

A Qualitative Study Proposal: Understanding Today's Researcher

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Chapter 1

Introduction

Libraries need to adapt and understand how advances in technology, social media networks, and the overall amount of available information is transforming how people search for information. Within the context of the academic library, library resources contain interdisciplinary coverage of the material. The increase in the volume of available information has not simplified but rather made the research process more complex. Throughout the history of the discipline, information seeking behavior is one of the central research topics in Library Science literature. Changes in information access points, for example, users searching for information via voice technology necessitates more studies to understand today's researcher. How do researchers decide on what items to use? There are different types of researchers or researcher profiles such as guided researcher, assignment researcher, domain learner, aspiring scholar, and established scholar (Rosenhan & Kemsley, 2017). Understanding the modern researcher is crucial for libraries to remain relevant.

Statement of the Problem

Libraries invest a significant percentage of their budget on electronic resources and database subscriptions—now more than ever libraries need to justify this expenditure and ensure use of the resources in this age of “Why can't I just Google it?” (Walsh & Borkowski, 2018). In 2012 Academic libraries spent approximately \$2.8 billion on information resources of which \$1.4 billion is for subscription databases (*Library Operating Expenditures*, 2015). Academic libraries also invest time and money in staff training and creating research guides to support students and faculty. Librarians continually evaluate resources to analyze use and decide to either cancel or renew the annual subscriptions. Understanding how faculty and students research and

seek information is crucial for librarians making decisions about resources and instruction.

Wikipedia and Google are available to today's researcher, and librarians must embrace and realize they will work with other sources of information in addition to library resources.

Librarians also need to consider and ask how this change in information seeking behavior will influence scholarship and the future of the research paper perhaps evolving to an interactive montage of mixed media and text.

Purpose

The purpose of this exploratory, qualitative study is to learn about the information seeking behavior of today's researcher. The researcher will collect information via interviews and observations to understand the modern researcher—it is necessary to explore information seeking behavior and how students interact with resources while researching a specific topic or purpose. Participants will include graduate and undergraduate students. Librarians must continue to learn about their users to support their needs and to ensure the relevance of the library to the organization. The following research questions will guide the study.

Research Questions

1. How do users begin their research?
 - a. What do users access first when given a topic to search?
2. How do electronic resources influence the researcher's information seeking behavior?
 - a. How do students use and perceive online library resources to complete their assignments?
 - b. What role do Google and Wikipedia play in assistance with the search for information?
3. How do users describe their research process or method?
4. How will educational (grade) level influence search behavior?

Limitations, Delimitations, and Assumptions

Limitations

The limitations include the number of participants who will agree to an interview and observation of their information seeking behavior. Human-computer interaction (HCI) has many nuances, and the inability to identify common themes is a possibility. The limitations include the research site, the number of respondents, and the ability of the subjects to answer questions and complete tasks during the observation.

Delimitations

It is a possibility to address the research questions with a variety of research designs and methodologies. There may be a need for future studies of different populations or different research sites to support conclusions from this study. Future collection of quantitative data may also support the qualitative data from this study. The problem statement is broad in the sense of influencing research in related areas, such as the future of the research paper or library assessment.

Assumptions

Learning how students conduct their research is significant to libraries to continue to provide the appropriate resources for today's researchers. User behavior and elements of human-computer interaction (HCI) are essential to learning by questioning and observation. The research will gather data from students representing the interdisciplinary nature of the undergraduate and graduate students. The information collected will provide a further understanding of the population and contribute to developing researcher "profiles" to help identify appropriate resources and instructional strategies. The participants will provide the information to develop conclusions. During the research process, there will always be two

researchers—one person to interact with the subject and the other to transcribe and record the information.

Chapter 2

Literature Review

This literature review will explore a collection of qualitative and quantitative studies to provide an overview of the technical aspects of information seeking behavior to understand the modern researcher. The field of library science offers an abundance of information seeking behavior studies using a variety of research designs such as interviews, case studies, focus groups, usability and observation studies. The information sources and tools keep changing. Librarians, as well as the database vendors, need to learn how researchers are finding information. Each new technology, such as voice-activated search commands, may influence how and what users research. Some may prefer voice technology to start their searching while others may prefer to reference a book before going to other resources. People search for a variety of reasons such as health information or shopping, but for this study, the literature will focus on research behaviors of college students.

The growth of social media or social networking sites over the last decade has changed the way people communicate and share information. Hassan (2017) reviews how people communicate via social networking and presents studies of how undergraduates go to Twitter to seek information. College students use Twitter for activism, to get their news, and to share information. Hassan's research supports Twitter use in academia for both faculty and students to share information. Lee & Song's (2015) study of "mobile information-seeking behavior" reviews the mobile phone as an access point to library resources. Lee and Song conclude from their survey that undergraduate students use smartphones to perform limited library research functions

to check their library account and search the catalog. The students do not use smartphones to search library databases because of the small screen size. Hackman & Pember's (2016) qualitative study explores how undergraduates research health information using social media. From the 10 interviews, the researchers found five common themes among the researchers. Social connection and "passive engagement" are examples of common themes of why the students search. Social media is becoming part of the research process for example in the common scenerio when a user is following an organization or expert in the field via social networking sites. Laplante finds (2014) adolescents go to their social networks and friends for information. Nessel's (2014) book compiles studies about children and adolescent information seeking behaviors which are beyond the scope of this paper but of significance to this study as this is learned behavior that will be prevalent when the child is in college. There is increasing use of the internet and social networks for information both personal and academic across all age groups from childhood to adolescence. Internet searching for enjoyment can lead to internet addiction. The purpose of Soleymani, Garivani, & Zare-Farashbandi's (2016) study of postgraduate students was to explore the relationship between information seeking behavior and internet addiction. Another conclusion from their study show students prefer internet searching over using library resources, and the authors recommend a how-to research class be part of the standard college curriculum.

Academic librarians in the field for some time have witnessed the decrease in the use of library resources and databases (Suarez, 2013). Academic library websites provide links to several resources including the library catalog, websites, electronic databases, and journals. Students accustomed to solely internet searching via Google may not access the appropriate database for the subject matter, and some students may rely on one database and not explore

other options. Librarians need to embrace Google and Wikipedia and students may need to take the time to ask a librarian questions. Topic selection is challenging for all levels of researchers; a librarian can assist with keyword searching and in creating a strategy to search the databases. Researchers usually feel disappointment and experience frustration, not during the search but when analyzing the results of the search and realizes the need for more information (Nesset, 2014). Researchers frustration was caused by creating keywords and phrases or “discovering vocabulary” (Duncan, Holtslander 2012). The Duncan & Holtsander study of undergraduate nursing students recommends improving librarian teaching strategies.

Library resources are interdisciplinary, and many studies focus on subject-specific searching behaviors. One qualitative study explored science researchers working at a university medical school. The science researchers rarely used library services and completed their research using the Internet, subject-specific technical databases, and asking colleagues. The science researchers had positive opinions about the library but did not feel the library as an essential part of their work. Though, from this study, there is interest for the library to support the science department by creating an institutional repository (Haines, Light, O'Malley, & Delwiche, 2010). Undergraduate students have different searching behaviors than experts in the field of science for example. The emerging technologies influence research behaviors (Ge, 2010). It is also difficult to determine the information searching behavior across disciplines, for example, the searching behaviors of design students will differ from the needs of nursing students or even different behaviors within the same discipline for example business undergraduate students and MBA students (Spezi, 2016).

Kuhlthau's Information Search Process (ISP) Model (as referenced in Mills, Knezek & Wakefield, 2013) includes six stages of student information seeking activity: initiation, selection,

exploration, formulation, collection, and presentation (Mills, Knezek & Wakefield, 2013).

Though there may be more factors such as personality traits and searchers with accessibility needs, which is beyond the scope of this study. A 2010- 2011 study of 364 college students in Iran explores the relationship between personality traits and information seeking behavior (Mokhtari, Davarpanah, Dayyani, Ahanchian, 2013). The study provides insight into human-computer interaction and personalization applications which may lead to developments in artificial intelligence technologies. The students were asked to complete the “need for cognition” (NFC) scale personality test and information seeking behavior survey (Mokhtari, Davarpanah, Dayyani, Ahanchian, 2013).

There is a need for further research to understand how technology and a variety of other variables influence information seeking behavior. The webinar, a *Generation Apart* (Rosenhan & Kemsley, 2017, 30:33) covers a study where five researcher profiles “emerged from the research/observation studies.” The five profiles include: guided researcher (i.e., high school, first-year college); the assignment researcher (specific purpose and moves on); domain learner (commit to research in a specific discipline); aspiring scholar (doctoral student, new faculty); and established scholar (an expert in field). Assigning personas to the types of researchers will help in identifying the right products and instructional approach.

Chapter 3

Theoretical Framework and Methodology

The constructivist worldview is the theoretical framework for this qualitative study. The goal of the study is to learn about the information seeking behavior of college students and the constructivist worldview applies when the researcher gains insights about the behaviors of the participants of the study (Creswell, 2018). The research will employ qualitative research

techniques of observation and semi-structured open ended questions (RWJF, 2008). The study will take place during the 2018-2019 academic year beginning with the 2018 fall semester.

Research Design

The case study design is an effective design for the researcher to gather information from multiple subjects (cases) to understand more about the phenomenon (Swanborn, 2010) of human computer interaction and the information seeking behavior of the subjects. As Swanborn (2010) defines case studies to contain multiple sources of information as this study will involve several data sources of observation and interview data.

Population and Sample

Researchers will recruit participants in the study via physical and electronic flyers (see Appendix A) and sign up form via iPad (see Appendix B) in the library or through the form on the library website. This method of contact is appropriate because the college does not allow mass emails to students. As to not limit the study to only library users, there is an agreement to advertise the call for participants on the institution's LMS, Blackboard as well as to ask professors to share the information with their students. The purpose is to have students in their "natural environment" researching for a specific assignment (Creswell, 2018). Undergraduate students comprise most of the college's student population than graduate students, but there is a distribution of nursing, criminal justice, and business majors at different stages of their academic career from first-year to graduating students. Onsite students will be the population of the study, future consideration or studies should include online students.

Researcher's Position

The researcher is participating in the study as an active recruiter of participants and observer of the student's searching behavior and interviewing the participants. It is natural for

the librarian as the researcher to want to help the student while searching but for the study, the librarian will set up another appointment or agree to help the student after the session. The librarian will partner with another colleague to record the interaction.

Procedures

Once the participant and researcher agree on a mutually convenient time, the student will arrive at the session with the requirements of an assignment or an information need. The student will then sign the consent form agreeing to participate in the study and to agree to a screen capture of the search process and to record the interview about the student's search experience. The interview questions will be the same, though may differ based on the assignment and the student's search process. The interviews and research session will take place in a private study room with a desktop computer. The student is also welcome to bring their device with screen recording software as the study is aiming to observe the participant in their natural environment.

The researcher will ask the participant to present the assignment or the topic of the search. The researcher will provide a blank paper to the participant to write any notes during the search; then the researcher will ask the participant to proceed with the search as they usually would. The researcher observes the student selecting and searching resources. The researcher will not put time limits on the participant, but the person recording the session will record time spent on websites and library databases as well as the use of certain search terms. The search will end when the participant stops and is satisfied with the search results or needs help. The semi-structured open-ended questions (see Appendix C) will help the researcher understand the participant's information seeking behavior and research needs.

The decision to collect data this way as this replicates the most natural environment of the participant. To provide a specific topic to search for the participants or even a focus group,

the researcher may not get an accurate picture of the participant's behavior. Following each session, the researchers will analyze the screen recording, and the participant's notes and comments will go through a process of open coding to find themes in the data.

The study will continue until there is a good representative sample or cross-section of the population, and when the researchers derive conclusions and recommendations. The projected completion time of the study is the end of the 2019 summer semester. The researchers will share the results system-wide with the college, and the research may provide the basis for further studies to provide actionable data.

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Appendix A

The sample flyer created using a free template from Canva.com.



Appendix B

Below is the initial response form students will complete to participate in the study. The form is created using Google Forms.

The image shows a Google Form titled "Library Study Volunteer Form". At the top, there are two tabs: "QUESTIONS" and "RESPONSES". The "QUESTIONS" tab is active. The form has a blue header with the title "Contact information". Below the header, the form title "Library Study Volunteer Form" is displayed. The form contains several questions:

- Name ***: A short answer text field.
- Email and Phone Number ***: A short answer text field.
- Academic Major and Year of Graduation ***: A long answer text field.
- Availability for study? ***: A multiple choice question with two options: "Mondays" and "Other...".
- Do you need to complete a research assignment?**: A short answer text field.

Appendix C

Questions to participant following search exercise. Some questions may not be relevant depending on the search exercise (i.e., if participant stops searching and asks for help).

1. Why did you select the first source to start your search?
2. If participant took notes: Why did you take notes while searching?
3. Did you find what you are looking for?
4. Do you think you have all the resources you need to complete your assignment?
5. Do you need assistance locating more or different resources?