Privacy Literacy: From Theory to Practice

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Abstract

Libraries and librarians have dealt with patron privacy issues since their inception, often serving as educators and advocates. In today's social media-filled landscape, patron privacy has moved from the safeguarding of traditional library records to the creation, use, and ownership of information maintained in an online world. As the core educators for many aspects of literacy, librarians need to keep pace with the issues their users face daily. This paper centers on privacy literacy as an independent area of instruction for library sessions. It reviews a theoretical framework to support privacy literacy instruction and showcases resources and tools for creating privacy literacy education. Finally, privacy issues in healthcare are used to demonstrate the potential impact of privacy literacy instruction.

Keywords: privacy literacy; critical thinking; health care

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Introduction

In recent years, problems related to privacy and social media sites have gained prominence in the scholarly literature (Dhir et al., 2016; Litt & Hargittai, 2016). With the proliferation of social media sites and mobile technologies, online communication has become routine. Social media sites have become the predominant avenue for creating both a personal and a professional online presence (DeVito, Birnholtz, & Hancock, 2017). As the number of social media sites grows, the amount of personal information shared by users has steadily increased (Wissinger & Wilson, 2015). With this escalation, the protection of private information in an online environment has become the responsibility of users (Willis, 2014; Martin & Murphy, 2017). For users of social media sites to understand how their information is used, privacy literacy is a vital skill. Privacy literacy education can help users of social media sites assess the risks of sharing their private information online (Correia & Compeau, 2017). Librarians play an important role in supporting the development of lifelong literacies and acting as educators and advocates for privacy literacy; however, in the alphabet soup of literacy, privacy literacy's identity is still being created.

This essay will attempt to align one privacy literacy framework with established definitions of critical thinking to demonstrate the cognitive skills needed to become privacy literate. Current privacy literacy programs taking place in libraries across United States will be highlighted to provide resources for groups interested in starting a privacy literacy initiative at their institutions. The paper concludes with a tangible example of the importance of privacy literacy in the field of healthcare.

What is Privacy Literacy?

Privacy and digital literacy are often combined and seen as equivalent; however, current definitions of both privacy literacy and digital literacy demonstrate their differences. One broad definition states that privacy literacy is "the understanding that consumers have of the information landscape with which they interact and their responsibilities within that landscape" (Langenderfer & Miyazaki, 2009, p. 383). Another privacy literacy definition states that it is "one's level of understanding and awareness of how information is tracked and used in online environments and how that information can retain or lose its private

nature" (Givens, 2015, p. 53). These definitions highlight the idea of privacy literacy as a cognitive experience or thought process that takes place as information is shared.

This understanding of privacy literacy is distinctly different from the concept of digital literacy. According to the American Library Association's Digital Literacy Task Force, digital literacy is "the ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills" (Visser, 2012). While privacy literacy definitions focus on the understanding of the responsibilities and risks associated with sharing information online, digital literacy focuses on the task-based use of information in a digital environment. Based on these definitions, privacy literacy aligns more closely with critical thinking.

Privacy Literacy is a Cognitive Process

Mackey and Jacobson, the pioneers of metaliteracy, noted the importance of critical thinking when navigating an online environment. Their theory discusses the importance of critical thinking and collaboration in a digital age, specifically addressing issues related to social media participation (Mackey & Jacobson, 2014). Metaliteracy takes the first steps towards combining the concepts of critical thinking and social media, supporting the understanding of privacy literacy as a unique field independent of the more established concept of digital literacy.

Much like critical thinking, privacy literacy is an area with multiple definitions and little consensus (Johnson & Hamby, 2015). Critical thinking has several definitions; however, all of them center around a few core points or values. Broadly, these definitions have to do with critique, judgment, evaluation, reflection and awareness when forming opinions, making decisions, and considering evidence. (Enni, 1987; Robinson, 2001; Hatcher & Spender, 2006; Bailin & Battersby, 2010). The overarching theme in critical thinking is the ability for learners to take the information they have, paired with their unique life experiences, to make the best decision possible for their personal goals. While there is currently no sanctioned list of privacy literacy skills, Rotman (2009) attempted to create a framework for privacy literacy that aligns closely with the definitions of critical thinking listed above.

A Privacy Literacy Framework

Dana Rotman presented her privacy literacy framework in 2009. She noted that privacy literacy centers on the understanding of what may happen to personal information online,

and the active protection of this information. In privacy literacy, learners use the information they have about how their private information will be stored, used, or distributed, combined with their personal philosophy about what information should be public and private, to make informed decisions. Rotman stated that a privacy literacy framework should address five key areas: *understanding*, *recognizing*, *realizing*, *evaluating* and *deciding*. *Understanding* encompasses how personal information is used online. *Recognizing* distinguishes the various places personal information may be shared online. *Realizing* centers on the consequence of sharing personal information online. *Evaluating* addresses the risks and benefits of sharing personal information online. Lastly, *deciding* focuses on when to share personal information online.

Table 1: Comparison of Privacy Literacy Framework and Critical Thinking Definitions

Rotman's Privacy Literacy Framework	Critical Thinking Definitions
Understanding how personal information is used online.	"Conscious awareness about one's thought processes with insight, clarity and effectiveness as goals." (Robinson, 2001)
Recognizing the various places personal information may be shared online.	"Reasonable and reflective thinking focused on deciding what to believe or do." (Ennis, 1987)
Realizing the consequence of sharing personal information online.	N/A.
Evaluating the risks and benefits of sharing personal information online.	"The careful examination of an issue in order to reach a reasoned judgment." (Bailin & Battersby, 2010)
Deciding when to share personal information online.	"Attempts to arrive at a decision or judgment only after honestly evaluating alternatives with respect to available evidence and arguments." (Hatcher & Spender, 2006)

Rotman's privacy literacy framework can be easily aligned with the definitions of critical thinking previously discussed (illustrated in Table 1). Realizing is the only area of the privacy literacy framework that does not have a matching critical thinking definition. This is not a surprise: for Rotman, realizing is associated with the risks of the decision. As there are no risks for critically evaluating information, you would not expect to see this concept in a critical thinking definition. By demonstrating how Rotman's privacy literacy framework aligns with an accepted practice in information literacy instruction (critical thinking), privacy literacy can be seen as a unique area for education that can be facilitated by librarians. Ultimately, privacy literacy skills may be the most successful way to ensure online privacy and educate users about the elements to consider before posting online.

Privacy Literacy Instruction

The Association of College & Research Libraries' (ACRL) Information Literacy Competency Standards for Higher Education document states that "information literacy forms the basis for lifelong learning" (ACRL, 2016a) and ACRL's Objectives for Information Literacy Instruction Model Statement for Academic Librarians notes, "information literacy encompasses more than good information-seeking behavior...." (ACRL, 2016b). These statements support the expansion of literacy education in libraries to include areas such as privacy literacy and workplace literacy. There are resources available to support this integration for librarians interested in adding privacy literacy education into their traditional library instruction programs. For example, the San Jose Public Library received a $35,000 grant from the Knight Foundation to create a Virtual Privacy Lab, a project that provides information related to privacy issues and allows users to create a customized privacy tool kit to support projects in their own library. The American Library Association (ALA) offers a website for librarians to find resources to create their own privacy tool kits, while Mackey and Jacobson have developed a massive open online course (MOOC) where participants can earn badges for completing assignments and activities, in order to demonstrate that they have achieved a specific level of competency in a given area. Finally, the Pennsylvania State University Libraries have created an online bibliography where students can access resources to learn more about online privacy issues. Table 2 provides the URLs for each of these sites.

Table 2: Resources for Privacy Literacy Instruction

Website	URL
San Jose Public Library Virtual Privacy Lab	https://www.sjpl.org/privacy
American Library Association Privacy Tool Kit	http://www.ala.org/advocacy/privacy/toolkit
Metaliteracy MOOC Digital Citizen Badge	https://metaliteracybadges.org/badges/
The Pennsylvania State Libraries Privacy Bibliography	http://sites.psu.edu/pennstatereads2016-17/community/

Privacy Literacy Campaigns

Libraries have played an essential role in the health and well-being of their communities for decades. The importance of this role is clearly stated in the ALA's Core Values of Librarianship document, which states that "ALA promotes the creation, maintenance, and enhancement of a learning society, encouraging its members to... ensure that school, public, academic, and special libraries in every community cooperate to provide lifelong learning services to all" (ALA, 2016). Based on this statement, libraries have an ethical obligation to educate patrons about privacy issues, both online and offline. There are several websites that demonstrate librarians' roles as advocates of privacy issues and provide resources for libraries to create programs supporting privacy education. For example, the Library Freedom Project is a collaborative group of librarians, technology specialists, attorneys, and privacy advocates focusing on surveillance issues and intellectual freedom in libraries. The ALA's Choose Privacy Week supports community engagement and education related to privacy rights and issues. The Data Privacy Project trains librarians on how to advocate for privacy in their community and how to educate their users on privacy issues. Finally, the American Civil Liberties Union (ACLU) has created a site to promote their Invasion of the Data Snatchers online privacy awareness campaign, which can engage users in privacy issues. Table 3 provides the URLs for these advocacy sites.

Table 3: Privacy Advocacy Resources

Website	URL
Library Freedom Project	https://libraryfreedomproject.org/
The American Library Association's Choose Privacy Week	https://chooseprivacyweek.org/
The Data Privacy Project	www.dataprivacyproject.org/initiatives/privacy-literacy-training/
The American Civil Liberties Union's Invasion of the Data Snatchers	https://action.aclu.org/secure/data-snatchers

Privacy Literacy in Healthcare

As in many professions, the use of social media by healthcare providers has increased in recent years (Greysen, Chretien, Kind, Young, & Gross, 2012; Wells, 2015). Research by Kind (2015) found that there are risks associated with having a poor social media image for healthcare providers, while there are benefits to having a positive online persona (Kind, 2015). Kind's work relates a positive social media image by healthcare providers with an enhanced level of trust from patients. Patients who can search for their medical providers and find positive personas experience an increased sense of trust. The key to creating a positive social media presence, and reaping the benefits, is having the skills and knowledge to create a professional online reputation (Lagu & Greysen, 2011; Scruth et al., 2015). Using privacy literacy as a guide, libraries can take the lead in teaching healthcare students and students of all fields the tools necessary to craft positive online images.

Because the impact of an online reputation has been studied in healthcare for years, it may be an easy access point for librarians seeking to formalize privacy literacy instruction. Scruth et al. (2015) found that if a healthcare provider's personal and professional images conflict or display negative information, their career can be damaged. The role of online image management for healthcare providers is currently governed by professional organizations, associations, and healthcare schools, which have established social media guidelines for their employees and students. Table 4 displays just a few of the social media policies from various

institutions and organizations. A specialized library instruction session could be easily created for healthcare students by using Rotman's privacy literacy framework paired with examples of social media polices from the healthcare field. This would combine the theoretical nature of the framework with tangible examples.

Table 4: Social Media Guidelines in Healthcare

Website	URL
American Medical Association opinion 9.124 – Professionalism in the Use of Social Media	https://www.adventisthealth.org/nw/Documents/AMA-Professionalism-in-use-of-Social-Media-7-25-11.pdf
International Federation of the Red Cross and Red Crescent Societies: Social Media Guidelines	http://sm4good.com/wp-content/uploads/2009/11/Red-Cross-Red-Crescent-SocialMedia-Guidelines.pdf
National Council of State Boards of Nursing Social Media Guidelines for Nurses	https://www.ncsbn.org/347.htm
Harvard Medical School Social Media Guidelines	http://hwpi.harvard.edu/files/provost/files/social_media_guidelines_vers_2_0_eff_081814.pdf
Mayo Clinic: Employees Policy on Social Networking	http://sharing.mayoclinic.org/guidelines/for-mayo-clinic-employees/
Northwestern University School of Medicine Social Media Policies and Guidelines	http://www.feinberg.northwestern.edu/communications/guidelines/social-media.html
Vanderbilt University Medical Center Social Media Policy	https://ww2.mc.vanderbilt.edu/socialmediatoolkit/26923
Mount Sinai Health System Social Media Guideline	http://icahn.mssm.edu/about-us/services-and-resources/faculty-resources/handbooks-and-policies/faculty-handbook/institutional-policies/social-media-guidelines

Consequences of No Privacy Literacy in Healthcare

A poor online image or an ill-advised social media posts can have severe ramifications for healthcare providers. One of the most significant risks associated with a lack of understanding or compliance with social media guidelines is the destruction of a career. Employees who post inappropriate information on social media are at risk for losing their jobs (Greysen et al., 2012; Scruth et al., 2015; Wells, 2015). Also, healthcare students who violate their school's social media guidelines are at risk for expulsion, potentially ending a career before it even starts. This is a serious concern in the field that led the American College of Physicians (ACP) and the Federation of State Medical Boards (FSMB) to suggest that healthcare providers and healthcare students review their online personas periodically to "self-audit" their information and assess its accuracy (Kind, 2015, p. 442). As privacy is a well-established area of concern for libraries, and online reputation is a growing area of concern for the healthcare field, librarians who support health education have an opportunity to seek out collaborations for privacy education and add to the growing body of scholarly research being conducted in this area. By linking privacy literacy frameworks with critical thinking definitions customized privacy literacy instruction session can be easily created by librarians and integrated into existing information literacy programs in libraries.

Conclusion

The resources discussed in the previous sections have pulled privacy literacy out of obscurity and into the spotlight, positioning privacy literacy as its own unique area of literacy education. By teaching privacy literacy as a thought process, guided by Rotman's privacy literacy framework, librarians can assist students in crafting a successful online persona, and can provide them with a set of criteria to consider before posting to social media. Understanding the elements of privacy literacy can protect students from the consequences of a poor online image and mitigate the risks associated with an unprofessional social media presence. As librarians, we are established advocates for privacy and uniquely situated as educators of literacy to aid in creating and expanding the scholarly base of research related to privacy literacy. By emphasizing privacy literacy in library instruction, we are protecting our users in an ever-expanding online world that sees our private information as a growing commodity. In everyday situations, we may help to prevent students from the humiliation of an embarrassing online post. In direr situations, we could help to prevent students from losing their jobs after graduation.

References

Association of College and Research Libraries (ACRL). (2016a). *Information Literacy Defined.* Retrieved from http://www.ala.org/acrl/standards/informationliteracycompetency

Association of College and Research Libraries (ACRL). (2016b). *Responsibility for Information Literacy Instruction.* Retrieved from http://www.ala.org/acrl/standards/informationliteracycompetency

American Library Association (ALA). (2016). *Education and Lifelong Learning.* Retrieved from http://www.ala.org/advocacy/proethics/questions-and-answers-ethics-and-social-media

Bailin, S., & Battersby, M. (2010). *Reason in the balance: An inquiry approach to critical thinking.* Ontario: McGraw Hill Publishers.

Chretien, K. C., & Tuck, M. G. (2015). Online professionalism: A synthetic review. *International Review of Psychiatry 27*(2), 106–17.

Correia, J., & Compeau, D. (2017). *Information Privacy Awareness (IPA): A review of the use, definition and measurement of IPA.* In *Proceedings of the 50th Hawaii International Conference on System Sciences,* Waikoloa, HI.

DeVito, M. A., Birnholtz, J., & Hancock, J. T. (2017). *Platforms, people, and perception: using affordances to understand self-presentation on social media.* Paper presented at ACM CSCW, Portland, OR.

Dhir, A., Kaur, P., Chen, S., & Lonka, K. (2016). Understanding online regret experience in Facebook use–Effects of brand participation, accessibility & problematic use. *Computers in Human Behavior 59,* 420–30.

Ennis, R. (1987). A conception of critical thinking—with some curriculum suggestions. *APA Newsletter on Teaching Philosophy Summer* 1–5.

Givens, C. L. (2015). *Information privacy fundamentals for librarians and information professionals.* New York, NY: Rowman and Littlefield.

Greysen, S. R., Chretien, K. C., Kind, T., Young, A., & Gross, C. P. (2012). Physician violations of online professionalism and disciplinary actions: a national survey of state medical boards. *JAMA 307*(11), 1141–42.

Hatcher, D. L., & Spencer, L. A. (2006). *Reasoning and writing: From critical thinking to composition, 3rd ed.* Boston: American Press.

Johnson, R. H., & Hamby, B. (2015). A meta-level approach to the problem of defining 'Critical thinking.' *Argumentation 29*(4), 417–30.

Kind, T. (2015). Professional guidelines for social media use: a starting point. *AMA journal of ethics 17*(5), 441.

Lagu, T., & Greysen, S. R. (2010). Physician, monitor thyself: Professionalism and accountability in the use of social media. *The Journal of clinical ethics 22*(2), 187–90.

Langenderfer, J., & Miyazaki, A. D. (2009). Privacy in the information economy. *The Journal of Consumer Affairs 43*(3), 380–88.

Litt, E., & Hargittai, E. (2016). The imagined audience on social network sites. *Social Media+ Society 2*(1), 1–12.

Mackey, T. P., & Jacobson, T. E. (2014). *Metaliteracy: Reinventing information literacy to empower learners.* Chicago, IL: Neal-Schuman.

Martin, K. D., & Murphy, P. E. (2017). The role of data privacy in marketing. *Journal of the Academy of Marketing Science, 45*(2), 135–155.

Robinson, C. R. (2001). The role of critical thinking skills in counselor supervision. *Inquiry: Critical Thinking Across the Disciplines 20*(3), 19–25.

Rotman, D. (2009). Are you looking at me? Social media and privacy literacy. Poster presented at the iConference, Chapel Hill, NC. February 8–11.

Scruth, E. A., Pugh, D. M., Adams, C. L., & Foss-Durant, A. M. (2015). Electronic and social media: The legal and ethical issues for healthcare. *Clinical Nurse Specialist 29*(1), 8–11.

Visser, M. (2012). Digital literacy definition. *American Library Association Connect.* Retrieved from http://connect.ala.org/node/181197.

Wells, D. M. (2015). When faced with Facebook: What role should social media play in selecting residents? *Journal of Graduate Medical Education 7*(1), 14–15.

Willis, L. E. (2014). Why not privacy by default. *Berkeley Technology Law Journal 29*(1), 61–134.

Wissinger, C. L., & Wilson, B. G. (2015). Student perceptions of Facebook's privacy policies & rights. *Social Media Studies 2*(1), 15–26.