

CAIS Paper: Information Practices Evolving Over Time: Cases from the Longitudinal Young Parent Study

Abstract: Although longitudinal research into human information practices is uncommon, it can provide deep insight into the ways information practices evolve over time. Through discussion of cases from a study of early-age parents, this paper theorizes the interactions between time, participants, settings, and events that result in changes to information practices.

1. Background

Humans are ever-changing organisms, with social practices evolving over time. Information seeking routines, for example, may change as new needs are recognized, new sources emerge and old sources are reassessed, and cognitive and affective ability to process information shifts. Such changes may be spurred by factors exogenous to an individual, such as the emergence of the World Wide Web or widespread availability of mobile Internet devices. They may also be caused by endogenous variables, such as changing life stage that brings with it increased maturity or cognitive decline. Certain chronological periods can be identified as windows of accelerated change in information practices, as a result of external factors (e.g., neighbourhood library branch closure) or internal ones (e.g., an information-sensitive health crisis).

Savolainen calls time “one of the main contextual factors of information seeking” (Savolainen 2006, 110) and delineates three approaches to temporality in information seeking research: temporal elements of setting, temporal pressures such as lack of time, and stages of information seeking processes. Another way to approach temporality is by viewing the passage of time as a factor spurring information practice changes for an individual or population. Despite the reality that human practices evolve over time, relatively few information behaviour studies have taken a longitudinal approach (St. Jean 2014, 16). This paper reports on information practices evolving over time, using case examples from a study of early-age (16-23 year old) parents.

2. Methods

Setting

This study took place in the Greater Vancouver region of British Columbia, Canada. Within this metropolitan area exists a patchwork of programs and services aimed at supporting the health of early-age parents and their children. Key among these are Young Parent Programs (YPPs), a network of school-based, community-partnered, provincially-supported programs for young parents completing secondary education.

Data Collection

Data was collected via ethnographic observation and in-depth individual interviews from October 2013 to December 2014. Interviews were semi-structured, employing critical incident technique (Flanagan 1954; Urquhart et al. 2003) and information world mapping (Greyson 2013). Interviewees were purposively recruited from the student populations of two YPPs, and theoretically sampled from the surrounding communities. Interviewees were invited to participate in second and third follow-up interviews, spaced approximately four months apart.

Data Analysis

Interview transcripts and field notes were coded via constant comparison (Glaser 1965; Glaser and Strauss 1967) using NVivo. Analysis was guided by constructivist grounded theory procedures (Charmaz 2007). Initial open coding across data sources led to memo writing and an iterative process of constructing focused codes and selective theoretical coding.

Ethics

Written informed consent was obtained at each interview, and sought from students and staff present during observations. Interviewees selected pseudonyms, and potentially-identifying information was removed from transcripts before member-checking. This study was approved by the [University] Behavioural Ethics Review Board and by participating school districts.

3. Results

Sixty individual interviews (39 intakes, 18 second, and 3 third interviews) were conducted with 37 mothers and two fathers. Additionally, 50 days of naturalistic observation were recorded. Time interacted with young parents' information practices in a number of ways. Time was an element of setting, both in relation to the external geopolitical world and individual's life stage. Time pressures were also evident in many scenarios of information need and seeking. However, the most enlightening observations came from observing the interactions over time among individuals, shifting contextual factors, and evolving information practices.

Time as Element of Setting

Multiple overlapping time-related setting elements affected participants, including seasons and the "school year." Age and developmental stage (of both young parents and their children) shaped information needs, seeking, and use practices, and determined access to services. The sociopolitical era shaped (often through government funding priorities) the array of information resources available.

Time Pressures

While some information interactions were leisurely, time pressures were common. Both medical and non-medical information needs were often time-sensitive and sometimes urgent. The associated pressure shaped information seeking, as well as affective experiences of seeking, assessment, and use.

Information Practices Evolving Over Time

As participants' information worlds changed, practices of seeking, encountering, assessment, sharing, and use of information also shifted. These changes were due to a dynamic combination over time of: participant characteristics and social location (e.g., coming out as bisexual, becoming a parent); geopolitical setting (e.g., health services budget cuts, new young father programs); and events (e.g., child's illness, relationship breakup). As young parents and their children grew, different health information needs emerged, while parents accumulated experience and developed new routines and identities. The shifting of one significant element of a young parent's social information world (e.g., elimination of public health nurse visits) could create ripple effects on related social worlds, roles, and resources. This paper presents case examples from the Young Parent Study to illustrate and theorize the dynamic nature of information practices over time. One such case is Aliyah's story.

Aliyah's Story

During her intake interview, "Aliyah" was new to the YPP. She had an infant who had been born shortly after her arrival in Canada. While she and the baby were both healthy, she faced challenges accessing and using health information. Interacting in English was a challenge, and her family's lack of familiarity with Canadian health care, combined with immigration policy restricting newcomer health coverage, resulted in overwhelming medical bills. Aliyah felt that certain Canadian parenting values were quite different from those to which she was accustomed, which inhibited her information sharing with professionals and other "outsiders."

Over the course of a year, Aliyah's English strengthened and she managed to pay off her medical bills. She befriended other early-age mothers of the same ethnic background, resulting in a community of peers who understood her cultural parenting practices, as well as the opportunity for Aliyah to share her newly-acquired expertise in navigating Canadian health and social systems.

While at intake Aliyah was tentative regarding non-emergency health information seeking, over the course of a year she developed routines, preferred sources, and new social worlds within which to seek and share health information. Her social location and personal characteristics changed, her community and setting shifted, and she learned from events that occurred over the course of the year.

4. Discussion

Longitudinal methods allow observation of the complex interplay among individuals, settings, and events. Use of ethnographic methods in information research, although relatively uncommon, has been increasing (Carlsson, Hanell, and Lindh 2013; Khoo, Rozaklis, and Hall 2012), and can provide deep insight into shifting contexts and practices in variety of populations and settings. In the case of the Young Parent Study, fourteen months of fieldwork, including repeat interviews with participants, enabled observation of information practice evolution over time, as young parents and their children grew and developed, annual rhythms of seasons and the school year ebbed and flowed, and community resources shifted and changed. Information practices were influenced by the interactions among: participant characteristics and social location, geopolitical setting, and expected or unexpected events. They were further modified by time's effects upon each of those three factors. To simplify, if socially-constructed information

practices at a given point in time are influenced by (Participant x Setting x Events), then we might suggest that:

$$\text{Time x Participant x Setting x Events} = \text{Change in Information Practices}$$

Embracing the passage of time as an illuminating lens through which to view information practices, rather than attempting to control for or eliminate time via cross-sectional approaches, holds great potential for understanding the social construction of information practices.

To use Aliyah's story as an example, over the course of a year (time), her knowledge of English and Canadian culture and health care increased, along with her parenting and academic skills and abilities (participant). Other young mothers from her home country enrolled in her YPP, providing her with a stronger sense of cultural community, and she obtained a family doctor at one of the new clinics in the neighbourhood (setting). While she and her child only experienced minor illnesses, her successful management of these and of developmentally-appropriate yet challenging toddler experiences (events), increased her confidence in navigating health situations and meeting health information needs. Other young parents' cases demonstrate a different interplay of participant, setting, and events over time, resulting in various changes to health-related information practices, which will be discussed in the full paper.

This abstract has been prepared during year two of a five-year study. Future work will increase understanding of participants' practices over time. An emergent question is whether the passage of time necessarily brings changes in information practices, or if there are some characteristics, settings, or events that create resistance to information practice evolution.

5. Conclusion

The passage of time interacts with personal characteristics such as social location and developmental stage, setting attributes such as community resources, and expected or unexpected events to influence evolution of information practices. Longitudinal, ethnographic methods allow for deep observation of, and inquiry into, practices as dynamic and evolving. Such an approach may be particularly salient when focusing on populations experiencing great shifts in any of these factors, such as people changing life stage, in settings subject to great geopolitical change, or experiencing profound life events.

References

- Carlsson, Hanna, Fredrik Hanell, and Karolina Lindh. 2013. "Exploring Multiple Spaces and Practices : A Note on the Use of Ethnography in LIS-Research." In *Information Research : Proceedings of the Eighth International Conference on Conceptions of Library and Information Science*. Vol. 18 (3). Copenhagen.
<http://lup.lub.lu.se/record/4057953>.
- Charmaz, Kathy. 2007. *Constructing Grounded Theory: A Practical Guide through Qualitative Analysis*. Sage Publications.
- Flanagan, John C. 1954. "The Critical Incident Technique." *Psychological Bulletin* 51 (4).
- Glaser, Barney G. 1965. "The Constant Comparative Method of Qualitative Analysis." *Social Problems* 12 (4): 436–45.
- Glaser, Barney G., and Anselm Strauss. 1967. *The Discovery of Grounded Theory: Strategies for Qualitative Research*. Aldine Transaction.
- Greyson, Devon. 2013. "Information World Mapping: A Participatory, Visual, Elicitation Activity for Information Practice Interviews." In *Proceedings of the 76th ASIS&T Annual Meeting: Beyond the Cloud: Rethinking Information Boundaries*, 106:1–106:4. Silver Springs, MD, USA: Association for Information Science & Technology.
<http://dl.acm.org/citation.cfm?id=2655780.2655886>.
- Khoo, Michael, Lily Rozaklis, and Catherine Hall. 2012. "A Survey of the Use of Ethnographic Methods in the Study of Libraries and Library Users." *Library & Information Science Research* 34 (2): 82–91. doi:10.1016/j.lisr.2011.07.010.
- Savolainen, Reijo. 2006. "Time as a Context of Information Seeking." *Library & Information Science Research* 28 (1): 110–27. doi:10.1016/j.lisr.2005.11.001.
- St. Jean, Beth. 2014. "Devising and Implementing a Card-Sorting Technique for a Longitudinal Investigation of the Information Behavior of People with Type 2 Diabetes." *Library & Information Science Research (07408188)* 36 (1): 16–26. doi:10.1016/j.lisr.2013.10.002.
- Urquhart, Christine, Ann Light, Rhian Thomas, Anne Barker, Alison Yeoman, Jan Cooper, Chris Armstrong, Roger Fenton, Ray Lonsdale, and Siân Spink. 2003. "Critical Incident Technique and Explicitation Interviewing in Studies of Information Behavior." *Library & Information Science Research* 25 (1): 63–88. doi:10.1016/S0740-8188(02)00166-4.