
Information seeking behavior (ISB) has been a popular topic to study for researchers in the information field over the years. College students, who are often referred to as millennials, are one of the most studied information user groups. Their academic needs, social life and knowledge of technology have granted them different worldviews and information seeking habits. This study investigates the information seeking behaviors of first-year undergraduate students at UNC in terms of finding orienting information to better adjust to college life.

13 undergraduate students currently enrolled at UNC were interviewed in the study. The participants were asked a series of questions about their first-year experiences at UNC. Results indicate some common patterns among freshmen information seeking behaviors, which may then inform the university to provide better information access for future students.

Headings:

Information-seeking behavior

Information resources

Information needs

Access to information
HOW DO FRESHMEN FIND INFORMATION ORIENTING THEMSELVES IN THEIR FIRST YEAR OF COLLEGE? AN INVESTIGATION OF THE INFORMATION SEEKING BEHAVIORS OF FIRST-YEAR UNDERGRADUATE STUDENTS

by

Yuwei Qian

A Master’s paper submitted to the faculty of the School of Information and Library Science of the University of North Carolina at Chapel Hill in partial fulfillment of the requirements for the degree of Master of Science in Information Science.

Chapel Hill, North Carolina

April 2019

Approved by

_______________________________________
Dr. Ronald Bergquist
Table of Contents

1 Introduction ................................................................................................................. 2

2 Literature Review ........................................................................................................ 4
  2.1 Introduction ............................................................................................................. 4
  2.2 Academic Information Seeking Behaviors ............................................................ 4
  2.3 Non-Academic Information Seeking Behaviors ...................................................... 6
  2.4 Information Seeking Behaviors of College Students .............................................. 8
  2.5 Role of Technology in Students’ Information Seeking Behaviors ......................... 10
  2.6 Student Adaptation to College ............................................................................. 12

3 Methodology .............................................................................................................. 14
  3.1 Introduction ......................................................................................................... 14
  3.2 Subjects ............................................................................................................. 14
  3.3 Interviews ......................................................................................................... 16
  3.4 Recruitment ...................................................................................................... 17
  3.5 Data Analysis ................................................................................................... 19

4 Results and Discussion ............................................................................................ 20
  4.1 Backgrounds ...................................................................................................... 20
  4.2 Information Needs ............................................................................................. 21
  4.3 Difficulty Adjusting to College .......................................................................... 24
  4.4 Information Seeking Experiences ..................................................................... 28
  4.5 Use of Technology .......................................................................................... 30
  4.6 Source Selection ............................................................................................. 32
  4.7 Improvement .................................................................................................... 33
     4.7.1 Things that are hardest to access ............................................................... 33
     4.7.2 Suggestions ............................................................................................. 36

5 Conclusion ............................................................................................................... 39

References ................................................................................................................. 41

Appendices .................................................................................................................. 48
  Appendix A: Consent Form ..................................................................................... 48
  Appendix B: Interview Guide .................................................................................. 52
  Appendix C: Recruitment Email ............................................................................... 54
  Appendix D: Recruitment Flyer ............................................................................... 55
1 Introduction

Information seeking behavior is an essential topic in the field of information and library science. People’s information seeking behaviors differ in different contexts, settings, situations and from individual to individual. Researchers study people from different ages, backgrounds, occupations, social classes, fields of study, etc. and investigate their information behaviors. Many conceptual models have been developed. While professionals’ information seeking behaviors on academic topics show certain similar trends, concepts like “information grounds” and “the third place” also indicate how everyday life information is commonly sought in a social setting.

Among all the information users, college students are getting more and more attention from scholars conducting researches on information seeking behaviors, due to their unique standing in life. College students are generally young and constantly exploring new information to improve themselves both socially and academically. Over the years, researchers have been studying college students’ information behaviors, in both academic and non-academic settings. However, few or none have focused on the information that helps students navigate and set up their new life in college. For first-year college students, starting a new life in college could be difficult, as it’s a completely different experience from their high school life. Are they able to locate resources to help them find the information they want, as new students? Where do they look when they need information to navigate and adjust to college life? What is their perception of the
effectiveness of these resources? Our study intends to answer these questions by interviewing current freshmen at UNC and analyzing results collected from the interviews. This will potentially aid the university’s attempt to better identify the ways to help freshmen adjust to college and provide them with information that matches their needs and information seeking behaviors.
2 Literature Review

2.1 Introduction

The literature related to Information Seeking Behaviors covers a huge number of articles and various aspects of the field. This literature review section divides the literature into five thematic areas including general information seeking behaviors that are focused on either academic or non-academic information, college students’ information behaviors, how technology plays a role in people’s information seeking process and lastly students’ adjustment to college. Among these related topics, more focus will be put on college students’ information seeking behaviors, for they belong to the subject group that is studied in this study, as well as with the literature discussing how students adjust to college in their first year. Given that being new to college differentiates freshmen from students of other school years, stressing the first-year setting is important in this study.

2.2 Academic Information Seeking Behaviors

Information seeking behavior (ISB) has been a popular topic among information science studies in recent years. Among the literature discussing this topic, various ideas have been explored and certain numbers of models are built by researchers in order to
understand ISB in a better way. The literature in this section covers a broad scope of information seeking behaviors in an academic setting, whatever the target group is. It concludes a general idea of the existing literature and theories about ISB, and explains the way that this topic has been studied and developed over the years, different results generated from the studies of various focuses.

Jia Tina Du and Nina Evans (2011) identify the task characteristics of academic information search, which are explorative (Gary Marchionini, 2006), uncertain, multifaceted, logical, variable and success. They also examine the search techniques academic users tend to adopt. For example, interaction with multiple search systems and exploration using popular search engines (e.g. Google).

Among the literature focused on academic settings, one of the studies conducted by Cheryl Dee and Ellen E. Stanley (2005) investigates nursing professionals’ information source selection. They point out the results differ from study to study, which then implies the development of information technology may have been changing professionals’ preference and selection toward information sources, for example, print sources versus electronic sources. The trend that many researchers choose nurses, doctors or medical students as their subject group also indicates that health professionals have been a very popular user group to be studied.

Xi Niu. et al. (2010) conduct a web-based survey designed to study the information behaviors of the academic researchers in natural science, engineering, and medical science from five research universities in the United States. One significant finding shows that university researchers, mostly graduate students, largely rely on and utilize electronic resources and methods to search for scholarly content. Online databases
and systems have been heavily adopted by graduate students for scholarly communication.

Today’s university undergraduate students are getting more and more involved in their academic fields and researches, which thus makes them an ideal subject group for academic information behaviors studies. Lillian Rozaklis (2012) uses surveys and focus group interviews to understand undergraduate students’ information behaviors. Similar to the results from previously-mentioned researches, the utilization of online information resources is significant among undergraduate students in their academic information searching. However, the study also shows that most of the subjects still seek to use print books in their academic information seeking process.

2.3 Non-Academic Information Seeking Behaviors

Apart from academic information seeking, many studies are focused on non-academic information behaviors. Denise E. Agosto and Sandra Hughes-Hassell (2005) choose to study urban youth aging 14 through 17 and their results show that human sources are the preferred everyday life information source of urban youth, and social life is one of the most important parts of their Everyday life Information Seeking (ELIS). Although this age range is a little younger than the target group of this study - freshmen who usually age 18 to 20, the social life part should be in accordance between these two groups, which is a useful reference for this study.

Another very interesting study is conducted by Elfreda A. Chatman (1991). Chatman chooses to look at a special group of people, Janitors’ ELIS, which is a very
unique perspective, despite the possibility pointed out by many critics that some part of the study makes some of the ideas less compelling.

Karen E. Fisher, Carol F. Landry and Charles Naumer (2007) decide to take a deep look at college students’ information behaviors. Understanding social spaces, casual interactions and how meaningful exchanges happen around campus is helpful as college is one of the places where social interactions take place very often and naturally. For college students, a lot of information exchange happens in the school on campus as students interact with each other. The concept of “information ground” is worth thinking, and it indicates people's everyday life information behaviors mainly rely on social spaces and personal interactions with other people.

Source selection is one of the most common and most important topics discussed among studies on Information Seeking Behaviors. The study initiated by Heidi Julien and David Michels (2000) proves that most people seek personal sources such as friends or relatives when there is a problem in their life not related to school, whereas for school related problems, they tend to rely on print sources, followed by electronic sources. It is also worth noting that for personal information seeking, people chose human interaction as their sources partly because it is motivated by social goals.

Pamela J. McKenzie (2003) traces back in the history of ISB research and points out the models constructed by researchers in different stages of the study of this field, especially the difference between active information seeking and non-direct monitoring or interaction by proxy. One of the most significant research frameworks reviewed is the one proposed by Reijo Savolainen (1995). Way of Life and Master of Life are introduced as very important concepts in non-work information seeking.
One important part of everyday life information is health information. Sally Wyatt, Flis Henwood, Angie Hart and Julie Smith (2005) examine the health information seeking behaviors of an under-studied group of mid-aged internet users. Although the study results are not significant, the choice of health information as the focus of the study marks an era where people of different ages have increasing needs and improving access to health information on the Internet.

2.4 Information Seeking Behaviors of College Students

This section is one of the main themes in the literature review as it puts college students, who, over the years, have become a popular experiment subject group in information behavior study, under the spotlight. College students, though varying in majors, school years, academic specialties and country of origins makes it hard to study them in the best comprehensive way as a whole, share some common characteristics and preferences when it comes to information seeking. It is helpful to understand how researches in the past have studied college students’ ISB and compare some of the impactful results of the observation and experiments and use them as a reference in this study.

Stacy Brinkman, Katie Gibson, and Jenny Presnell (2013, April) introduce some of the common problems college students are facing, such as financial issues, relationships with their family and support from their universities. While facing these challenges, their study skills and information seeking skills may not necessarily lead to successful information searching experiences.
Elizabeth Hartmann (2001) stresses the college students’ literacy skills in information seeking in college. While college students possess a certain level of literacy skills that help with their study and information seeking, it is made obvious that universities should still put efforts into assisting students in establishing research processes and strategies.

Tracy Gabridge, Millicent Gaskell and Amy Stout (2008) compare information tasks, goals, methods and efficiency in college students’ information seeking process. A lot of the results indicate that graduate students tend to focus more on their research and the depth of a topic. Moreover, they tend to be more detail-oriented, more persistent to long-term information seeking than their undergraduate counterpart.

To conclude different aspects of students’ information seeking behaviors studied by researchers, in the previous section of the literature review, the information sources have been discussed in a few of the studies. Following that, Soo Young Rieh. (2007) reports a rather different result on students’ selection of sources and media during information seeking. A large percent of online resources is used for personal information needs, academic as well as entertainment information. One interesting finding is that search engines are only used more than general websites in academic information seeking for college students.

Having adopted a different approach at information sources. Diane H. Sonnenwald, Barbara M. Wildemuth and Gary L. Harmon (2001) propose the concept of Information Horizon, which represents a person’s information seeking map and source choosing process in a certain context or situation. The technique is considered in this study as well.
Another important aspect to be discussed is credibility judgements of the information, which is crucial in determining specific information sources. Soo Young Rieh and Brian Hilligoss (2008) examine young people’s especially college students’ credibility judgements in their information seeking strategies. Their study also leans towards the evaluation of the information in the process of ELIS.

Although many researches separately look at academic and non-academic information seeking, including this study, a certain level of overlaps is also worth mentioning. Lisa M. Given (2002) investigates the overlap in mature undergraduates' academic and everyday information seeking behaviors. The study points out there is an overlap between academic and everyday life information seeking. This is due to the special character of college students, for many parts of their life are closely connected to the school and coursework. It may be reasonable to always look at both aspects in this study as well.

2.5 Role of Technology in Students’ Information Seeking Behaviors

It is noticeable that while reviewing the related literature, there have been certain numbers of articles specifically looking at how technology plays an important role in people’s information seeking behaviors, whether it’s for academic or non-academic information seeking. It is specially so for college students as they are proven to be heavy users of the Internet and today’s information technologies. Some articles label college students with different names to represent their familiarity with technology, such as Digital Natives, which makes the impact of the technology even more of an interesting trend to study in the field of information seeking behavior study.
Steve Jones (2002)’s book reflects on college students’ adoption of the Internet based on the findings of the study, compared with the general population. Growing up with computers and other technologies, use of the Internet is integrated into their daily communication habits. The Internet has also changed their education and social life, according to the students.

The use of the Internet primarily in non-work contexts is discussed by Reijo Savolainen (2000, June). Requirements of work or study, easiness to navigate everyday life, and social connections are recognized as important motivations for people to use the Internet.

The nature of the online information raises doubts about its credibility. Thus, it is important to understand how web users verify the credibility of the information provided online. Miriam J. Metzger, Andrew J. Flanagin and Lara Zwarun (2003)’s study shows that students only verify online information rarely or occasionally. However, students show willingness to expend their effort to verify Web-based information.

The health information seeking has been discussed previously in the literature review. With the development of the technology, using the Internet to retrieve health information is getting more and more common nowadays. Cam Escoffery et al. (2005) discover that most of the college students prefer to get health related information online. One of the concerns raised by students is the credibility. Different from the general information in the study of Miriam J. Metzger, et al. (2003), students do consider about the credibility of health information.

News media is also one significant product of today’s technology and network that is worth discussing. Kirsty Williamson et al. (2012) investigate university students’
use of online and print news media. The findings indicate that students’ purposeful information seeking is more likely to occur online, but both print and digital news media still play an incidental role in providing information to students in their everyday lives.

### 2.6 Student Adaptation to College

How college students adapt themselves to college is an important theme for this study because the primary population of this study is university freshmen, who are assumed to be undergoing a process of adjustment in their first year of college. Though most of the articles under this theme are heavily focused on the psychological side of the adjustment and are mainly looking into their mental wellbeing, the literature could still be worth reading as to some extent their mental health can be something that affects their information needs.

One of the articles mentioned in a previous section, written by Brinkman, S., Gibson, K., & Presnell, J. (2013, April), reveals that most of the college students are struggling with adjusting to college, depending on their backgrounds and study skills. This points out the need to review some literature focused on students’ adaption to college, which does not necessarily have to be connected to their information seeking behaviors.

Shelley Blundell and Frank Lambert (2014) measure how the anxiety elements of second-semester freshmen impact students’ information literacy skills and research abilities and compares the differences among different genders, races and whether or not the students have experience with libraries and the Internet.
Rafael García-Ros et al. (2018) study first-year engineering students at a public school in Spain and the result shows that motivation and social interaction learning strategies both have direct effects on first-year university experiences.

Enes Rahat and Tahsin İlhan (2016) investigate how well coping styles, social support, relational self-construal, and resilience characteristics predict first year university students' ability to adjust to university life. The findings indicate that resilience characteristics have the greatest contribution to predicting at-risk students' overall adjustment in university.

Mücahit dilekmen (2007) designed a 3-week orientation program for first-year students that exposes students to the academic, social and cultural environment at the university. Although the results are not significant, it is suggested that the application of a better and professionally designed orientation program be considered.
3 Methodology

3.1 Introduction

This research aims to study first-year college students’ behaviors in seeking orienting information in a new college environment which they are assumed to be not familiar with in the beginning of the first few semesters. Students’ experiences and opinions are of great essence for the study and a comprehensive understanding of their information seeking behaviors and their feedback is to be constructed. Thus, a qualitative as opposed to quantitative research method is used in this study. This is appropriate as it helps the investigator understand better the personal experiences and behaviors of students, which is helpful in terms of getting more in-depth and more accurate results for the study. Semi-structured interviews are conducted to gather the above stated data needed in the study.

3.2 Subjects

First-year undergraduate students at UNC who are not familiar with the university and Chapel Hill area were identified as target subjects for this research, though some second-year and third-year students were also chosen later in the study. The decision to choose only UNC students was primarily based on the accessibility and convenience. The
interaction with the subjects mostly happened on campus. It reduced the cost and the need for travelling and choosing an ideal location for each of the subject, which also saved time. Knowing that the interview can be done on campus during the day between their classes might have made it easier for students to agree to participate in the study. There are possibilities in the future for researchers to generalize it to students in other universities around U.S.

The study targets freshmen, as very few of them have experienced a university environment, except for those who have already earned an associate degree, which leads to difficulties for their information seeking. First-year graduate students were excluded as they are believed to either have experienced such a transition process to a university setting or be able to quickly adapt themselves to this environment with similar previous experiences. For example, some graduate students may have also had their freshman year in a place that was far from home and was very different from their high school environment. Such experiences make them unqualified for this study, as the study seeks to understand what students think and act in an absolutely unfamiliar university setting.

The unfamiliarity with Chapel Hill and surrounding area was also included as part of the requirement of their experience in their first year at UNC. The reason is that students growing up or having lived here in Chapel Hill are familiar with the life here to some extent, which makes their need for looking for navigating information at UNC different and not as significant as those who are new to both the university and the city, even though they are also starting their very first year here. Although some local students were interviewed in this study, our effort to exclude local students was based on the
thought that it might help mitigate the bias brought by previous living experience that this
group of students might have had.

3.3 Interviews

Semi-structured one-on-one in-person interviews were conducted with freshman
students for this research. One-on-on in-person interviews proved to improve the
communication with participants. It was also made easy to observe their feelings while
talking, confirm and better understand what they try to express, and in the meantime,
reduce the level of distraction, which could be caused by other participants if it was in a
focus group, to the lowest level. All 14 interviews were conducted in a closed study room
in the library on campus. The study room setting helped minimize the distraction by
providing a closed and private environment for students to feel comfortable sharing about
their personal experiences.

An interview guide was developed based on several themes identified throughout
the literature review. The interview guide was intended to guide the investigator through
the interview process with all topics being covered, while potentially leading to follow-up
interview questions in the actual interaction with the participants. The pre-written
questions provide the interviewer and participants with a certain format and help direct
their responses. It also allows room for more detailed explanation behind their answers.
The interviewer has the option to go above the script based on different situations they
are at and ask follow-up questions that they perceive as helpful in understanding what
participants are saying. Participants were given enough time and space to elaborate as well.

The interview guide was pre-tested with one faculty member at School of Information and Library Science (SILS) at UNC, who specializes in the information seeking behaviors study. During the pre-testing, some problems arose. Some questions were not helpful in getting meaningful or interpretable responses. It is also obvious that in an actual interview, it is difficult for a participant to recall many of their experiences, even if they are recent experiences. It was suggested that the interviewer provide more guidance in helping the participants recall the events in their first year. The authority and the professional perspective of the testing subject provided the investigator a better insight to improve the interview questions, structure and style. They helped add to the script important elements neglected in the research design.

3.4 Recruitment

In order to reach out to participants, the primary approach was to get in touch with undergraduate admissions and student organizations on campus. A detailed list of the organizations contacted includes Academic Advising Office, Undergraduate Admissions, Carolina Union, Campus Y and Office of Fraternity & Sorority Life. The communication was mainly through email, where the goals of the study were explained in detail. However, this method turned out to be unsuccessful, as most of the organizations did not reply or replied late. Some expressed unwillingness to support individual studies as an organization.
The second approach to recruit students was then adopted. The investigator designed a flyer for the study and physically posted the copies on the information display boards in the libraries and department buildings on campus. The print products like this have more visual impact and may produce higher probability for students to notice on the hallway of a building. A paragraph describing the study, the confidentiality, the incentives provided and how to participate were all included in the flyer. Students interested participate were encouraged to contact the investigator through email which was also provided.

After a student reached out to the investigator expressing their interest in being a participant, an email or a text message was sent to them to explain more details about the study. They were also offered the options to decide not to participate at any time before or during the interview. Interview times were arranged with each of the students who agreed to become participants through either email or text messages. The interviews were conducted in a rather closed space on campus such as a study room, in order to protect privacy and to make the students feel less nervous. Audio recording was applied with participants’ consents. They were asked to read and sign a form of consent before the interviews. Questions were asked according to but not limited to the ones on the interview guide. Notes were taken when perceived as necessary.

During the recruitment process, a few other recruiting methods were also used under various circumstances, including in-person interaction and snowballing. Among all the 13 participants, 3 were asked in person, 5 were recruited through snowballing and the rest 5 were through the flyers. Recruiting students was one of the hardest parts of the
study, but the snowball approach turned out to be very helpful especially approaching the end of the recruitment.

3.5 Data Analysis

The original plan for data analysis was to make full interview transcriptions for all the valid interviews. However, due to the limited time given to this part, the strategy for data analysis changed accordingly. Based on the notes taken during the interviews, key responses were gathered and common experiences of the students were analyzed. When needed, keywords and original sentences were taken out from the recordings for analysis. Certain transcription software and tools were considered to either help manipulate data or to visualize the results. Thematic analysis was conducted with the interviews, which enabled the investigator to examine the meanings behind students’ responses, understand and identify their significance by looking for important themes. Thematic analysis is all about identifying similar patterns and themes within the collected data. This process continues as part of the sense making of the data. If one topic gets mentioned a few times by participants in the interviews, it should be identified as a theme. This is a reasonable approach to understand the data for this study especially because in qualitative analysis the significance is not as easy to identify as in quantitative study, and it oftentimes depends on how much the data speaks in various ways.
4 Results and Discussion

4.1 Backgrounds

The population of the students that participated in this study consists of 8 freshmen, 2 sophomores and 3 juniors. All of the 13 participants are female. In terms of the the locations from which they came to Chapel Hill, 10 students are from North Carolina, 4 of whom are from Raleigh/Durham/Chapel Hill/Cary areas that are within one hour of driving distance. The other 3 participants are out-of-state students, including one international student. Only 1 participant described herself as very familiar with the Chapel Hill area before coming to the university, whereas most participants had never come to the area other than for the purpose of campus tours.

Two of the participants have an associate degree at a different university, so they are rather familiar with a university setting than the other participants. However, as they stated, the years they spent at the previous places were nowhere close to what UNC has. The classes here at UNC are harder and the campus is a lot larger. For this reason, their responses have still been accepted for this study.

Transportation while studying at UNC was asked as a background question to better understand students’ experiences in the personal experiences section. All of the participants reported that they did not have a car in their first year. One said “Freshmen are not allowed to have a car”. The main transportation they used was the bus system.
Many also walked to school or to the places nearby. Some said they would take a ride with friends or upper-class students to go to somewhere further, like Durham.

The majors of the participants vary. They range from Psychology, Chemistry, Creative Writing to Nursing, Pre-Med, etc. However, some of the participants explained that they had to switch major multiple times due to certain reasons. It will be discussed in a later part of the discussions section.

12 out of 13 participants think they are active or fairly active on campus and in student organizations. Many listed the organizations and clubs they are in, most of which are closely related to their majors, interests or backgrounds. For example, participant #5 said that she joined many clubs and volunteer groups to help people in need. Participant #4 and #8 are both in Christian Organizations, while #11 and #13 belong to the psychology club and the consulting club respectively, which are directly related to what they are studying.

4.2 Information Needs

The participants were asked a series of questions about their personal experiences during their first year, following the background questions. For the very first question, they were asked what they had researched about college life before their arrival at UNC, and the second question was about their information needs and how they went about finding what they need immediately after the arrival. This was designed to understand freshmen information needs before and after coming to UNC.
<table>
<thead>
<tr>
<th>Information Need</th>
<th>Sources Used</th>
<th>Pre-arrival</th>
<th>Post-arrival</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Information about UNC and Chapel Hill</td>
<td>Google, Forums</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Academic Information (Majors, Courses, Professors)</td>
<td>Rate My Professors, Carolina Go, Academic Advising</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Direction and Transportation</td>
<td>Rider App, Next Bus App, UNC Maps, Resident Assistant (RA)</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Clubs, Events and What to do Around Campus</td>
<td>Heel Life, Brochure, Talk to People on Campus</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Everyday Life Needs (Housing, Dining)</td>
<td>Facebook Groups, Blogs, UNC Websites</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>General College Advice and What to Expect</td>
<td>Friends and Family, Upper Class, High School College Prep, YouTube, Instagram, Facebook</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Financial Information</td>
<td>UNC Websites, Banks</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Health Information</td>
<td>Resident Assistant (RA)</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

According to Table 1, there are some significant differences between students’ pre-arrival and post-arrival information needs. At least 6 participants sought for information about what to expect in college and general advice from people who have experienced it. Since this is something that need to be experienced, their primary sources are mostly social media or people they know, like friends and family. Many participants also mentioned they looked for what to do around campus and things like housing and dining. An interesting finding here is that Facebook Groups appeared multiple times in different interviews. They turn out to be a common place for college students especially freshmen to find housing information and even roommates. Many find Facebook Groups more useful than UNC Housing website.
It is worth noting that the needs for many types of the information tend to decline after students have arrived at the university. However, the need for direction and transportation increases greatly. At least 8 participants expressed their need to find where classes were when they first arrived at UNC, but found it confusing to navigate on campus. In terms of the information sources participants used, Resident Assistant was mentioned a few times, who would take freshmen’s printed class schedules and show them around different buildings where the classes would take place. Some participants found this very useful but not all the participants had the knowledge of that, and thus, most of them used maps for navigation and familiarized themselves by simply walking around campus.

Although only by a small amount, the needs for health information and financial information also seem to increase after freshmen’s arrival at UNC. Participant #1 said she “didn’t care” before coming to UNC but realized the need to apply for funding once settled down. Participant #7 experienced stress when she first started her first year and was in need of helpful information on mental health. Information like this is not generally needed by everyone but can be useful for all the university students. Our findings prove that students will start to realize their information needs when they experience specific situations on campus. It is important for the university to make such information always available to students.
4.3 Difficulty Adjusting to College

As discussed in the literature review, due to the change of the environment, freshmen who come to study in the university right after high school, will most likely experience some level of difficulty to adjust. In this study, participants were asked to recall some of the difficulty they had trying to adapt themselves to college life. Various answers were provided.

- Academic Problems

Academic problems are proven to be the most common obstacle in freshmen’s adjustment to college. Four of the participants (#4, #6, #7, #13) expressed their frustration related to their academic development during their first year.

Participant #4, #6 and #7 were all frustrated as the university level classes were harder than they anticipated. They either stressed over the first exam in college (#4), enjoyed the in-depth classes but struggled at the same time (#7), or “did poorly” in the first semester and had to “change major four times” (#6).

Participant #13 had a different problem, where only after going to the class, she found out that the class she signed up for was not at all the same as described in the course description.

In order to improve their academic performance, participant #6 and #7 both turned to online resources for help. They utilized Google and blogs to read about how to study better and some study tips. Participant #4 and #13 preferred to seek help from
people. They turned to Teaching Assistants (TA), peer, Academic Advising Office, etc. to make sure they were on a right path to succeed in what they studied.

• Health Problems and Sickness

One of the significant findings here is that three of the participants (#3, #11, #12) reported to have experienced major health problems in their first year.

Participant #3 experienced chronic health issues to the point that they affected her class attendance, whereas participant #11 had mental health issues which lead to depression. They both referred CAPS (Counseling and Psychological Services) as the primary health information source they turned to for help, but neither of them was satisfied with the help they received. People at the CAPS “provide same treatment for everyone”, repeat what the patient has already told them, and only “read to you stuff off the book”, according to Participant #11. She ended up seeking diagnosis from her therapist off campus, which was way more effective.

• General Lifestyle

Two participants (#2 and #10) elaborated their difficulty in adjusting to a different lifestyle where they could not come home to parents anymore and they had to deal with everything on their own. This is one of the problems commonly anticipated for freshmen. In high school, students have teachers to instruct them at school, the same group of classmates to discuss homework, and parents to help with anything at home. They do not have to do everything by themselves and always have people to talk to. However, in college, they live with one or more other students at the dorm, who they
may not know at all. Professors in college are not available all the time and most of the time, students are expected to find ways to solve problems by themselves. Such changes in lifestyle certainly cause trouble for some freshmen.

Participant #2 described herself as a very homey person and participant #3 explained how she was raised as an only child back home. Both of them showed tendency to depend heavily on their parents. Despite the fact that they liked their roommates, they did not feel comfortable living with strangers in the beginning, and it took some effort for them to resolve the difference between them and their roommates.

When asked what methods were taken to improve their situations, both of the participants mentioned the effort they put in to getting used to their new life. Participant #2 took initiatives to talk to other people about her problems and tried hard to feel comfortable around people. She ended up befriending all her roommates. Participant #10 used Facebook Group, as mentioned before, to find roommates with traits that align with her expectation. Her approach turned out to be effective and she felt more comfortable after getting an ideal roommate.

- Time Management

Time management issue is mentioned by two participants (#5 and #8). According to the previous background section, both participants are in multiple student organizations and clubs, which could be partially the reason that they had trouble balancing their time. It is understandable that many undergraduate students, especially when they first come to the university, are interested in a lot of things, hoping to experience different aspects of college life. However, it takes some time management
skills to help them better balance their life. Participant #5 said it was hard for her to balance among “classes, clubs and friends”, and sometimes it cost her the opportunities to “hang out with friends”. Participant #8 decided that she ought to learn how to use her time, as she “overcommitted to a lot of student organizations”.

The two participants took very different approaches in fixing their problems. Participant #5 fully utilized the access to professional help at UNC. She consulted with her Resident Assistant (RA) and her RA worked closely with her to make a schedule that worked better. She also learned about Academic Advising through her RA and used drop-in hours to get more help. Participant #8, however, adopted some technology and online tools, such as Google Calendar to help herself plan time while cutting things out. Both professional help and technology were helpful in helping them improved the situations.

• Other: Trouble Getting Around / Political Issues

Although only one participant (#9) reflected on the difficulty in getting around without a car and a parking spot during her first year, it is possible that many other freshmen would agree to it. Participant #9 took some effective information seeking approaches, for example, through Facebook Groups and friends, to successfully find a parking spot.

Another problem reported by participant #1 is the fact that the political incidents that happened over the course of last year, made her feel unsafe about her campus life. She also expressed concerns about being involved in uncomfortable conversations about politics. The only thing she could do was to distance herself from relevant events.
### 4.4 Information Seeking Experiences

During the interviews, participants were asked to recall some examples of their information seeking experiences in their first year. They were encouraged to list any successful or unsuccessful experiences as they saw necessary. Most participants were able to provide the investigator with at least one example from their first year, although some juniors did have trouble remembering their detailed behaviors while looking for relevant information.

| Table 2: Freshmen’s Successful VS Unsuccessful Information Seeking Experiences |
|--------------------------------|---------------------------------|-----------------|-----------------|
| **Specific Area** | **Sources** | **Successful Experiences** | **Unsuccessful Experiences** |
| Academic Information | Course Requirement | UNC Catalogs, School Listserv | ConnectCarolina |
| | Class Schedule | Carolina Go | |
| | Program Information | No Information | No Information |
| | Classes outside UNC | Google Scholar, Library System | Academic Journals Databases |
| | Study Materials | | |
| | Study Abroad | UNC Website | |
| | Majors, Minors | Academic Advising, Department pamphlet | |
| Non-Academic Information | Sports | Friend Recommendation | |
| | Clubs, Student Organizations | Fall Fest | |
| | Transportation | Rider App, Next Bus App | Rider App |
| | Part-time Jobs | Friend Recommendation, Facebook Groups | On-Campus Job List |
| | Careers | | Career Services |
| Serendipitous Information | Space to Study | Walk By | |
| | Place to Jog | Friend Recommendation | |
| | Dining | Friend Recommendation, UNC Website | |
| | Makerspace | Makeathon | |
Table 2 concludes the examples supplied by the participants, along with the sources they used seeking the information they needed. Most of the feedback is focused in academic information, which is crucial and most relevant to students’ goals in their college life, although not all the feedback is positive. At least 2-3 participants have trouble navigating ConnectCaroline, which is the main course registration system at UNC. Due to that, many students seemed to seek course related information on other platforms, such as Carolina Go app and UNC Catalogs, which were more helpful. Participants were able to find many different types of academic information rather easily, for example, research materials through UNC Libraries, and information about Study Abroad or taking a minor. There are also certain kinds of information that students couldn’t find any relevant information. One participant has been taking summer classes outside UNC, but she failed to find any information provided by UNC.

Participants have shown to have both negative and positive experiences seeking non-academic information. More than three participants told the investigator that they found Fall Fest extremely helpful in presenting students with all the information about the student organizations and clubs that they could join. According to the students, Fall Fest is hosted by UNC at the beginning of the Fall semesters and all freshmen are required to attend. Hosting campus wide events like this proves to be a good way to provide new students with information access that they might not have thought about looking for.

Information about transportation and direction is discussed in previous findings and it is quite necessary for freshmen to find information to help them get around without a car. Participants in this study showed mixed feelings and opinions about some of the
common apps to check bus schedules. A phone app is considered convenient but the accuracy of the bus schedules is the primary factor that determines whether students like it or not.

Serendipitous Information also appeared in some of the interviews. While students do not tend to actively seek such information, recommendations from friends contribute quite a lot to the finding of such information. That makes it a great source for useful information as well.

4.5 Use of Technology

Participants answered a few questions about their use of technology. First, they were asked whether they used their laptop more often than their cell phone when looking for information online, or the other way around. Results show that laptops were mentioned 10 times and cell phones were mentioned 7 times. This is not a very significant difference, but if the participants who has no preferences were eliminated from consideration, the results became 6 versus 3, where participants who prefer laptops are two times as many as ones that prefer using cell phones for information seeking.

According to the participants, the reasons they use laptops more often are mainly because “it’s easy to read” and “it’s easier to do research on my laptop”, whereas others choose to use their phones because “it’s good for quick information”, “phone’s easier on the go” and “it is just always in my hand”.

Table 3 lists participants’ preference of devices and what sources they utilize the most through technology. The uses of Google and UNC websites or resources are rather dominant. And Social Media like Facebook, as well as direction apps are used quite often too. Students’ preference to use Google for general information is in accordance with many previous studies. The good news for the university is that according to the results, students are using and are willing to use UNC provided resources, such as the library website, UNC Dining and Campus Recreation. However, feedback is received that not all the school websites are providing the information needed by the students, and it sometimes take them very long to retrieve the information they need. Sakai and

<table>
<thead>
<tr>
<th>Participant ID</th>
<th>Preference</th>
<th>Resources Used on the Device</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1</td>
<td>√</td>
<td>Message, Snapchat, FB, IG</td>
</tr>
<tr>
<td>#2</td>
<td>√</td>
<td>FB</td>
</tr>
<tr>
<td>#3</td>
<td>√</td>
<td>Google UNC Databases</td>
</tr>
<tr>
<td>#4</td>
<td>√</td>
<td>Google UNC Libraries</td>
</tr>
<tr>
<td>#5</td>
<td>√</td>
<td>Outlook Rider</td>
</tr>
<tr>
<td>#6</td>
<td>√</td>
<td>Google UNC Databases</td>
</tr>
<tr>
<td>#7</td>
<td>√</td>
<td>Google UNC Databases</td>
</tr>
<tr>
<td>#8</td>
<td>√</td>
<td>Google UNC Databases</td>
</tr>
<tr>
<td>#9</td>
<td>√</td>
<td>Google UNC Databases</td>
</tr>
<tr>
<td>#10</td>
<td>√</td>
<td>FB Google Outlook UNC Libraries</td>
</tr>
<tr>
<td>#11</td>
<td>√</td>
<td>Sakai, Trello</td>
</tr>
<tr>
<td>#12</td>
<td>√</td>
<td>UNC Dining, Campus Recreation</td>
</tr>
<tr>
<td>#13</td>
<td>√</td>
<td>Outlook UNC Websites Google Maps</td>
</tr>
</tbody>
</table>

Total 10 7 1 4 7 3 7 5
ConnectCarolina are two of the sources that received negative feedback from participants.

4.6 Source Selection

General source selection for orienting information on campus has been studied here. Participants were given the opportunity to choose one primary information source that they would turn to first most of the time, and to illustrate the reasons behind their choices.

<table>
<thead>
<tr>
<th>Information Sources</th>
<th>Number of times chosen</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology</td>
<td>8</td>
<td>61.5%</td>
</tr>
<tr>
<td>Friends or other Students</td>
<td>4</td>
<td>30.8%</td>
</tr>
<tr>
<td>Professionals or Organizations</td>
<td>1</td>
<td>7.7%</td>
</tr>
</tbody>
</table>

It is not surprising that 61.5% of the participants would turn to technology first for information related to their college life. As is discussed in the literature review section, today’s college students possess the ability to adopt new technology quickly and are used to interacting with screens all the time. When asked why they chose technology over human sources, participant #3 expressed that she preferred correct information posted in writing than people’s personal opinions. Participant #11 also said that she simply just did not trust people. Participant #5 has the concern that all her friends are also freshmen, so she doubts that they have the information she needs, whereas she can look up anything online. Most of the other participants think that it’s just easy and quick to access information with technology.
30.8% of the participants would still like to ask friends first if they needed information. Participant #2 thinks it’s easier to talk with people face to face. Participant #10 said she had trustworthy and diverse group of friends, so she had a basic idea of who might know what. Participant #7 had a rather unique perspective. She thinks asking friends for information is part of the social life in college.

Although only one participant expressed the preference to consult professionals first, during the follow-up questions, many participants told the investigator that they would seek help from professors or organizations in specific situations.

4.7 Improvement

4.7.1 Things that are hardest to access

Almost all the participants said yes to the question of whether or not the university needs to improve students’ access to more orienting information. They were then asked what information in general did they find the hardest to access in their first year. Their responses are as follow.

**Academic Information:**

Participant #1 – It’s hard for freshmen to find research opportunities.

Participant #2 – The hardest thing for me was how to make class schedule. They teach us step by step in high school. ConneceCarolina is just not user-friendly.

Participant #9 – What classes to take. Website is very confusing.
Participant #11 – No sample syllabus. No way to know if classes or professors are any good.
Participant #13 – Course descriptions are only a few lines of words. Not enough.

**Clubs & Student Organizations:**
Participant #3 – Navigating Heel Life website. I lost the chance to join clubs.
Participant #7 – Heel Life has no information for clubs to join. Registration process is too hard.

**Directions & Events:**
Participant #4 – What kind of transportation? What bus do I take? What’s out there fun but free? Best places to eat for broke college students?
Participant #6 – What actually goes on at school? Cannot find course syllabus.
Participant #10 – Events are not promoted by UNC. Did not know when the blood drives are.

**Everyday Life Needs:**
Participant #5 – Housing. Applied to stay together with my old roommate for the next year but got split up.
Participant #8 – Student loan. Had to go to a UNC website and then got directed to a federal website.
Participant #12 – Roommates.
The responses from the participants show that many of the problems of students’ information access occur in their academia. One thing worth noting is that one of the common complaints falls onto the course registration system. There is not enough information or instruction on registering classes, understanding what each class is about or simply what are some classes for freshmen to take, whether they have a major or not. One response also points out the lack of information about researching provided for freshmen.

Two of the participants reflected on the student life website Heel Life, which did not do a good job in providing students with potential club information for them to view and join, especially for students that missed Fall Fest. Future changes could be made to the website to better serve the freshmen and students of all years.

Directions and events information is proved to be needed by many students when they first come to UNC. However, even with all the maps, posters, brochures, apps available, many participants in this study still find it the hardest to access. There are two reasons that might cause this problem. First, the accuracy of the bus apps is not satisfactory at all time, which is the main reason why students have different opinions about same apps. Secondly, campus events are being promoted at different time of the semester, which could potentially lead to information overload. The result of that is students not getting the information they need the most.

For everyday life needs, one thing that gets talked about the most is housing. Participants are unsatisfied with UNC Housing portal and almost 100% of them turn to Facebook Groups for more useful housing information. The university should think of a way to boost the use of the portal by improving the accuracy of the housing information.
4.7.2 Suggestions

Blogs

One suggestion that would gain support from majority of the freshmen has come up during the interviews. Instead of having to join a Facebook group for each class, the university should consider developing a blog of some sort, where upper-class students can share their experiences and comments about the classes they have taken. Many participants complained about the lack of information on course content and sample syllabus. A blog or a website like this will provide students with syllabus from previous classes shared by past students. This would be designed more toward UNC students, compared to the generalized information on other common websites students would go to.

One-on-one Orientation Sessions

Since almost all the participants had problem with registration when they first started here, and they did not find school orientation helpful at all, there could be another way to improve freshmen’s experiences and their information access to registration information. Many participants reflected that too much information was thrown at them over the days of orientation, even if some of the information wasn’t of their immediate need at the beginning of the semester. It is suggested that the university consider hosting shorter but one-on-one orientation sessions, where incoming freshmen can sit down with an advisor, RA or simply someone who can explain how to register classes on ConnectCarolina. It might not be the easiest thing to achieve, considering the number of students accepted
into UNC every year. Methods like recruiting volunteers from junior or senior students would be a reasonable option.

**Easier access to counseling services**

Mental health information and the lack of access to such information has appeared in many parts of this study, and thus it should be seen as another category that is in urgent need of improving. As reported, the majority of the freshmen have not heard of CAPS, the counseling services provided by the campus health center at UNC. Even if some of the sophomore and junior participants acknowledge their knowledge of its existence, they have mostly heard about it from a friend who has also suffered mental health issues. Moreover, the services provided by CAPS are not at all satisfactory. Some students had to travel off campus to see a therapist instead. It is advised that counseling services at UNC be made more customized toward each student’s situation. Information like this should also be made available to freshmen over the course of their first semester here.

**Academic Advising More Available**

It is learned from the interviews with the participants that the Academic Advising services provided on campus has been helpful in providing academic information, especially for questions like course requirements, major and minor questions, etc. However, students seem to experience difficulty in actually getting the chance to sit with an advisor, as they are usually fully booked. If more appointments could be made available to students, the gap between their knowledge and the academic information
available on campus would be filled quickly, so that they wouldn’t be struggling as much trying to figure out how to register for classes and so on.
5 Conclusion

College students’ information seeking behaviors have been studied in various research institutions and universities. Nevertheless, few of them are entirely focused on freshmen orienting information needs while taking into consideration their difficulties in adjusting to college life. In this study, 13 undergraduate students currently enrolled at UNC were recruited for one-on-one interviews. Whether a freshman or not, their experiences and comments about their first-year information seeking process and information availability they perceived were documented.

Results show that direction and transportation information is needed the most when non-local students first arrive at the area. Most of the participants reported confusion about direction and where classes are the first few weeks of their first semester. Suggestions are made that directory on campus and signs of the buildings be made more visible.

During the time the participants were enrolled as freshmen, academic information and health information seemed to be the two most lacking types of information. Some students struggle to register for courses that are suitable for them, while some experience health issues with nowhere to find helpful information. These are two major areas the university should consider reflecting and improving on.

Despite the negative results, many of the university websites and resources are thought of as useful by freshmen. By viewing the results on freshmen’s source selection,
it is noticeable that Google, UNC websites (especially library website, dining and recreation sites), and social media are all popular sources. More than half of the participants prefer using technology for information searching over human sources. However, human interactions that provide useful information are preferred by students who value personal experience and social value in their information seeking process.

At the last part of the results and discussion, a few reasonable suggestions are made, after analyzing the results from the study. A blog or a website that contains all detailed course information provided by upper-class students who have taken the courses, is strongly recommended. Providing each freshman with a one-on-one orientation session that is entirely focused on course selection, registration and degree requirements could be more helpful to freshmen than a 3-day long orientation with overwhelming information that tends to be forgotten right after. Academic Advising has been told to be extremely useful for students, and thus should be more available to freshmen. Last but not least, students’ mental health is just as important as their academic performance. Something should be done to improve the counseling services on campus that’s available to students especially freshmen who experience stress trying to adjusting to college.

The suggestions made in this study will hopefully be of reference for the university to improve its information access and to assist freshmen better adjust to their new life here. To quote one of the participants from this study, “we are still kids and we need more attention”. One thing a university can always do, is to be more supportive, and let our freshmen know, that we are here for them.
References


Brinkman, S., Gibson, K., & Presnell, J. (2013, April). When the helicopters are silent: The information seeking strategies of first-generation college students. In presentation at the ACRL Conference, Indianapolis, IN, April (pp. 10-13).


Research proposal outlining the design of a qualitative study using semi-structured interviews. Podcast retrieved from:
https://learnenglish.britishcouncil.org/sites/podcasts/files/Writing_for_a_Purpose-Proposal-Structure-Proposal1_0.pdf


Appendices

Appendix A: Consent Form

University of North Carolina at Chapel Hill
Consent to Participate in a Research Study
Adult Participants

Consent Form Version Date: ______________
IRB Study # 18-3420
Title of Study: How do freshmen find information orienting themselves in their first year of college? An investigation of the information seeking behaviors of first-year undergraduate students

Principal Investigator: Yuwei Qian
Principal Investigator Department: School of Information and Library Science
Principal Investigator Phone number: (984) 215-7180
Principal Investigator Email Address: eveshyw@live.unc.edu
Faculty Advisor: Ronald Bergquist
Faculty Advisor Contact Information: (919) 962-8073

Concise Summary

The purpose of this study is to understand the first-year experience of freshmen at UNC in terms of their information seeking behaviors for navigating information. What is learned in this study may help the university to provide students with better resources and access to college related information in the future.

Participants in this study will each take part in a face-to-face interview where they will be asked a series of questions about their experience during their first school year at UNC. The questions will be mainly focused on how the participants look for information to navigate themselves when they first enter college which is an unfamiliar environment to freshmen. Each interview should last 45-60 minutes.
There is a risk of privacy in the study. However, participants can refuse to answer any questions or give out any details that they do not feel comfortable discussing.

If you are interested in learning more about this study, please continue reading below.

**What are some general things you should know about research studies?**
You are being asked to take part in a research study. To join the study is voluntary. You may choose not to participate, or you may withdraw your consent to be in the study, for any reason, without penalty.

Research studies are designed to obtain new knowledge. This new information may help people in the future. You may not receive any direct benefit from being in the research study. There also may be risks to being in research studies.

Details about this study are discussed below. It is important that you understand this information so that you can make an informed choice about being in this research study.

You will be given a copy of this consent form. You should ask the researchers named above, or staff members who may assist them, any questions you have about this study at any time.

**What is the purpose of this study?**
The purpose of this research study is to better understand the first-year experience of freshmen at UNC in terms of their information seeking behaviors for navigation information that help orient themselves through the unfamiliar college life. What is learned in this study may help the university to provide students with better resources and access to college related information.

You are being asked to be in the study because you either are currently a freshman registered full-time at UNC or have experienced first-year college life just recently.

**Are there any reasons you should not be in this study?**
You should not be in this study if you are not a full-time student at UNC.

**How many people will take part in this study?**
There will be approximately 10-15 people in this research study.

**How long will your part in this study last?**
You will participate a one-hour face-to-face interview. The communication between you and the investigator will be primarily through email. You may receive emails after the interview if there are any confirmation to be made related to your interview.

**What will happen if you take part in the study?**
You will be contacted by email to schedule a face-to-face interview. During the interview
you will be asked a few questions about your college life experience during your first year.

- **Early Communication**
  - Emails explaining the details about the study will be sent to you prior to your interview. If you decide to participate, date and time will be discussed with you over the email to set up your interview with the primary investigator.

- **Face-to-face Interview**
  - During the interview, you will sit down with the primary investigator who will discuss with you more details about the study. You will then be asked a series of questions about your first-year college life and how you seek for information to navigate your life and adjust to such a new environment.
  - You can refuse to answer any questions that you do not feel comfortable answering during the interview. You can also decide to withdraw your participation at any time during the study.

- **Post Interview Communication**
  - An email will be sent to you after your interview to thank you for the participation. You may be reached out again to provide confirmation about certain information received from the interview if there is any confusion.

**What are the possible benefits from being in this study?**
Research is designed to benefit society by gaining new knowledge. There is little chance you will benefit from being in this research study.

**What are the possible risks or discomforts involved from being in this study?**
There is a risk of privacy in the study as some of the questions and information you are asked for may be perceived as private. However, you can refuse to answer any questions or give out any details that you do not feel comfortable discussing. There may be other uncommon or previously unknown risks. You should report any problems to the researcher.

**What if we learn about new findings or information during the study?**
You will be given any new information gained during the course of the study that might affect your willingness to continue your participation.

**How will information about you be protected?**
To protect your privacy and confidentiality, all the interview questions are designed to collect only important information that is related to the study. Your identification in the study will be represented by random numbers and will be made unrecognizable. All the paper records will be kept in a safe location only the primary investigator will have access to. An electronic copy may be made and kept in the investigator’s personal computer with password protection for future reference.
Participants will not be identified in any report or publication about this study. We may use de-identified data and/or specimens from this study in future research without additional consent.

Although every effort will be made to keep research records private, there may be times when federal or state law requires the disclosure of such records, including personal information. This is very unlikely, but if disclosure is ever required, UNC-Chapel Hill will take steps allowable by law to protect the privacy of personal information. In some cases, your information in this research study could be reviewed by representatives of the University, research sponsors, or government agencies (for example, the FDA) for purposes such as quality control or safety.

- Your interview may be audio recorded. It is only for the purpose of transcription so that the investigator who interviews you does not need to take as much note during the interview.
- The recordings will be deleted as soon as the transcripts are finished.
- The audio recordings may be requested to be turned off any time you feel uncomfortable being recorded.

Check the line that best matches your choice:

_____ OK to record me during the study

_____ Not OK to record me during the study

**What if you want to stop before your part in the study is complete?**
You can withdraw from this study at any time, without penalty. The investigators also have the right to stop your participation at any time. This could be because you have had an unexpected reaction, or have failed to follow instructions, or because the entire study has been stopped.

**Will you receive anything for being in this study?**
You will not receive anything for taking part in this study.

**Will it cost you anything to be in this study?**
It will not cost you anything to be in this study.

**What if you are a UNC student?**
You may choose not to be in the study or to stop being in the study before it is over at any time. This will not affect your class standing or grades at UNC-Chapel Hill. You will not be offered or receive any special consideration if you take part in this research.
**What if you have questions about this study?**
You have the right to ask, and have answered, any questions you may have about this research. If you have questions about the study (including payments), complaints, concerns, or if a research-related injury occurs, you should contact the researchers listed on the first page of this form.

**What if you have questions about your rights as a research participant?**
All research on human volunteers is reviewed by a committee that works to protect your rights and welfare. If you have questions or concerns about your rights as a research subject, or if you would like to obtain information or offer input, you may contact the Institutional Review Board at 919-966-3113 or by email to IRB_subjects@unc.edu.

**Participant’s Agreement:**

I have read the information provided above. I have asked all the questions I have at this time. I voluntarily agree to participate in this research study.

__________________________________________________  __________________________
Signature of Research Participant                        Date

_____________________________________________________
Printed Name of Research Participant

__________________________________________________  __________________________
Signature of Research Team Member Obtaining Consent      Date

_____________________________________________________
Printed Name of Research Team Member Obtaining Consent

**Appendix B: Interview Guide**

Updated January 1, 2019

Basic background information:

Q1: How long have you been studying in UNC?

Q2: How long have you been in Chapel Hill?
Q3: Do you live on campus or off campus?

Q4: Do you walk, drive or take a bus to school?

Q5: What types of transportation do you use to get around other than coming to school?

Q6: Are you active on campus and in student organizations?

Personal experience:

Q1: Before your arrival at UNC or Chapel Hill, what kind of information did you search in advance to help yourself better adjust to college? Did it turn out to be helpful?

Q2: When you first arrived here, what information did you need the most at that moment? How did you go about and find that information?

Q3: Could you please think back and describe a situation from your first year at UNC in which you experienced difficulty adjusting to college life?

Q4: In the situation you mentioned in the previous question, have you tried to look for information that could help you improve that situation? What kind of sources have you used and which of them did you find useful?

Q5: Looking back at your behavior last week, can you recall an experience where you successfully found information you needed for an activity related to your college life? What about unsuccessful experience? (Examples could be “found where I could practice soccer on campus” or “failed to find information about on campus jobs”, etc.)

Q6: Are there any other examples you can think of?

Q7: Thinking about all these experiences, what sources (technology, friends, student organizations, professionals such as student coordinators, library staff, etc.) do you tend to rely on the most? Any specific reasons to choose one over the others?

Q8: Since you mentioned technology, what device (laptop, smartphone, etc.) and what site (specific websites, phone apps, software, etc.) do you use the most? Why?

Q9: Overall, what types of information do you find the hardest to access? For example, course related info (how many credits can I register, how can I purchase textbooks, etc.), campus events, local transit, entertainment (concerts, sports), everyday life needs (grocery, parking, housing, etc.).
Q10: Overall, are you satisfied with your first-year experience in terms of finding information to navigate your campus life?

Suggestions

Q1: Do you think it’s necessary to improve students’ especially freshmen’s access to such information to help them better adjust to college life?

Q2: What do you think can be done to improve it?

Appendix C: Recruitment Email

Subject Line: Freshmen Needed for A Study on Information Seeking Behavior

Hello!
My name is Yuwei Qian and I am a graduate student at UNC School of Information and Library Science. I am looking for first or second year undergraduate students to participate in my study on college students’ information seeking behavior, as part of my master’s paper. The goal of this study is to understand how freshmen find information related to college life and what kind of information they need to better adjust to college. Results from this study can potentially benefit future students and inform the university to provide better information access for first-year students.

To be eligible for this study, you need to be:
1. At least 18 years old
2. First or Second year undergraduate student
3. Participating in a 1-hour interview with me where you will be asked to answer some questions about your first-year experience at UNC

You will be given a $10 Amazon Gift Card as compensation at the end of the interview. Participation in this study is completely voluntary and all data will remain anonymous. If you would like to participate, please contact me at eveshyw@live.unc.edu. Please also feel free to email me with any questions.
Thank you.

Sincerely,
Yuwei (Eve) Qian
School of Information and Library Science | UNC-Chapel Hill
984-215-7180 | eveshyw@live.unc.edu
Freshmen Needed

For A Study on College Students’ Information Seeking Behavior

This study aims to understand how college students find information to orient and adapt themselves in their first year of college. Contact eveshyw@live.unc.edu, if you would like to participate. To be eligible, you need to be:

1. At least 18 years old
2. First or Second year undergraduate student
3. Participating in a 1-hour interview where you will be asked to answer some questions about your first-year experience in college

Each Participant Will Be Compensated
A $10 Amazon Gift Card

SCHOOL OF INFORMATION AND LIBRARY SCIENCE

UNC