Canadian Academic Librarians and the Need for a Systematic and Comprehensive Research-Support Model

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Abstract
Expectations for Canadian academic librarians’ research have evolved, but not all librarians have access to the support systems needed that aid and enable them to conduct and publish research. A survey was sent to librarians asking about the research supports available and most useful to them. “Research” was not defined and was left to the interpretation of the participant. The survey found that supports are sporadic, possibly leading to a two-tiered research climate between “haves” and “have-nots.” It is essential for academic librarians to initiate and engage in conversation about what library research is and how librarians’ research competency may be improved. This should lead in turn to conversations about the support systems needed, which ones the universities and the libraries should provide, and how having a comprehensive research-support model would help librarians engage more with research, increase their research output, and improve the quality of their research.

Keywords: academic librarianship · Canada · practitioner-researchers · research support

Résumé
Les attentes quant à la recherche produite par les bibliothécaires universitaires canadiens ont évolué, mais tous les bibliothécaires n’ont pas accès au soutien nécessaire pour leur permettre de mener et de publier cette recherche. Une enquête a été menée auprès des bibliothécaires au sujet du soutien à la recherche : ce qui est à leur disposition et ce qui leur est le plus utile. Le terme « recherche » n’a pas été défini et a été laissé à l’interprétation du participant. L’enquête a révélé que le soutien est sporadique, ce qui peut créer un environnement de recherche à deux vitesses : les « nantis » et les « démunis ». Il est essentiel pour les bibliothécaires universitaires d’amorcer la conversation et de dialoguer sur ce qu’est la recherche en bibliothéconomie et sur les façons dont la compétence à la recherche peut être améliorée. Cela devrait ensuite conduire à des discussions sur le soutien nécessaire, sur ce que les universités et les bibliothèques devraient offrir et sur la manière dont un modèle général de soutien à la recherche pourrait aider les bibliothécaires à s’engager davantage dans la recherche et à augmenter la production ainsi que la qualité de celle-ci.
Academic librarianship has evolved over the last century, and most practitioner-researchers (hereafter referred to as librarians) in North American universities now have faculty status (Coker, Van Duinkerken, and Bales 2010; Isaac 1983). In tenure-track, tenured, or continuing appointments, research activities are often either required or strongly encouraged (Cosgriff, Kenney, and McMullen 1990; Mitchell and Reichel 1999; Rayman and Goudy 1980; Sassen and Wahl 2014), and librarians actively engage in research activities either independently or in collaboration with other faculty (Bedi and Walde 2017). However, librarians face many barriers, and not all librarians are confident in their research abilities (Kennedy and Brancolini 2012; Klobas and Clyde 2010). They need a support system to enable their research. It is not the aim of this paper to provide a perfect example of a support system.

The landscape of librarianship in Canada, particularly academic librarianship, expects and enables librarians to be researchers. The Canadian Association of Research Libraries (CARL), representing Canada’s 29 largest university libraries, provides a document of core competencies, stating that “more and more academic librarians produce research and scholarly works to help them gain better knowledge of the profession” (CARL 2010, 5). Although it does not set requirements, CARL assumes research expectations of academic librarians as one of the core competencies.

The Librarians’ Research Institute (LRI), an intensive research workshop that CARL (n.d.-a) offers, has played a vital role in encouraging and training Canadian academic librarians in how to conduct and publish their research. LRI workshops provide an infrastructure for librarian researchers to network, and they encourage scholarly conversations that concentrate on improving research competencies among librarians.

Despite recognizing the importance of research in librarianship, DeLong, Sorensen, and Williamson (2015) established that “many librarians themselves simply feel ill-equipped to conduct research” (92), and “it is not clear if they are being supported in this endeavour” (92), especially when it is predicted that there will be a “significant shift in research and scholarly expectations” of librarians (93). Their observation implies a direct link between providing supports and increasing research outputs.
Literature Review

There are many reasons for academic librarians' relatively low research output. One reason is the lack of research training (Isaac 1983; Powell, Baker, and Mika 2002; Sassen and Wahl 2014) in library education programs. MLIS programs focus on producing library professionals rather than librarian researchers. Most librarians do not have doctoral degrees that teach the rigour of research. Fox (2007c) found that one hundred percent of participants in his study had an MLIS or its historical antecedent, but only four percent had a doctorate. He does not mention the difference between those who undertook thesis-based or course-based master's degrees. The results of Fox's study did not differ much from a later study (DeLong, Sorensen, and Williamson 2015), where only five percent of librarians had a PhD, most of whom acquired this degree later in their career.

The quality of research in librarianship has been criticized over the last many decades. Molholt (1987) and Haddow (1997) are critical of the quality and posit that librarians have difficulty with the science of research and lack research-mindedness. Hildreth and Aytac (2007) suggest that since the 1960s, librarians' research is dissociative, fragmentary, oriented toward practice, weak in methodology, suffering content problems, and of unacceptably low quality in terms of discussions of validity, reliability, study limitations, and future research, although progress seems to have been made in being organized, detailed, and comprehensive.

Koufogiannakis and Crumley (2006) observe that librarians face obstacles such as lack of time to conduct research and lack of funding to attend or present at research-related workshops and conferences. Fox (2007a) confirms this observation, concluding that support for scholarship is variable and sometimes non-existent in CARL libraries. Many librarians report using their personal time for research, and “few were satisfied with specific funding for research and time available for scholarship” (Fox 2007a, 20).

A study focusing on Penn State University librarians (Fennewald 2008) who were expected to engage in research and publication found that multiple factors contribute toward their research success, such as institutional support, mentorship, self-motivation, and even help from family members with editing and proofreading.

Hoffmann, Berg, and Koufogiannakis (2014) find three major factors that contribute to the research success of academic librarians and non-librarians: individual attributes, peers and community, and institutional structures and support. The same authors (2017) note that “an environment that embraces all three areas, by encouraging individual attributes, fostering peer and community interaction, and
providing institutional supports, will be likely to promote research productivity among librarians” (2007, 116).

Molholt (1987) envisions a comprehensive research infrastructure framework that would include library schools, teaching libraries, and research centres. She compares teaching libraries to teaching hospitals; teaching libraries would serve as a “laboratory environment for research and advanced training” (17) and offer research internships. The purpose of a research centre, according to Molholt (1987), would be to share research information and activities. The centre could serve as a hub that coordinates links to other research centres, libraries, research programs in library schools, and extension activities such as teaching libraries with research internships.

While the primary focus of this research was to learn of supports that academic librarians currently have and use, the secondary focus was to determine if comprehensive support models that cover aspects discussed in the literature have evolved over time (Hoffmann, Berg, and Koufogiannakis 2014 and 2017; Blessinger and Costello 2011; Cosgriff, Kenney, and McMillan 1990; Fox 2007b; Isaac 1983; Koufogiannakis and Crumley 2006; Sassen and Wahl 2014).

Other practice-focused fields have had research challenges similar to those of librarianship and have made progress in increasing the quality and amount of research conducted. For example, the field of nursing, after identifying gaps that contribute to lack of research and publication, has recommended and instituted research teaching in nursing programs and encouraged nurses to undertake research as a critical part of their role (Grange et al. 2005). Other ideas that have been implemented are encouraging collaborative research with other academics and practitioners, providing mentors to educate nurses in research skills (Lode et al. 2015), and hiring a research facilitator (Grange et al. 2005; Harrison and Kitchens 1989; Jamerson and Vermeersch 2012; Plamondon et al. 2013). Although their roles vary, research facilitators are common in the field of nursing (Harrison and Kitchens 1989).

Allied health science is another field that has accepted the importance of conducting and publishing research to promote allied health literature. In this field, hiring a dedicated and embedded research facilitator within the department or unit has had an impact on research outputs (Wenke and Mickan 2016). The study by Wenke and Mickan found that there was an increase in individual research skills, participation, and research activities, and an improved research culture. In a survey conducted by Williams et al. (2015) among allied health personnel in Australia, 186 out of 520 participants stated that they had research facilitation help. The same study concluded that organizations with research leads had an effect on research activity at the team level. The respondents of this study reported participating in data collection, report writing, publications or presentations, and research grants.
To summarize, this support person or facilitator is often an expert who can provide in-depth guidance on all aspects of research, from start to finish. This might include guidance on writing a research proposal, designing the project, creating a budget and timeline, choosing a methodology, gathering, coding, and analyzing data, and writing or presenting for dissemination. The facilitator may also inform librarians about internal and external research grants or funds and help them with grant and fund applications. Research facilitators may be in a unique position to know of research topics of interest to faculty and librarians, and this can help them connect researchers with similar research interests.

Such support is different from the type of research facilitation that new faculty receive. New faculty often need help with identifying mentors, grant funds, balancing work and research, or producing research to fulfill tenure expectations (Brent and Felder 2016), not necessarily with the actual designing, producing, writing, and sharing of their research. An experienced librarian can help faculty with some of these needs by suggesting sources for their research and identifying journals where they might want to submit their research.

In a practice-based discipline such as librarianship, research often focuses on topics such as library operations, collections, and services, sometimes with an emphasis on “how we did it in our library” (Haddow 1997). While such articles are paramount for setting or evaluating policies and procedures, it is also essential to conduct in-depth, valid, and reliable research that is based on evidence and emphasizes content analysis. The literature on library research (Haddow 1997; Hildreth and Aytac 2007) shows that the quality of research still lacks in some areas, such as external validity and reliability. As Koufogiannakis and Crumley (2006) posit, librarians need to fill the gaps in research through “well-planned and well-designed” (338) and well-executed research.

Methodology
This qualitative study used an online survey for data collection. The survey questions were informed by other studies cited throughout this paper, particularly Berg, Jacobs, and Cornwall (2013), Fox (2007a; 2007b), and Sassen and Wahl (2014), in which participants identified factors that encouraged or were needed to facilitate research.

After approval by the University of Saskatchewan’s Research and Ethics Office, I developed an electronic questionnaire in English (see Appendix B) using FluidSurveys. The survey was translated and made available in French. The structured questionnaire consisted of multiple-choice, closed, and open-ended questions. There were 25 questions, including demographic details, institutional affiliation, tenure expectations, and various types of research supports. Questions
about research supports focused on the types of supports available, supports librarians found most useful, supports they currently did not have but would like, and whether their library had a research facilitator. The term “research” was not defined and was left to the interpretation of the participant.

Pre-test questionnaires were sent to three academic librarian colleagues who had knowledge of the project but did not participate in the survey. Based on their feedback, the survey was adjusted, retested, and finalized. The survey took approximately 15 to 20 minutes to complete and was available over five weeks in the fall of 2016. Some of the major questions were:

- Do you hold a tenured or tenure-track position?
- Does your tenure requirement include conducting and publishing research?
- Do you use the library research supports available to you as a researcher?
- What are the various research supports available to librarians (e.g., research time, funding support, support in writing applications [grant, ethics, or sabbatical], support in writing your research findings toward dissemination, or a dedicated person that offers many types of research help)?
- Of the supports available to you, which are the most useful?
- What are the supports you would like to have that you currently do not have?

Recruitment and Response Rate

The sample selection process for the survey was conditionally random: potential participants had to hold a position that required them to engage in research activities and had to be in tenured or tenure-track positions.

Canadian academic librarians were targeted through relevant electronic mailing lists. A link to the survey was distributed through CARL, the Council of Prairie and Pacific University Libraries (COPPUL), and other electronic mailing lists. Personnel from CARL and COPPUL posted the survey link to their listservs during the fall of 2016, and multiple reminders were sent. The third question in the survey was, “Does your tenure requirement include conducting and publishing research?” If the respondents said no, the survey ended for them at that point. The intention was to capture information from librarians who were required to engage in research activities and who might have different perceptions of what support was available or should be available to them. In hindsight, the survey questionnaire could have been designed to get information from all librarians, particularly because the data analysis showed that librarians from the same institution had contradictory information about whether they were required to publish. A total of 117 responses (113 English responses and four French responses) were received. However, after question
three, 66 responses (65 in English and one in French) were considered as attempts to complete the survey.

Despite sending multiple reminders, the response rate was not as high as expected. One of the reasons for the low response rate, I believe, is the use of controlled electronic mailing lists targeted to those in library leadership positions. The survey may not have reached as widely as expected.

Results

Data Analysis

Once the online survey closed, all of the responses were exported to an Excel workbook. A separate sheet was created for each of the survey questions, and the results were tabulated manually to determine numbers and percentages and to organize and analyze qualitative data.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Male</th>
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<td></td>
<td></td>
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<tr>
<td>Female</td>
<td></td>
<td>33</td>
<td>42</td>
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<tr>
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<th>31 to 40</th>
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<td>11</td>
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<th>Primarily undergraduate</th>
<th>Comprehensive</th>
<th>Medical/doctoral</th>
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<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comprehensive</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical/doctoral</td>
<td>8</td>
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</table>

6 respondents identified simply as working at an academic institution.

Table I  Demographic details. Not all participants answered each question.
Table 2  Responses regarding tenure, research, and support.

Funding was the most common and a key support available to librarians. Thirty-four out of 40 librarians (85%) had funding support, but the types and purpose of these funds varied. The types of funding supports available were professional development funds (94%), travel funds (65%), start-up funds (15%), and internal funding (26%). Start-up funds may be minimum funds provided by the institution to help new faculty with undertaking research. Faculty can avail themselves of these funds within the first few years of their appointment. These funds may be used to buy equipment such as a new laptop and other hardware or software applications required for conducting research, or to hire a research assistant.

Table 3  Research supports that librarians report as available to them (breakdown provided in the text). Forty participants answered this question.

Professional development funds varied from $400 a year to over $2 000 a year. This included institutional funds negotiated as part of collective bargaining and used for various purposes, such as travel, membership registration, and software purchases. Travel funds are separate funds specifically for conference travel or are part of professional development funds. In one case, the “university as a whole has a
fund that can be used for research expenses and travel (e.g., conference registration, society memberships, software, etc.) which librarians have access to.” Professional development funds and travel funds are both generally used for any professional development activities, continuing education, and conference travel.

Internal funding is a combination of possibilities. It includes annual funds from the university, a sabbatical fund, small pots of money for equipment or transcription, and competitive internal grants. Internal or start-up funds are generally available for new librarians or for first-time research projects. In a couple of situations, internal funds are institution-wide funds for which librarians needed to compete, with no guarantee of receiving an award.

Twenty of 40 librarians (50%) received support with writing applications (grant, ethics, or sabbatical). Of these, 20 percent received sabbatical application support, 20 percent received support for grants, and 20 percent received help with ethics applications. Of these also, 12 librarians (60%) received help from either their research or ethics offices, 15 percent had either a peer or dean support them with reviewing their ethics applications, and 20 percent received help from a dedicated research facilitator. Frustration with lack of support in this area is evident from one survey response:

Nothing, academic support is generally directed towards grant applications, NSERC and other agencies, but nothing for librarians as our practice does not lend itself to funding, grants or awards that would support research-based initiatives, which is the norm for most academic librarians . . . we’re just not in that game.

Seventeen of 40 librarians (43%) reported having allotted research time. Four types of research time were available to these librarians: sabbatical time (33%), percentage of time for research (23 %), study leave (13%), and research leave per year (5%). A combination of sabbatical, percentage of time for research, study leave, or research leave per year was available to 8% of these 17 respondents. The percentage of time available for research varied from five to 20 percent. Time was either specified as days per week, days per year, or a negotiable amount to be taken at certain times of the year. Percentage of time for research was not always clearly stated or interpreted and therefore was not as straightforward. One respondent said,

Most librarians have research as 10–20% of their (yearly) responsibility, and some interpret and conduct this as that percentage of time per week. Not always easy to make it work and most people aren’t that rigid about it.

Study leave also varied. It could be 20 days a year, applying for two months of leave, a sabbatical, or getting a doctoral study leave.
Fourteen of 40 librarians (35%) received support for designing and conducting research. Of these, 36 percent had peer advice as the only support, 29 percent had a centralized service at their institution that offered some support, and 14 percent mentioned the availability of continuing education opportunities on the topic. Peer supports were the main or only support available to most of these librarians: “Only in the sense that I generally have supportive colleagues who will read over something for me.” Centralized supports may include help from the institution’s research ethics office, continuing education opportunities through the faculty association or library administration, or help from the institutional teaching centre. Another supportive forum mentioned was the Librarian/Archivist Research Support Network, a network available at the University of Western Ontario. Support that the ethics office provided was not hands-on. Rather, it varied from “consultations with the ethics office” and “internal peer review through research office,” to “workshops and consultations.” There was little personal help, and “there is no assistance for writing a sabbatical proposal.” In one situation, a “staff member [was] hired to assist writing grant and ethics applications.”

Eleven of 40 librarians (28%) received help with the writing of their research. This support came through peer help (12%), a research consultant (7%), writing circles (7%), and continuing education opportunities (12%). In two situations, financial support came either through professional-expense funds or from the “annual allocation give[n] through the Collective Agreement to support legitimate research expenses.” Peer support was often voluntary and informal. Only one respondent identified that “library administration created a committee to develop a library mentoring program.”

Librarians from two libraries had a dedicated research facilitator to help with the grant, ethics, or sabbatical applications. Only one of the libraries had a comprehensive model in which the research facilitator:

- provides or updates librarians on research-related information, such as rates for research assistants, university policies on travel expenses, and per diem rates,
- sends reminders about grants and workshops,
- shares information about upcoming internal and external funding opportunities and deadlines,
- arranges for or offers research-related workshops and training (e.g., Canadian Common CV for grants),
- helps develop and manage a budget for research projects,
- helps with writing the grant, sabbatical, and ethics applications,
- edits and proofreads applications or materials prior to sending to publishers,
• advises on research methodology, and
• acts as a liaison between the librarian and the institution’s central research/ethics office.

<table>
<thead>
<tr>
<th>Types of Supports Researchers Use</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Funding</td>
<td>57</td>
</tr>
<tr>
<td>Time</td>
<td>19</td>
</tr>
<tr>
<td>People</td>
<td>15</td>
</tr>
<tr>
<td>Methodology design &amp; research administration</td>
<td>5</td>
</tr>
<tr>
<td>Other</td>
<td>7</td>
</tr>
</tbody>
</table>

**Table 4** Types of research supports that librarians used.

I wanted to know which research supports librarians used more than others, and which supports they would like to have but were currently lacking. Table 4 shows the supports that librarians used. Funding is the support that they most used.

“Other” supports under Table 4 were ethics offices that provide workshops for all faculty, including librarians, advice from the teaching support centre, and having writing help. There are commonalities between what the survey respondents identified as most useful supports that were already available and the supports that they most desired to have in the near future. The top most-useful supports they identified were:

1. financial (professional development, travel, conference registration, and attendance),
2. time for research,
3. peers (to help with proofreading, informal mentoring help, or advice on the research process), and
4. having a research support staff (to help with ethics or sabbatical applications, grant writing, or data collection and analysis).

The top most-desired supports identified were:

1. help with methodology and designing a research project, and research time (tied in first place),
2. financial support,
3. writing help,
4. “having a research support staff” and “help with developing a program of research (from start to finish of a research project)” (tied in fourth place).

One of the participants stated, “I wish we had someone to help guide our research projects from inception to completion and funding for research assistants or open-access publishing.” Another participant said, “I would love for our library to have a role dedicated to supporting librarians’ and archivists’ research.” A third participant succinctly stated that they needed help “from start to finish.”

**Discussion**

The results of the survey show that not much has changed in terms of supports available to Canadian academic librarians since the previous studies, by Berg, Jacobs, and Cornwall (2013) and Fox (2007a and 2007b), identified barriers to librarians’ research. Librarians in many institutions have access to some support systems, but they are not all aware of everything available to them. The amount of funding and research time available varies from institution to institution. Librarians’ understanding of research expectation or requirement also varies.

Data analysis reveals that librarians are not always aware of what is available to them. For the question, “Does your library provide you with any support (financial or otherwise) toward initiating, conducting, and disseminating research?” librarians from the same institutions provided contradictory responses. Librarians who had been employed for two to five years always responded that they did not have supports. Experienced librarians seemed more aware of supports available through their institutions. When asked to elaborate on the types of supports, there were differences in what they said was available to them. These were the three responses from the same institution: “travel funding only available,” “internal funding for conference attendance,” and “library-specific individual fund for travel, university-wide fund for professional development, library continuing education fund.” Librarians need to be proactive about seeking and using research supports available to them. A research facilitator may help with creating awareness of what, how much, and when supports are available.

The research support that most librarians have and use is funding. Canadian academic libraries do not have standards for the types of funding available or for how much is available per year. While it is understood that the amount of funding will vary based on the size of the institution and its budget, our profession agrees that we want to advance further in research (CARL 2010; CARL n.d.-a). With this in mind, although there is no standard that I could find, it would help if there were some standard among academic libraries for providing funding for professional development, travel, conference registration, and attendance. It would be ideal to have
additional funding to pay for other research activities (e.g., buying or subscribing to survey tools, hiring a research assistant, or printing a poster). It is unsettling to know that not all librarians from the same institution are aware of the funds available to them. For example, in one scenario, a librarian mentioned having only a professional development fund, another talked about having a health fund in addition to the professional fund, and the third mentioned only a research fund (all different amounts). All of these participants were from the same institution. Perhaps this could be avoided with the presence of and help from a research facilitator, who would have the overall picture of funds available and knowledge of what research areas each librarian is working on. It is possible that libraries have some structure to share or exchange information, but this model is obviously not functioning well, as some of the librarians are unaware of supports available to them.

Research time allotment has not changed much since Fox (2007b) described the challenges of a “normal work week” and assigned research time. It is difficult to determine time commitment to scholarship, but planning, designing, conducting, analyzing, writing, editing, and disseminating research involves time. The time required to complete a research project is subjective and varies with the individual, their experience and knowledge, the kind of help they have, and the size of the project. If there are expectations for tenured and tenure-track librarians to produce and disseminate research, it is imperative that they be allowed fixed times when they can dedicate themselves to the research project. Unlike teaching faculty (who do not have to teach year-round), librarians have year-round instructional duties and may have limited time to focus on their own research. Additionally, having a dedicated research facilitator who can help librarians find the right grants and awards, write grant applications, offer comments on librarians’ final research product, and provide ongoing updates on institutional and external research grants would help further librarians’ research initiatives. There were discrepancies in the responses from the same institution on the question of research expectations or requirements. Six librarians from one institution said that they were not required to conduct and publish their research, while two from the same institution said that they were. From another institution, seven said there was no research expectation or requirement, but three from that same institution said there was. These discrepancies suggest either that the librarians lack understanding of what is required or expected at their institutions, or that the language in the collective agreement is open to interpretation. It is also possible that these librarians’ appointments are different, reflecting the evolution of librarianship over time.

A secondary tacit focus of this research was to determine if comprehensive support models that cover many aspects discussed in the literature are available
to librarians. The survey results showed that librarians from one university (the author’s institution) have a comprehensive research support model, with a dedicated research facilitator who provides or updates librarians on grant-related information and internal and external funding opportunities, organizes writing circles and research workshops, helps with writing ethics, sabbatical, or grant applications, and helps develop budgets. It is surprising to learn that librarians from another university did not mention their dedicated librarian who provides overall research support and support for writing grants.

Building a community of librarian researchers is fraught with challenges when those librarians have fragmented research-support systems. Fragmentation may create two tiers of librarian researchers—the “haves” and the “have-nots.” Such a two-tiered research climate may affect the number of research outputs and the quality of research. It may also cause librarians to apply for certain jobs for the right or for the wrong reasons: a librarian who is not confident about their research skills, despite their ability to perform in the job, may not apply to a position that requires them to conduct research. In addition, this fragmented model of research support does not help to further research. For example, providing writing supports for librarians creating a writing group helps to develop their writing skills, but research is more than just writing. Providing a workshop on qualitative or quantitative methodology alone does not help with data collection, organization, and analysis. While peer mentorship is a suggestion, it is not always easy to find a mentor and not always feasible for established librarians to provide such time-consuming support to new librarians. A dedicated research facilitator who knows and understands research can help with many phases of research activities and with the profession’s research success. The author comes from a similar background as Molholt (1987) envisioned or Detlor and Lewis (2015) experienced. Having research support helped the author initiate and conduct research in the early stages of her career. Since research support is valuable, it needs to be implemented more evenly across the academic library landscape. Librarians with extensive research experience may decide not to seek or use all of the available supports.

Limitations
The survey method was chosen as the best option for this project because of its ability to reach all across Canada, but the author was cognizant of its limitations. The survey method also did not allow for follow-up with one-on-one interviews with interested librarians. Interviews might have revealed additional information for triangulation analysis, such as information on educational backgrounds, previous research experience, and research courses undertaken, all of which may have helped librarians in their research activities. There were three possible reasons for the low
response rate. First, the email was not sent to individual librarians but to listservs. It is possible that librarians did not feel personally connected to the survey. Second, if the respondents answered “no” to the question of whether their tenure requirement included conducting and publishing research, the survey ended at that point. Since the data analysis revealed that not all librarians agree about whether research was required or expected, this question may have limited their participation. Third, it is possible that the term “research” allowed for misinterpretation about what constitutes research (is it professional development, empirical research, or any scholarly activity?). Participants’ respective understandings of this term may also have limited their participation in the survey. Finally, there is one scenario in the data where scholarly and professional achievement are counted for promotion but not needed for confirmation of appointment. Such variations should be taken into consideration when building future surveys or interview tools for this topic.

Future research should also consider the size of the institution as a factor in determining the extent to which research is expected or conducted. On a broader scale, it is interesting to note the differences in our profession’s understanding of the research requirements. These differences pose the question of how we as a profession approach research.

Conclusion

The author’s primary focus of this survey was to learn about the types of research support librarians currently have, and how they use them. A secondary tacit objective was to determine if comprehensive support models, covering many aspects discussed in the literature, exist in libraries. The results indicate that Canadian academic librarians need to engage in further conversations about what constitutes research and what supports their institutions and their libraries should make available to them. This would allow for a move toward a universal support model, avoiding a two-tiered research climate between “haves” and “have-nots” in research support.

Since LRI workshops provide some infrastructure for librarian researchers to engage in conversation and improve their research competencies, this may be one good place to initiate conversations about research supports at different institutions. This may lead to further discussions.

CARL’s (n.d.-b) current aim toward research advancement focuses on research data management initiatives, scholarly communication, and preserving research. While CARL enables librarians’ role in helping others to conduct research (that is, helping faculty and students), it is important to have conversations about how to enable librarians as researchers. Although not all survey respondents are employed in CARL libraries, as a national research association focusing on libraries CARL
might be one of the places to begin conversation about what the research-facilitator model would look like. Experienced research librarians and library administrators could come together under the umbrella of CARL and work on standards or best practices for hiring and working with research facilitators. Other academic and college libraries could follow this model or adapt it to suit their needs.

More research is necessary to evaluate the impact of each of the types of support available to librarians. Future research can also focus on investigating the differences between librarians who receive comprehensive research supports and those who have selective, fewer, or no supports. As Sassen and Wahl (2014) note in their study, it will also be important to ask academic librarians about the adequacy of their library education and its role in their subsequent research activities. Another research area to explore is the difference between librarians who have a master’s with a thesis requirement or a PhD, and librarians who do not, concerning their research outputs, confidence with research, and grant or funding successes.

Having a level playing field for research support across institutions, and having a research facilitator, would likely increase the number of research outputs, research impact, and the quality of research across Canadian academic librarianship.

ACKNOWLEDGEMENTS
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ABOUT THE AUTHOR
Maha Kumaran is the education liaison and Head of the Education and Music Library at the University Library, University of Saskatchewan. Her research program includes academic librarianship and various aspects of visible minorities or multiculturalism and librarianship.

REFERENCES


### Appendix A: Institutions that Participated in This Survey

<table>
<thead>
<tr>
<th>Institution Name</th>
<th>Type of Institution</th>
<th>Research Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acadia University</td>
<td>primarily undergraduate</td>
<td>Yes</td>
</tr>
<tr>
<td>Brock University</td>
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<td>Yes</td>
</tr>
<tr>
<td>Dalhousie University</td>
<td>medical/doctoral</td>
<td>Yes</td>
</tr>
<tr>
<td>McGill University</td>
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</tr>
<tr>
<td>Memorial University of Newfoundland</td>
<td>comprehensive</td>
<td>Yes</td>
</tr>
<tr>
<td>Mount Saint Vincent University</td>
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</tr>
<tr>
<td>Trinity Western University</td>
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<td>Yes</td>
</tr>
<tr>
<td>Université de Moncton</td>
<td>primarily undergraduate</td>
<td></td>
</tr>
<tr>
<td>University of Alberta</td>
<td>medical/doctoral</td>
<td>Yes</td>
</tr>
<tr>
<td>University of British Columbia</td>
<td>medical/doctoral</td>
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</tr>
<tr>
<td>University of Calgary</td>
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<tr>
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</tr>
<tr>
<td>University of Regina</td>
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<td></td>
</tr>
<tr>
<td>University of Saskatchewan</td>
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</tr>
<tr>
<td>University of Victoria</td>
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<td></td>
</tr>
<tr>
<td>University of Western Ontario</td>
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<tr>
<td>University of Windsor</td>
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<td>Yes</td>
</tr>
<tr>
<td>Wilfrid Laurier University</td>
<td>comprehensive</td>
<td>Yes</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX B: SURVEY QUESTIONS

Introduction Questions
1. Which library/institution do you work at?
2. Do you hold a tenured or tenure-track position?
   Yes / No
3. Does your tenure requirement include conducting and publishing research?
   Yes / No
   If no, thank you for your participation.
   If yes, how long have you been employed in your tenured or tenure-track position?

General Research Support–Related Questions
4. Does your library provide library faculty with any support towards initiating, conducting, and disseminating research?
   Yes / No
5. If no, skip to question 23.
6. If yes, do you use the library research support available to you as a researcher?
   Yes / No
7. If no, why not?
   Comment Box

Specific Research Support–Related Questions
8. Do librarians receive research time?
   Yes / No
9. If yes, how is this time allotted?
   • Certain percentage during the week
   • Study leave
   • Research leave per year
   • Sabbatical
   • Other
10. Do librarians receive funding support?
    Yes / No
11. If yes, what kinds of funding support do they receive? (e.g., professional development funds, travel funds, seed funding)
    Comment Box
12. Do librarians receive support in writing applications (grants, ethics, or sabbatical)?
    Yes / No
13. If yes, please elaborate on the kinds of support librarians receive towards writing applications (grants, ethics, or sabbatical).
    Comment Box
14. Do librarians receive support for conducting their research (e.g., developing research design or methodology, participant recruitment, data collection, data analysis)?
   Yes / No

15. If yes, what kinds of support do librarians receive for conducting research (e.g., developing research design or methodology, participant recruitment, data collection, data analysis)?
   Comment Box

16. Do librarians receive writing support?
   Yes / No

17. If yes, elaborate on the kinds of writing support that are available.
   Comment Box

18. Does your library have someone to assist librarian researchers with coordinating their research from pre-conception to dissemination?
   Yes / No

19. If yes, what is this person's job title and/or description (e.g., research facilitator, research coordinator)?
   Comment Box

20. How does this person assist librarians in coordinating their research? (Check all that apply.)
   • Providing information (rates for research assistants, university policies, sending reminders on grants and workshops)
   • Providing information on upcoming funding opportunities and deadlines (within or outside of your institution)
   • Providing workshops
   • Developing budgets
   • Managing budgets
   • Writing grant applications
   • Writing ethics applications
   • Writing sabbatical applications
   • Editing and proofreading (applications, papers, presentations)
   • Advising on research design and methodology
   • Other

21. Of the supports available, which supports do you take advantage of and find the most useful?
   Comment Box

22. Do librarians at your institution receive any kind of support other than the ones listed above?
   Comment Box

23. What supports would you like to have that you don’t currently have?
   Comment Box

24. Do you take advantage of any other research supports at your institution?
   Yes / No

25. If so, which ones and why?
   Comment Box