RESEARCH ARTICLE / ARTICLE DE RECHERCHE

Identifying Research Support Needs of Members of the Canadian Health Libraries Association / Association des bibliothèques de la santé du Canada

Sandy Campbell, Kelly Hatch and Nazi Torabi

Abstract: Introduction: The CHLA/ABSC Special Committee on Research undertook this project to identify potential ways in which the Association could support its members in undertaking research. The goal was to inform future CHLA/ABSC research-related service and program offerings. A literature review revealed limited publication related to health librarians' research needs. **Method**: The Committee developed and distributed an online survey to CHLA/ABSC's membership. The questions related to demographics, previous research engagement or experience, current research support, work-related research requirements and expectations, barriers and enablers for conducting research, desired research support (topic and format) from CHLA/ABSC, and types of programs that would benefit members the most. Both qualitative and quantitative data were collated and analysed. Data from open ended questions were examined to identify relevant themes. **Results**: Survey participants (45) were nearly equally divided between academic health libraries and hospital libraries. Forty-three members responded to the English survey, while two responded to the French version. Results showed that the barriers to research, and the research supports needed are similar for both academic health librarians and hospital librarians. Results showed a strong desire for methodological and statistical training. **Conclusion**: Through this study CHLA/ABSC members identified several kinds of preferred research support. CHLA/ABSC can use these findings to guide the selection and delivery of further continuing education products, as well as the development of specific research support services such as a peer-review program, a research question and answer blog and research mentorship; and also improve communications around CHLA/ABSC's research services.

Background

The Canadian Health Libraries Association / Association des bibliothèques de la santé du Canada (CHLA/ABSC) mandate includes the provision of support to its membership in various aspects of the members' professional work. Health librarians in Canada may have research as a part of their work expectation or may choose to undertake research if it is not part of their work. In May 2016, CHLA/ABSC struck a special committee on research. One of the responsibilities of this committee was to work with the board to support members undertaking research. The committee undertook a membership survey to determine the nature and scope of research needs of members and identify ways in which members believe the association could support them, with the goal of informing future CHLA/ABSC research services and programs.

Literature review

Several studies have addressed the research activities and needs of librarians in general [1-4]. However, none of these studies, while they may have included health librarians, reported separate findings of health librarians' responses.

Three studies have addressed the research needs of health librarians. Fenske focused on the factors influencing research productivity among health

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librarians and concluded that availability of time, support for research, access to research courses and successful grant applications were important factors [5]. McNicol confirmed lack of time and access to financial resources as the two barriers most frequently cited by health librarians, followed by a lack of "practically focused projects" and lack of staff skills in research [6]. Lessick et al., reporting on a survey of Medical Library Association (MLA) members, thoroughly reviewed MLA's earlier work in this area, and confirmed lack of time as the most frequently cited barrier. Other barriers included lack of employer support, lack of time to acquire research skills, lack of training in research design and methods, lack of funding for research training and projects and lack of statistical support as barriers [7].

Methods

To determine the nature, scope, and desire for research support by CHLA/ABSC members, the committee conducted a research needs assessment using both qualitative and quantitative approaches in an online questionnaire. The Committee developed a 23 item questionnaire (Appendix 1), using various formats (checklists, Likert Scale, open ended, etc.). While the committee considered the questions used by Lessick et al. and Fox, the content of the survey was primarily defined by the Responsibilities and Deliverables articulated in the committee's Terms of Reference. The questions related to demographics, previous research engagement or experience, current research support, research requirement and expectations, barriers and enablers for conducting research, the desired research support (topic and format) from CHLA/ABSC, including the types of programs that would benefit members the most. A cover letter (Appendix 2) explaining the scope and purpose of the project, as well as the ethics approval process accompanied the survey. Ethics approval for this study was granted on February 22, 2017 by the University of Alberta's Research Ethics Board 1. The questionnaire was offered in both French and English. Other versions of the questionnaire were piloted by a sample of members, including the CHLA/ABSC Board members, and questions were improved before distribution to the membership. Google Forms (provided through the University of Alberta) was used to create and distribute the survey. On 10 March 2017, via the CANMEDLIB listserv, the CHLA/ABSC membership was invited on to complete the survey. Reminders were sent March 21 and 24, and the survey closed 24 March 2017.

Forty-five of the 250 CHLA/ABSC members (18%) responded to the survey. Forty-three responded to the English survey and 2 to the French survey. Because the number of French responses were not large enough to be statistically significant, they were combined with the English responses for analysis. This approach also ensured the anonymity of French responses. Committee members translated the French responses into English. Respondents included 23 academic librarians, 19 hospital librarians and 3 who worked in other library settings.

Tabulated results for quantitative questions were generated through Google Forms. Descriptive statistics were used to analyze the quantitative questions. Text questions were divided among committee members for collation and tabulation, and again for analysis and coding. Team members subsequently discussed the results and resolved differences in interpretation by consensus.

Results

Research engagement

Of the 44 members who responded to a question about research undertaken in the past 2 years, 77% (academic 63.6%, n=22; hospital 33.3%, n=10; other 3.0%,n=1) indicated that they had undertaken research in the past two years, while 23% (academic 10%, n=1; hospital 80%, n=8; other 10%, n=1) had not.

Of the 44 respondents, 75% (academic 66%, n=21; hospital 31%, n=10) indicated they had published or disseminated their research in the past 2 years or plan to do this in the coming year. The most common form of dissemination was publication as peer reviewed journal articles, followed by podium presentations, posters at conferences and workplace presentations (Figure 1).

Research Support

Workplace support can be an important determinant of librarians' research activities. The survey asked a series of questions related to support for research in the workplace.

Figure 1: Types of publications in which health librarians published their research
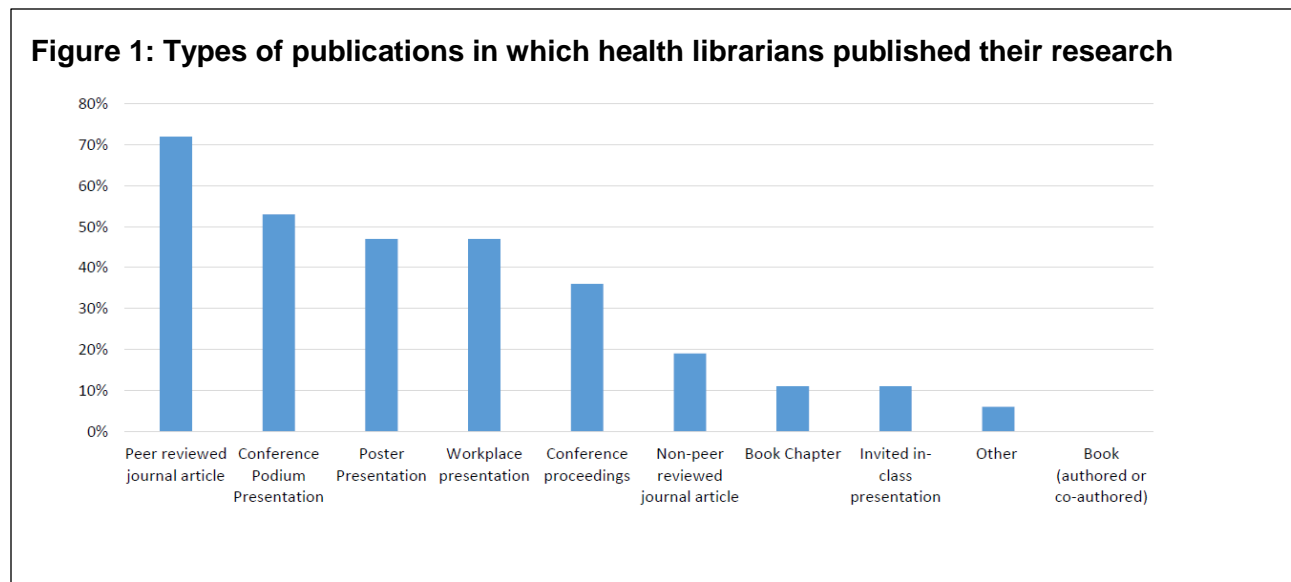
Members were asked whether research was a part of their job description or work expectation. Of 44 members who responded only 36.2% (academic 87.5%, n=14; hospital 12.5% n=2) had this expectation, while 61.4% (academic 32%, n=8; hospital 56%, n=16; other 12%, n=3) did not. One repondent reported that this was not clear in their workplace.

Of the 35 members who responded to a question about access to dedicated research time, 51.4% (academic 88.9%, n= 16; hospital 11.1%, n=2) reported having dedicated research time, while 48.6% (academic 23.5%, n=4; hospital 76.5%, n=13; other 5.9%, n=1) did not. Those who do have time set aside for research, reported it in the form of sabbaticals, various lengths of study leaves (ad hoc time, 1 day per month, 12 to 24 days per year, 4 weeks per year), formal research leave, dedicated research time and reduced workload.

Of the 31 respondents who answered a question about availability of research funding, 35.5% (academic 81.8%, n=9; hospital 9.1%, n=1; other 9.1%, n=1) responded that their workplace/contract offered funding to undertake research while 63.3% (academic 26.3%, n=5; hospital 63.2%, n=12; other 10.5%, n=2) did not. Those who do have access to funding reported that it comes in the form of: professional development funds (conferences, software, travel, equipment, books, Open Access fees), internal grants, sabbatical/research leave funding, and external grants.

Barriers to Research Engagement

Respondents were asked to number 7 potential barriers to research in priority order (from 1 to 7, with 1 representing the greatest barrier and 7 being the least). Ranks assigned to each of the barriers were totalled and divided by the number of respondents for each barrier to create an average rank. In order of average rank, from greatest to least, the barriers identified by respondents are: 1- lack of time, 2 - lack of funding, 3 - lack of methodological training, 4 - cannot identify a research topic, 5 - don't know where to start, 6 - lack of a research mentor, 7 – supervisor or administrator does not value research.

Desired Research Support - Research Activities

To understand what parts of the research cycle members needed more education about, respondents (n=45) were asked to select as many subjects as they wished, from a list of 16 choices, plus an option to write in choices. The most frequently requested subjects were research statistics for librarians, followed by identifying research methodology, applying research methodology, and finding sources of funding. The complete list of education topics and the popularity are outlined in Table 1.

Table 1: Desired Research Support – Research Activities

In which parts of the research cycle would you want CHLA/ABSC to supply education (check your top 5 choices).

Part of research cycle	n	%
Research statistics for librarians	28	62.2
Identifying appropriate research methodologies for my research question	26	57.8
Applying a specific research methodology	19	42.2
Finding sources of funding	17	37.8
Finding research collaborators and defining roles in a research team/who is an author?	15	33.3
Knowledge Translation Skills	15	33.3
Identifying a research topic	14	31.1
Writing for publication	12	26.7
Grantsmanship (learning how to write grants)	11	24.4
Writing ethics review documents	10	22.2
Negotiating research support with your supervisor	10	22.2
Expressing my research topic as a good research question	9	20.0
Creating good posters	7	15. 6
Using presentation software well (PowerPoint, Prezi, etc)	5	11.1
Writing a structured abstract	4	8. 9
Using a citation manager (eg: RefWorks, EndNote, Mendelay)	3	6. 7

Desired Research Support – Research Methods

In order to understand the types of research methods members required more education about, respondents were asked to select their top 5 choices from a list of 10 methodologies: participatory or community research, surveys, focus groups, theoretical research methods, qualitative research (e.g. grounded theory, ethnography, phenomenology), systematic reviews, scoping reviews, realist reviews, other kinds of reviews (mapping, integrative, etc.), media analysis (e.g. textual analysis, image analysis). Forty-four individuals responded to this item. Respondents were further asked to rank the methods according to their need for education. Of these choices, 4 were selected significantly more often than the others. These 4, with distribution of number of selections by hospital and academic librarians were: qualitative research methods – listed as first or second choice 19 times (13 academic, 6 hospital), surveys - listed as first or second choice 15 times (5 academic, 10 hospital), focus groups - listed as first or second choice 9 times (4 academic, 5 hospital) and participatory or community research - listed as first or second choice 8 times (5 academic, 3 hospital) (Table 2).

Table 2: Desired Research Support – Research Methods

If CHLA/ABSC were to supply training in the use of a specific research methodology, which ones would be of most interest to you? Please rank your top 5 choices, with 1 being the most preferred subject of training and 5 being the least preferred.

| Research method	# times listed in the top 2	# times listed in the top 5
Qualitative research (eg: grounded theory, ethnography, phenomenology,)	19	34
surveys	15	31
participatory/community research	8	28
focus groups	9	27
media analysis	5	20
theoretical research methods	7	18
scoping reviews	6	16
realist reviews	5	12
other kinds of reviews	4	11
systematic reviews	7	9

To successfully offer educational support that meets membership needs, choosing the mode of delivery that matches users' preferences is important. Members were asked to select preferred training delivery methods from a list. Members could choose as many as they wished. Responses to this question (n=34) show that in person classes offered by the local chapters or at the annual conference were most popular (33), followed by webcasts (21), self-help materials on the CHLA website (18) and videos (12). Online tutorials, study groups and communities of practice were each selected once as preferred methods of continuing education delivery (Figure 2).

directed and webcasts were identified as a means to overcome lack of funding, travel restrictions or logistic issues.

Potential Research Support Services

In order to align the outcomes of this survey with the terms of reference of the committee, the survey asked members to indicate their level of interest in 4 potential services: 1) an abstract or paper peer review program, 2) a research mentorship program, 3) CHLA/ABSC research question and answer list or blog, 4) research toolbox.

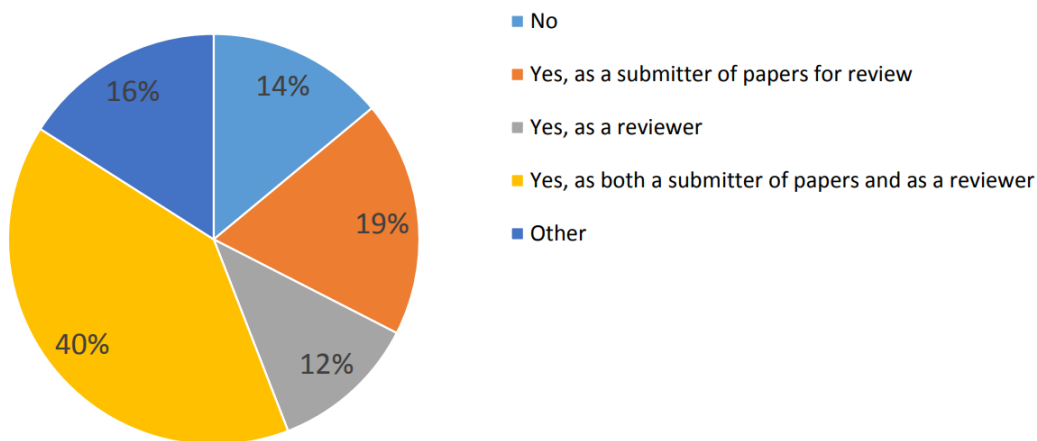**Figure 2: Preferred modes of educational delivery**
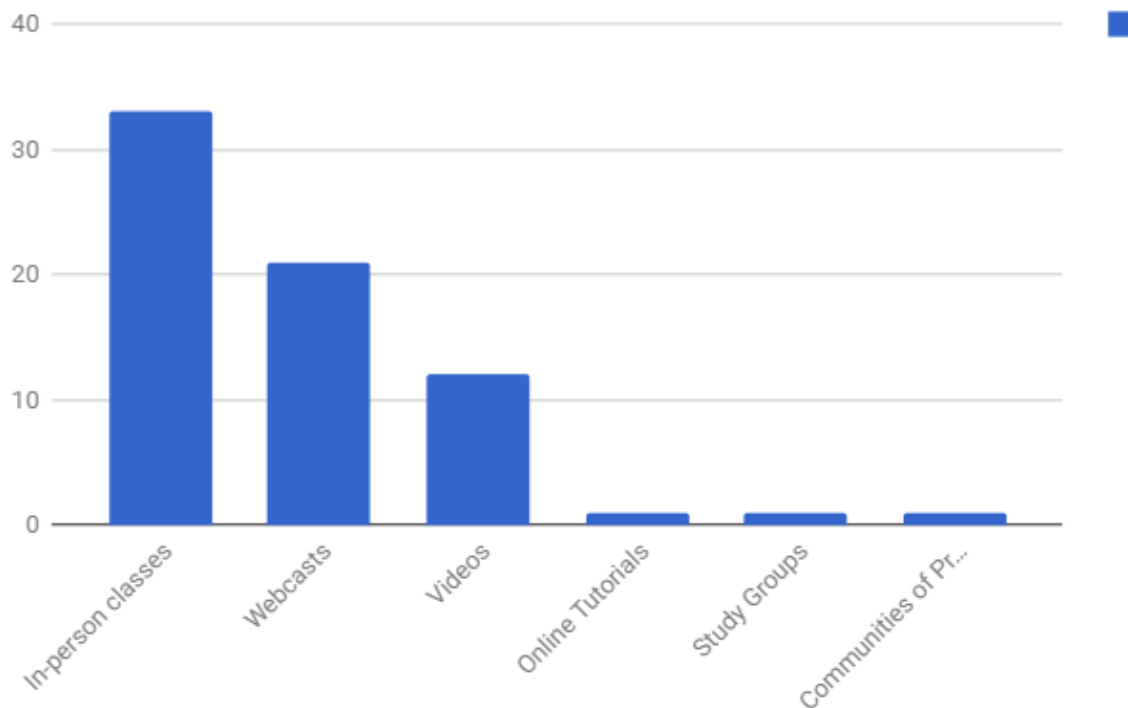
In a follow-up open ended question, respondents were asked to list the subject for which they most wanted to receive training, to describe which delivery method and explain why this delivery method would work best. The 17 respondents to this question expressed an overall preference for in person and hands on sessions when more complex topics such as statistics, research methods, meta-analysis, or qualitative research are being delivered. Self-directed and webcast sessions were preferred for less intensive topics including how to create posters and surveys. Self-

Of the respondents (n=43) who answered the question about an abstract or paper peer review program, most (74.4%, n=32) are interested in taking part as authors, reviewers or both. Some members were interested but had questions or needed more information. Fourteen percent had no interest (Figure 3). The feedback received regarding this service varied. Some indicated this service might be more useful for solo librarians and 1 person indicated that this might be a good service to offer to local chapters to strengthen the community of practice.

Figure 3: Respondent interest in a CHLA/ABSC sponsored abstract or peer-review program

Abstract or paper peer-review program

Legend:
- No — 14%
- Yes, as a submitter of papers for review — 19%
- Yes, as a reviewer — 12%
- Yes, as both a submitter of papers and as a reviewer — 40%
- Other — 16%

Several respondents required more information about the needs and expectations of this service. In particular, some wish this to be clearly defined as being the last step before submitting a manuscript. Those who had reservations about this service worried that it might be mistaken by proof reading or editing service.
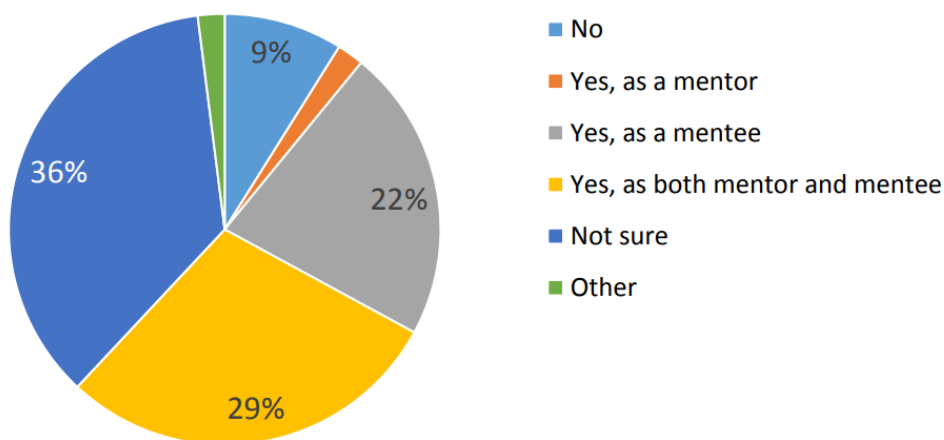
Responses (n=45) indicated considerable uncertainty about participating in a mentorship program. While 24 respondents (53.3%) are interested in participating as a mentee, a mentor or both, 16 (35.6%) are not sure and 4 (8.9%) had no interest (Figure 4).

Of 44 respondents who considered the value of a research question and answer blog, 27 (61.4%) expressed interested in a blog or list, 14 (31.8%) were unsure and 4 (9.1%) were not interested.

Because the Research Toolbox already existed as a service on the CHLA/ABSC website, the respondents were asked to comment on specific resources that should be added to a research toolbox. This question elicited several specific suggestions (e.g. tools or websites) as well as generic suggestions (e.g.: books on research methodologies).

Figure 4: Interest in a CHLA/ABSC mentorship program

Mentorship

Legend:
- No — 9%
- Yes, as a mentor
- Yes, as a mentee — 22%
- Yes, as both mentor and mentee — 29%
- Not sure — 36%
- Other

Discussion

Research Engagement and Publishing

Comparing our study to earlier studies, we find that the number of health librarians who have undertaken research (77%) is higher than McNicol's findings (47%) in the UK and the MLA study (44%). The finding that most of the hospital librarians did not undertake research is consistent with Lessick et al.'s findings and statement that "hospital librarians were significantly less likely than academic librarians to have participated in research".

The percentages of academic and hospital librarians who had published (academic - 66%; hospital - 31%) are similar to Fenske's study (academic - 64.2%; hospital - 36.0%). Lessick et al.'s study showed a wider gap (academic - 72%; hospital - 16%). The low publication rate among hospital librarians confirms Fenske's statement that "hospital librarians tended to be nonpublishers". Our study also found that few hospital librarians have research as a part of their work expectations and also have less access to research funding. Their low rates of research and publication may be related to these factors. The difference between the findings of this study and Lessick et al's may be reflective of their study having a higher response rate from non-academic health librarians (hospital librarians - 44.3% and other MLA members - 29.3%) than academic health librarians.

Barriers to research

The ranking of lack of time, lack of funding and lack of methodological training or staff skills confirm both Lessick et al.'s and McNicol's findings that these are important barriers. While Lessick et al. found that "lack of employer support" was also an important barrier, our study found that the related barrier of "supervisors and administrators not valuing research" received the lowest rank. Lessick et al. also listed "lack of statistical support" as important, but did not study the inability to identify a research topic, knowing where to start, or lack of a research mentor, so no comparison can be made. McNicol, on the other hand documented a lack of "practically focused projects" among her top 4 barriers which relates to our fourth ranked barrier of "unable to identify a research topic".

Research Support Education

Survey respondents do want CHLA/ABSC to provide research related education, with the strongest preference expressed for research statistics and methods education. Within the methods, qualitative methods have the strongest preference.

Preferences for modes of delivery for education broadly concur with the findings of Lessick et al., who also found that in person delivery was most highly ranked, followed by web delivered products and lesser support for informal programs. Our study reveals new information about the content that respondents think is appropriate for different delivery modes. For difficult or complex topics, such as statistics or qualitative methods, respondents preferred more formal, in person and hands on delivery. These formats allow opportunities for homework, practice, and feedback. For less complex subjects, such as how to make a poster, respondents felt more informal methods such as videos, or web-tutorials were acceptable. It is noteworthy that the subjects for which respondents felt that more formal delivery was required are also the subjects for which there is the most demand.

Potential Research Support Services

While there is strong support for an abstract or paper review service, there were indications that clear expectations would need to be defined for the service. For both the mentorship program and the research question and answer blog, there is a high level of uncertainty, with about a third of respondents "not sure" if they would be interested in participating. Members may have less experience with these kinds of services than they do with peer review, so they may need more explanation about the demands and benefits of the activities. Ideally members would be directly involved in the development of these services to ensure their relevance and sustainability.

The creation of a research toolbox is one of the responsibilities in the Special Committee on Research's mandate and a research toolbox space was established on the CHLA/ABSC website prior to the survey being released. Specific suggestions offered by respondents have been added to the Research Toolbox including topics on authorship, funding, and copyright.

Limitations of this project

This project has several limitations. First, while the response rate of 18% is representative of the population, the committee could not engage most of the membership in participating in the survey. In particular, only a few francophone colleagues and librarians from special library settings participated in the survey making the results not generalizable to the whole membership. Also, due to small sample size, we could only conduct descriptive analysis. Second, participants self-selected to complete the survey which has a potential to be over representative of individuals interested in research and an under representation of those not interested or not engaged in research.

Third, responses to some questions may have been biased by ambiguity in some questions; however, no specific questions were identified by the pilot test subjects or participants as being ambiguous. Fourth, research support needs is a complex concept and needs vary greatly at the individual level. Approaches other than an online survey can reveal more information about the nature and the scope of the membership's research needs.

Finally, the committee initially intended to use the survey results to facilitate further discussion with the CHLA/ABSC membership during the research interest group session at the 2016 CHLA/ABSC Conference. Unfortunately, there was not enough interest to hold the discussion group so this phase of the research was not undertaken.

Conclusion

There is no doubt that CHLA/ABSC members, both academic and hospital based, are interested in research and that the barriers and research support needs are similar, but vary in intensity between the 2 groups. So what can a library association practically offer to members in support of research activities? This study and others found that lack of time, funding, and training in specific subjects are the greatest barriers. While CHLA/ABSC could develop a white paper to support librarians who are arguing for the importance of health librarian research, the association cannot arrange for librarians to have more time and provide monetary support to do research. This study and others have found that there is strong need for research training in the areas of research statistics and research methods. Continuing education is an area where CHLA/ABSC

can effectively act. Taking into account the preferences for "in person" and "hands on" delivery of these complex topics, CHLA/ABSC can work towards providing more accessible and affordable "research related" continuing education, both at conferences and through chapters. In addition, the proposed research support services: peer review program, mentorship program, research question and answer blog and the Research Toolbox, offer potential for supporting health librarians in their research activities, but require development and explanation so that members can determine their potential value. Ideally, groups of interested member volunteers would be involved in the development and maintenance of these products to ensure their usefulness and sustainability.

Results of this study and recommendations for further investigation and implementation have been presented to the CHLA/ABSC Board of Directors. CHLA/ABSC, its committees and future conference organizers can use the results of this study in the future development and delivery of research support services for members.

Acknowledgements

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Appendix 1 : See attached files

Questions CHLA Survey French.pdf

CHLA Survey Questions ENGL.pdf

Appendix 2 :

Survey to Determine the Research Support Needs of CHLA/ABSC Members

Version française à: goo.gl/ZeWZsd

Dear CHLA/ABSC Member:

Thank you for taking part in the CHLA/ABSC Special Committee on Research survey, designed to determine how CHLA/ABSC can best meet the research support needs of its membership. We hope that by gaining insight from your responses, we can create effective research support services. This survey (below) will take approximately 15 minutes of your time.

There is no known harm to you in completing this survey and the only potential benefit to you is in receiving improved research support from CHLA/ABSC. Your responses are anonymous. You may stop answering the survey and leave the survey system at any time, without penalty. Once you have submitted data, it cannot be withdrawn.

At the end of the survey you will be asked whether or not you wish to take part in follow-up conversations about the survey. If you wish to do so you may link to a separate and unconnected form where you may supply your contact information. There will be no attempt to connect your contact information with your responses to the survey.

In addition to providing CHLA/ABSC with valuable information about your research support needs, data collected via this survey will be presented at the Research Interest Group session at 2017 CHLA/ABSC Annual Meeting and as scholarly presentations at other library-related venues. The results of this research may also be used in research articles. Each stated use of the data collected will be handled in compliance with the University of Alberta's Human Research Ethics Policy https://policiesonline.ualberta.ca/PoliciesProcedures/Pages/DispPol.aspx?PID=48. In keeping with required standards, data collected with the survey will be retained for a minimum of five (5) years. In addition, it is our intention to make the anonymous data open for use by other researchers after the five year period.

Please complete this survey by March 24, 2017.

Participation in this survey implies consent.

If you have questions about this survey, please contact:

Thank you.

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Sondage servant à déterminer les besoins en soutien à la recherche pour les membre de l'ABSC / CHLA

English version at: goo.gl/zRSpzf

Cher membre de l'ABSC / CHLA,

Merci pour votre participation au sondage du comité spécial de l'ABSC / CHLA sur la recherche visant à déterminer la façon dont l'ABSC / CHLA peut le mieux répondre aux besoins de soutien en recherche pour ses membres. Nous espérons qu'à la lumière de vos réponses, nous serons en mesure d'offrir des services de soutien à la recherche qui soient efficaces. Répondre au sondage que vous trouverez ci après exigera environ une quinzaine de minutes de votre temps.

Il n'existe aucun inconvénient connu qui puisse vous affecter résultant de votre participation à ce sondage ; il ne peut en résulter qu'un avantage pour vous, celui de bénéficier d'un soutien à la recherche accru de la part de l'ABSC / CHLA. Vos réponses demeureront anonymes. Vous pourrez cesser de répondre au sondage et sortir du système en tout temps, sans pénalité de quelque sorte. Lorsque vous aurez soumis les données, elles ne pourront plus être retirées.

À la fin du sondage, on vous demandera si vous souhaitez ou non prendre part aux conversations de suivi du sondage. Si vous le souhaitez, vous pourrez alors accéder à un formulaire distinct, exempt de tout lien, par lequel vous pourrez soumettre vos coordonnées. Aucune tentative ne sera faite visant à lier vos coordonnées avec vos réponses au sondage.

En plus de fournir à l'ABSC / CHLA de précieux renseignements sur vos besoins en soutien à la recherche, les données recueillies grâce à ce sondage seront présentées au groupe d'intérêt sur la recherche dans le cadre de la séance que le groupe tiendra lors de l'assemblée annuelle 2017 de l'ABSC / CHLA, et seront utilisées pour des présentations érudites lors d'autres événements liés à la bibliothéconomie. Les résultats de cette recherche pourront aussi servir pour des articles portant sur la recherche. Chaque utilisation mentionnée des données recueillies sera traitée conformément à la politique d'éthique sur les études sur les humains de l'Université de l'Alberta. https://policiesonline.ualberta.ca/PoliciesProcedures/Pages/DispPol.aspx?PID=48. Conformément aux exigences normatives, les données recueillies par le biais du sondage seront conservées pendant au moins cinq (5) ans. En outre, nous prévoyons offrir les données anonymes en accès libre pour d'autres chercheurs après cette période de cinq ans.

Veuillez s'il vous plaît répondre à ce sondage avant le 24 mars 2017.

Si vous avez des questions à propos de ce sondage, veuillez communiquer avec :

Merci.

Sandy Campbell
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Bibliothèque des sciences de la santé J.W. Scott
Université de l'Alberta
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La participation à ce sondage implique le consentement.

https://docs.google.com/forms/d/e/1FAIpQLSecfsu5Mqz8wd7QifEF54F6IK0t0ok3OhYeBbINTCbIjNo6Og/formResponse