Jacqueline R. Sipes. Humanities Graduate Students' Use of Library Instructional Resources. A Master's Paper for the M.S. in L.S degree. April 2008. 66 pages. Advisor: Diane Kelly

The purpose of this study was to explore the information needs of humanities graduate students with the intention of applying what is learned towards improvement in library instructional services and resources. The questions framing this study were: (1) What are the information needs of humanities graduate students? (2) How do current library instructional services and resources meet these needs? Eleven graduate students from the departments of Classics, Communication Studies, English and Comparative Literature, History, Philosophy, and Religious Studies at UNC-Chapel Hill participated in qualitative, in-depth interviews. Using the critical incident technique, the researcher asked participants to describe an information need related to their coursework. The information needs of humanities graduate students primarily include locating secondary source materials for research papers. Findings suggest that humanities graduate students are not heavy users of instructional resources and services. Participants suggested methods to increase awareness of instructional services and resources, including how to improve bibliographic instruction sessions catered to humanities graduate students.

Headings:

      College and university libraries/Services to graduate students

      Information needs/Evaluation

      Library Instruction/Web-based Instruction

      University of North Carolina at Chapel Hill

HUMANITIES GRADUATE STUDENTS' USE OF LIBRARY INSTRUCTIONAL RESOURCES

by
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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/Library Science.

Chapel Hill, North Carolina

April 2008

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Chapter 1: Introduction

In recent years, research in Library and Information Science (LIS) has begun to focus heavily on the user's experience. Much of the research conducted has been in the form of user studies in which researchers seek to examine the information needs and information-seeking behaviors of individual users and specific user groups. Results often indicate how relevant user groups find specific library services to be and how often they use these services, if at all. The influence of empirical user studies on library practice cannot be overstated. Researcher Andy Barrett writes that, "studying the information-seeking behavior of specific user groups has contributed to the development of a variety of library services" (324).

Indeed, over the past twenty years, libraries have begun to offer users an increasing number of instructional services and resources beyond those traditionally provided at the reference desk. Many libraries now offer services such as information literacy classes and self-paced online tutorials that aid in the development of information literacy skills. Some academic libraries even target services to specific user groups and offer course-integrated assistance. At UNC-Chapel Hill, for example, librarians offer to collaborate with instructors of undergraduate and graduate courses alike in the creation of online course content that facilitates information-seeking. Some universities, such as SUNY Plattsburgh, have even experimented with taking librarian and faculty collaboration a step further by building it into the curriculum as part of thesis preparatory

courses where librarians and faculty share the responsibilities of educating students about writing and research (Toth 84). In academic libraries, these types of instructional services exist, theoretically, to increase information literacy among students by teaching them how to conduct research using library resources.

The present study looks specifically at humanities graduate students as users. Previous LIS studies, such as Delgadillo's and Lynch's study of history graduate students and Barrett's study of humanities students as a distinct user group, shed light on the information-seeking behaviors of graduate students. Many studies provide insight into the nature of graduate student information-seeking habits and satisfaction with library resources; however, only a few studies focus on graduate student use of instructional services. Previous research on this topic has focused heavily on graduate student use of physical collections and electronic resources with little focus on student use of the educational services offered by academic libraries, such as reference consultations and formal instruction. The present study aims to fill this gap by providing an in-depth look at graduate student use and perception of the library reference and instructional services. In addition, this study will build on existing research by further exploring the information needs and searching behaviors of humanities graduate students.

Graduate students are an important user group to explore. Graduate students and professional students are likely to make significant contributions to their fields and use library resources to do research (Hoagland-Washington and Clougherty 127). When students, particularly those in the humanities and social sciences, begin their research for papers, masters' theses, and doctoral dissertations, the academic library becomes a highly used resource. Moreover, humanities graduate students often exhibit retention problems

at higher rates and take longer to graduate than science graduate students (Hoagland-

Washington and Clougherty 127). Through the use of instructional services such as

reference assistance, bibliographic instruction, and Web-based learning resources that

teach information literacy, librarians have the potential to play a major role in the

development of graduate students' scholarly work habits.

Though instructional services, such as information literacy classes, are available

to graduate students, often these students can get by without making use of such services.

Previous studies have found that humanist scholars often exhibit an individualistic

outlook on information-seeking. In their own review of the literature, authors Delgadillo

and Lynch found that humanist scholars are solitary workers who may seek assistance

from curators and specialists, but rarely seek assistance from general reference librarians

(250-51). They describe the scholarly work habits of humanists in the following way:

> . . . humanists, including historians, work alone and . . .
> collaborative efforts are uncommon. Humanists rely on libraries
> and make active use of the primary and secondary sources found in
> them. They believe they must be self-reliant in using libraries.
> Both humanists and historians see the search for information as
> being as important as the information itself. Thus, they generally
> do their own literature searching. Because the humanist must
> interact directly and intimately with the materials, browsing in the
> library's collections is an important activity [and] they do not rely
> on the general reference librarian, believing they can manage as
> well or better without his or her help (248).

The present study seeks to learn more about the information needs of humanities

students, and to discover other potential factors that lead to their minimal use of

library instructional services.

First and second year graduate students are a particularly important subset of

humanities scholars to examine because they are just beginning to form the information-

seeking habits that they will use throughout their academic careers. One study found that when some of these students enter graduate school, they have had little or no previous exposure to library instruction (Libutti 13). Many students may assume that they have adequate information-seeking skills and perceive no need to seek help from an information professional, such as a reference or instructional librarian (Nixon). Studies have shown a number of differing perceptions of library educational services and resources; Delgadillo and Lynch found that history graduate students did not feel that general reference librarians possessed the necessary expertise to assist with their level of research (248) while other studies have shown that graduate students are interested in instructional services such as formal bibliographic instruction from librarians, but for various reasons have not taken advantage of the services available (Maughan; Sadler and Given). This study seeks to discover more about why students have not taken advantage of instructional services such as formal bibliographic instruction.

The problem that this research study addresses is the previous finding that graduate students in the humanities underutilize the reference and instructional services and resources available to them (Delgadillo and Lynch; Maughan; Sadler and Given; Washington-Hoagland and Clougherty). General reference assistance, reference consultations, and bibliographic instruction are among these services. Though past studies report that humanities graduate students do, in fact, rely on library collections and materials for conducting scholarly research, many of these students do not take advantage of reference and instructional services (Washington-Hoagland and Clougherty; Delgadillo and Lynch 253). Various factors may affect whether or not graduate students seek assistance from librarians or use library services. Because these students may

successfully locate information and resources by speaking with professors or by using solitary search techniques such as shelf-browsing (Delgadillo and Lynch), they may not perceive a need to "bother" the reference librarian for research assistance. Students may also, due to a possible lack of library outreach, be unaware that instructional services exist for them (Jankowska, Hertel, and Young; Sadler and Given; Washington-Hoagland and Clougherty). The general research questions framing this study are: (1) What are the information-seeking needs of humanities graduate students? (2) How do current library instructional services and resources meet these needs?

The purpose of this study is to both explore the information needs and information-seeking behaviors of humanities graduate students, and to find out, based on participant responses, how library instructional services and resources may help students meet these information needs. Understanding how students experience information needs and make use of the reference and instructional services available to them will allow librarians to develop services and resources that may play a larger role in the development of scholarly research habits.

Many graduate students will go on to become scholars and life-long library users. It is pertinent for librarians to foster better relationships between themselves and these students, especially those in their first two years of graduate school as they are just beginning to develop scholarly information-seeking habits. As Barrett points out, much of the LIS research in this area has been devoted to studies of undergraduate information-seeking behaviors, which have subsequently informed the development of information literacy programs, but not as much research has been conducted about the habits of graduate students (324). Exploring the information-seeking behaviors of graduate

students could inform the development of instructional programs that continue to increase

the information literacy skills of students as they advance through their academic careers.

Chapter 2: Literature Review

A review of previously published literature provides insight into the research questions framing this study. Within the past twenty years, researchers in the field of Library and Information Science have conducted a variety of empirical studies relating to postgraduate student library use. Populations sampled in these studies have included faculty members, post-doctoral students, academic librarians, and graduate students across the humanities, social sciences, and medical sciences earning masters degrees, professional degrees, and PhDs. A common goal in these studies has been to examine some aspect of library use in order to improve library resources and services at institutions of higher education. Though these studies share the common purpose of discovering how librarians can improve resources and services to meet the information needs of graduate students and scholars, many nuances exist across studies and findings. Researchers have studied graduate student library use using a variety of research methods, and topics studied have included information-seeking behaviors, user satisfaction with library collections including books, journals, electronic journals, and special collections, user satisfaction with library services, and scholarly work habits.

Researchers have also examined graduate students' experience with instructional services, such as information literacy courses (Parrish; Sadler and Given). Overwhelmingly, results have indicated that graduate students are unaware of the full array of instructional services available to them (Barrett; Jankowska, Hertel, and Young; Maughan; Sadler and Given, Washington-Hoagland and Clougherty). However, few

studies provide an in-depth exploration into why this might be the case. This study seeks to fill this gap in the research by replicating aspects of more in-depth qualitative studies that have touched on attitudes toward instructional services. This exploration into student attitudes toward services can provide insight as to how existing instructional services may be altered or augmented to meet the needs of graduate students. For the purposes of this literature review, discussion of research is separated based on study methodologies into user satisfaction surveys and in-depth user studies.

User Satisfaction Surveys

In order to evaluate graduate student use of library resources and services, many researchers have administered user satisfaction surveys. User surveys provide valuable data about satisfaction with collections, special collections, library facilities, electronic journals, reference services, and bibliographic instruction (Libutti, Maughan, Washington-Hoagland and Clougherty, Jankowska, Hertel and Young). However, these studies provide minimal in-depth data concerning why students articulate certain reactions about library resources and services.

Patricia Libutti, Education Librarian at Fordham University Libraries, conducted a study during 1989 and 1990 on collection and instructional support for graduate student research. The purpose of her study was to "provide an information base for library planning" (Libutti 3). Libutti investigated library support of graduate student information needs using a multi-method approach. Her first step was to examine collection support of information needs by performing a content analysis of syllabi and dissertation bibliographies. Libutti discovered collection gaps in both books and journals and

recommended that the library consider purchasing the missing items. To measure instructional support, Libutti administered a survey to 161 masters and doctoral students, which represented 12% of the 1,348 graduate students.

Libutti found that only a minority of students had been exposed to bibliographic instruction prior to entering the graduate program and that there was no collaboration present between the Graduate School and the University Library that addressed the information needs of graduate students (Libutti 13). The remainder of the report provides an annotated list of resources and services implemented to improve support for graduate student research needs. The present study seeks to explore the ideas of previous exposure to instructional services as well as perceived effectiveness of library instructional support in the classroom or department.

In 1997, at the University of California at Berkeley, Patricia Maughan examined the information-seeking behaviors and library use of graduate students and faculty in seven academic disciplines across the humanities, social sciences, and sciences. In order to examine information-seeking behaviors, Maughan surveyed graduate students and faculty. Her survey method included a questionnaire consisting of close-ended questions relating to information-seeking behavior, preference for print or electronic information, and satisfaction with collections and document delivery services followed by a few open-ended questions relating to scholarly communications. Two separate sets of findings were presented for faculty and graduate students as well as a breakdown of percentages based on academic department. Maughan found that both faculty and graduate students were intensive library users (356-7). Faculty used the library for their own research, and they referred graduate students to the library. While faculty members rated reference

services as "good" or "excellent," 60% of faculty surveyed reported "insufficient experience to evaluate library instructional services" (356). Over half of the graduate students also reported a lack of experience with library instructional services that prevented them from evaluating these services. 31.3% of students also reported they did not have enough experience with reference services to evaluate those either. Overall, survey results indicated a number of important findings such as a lack of familiarity with current library services, desire for improvement in availability of books and journals, and the need for more library reference and instructional services. Though results were useful in developing library improvements in areas of collections and instructional services, it was not clear why faculty and graduate students lacked familiarity with reference and instructional services. While the use of questionnaires allowed Maughan to sample a large segment of her targeted population (123 faculty and 264 graduate students), the survey did not allow for in-depth answers to questions concerning information-seeking and library use.

One interesting finding of Maughan's study was that faculty members often use informal channels of communication, such as colleagues, rather than librarians when seeking information (356). Faculty members play an important role in educating graduate students on the information-seeking process, especially those who become mentors or academic advisors of students writing master's theses or doctoral dissertations. If faculty themselves ask other faculty or colleagues for information, rather than seeking it themselves or asking librarians, they may be relaying such practices to graduate students. In the present study, the researcher seeks to find out if there is a

relationship between lack of use of reference and instructional services and faculty advice on the research process.

In 1998, Carlette Washington-Hoagland and Leo Clougherty investigated graduate student library use at the University of Iowa. The purpose of Washington-Hoagland's and Clougherty's exploratory study was to assess user satisfaction with library resources and services. Their research was part of a longitudinal study which took place over four years and surveyed various users and user groups with the purpose of prosing recommendations for improved services in the library's strategic plan. A series of research questions shaped this study. Researchers sought to examine how graduate students utilize library resources and services for studying, teaching, and research and how satisfied they were with library resources and services. Likert-type surveys were administered to 10% of the graduate and professional student population. Portions of the survey also included open-ended questions. The open-ended responses "revealed a lack of awareness of library services (46%) as well as a need for more information and general instruction" (Washington-Hoagland and Clougherty 139).

Unmet needs of graduate students were identified; however, this study lacks data concerning library instructional services and focuses more heavily on student satisfaction with library collections and facilities. The authors do note that, "[students] recognize the need for more assistance in using the library . . . and prefer human contact" (Washington-Hoagland and Clougherty 136); however, survey data do not indicate why instructional services were rarely used.

Most recently, in 2004, at the University of Idaho, Maria Anna Jankowska, Karen Hertel, and Nancy Young conducted a survey to measure user satisfaction with library

service quality among graduate students. Researchers used a multi-method approach

including benchmarking and a survey with a Likert-type scale to measure user

satisfaction with collections, services, and library facilities. The authors summarize the

results of their study with a list of key findings:

- Graduate students are unaware of the full range of library services and resources.
- Graduate students need and/or desire help in using library resources.
- Faculty greatly influence how and if graduate students use the library.
- Faculty/Librarian collaborations have proven effective in assisting graduate students in their information needs.
- Graduate students are heavy users of e-resources, particularly e-journals.
- Graduate students prefer access to networked-based library resources and services. (Jankowska, Hertel, and Young 62).

These findings were considered in the library's strategic planning process. Similar

results are found throughout other studies, especially the finding that graduate students

are unaware of the range of library services and resources available to them. The present

study will explore why users are unaware and what types of marketing procedures might

be most affective for communicating information about instructional services to graduate

students.

In-depth User Studies

User satisfaction surveys are useful in measuring user expectations, needs, and

experiences. Data gleaned from user surveys can provide important insights that can be

incorporated into library strategic plans and lead to improvements in resources and

services. However, these studies often use methods such as surveys containing closed-

ended questions with few opportunities for participants to provide in-depth qualitative

data. For instance, in Maughan's study, faculty and graduate students revealed that they did not have enough experience with reference and instructional services to confidently evaluate these services; however, Maughan's data do not reveal any information on *why* students and faculty do not have experience with reference and instructional services. In order to fill this gap in the literature, researchers such as Christine Barry, Elizabeth Sadler and Lisa Given, Andy Barrett, Robert Delgadillo and Beverly Lynch, and Marilyn Parrish have undertaken studies which have used qualitative methods, such as in-depth interviews, to collect data. While these studies still allow for evaluation of user satisfaction, data collected in these studies also reflect the attitudes behind user satisfaction with library resources and services, allowing researchers to gain a better understanding of why graduate students may not use certain resources and services. Other user studies are also important though they may not necessarily examine the information-seeking habits of graduate students. Carol Kuhlthau's work, for instance, explores the role of the information professional as intermediary during the information-seeking process. While the following studies provide in-depth data relating to information-seeking behaviors, some of these studies still only briefly discuss use of instructional services. Sadler and Given's study is an exception.

In 1988, Marilyn Parrish conducted one of the first broad studies of graduate student library use at Bowling Green State University. Using a multi-method approach including analyses of library statistics and graduate student demographical data, interviews with faculty advisors, analysis of course syllabi, and a survey distributed to students, Parrish collected extensive quantitative and qualitative data relating to graduate student information needs and library support of these needs (Parrish 1). While these

methods allowed the researchers to gain a contextual view of the academic environment in which these students were using library resources and services, student use of reference and instructional services was only touched upon briefly. Parrish mentions that during the academic year 1987-1988, 57% of the Library User Education courses were presented to graduate level students, as well noting that the Education and English departments requested the highest numbers of User Education courses (Parrish 14); however, the researchers' subsequent interviews and surveys do not indicate if this amount of instruction is adequate or if students learned effective information-seeking strategies that they could use in their coursework.

In 1996, Christine Barry explored how knowledge of information skills has evolved with the onset of digital resources. Barry writes that it is no longer adequate to only understand subject headings and catalog searches; today's library users must understand how to manipulate and navigate complex information systems as well (227). Barry provides two case studies of faculty advisors of masters students who differ vastly in their approaches to educating students on information-seeking. Multiple methods were used to evaluate the information-seeking behaviors including in-depth interviews, diaries, questionnaires, and participant observation (Barry 230). While Barry's focus is on the new skills needed to navigate the digital landscape, her study reveals a good deal about the attitudes of faculty and doctoral students towards library resources. One faculty member takes it for granted that students entering a masters or PhD program already understand how to use library and information systems to conduct research (Barry 233). Similar to Maughan's study, Barry elicits responses that reflect faculty members' ideas

and attitudes toward information-seeking. Again, this study seeks to determine the role, if any, of faculty and advisor mentorship in library use.

In an exploratory study in 2005, Andy Barrett investigated the extent to which humanities graduate students constitute a user group distinct from undergraduates and faculty. Ten graduate students, from academic departments including English, History, Philosophy, Classics, and Music at the University of Western Ontario, agreed to participate in open-ended interviews. Interviews were designed to collect information about the students' information-seeking behaviors. Results demonstrated that the information-seeking behaviors of humanities graduate students do, in fact, distinguish them from faculty and undergraduates. The author suggests, however, considering graduate students not as a distinct user group, but as a "group constituting a unique series of stages" (Barrett 330) and that librarians should aim to recognize information-seeking patterns that emerge among these students during particular stages in their masters programs. Barrett examines graduate students' degree of interpersonal contact in the research process, as well as use of electronic information resources. Both of these facets are an integral part of many instructional services such as reference assistance, bibliographic instruction, and Web-based learning resources, and the researcher explores these themes in the present study.

In 1999, Robert Delgadillo and Beverly Lynch examined whether or not the information-seeking behavior of history graduate students reflects the information-seeking behavior of professional historians. In order to address this question, the authors examined the research habits of history graduate students. Fifteen full-time graduate students at UCLA took part in open-ended interviews and subsequent unstructured

discussions with the researchers. Results indicated that UCLA's main library was heavily used by the students. Frequently used library resources included the reference collection, interlibrary loan, and special collections. Subject bibliographers and other specialists were sometimes consulted for research assistance, but not general reference librarians. A weakness of the study exists in the sampling method.   Out of 300 graduate students, 22 history students were approached randomly, and 15 agreed to participate in this study. The researchers offer no indication of the extent to which the participants and non-participants differ in relevant aspects. The results in Delgadillo's and Lynch's study present an important finding about the attitudes of graduate students towards general reference librarians – that they do not feel that general reference librarians possess the expertise needed to assist with students' level of inquiry. The present study seeks to determine if this sentiment towards general reference librarians exists across other humanities disciplines.

In 2007, at the University of Alberta, Elizabeth Sadler and Lisa Given also investigated the nature of graduate student interactions with the university libraries, giving a great deal of attention to student perceptions of library instructional services. In-depth interviews allowed the researchers to explore feelings and attitudes toward library resources and services. Working from an ecological psychology theoretical framework, the researchers sought to examine how the "affordances experienced by graduate students differed from the affordances librarians were attempting to provide" (Sadler and Given 116). This allowed the researchers to discover discrepancies between what librarians thought they were providing in terms of resources and services and what the graduate students actually perceived as resources and services being provided by librarians. The

researchers used the qualitative method of in-depth interviews with eight graduate

students studying in social sciences disciplines as well as three academic librarians

working at the university. Findings fell into three categories: Intended and Perceived,

Perceived but not Intended, and Intended but not Perceived with the last category

reflecting affordance gaps. Two major affordance gaps were found in information

instruction literacy programs offered by the library and the use of the library Web site as

a tool to announce services to patrons (Sadler and Given 130-132). Student responses

indicated problems with relying on the library's Web site as a mode of communication

with users, a lack of awareness and understanding revolving around information literacy

courses, and hesitancy to ask reference librarians for help. Of reference services, Sadler

and Given write:

> Although there was unanimous awareness that librarians could be
> used as a resource, some users were reluctant to do so. David, a
> sociology PhD student, said he "[doesn't] use reference librarians
> very often" and Bernard, though a frequent and enthusiastic user of
> the library, echoed a frequently cited point of anxiety: "You're
> afraid to go up to the resource person and ask a dumb question"
> (121).

User responses like the one above confirm graduate students do not fully utilize the

reference and instructional services available to them.

Other relevant in-depth studies have examined the role of information

professionals, such as librarians, in the information-seeking process among groups other

than graduate students. Carol Kuhlthau's work has been particularly seminal in this area.

In, "The Concept of a Zone of Intervention for Identifying the Role of Intermediaries in

the Information Search Process," Kuhlthau examined the role of the intermediary in

environments where users have direct access to information systems. Kuhlthau

interviews two professionals about their information-seeking habits, asking them to

comment on complexity, uncertainty, process, and perception of the role of the intermediary as the participant experiences an information need. Results indicated that participants wanted a more interactive and collaborative relationship with the information professional (Kuhlthau 6).

Though Kuhlthau does not look specifically at graduate students as users, Kuhlthau's work is relevant to this study. Based on Vgotsky's theory of the zone of proximal development, Kuhlthau developed the "zone of intervention" which is defined as "that area in which an information user can do with advice and assistance what he or she can not do alone or can do only with great difficulty" (2). Kuhlthau states that, "intervention outside of this zone is inefficient and unnecessary: experienced by users as intrusive . . . and overwhelming" (2). The concept of the zone of intervention is relevant to this study as it points to an important idea—that instruction provided outside of the zone of intervention, or the point of need for information-seeking assistance, is not necessarily useful to the user. If information literacy sessions offered by librarians do not relate to a concrete information need, students may not perceive the usefulness of the sessions. In an information environment where users can search for and retrieve information themselves from online systems, many users may experience difficulty with information-seeking without ever consulting information professionals. As more and more information systems in academic libraries provide full-text, students may rarely, if at all, consult an information intermediary such as a reference librarian. By asking graduate students to describe their experiences during the point of need, this study explores whether or not students find reference and instructional services useful in solving concrete information needs. Understanding of graduate students' "zones of

intervention," may point to ways that reference librarians might more successfully

intervene when students need assistance.

Chapter 3: Methodology

The purpose of this study was to learn about the nature of humanities graduate students' information needs and how library instructional services meet these needs. In order to explore graduate student information behavior, qualitative in-depth interviews were the method of this study. A small subset of humanities graduate students were the participants. Semi-structured interviews were mostly open-ended and modeled on the method of critical incident technique.

Participants

The population sampled in this study was humanities graduate students at UNC Chapel Hill, a public university in North Carolina. As of the Spring of 2007, 7,905 students were enrolled in graduate non-professional programs at UNC with 2,051 of these students earning degrees in the humanities and social sciences ("Frequently Requested Reports"). Humanities disciplines include Art History, Classics, Communications Studies, Comparative Literature, Dramatic Art, English, Folklore, History, Music, Philosophy, and Religious Studies. Non-probability convenience and purposive sampling were used to recruit and select participants.

A purposive sample was taken to ensure that the researcher was able to examine first and second year graduate students in humanities degree programs. Participants were first or second year humanities graduate students because these people were best suited to provide appropriate data. First and second year students represent users who are just

beginning to form their scholarly information-seeking habits and may be able to better recall previous experiences with library instruction and instructional services from their undergraduate studies. Because this study is concerned with the use of instructional services offered by the main graduate library at UNC, disciplines in which the students are likely to use departmental or special libraries, such as Art History and Music, were excluded from the sample. It is assumed that students in Classics, Communications Studies, English and Comparative Literature, Philosophy and Religious studies use Davis Library, UNC's main library, as their primary library, and therefore, the sample was taken from students belonging to these departments. Also, sampling from a smaller subset of the population, rather than from the larger population of humanities graduate students, was convenient to the researcher who conducted the study with limited resources.

Recruitment of participants occurred through emails to the listservs of humanities departments including Classics, Communications Studies, English and Comparative Literature, Philosophy, and Religious Studies. The researcher contacted student services staff in each department and asked that the departmental listserv manager forward an email containing information about the study to the graduate student listserv. Flyers containing information about the study were also placed in Davis Library and buildings where the departments hold classes. Once potential participants were identified, the researcher corresponded with participants via email to arrange meeting times and to discuss the location and other details of the interview.

Eleven participants agreed to participate in interviews. Of the eleven participants, seven were female and four male. Four participants were earning degrees in

Communications Studies, two in English and Comparative Literature, two in Philosophy, one in Classics, one in History, and one in Religious Studies. Nine of the participants were enrolled in PhD programs within these departments. Only two participants, both from Communications Studies, were enrolled in a terminal masters' program; however, they both planned to enroll in PhD programs after completing the masters' degree. Six participants were in their first year of the program, and five were in their second year and completing masters' theses. Three participants had already completed one masters' degree at another institution and were working presently on a second masters' degree. Career goals primarily included teaching in a college or university setting. Some participants, especially those who expressed that they would like to work at research universities, mentioned writing and publishing as an additional aspect of a future teaching career.

Library Environment

UNC Libraries has any array of instructional resources and services available to humanities graduate students such as research help, formal instruction, and Web-based tools. For research help, students may visit the Davis Library reference desk. Located on the first floor of the library, the reference desk is staffed daily with professional reference librarians, as well as graduate students from the department of Information and Library Science. Reference staff provide research assistance in-person and via phone, IM, and email service. Students can also receive individual research assistance from subject specialist librarians.

In addition to the reference assistance offered at Davis, group instruction sessions are offered. At the beginning of the semester, instructional librarians conduct orientation sessions for all new students, including undergraduates, graduate students, and transfer students. Orientation sessions may include building tours or brief instruction on using the Libraries' Web site and other resources. Throughout the semester, UNC Libraries' offers instructional sessions for graduate students at Davis as well as other branch libraries. These sessions, open to all graduate students, frequently include instruction on Refworks and EndNote, Grant Source workshops, and sessions on specific software such as GIS. More traditional bibliographic instruction sessions on conducting research are offered infrequently. A class on resources for English and Comparative Literature was offered in 2006. A calendar of previous and upcoming instruction sessions can be found at http://www.lib.unc.edu/instruct/grad_workshops/calendar.html.

In addition to face-to-face instruction, students may also take advantage of resources on the libraries' Web site. Research by Subject pages allow students to access relevant databases, e-journals, online guides, and contact information for research help and subject bibliographers. Web-based tutorials, located on the instruction page at http://www.lib.unc.edu/instruct, aid students in conducting library research. Many of these tutorials are targeted at undergraduates who have little experience with information-seeking; however, guides such as *Manuscripts Research,* may be relevant to undergraduates and graduates alike.

Description of Methods

In this study, the critical incident technique (CIT) was used as a specific kind of qualitative interview. Babbie writes that a qualitative interview "is an interaction between an interviewer and a respondent in which the interview has a general plan of inquiry but not a specific set of questions that must be asked in a specific order" (Babbie 300). The focus of the qualitative interview was on the interviewee's description of a "critical incident." Flanagan, who developed the technique in the 1950s, describes the critical incident as an "observable human activity that is sufficiently complete in itself to permit inferences and predictions to be made about the person performing the act" (Flanagan 1). In this study, the participant was asked to describe a significant information need that he or she experienced in his or her current graduate program.

One of the major advantages to the critical incident technique is that it provides in-depth, rich data sets (Gremler 66). Using CIT allowed the researcher to collect detailed descriptions of graduate student information needs and to interpret students' feelings and behaviors. In order to fill identified gaps in previous research, this study collected in-depth data that reflected students' thoughts and feelings about library instructional services. From the participant's description of the event, the researcher aimed to "gain an understanding of the incident from the perspective of the individual, taking into account cognitive, affective, and behavioral elements" (Chell 48). The CIT allowed participants to discuss their thoughts, emotions, and behaviors as they experienced an information need, as well as how they felt seeking research assistance from librarians. Understanding what the user experiences at the point of information

need potentially provides insight into whether or not existing instructional services are meeting needs.

Another advantage of CIT is that it allows greater flexibility in questioning as interviewers talks with participants. Rather than strictly following a set of pre-formulated questions, the researcher in this study had the flexibility of creating questions on the spot as the participant describes his or her experiences.

During this interview, the interviewee was seen as the expert and did the majority of the speaking, especially during discussion of the incident. Before the interviewer asked the participant to talk about the incident, the interviewer took care to explain the type of behavior that was relevant to the study. To ensure that the participant understood what was expected of them, the researcher briefly stated the general aim for describing the incident—to understand how graduate students experience information needs. The researcher also provided the participant with an operational definition of instructional services and resources. For the purposes of this study, instructional services and resources referred to any of the following: formal bibliographic instruction sessions, assistance from reference librarians, and resources created by librarians to guide the information-seeking process. When the participant was asked to describe experiences with formal bibliographic instruction, it was explained that this type of instruction could be referred to using a wide array of terminology including course-integrated instruction, information literacy instruction, library education, etc.

Data Collection

Participants were asked to attend one interview session lasting approximately one hour. Participants were interviewed individually in a large study room in UNC's Undergraduate Library. Interviews were digitally-recorded using a laptop computer with an internal microphone and digital recording software. Interviews occurred in the early Spring semester of 2008 during times that were convenient for participants.

During the session, the researcher conducted questioning based on the interview schedule.[1] The interview schedule was designed as a guide for the researcher to ask participants about their information needs, information-seeking behaviors, and experiences with library services and resources.

The researcher began each interview by asking a series of questions about the participant's academic department and interests. The purpose of these questions was to learn about the information needs and to gather basic demographic information which aid in understanding how each participant fit into the demographics of the larger population of humanities graduate students at UNC.

After gathering basic information about the participant, the researcher inquired about the participant's previous exposure to library instructional services. The purpose of these questions was to probe participants about use and perception of existing library instructional services available to graduate students, as well as to find out about the students' previous exposure to library instruction sessions, such as those that are often required of university students during their undergraduate careers.

Participants were also asked a series of questions relating to awareness of specific library resources and services. While the critical incident section was designed to gain an

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[1] See Appendix A

understanding of information needs and search behaviors, other sections were designed to reflect whether or not participants used specific instructional resources and services. In designing these sections of the interview schedule, the researcher explored the UNC Libraries' Web site to find what instructional services and resources exist at UNC Libraries. Questions relating to specific aspects of the library environment were included on the schedule to reflect awareness and use of the resources available to graduate students.

Analysis of Data

Gremler writes that the goal of analysis of stories gathered using the CIT is to produce a "classification system to provide insights regarding the frequency and patterns of factors that affect the phenomenon of interest" (Gremler 66). In order to create classification systems, or categories relating to the topic being studied, the researcher prepared transcripts of each interview. After interviews were transcribed, the researcher read the transcripts and made notes. Memoing was used throughout the reading of transcripts to allow the researcher to think analytically about the results and prepare descriptions of emerging patterns and themes among the findings (Kelly et al. 1037). After analyzing the transcripts and memoing, the researcher created a list of patterns and themes that appeared throughout the transcripts. This list reflected the frequency of various aspects of the participants' information-seeking experiences. The list also reflected student use and perception of library instructional services. From this analysis, the researcher was able to make some interpretations and future suggestions relating to the information needs of humanities graduate students.

Chapter 4: Findings

Interviews revealed the types of information needs experienced by the participants, how they search for information, and the resources that they use when seeking information. Participants used the library primarily to search for secondary sources written by other scholars on topics they were studying. Two participants mentioned using libraries to find primary source documents such as archives and special collections. Regardless of exposure to previous bibliographic instruction, most participants learned to locate information in academic libraries by a process of trial and error. The description of the critical incident, or information-seeking experience, revealed that these graduate students utilize a host of different resources in searching for information and exhibit different behaviors and search strategies. Participants were vaguely aware that reference librarians were available to help them; however, most lacked an understanding of how a reference librarian could assist in the research process. Most participants mentioned that it would not occur to them to contact a reference librarian for research assistance and that they would be more likely to talk with professors. Some participants were unaware of many of UNC Libraries' instructional services and resources like one-on-one research consultations and the Research by Subject pages on the Web site. Findings are organized by themes and patterns that emerged throughout the analysis of data.

Exposure to Library Instruction

Participants had varied amounts of exposure to formal library instruction. Seven participants recalled attending bibliographic instruction as undergraduates, two had no undergraduate exposure to instruction, and two could not recall instruction at the undergraduate level. Since beginning graduate school, ten of the participants had attended some type of formal library instruction including the new student orientation to the library and grant source library workshops. However, only two students had attended instruction that involved learning to conduct library research since entering graduate school. Participant D, from Religious Studies, attended a rare books and manuscripts research instruction session in her previous masters' program at another university. Participant J, from History, attended one formal library instruction session as a graduate student at UNC during her Research Methods class.

Participant J, from History, was the only participant that had taken a research methods course that involved information literacy instruction. Five participants had to complete a research methods course, but only participant J's course explicitly included information literacy instruction and a trip to the library. Other research methods courses taught students how to design qualitative and quantitative studies or how to situate their own ideas within academic discourse; but, none of the courses touched on conducting library research.

Though at least some of the participants had attended formal library instruction as either undergraduates or graduate students, most of them did not feel that these sessions taught them what they knew about using academic libraries. Participants described their learning experiences as "piecemeal" and "trial and error." Some participants explained

that they had learned to use the library out of necessity as undergraduates. Participants C and I mentioned increasing their familiarity with library resources when they were writing senior theses as undergraduates. Participants also learned about library resources from informal sources such as professors and fellow students. Participant D, from Religious Studies, mentioned that one of her professors gave a lecture on using WorldCat. Participant I, from Classics, mentioned that at the beginning of her first semester of graduate school, one of the more advanced graduate students took her on a tour of Davis Library. Also, some participants held jobs that helped them to become familiar with library resources. Participant A, though she had not attended formal instruction as an undergraduate, mentioned that she learned a lot about the library through working as a student assistant in the library at her undergraduate institution. She commented, "I shelved books and shelf-read . . . helped patrons locate books, and that got me pretty familiar with how to find things in the library." Similarly, participant C also mentioned having worked in a library as an undergraduate and as a research assistant for a professor. Participant F, from English and Comparative Literature, currently works in Wilson Library for Documenting the American South.

Information Needs

The information needs of these humanities graduate students arose primarily out of class assignments such as research papers and presentations. In addition to completing masters' thesis requirements, participants completed various types of assignments for classes. All participants said that most seminars required a substantial research paper, between 18 and 25 pages, at the end of the semester. Other assignments included

presentations, performances, annotated bibliographies, historiographies, and designing syllabi.

In addition to assignment requirements, information needs were strongly tied to participants' individual academic interests. Participants described assignments as being flexible and tailored to the interests of the individual student. Academic interest and expertise often guided class research papers and the search for information for these papers. Participant B mentioned that he was mostly able to write about some aspect of his primary interests, haunting and abuse, in each of his seminar papers.

Participants had a wide range of academic interests. Communication Studies participants studied rhetoric, identity, nationalism, public discourse, therapeutic discourse, and haunting and abuse. The Classics participant was interested primarily in Latin studies. Interests among the English and Comparative Literature participants included 20th century American literature, slave narratives, and American religious literature. Participant J, from History, was interested in Caribbean studies with a focus on mental health institutions in Cuba. Participants from Philosophy were interested in modern philosophical thought, and the participant from Religious Studies was interested primarily in American religion and the American West.

Academic interests varied greatly even among students in the same departments and were often highly specialized. Participant J spoke at length about the differences between her academic interests as a History major, and those of the other students in her program. Because her interests diverged, she felt hesitant to use library resources that were geared towards History students, such as the libraries' Research by Subject pages. Departments like Communications Studies are even more interdisciplinary, combining

elements of humanities-based research with ethnographic studies more commonly associated with social sciences research. Research for Communication Studies students included both analyses of textual resources and human subjects. This study found that the type of information sought varied greatly among humanities students, even those in the same academic department.

Regardless of academic interests, participants used library resources in completing most assignments, especially research papers. All of the participants mentioned looking for secondary sources, such as research articles written on a similar or related topic by other scholars. Participant F mentioned the importance of situating one's own argument within the current discourse of a particular field of study, as well as the need to establish what has already been written about a topic to avoid replicating scholarly work. One participant also mentioned the need to locate "background" information on materials or topics, especially topics that she knew little about. She commented, "if I am writing about a particular object, piece of art, case study or a film, I need to not only understand what people have said about it, but I need to understand the context of the [the object] and the language of it."

Information-Seeking Behaviors

Participants discussed the methods and resources they use to conduct research during the description of the critical incident and throughout the interview. Generally, participants used the libraries' online catalog, library databases, and other databases, such as Google Scholar, to find information. However, search strategies and specific resources varied.

When participants were asked to describe a recent experience with an information need, several themes and patterns emerged. All of the participants used similar methods to generate ideas for papers and find information once a topic was chosen. When looking for information, participants used library and non-library resources. Library resources used included online databases, electronic journals, and the UNC Libraries' online catalog. Participants also consulted professors, class readings, and bibliographies and works cited lists of articles they were familiar with. Three participants also talked about shelf-browsing as a method of finding information.

While online article databases and the online catalog were the primary library resources that participants used to search for information, they were often used only after consulting other resources, or after the student had a specific article or book to search for. Many of the participants consulted professors or bibliographies before beginning a library search. Participant A, from Communications Studies, mentioned that she often conducts very specific library searches because sources have already been recommended to her by professors. She said,

> A lot of times I have a more specific idea of what I am looking for because various sources have been recommended to me by faculty members or my previous experience with similar authors . . . I am more often going to have a specific search for a specific book, or at least a specific author, rather than a search for keywords usually.

Another participant reported getting suggestions from a classmate when she was working on a paper about comic books, a topic that she needed background information on.

In instances where participants were researching broader topics, or topics that they knew less about, online resources such as library databases and online search engines were used more heavily. Keyword searches were performed in databases such as

Academic OneFile, JSTOR, Communication and Mass Media Complete, and in online search engines such as Google and Google Scholar.

Even when participants were researching broad topics in databases, they were still looking at these topics from very specific perspectives. Previously gained knowledge, or "cultural capital" was used to sift through results as participants decided what was relevant to their own work and what was not. Since participants often already have an idea of what they want and do not want based on their existing knowledge of the topic, certain authors and perspectives may be excluded from their searches. Participant A mentions that when looking for information on procrastination, the topic of her masters' thesis, she knows that she is "looking at procrastination in a very specific way where as other texts [she] might find would problematize procrastination and pathologize it." Similarly, participant B, who is interested in haunting and abuse, knows that he does not want psychoanalytic articles when searching for information.

Some participants did not use the UNC Libraries' online catalog or databases as their primary information-seeking resources; rather, they used alternative online information resources. Two participants used library databases from their previous institutions. Participant G, from English and Comparative Literature, expressed discontent with UNC Libraries' choice of vendor for one of his most frequently used databases, the MLA International Bibliography. He stated that he does not like the interface of UNC's subscription and uses a friend at his previous university to gain access to the EBSCO Host version of MLA. When asked if he had considered asking for help using the database, he explained that he had found another way around it. Participant D mentioned that she continued to have access to the databases and electronic journals from

her previous institution, and that she preferred to use those because UNC Libraries did not always have what she was looking for. Another participant reported that she does not use the online catalog to search for books, unless she has a specific title in mind explaining, "Sometimes I use Amazon and Google Books, and that way I can read an introduction which is useful, and then I look and see if we have it." In these cases, UNC Libraries was often used to retrieve materials, but only once a specific source was desired.

Information Literacy Perceptions

When searching using online databases and the online catalogs, most of the graduate students in this study were competent, confident information seekers. Three participants mentioned the use of techniques such as Boolean operators in database searches. When performing catalog searches, participants clicked on subject heading links to locate similar materials, and some participants knew the difference between searching by keyword and searching by subject heading. Overall, participants described minimal frustration with locating desired information. Some participants did experience frustration, however, during more open searches using online databases. Participants B and E, both from Communications Studies, had difficulty narrowing results and retrieving relevant results from library databases.

Use of Reference Services

Participants rarely contacted reference librarians for research help. Two participants spoke to a librarian at Davis when they had trouble finding books on the shelf and one IMed to find out if she could check out periodicals; but, even highly

specific inquiries such as this were infrequent. None of the participants had ever scheduled a one-on-one research consultation with their departmental liaison librarian, and only one had communicated with her department's subject bibliographer to locate a specific source. Most of the participants either vaguely, or explicitly, had some idea that they could receive one-on-one research help, but most did not know how to schedule such a meeting. Those that were more explicitly aware (at least three participants mentioned receiving emails on the departmental listservs about research help from the departmental liaison librarian) had not taken advantage of this service.

Some participants reported the perception that their research skills could be improved, but they still did not contact librarians. Looking at the bibliography of another scholar made participant C wonder how he could strengthen his own searching skills. He commented, "I was reading something and I was so impressed with all of the resources this person had, and I was thinking what kind search mechanisms is he using that I am not?"

Other participants reported frustrations when searching for information using online databases. Participant G, who was unhappy with the MLA International Bibliography interface at UNC, said he had not considered asking a librarian for help with the database even though he was unable to retrieve desired results. He commented, "They might be able to help me search better in the actual database, but they can't change the database and that is what this is about. It is about me and the database, to me anyway, it's not the way I am using the database." Another participant experienced frustrations when searching the online catalog for information. She reported that even when she retrieved an overwhelming number of search results, she did not consider approaching a

reference librarian. She commented, "When I was writing that materiality paper I was overwhelmed by the results . . . because there is so much about Foucault, and I just felt overwhelmed by it; but I don't know how the library could fix that."

Other participants reported similar sentiments that they did not know how reference librarians could assist with the research process. Participant A reported that she did not have a clear idea of what a librarian could do for her that she could not do for herself. Participant E spoke of not knowing how to prepare for a research consultation. When asked if she would consider consulting a reference librarian, she said, "Maybe if I knew a little more about what it was. Like am I supposed to go in with research ideas? Am I supposed to go in with a particular source that I am looking for?" Another participant commented, "I probably don't know what they can do for me. They probably could rock my world, and I don't know it."

Besides not knowing how reference librarians could help, participants gave additional reasons for not contacting reference librarians. Time was a significant factor; most participants reported procrastination and time constraints as reasons for not seeking help. Participants also spoke of the ease of accessing information as a reason for not approaching librarians. One participant said, "There's so much information that I can get . . . easily that I don't see a need to enlist the services of a librarian to help." Many participants also approached professors for help. Professors were a source of information, as they often suggested particular articles to students. One participant explained, "My professor is teaching me then that person would be the expert on sources. If I can't find something or need help, I will default to that person rather than to a reference librarian."

Only one participant reported asking a reference librarian for in-depth research assistance. Participant F, from English and Comparative Literature, commented that she had IMed and approached reference librarians a few times and went on to speak of a specific instance:

> I had an author and a text, and I had a similar author and . . . a theory that they were the same person, so [the librarian and I] spent quite a while figuring out that they were probably the same person, but she changed her name to a pseudonym, so that was quite an adventure. I've definitely challenged the reference librarians from time to time.

She went on to explain that she has a firm sense of what librarians can do for her, mentioning that working for Doc South, in Wilson Library, has made her feel more comfortable approaching librarians. She describes her experience the following way:

> Working in a library setting, even if it's a digital resources place, I felt broke down a few barriers. I've gotten a much better sense of what [librarians are] capable of doing. I think part of it too is I've met some people in library science and gotten to know a little more about what it is that librarians do . . . clearly reference librarians are not there just to catalog books, and I don't think that an English graduate student ever sits down and consciously thinks about [it], but we have people whose entire job is to keep track of information and to be experts in information management.

Clearly, participant F possessed a strong understanding of how reference librarians could assist her with her own research that other participants lacked.

Use of Instructional Services and Resources

At different points throughout the interview, participants were asked to comment on formal library instruction, such as course-integrated library instruction. Since only one participant had attended library instruction since being in graduate school at UNC, the researcher was unable to inquire about the usefulness of previous sessions. Instead,

participants were asked about the likelihood of attending research consultations and instruction. Most participants also provided suggestions for how to raise awareness among humanities graduate students about research consultations and instruction sessions.

A number of participants that indicated that they would be interested in voluntary instruction sessions geared towards graduate students in their academic department, depending upon the scope of the session and incentives to attend. Many participants stated that a voluntary session would have to have a narrow topic that was relevant to their own research. Many of the participants mentioned the importance of incentives if instructional sessions were going to be voluntary. The reason they had attended the grant source library workshops was because there was an incentive involved—they could learn how to fund their graduate school education. At least three participants mentioned free food as an incentive to bibliographic instruction, and one participant even mentioned having a graduate student from UNC's School of Information and Library Science run sessions to create a way to meet graduate students outside of her own department. Other participants also mentioned that voluntary sessions should be advertised as being narrow in scope to make it clear how the session would help its target audience. Participant F commented,

> I know it's probably hard to do given all of the specialties that larger
> programs have, but . . . if a program is advertised as applying to graduate
> school research then I'm not going to go, because I'm going to think it's
> so generic, but if its something specialized to English, I am going to be
> much more interested . . . If you don't jump in front of us and say this is
> going to make your experience better, we're probably going to walk right
> past . . . advertising in a generic way, most people will miss it.

In order to attend a voluntary session, participants wanted the session to be narrow in

scope, relevant to their specific academic interests, possibly include incentives, and to be held at a time of day that was convenient for them to attend.

Reactions to mandatory library instruction were mixed. One participant mentioned that it takes away from an already limited amount of class time over the semester. Another participant noted that if a session was made mandatory by his professor or department, he would feel that it was important to attend and would be keen to discover what he could get from the session.

Though participants had minimal formal library instruction as graduate students, they discussed potential reasons for not having attended more instruction. Most participants also discussed what they would want from bibliographic instruction sessions, offering specific ideas for how to make formal instruction sessions more appealing to humanities graduate students. For instance, students responded negatively to the idea of generalized instruction. However, they responded positively to bibliographic instruction that was geared toward their specific academic interests, as well as instruction that was incorporated into seminar classes within their academic departments. Most participants provided suggestions for how to increase library awareness among humanities graduate students.

Most participants mentioned that one way to increase interest and awareness in formal instruction sessions is for the librarians to collaborate with professors in the department. At least two participants mentioned interest in incorporating library sessions into existing classes or into professionalization seminars that are offered during the semester. Participant G stated that even his interest in a voluntary instruction session would increase if it was "run in conjunction with an English faculty member and

somebody from the library because that represents to me not just "this is how you do research" but this is how you do research and make it applicable. Participant B expressed a similar sentiment that, as far as required instruction sessions, a graduate student "is going to be much more open to receiving the information and retaining the information than an undergraduate would" and that "if a graduate program is telling you that you need to do this, it feels like there's more reason behind it."

Increasing faculty awareness of library instructional services was also mentioned as being integral to getting students to seek help from librarians. Participants did not feel that faculty had an understanding of what librarians could help with either. Participant E stated:

> I also don't think that our faculty are really aware of the fact that there are reference librarians to help, at least I never hear anybody talk about it or recommend it . . . if the faculty was more aware and could say 'I know this literature…but talk to the reference librarian, they're very helpful,' that would probably make me more inclined to take advantage of that persons expertise.

Incorporating library instruction into research methods seminars was also suggested. Both participants from English and Comparative Literature expressed discontent with the lack of opportunity to learn more about professionalization and research methodologies, and they welcomed the idea of incorporating library instruction into a semester long course on professionalization.

Awareness of Instructional Resources

Participants in this study were unaware of the variety of instructional services and resources available to them such as one-on-one help and the Research by Subject pages on the libraries' Web site. Most participants were aware that they could set up one-on-

one consultations to receive research help; however, many of them described it as a vague awareness. Participant G knew that reference librarians were there to help and assumed that he could set up a consultation because of similar services at his previous institution. Participant E commented, "I was aware of that I guess . . . in theory I knew that they offered those, but in practice I really had no idea how it worked." Participants that were explicitly aware research consultations had received information about research consultations through departmental listservs. Most participants were aware that there was a reference librarian that offered specialized research assistance for their department and that there was a subject bibliographer who specialized in collecting materials related to their discipline; however, only one participant mentioned contacting either of these people. One participant remembered meeting her liaison at orientation because he was in charge of the orientation session, and another participant had corresponded with one of the subject bibliographers to locate materials, but few of the participants knew who the library liaison was for their department.

Chapter 5: Implications and Study Limitations

The findings of these eleven interviews coincide with the findings of previous studies relating to graduate student library use. Like previous studies, this research suggests that humanities graduate students are heavy users of the library, they lack awareness of many of the services and resources available to them, and they are interested in more instruction. Similar to previous studies, such as Delgadillo and Lynch's study of history graduate students, this study found that participants were hesitant to approach reference librarians. Participants did not feel that librarians could do anything for them that they could not do themselves. Like participants in other studies, these graduate students also did not perceive a need to "bother" a reference librarian since they could usually locate information on their own.

This study also produced important data that illuminates the uniqueness of humanities graduate students information-seeking habits and information needs. Because of their varying levels of information literacy and highly-specialized areas of study, the "zone of intervention," or point of need, that Kuhlthau discusses, likely occurs for these students at different stages, and the amount of assistance they need may varies from student to student. In his research, Barrett mentions that librarians might "begin thinking about services to graduate students in terms of particular ''zones of intervention,'' . . . by recognizing patterns in humanities graduate student research behavior at particular program stages" (330). Indeed, the zones of intervention may occur at particular stages

throughout the graduate program. However, data in this study suggest that even at particular stages, such as needing information for seminar papers at the end of the semester, student needs may vary greatly within these stages.

A major finding of this study was that humanities graduate students have very specific, individualized needs, perhaps even more so than undergraduates. When humanities graduate students begin work on assignments, their levels of need may vary depending on a number of factors. They exhibit different levels of comfort with information-seeking and may reach frustrations at different points in their research. Their levels of information literacy vary greatly; as one participant from Communications Studies mentions, he is "totally lost" when it comes to searching online databases, while other participants from the same department indicate a high level of comfort with online databases. Because humanities graduate students have such a wide array of interests and methodologies, the zone of intervention, or point of need, may occur at different points for each student, making these concepts more difficult to incorporate into instructional design. Librarians must consider how to approach instructional programming that targets students at both levels.

While librarians may be able to reach undergraduates at their time of need by designing assignment-specific instruction, graduate students may benefit from individual help, or a course-integrated approach that occurs throughout the semester and addresses the individual needs of students. As Barrett suggests, librarians may aim to recognize patterns among graduate student needs at different stages of their masters' programs, while at the same time recognizing that these needs may vary greatly from student to student.

Implications

This research contributes to the research areas of Library and Information Science and Education, as well as to professional practice in these areas. It contributes to Library and Information Science by identifying library resources and services in need of improvement and by conveying further insight about the information-seeking behaviors of users. It contributes to Education by identifying gaps in and proposing supplements to the pedagogical practices of humanities graduate programs.

Academic librarians, especially the general reference librarian serving the needs of graduate students, would be interested in this research because of its potential to inform practice and theory. Data collected in this study may inform instructional design in college and university libraries. If librarians possess a better understanding of how graduate students use the library, methods of improvement in services and out-reach can be considered. Findings from this study suggest a number of different ways academic librarians might tailor instructional services to better fit the needs of humanities graduate students. For instance, future instruction sessions could be tailored to meet the highly-specialized needs of humanities graduate students and coordinated through the academic department.

Findings also suggest ways in which librarians might advertise services, such as bibliographic instruction classes, to graduate students. For instance, librarians at UNC may wish to promote services to graduate students by prominently posting information on the libraries' Web site. Many of the participants spoke of departmental listservs as a primary place of communication. Therefore, librarians may consider forwarding more information about instructional services and resources to the departmental listservs as a

way to increase awareness. When advertising research consultations or instruction sessions, librarians should clarify how these services will help the target audience specifically. Another option is to consider increasing awareness in humanities departments is for subject specialist librarians to meet incoming students in a brief session at the beginning of the semester.

Humanities faculty and instructors may also be interested in this research because it examines potential unmet needs of the students whom they teach and mentor. Humanities faculty involved with curriculum design may wish to institute research methods courses to prepare students to conduct scholarly research and function as professionals in academia. Also, collaboration among librarians and humanities faculty and instructors may be significant for increasing graduate student use and awareness of library services. Librarians and faculty may wish to collaborate in research methods courses when these courses contain information literacy content. While only some participants in this study desired a research methods or professionalization class, almost all participants indicated that they would be more likely to attend instruction if the session was coordinated through their department.

Study Limitations

The methods employed in this study, qualitative interviewing and the critical incident technique, posed certain advantages and limitations. Advantages of qualitative interviewing include that it provides depth of understanding, flexibility, and is relatively inexpensive (Babbie 307). One of the primary advantages of CIT is that it "provides a rich source of data by allowing respondents to determine which incidents are the most

relevant to them for the phenomenon being investigated" (Gremler 66). Further, CIT can be used as an exploratory method to increase the pool of research on a little studied topic, and it is a highly flexible method that can be adapted throughout the course of the interviews to fit the purpose of the research topic (Gremler 66).

The researcher also faced a number of limitations. With qualitative interviewing, the researcher faced issues of validity and reliability among data. Qualitative interviewing produces valid results (Babbie 307); reliability, however, is low in qualitative interviewing (Babbie 308). Though participant responses exhibit a high degree of validity, responses are somewhat unreliable as it is difficult to be sure that another observer would interpret participant responses similar to the researcher of this study. Participants may also respond differently if interviewed again.

Another limitation was the issue of social desirability present in this study. Babbie writes that, "whenever we ask people for information, they answer through a filter of what will make them look good" and that this is "especially true if they're interviewed face-to-face" (Babbie 250). Once the aim of the interview was stated, participants may have assumed that the researcher was seeking this information because the researcher had a vested interest in the quality of library service provided at UNC. This may have caused participants to give socially desirable answers. In an attempt to prevent participants from giving socially desirable answers during the interviews, questions asked were as unbiased as possible. The researcher attempted to provide participants with enough information that they were able to adequately describe their information needs without explaining the study in such depth that participants perceived a bias on the part of the researcher.

Another limitation of the study is that the chosen sample is not necessarily representative of the larger population of humanities graduate students. The sample was taken from a small subset of humanities graduate students out of convenience to the researcher. This study was unable to generalize results from the students in the sample to the larger population of humanities graduate students at UNC or in general.

Another limitation is that the CIT required participants to think retrospectively. Gremler writes that "the CIT method relies on events being remembered by respondents and requires the accurate and truthful reporting of them" (Gremler 67). Participants had to recall an information need that occurred in the past and sometimes had difficulty remembering precise details of the event. Participants also experienced difficulty in other parts of the interview. Some participants experienced difficulty recalling events like approaching a reference librarian and some could not recall if they had attended formal library instruction session as undergraduates. One inquiry that participants had difficulty responding to was when they were asked to recall alternative ways they had learned to use academic libraries, such as through professors, peers, or colleagues. Surprisingly, most participants had no trouble recalling mandatory bibliographic instruction sessions from undergrad; however, recalling other ways they had learned about library resources and services proved more difficult. Participants felt that they had likely learned various information-seeking skills from professors, peers, or colleagues, but experienced difficulty recalling the specifics of such events.

Another limitation is that this study does not measure the efficacy of instructional services and resources. Participants who had attended formal instruction or corresponded with a reference librarian in graduate school were asked to recall whether these

experiences were helpful; however, this was the extent of measuring how effective instructional services and resources were. Because so few participants had attended formal instruction as graduate students, it was difficult to measure the effectiveness of sessions in conveying information literacy skills. Contingency questions about the usefulness of instruction largely could not be used since participants had had so little bibliographic instruction as graduate students. The conclusion of this paper offers suggestions for future research that may measure the efficacy of specific forms of user education.

A final limitation was the levels of specificity with which participants described an information need during the critical incident portion of the interview. When asked to describe a recent experience with an information need, some participants talked about a specific need, such as looking for a specific title in the online catalog. When participants described specific needs, the critical incident was fairly short and because there were only a few steps taken to locate information, the researcher did not collect adequate data to analyze the participants' information-seeking abilities. In these instances, information was usually located easily and with use of low-level information literacy skills.

In each instance where a participant described a very specific information-seeking experience, the researcher probed the participant for an experience where they were dealing with a less specific search. Through probing participants, further strengths and weaknesses in information-seeking skills emerged. For instance, when participants discussed more open searches, meaning searches on topics that they knew little about or were just beginning to research, they experienced more frustration and difficulty with the search. If the study was repeated, more precise language would be used to ensure that

participants describe an open search for information, rather than a search for a specific item held by the libraries. Though this limitation created difficulties in the study, it also highlighted that participants had greater difficulty with open searches as opposed to searches for specific items.

Chapter 6: Conclusion

This study explored the information needs and information-seeking behaviors of graduate students in the humanities. By conducting eleven in-depth, qualitative interviews with humanities graduate students at UNC Chapel Hill, the researcher built upon the existing pool of knowledge related to the information-seeking habits of graduate students as a user group. When conducting scholarly research, humanities students are frequent users of library collections; however, previous studies have shown that these students, as well as advanced scholars in these academic disciplines, do not take full advantage of library instructional services. This study aimed to produce data that reflect the attitudes behind students' choices to utilize the educational library services available to them.

This study sought to fill a gap in existing research by producing qualitative, in-depth data about graduate student perception and use of library instructional services. Rather than simply discovering frequency of use, this study produced data that hopefully reflects the cognitive and behavioral aspects that affect student use of these services and resources. While it is useful to know whether or not students are aware of particular services (which many studies have demonstrated), to fully understand how to design instructional services, librarians and information professionals must understand, from the student's perspective, the way they experience information needs and the types of behaviors they exhibit when searching for information.

In this study, participants spoke candidly about their information-seeking behaviors. Interviews revealed that these students were largely unlikely to approach a reference librarian for help and were more likely to ask a professor or to tackle problems on their own. Because they did not understand what librarians could do for them that they could not do for themselves, participants did not feel inclined to seek research assistance from librarians. Time constraints and the ease of accessing information also contributed to this. Participants would like instruction that introduced them to specific resources, such as databases and journals pertinent to their academic interests. Two participants also mentioned the desire for instruction on locating archives and special collections materials.

Though participants in this study expressed interest in library instruction, this study also highlighted some of the difficulties of targeting information literacy courses to this population. A major theme that emerged was students' desire for highly-specialized instruction. This study found that humanities graduate students have highly individualized information needs. Even within departments, research interests vary greatly and are often interdisciplinary. This study also found differing levels of comfort with resources such as online databases among humanities graduate students. Reaching these students with the same instructional resources geared towards undergraduates may prove difficult, as more individualized research assistance may be necessary. Participants would also be more likely to utilize instructional resources if those were coordinated with academic departments.

Understanding how graduate students experience information needs can help instructional librarians to design services and resources that optimally help students

during the moment of need. Rather than providing voluntary information literacy courses throughout the semester, which may not seem beneficial to students when they do not have a particular assignment or information need in mind, librarians may consider ways to reach students at their point of need, such as course-integrated instruction that prepares students to search for information relevant to particular academic interests and information needs.

As research in Library and Information Science focuses on the user's experience and interactions with library services and resources, it is important to pay attention to the diverse array of users that exist throughout different information environments. Though groups such as graduate students may be perceived as highly intelligent and able to competently solve their own information needs, LIS researchers and professionals should not ignore such a group's potential need for information literacy instruction. Empirical user studies such as this one have the potential of identifying unmet needs. Subsequently, professionals can base instructional design on the results of such research.

Future Research

Future research is needed to more fully understand the information needs and information-seeking behaviors of humanities graduate students. Information retrieval studies and case studies of instructional programs may help fill in the gaps in knowledge.

Information retrieval studies are needed to more effectively measure information literacy among humanities graduate students. Asking graduate students to retrieve documents using online information systems may reveal difficulties these students experience when searching for information. As this study only asked them to discuss

their own perceptions of their information-seeking abilities, it was difficult to precisely measure levels of information literacy.

Further study of institutions that provide more instruction for graduate students is needed. Studying instructional programs, even those focusing on social sciences or medical sciences, that conduct a higher volume of instruction could also be useful in learning more about outreach services to graduate students. Interviewing graduate students in these scenarios could be useful for understanding whether such programs are successful and to what extent they could be used as a model for institutions wishing to implement a broader range of instructional resources for graduate students.

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Appendix A: Interview Schedule

1) **OPENING**

   a) **Establish rapport**: I am a masters' student in the School of Information and Library Science, and I would like to interview you as part of a study that I am conducting.

   b) **Purpose:** I would like to ask you a few questions about your academic department and curriculum, your information needs, and your experiences (or lack of) with library instruction. The focus of our interview will be on a specific information need that you have experienced and how you handled it.

   c) **Time line:** The interview should last no longer than one hour. The focus of our interview will be on a specific information need that you have experienced and how you handled it. I may pause periodically throughout the interview to consider and make notes on your responses. You reserve the right to at any time ask me to stop recording.

2) **BODY**

   a) **General information**

      i)   What academic department are you in?
      ii) How far along are you in your program?
      iii) Are you a masters' or PhD student?

   b) **Curriculum information**

      i)   Tell me briefly about what your specific academic interests are and what you intend to do once you finish your degree.
      ii) What kind of assignments do you usually have to complete in your classes?
           (1) Can you talk more about the requirements of particular assignments?
      iii) Do you use the library in completing these assignments? I so, what types of resources do you use?
           (1) Can you say more about your research process? How do you normally locate the types of sources you use?
      iv) Are you required to take a research methods course as part of your required coursework?
           (1) If so, tell me about the course content?
           (2) Did you learn about using library resources in your research?
           (3) If you learned about library resources, did you learn about these from a professor/instructor in your department or from a librarian?
           (4) When were you required to take this course?
           (5) After taking this course, how confident did you feel in your abilities to conduct research using library resources such as online databases?

Transition: I am going to ask you a few questions about your current and previous experience with library instructional services. When I ask about "instruction," I am referring broadly to any time that you received help from a librarian or a resource created by a librarian. Instruction can include anything from approaching a librarian at the reference desk to ask for assistance finding a specific article or book; asking for research help; IMing, calling, or emailing a librarian for research help; or attending a formal instruction session taught by a librarian in which you learn to use a specific resource or conduct research on a topic. The next few questions that I am going to ask you are about your experiences with instruction, specifically formal instruction sessions taught by librarians.

When I ask about formal library instruction, I am referring to services such as classes taught by librarians where you learn how to use library resources. An example of a formal library instruction session would be one that had been scheduled ahead of time, possibly by an instructor or professor. Sometimes students, especially undergraduates, are required to attend sessions in the library to learn how to find scholarly articles. Some library instruction sessions are scheduled by the library and are open to anyone affiliated with the university. Some of these types of classes include learning about specific software, such as Refworks or EndNote.

c) **Exposure to formal library instruction**

   i) Before entering graduate school, had you had attended any formal library instruction sessions?
      (1) Tell me about that session(s). Why did you attend it? Was attendance mandatory? Was the session helpful? Do you remember any of the skills you learned in it?

   ii) Since you have been in your current degree program, have you attended any formal library instruction sessions?
      (1) Tell me about that session(s). Why did you attend it? Was attendance mandatory? Was the session helpful? Do you remember any of the skills you learned in it?
      (2) If you have not attended formal instruction, can you talk about how you feel about the idea of formal instruction? Would it have been helpful to you at any point since you've been in graduate school?

d) **Information literacy skills**

   i) When you entered your current degree program, how confident did you feel in your abilities to use the library? This includes your ability to locate print materials such as books and journals, use online databases, etc.

ii) Can you summarize how you learned what you know about using academic libraries?

e) **The Critical incident**

i) **Researcher explains aim of asking participant to describe the CI**: I want to understand the information needs of graduate students, and to find out how library instructional services help meet these needs.

ii) **Critical incident**: Think of a time recently when you have needed to find information for a class assignment. Please provide a step-by-step description of what you did to resolve your information need beginning with the circumstances that necessitated the information. It would be best if this was a broad information need, such as a time when you needed information on a topic that you either did not know much about or had only begun to research. You can also tell me about a search for information as you began to develop ideas for a large paper or for your thesis. If you cannot think of a broad need, then it can be something such as needing a specific article, but try to describe the larger context of the need if this is the case. Sketch the progression of the information need on paper detailing each step.

   (1) **Possible contingency questions**

   (At this point, the researcher will follow a semi-structured series of contingency questions. Contingency questions will further probe participant about experiences with and perceptions of library instruction. The operational definition of "instruction" may be repeated so that the participant understands what services and resources are considered to fall under "instruction.")

   (a) Did you use any electronic library resources, such as the library Web site or any databases to fulfill your information need? If so, will you please demonstrate for me what you did?
   (b) Did you experience frustration in looking for this information? If so, describe your frustration.
   (c) Did you at any point consider going to a reference librarian for help? Why or why not?
      (i) What are your feelings about approaching a reference librarian for assistance with research?
      (ii) If you went to a librarian for help, did you find this to be useful? Would you go back? Would you recommend to your friends that they go to a librarian when they need help finding information?
   (d) Would it have been useful to have had an instruction session that taught you how to do research for this assignment?

f) **Library Services Awareness Questions**

    i) Are you aware that Davis Library offers a number of classes, as well as one-on-one consultations, on finding information?

    ii) Are you aware of the 'Research by Subject' pages on the Web site that contain a list of all electronic resources pertinent to your field of study?

    iii) Are you aware that there is a subject bibliographer in Davis Library who specializes in collecting and locating information in your particular field of study?

3) CLOSING

    a) Reminder of confidentiality

    b) Further comments? Is there anything else you would like to tell me about your experiences that we just discussed?

    c) Thank participant

Appendix B: Recruitment Materials

The following email was sent to Student Services Assistants for the academic departments of Classics, Communication Studies, English and Comparative Literature, Philosophy, and Religious studies:

Subject line: Graduate student volunteers needed for study relating to library use

Dear _____ ,

My name is Jackie Sipes, and I am a second year masters' student in the School of Information and Library Science at UNC. I will be conducting a study for my masters' paper, and would like to know if you could send out a message regarding my study to masters' and PhD students in your department as I am seeking first and second year graduate students as participants in my study.

Sincerely,
Jackie Sipes

Message to be sent to student listserv:

Want to participate in a research study? My name is Jackie Sipes, and I am a second year masters' student in the School of Information and Library Science at UNC. I am conducting a study on graduate student use of library instructional services for my masters' paper. I will be interviewing a number of humanities graduate students on their use of library services. Interviews will take place on campus and should last no more than one-hour. Students will be compensated with $15 cash for their time. If you would like to help me out, or know of someone that would, please contact me at sipes@email.unc.edu or 919.260.7503. Your participation would be greatly appreciated!

Volunteers Needed!

Are you a **graduate student** in the humanities?

12-15 masters' and PhD students are wanted to participate in a research study on student use of library services. This study is part of a masters' paper in UNC's School of Information and Library Science. Participants will be required to talk about their use of library resources and instructional services, such as information literacy classes. The interview session will last no longer than 60 minutes. All participants who complete the interview will receive $15!

Requirements to participate:
- You must be currently enrolled in a masters' or PhD program in one of the following academic departments: Classics, Communication Studies, English and Comparative Literature, Philosophy, Religious studies, or other humanities-based departments
- You must be a first or second-year student or have completed less than or equal to 36 credit hours in your graduate program

For more information contact:
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