, you know we are not PhD candidates or anything like that... (Informer 1)

Discussion and conclusion

Although the study was based on a small number of interviews and the analysis of publications from only one year, the results reveal some aspects of practitioners' relationship with research. The study showed that practitioners make a notable contribution to the research literature by publishing journal articles, however, there is still a gap in terms of publication of research by practitioners. Practitioners want to do research but they lack skills and do not have sufficient resources. On the other hand, academic research lacks practical implications as their research problems do not originate from practice. The solution might be greater collaboration between researchers and practitioners in conducting research studies. As Van de Ven (2007) rightly said “practitioners' knowledge complements that of academics”. Initiatives such as LISRA (Library and Information Science Research in Australia, <http://lisresearch.org.au>) that aim to bridge the gap between research and practice can be helpful. Although, as Chang (2017) noted, the number of co-authored articles by researchers and practitioners in LIS is larger than some other fields such as education and sociology, the number of such articles has been decreasing. Panda and Gupta (2014) made a set of suggestions that can help foster a suitable environment for such collaboration between researchers and practitioners.

Practitioners think the academic research lacks relevance and applicability, and it is sometimes rather aspirational and very narrow in consideration. There is already some criticism about the lack of practical implications in the research done by academics. For instance, research in information behaviour is supposed to inform information services and systems. But studies in the area of information behaviour seem to have little relevance and application and hence, impact on practice. Case and Given (2016) stated that “while it is commonplace for publications to include a closing statement like ‘practitioners may find these results useful in improving information services,’ there is little evidence that information behaviour findings have strong impacts on the design of services or technologies (p. 353).

To sum up, the key findings of the study were that evidence-based practice, especially with regard to the use of research, is a more personal practice than an institutionalised practice in the profession. Practitioners’ expectations of the research literature generated by academic researchers is not high for they believe academic research lacks relevance, applicability, and coverage. They find commissioned research, practitioner-led research and professional research more valuable than academic research. Mailing lists play an important role in the dissemination and identification of research that is useful for practitioners.

References

- Australian Library and Information Association Board of Education. (2000). Survival, improvement, innovation. *InCite*, 21(12), 10.
- Booth, A. (2006). Australian supermodel?-A practical example of evidence-based library and information practice (EBLIP). *Health Information & Libraries Journal*, 23(1), 69-72.
- Case, D. O., & Given, L. (2016). *Looking for information: a survey of research on information seeking, needs, and behaviour* (4th ed.). Bingley, (UK): Emerald.
- Chang, Y. W. (2017). A comparison of researcher–practitioner collaborations in library and information science, education, and sociology. *Journal of Librarianship and Information Science*, in press, DOI: 10.1177/0961000617726121
- Clare, T., Partridge, H. L., & Edwards, S. L. (2008). Are library and information professionals ready for evidence based practice? In ALIA Biennial Conference: Dreaming 08. Australian Library and Information Association (ALIA).
- Eldredge, J. D. (2000). Evidence-based librarianship: an overview. *Bulletin of the Medical Library Association*, 88(4), 289-302.
- Eldredge, J. (2006). Evidence-based librarianship: the EBL process. *Library Hi Tech*, 24(3), 341-354.
- Haddow, G., & Klobas, J. E. (2004). Communication of research to practice in library and information science: Closing the gap. *Library & Information Science Research*, 26(1), 29-43.
- Koufogiannakis, D. A. (2013). *How academic librarians use evidence in their decision making: Reconsidering the evidence-based practice model* (Doctoral dissertation, Aberystwyth University, UK).
- Maguire, C. (1975). Problems of research in librarianship. *Australian Library Journal*, 24, 290-296.
- Middleton, M., & Yates, C. (2014). ALIA LIS research environmental scan report. <http://eprints.qut.edu.au/79358/1/ALIA-LIS-Research-Environmental-Scan.pdf>
- Miller, F., Partridge, H., Bruce, C., Yates, C., & Howlett, A. (2017). How academic librarians experience evidence-based practice: A grounded theory model. *Library & Information Science Research*, 39(2), 124-130.

- Nguyen, L. (2017). Relevance 2020: LIS research in Australia, <https://read.alia.org.au/sites/default/files/documents/alia-relevance-2020-lis-research-in-australia-online.pdf>
- Panda, A., & Gupta, R. K. (2014). Making academic research more relevant: A few suggestions. *IIMB Management Review*, 26(3), 156–169.
- Partridge, H. L., & Thorpe, C. E., & Edwards, S. L. (2007). The practitioner's experience and conception of evidence based library and information practice: an exploratory analysis. In *Proceedings 4th International Evidence Based Library and Information Practice Conference*, Chapel Hill-Durham, NC, USA.
- Pymm, B., & Hider, P. (2008) Research literature and its perceived relevance to university librarians. *Australian Academic & Research Libraries*, 39(2), 92-105.
- Roddham, M. (2004). Evidence-based practice for information professionals: a handbook. *Health Information & Libraries Journal*, 21(4), 276-277.
- Schlögl, C., & Stock, W. G. (2008). Practitioners and academics as authors and readers: the case of LIS journals. *Journal of Documentation*, 64(5), 643-666.
- Todd, R. J. (2006). School libraries and evidence-based practice: An integrated approach to evidence. *School Libraries Worldwide*, 12(2), 31-33.
- Turner, K. J. (2002). Do information professionals use research published in LIS journals? *68th IFLA Council and General Conference, August 18–24, 2002, Glasgow*. Accessed May 28, 2002. Available: <http://www.ifla.org/IV/ifla68/papers/009-118e.pdf>.
- Van de Ven, A. H. (2007). *Engaged scholarship: A guide for organizational and social research*. Oxford: Oxford University Press.

Appendix 1. Interview protocol

- How do you go about making work related decisions at work?
- What types of things do you consider to be 'evidence'? In other words what evidence do you usually use to make informed decisions or justify your decisions?
- Do you usually use research evidence in your decision making and practices?
- Can you tell me how important research is to you as a practitioner?
- How do you use research evidence and what kind of research evidence do you use?
- What do you consider to be good research, what characteristics should research have to suit your purpose as a practitioner?
- Do you read journal articles of the field to keep up to date or to find solutions for your work related issues? What kind of journals do you read?
- How useful or inapplicable do you think the research literature produced by researchers and academics are for practice purposes?
- What challenges and barriers, if any, do you see in using research evidence and literature for your professional practice and work?
- How do you generally evaluate the situation of evidence based practice in LIS in Australia?

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