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Do Information Professionals Use Research Published in LIS Journals?

Kathlyn J. Turner
Reference/Document Delivery Science Library
University of Otago
Dunedin, New Zealand

Abstract:

This paper is a précis of a research project conducted in March 2001 for the Master of Library and Information Studies at New Zealand's Victoria University of Wellington. The project investigated the perceptions of information professionals (denoting qualified practitioners) in New Zealand regarding applied LIS (Library and Information Studies) research. It was hoped the findings would direct the future production of such research in a way that might promote its use. The project assessed the local situation and attempted to redress an imbalance in the literature created by previous studies focusing on the production, rather than consultation, of LIS research by the practising community. Project participants were asked to indicate their amount of research use; their motivations for and against consulting the research; and their opinions concerning the relationship between LIS research and practice, and how it might be improved.

Amounts of research consultation were compared with the following participant variables:
- *Library / information qualifications;*
- *Experience, indicated by number of years / months in current position;*
- *Library / information centre size;*
- *Organisational context of the library / information centre;*
- *Involvement in professional activities such as conferences.*

Anyone wishing to read the original research paper is welcome to contact me using the following email address: *kat.turner@library.otago.ac.nz*

Introduction

The literature repeatedly indicates that research use by information professionals is remarkably low (McClure and Bishop, 1989). Promulgated reasons for this phenomenon often focus on the nature of LIS research, and its consequently limited ability to be effectively utilised in the workplace.

Applied research, by which formal methods of inquiry are used to resolve practical issues, predominates in LIS. A problem arises from the fact that such applied research frequently takes the form of action research (Childers, 1990, p. 258; Hernon, 1989, pp. 1-2; Van House, 1991). Action research identifies problems in a specific setting and suggests strategies to deal with those problems (Busha and Harter, 1980, pp. 7-8; Hernon and McClure, 1990, p. 14; Hernon, 1991, p. 5; McClure, 1989, p. 282; Powell, 1997, pp. 2-3, 44). Defined by its context to such a large degree, it is consequently characterised by a lack of external validity (whereby results are applicable to a variety of settings) and low reliability (or capacity to be replicated with accuracy and consistency). Episodic by nature, action research cannot easily be built into, and integrated with, previous studies, and this limits its ability to form part of a continuing and coherent whole. In-house research, in particular, tends to be non-cumulative and descriptive reporting with subsequent limited relevance beyond its original setting, and this fragmentation reduces the capacity of research to illuminate widely-applicable trends (Townley, 1991, p. 270). Such trends can give rise to the theoretical questioning that underpins basic research. A body of basic research, widely agreed to be lacking in LIS, defines a profession, and is fundamental to its advancement (Biggs, 1991, pp. 74-5; Childers, 1984, p. 522; Hernon, 1989, p. 23).

The problem is perpetuated by the observation that "library managers require research that has high internal validity for their particular library setting" (McClure, 1989, p. 285). Arguably, these requirements are best met if action research endeavours are underpinned by a careful consideration of the previous research. By applying a rigorous research process a librarian can simultaneously "address a local problem and contribute to the further development of the profession and its theory" (Townley, 1991, p. 270). Yet information professionals, as noted, seem recalcitrant to consult the research.

As the intended consumers, information professionals' motivations for and against research consultation are crucial to our understanding of this phenomenon. Yet the perceptions of the practicing community regarding their apparently widespread lack of research use are infrequently examined. McClure and Bishop set about determining the quantity, quality, impact and importance of LIS research in their 1989 study and interviewed a selected group of 23 active LIS researchers in Canada and the US, who gave largely unanimous expressions of "guarded optimism" regarding the future status of LIS research.

Looking specifically at the situation in New Zealand, Cave undertook an enquiry into research in library and information work in 1991 to determine the attitudes to, and participation in, LIS research by information professionals. Cave distributed a list of twelve questions to the chief librarians of New Zealand's seventeen largest libraries, and invited written comment. Disappointingly, the responses were occasionally "too vague or generalised" to be of use (Cave, 1991, p. 24).

More recently, the Dunedin Library Research Group examined the amount of research currently conducted in the workplace by New Zealand library practitioners, as well as the impact of the finished project on the employees' organisations (Finnie, Frame and Stewart, 2000). A counterbalance to such focus on the production of LIS research by the practicing community was desired in this project, which canvassed the perceptions of information professionals regarding their research use.

Methodology

The project sought to answer the following research questions:

1. What are the perceptions of information professionals concerning their use of LIS research:
    1.1 How often do information professionals consult the research?

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1.2 Why do information professionals consult the research?
1.3 Why do information professionals not consult the research?

2. Do any of the following participant variables affect the amount of research use by information professionals:
2.1 Highest library / information qualification, whether it contained a research (methods or project) component, and how recently it was completed?
2.2 Experience, indicated by number of years / months in current position?
2.3 Size of the participant's library / information centre, indicated by number of EFTS (Equivalent Full-Time Staff – both professional and para-professional)?
2.4 Organisational context of the participant's library / information centre?
2.5 Level of participation in conferences / professional meetings?

3. How do information professionals feel the relationship between LIS research and practice might be best improved?

A self-administered questionnaire was mailed to a purposive sample of 130 New Zealand tertiary (University, Polytechnic, or College of Education) and non-profit government libraries or information centres taken from the *New Zealand Contacts in Libraries* directory. Such institutions depend on research to guide learning, the acquisition of new knowledge, and the formulation and implementation of government policy. The fulfillment of such objectives requires effective information use and dissemination, and therefore employees from such institutions were purposively selected as key informants who might offer a best-case scenario of the current local situation. Private and public sector for-profit libraries and information centres were not selected for sample inclusion due to their distinct profit-driven information requirements, despite the fact such institutions may have an explicit research focus.

The chief librarians or library managers from the institutions in the sample were sent a consent form, an information sheet explaining the purpose of the project, and the questionnaire. These could be distributed to any other information professional(s) from the institution as desired.

Questionnaires were mailed out in March 2001 and 64 useable returns were obtained (response rate = 49%). The efficacy of data collection may have been affected by increased demands for tertiary user education services impinging upon staff time at the start of the New Zealand academic year. To facilitate quantitative data analysis, the questionnaire comprised 6-point Likert and Verbal Frequency scales. Data located in the returns were coded and subjected to descriptive statistical techniques using Excel. The mean was calculated as a measure of central tendency, enabling generalisations to be made. The project should consequently be construed as a preliminary exploration of associational relationships.

1. Research use

The survey included a definition of research as,

> *any systematic effort to generate new information, create new knowledge, or produce new interpretations of existing knowledge or information, suggesting attention to method and exactitude in obtaining and analysing results.*

1.1 How often do information professionals consult the research?
The mean response to this question on a Likert scale of 1 to 6 was 3.11. This score, below the Likert scale median of 3.5, indicates that research use by information professionals is low.

1.2 Why do information professionals consult the research?

Table 1: Ranked reasons for consulting the research [Range = 1-6]

Rank	Reason	Mean
1	To stay current with developments and trends in LIS for personal professional development	3.79
2	To assist with managerial activities in my library/information centre such as problem-solving, decision-making, planning and/or evaluation	3.77
3	To provide information when conducting self-motivated research not necessarily intended to solve problems specific to my workplace	2.54

1.3 Why do information professionals not consult the research?

Table 2: Ranked reasons for not consulting the research [Range = 1-6]

Rank	Reason	Mean
1	Time constraints	4.07
2	Conferences, meetings, and professional networking provide sufficient knowledge sharing opportunities with colleagues and researchers	3.70
3	The research does not address practical problems in the workplace	3.13
4	Problems with physical availability (e.g. resource constraints affect my library's budget for obtaining professional literature)	2.84
5	The research is presented in a way that is difficult to understand and apply	2.61
6	Problems with intellectual availability (e.g. poor bibliographic control of research findings)	2.34

The Dunedin Library Research Group discovered that research was typically "initiated to…provide answers and directions likely to affect library operations" (Finnie, Frame and Stewart, 2000, p. 87). This observation was explored in the present study as a factor that might motivate practitioners to consult the research, and the mean scores display a weighting towards consultation that supports workplace activities such as decision-making, problem-solving, planning and evaluation (3.77). Garnering information for the purposes of self-motivated research attracted a much lower mean score (2.54). This is possibly because the results of self-motivated projects are not as directly applicable to the workplace context, and encouragement and support for such pursuits from an institution may therefore defer to more pressing workplace priorities.

Of the reasons suggested for information professionals not consulting the research, the high mean score for "time constraints" (4.07) suggests that demands on respondents' time regularly affect their capacity to turn to the research. Problems with research content ("practical workplace problems not addressed"; mean = 3.13) were perceived as having a greater impact on levels of research use than problems with research presentation and dissemination. The physical availability of research (mean = 2.84), its intellectual availability (mean = 2.34), and the way in which it is presented with consequences for its ability to be effectively understood and applied (mean = 2.61), gained lower mean scores. In response to this question, one respondent noted that,

> Improved staffing levels would facilitate the undertaking of practice-based research and more frequent application of research results in the workplace – minimal staffing tends to discourage this.

Resource constraints such as low staffing levels have been previously discussed in the literature as a

barrier to research production (Finnie, Frame and Stewart, 2000). From this comment, it transpires that the same factor is perceived as an obstruction to the use and application of research results.

2. Participant profiles compared with research use

The following question set was used to determine the education and employment profile of participants, enabling an assessment of variables that may affect information professionals' amount of research use.

2.1 Highest library / information qualification, whether it contained a research (methods or project) component, and how recently it was completed

Table 3: Mean research use for "type of library / information qualification"

Type of library / info. qualification	Mean research use	% of responses
Postgraduate degree, diploma, certificate	3.19	62
Bachelors degree	2.00	2
Non-graduate diploma, certificate	2.91	36

Table 4: Mean research use for "research component in library / information qualification"

Research component	Mean research use	% of responses
Yes	3.19	40
No	2.97	60

Only 2% of respondents specified a bachelors degree as their highest library / information qualification, which is too small a data set for this category's results to be meaningfully interpreted.

LIS is often accused of lacking a body of practitioners trained in research methods and able to consume research findings in a critical and imaginative fashion (Biggs, 1991, p. 82; Montanelli and Stenstrom, 1986; Townley, 1991, p. 270). Those participants who completed a postgraduate degree, diploma or certificate had a considerably higher mean score for research use (3.19) compared with the mean indicated by respondents from the "non-graduate diploma, certificate" category (2.91). The supposition that postgraduate qualifications typically involve higher levels of research use and more rigorous attention to research skills when compared with non- and under-graduate qualifications may explain these results.

This suggestion is supported somewhat by the observation that those respondents who undertook a research methods or project component in their highest LIS qualification displayed a greater mean score for research use (3.19) compared with those whose qualification did not include a research component (2.97). The trend displayed in these results implies that information professionals with higher LIS qualifications are more likely to use LIS research.

Table 5: Mean research use for "date of completion of library / information qualification"

Date of completion	Mean research use	% of responses
1995 and before	3.25	78
1996 – current student	2.38	22

Only 22% of respondents completed their highest library / information qualification in 1996 or more recently, possibly because the questionnaire was distributed to the senior staff members from institutions in the sample, and the probability of recent graduates occupying such positions is understandably low.

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1996 was chosen as the category boundary because this was the year in which compulsory Research Methods and Research Project components were introduced to the New Zealand Victoria University of Wellington's MLIS (Master of Library and Information Studies) degree. There is, however, no way of knowing whether respondents who graduated in 1996 or more recently undertook the New Zealand MLIS programme, or a diploma or certificate that may or may not have contained compulsory research components.

This comparison revealed that those respondents who graduated with their highest LIS qualification most recently had a considerably lower mean score for research use (2.38) than those respondents who graduated in 1995 or earlier (3.25). In 1987 Stewart surveyed library practitioners in public library systems to assess their awareness of LIS research and determine the extent to which research had been effectively disseminated for their needs. Stewart noted a similarly disappointing performance in research awareness by recently qualified information professionals. This is a disconcerting sign given that "studying at library schools does give opportunities for reading widely in library literature – the like of which are rarely found again in professional life" (Stewart, 1987, p. 61).

The results obtained here prompted the following speculations:

- after immersion in scholarly pursuits, recent graduates may exhibit a tendency to detach themselves from academic activities, such as research consultation, in their first few years of professional practice;

- the problem-solving responsibilities inherent to senior management positions (such as those filled by experienced information professionals) demand greater use of research than those positions typically filled by recent graduates.

2.2 Experience

Those respondents who had held their current position for more than 5 years had a higher mean score (3.40) for research use than those who had held their current position for 5 years or less (2.84). This suggests that the amount of research consultation by information professionals increases with the number of years of experience gained at a senior level. Senior positions carry with them attendant responsibilities for decision-making, problem-solving, evaluation and planning. Such activities demand, and are effectively assisted by, recourse to research, as indicated by answers to question 1.2, where these activities were the second top ranking reason prompting research use.

2.3 Library / information centre size

Table 6: Mean research use for "library / information centre size"

Library / information centre size (EFTS)	Mean research use	% of responses
5 or less	2.69	56.5
6 – 80	3.35	27.5
81 or more	4.20	16

The data imply that tertiary and non-profit government libraries / information centres in New Zealand are mostly small, with 56.5% of responses comprising 5 or less EFTS (equivalent full-time professional and para-professional staff). An institution's size, indicated in this study by its staff numbers, may have ramifications for the funding of research endeavours and the procurement of research resources. The largest institutions (81 EFTS or more) scored a notably high mean for research use (4.20), with the smallest institutions attracting a considerably lower score (2.69). The mean score for research use by respondents employed in medium / large institutions (6 - 80 EFTS) fell neatly in the middle (3.35).

Such results suggest that research use increases as the size of a library / information centre increases. This may be due to extra funding provisions available to larger institutions. Alternatively, it may reflect information professionals employed in very small teams undertaking task diversification on a scale that prevents them gaining expertise in specialised sectors of professional activity to a level that promotes research consultation.

2.4 Organisational context of the library / information centre

The mean research use for respondents from tertiary libraries was 3.51. In light of the scholarly environment in which tertiary information professionals perform their duties, their high mean for research use is not surprising. The academic community has an obligation to conduct research, and such necessary preponderance towards research endeavours might favourably influence the attitudes of library staff from those institutions regarding research use (Cave, 1991, p. 4).

Respondents from non-profit government libraries / information centres displayed a comparatively low mean score for research use (2.59; 0.92 less than the score for tertiary libraries). The sampling method employed in this project was based on the assumption that government libraries / information centres provide resources to assist ultimately with the formulation of governmental policy, and that staff consult and evaluate research resources as part of this support service. If these assumptions are valid, it appears that the use and provision of research findings for clients does not necessarily result in increased research consultation in the practitioner's own professional field.

2.5 Conference participation

Table 7: Mean research use for "conference attendance"

Conference attendance	Mean research use	% of responses
Once a year or less (including never)	2.93	47
Twice a year or more	3.27	53

Table 8: Mean research use for "conference presentation"

Conference presentation	Mean research use	% of responses
Not once to date	2.69	64
Once or more	3.77	36

These results suggest that an increase in conference attendance is met with a corresponding increase in research use. Furthermore, information professionals who present at a professional forum (even only once) have a considerably higher tendency towards research use (3.77) than those information professionals who have not yet presented in such a context (2.69).

The trends revealed in answers to this question were expected. Stewart (1987) discovered that research awareness was often inspired by conference or professional meeting participation: respondents indicated that they first learned about three of the six research projects chosen as reference points for Stewart's study through conferences, meetings or conversations with colleagues. Stewart did not, however, ask her study's respondents to classify their professional participation as passive (i.e. attendance) or active (i.e. presentation). From the results obtained here, presentation seems to have a greater impact on tendencies towards research consultation than attendance.

Schön's Reflection-in-Action model maintains that practitioners continually face dynamic situations that are neither clearly defined nor static (Schön, 1983, p. 14). Thus, knowledge obtained through the process of practice, often tacit and largely anecdotal, is more relevant and applicable to issues

encountered in the workplace than clearly defined, theoretical knowledge drawn from a static store. Schön asserts that this practice-based knowledge is communicated amongst practitioners through descriptive reporting, conferences, association-meetings, and conversations that are difficult to capture and commit to written, published form (Schön, 1987). This suggests that there is reduced impetus for information professionals to consult published research when addressing dynamic, pragmatic workplace concerns.

Results obtained here seem to uphold Schön's argument: while "time constraints" was the top-scoring factor in respondents' reasons for not consulting the research (with a high mean score of 4.07), the following factors ranked second and third:

- conferences, meetings, and professional networking provide sufficient knowledge sharing opportunities with colleagues and researchers (mean score = 3.70);
- the research does not address practical problems in the workplace (mean score = 3.13).

These findings were summarised by one respondent who stated,

Unless the research is practice based and able to be directly applied in the work environment, [it] will remain an academic exercise of little value.

Another respondent supported the notion that such professional knowledge sharing is best suited to situations that are dynamic and rapidly evolving, with the following words,

My library has been in a phase of establishment and rapid expansion...I tend to follow precedents of best practice in similar libraries…and make direct personal enquiries to expert colleagues when I feel I need to seek advice.

These sentiments were echoed in another respondent's statement that "Personal / professional networking provides the most effective information." Email listservs, SIG (Special Interest Group) gatherings, and *Library Life* (the publication of LIANZA: *Library and Information Association of New Zealand Aotearoa*) were specific examples of such intra-colleague communication, as noted by one respondent.

3. The relationship between research and practice

Respondents were asked to specify how they thought the relationship between research and practice might be improved, by indicating their level of agreement with five suggested strategies.

Table 9: Ranked actions for improving the relationship between research and practice [Range = 1-6]

Rank	Action	Mean
1	Encourage research productions that include practical guidelines for applying the results in the workplace	4.72
2	Contribute and have access to columns in library / information newsletters or listservs that identify, index and summarise recent research projects	4.44
3	Encourage staff to attend and/or present papers at conferences and professional meetings	4.11
4	Encourage staff to become better consumers and producers of research by enrolling in courses that develop their research skills	4.02
5	Encourage the intended users of a research study to participate in the research process	3.97

The literature abounds with discussions of the perceived dichotomy between researchers and practitioners (Hernon, 1989, p. 23; Biggs, 1991, pp. 81-3). In an ideal world, researchers provide the basic research from which diagnostic techniques can be derived and applied to the problems of practice. Practitioners, in turn, supply problems for investigation, and test the utility of research results in the workplace (Schön, 1983, p. 26; Van House, 1991, p. 88). However, the cross-fertilisation of ideas between these two communities appears to be rare in LIS, and a communication chasm indubitably exists (McClure and Bishop, 1989, p. 141; McClure, 1989, p. 284; Schön, 1983, p. 308).

Information professionals' views regarding ways by which this dichotomous relationship might be improved have not often been explored. This project's participants were asked to indicate their opinion of promulgated strategies taken from the literature on this topic, which focus on improved collaboration and understanding between the two groups (McClure and Bishop, 1989; McClure, 1989; Townley, 1991).

The mean scores are high and fall within a narrow range (3.97 – 4.72). The strategy "include practical guidelines for applying results" scored the highest ranking mean (4.72). Respondents to McClure and Bishop's 1989 survey perceived that researchers do not always present and articulate their findings in a way that can be applied to practice, and that many practitioners have difficulty understanding the research results (McClure and Bishop, 1989, p. 136; McClure, 1989, pp. 283-4, 290). This is not so much an indictment on the intellectual capacities of practitioners as it is an accusation that academic research can be too remote and esoteric to supply applicable and practical results (Hernon, 1989, p. 24). Such shortcomings were echoed in an earlier question where respondents indicated that "practical workplace problems not addressed" was the third highest ranking reason why research is not consulted.

The second ranking strategy (mean = 4.44) was "contribution and access to research awareness columns/listservs". "A regular bulletin reporting on research in progress" was advocated by Cave (1991, p. 22). Likewise, the Dunedin Library Research Group noted "widespread support for the idea of a national database" or central research register to which "all libraries could both refer and contribute" that would list research currently underway or recently completed in New Zealand libraries (Finnie, Frame and Stewart, 2000, pp. 86-87). Support for the effective dissemination of research findings using current awareness media is similarly evident in responses to this project.

"Staff attending / presenting at conferences" scored the third highest ranking mean of 4.11, and as noted in a previous question, such professional participation does seem to promote increased levels of research consultation. Participants gave the mean score 4.02 when asked for their opinion on the value of encouraging staff enrolment in courses to improve their skills as consumers and producers of research. Lack of research expertise was identified by the Dunedin Library Research Group as a barrier to research performance by practitioners (Finnie, Frame and Stewart, 2000, p. 86), and the active encouragement of appropriate staff education has been previously postulated by Cave (1991, p. 28) as a solution to this problem.

The lowest ranking score (3.97) was assigned to the strategy of encouraging intended research consumers to participate in the research process. Practitioners should not function as mere consumers of researchers' outputs, commentators advise, but should share their practical experiences with the research community (Schön, 1983, p. 323). Such a low comparative ranking may have resulted from perceived logistical difficulties inherent to this process. Funding constraints, demands on staff time, and geographic isolation from tertiary institutions would feasibly hinder participation by practitioners in academic research endeavours.

It appears that information professionals in New Zealand tertiary and government libraries / information centres feel there is a dichotomy between LIS research and practice, underpinned by conflict between the motivations guiding each community. As one respondent noted (with emphasis in the original),

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Academic LIS research [is] not really helpful – we require operationally based material. Academic research *reflects* the trends and developments – it does not provide *leadership*. This is usually to be found at practitioner level.

One respondent made the noteworthy suggestion of "encouraging staff to do literature reviews in relation to internal development projects." Through such a process, practitioners could usefully draw upon previous research for the ultimate resolution of workplace issues, simultaneously meeting researchers' requirements for the integration of their findings into subsequent research productions.

Conclusion

It was hoped that this project would give focus to the future encouragement of research use. From the findings presented here, applied research that attempts to resolve operational concerns most satisfies the requirements of information professionals. The perceived inadequacy of research to address practical workplace problems was a major reason for information professionals not consulting the research. The project's participants also identified problems with the way in which research is presented, and the repercussions this has on its capacity to be understood and applied effectively. It is recommended that LIS researchers heed this message from the practicing community, and focus their energies on research that includes practical guidelines and contains enough external validity for the application of results in diverse workplace contexts.

The instigation of research current awareness columns in library publications was supported by this project's respondents as an effective way of improving interactions between the communities of research and practice. Such a strategy has been previously endorsed in a New Zealand context (Cave, 1991; Finnie, Frame and Stewart, 2000), and more recently discussed in a meeting of the LIANZA (*Library and Information Association of New Zealand Aotearoa*) Research SIG, which is currently in the process of establishing a national Research Register website. Combined effort directed towards the development of such a resource, by and for the communities of research and practice, should facilitate mutual awareness of the research productions and the research requirements of both camps.

This project's findings also imply that Schön's Reflection-in-Action model applies to the current situation in New Zealand's information sector. Practitioners seeking to address dynamic workplace problems predominantly turn to information exchanged via professional networking. Respondents to this project also indicated that professional meeting attendance and presentation leads to a corresponding increase in research use. Information professionals are therefore encouraged to participate in professional activities such as conferences, meetings, and email listservs, as a way of increasing both their consultation of the published research, and intra-colleague information sharing.

Research facilitates professional reflection and development. Information professionals who consult the research empower themselves to evaluate and analyse its quality in a critical fashion. This in turn enables them to adapt and apply research findings to their local context more effectively, and to administer more widely applicable in-house library research. Ultimately, this may have the added benefit of enhancing information professionals' appreciation of the research needs of their clientele.

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