Academic Information Horizons:
Exploring the Red Thread of Information in the
Information Studies Doctoral Program Application Process

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Abstract

This study investigates the role that information plays in the information studies doctoral program application process. Utilizing Sonnenwald's information horizon interview method, three informants who are familiar with the information studies doctoral program application process were identified and invited to reflect upon the diverse information needs, resources and behaviours that are associated with this process. Each informant was subsequently invited to draw a map of her 'information horizon' and to populate it with the various information needs, resources, and behaviours that the information studies doctoral program application process engenders. Interview data were next analyzed using key concepts drawn from Sonnenwald's information horizons theoretical framework. The information studies doctoral program application process is revealed to be a complex, competitive process that stimulates a number of highly specific information needs and behaviours. Each informant described a wide array of information resources that she draws upon to satisfy her information needs within this context, and each informant also expressed an awareness of her embeddedness within a relational system of information resources. Information behaviour occurring within the context of the information studies doctoral program application process is observed to necessitate a significant degree of collaboration and accommodation between individuals and information resources.

INTRODUCTION

The Faculty of Information at the University of Toronto is dedicated to the education of the next generation of professional and academic leaders in the field of information. Driven by a research-led faculty, it offers a range of innovative degree programs including a doctoral program that invites students to pursue advanced scholarly research in the theoretical foundations of information. As a current graduate student in the Faculty of Information, I aspire to pursue doctoral studies in the field of information upon completing my current degree. For this reason, when I was recently invited to conduct an original research project exploring information behaviour using Sonnenwald's (2005) information horizon interview method, I decided to investigate the role that information plays in the information studies doctoral program application process, so that when the time comes to initiate a doctoral program application of my own, I will possess a clearer understanding of what this process entails. Drawing upon Sonnenwald's information horizons theoretical framework and methodology, I invited three informants who are presently or have previously engaged in the information studies doctoral program application process to reflect upon the diverse information needs, resources and behaviours that are associated with this process. Next, I invited each informant to draw a map of her 'information horizon' and to populate it with all of the various information resources and activities that the information studies doctoral program application process

entails. I soon learned that the information studies doctoral program application process engenders a number of highly specific information needs, that the social networks of individuals engaged in this process facilitate the identification and exploration of their information needs, that within this context individuals draw upon a diverse range of information resources to satisfy their information needs, and that information behaviour occurring within this context requires a significant degree of collaboration and accommodation. In what follows, I will briefly contextualize my research within the library and information science literature, outline the method that I used to gather and analyze my data, summarize my findings and discuss their implications, and finally suggest several novel adaptations of the information horizon interview method before offering some concluding remarks.

LITERATURE REVIEW

Any 'difference' that a person perceives, whether in their environment or within themselves, is information; information is any aspect that a person discerns in 'the pattern of reality' (Case, 2012, p. 4). An information need arises when a person recognizes that they possess insufficient knowledge to satisfy an objective that they have. In response to such a need, a person may engage in information-seeking efforts to obtain the information that they require. Information behaviour encompasses not only deliberate information-seeking efforts, but also unintentional, passive, and evasive behaviours such as

information glimpsing, information encountering, and information avoidance. Information behaviour does not occur in isolation, but also takes into account such activities as information sharing between persons.

Graduate students possess information needs that are distinct from those of other persons, including undergraduate students; their information needs are often more sophisticated and complex (Catalano, 2013). Like many information seekers, graduate students often begin their research on the internet, and are then subsequently influenced by other persons whom they encounter, including academic personnel, other students, and library staff. When searching for information for scholarly purposes, graduate students often meet with professors or advisors who offer them guidance and direction, answer questions, and recommend resources (George et al., 2006). Graduate students' peers also influence their research activities by sharing further resources and insights with them, while library personnel support graduate students' information-seeking efforts by helping them design and carry out research strategies and locate and evaluate resources. As graduate students become increasingly knowledgeable in their specific fields of research, their information-seeking behaviours become increasingly well-refined.

One area of graduate student information behaviour that has received scant attention in the library and information science literature is that of the information studies doctoral program application process. In an article entitled 'A Doctorate in Library/Information Science,' Marcia J. Bates (1986) offers advice to individuals interested in pursuing doctoral studies in the field while simultaneously clarifying a number of common misconceptions about doctoral work. In 'Why Enter a Doctoral Program in Library and Information Science?' Doug Achterman and Joyce Kasman Valenza (2007) each share a first-person account describing why they decided to pursue doctorates in library and information science. In 'Doctoral Student Motivation in LIS,' Africa Hands (2017) explores first-year library and information science doctoral students' initial motivations for pursuing their doctoral degrees. While these articles offer valuable insights into library and information science doctoral student motivation and library and information science doctoral programs, none explore specifically the information needs, resources, and behaviours that are associated with the information studies doctoral program application process, which lay at the heart of the present study.

RESEARCH METHODS

In order to explore the 'red thread of information' in the information studies doctoral program application process (Bates, 1999), three informants who are familiar with this process were identified and invited to reflect upon the diverse information needs, resources and behaviours that are associated with it.

Ursula, 23, is a second-year graduate student in the Faculty of Information at the University of Toronto who is currently completing a concentration in critical information policy studies as well as a thesis. She is in the very early stages of the doctoral program application process and will finalize her application to an information studies doctoral program in approximately one year's time. Jill, 23, is a second-year graduate student in the Faculty of Information who is currently completing a concentration in library and information science. At the time of this study she is actively applying to the University of Toronto's doctoral program in information studies. Siham, 26, is a first-year PhD student in the Faculty of Information at the University of Toronto. Just last year she completed an application to the University of Toronto's doctoral program in information studies and her application was deemed successful.

Drawing upon Sonnenwald's (2005) information horizon interview method, I conducted one 45-minute semi-structured interview with each informant. Given each informant's unique relationship with the information studies doctoral program application process, I employed a slightly different semi-structured interview guide with each informant: since Ursula has yet to dive wholeheartedly into the information studies doctoral program application process, I invited her to *imagine* the various information needs, resources, and behaviours that are associated with this process; next, I invited Jill, who is actively completing an information studies doctoral program application at present, to *report on* the various information needs, resources, and behaviours that are associated with the process; and finally, I invited Siham, who engaged in the information studies doctoral program application process one year ago, to *recollect* the various information needs, resources and behaviours that are associated with this process (see Appendix 1).

Each informant was subsequently asked to draw a map of her 'information horizon' and to represent within it all of the information resources and activities that she *will engage with* (Ursula), *is currently engaging with* (Jill), or *engaged with* (Siham) throughout the information studies doctoral program application process. Informants were encouraged to talk about and explain their drawings as they created them, and follow-up questions encouraged informants to provide additional details about their information horizons.

All of the interviews took place during the week of November 3rd to November 10th, 2017 at the University of Toronto. Informed consent was secured prior to initiating each interview. To respect the privacy and confidentiality of the informants, audio recordings of each interview were transcribed within one week of each interview and audio

Figure 1. Ursula's graphical representation of her information horizon.

Figure 2. Jill's graphical representation of her information horizon.

recordings were subsequently destroyed. Informants' names and identifying information were removed from transcripts, and pseudonyms were selected. Interview data were then analyzed using key concepts drawn from Sonnenwald's (2005) information horizons theoretical framework.

FINDINGS

According to Sonnenwald (2005), human information behaviour is simultaneously 'shaped by and shapes individuals, social networks, situations and contexts' (p. 192). An individual within a particular situation and context may develop an information need that her situation and context help establish; the individual's social network provides a vantage point that facilitates recognition and investigation of her information need. Moreover, the individual, her social network, her situation, and her context help determine the information resources that are available to satisfy her information need. Information resources and the relationships amongst them comprise an individual's 'information horizon,' within which the individual may seek for information. The individual's information horizon may be conceptualized as a 'densely populated solution space' within which many information retrieval solutions are possible (p. 195).

Interview data in this study revealed that informants engaged in the information studies doctoral program application process experience a variety of information needs shaped specifically by this process. All of the informants discussed the need to carefully investigate doctoral program application details, admission requirements, and costs; the need to review faculty member profiles and faculty research in order to align their research interests with those of faculty; and the need to conduct independent research in order to prepare their statements of intent. Moreover, Jill also highlighted the need to locate strong academic references to support her application, while Siham underscored the need to identify a potential
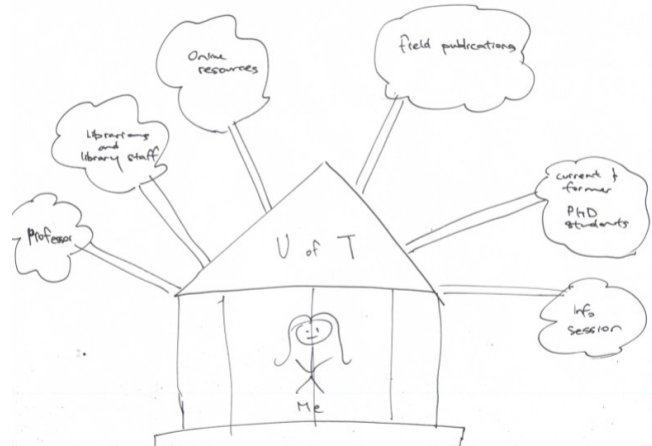
doctoral supervisor, and Ursula emphasized the need to explore funding, scholarship, and grant opportunities. Ursula in particular included several of her information needs in the graphic representation she created of her information horizon (see Figure 1).

Interview data also revealed that each informant's social network provided a vantage point that facilitated the identification and exploration of her individual information needs. Informants cited current information studies doctoral students as valuable sources of information and support, as well as librarians, peers, colleagues, friends, and family members. Each informant also stressed the particularly significant role that academic mentors – primarily faculty members – play in offering guidance and support throughout the information studies doctoral program application process. In attempting to narrow down a research focus for her statement of intent, for example, Jill described how one academic mentor suggested that she review recent issues of prominent library and information science journals to develop a clear understanding of major trends in the field. This same academic mentor encouraged Jill to reach out to and seek advice from several of her current and former information studies doctoral students. In this manner, Jill's academic mentor demonstrated knowledge of and recommended to her additional information resources to satisfy her information needs, thus expanding Jill's information horizon. In the graphic representation that she created of her information horizon, Jill included several of the information resources that were recommended to her by her academic mentor (see Figure 2).

In addition to human information resources, Sonnenwald observes that information resources may also consist of 'documents, including broadcast media, web pages, books; information retrieval tools, including computer-based information retrieval systems, bibliographies; and experimentation and observation in the world' (p. 193). Taken together, all such information resources and the relationships amongst them constitute an individual's

information horizon. In addition to the persons that constitute their social networks, some of the many information resources cited by informants in this study while engaging in the information studies doctoral program application process were books, journals, journal articles, libraries, computer programs, university websites, and the internet. Ursula additionally highlighted the value of attending conferences and other gatherings of scholars, noting that 'human interaction is key to knowledge-gaining,' while Jill stressed the usefulness of attending doctoral program information sessions, and Siham highlighted the benefit of exploring internet forums dedicated specifically to graduate program application processes.

DISCUSSION

Examination of the information studies doctoral program application process through the lens of Sonnenwald's information horizons theoretical framework sparked a number of valuable insights. Information behaviour occurring in this context, for instance, may be deemed a type of 'collaboration' between individuals and information resources (Sonnenwald, 2005, p. 194). The objective of collaboration within the context of the information studies doctoral program application process is the sharing of knowledge and the resolution of individuals' information needs; each informant interviewed during this study expressed an awareness of her embeddedness within a relational system of information resources as she worked to achieve her goals. The information resources each informant was able to collaborate with were determined by her information horizon, an understanding most clearly reflected in Siham's graphic representation of her information horizon (see Figure 3), which she described as an 'information network.' According to Siham, she is at the centre of this network, which is like a 'sun.' It is a network not only of people, 'but also of resources and research.'

Informants also revealed during their interviews that within the context of the information studies doctoral program application process 'accommodation' of self, others, and the environment, often with 'some form of dominance,' was also frequently required (Sonnenwald, 2005, p. 192). During their interviews, Siham, Jill and Ursula frequently alluded to the intense, competitive nature of the information studies doctoral program application process and to the expectation that complex emotions like confusion and doubt be regulated. Siham, for instance, explained how engaging in the doctoral program application process was incredibly 'anxiety-provoking,' while Jill described it as at times feeling 'overwhelming,' and Ursula shared how graduate education application processes provoke feelings of 'uncertainty' and 'inadequacy.' Ursula further emphasized that racist, misogynist, and ageist practices are prevalent features of academic life and that as a 'young female minority within academia' she must work doubly hard so as to not 'allow anyone an opportunity to reject' her.

Figure 3. Siham's graphical representation of her information horizon.

She also touched several times upon a specific incident during which she received poor advice from an academic mentor, trusted this mentor's advice, but wished she had ignored it as this advice was not in her best interest.

This is not to suggest, however, that Ursula and the other informants in this study experienced the information studies doctoral program application process in an entirely fraught manner. Indeed, Siham also described the great joy she felt upon connecting with a potential doctoral supervisor whose work she greatly admired and the deep satisfaction she experienced when she learned that she had been admitted to the program of her choice. Jill emphasized the 'excitement' and 'novelty' of the information studies doctoral program application process, stressing that she felt exceedingly supported throughout it by faculty members, family members, friends, and co-workers.

While due to its length restriction it is beyond the scope of this paper to do so, further analysis of the information studies doctoral program application process utilizing Kuhlthau's (1988) model of the information search process could prove valuable given the emotionally-charged nature of this process. Kuhlthau's model, which stresses the cognitive and affective stages that accompany the action of seeking and using information resources, could shed additional light on insights developed in this study.

METHODOLOGICAL REFLECTIONS

Sonnenwald's (2005) information horizons theoretical framework and methodology proved a valuable means of gathering and analyzing data about informants' information needs, resources, and behaviours within the context of the information studies doctoral program application process. A future synthesis of Sonnenwald's information horizon method and Kuhlthau's (1988) information search process model inviting informants to map out the affective stages that accompany their information behaviours can also be envisioned by the author of this paper. Furthermore, a 'critical' information horizon interview that invites

informants to consider what kinds of information resources they do not have access to, what kinds of information they have access to but others do not, and what kinds of information resources they actively avoid, might also prove a worthwhile extension of the method.

CONCLUSION

Realization of this research project provided me with a valuable opportunity to gain significant insight into the information studies doctoral program application process. Given that I aspire to pursue doctoral studies in the field upon completing my current degree, I stood to gain much from effectuating this project, and I did. By exploring Ursula, Jill and Siham's information horizons, my own information horizon was expanded as I became better acquainted with the diverse information needs, resources, and behaviours that are associated with the information studies doctoral program application process. The information studies doctoral program application process, I learned, is complex, competitive, and engenders a number of highly specific information needs and behaviours. Each individual whom I interviewed described a wide array of information resources that she drew upon to satisfy her information needs and expressed an awareness of her embeddedness within a relational system of information resources. Morevoer, information behaviour occurring within the context of the information studies doctoral program application process requires a significant degree of collaboration and accommodation. Sonnenwald's information horizons theoretical framework and methodology proved an invaluable means of gathering and synthesizing these insights.

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AUTHOR'S BIO

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APPENDIX 1

Interview Guide

1. Can you tell me your current program and year of study?

2. Before making your way to the field of information, what did you study previously?

3. What motivates you to be a student in the field of information at present? Does a particular area of research interest you? Which? And why?

4. Will you/Did you/Are you apply(ing) to many doctoral programs? Why some and not others?

5. How will you/Did you/Are you prepar(ing) your application(s) for these program(s)?

   - What kind of information activities and practices did you/will you/are you engag(ing) in? In what order? Where did you start? Where did you go next?

   - What kind of information resources did you/will you/are you draw(ing) upon? Are there any that you consider especially valuable?

- Who did you/will you/are you go(ing) to for help to find the information that you need? What kind of information do you need?
- What application components were/will be/are required of you? Are any particularly challenging to produce?

6. What will it/does it/did it feel like to engage in these kinds of application processes?

7. Were there any parts of this experience that you find/found/will find satisfying? Dissatisfying?

8. One other thing that I'm doing in this study is asking people to draw what they refer to as their 'information horizon': to put yourself on this piece of paper, and then draw in the people, resources, and activities that you will engage with/are engaged with/did engage with when seeking information in order to complete your information studies doctoral program application(s). If you can indicate which ones you might go to first, or which ones you prefer, and talk about the process as you're drawing it, that would be great.

Follow up questions:
- Do you/Did you/Will you use any other resources apart from the ones you see here?
  - Your Own Experiences/Observations (What kinds?)
  - People/Social Networks (Who? – Profs? Peers? Family members? Friends?)
  - Documents (What kinds?)
  - Information Retrieval Tools (What kinds?)
  - Locations (What kinds?)
- When or why would you go to this particular resource after/before going to this other one?
- Do/Did/Will any of these resources proactively provide you with information? Or suggest other information resources to you?
- Previously, you mentioned resource X. Would you include it on your information horizon? Where? Or why not?

APPENDIX 2

Quotations from Interview with Ursula

Hugh: What application components do you anticipate being required of you? Do you think that any will be particularly challenging to produce?

Ursula: . . . being a female academic is hard, especially being a minority female who is young looking I do get ageism and I do get sexism, and so creating the reasons that they can't reject me is a key thing that I'm doing. . . . In academia, and especially at U of T, I'm starting to feel this insane pressure about how to protect myself and my own assets and what I'm doing and how I'm going about in space. I feel bad but this has been largely one of the reasons I have been removed from school.

Quotations from Interview with Jill

Hugh: How are you preparing your application(s) for these program(s)? What kind of information activities and practices will you engage in? In what order? Where will you start? Where will you go next?

Jill: . . . I think having one-on-one conversations was definitely a lot more valuable because they could put a face to a name and you're not just some stranger. And if you're going into their office or setting they're often more comfortable with sharing information, so I thought that was better than a phone call or an email or what not. Emails are often chopped up conversation. It's continuous but there's often a delay and you don't see any of their facial expressions.

. . . Yesterday I went to the PhD Information Session, mainly to scout out my competition. (laughs) Kind of devious, but . . . (laughs) To be honest I did not realize that there were so many people interested. It was very interesting seeing such a dynamic group, and also realizing that so many were from the iSchool. I was baffled. That was interesting.

Quotations from Interview with Siham

Hugh: One other thing that I'm doing in this study is asking people to draw what they refer to as their 'information horizon': to put yourself on this piece of paper, and then draw in the people, resources, and activities that you engaged with when seeking information in order to complete your doctoral program application(s). If you can indicate which ones you went to first, or which ones you preferred, and talk about the process as you're drawing it, that would be great.

Siham: . . . I think that privilege and access need to be talked about a bit more. . . Why certain people have access to things . . . First of all, the privilege to consider this as an option, the privilege to even pay for the application. To navigate through the multitude of information – I'm very critical about the use of that word now – there are so many aspects, and I think it might be important to take into consideration things like, who has access to apply? And who gets accepted? I think that there are some politics there that needs to get unpacked and recognized.