Attitudes and practices of Canadian academic librarians regarding library and online privacy:

A national study

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1. Introduction

Libraries have always been places where individuals feel free to explore new ideas and seek out information in the pursuit of creative and intellectual growth. Fear of exposure or surveillance could threaten an individual's inclination to search for and access information. "Even what may be perceived as minor intrusions on privacy can impede the free flow of ideas hindering information seeking, critical thinking, and the development of new ideas and opinions based on the receipt and evaluation of new information" (Givens, 2014, p. 24). It is therefore reasonable that libraries define their ethical responsibilities, at least in part, by their duty to protect patron privacy.

Privacy is understood to be a core professional responsibility of librarians. This is evidenced by the series of statements from library associations in Canada, the United States, and from the International Federation of Library Associations and Institutions (IFLA). The Canadian Library Association Code of Ethics (1976) stated that, "[m]embers of the Canadian Library Association have the individual and collective responsibility to … protect the privacy and dignity of library users and staff." The American Library Association Code of Ethics (2008) states that as librarians, "[we] must protect each library user's right to privacy and confidentiality with respect to information sought or received and resources consulted, borrowed, acquired or transmitted." The ALA Bill of Rights (1996) states: "Libraries should cooperate with all persons and groups concerned with resisting abridgement of free expression and free access to ideas." Finally, IFLA, in their Code of Ethics for Librarians and Other Information Workers (2012), state the following: "Librarians and other information workers respect personal privacy, and the protection of personal data, necessarily shared between individuals and institutions."

However, a code of ethics is akin to a set of ideals; principles to help guide an organization or a profession and to hold its members to a certain standard. Libraries uphold privacy as an inviolable right even while rapidly evolving digital technologies make data protection extremely complex.

2. Problem Statement

Compared to the United States, little has been reported on librarians' personal attitudes regarding online privacy and practices related to patron privacy in academic libraries in Canada. Michael Zimmer's 2014 study measured privacy attitudes of public, academic, school, and special librarians in the United States. However, Jeske, Intahchomphoo, Landriault, & Bioni (2016) pointed out that attitudes toward privacy, even among Western countries like Canada and the United States, can differ from culture to culture. Canada and the United States have vastly different personal data protection laws for example. Learning about library practices and how librarians feel about general privacy issues, is the first step toward understanding privacy in Canadian academic libraries. This knowledge may help to evaluate the role libraries have in educating patrons about library privacy and online privacy risks, and it may demonstrate areas where library practices concerning patron privacy protection are unknown or unfamiliar. This information has the potential to guide future library policies and programming aimed at creating an environment where privacy rights are protected and patrons can make informed choices about

their online actions. Canadian academic librarians stand to gain knowledge and understanding of peer attitudes toward online privacy and library practices by exploring the following questions:

1. How do Canadian academic librarians feel about general topics related to online privacy, such as who sees and collects their personal information in online environments?
2. Do Canadian academic librarians of different ages or working in different geographic locations respond differently to these questions about online privacy and library practices related to patron privacy?
3. Do Canadian academic librarians have a different level of concern about privacy issues than they did five years ago?
4. What are some of the reported library practices in Canadian academic libraries related to teaching privacy literacy and the protection of patron privacy?

3. Literature Review

3.1 Research Surveying Privacy-related Attitudes and Behaviors

The Office for Intellectual Freedom at the American Library Association published a report (2008) with the results of a survey of over 1,100 librarians and library professionals. The aim of this survey was to "…understand librarians' role in and attitudes toward protecting patron privacy" (p. 2). The online survey asked "questions about information privacy policies and practices in libraries, especially with regard to law enforcement agencies … to determine the impacts, if any, of law enforcement contact or the prospect of increased law enforcement demands on … libraries across the United States" (p. 2). Michael Zimmer, a privacy and internet ethics scholar, built on this research with his survey in 2012 of American librarians, stating that the goal was to "provide important data that will help privacy advocates evaluate the state of privacy in the US and libraries' role in protecting library users' privacy" (2014, p. 123). Zimmer also explained that he wanted to compare privacy attitudes between 2008 and 2012. Overall, both studies confirm that the majority of librarians are concerned about privacy and see themselves as having a significant role to play in creating awareness and educating patrons about online privacy risks.

There have also been efforts to measure online privacy attitudes and behaviors of college and university students. Sutlieff & Chelin (2010) surveyed over 500 undergraduate students regarding the user-library trust relationship at a large UK university. One aim of the multi-faceted study was to measure students' confidence in libraries as it pertains to library privacy practices, including whether or not students understand the types of and uses for personal information kept by libraries. A higher number of students were classified as being privacy-relaxed compared to privacy-concerned and overall they trusted the library with properly collecting, storing, and sharing their personal information. Johns and Lawson (2005) surveyed over 400 incoming undergraduate students at an American university about their awareness of online data collection practices at libraries and how well they understood privacy policies and legislation. Overall the students did not feel that the library's collection of and use of personal student information was a good thing, even if used to improve library services and collections. The majority said they value their online privacy and consider privacy issues to be important.

However, based on their replies, they were unaware of the university's privacy policy or the USA Patriot Act, legislation which some believe endanger privacy rights of library users by expanding law enforcement's surveillance and investigative powers. Are librarians doing enough to communicate privacy practices and policies to students, and to build awareness about how online personal information is being used or potentially misused?

Surveying individuals about online privacy concerns is certainly not just the domain of librarianship. An examination of and debate around the issues of online privacy have been going on since the internet made it easier than ever before to access, store, share, and even lose or have stolen, personal information. This has resulted in many public opinion polls and surveys conducted primarily by social scientists. Zimmer (2014) highlighted this history in the introduction to his article, citing a survey by AT&T Labs (1999) as one of the trailblazing studies on online privacy concerns, which confirmed that people have significant concerns about general and online privacy. Buchanan (2007) also reported that while privacy polls and surveys are not without their critics, "they do appear to provide evidence that people recognize the existence of threats to their privacy while online" (p. 158).

2.2 Patron Privacy in Libraries

Prior to the advent of the internet, the digital library, and the proliferation of technology in libraries to circulate books, keep patron records, and provide access to a wealth of electronic resources, patron privacy was a less complex issue than it is today. "Libraries have always had the capability and need to collect information about their borrowers…to keep track of the books or other items that a…library user had checked out" (Coombs, 2004, p. 493). However, technology has dramatically transformed privacy in all aspects of our daily lives and that includes privacy in libraries.

"Libraries are pondering the implications of e-lending, as well as mobile and wearable technology in libraries, on privacy and the protection of their users' data" (IFLA, 2013). Third-party providers and commercial vendors supply libraries with, among other things, e-books, e-journals, and databases. How patron information is collected, stored, shared, and disposed of is often under the purview of the third-party and not the library. The ALA Library Privacy Guidelines for E-book Lending and Digital Content Vendors (2015) notes, "most e-book and digital content vendors collect and use library patron data for a variety of reasons, including digital rights management, consumer analytics, and user personalization." Magi (2010) analyzed the privacy policies of 27 major library vendors and found that the policies "fail[ed] to express a commitment to many of the standards articulated by the librarian profession and information technology industry for the handling and protection of user information" (p. 267). The tension between libraries' commitment to protecting patron privacy and their need to provide users with electronic resources via third-party vendors is a major focus of library privacy researchers (Dixon, 2008; Rubel, 2014; Rubel & Zhang 2015; Widdersheim, 2014; Lambert, Parker, & Bashir 2015). The fact remains that "assessing trade-offs between privacy and access to electronic resources remains difficult" (Rubel, 2014, p. 183). Academic libraries must make their patrons aware of the potential privacy risks of using third-party vendors so patrons can make informed choices about the online use of their personal information. ALA (2015) recommends

that libraries and vendors work together to create licenses that are in alignment with library policies and ethics in order to protect patron privacy and confidentiality.

Online behavioral tracking and the collection and use of non-personally identifying information is also a concern for libraries committed to protecting patron privacy and educating users about potential threats in an online environment. Fortier & Burkell (2015) noticed that guidelines for evaluating websites rarely include privacy and surveillance issues. Since many information searches take place online, they insist that librarians must do their part to understand behavioral tracking mechanisms, like cookies and web beacons, and pass on this knowledge to their users in order to improve privacy literacy.

Social media use in libraries is another area where privacy can be compromised, therefore making it difficult for libraries to reconcile their promotion and use of these tools and platforms with their professional commitment to protecting patron privacy. Lamdan (2015) points out the fact that "social media has become people's primary source for news, opinions, and human connection" (p. 261). Social media provides library users with information *and* also collects significant amounts of personally and non-personally identifiable information. She goes on to describe social media platforms' subpar internal privacy controls like legal privacy policies. She "urg[es] library professionals to lead the transition of online social media's terms of service to terms that value the privacy rights of users" (p. 262).

Online privacy is understandably of paramount concern for library professionals and privacy advocates. However, proper data collection and retention practices at the patron record level and ensuring patron confidentiality in regard to circulation information should not be overlooked. Articles by Bowers (2008) and by Stevens, Bravender, & Witteveen-Lane (2012) have investigated the privacy breaches created by self-service holds in public and academic libraries. By identifying the patron by name on the hold shelf, any member of the public can identify what book or books a patron has requested. This is just one seemingly small example but it has enormous implications for libraries and their professional responsibility as advocates for privacy and intellectual freedom.

2.3 The Role of Libraries in Educating Patrons about Information and Internet Privacy

The ACRL *Framework for Information Literacy for Higher Education* (2016) states that learners who are developing their information literacy abilities should "make informed choices regarding their online actions in full awareness of issues related to privacy and the commodification of personal information" (p. 6). Librarians are, or at least should be, pondering what their role or responsibility is as librarians to help patrons make informed choices.

The literature reports on a range of activities and recommendations for protecting patron privacy, as well as educating patrons about online and information privacy. One of the most common ways to educate patrons about privacy is through a privacy policy or statement. There is wide consensus among privacy experts and librarians about the need for libraries to develop strong privacy policies or statements, used to inform patrons about the collection, storage, and use of their personally identifiable information by the library, including third parties. For example, Hess, LaPorte-Fiori, & Engwall (2015) pointed out, in their case study about the development of

a privacy statement at a large academic library, that since there are no official standards that can be universally applied across all libraries for the protection of patron privacy, it is in the best interest of an institution to develop solid and comprehensive privacy policies or statements to ensure patron privacy. Sutlieff and Chelin (2010) found that having a clear library privacy policy helps patrons feel confident that their personal information is protected and confidential. Givens (2015) describes a similar effect wherein users see privacy policies as a testament to how serious the library is about patron privacy, thereby creating a secure environment where patrons feel they can search for and share information freely. Privacy policies can spell out the library's role in protecting patron information and empower patrons to make informed decisions about their actions regarding privacy. Fifarek (2002) recommended, over a decade ago, to initiate thoughtful discussions with patrons to find out what they think about library and online privacy and to consider their issues when developing privacy policies. Patrons could even play a role in reviewing drafts of the policy. This level of involvement would help to ensure patrons understand online and library privacy issues and the library's role in privacy protection. Burkell & Carey (2011) noted that even with an understanding of the important benefits of privacy policies, most libraries, according to American studies, do not notify patrons about their information practices. They list three possible reasons: libraries are not required to have policies, limited resources, and lack of professional training. Even their own study, assessing the quality of privacy statements at Ontario public libraries, reports that "[o]verall, fewer than half the libraries studied offer any form of notice to their patrons regarding the collection and use of personal information (pp. 13-14).

Privacy policies are one mechanism for educating patrons about library and online privacy but libraries must take an active role in educating patrons about their rights as consumers of information and what they might be giving up in return for resources and services (Coombs 2004). Jeske, Intahchomphoo, Landriault, & Bioni (2016) provided a comprehensive list of recommendations to support privacy protection in libraries, including "[o]ffer[ing] workshops to library users about the necessary knowledge and skills to safely use online collections, Internet, computers, and technologies in libraries to protect their privacy and personal information" (p. 19). Fortier & Burkell (2015) are also proponents of public education to promote digital literacy, including privacy literacy. Support for these activities exist at the association and organizational level. The Library Freedom Project is an organization out of the United States which offers curriculum resources for teaching about privacy and surveillance and a "Privacy Toolkit for Librarians" to support privacy education programs in libraries. The ALA also provides a suite of resources to support libraries in the development of privacy policies and public education programs, including an annual "Choose Privacy Week".

4. Methodology

Michael Zimmer's 2014 study measuring privacy attitudes of public, academic, school, and special librarians in the United States was used as a guide for developing the survey questions for this study. The Zimmer study consisted of forty-four questions. Questions related to the American legal system or American law, such as the Patriot Act or "anti-terrorism" legislation, were removed, as the focus of this study was Canadian librarians. Some of the general questions about privacy attitudes were also removed, for brevity and relevancy.

This resulted in a survey consisting of 28 questions. All questions were optional, and were either multiple choice or used Likert scales. The questions asked about attitudes toward online privacy scenarios and library practices related to privacy concerns, such as patron data collection. There were also three demographic questions: job status, location, and age.

The online survey used to collect data was created using LimeSurvey (http://www.limesurvey.org). The survey was distributed by email, using Microsoft Outlook's mail merge functionality. Emails were sent directly to librarians, making it easier to calculate a response rate. Email addresses were initially gathered by a librarian working at Wilfred Laurier University, who generously shared the list she compiled in October 2016 by searching staff lists on public websites of English-speaking academic libraries in Canada. This list was double-checked by searching the websites of the same institutions for listings or departmental webpages for librarians in liaison roles, public services, reference, collections and technical services, digital initiatives, scholarly communications, information literacy, outreach, and administration, including University Librarians. Changes were reflected on an updated list, which consisted of 1,317 email addresses. The survey was sent out on April 7, 2017 and a reminder email was sent out on May 3, 2017. The survey closed on May 5, 2017.

Results were exported from LimeSurvey into Microsoft Excel and SPSS for analysis. Survey questions are included in Appendix A.

5. Results

The survey had 183 completed responses, resulting in a response rate of 13.9%. For most questions, all respondents selected an answer; exceptions are noted in the results below.
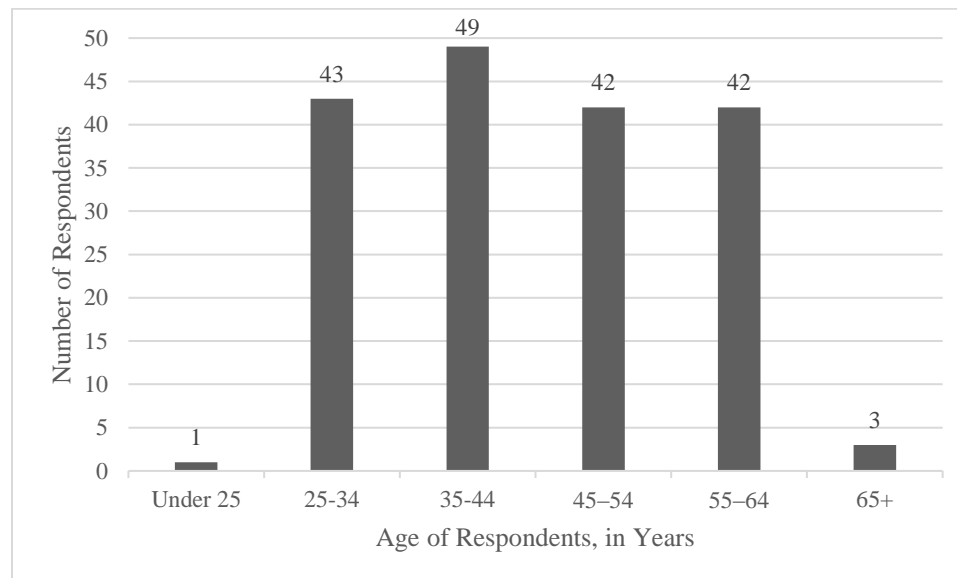
5.1 Demographics

The majority of respondents, 62.8% worked in Public Services, followed by Administration at 13.1%, and librarians in Collection and Technical Services units at 12.6%. Librarians working in Digital Initiatives (digitization/scholarly communications/web services/user experience) made up 7.7% of responses, and Archives and Special Collections consisted made up 2.2% of responses. Three participants selected "Other".

The highest number of respondents were located in Ontario, followed by British Columbia, Alberta, and Quebec. However, when looking at response rate by province, New Brunswick had the highest, followed closely by Quebec, as shown in Table 1.

Table 1. Survey responses by province.

Province	Emailed	Responses	Response rate
ON	548	67	12.2%
BC	220	30	13.6%
AB	157	25	15.9%
QC	104	23	22.1%
NS	70	10	14.3%
MB	75	9	12.0%
SK	60	7	11.7%
NB	29	7	24.1%
NL	39	3	7.7%
PE	15	1	6.7%
No response selected		1	N/A
Total	**1317**	**183**	

Three respondents did not select an 'age' category. Of the 180 results for this question, age was fairly evenly distributed within 25-65 years old. One respondent selected "Under 25" and four selected "65+".

Fig. 1. Age of respondents.

Cross tabulation of each demographic variable was also analyzed in SPSS and Excel. While the results were statistically significant, there were no relationships between job position, province, or age with other data. Likewise, there were no obvious outliers; for example, people of different generations did not appear to be more or less concerned about online privacy.

5.2 General privacy attitudes

Two parts of the survey asked about general attitudes towards privacy. Table 2 shows that nearly all respondents feel that individuals should control who sees their personal information.

Table 2. Control of personal information.

Individuals should be able to control who sees their personal information		
Answer	**Count**	**Percentage**
Strongly Disagree	1	0.5
Disagree	2	1.1
Neither Agree or Disagree	4	2.2
Agree	49	26.8
Strongly Agree	127	69.4
Total	**183**	**100.0**

The majority of respondents are concerned that companies and the government are collecting too much personal information, as indicated in Table 3.

Table 3. Collection of personal information.

I'm concerned that companies are collecting too much personal information about me and other individuals			I'm concerned that the government is collecting too much personal information about me and other individuals	
Answer	**Count**	**Percentage (%)**	**Count**	**Percentage (%)**
Strongly Disagree	1	0.5	2	1.1
Disagree	3	1.6	13	7.1
Neither Agree or Disagree	10	5.5	61	33.3
Agree	54	29.5	71	38.8
Strongly Agree	115	62.8	36	19.7
Total	**183**	**100.0**	**183**	**100.0**

Canadian academic librarians showed similar trends to the 2008 ALA participants and Zimmer's 2012 participants, as in all cases, a much higher number of respondents selected "Agree" or "Strongly Agree" regarding companies compared to government collecting their personal information. .

Nearly all respondents feel that government agencies should not share personal information with third parties unless it has been authorized by the individual or a court of law. Likewise, almost all respondents agree that when people give personal information to a company for a specific purpose, the company should only use the information for that purpose. See Table 4 and Table 5.

Table 4. Sharing of personal information by government.

Government agencies should not share personal information with third parties unless it has been authorized by the individual or a court of law

Answer	Count	Percentage (%)
Strongly Disagree	0	0.0
Disagree	2	1.1
Neither Agree or Disagree	5	2.7
Agree	35	19.1
Strongly Agree	141	77.0
Total	**183**	**100.0**

Table 5. Company use of personal information.

When people give personal information to a company for a specific purpose, the company should only use the information for that purpose

Answer	Count	Percentage (%)
Strongly Disagree	0	0.0
Disagree	2	1.1
Neither Agree or Disagree	2	1.1
Agree	28	15.3
Strongly Agree	151	82.5
Total	**183**	**100.0**

The majority of librarians polled demonstrated concern about their personal privacy when using the internet, and showed particular concern around companies and government learning about their web activities. See Table 6.

Table 6. General privacy attitudes.

Question	Not at all concerned	Neither concerned/ unconcerned	Somewhat concerned	Very concerned	Total
Generally, how concerned are you about your privacy while using the internet?	4	16	114	49	183
Are you concerned about family, friends, and people you know getting personal information about you and your web activities?	30	63	75	15	183
Are you concerned about businesses and people you do not know getting personal information about you and your web activities?	4	11	74	94	183
Are you concerned about the government and law enforcement getting personal information about you and your web activities?	9	37	96	41	183

When asked if an online site tracked the web pages visited, the majority, 53.3%, selected that this would be both beneficial and harmful. Of the remaining results, 29.1% selected that this would be "Harmful", 13.7% selected "Neither beneficial nor harmful", 3.3% selected "Don't know" and 0.5% selected "Beneficial".

Regarding online shopping and identify theft, the majority of respondents indicated some level of concern for every question (by selecting "Somewhat concerned" or "Very concerned").

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Table 7. Online shopping and identity theft.

Question	Not at all concerned	Neither concerned/ unconcerned	Somewhat concerned	Very concerned	Total
Are you concerned that you are asked for too much personal information when you make online purchases?	15	42	93	33	183
Are you concerned about online identity theft?	1	11	105	66	183
Are you concerned about the security of your information given to online companies?	3	10	90	80	183

Likewise, most respondents also indicated a level of concern regarding social networking, as shown in Table 8. Note that the question, "Are you concerned that you are asked for too much

personal information when you join a social networking site?" had 182 responses, while the remainder had 183 responses.

Table 8. Social networking.

Question	Not at all concerned	Neither concerned/ unconcerned	Somewhat concerned	Very concerned	Total
Are you concerned that you are asked for too much personal information when you join a social networking site?	6	31	71	74	182
Are you concerned that mobile and social networking applications might collect information about your activities online?	3	23	91	66	183
Are you concerned about other people uploading a photo or video of yourself to the internet where you are clearly recognizable without your permission?	10	43	77	52	183
Are you concerned about people you do not know obtaining personal information about you from your online activities?	1	19	88	75	183

Concern about people unknown to respondents obtaining personal information from online activities was demonstrated, as well as search engines tracking keywords and the use of cookies on websites, as shown in Table 9.

Table 9. Online and mobile tracking.

Question	Not at all concerned	Neither concerned/ unconcerned	Somewhat concerned	Very concerned	Total
Are you concerned about people you do not know obtaining personal information about you from your online activities?	1	19	88	75	183
Are you concerned about who might access your web browsing history from your computer itself?	30	46	82	25	183
Are you concerned about search engines tracking your keywords and sites you visit?	6	34	92	51	183
Are you concerned about the use of web cookies or other means of tracking your visits to other websites?	4	30	102	47	183
Are you concerned that cell phone providers might track your physical location?	12	33	95	43	183

When asked if respondents were more or less concerned about privacy issues than they were five years ago, the majority, 69.9%, were more concerned, while 28.4% had the same level of concern and 1.6% had less concern. People who selected that they were "More concerned" were shown an additional question to identify the reason, and 78.1% selected that they knew more about the risks now than they did five years ago. Fourteen participants selected the reason "Other", and added a comment, explaining a concern for a reliance on the internet, apps, and software today as compared to five years ago, and that the risks seemed more tangible than in the past. Three people mentioned that they had more knowledge or noticed more privacy-related features online such as ads than they previously did. Knowledge of the Edward Snowden leaks was given (Snowden is a former CIA employee who leaked classified information from the National Security Agency in 2013 without authorization), as well as the overall political climate in the United States, as reasons for having more concern today as compared to five years ago.

5.3 Library practices

Several questions in the survey related to privacy within the library, including how respondents personally feel about what libraries *should* be doing, as well as reported practices and policies within their institutions. It should be noted that as these practices are self-reported through the survey instrument only, and not corroborated or directly observed, they cannot be considered

'evidence' of these practices. Rather, they are considered to be perceptions of these practices as reported by the librarians who work in these institutions.

The majority of respondents strongly agreed that libraries should never share personal information, circulation records, or internet use records with third parties unless it has been authorized by the individual or the court of law. The 2008 and 2012 surveys demonstrated similar findings.

Table 10. Comparison: sharing patron records.

Comparison of responses: "Libraries should never share personal information, circulation records, or internet use records with third parties unless it has been authorized by the individual or by a court of law."			
Answer	**2008 ALA (%)**	**2012 Zimmer (%)**	**2017 CDN Academic (%)**
Strongly Disagree	1	1	1
Disagree	3	1	2
Neither Agree or Disagree	-	2	1
Agree	18	18	25
Strongly Agree	79	79	72
Total[a]	**100%**	**100%**	**100%**

Note: Due to rounding, some totals may appear to sum to great than 100%; however, actual data sums to 100%.

While less than half of Canadian academic librarians agreed that libraries are doing all they can to prevent unauthorized access to patron records, the majority of American librarians from earlier surveys indicated a much stronger agreement.

Table 11. Comparison of Question 6 responses.

Comparison of responses: "Libraries are doing all they can to prevent unauthorized access to individuals' personal information and circulation records"			
Answer	**2008 ALA (%)**	**2012 Zimmer (%)**	**2017 CDN Academic (%)**
Strongly Disagree	2	1	5
Disagree	17	10	19
Neither Agree or Disagree	-	13	33
Agree	57	53	32
Strongly Agree	24	22	10
Total	**100**	**99**	**100**

As to whether librarians should play a role in educating patrons, 39.9% selected "Strongly Agree", 38.3% selected "Agree", 18% selected "Neither Agree nor Disagree", and 3.8% selected "Disagree". No one selected "Strongly Disagree".

The majority of respondents feel that search engines should prominently display policies on how a user's information is treated, as 37.7% of respondents selected "Agree" and 48.6% selected "Strongly Agree", totalling 86.3%. More librarians are concerned that search engines are sharing personal information and search records with companies than with government, as shown in Table 8. Note that for Question 10 regarding search engines sharing with the government, one respondent did not select an answer, and thus the total is 182 rather than 183.

Table 12. Search engines.

I'm concerned that search engines are sharing my personal information and search records with the government			I'm concerned that search engines are sharing my personal information and search records with companies	
Answer	Count	Percentage (%)	Count	Percentage (%)
Strongly Disagree	6	3.3	2	1.1
Disagree	36	19.8	5	2.7
Neither Agree nor Disagree	68	37.4	20	10.9
Agree	49	26.9	80	43.7
Strongly Agree	23	12.6	76	41.5
Total	**182**	**100.0**	**183**	**100.0**

The majority of respondents do not self-censor search and reading habits out of fear that records could be misunderstood, as 17.5% selected "Strongly Disagree", and 35.5% selected "Disagree", totalling 53% of respondents. Those who selected "Neither Agree nor Disagree" totalled 23.5%, while 19.1% selected "Agree" and 4.4% selected "Strongly Agree".

Many respondents indicated that they did not know if their library had established practices or training on privacy-related issues. For example, 68.9% selected "Don't know" when asked if the library has established practices or procedures for dealing with requests for information from patron records by law enforcement or other government officials. Of the remaining respondents, 20.8% selected "Yes" and 10.4% selected "No". This result suggests that 79.3% of librarians perceive that their libraries either do not have such a policy, or they are unaware if a policy exists at their institution.

Similarly, respondents reported that they were unaware if patrons had made inquiries to library staff regarding privacy of patron records, or other library privacy issues, as 72.1% selected "Don't know" to this question. The remaining were closely divided, as 14.8% selected "Yes" and 13.1% selected "No".

When asked if the library trains staff on how to handle requests for information from patron records made by law enforcement or other government officials, the same percentage, 42.6% selected "No" and "Don't know". The remaining 7.7% selected "Yes".

Regarding privacy policies, 42.3% selected that they did not know if the library communicated these types of policies to patrons, while 29.1% selected "No" and 28.6% selected "Yes" to this question. Question 17 asked librarians about different types of privacy policies in their library. Note that respondents could select 'all that apply'.

Table 13. Library privacy policies.

Privacy Policies						
Question	Written policy with card, registration, orientation	Notices/ signs	Library website	On/near computers	Don't know	No policy for this question
17. a) How are your library's privacy policies for patron data (patron name, address, phone number, etc.) communicated to patrons?	17	5	35	3	8	1
17. b) How are your library's privacy policies for circulation and/or borrowing data communicated to patrons?	17	1	30	2	9	2
17. c) How are your library's privacy policies for computer/internet usage communicated to patrons?	15	6	24	9	12	3

Librarians were also asked to indicate if some or all of their library's e-resource privacy policies were communicated to patrons: 45.4% selected "No", 39.9% selected "Don't know" and 14.8% selected "Yes".

Many respondents had participated in information sessions, lectures, seminars, or other events related to online privacy and surveillance, but not many worked at a library that hosted these types of events, as shown in Table 14. Note that for the question regarding hosting information sessions, one respondent did not select an answer, and thus the total is 182 rather than 183.

Table 14. Information sessions on online privacy and surveillance.

In the past five years, have you participated in any information sessions, lectures, seminars, or other events related to online privacy and surveillance?			In the past five years, has your library hosted or organized public information sessions, lectures, seminars, or other events related to online privacy and surveillance?	
Answer	Count	Percentage (%)	Count	Percentage (%)
Yes	101	55.2	35	19.2
No	79	43.2	95	52.2
I don't know	3	1.6	52	28.6
Total	**183**	**100.0**	**182**	**100.0**

6. Discussion

Over a decade ago, the students polled in Johns and Lawson's study (2005) valued their online privacy and considered privacy issues to be important. What has changed in that time? In general, most Canadian academic librarians today are not unlike those students, demonstrating privacy to be important to them on a personal level and at work. Zimmer's participants in 2012 demonstrated a "desire to maintain control over who has access to their personal information" (p. 143). This is echoed by Canadian academic librarians surveyed, as 96.2% of participants agree with this statement. Additionally, Canadian academic librarians feel that government and companies are collecting too much information. Like Zimmer's participants, they overwhelmingly agree that government should not share personal information with third parties unless authorized, and that companies should only use personal information for its original intended use. While Zimmer's participants showed "an increase in concern about particular privacy-related issues as respondent age increases," this sentiment is not replicated in the responses of the Canadian academic librarians polled. In fact, there were no demographic relationships – neither age, job position, nor location showed statistically significant differences, or even trends to note. In the five years' time since Zimmer's study, the use of social media and the internet has steadily increased for all ages, and younger generations appear to use the internet and social media more frequently than older generations (eMarketer, 2018; Pew, 2018a; Pew, 2018b). However, while age can play a role in the frequency of use for some social media sites, the "majority of Americans across a wide range of demographic groups now use Facebook", including 80% of 24-49 year olds, demonstrating age is not a factor in using this site (Pew, 2018c). Furthermore, the majority of librarians surveyed, 69.9%, reported a higher level of concerns for privacy issues compared with five years ago, with most citing that they understand the risks more now. Perhaps the ubiquitous nature of Facebook and the internet, and an increase in awareness of the risks has helped blur the age divisions regarding online privacy concerns. Could privacy concerns now be equally important to all ages?

While protection of personal information is of high concern, it is interesting that librarians are alarmingly unaware of the practices at their own libraries regarding online and patron privacy. In order for libraries to protect their patrons' privacy, and to help the patrons make informed

choices about their actions online, as recommended by library associations around the world (American Library Association, 1939/2008; Canadian Library Association, 1976; International Federation of Library Associations and Institutions, 2012), librarians must first educate themselves about the practices in their institutions. There is a strong consensus among librarians polled that libraries should never share personal information, circulation records, or internet use records with third parties unless it has been authorized by the individual or the court of law. As most respondents indicated, they are unaware if their library has a policy related to protecting this type of data and the majority indicated they are not receiving training on these topics. It is not surprising that many respondents did not agree that libraries were doing all can to prevent unauthorized access. Distressingly, results from the previous surveys conducted by ALA (2008) and Zimmer (2012) show a slight decreased in faith over time that libraries are doing their best to protect patron data. Libraries are faced with a great opportunity to grow their knowledge in this area and librarians cannot protect patron information until they have a better understanding of the policies in their own library. As Ard states, "education is the cornerstone of library advocacy" (2016, p.170). One way to educate is through privacy policies in the library. According to Hess, LaPorte-Fiori, & Engwall (2015), privacy policies that "enumerate the library's role in protecting information" are "critical components" in ensuring that patrons' expectations are met. Canadian academic librarians can use these guides to increase the prevalence and awareness of privacy policies in their libraries.

Policies for e-resource use can be equally difficult to find and understand. In order for patrons to make informed decisions about using e-resources, they must understand a vendor's policy, such as what data is collected, where is the data stored, and for what purpose is the data being used. Vendors' e-resource policies are not well communicated, as 85.3% of respondents indicated that their library did not communicate these policies or they did not know if the library communicated them. As Rubel (2014) states, using these e-resources is a trade-off but one that remains "elusive". Lambert & Parker (2015) demonstrated that these types of policies are written at a high level, possibly too high for the average library patron to understand. Furthermore, as Magi (2010) has shown, most vendors share user information with third parties and do not comply with the ALA Code of Ethics regarding the protection of patron privacy. It is essential that librarians and patrons are made aware of the details of the trade-off in order to assess the risks of using the e-resource. Ard calls librarians to action, suggesting they "have an important role to play as privacy advocates" and should be doing more to address privacy issues (2016, p.163). Information sessions, lectures, and events surrounding online privacy and surveillance are reportedly not occurring at academic libraries, according to survey respondents. As librarians are immersed in online activity and electronic resources constantly, this presents an opportunity to learn about this subject and share knowledge with other librarians, staff, and patrons on campus. Librarians who do not feel comfortable offering sessions themselves can recruit guest speakers.

Social media is one aspect of technology that some libraries use. Academic libraries must wrestle with their concern about using social media while also wanting to use it as a tool to engage with patrons in meaningful and impactful ways. The challenge for libraries is deciding how to best educate librarians and patrons about privacy concerns when using social media, so there is a

better understanding of the types of information collected by social media sites, and trade-offs made when participating in social media. What better place to provide this type of education than in academic libraries?

In order to follow the ACRL *Framework for Information Literacy for Higher Education* (2016), to help patrons make informed decisions about their online actions, Canadian academic librarians need to further educate themselves and engage with patrons on these issues. While some tools exist in the United States to help librarians and patrons learn about online privacy, such as the toolkit offered by the Library Freedom Project and the resources on the ALA website, these types of tools do not yet exist on a national scope in Canada, to help libraries learn about these issues in the Canadian context.

Future areas of research could include taking the survey of Canadian academic librarians to the next level. Rather than surveying general attitudes, a survey of privacy policy content at Canadian libraries or privacy audit components could be examined. This would highlight tangible areas in which library practices could improve. Another area of research to explore would be generational differences in privacy attitudes as they pertain to libraries.

6.1 Limitations

One limitation of the study is that it only surveyed academic librarians in Canada, not librarians working in other library settings such as public libraries or special libraries. As privacy literacy and challenges faces all libraries, to fully understand the landscape on a national level, the behaviors and attitudes of all librarians would need to be investigated.

Another possible limitation is that the survey did not provide a definition or examples for what was meant by "government" in a number of the survey questions. While "government" could have multiple meanings, it was intended to refer to Canadian federal, provincial, and territorial sectors, all of whom collect personal information about Canadians.

7. Conclusion

This study provides insight into Canadian academic librarians' attitudes and reported practices in their institutions regarding library and online privacy. The majority of survey respondents, irrespective of age and location, are concerned about their own online privacy and consider patron privacy to be extremely important. While librarians have strong concerns about privacy, they seem unsure of the privacy-related practices within their own libraries. It is clear from the literature and from the results of this survey that academic libraries have a role to play in educating patrons about online privacy. However the data reveals that there is a lack of privacy education-related activities taking place at academic libraries in Canada. This study will be useful to library professionals who wish to implement or improve policies, staff training, and privacy education programs at their libraries. By acknowledging the lack of knowledge, understanding, and programming about library and online privacy, academic libraries can identify where and how action can be taken to advocate for privacy in libraries and protect their own online privacy and that of their patrons.

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Appendix A: Survey Questions

Please select the option which best describes your attitude toward general privacy.

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
1. Individuals should be able to control who sees their personal information.					
2. I'm concerned that companies are collecting too much personal information about me and other individuals.					
3. I'm concerned that the government is collecting too much personal information about me and other individuals.					
4. Government agencies should not share personal information with third parties unless it has been authorized by the individual or a court of law.					
5. When people give personal information to a company for a specific purpose, the company should only use the information for that purpose.					
6. Libraries are doing all they can to prevent unauthorized access to individuals' personal information and circulation records.					

Please select the option which best describes your attitude toward general privacy.

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
7. Libraries should never share personal information, circulation records, or internet use records with third parties unless it has been authorized by the individual or by a court of law.					
8. Librarians should play a role in educating patrons on the potential privacy risks resulting from using the internet.					
9. Search engines such as Google, Yahoo, and Bing should prominently display policies on how a user's information is treated.					
10. I'm concerned that search engines are sharing my personal information and search records with the government.					
11. I'm concerned that search engines are sharing my personal information and search records with companies.					
12. I self-censor my search and reading habits out of fear that my records could be misunderstood.					

13. Does your library have any established practices or procedures for dealing with requests for information from patron records by law enforcement or other government officials?
- Yes
- No
- Don't Know

14. Does your library train staff on how to handle requests for information from patron records made by law enforcement or other government officials?
- Yes
- No
- Don't Know

15. Have patrons made inquiries to library staff regarding privacy of patron records, or other library privacy issues?
- Yes
- No
- Don't Know

16. Does your library communicate privacy policies to patrons?
- Yes
- No
- Don't Know

17. a) How are your library's privacy policies for **patron data** (patron name, address, phone number, etc.) communicated to patrons? Check all that apply.

- Written policy with card issuance, or as part of communications upon registration or orientation (print or electronic)
- On notices/signs
- On the library website
- On/near computers
- Don't Know
- No policies related to patron data
- Other

17. b) How are your library's privacy policies for **circulation and/or borrowing data** communicated to patrons? Check all that apply.

- Written policy with card issuance, or as part of communications upon registration or orientation (print or electronic)
- On notices/signs
- On the library website
- On/near computers
- Don't Know
- No policies related to circulation and/or borrowing data
- Other

17. c) How are your library's privacy policies for **computer/internet usage** communicated to patrons? Check all that apply.

- Written policy with card issuance, or as part of communications upon registration or orientation (print or electronic)
- On notices/signs
- On the library website
- On/near computers
- Don't Know
- No policies related to computer/internet usage
- Other

18. At your library, are some or all of the vendors' e-resource privacy policies communicated to patrons?
- Yes
- No
- Don't know

19. In the past five years, have you participated in any information sessions, lectures, seminars, or other events related to online privacy and surveillance?
- Yes
- No
- Don't know

20. In the past five years, has your library hosted or organized public information sessions, lectures, seminars, or other events related to online privacy and surveillance?
- Yes
- No
- Don't know

Please select the option which best describes your attitude toward general privacy.

	Not at all Concerned	Neither Concerned nor Unconcerned	Somewhat Concerned	Very Concerned
21. Generally, how concerned are you about your privacy while using the internet?				
22. Are you concerned about family, friends, and people you know getting personal information about you and your web activities?				
23. Are you concerned about businesses and people you do not know getting personal information about you and your web activities?				
24. Are you concerned about the government and law enforcement getting personal information about you and your web activities?				

25. If an online site tracked the web pages you visited, do you think that would be:

- Beneficial to you
- Harmful to you
- Both beneficial and harmful
- Neither beneficial nor harmful
- Don't know

26. Please indicate your privacy concern for each of the following scenarios:

	Not at All Concerned	Neither Concerned nor Unconcerned	Somewhat Concerned	Very Concerned
a) Are you concerned that you are asked for too much personal information when you make online purchases?				
b) Are you concerned about online identity theft?				
c) Are you concerned about the security of your information given to online companies?				
d) Are you concerned that you are asked for too much personal information when you join a social networking site?				
e) Are you concerned about people you do not know obtaining personal information about you from your online activities?				
f) Are you concerned about who might access your web browsing history from your computer itself?				
g) Are you concerned about search engines tracking your keywords and sites you visit?				
h) Are you concerned about the use of web cookies or other means of tracking your visits to other websites?				
i) Are you concerned that cell phone providers might track your physical location?				
j) Are you concerned that mobile and social networking applications might collect information about your activities online?				

	Not at All Concerned	Neither Concerned nor Unconcerned	Somewhat Concerned	Very Concerned
k) Are you concerned about other people uploading a photo or video of yourself to the internet where you are clearly recognizable without your permission?				

27. Compared to five years ago, would you say you are more concerned about privacy issues on the internet, less concerned, or that you have the same level of concern?
- More concerned
- Less concerned
- Same level of concern
- Don't know

28. Which one of the following is the most important reason you are more concerned about privacy issues on the internet than you were five years ago?
- You know more about the risks
- You have more to lose
- Personal experience
- Don't know
- Other

29. What is the best match to your job position or role? If you have multiple roles, please select the most prominent one.
- Administration
- Public Services (Liaison/Subject Specialist/Reference/Instruction)
- Collection and Technical Services (Acquisitions/Cataloguing/eResources/Metadata/Systems)
- Digital Initiatives (Digitization/Scholarly Communications/Web Services/User Experience)
- Archives/Special Collections
- Other

30. Please select the province or territory in which you work:
- British Columbia
- Alberta
- Saskatchewan
- Manitoba
- Ontario
- Quebec
- New Brunswick
- Nova Scotia
- Newfoundland and Labrador
- Prince Edward Island
- Yukon
- Northwest Territories
- Nunavut

31. Please select your age range:
- Under 25 years
- 25-34 years
- 35-44 years
- 45-54 years
- 55-64 years
- 65 years and over