THE PREPARATION OF ACADEMIC LIBRARY ADMINISTRATORS

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The purpose of this quantitative study was to determine the preparation methods experienced by academic library deans and which methods they perceived to be most valuable. Rosser, Johnsrud, and Heck (2000, 2003) defined the theoretical constructs of effective academic leadership upon which this study is based. The instrument—a modified version of Greicar’s (2009) Professional Preparation of Academic Deans Questionnaire—was administered online. The population was the chief administrators of academic libraries in the United States; there were 749 usable responses for a 30.4% response rate. Respondents were primarily female (61.7%), White non-Hispanic (90.0%), and born in the United States (95.7%), with a mean age of 56.4 (5.9% < 40, 11.0% > 65). The largest minority group was Black, non-Hispanic (3.9%). Many respondents held multiple advanced degrees; 90.0% held an MLS, 45.8% held a subject master’s, and 18.8% held a doctorate.

The instrument measured academic library deans’ perceived value of various preparatory methods (formal and informal mentoring, on the job training, conferences or seminars, advanced degrees beyond the MLS, and training programs). The methods were tested for perceived effectiveness with Rosser, Johnsrud, and Heck’s (2000, 2003) theoretical constructs of academic leadership. Each preparation method was measured using eight item-level variables and summed to create a scale. Parametric analyses were used to examine scale-level variables and nonparametric analyses to evaluate item-level variables. On the job training was both the most commonly-experienced
method (86.6%) and the most highly-valued ($M = 24.97$). Mentoring was a particularly important preparation method for female and minority deans. Female deans perceived informal mentoring to be significantly more valuable than did males, $t(447) = -2.12, p < .05$. Minorities rated formal and informal mentoring significantly higher than did non-minorities, $t(114) = 2.73, p < .05$; $t(441) = 3.05, p < .05$. Practical implications and future research are discussed.
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CHAPTER 1
INTRODUCTION

Background of the Study

Role of Academic Libraries in Higher Education

Academic libraries occupy a unique position in institutions of higher education. An academic library is not categorized as an academic support or student support service, although it performs similar functions. It is also not an academic department, although many libraries provide library instruction, librarians may have the same academic status as research and teaching faculty, and the library dean is often seen as a direct peer to academic deans. Librarian duties range from providing traditional library services like reference, cataloging, and library instruction to faculty-like tasks such as performing original research and teaching for-credit courses. Librarians often have publication and service requirements similar to faculty members, and some share the same tenure requirements (Bolger & Smith, 2006). Library mission statements reflect this multiplicity of academic function. While many missions focus on the traditional library values of serving students, faculty, and staff, others more directly support their institution’s mission, or describe independent, innovative objectives such as digitizing collections (Franklin, 2009). Academic libraries are where scholarship meets service.

Assessment has become a regular part of higher education and thus a part of academic libraries. There is increasing pressure to show quantifiable results in order to justify continued funding, particularly as institutional budgets shrink and economic conditions worsen (Lynch, 2007). Libraries must prove that they are being used by students and faculty both in-person and online to justify the cost of library staff, facility
maintenance, and the resources to expand both physical and electronic collections (Hiller, Kyrillidou, & Self, 2008; Lakos, 2007; Russell, 2008). Library staff and administrators, rarely trained in assessment practices, must learn to create and execute assessments that are meaningful and appropriately convey library worth (Lopez, 2002). Academic libraries face another assessment hurdle because of the difficulty of directly tying library measurements (such as circulation statistics) to institutional outcomes like academic success or graduation rates. Person and Newman (1990) call the academic library the critical but often overlooked “silent partner” in higher education (p. 357).

While many academics still agree with Harvard president Charles Eliot’s 1873 statement that the library is the heart of the university, this is a difficult statement to quantify (Weiner, 2003).

Another barrier to proving academic library worth is the fact that students and even faculty are not always aware that they are using library-supplied resources. For instance, faculty and students often use commercial internet search engines to locate and download electronic academic articles, rather than beginning with the library website (Frumkin & Reese, 2011). Often, these articles are accessible because of the library’s subscriptions and database licenses. Although this “invisible service” is convenient for the users, it does the library’s image a disservice by implying that the content is freely available online, rather than fee-based content made available by the library. This may strengthen some students’ erroneous assumptions that everything can be accessed freely online, and that the library isn’t relevant to their research. The subsequent lack of support for library resources could make budget justification difficult.
Budgets continue to be an issue for higher education in general, and libraries are particularly financially troubled. Libraries face increased costs merely to maintain their existing subscriptions, let alone the additional cost to increase their collections (purchasing new books, journal subscriptions, or databases) or improve their facilities. Publication costs have skyrocketed in the past decade, particularly the cost of journal subscriptions. In the mid-2000s, reports showed that the price of journal subscriptions had risen 215% over the past 15 years, compared to the 62% rise in the Consumer Price Index (McLellan, 2004). This trend has continued, with a 381% increase in serials expenditures from 1986 to 2009 (Kyrillidou & Morris, 2011). It is not unusual for subscription costs to individual journal titles or databases (which aggregate electronic subscriptions to hundreds of journals) to rise around 7% per year, while collection budgets are being cut at this same rate or more (Kniffel, 2009). It costs academic libraries more money each year simply to maintain their current journal subscriptions, meaning they are left with less money to purchase new books or journals. Many libraries that used to maintain both print and electronic subscriptions are canceling the print version to lower costs and to make physical collection space available for other purposes (Zambare, Casey, Fierst, Ginsberg, O'Dell, & Peters, 2009).

As library collections shift to emphasize electronic resources, formerly physical collection space is being renovated to provide student space for individuals and groups (Euster, 1995; Hobbs & Klare, 2010). This provides yet another drain on the library budget, in order to make best use of their space and remain relevant to their users. Depending on particular campus needs, academic libraries may use this space for
public computers, large group-study tables, individual desks or study carrels, comfortable seating, cafes, or instruction rooms (Dewey, 2008; Euster, 1995; Lin, Chen, & Chang, 2010). For instance, at the University of North Texas, little study space was provided at the student union or on the campus as a whole. Thus, the first floor public areas of Willis Library were converted to allow more group study with large tables and comfortable seating, while the basement was filled with smaller desks and carrels for individual study (Halbert et al., 2011; Jackson, 2011; Kolsti, 2012). As campus conditions and space needs change, academic libraries must be prepared to respond quickly to use their space effectively and maintain institutional relevance. Therefore, libraries need effective, strategic leaders who are responsive to the higher education environment and committed to the mission of the academic library. Riggs (1998), a respected voice in academic library leadership, calls the library dean the “chief strategist of the library” (p. 58).

Changing Role of the Academic Library Dean

As the role of the academic library has changed, the library dean’s role has gone through a similar transition. Until the 1970s, the typical academic library dean was thought of as a “gentleman scholar” (Rooks, 1994, p. 56). These deans were typically white, male, and stayed in their position for average tenures of 12 to 14 years (Cohn, 1976; Person & Newman, 1988; Rooks, 1994). The position was considered a lifetime appointment (McAnally & Downs, 1973; Rooks, 1994). Between 1933 and 1973, 54% of research library deans remained in their positions until their retirement or death (Cohn, 1976). There was little emphasis on long-range planning and few financial pressures, as library budgets increased annually (McAnally & Downs, 1973). Management was
traditionally hierarchical, with the dean as a firm authority figure; there was little staff participation in decision-making (McAnally & Downs, 1973).

By the 1970s, academic library deans’ average tenure had lowered to five to six years and frequently ended not due to retirement or death, but because the dean took a position at a different institution (McAnally & Downs, 1973). In a particularly dramatic instance, seven of the library deans at the “Big Ten” universities left their positions during 1971, all but one well before retirement age. From 1970-1973, half of all Association of Research Libraries (ARL) deans left their positions; four of these libraries changed administration twice during that period (Association of Research Libraries [ARL], 2012a; McAnally & Downs, 1973). McAnally and Downs (1973) attributed this rapid turnover to the increased pressures in higher education administration, primarily due to enrollment growth and high expectations driven both by the student activism of the 1960s and increased faculty participation in governance. They describe how these same pressures shortened the average tenure of university presidents and other senior administrators in higher education, and resulted in the addition of new vice president positions to help address problems. This increase of administrative layers between presidents and library deans effectively reduced the library’s administrative authority and visibility, further complicating the dean’s role. To survive in this new environment, McAnally and Downs (1973) advised that contemporary library deans “must be willing to accept change as a way of life” (p. 122).

DePew and Allison (1984) noted a continued increase in turnover rates in the following decade. Person and Newman (1988) interpreted the data from DePew and
Allison’s study to imply that the traditional scholarly-focused deans of the past found the changing environment of academic libraries unpalatable. Lee (1977) noted the need to balance the traditional internal management of the library with increasing external duties. Woodsworth (1989) confirmed McAnally and Downs’s (1973) conclusions, noting that by the late 1980s the short tenures and rapid turnovers they mentioned had become the norm among academic library deans. She found it unlikely that “even the brightest and best can survive twenty or thirty years as a dynamic library director given the current tempo and demands of the job” (Woodsworth, 1989, p. 38).

In the mid-1990s, Rooks (1994) said that while the complexity of the library dean role had remained similar to that described by McAnally and Downs (1973), the reasons for that complexity had changed. Rather than the issues of growing enrollments and expanding administration in the 1970s, the 1990s faced shrinking enrollments, downsized staff, and reduced funding. The birth of the internet, the rapid increase in costs of electronic subscriptions, and questions about the preservation and access of electronic resources further complicated library decisions and budgeting (Rooks, 1994). Today, the rapid pace of technological change can be added to this list of complications and pressures.

Today, library deans must become the face of the library to the institution they serve. Their duties include fundraising, strategic planning, quantitative assessment, defense of library value to institutional administrators, and other skills beyond the traditional library school education (Dewey, 2005; Long & Schonfeld, 2010; Martin, 1998; Moran, 1999; Winston & Dunkley, 2002). Deans must be not only library experts
and effective managers, but also entrepreneurs and spokespersons (Koelker, 2002). In addition, library deans need to understand faculty needs and the politics of higher education (Mech, 1996). This perspective is not usually included in library science curricula, and the dean’s role within the university-wide community is something not easily learned by prior library experience at lower levels (Williams, 1998). Library deans must be able to work with the deans of academic departments on a peer level and to persuasively communicate the library’s interests and goals to senior administrators (Rooks, 1994). While education other than the MLS may not provide specific skills that will make this peer relationship easier, possession of a doctorate can be a powerful credential for gaining the respect of other deans (Mech, 1996).

Education and Preparation of Academic Library Deans

Traditionally, academic library deans were viewed similarly to their academic dean counterparts, as scholarly leaders (McAnally & Downs, 1973). Until the 1970s, it was common for the academic library dean to have a subject doctorate (a doctorate in a specific research area, rather than in the practice fields of library science or education). Since the 1970s, library deans have had greater management, leadership, and administrative duties. At the same time, librarian training has been standardized. Since 1975 the leading professional association for academic librarians, the Association of College and Research Libraries, has maintained that the master’s in library science (MLS) is the appropriate terminal degree for academic librarians (Association of College and Research Libraries [ACRL], 2007; Bryan, 2007; Jones, Mitchell, & Major, 1998). A MLS from a school accredited by the American Library Association (ALA) is required for most librarian positions. Because academic library deans are often promoted from
lower-ranking librarian positions, the MLS became the primary educational requirement for library deans by default, and doctorates became less common after the 1970s. A second master’s degree, often referred to as the subject master’s degree because it creates an area of subject expertise for reference librarians, has become an acknowledged substitute for the doctorate. However, a subject master’s is by no means required or expected for academic librarians, even library deans (Lindquist & Gilman, 2008, 2010; McCracken, 2000).

Some academic libraries hire non-MLS doctorate holders as subject specialists. Yale University has a program to educate doctorate-holders of various disciplines to become non-MLS-holding librarians, and several institutions have similar programs (Oder, 2003). Arguments in favor of doctorate education for academic librarians include the acquisition of in-depth research skills, self-discipline, and socialization into the broader academic community of faculty (Downey & Hoffman, 2009; Gilman, 2003, 2005; Herubel, 2006; Macklin, 2006; Oder, 2003). However, some argue that requiring a doctorate devalues the traditional librarian degree, and that hiring non-MLS-holding librarians could lead to a dilution of standard library practices and values such as the emphasis on client information access and discovery (Bell, 2006; Crowley, 2004; Jones, Mitchell, & Major, 1998). Some academic library deans hold a doctorate or other professional degree instead of a MLS, but today these cases are rare and typically apply to special focus institutions (for instance, a medical school library dean possessing a medical degree). The majority of position listings for academic library deans in Chronicle of Higher Education and College & Research Libraries News list a
MLS as required (Hernon, Powell, & Young, 2001, 2002; Lin, 2000). A doctorate may be included as an additional requirement, as a preferred qualification, or not listed at all, but the doctorate is rarely listed as an acceptable substitute for a MLS.

Among those who favor doctoral education for academic librarians, there is disagreement over the appropriate subject for such a degree. The debate has been divided into three major factions: those who favor a doctorate in library and information science, those who favor a doctorate in education (usually higher education or educational administration), and those who maintain that a doctorate in any subject is sufficient (Downey & Hoffman, 2009; Herubel, 2006). The latter list the key benefits of a doctoral education for librarians as depth of research and academic socialization, and believe the subject itself matters little unless it is a topic in which the librarian performs further research, or is relevant to his or her current or desired position (usually as a subject expert). Those who argue the doctorate’s relevance for academic library deans in particular cite the primary benefits as faculty socialization, familiarity with research methods and statistical analysis, and peer status with other academic deans (Downey & Hoffman, 2009; Mech, 1996). Hernon, Powell, and Young (2003) endorsed the value of doctorates for library leaders because of the degree’s emphasis on research, “neither leadership institutes nor mentoring can offer the same type of formal training in research… research develops one’s capacity for problem-solving and critical thinking as well as including both evaluation and assessment” (p. 147). Williams (1998) notes that despite the lack of consensus on appropriate educational attainment for library deans,
“the credential of choice on a college campus is the doctorate, and anyone in a leadership position on campus who does not hold a PhD is at a disadvantage” (p. 51).

Broadbent (1998) describes his doctoral education as fundamental to his successful career path from librarian to academic library dean to university chief information officer. He earned a doctorate from Drexel’s College of Information Studies, which included coursework in the disciplines of higher education administration and business administration. Broadbent lists several benefits from this experience, including analytical skills, presentation experience, understanding educational organizations, strategic planning, and learning a variety of viewpoints on organizational management. In the same volume on academic library leadership, Jennerich (1998) describes his similar path from librarian to associate provost, crediting his doctorate as particularly informative for his administrative duties, “the collegiate educational enterprise demands more than simply on-the-job-training” (p. 220). It’s worth noting that Jennerich heartily endorses continued formal learning and participated in one of Harvard’s educational management institutes, which is mentioned later in this chapter.

This lack of a standard educational profile for academic library deans leaves search committees for these positions at a loss (Riggs, 2001; Stussy, 1989). Search committees may include one or more librarians to be supervised by the future dean, but they are primarily composed of faculty members and administrators at a peer level or higher, including deans of academic departments and the provost (to whom most academic library deans directly report) or a vice-provost (Fitsimmons, 2008; Lin, 2001; Person & Newman, 1990). If even a librarian on the search committee is at a loss about
what educational attainment and other preparation is most appropriate for the position, how can a faculty member or senior administrator who knows little about daily library functions be expected to make an informed decision?

Other Preparation of Academic Library Deans

A little over half of all MLS programs require at least one course in the management of information organizations (Mackenzie & Smith, 2007; Moran, 1999). This course is typically an introduction to management theory and emphasizes communication and human relations, rather than finances and administrative duties. Some programs offer advanced management courses, but these are usually broadly-focused to encompass potential careers in public libraries, corporate libraries, and special libraries as well as academic libraries. Thus, even these advanced management courses give little insight into academic politics or the organization of higher education institutions. Courses in academic librarianship offer the basics of academic library operation and organization, but usually focus on the library itself rather than the broader academic context in which it operates. Thus, few librarians are adequately prepared for the day-to-day duties of academic library administration (Mackenzie & Smith, 2007).

This problem has worsened as the library dean role has evolved, necessitating more specialized skills such as fundraising and strategic planning. Library deans promoted from institutions where the dean is the only administrator on the library staff may have had little experience with such tasks. In addition, associate library deans do not always perform the same functions as a dean. Thus, many library deans come into the position without experience creating a strategic plan, fundraising, or working with senior academic administrators (Mackenzie & Smith, 2007; Moran, 1999). In one survey
of 49 library deans, the majority indicated that their MLS had not adequately prepared them for management in their current position (Mackenzie & Smith, 2008). Mackenzie and Smith (2007, 2008, 2009) concluded that because current library science curriculum provides inadequate preparation for library deans, most deans learn the skills they need on the job.

On the job training. The traditional method of preparation for deanship has simply been learning on the job. This encompasses both learning by trial and error, and hands-on instruction in specific processes that may be provided by those in the administrative office (Greicar, 2009). However, Williams (1998) states that prior library experience and learning on the job isn’t adequate training. He maintains that additional preparation is needed in order for a library administrator to effectively lead a library that is responsive to the needs of the parent institution. Among the knowledge bases for an effective academic library administrator, Williams includes grounding in the history of higher education, an understanding of the original research process in various disciplines, and the capacity to analyze and assess research.

Professional training programs. Several training programs and institutes have been created specifically to address this training gap. Harvard University offers two such programs, one for new academic library leaders and another for senior library leaders (Harvard Graduate School of Education, 2012; Kalin, 2008). Harvard's programs are held each summer for five days, and enroll 100 participants or less each year (Kalin, 2008). They require reading specific texts before the course, and involve discussion of administrative case studies. The Frye Leadership Institute is a one-week program
sponsored by the Council on Library and Information Resources (CLIR) and EDUCAUSE (Council on Library and Information Resources [CLIR], 2012; Hernon, Powell, & Young, 2003). Admittance is selective, and participants spend the week learning about and discussing current issues in higher education and cooperatively working to solve problems. The Texas Library Association (TLA)’s annual Texas Accelerated Library Leaders (TALL) Institute provides leadership training for librarians employed by all types of libraries, including academic. Enrollment is limited to between 20 and 30 participants. The five-day program is grounded in leadership theory, group discussion, and program advisors who provide personal insight into what it means to lead change in various library types (Texas Library Association [TLA], 2012).

Mentoring and the changing demographics of academic library deans. Mentoring has been a key strategy in the field’s efforts to achieve both gender and ethnic parity in leadership positions (Cargill, 1989). Historically, librarianship has been a female-dominated profession with a disproportionately large number of males in positions of authority, administration, and management (Fennell, 1978; Moran, Leonard, & Zellers, 2009; Moran, 1983). In the 1970s, professional organizations such as the American Library Association focused on methods of advancing women into positions of library leadership, and the numbers of women in positions of library leadership began to slowly rise.

This slow progression of women into library dean positions can be seen in the literature. Parsons’s (1976) study of Association of Research Libraries (ARL) deans showed that in 1958 there were no female ARL deans. Karr (1984) reported that in 1966
one ARL library dean was a woman, but by 1970 there were again no female ARL
deans (Myers & Kaufman, 1991). In the mid-1970s, there were four female deans, 5%
of the 78 total ARL deans (Myers & Kaufman, 1991; Parsons, 1976). By 1981, this
number had risen to 12 female deans, or 14% of the 90 total ARL deans (Karr, 1984).
Wong and Zubatsky (1985) noted a rise to 16 female deans by 1983. At that time, one
library joined ARL for a total of 91 libraries, making the percentage of female deans
18%. By 1989, 32 out of the 101 ARL library deans were women (Myers & Kaufman,
1991). Even in recent years, changes have been dramatic. In 2009, 63 out of 111 ARL
deans were women; just one year later, 68 of the 114 were women (Kyrillidou & Bland,
2010).

Mentoring was found to be effective in advancing women to positions of library
leadership (Fennell, 1978; Moran, Leonard, & Zellers, 2009; Turock, 2001). This
includes both formal mentor programs sponsored by organizations, and informal mentor
relationships that naturally developed between individuals. Turock (2003) stated that
mentoring women enables them to “bypass the hierarchy, to get inside information, to
short-circuit cumbersome procedures, and to cut red tape” (p. 495). Kirkland (1997)
described how mentoring counteracts the “deprivation behavior” many female academic
librarians face, such as being purposefully left out of office communications, and helps
remove barriers to advancing into a leadership position.

From the 1960s to the 1980s, as leadership mentoring for women became more
widespread, there were noted improvements in gender parity (Cargill, 1989; McNeer,
1988; Turock, 2001). Studies have been undertaken in the past decade to determine if
gender parity has been reached (Deyrup, 2004; Moran, Leonard, & Zellers, 2009). Moran, Leonard, and Zellers (2009) show that although the numbers of women in administrative positions at academic libraries have dramatically increased and in fact outnumber men in these positions, this is still not proportionate to the percentage of female academic librarians overall. The situation is better at research libraries than at selective liberal arts institutions. At Association of Research Libraries, 64% of academic librarians are women, compared to 60.6% of the library deans, 58.2% of the associate and assistant deans, and 76.6% of the department heads (Moran, Leonard, & Zellers, 2009). Therefore, women are slightly better represented in department head positions than in the population overall, but slightly lower in dean and associate/assistant dean positions. At selective liberal arts institutions, 70% of all academic librarians are women, but only 50.9% are library deans (American Library Association [ALA], 2012; Davis & Hall, 2007; Moran, Leonard, & Zellers, 2009). However, women are well-represented as associate and assistant deans (73.6%) and department heads (74.6%). These numbers show a marked improvement from just a decade earlier, and certainly a dramatic improvement from the 1980s and earlier. Women are also better represented in leadership positions in academic libraries than in higher education administration overall (Fagan, 2012; West & Curtis, 2006). However, work remains to be done to ensure that women are fully represented in positions of library leadership.

In addition to mentoring’s benefits for encouraging women in library leadership, it has been cited as a major strategy to encourage individuals from underrepresented groups to attain positions in library administration (Bonnette, 2004; Mavrinac, 2005;
Turock, 2001). Early mentoring initiatives were focused on recruiting into librarianship as a profession (Wheeler, 2000). However, more recent studies have shown that retention and promotion into leadership, rather than recruitment, are the true keys to creating a more diverse profession (Epps, 2008; Johnson, 2007; Neely & Peterson, 2007; Wheeler, 2000).

The percentage of white academic librarians at ARL libraries has remained stagnant for some time at 85% (Kyrillidou & Morris, 2011; Kyrillidou & Young, 2006). The same numbers are reported for academic librarians at all institutions of higher education, that 85% are white (American Library Association [ALA], 2012; American Library Association [ALA] Office for Research and Statistics & ALA Office for Diversity, 2012; Davis & Hall, 2007). The percentage is even more pronounced in leadership positions; just 9% of research library managers are minorities, and only 5% of research library deans are minorities (Hernon, Powell, & Young, 2003; Hipps, 2006; Wheeler, 2000). Lower-paying, non-credentialed positions as library assistants tend to be more diversely populated than do positions for degreed academic librarians (Davis & Hall, 2007). Furthermore, public and school libraries tend to have a more diverse workforce than do academic libraries (Davis & Hall, 2007).

This does not reflect current U.S. population demographics that indicate around 38% of the population are minorities, with projections indicating this number is rising (Humes, Jones, & Ramirez, 2011). Minorities represent an even higher percentage of students in higher education, 37% (National Center for Educational Statistics [NCES], 2012). This shows how dramatic the under-representation of minorities is in academic
libraries, particularly in leadership positions. As American culture becomes increasingly diverse and globalized, academic libraries will only continue to do themselves and their constituents a disservice if they do not address this mis-match (Alire, 2001). It is imperative that minorities are recruited and retained into academic librarianship, and in particular that academic library leadership becomes more diverse (Alire, 2001; Davis & Hall, 2007; Neely & Peterson, 2007; Turock, 2003).

Statement of the Problem

There is currently no agreed-upon standard preparation for academic library administrators. In addition, there is little data comparing the effectiveness of existing preparatory methods. Several studies have surveyed the educational attainment of academic library deans, but these have primarily focused upon deans employed at major research institutions and have not addressed the relevance of their education to academic leadership (Caldwell, 1962; Cohn, 1976; Karr, 1984; McAnallay & Downs, 1973; Myers & Kaufman, 1991; Parsons, 1976; Rooks, 1994; Wong & Zubatsky, 1985). Studies of preparatory methods other than educational attainment have primarily been descriptive, qualitative, or focused on desired leadership attributes (Fitsimmons, 2005; Hernon, Powell, & Young, 2003; Kreitz, 2009). These studies often involved small samples of library deans (20 or less). Greicar’s (2009) study of the preparation of academic college deans addresses the need to connect preparatory methods with specific leadership domains, but she did not include library deans in her population. There is a need for empirical, quantitative study of the preparation methods of current
academic library deans, and to determine the methods that they perceive as most relevant to their leadership responsibilities.

Purpose of the Study

The purpose of this study was to identify the preparation methods that academic library deans experience. This updates past research on the educational attainment and training of library administrators, and allows comparison of the evolution of trends in library dean education from the past to the present. Such information could be valuable for hiring administrators and search committees for new academic library deans. Such groups seek current trends and standards in education and other preparation. In addition, this study’s link between experienced preparation and its relevance for particular aspects of academic leadership may help search committees better decide which education or other preparation methods are most appropriate for their particular institutions (Person & Newman, 1990). Specifically, education other than the MLS was studied to determine the value and relevance that current academic library deans perceive these degrees may or may not provide for their positions.

The secondary purpose of this study was to determine which of the preparation methods experienced by academic library deans were most relevant to their position and to specific aspects of academic leadership. This could guide the training of those who aspire to become academic library administrators, or provide guidance for new academic library deans struggling to learn about their positions’ responsibilities. It could also inform the improvement or creation of library science curricula and/or professional
training programs for current and future academic library administrators to better prepare them for the position’s academic and political environment.

Finally, this study explored the particular role of mentoring in the encouragement of women and minorities who have become academic library deans. This investigation sought percentages of these groups participating in formal or informal mentoring and their perception of the benefit of such preparation for deanship. Such information is key to understanding how to best encourage and prepare women and minorities for leadership roles in libraries.

Significance of the Study

As Weiner (2003) stated, “there is a dearth of published studies or dissertations that relate leadership to effectiveness of library directors, their organizations, or outcomes” (p. 14). Hernon, a leading scholar in library leadership, has written numerous times about the need for sustained research on the preparation of academic library leaders (Hernon, 2006; Hernon, 2011; Hernon & Schwartz, 2008; Hernon & Schwartz, 2011). Among the specific topic areas that Hernon and Schwartz (2011) mentioned for further study are the mentorship of library leaders, identifying the traits of effective leaders (including educational preparation), and leader development. Elgohary (2003) suggested expanding current research to broader institutional types and considering both current professional preparation and required competencies for librarians, including management competencies. In his suggestions for future research, Fitsimmons (2005) listed studying the varied preparation methods of academic library administrators, both formal and informal. Likewise, Mackenzie and Smith (2009) stated in their study of
management preparation of library directors that because traditional library education lacks the necessary depth and focus, that further research should more closely examine the educational preparation and management experiences of library directors. Fagan (2012) suggested applying the academic leadership domains developed by Rosser, Johnsrud, and Heck (2003) to the study of academic library leaders. Knowledge of how training and education correspond to academic leadership will help librarians aspiring to become library deans to make more informed decisions about their education and professional development. This information could also be important for library science programs reviewing their curricula and degree offerings.

Without research on the preparation experienced and valued by current academic library administrators, search committees and hiring administrators will continue to struggle when writing job descriptions and interviewing candidates. A library administrator hired with inadequate preparation may be ineffective or may not possess a relevant body of knowledge. A library dean without a doctorate may not be respected as a peer by the academic deans. However, a dean without a MLS may not be respected by library staff because they do not trust him or her to make sound judgments on behalf of the library. An overqualified administrator may require a higher salary, or may unexpectedly leave the position for a more suitable one. In addition, the time and effort to obtain a doctorate may not be worthwhile for potential library administrators if there is no payoff of greater employability or relevant skills.

I studied the preparation methods and educational attainment of currently-employed academic library deans in the United States in order to discover which are
most commonly experienced, and which methods current deans perceive as most valuable and relevant to academic leadership. This study informs those who aspire to become academic library administrators as to the most common, effective, and appropriate administrative preparation methods. It may particularly help women or minorities determine if formal or informal mentoring may be helpful experiences which to seek out. This investigation can guide the creation of relevant training for future library administrators, whether in the context of library science education, library leadership training programs, or professional conferences or seminars. This study informs search committees and hiring administrators about current educational and experiential trends among academic library administrators, and how they relate to various institutional types. This will aid them in making informed decisions about which educational requirements to require and which preparatory experiences to look for in potential candidates. Finally, this study provides insight for professional organizations as to the most effective types of preparation methods they may consider sponsoring, such as formal mentor programs, leader training programs and institutes, or conferences and seminars.

Definition of Terms

- Academic library dean: In this study, this phrase will be used to describe the chief administrator, variously titled the dean, director, university librarian, or head librarian. This study includes consideration of interim or acting deans, as well as those acting the chief capacity but without a formal title, as is the case at some community college libraries and special focus institutions.
• Subject master’s: A master’s degree held by an academic librarian, in a subject other than library science.

• Preparation methods: The means by which library professionals prepared themselves for the position of library administrator. In this study, the preparation methods considered are mentoring, informal mentoring, professional conferences, on-the-job training, advanced degrees, and professional training programs or institutes. Each is defined below.

  o Formal mentoring: a process where an institution matched a mentee with a veteran academic and/or library administrator to nurture, support, and guide the mentee’s professional development.

  o Informal mentoring: a voluntary process where an experienced academic and/or library administrator nurtured, supported, and guided the mentee’s professional development.

  o On-the-job training: an informal practice in which the dean learned the responsibilities, demands, ethics, duties, and details of the position after his or her appointment as dean.

  o Professional conferences or seminars: attendance at professional conferences and/or seminars related specifically to the academic library dean position.

  o Advanced degree(s): completion of a subject master’s degree (that is, a master’s degree in a subject other than library science) or doctoral degree (in any subject, including library science).
• Professional training programs or institutes: attendance at a professional institute or training program, including but not limited to: Harvard’s Leadership Institute for Academic Librarians, Harvard’s Advanced Leadership Institute for Senior Academic Librarians, Texas Library Association’s TALL Texans Institute.

• Academic leadership domains: Seven aspects of academic leadership defined by Rosser, Johnsrud, and Heck (2000, 2003). These domains have been slightly modified to reflect their use in the setting of an academic library, rather than an academic department.

  o Vision and goal setting: the ability to articulate clearly the strategic goals of the library, encourage ideas and creativity, create an atmosphere conducive to high librarian performance, demonstrate vision and long-range planning, emphasize library service excellence appropriately, emphasize research excellence appropriately, emphasize institutional service excellence appropriately, advocate for resources needed by the library, encourage librarian and staff development, encourage development of innovative library services, and provide leadership for the library/department level initiatives.

  o Management of an academic library: the ability to ensure that fair administrative procedures are followed, exercise fair and reasonable judgment in allocating resources, manage change constructively, delegate work effectively, handle administrative tasks in a timely manner, be an
effective problem solver, demonstrate knowledge of departments and programs within the library, and maintain an effective and efficient staff.

- Interpersonal relationships: the ability to demonstrate understanding of the needs and concerns of librarians and library staff, treat individuals fairly and with respect, maintain positive and productive relationships within and external to the library, demonstrate awareness of the quality of professional work of librarians and library staff, be accessible to faculty and staff within the library, demonstrate understanding of the needs and concerns of students, and be accessible to students.

- Communication skills: the ability to listen to and communicate with librarians and library staff, listen to and communicates with external constituencies, effectively represent the library to the rest of the university, effectively communicate the library’s priorities to the upper level administration, and produce clear reports and correspondence.

- Professional development, research and institutional endeavors: the ability to maintain an active research and scholarly agenda, pursue professional growth opportunities, engage in effective provision of library services, contribute service to professional organizations, and contribute service to community and campus projects.

- Quality of library services: the ability to advance the library’s services effectively, handle external accreditation reviews effectively, recruit new
personnel and/or promote skillfully, and demonstrate a commitment to ensuring a fair promotion process.

- Support for institutional diversity: the ability to demonstrate commitment to advancing and supporting equal employment opportunities, demonstrate commitment to mentoring of women and librarians or staff from underrepresented groups, provide reasonable accommodation for persons with disabilities, and ensure the staff is educated in EEO/AA concerns.

Theoretical Framework

Leadership research has an abundance of theories. Few of these theories build upon prior theory; rather, their multiplicity reflects the complex nature of leadership and how it varies according to individuals, groups, situations, and environments. Leadership research in academic libraries has borrowed much of its theory from leadership research in other fields, such as management. As Birnbaum (1998) noted, this can result in a mismatch and misunderstanding of how higher educational institutions, and the libraries that serve them, actually operate. Using classical leader theory to interpret outcomes in higher education is not always appropriate.

The body of truly empirical leadership research in academic libraries is still relatively small. Transactional and transformational leadership are the most relevant theories for the current study. Transactional leadership, first described by Burns (1978), is characterized by a reciprocal relationship between leader and followers (Rossiter, 2007). The leader and followers each negotiate to come to an understanding, each needing the other to accomplish their individual goals. This leadership consists of
ensuring that basic tasks are performed in order to accomplish negotiated goals. Transformational leadership, defined by Burns (1978) and Bass (1985, 1990), takes this concept a step further. Transformational leaders change their follower’s expectations and grow their perspective in order to achieve new, more aspirational goals.

Birnbaum (1998) pointed out that change in colleges and universities tends to be slow primarily because of higher education’s shared governance structure. Although college presidents and academic library deans have leader positions that appear traditional and authoritative, their authority is effectively limited. Their ability to transform their institutions depends heavily on faculty, who are not traditional followers in the sense of management literature. Faculty members are a hybrid of followers and leaders; they are constituents that have their own power and influence in the educational organization (Birnbaum, 1998). Contrary to the typically negative view of transactional leadership in managerial research literature, Birnbaum (1998) maintained that it this not only common but is a positive method of leading educational institutions. He believed that transformational leadership is only possible in higher education when there is an acknowledged crisis, if it is even possible then.

Rosser, Johnsrud, and Heck (2000) built on transactional leadership as presented by Burns and Birnbaum, particularly the idea that leadership is founded on the reciprocal relationship between leader and followers. Acknowledging that the particularly complex nature of reciprocity in leadership has not been thoroughly investigated empirically in a higher education setting, they investigated behaviors indicative of effective academic leadership (specifically, the behavior of academic
deans). This approach was also influenced by classical behavioral leadership theory, identifying what successful leaders do (Giesecke, 2007).

Rosser, Johnsrud, and Heck’s (2000, 2003) research produced seven domains of effective leadership that are specific to higher education. Those domains, also presented in the definitions above, are: vision and goal setting, management of the unit, interpersonal relationships, communication skills, quality of education for the unit, support for institutional diversity, and research, professional and campus endeavors. (For the purpose of this study, the “quality of education for the unit” domain was interpreted as “quality of library services” to more directly reflect this study’s academic library setting. This modification is discussed in more detail in the section on instrumentation in Chapter 3.) Heck, Johnsrud, and Rosser (2000) developed these domains to measure the effectiveness of academic deans in specific leadership areas and tasks. More about their study and its results is detailed in Chapter 2.

The seven domains of academic leadership developed by Heck, Johnsrud, and Rosser (2000) provide the foundation for this study. Academic library deans were asked to consider the value of preparation methods they experienced by comparing how well each method prepared them for academic leadership as represented by these seven domains. The specific instrument that was used in this study was developed by Greicar (2009) by using the Heck, Johnsrud, and Rosser domains in this way. Greicar’s study and results are discussed in Chapter 2, and her instrument is discussed in further detail in Chapter 3.
Research Questions

The research questions that this study addressed are as follows:

1. What preparation methods do academic library deans experience?

2a. What preparation methods do academic library deans perceive as the most beneficial?

2b. Does this vary according to the employing institution’s Association of Research Libraries (ARL) status?

3a. According to the literature, library and information science education may not adequately prepare academic library deans for administrative positions. What value do deans place on advanced degrees (other than the MLS)? Do deans perceive advanced degrees to be a more beneficial preparation method than on-the-job training?

3b. Is there a significant difference in perceived value of advanced degrees between deans that hold doctorates and those that do not (who either hold second master’s, MDs, or JDs)?

3c. Do deans perceive that advanced degrees specifically increase their leadership ability in research and professional development (according to Heck, Johnsrud, and Rosser’s seven domains of academic leadership)?

3d. Do deans perceive that advanced degrees provide better preparation than on the job training in administrative leadership areas such as vision and goal-setting, management of an academic library, or communication with external constituents and upper administrators?

4a. According to the literature, mentoring was an integral part of recruiting female and minority library professionals as academic library deans twenty years ago. What value do current deans place on mentoring? Does this vary by gender? If so, are these differences affected by age?
4b. Does perceived value of mentoring vary by minority status?

Limitations

This study has the following limitations: there are several variables outside the researcher’s control, such as the administrators’ motivations for seeking their current position, and the selection criteria of the search committees and hiring administrators. These variables may have potential impact. In addition, participants only ranked the value of preparatory methods that they personally experienced. This may limit the ability to directly compare the perceived values of all preparatory methods. Finally, because the instrument was applied as a self-report measure, the objective effectiveness of the academic leadership activities of the surveyed participants cannot be determined. This study judged only participants’ perceived importance of preparation for academic leadership, not how that preparation relates to objective measures of academic leadership effectiveness.

Delimitations

This study is limited to the United States. The institutional types included are basic Carnegie classifications for associate’s colleges, baccalaureate colleges, master’s colleges & universities, doctorate-granting universities, special focus institutions, and tribal colleges (Carnegie Foundation for the Advancement of Teaching, 2010). Public, private, and for-profit institutions are included in this study.

Assumptions

This study includes the following assumptions: 1) the sample is representative of the population, 2) the administrators respond to the survey accurately, and 3) the data
collected measures the preparation methods experienced by academic library administrators.

Organization of the Study

This research study is presented in five chapters. Chapter 1 includes the background of the study, statement of the problem, purpose of the study, significance of the study, definition of terms, theoretical framework, research questions, limitations, delimitations, and the assumptions of the study. Chapter 2 is a review of the literature, which includes definitions of academic leadership, educational attainment for academic library deans, leadership traits of academic library deans, and preparation methods for deans. This chapter also presents a more detailed review of the studies that directly inform this study: Greicar’s (2009) study of the preparation of academic deans, and Rosser, Johnsrud, and Heck’s (2000; 2003) work assessing the effectiveness of academic deans within seven leadership domains. Chapter 3 describes the methodology for the research study, the participants, the instrument, data collection, and how the resulting data was statistically analyzed. Chapter 4 presents a profile of the respondents’ demographic and institutional characteristics, reports the reliability measures for the instrument scales, and provides the results of the statistical analyses as organized by the research questions. Chapter 5 summarizes the study, discusses the findings and synthesizes them with existing research literature, details the study’s practical implications, and lists areas for future research.
CHAPTER 2
REVIEW OF THE LITERATURE

Introduction

In this literature review, I am only considering empirical studies that relate directly to the research questions. Literature related to the background of this study was included in Chapter 1. There are a number of studies related to leadership attributes of academic library administrators; those included below directly relate to the question of either educational attainment or other methods of preparedness. The literature is presented thematically, with a review of the construct of academic leadership used in this study, leadership traits of academic library administrators, and the preparation methods of deans.

Measuring Leadership in Academic Deans

As mentioned in Chapter 1, Rosser, Johnsrud, and Heck (2000; 2003) developed an instrument that empirically measures the effectiveness of academic deans. The instrument has 58 Likert-rated items that create seven scales that the authors call leadership domains, because they measure latent variables related to academic leadership. These domains, drawn from a review of existing literature and theory on academic leadership, are: 1) vision and goal setting, 2) management of an academic affairs unit, 3) interpersonal relationships, 4) communication skills, 5) research/professional/campus endeavors, 6) quality of education in the unit, and 7) support for institutional diversity. I provide a brief overview of each of the leadership domains in the following paragraphs.
The items making up the scale of each leadership domain were tested for reliability. The Cronbach alphas indicated that all of these scales were reliable, with alphas that ranged from .97 to .98 (Heck, Johnsrud, & Rosser, 2000). The leadership domain of vision and goal setting contained 12 items ($M = 3.71$, $SD = 1.41$). The domain is defined as articulating strategic goals, encouraging creativity, emphasizing excellence in teaching, research, and service, encouraging faculty development as well as program development, long-range planning, and providing leadership for unit initiatives. The second domain, management of the unit, is made up of nine items ($M = 3.64$, $SD = 1.31$). It includes fairly allocating resources, managing change, delegating work appropriately, solving problems effectively, timely handling of administrative tasks, following fair administrative procedures, demonstrating knowledge of departments and programs, and maintaining an effective staff (Heck, Johnsrud, & Rosser, 2000).

The third leadership domain of interpersonal relationships, composed of 10 items ($M = 3.81$, $SD = 1.32$), entails how deans interact with their faculty, staff, and students as well as how they communicate with those external to their division. This includes mentoring unit members, being accessible to students, and demonstrating awareness of the quality of unit members’ work (Heck, Johnsrud, & Rosser, 2000). The fourth leadership domain is communication skills, encompassing eight items ($M = 3.94$, $SD = 1.17$). This domain encompasses listening and communicating both with unit members and external constituencies, representing the unit to the university, communicating unit priorities to upper administration, communicating upper administration priorities to the
unit, and producing clear reports and correspondence (Heck, Johnsrud, & Rosser, 2000).

The fifth domain is research, professional, community, and campus endeavors. It is made up of six items ($M = 3.29, SD = 1.44$) and includes pursuing professional growth opportunities, engaging in effective teaching, and contributing services to professional organizations and community and campus projects (Heck, Johnsrud, & Rosser, 2000). The sixth domain is quality of education in the unit, composed of seven items ($M = 3.49, SD = 1.51$). This domain covers effectively advancing the unit’s undergraduate and graduate programs, advancing appropriate curriculum offerings, handling external accreditation reviews, recruiting new personnel, promoting personnel skillfully, and showing commitment to a fair tenure and promotion process (Heck, Johnsrud, & Rosser, 2000). The seventh and last domain is support for institutional diversity ($M = 3.80, SD = 1.14$). This domain includes commitment to supporting and advancing equal employment opportunities, mentoring women and faculty from underrepresented groups, providing reasonable accommodations for persons with disabilities, and ensuring that staff are educated in EEO/AA concerns (Heck, Johnsrud, & Rosser, 2000). As a group, these leadership domains closely correspond with key aspects of the role of academic library deans as examined in Chapter 1 and as defined by other related studies. These related studies are explored in more detail later in the present chapter.

Because this instrument was designed as an evaluation of deans’ leadership, it is not a self-study. The instrument is administered to faculty and staff that are managed by
the dean whose performance is in question. Participants score their dean’s performance on each item with a 5-point Likert scale, with 1 as unsatisfactory and 5 as an outstanding score (Heck, Johnsrud, & Rosser, 2000). Leadership effectiveness is assessed using a multi-level model, so that a single dean’s effectiveness is considered both as viewed by individuals and as viewed by the group (all raters of a single dean).

Rosser, Johnsrud, and Heck (2000, 2003) piloted the instrument with six academic deans and 229 participating faculty and staff. Subsequent testing was conducted at a single institution; convenience sampling was used in order to gain the greatest number of participants. The instrument was mailed to 1,950 faculty and staff supervised by 22 deans; they received 856 usable responses for a response rate of 54% (Heck, Johnsrud, & Rosser, 2000; Rosser, Johnsrud, & Heck, 2000). Of the respondents, 46.8% were female, and 44.3% were from minority groups. Of the 22 deans, 36% were minorities, and 27% were women (Rosser, Johnsrud, & Heck, 2003). The authors did not specifically note that a library dean was included in the study, but they did list librarians among the participants rating a supervising dean (Rosser, Johnsrud, & Heck, 2000). Therefore, it is likely that at least one library dean was a participant in the study.

Chi-square was calculated for unbalanced group sizes (since the number of participants rating each dean varied) to test if the observed data was a good fit to the proposed multi-level model. The results indicated that the model was in fact a good fit ($\chi^2 = 860.04$, $df = 87$, $p < .05$). Further, the parameter estimates for the seven leadership domains ranged from .73 to .99, indicating that they define the leadership
efficiency construct well (Rosser, Johnsrud, & Heck, 2003). Because these leadership domains had high alpha coefficients indicating their reliability and high parameter estimates in the multi-level model indicating they are good measures of the construct of academic leadership, they are a good fit for the present study.

Leadership Studies of Academic Library Deans

Literature about academic library leadership was investigated in order to judge the appropriateness of applying Rosser, Johnsrud, and Heck’s (2003) measure of leadership of academic deans to the context of academic library deans. Hernon, Powell, and Young’s (2003) book *The Next Library Leadership: Attributes of Academic and Public Library Directors* was based on their earlier studies of the leadership, managerial, and personal attributes of academic library deans (Hernon, Powell, & Young, 2001, 2002). They compiled a list of these attributes through a content analysis of library leadership literature and library dean position announcements in *College & Research Libraries News* from 1994 to 2000 (Hernon, Powell, & Young, 2001, 2002). They then conducted in-person and phone interviews with library deans, during which participants were asked about academic library leadership and related issues, and were also requested to read and comment on the list of attributes. They pre-tested the interview questions with two library deans at Association of Research Libraries (ARL) member institutions before conducting full interviews with 19 ARL library deans. They used feedback from the interviews to refine the list of leadership attributes.

Because of the complexity of the results, Hernon, Powell, and Young (2002) decided to conduct a follow-up study in which participants would rank the leadership
attributes according to perceived value. Twenty ARL library deans ranked items in the list from 1 to 10 (1 being unimportant and 10 being extremely important), as well as added and deleted attributes. The list was adjusted accordingly and was sent to the group twice more for three total rounds of ranking and refining. They sent the resulting list to 13 associate, assistant, and deputy library deans at different ARL institutions to be ranked again (Hernon, Powell, and Young, 2002). The final list was sent back to the original 20 ARL deans, who agreed that the resulting list was useful and representative of desired attributes for academic library deans.

Hernon, Powell, and Young (2003) repeated this process in a second follow-up study with 20 deans of smaller academic libraries. These deans were identified by contacting members of the Association of College and Research Libraries (ACRL), a division of the American Library Association (ALA). (Whereas membership in the Association of Research Libraries (ARL) is at the institutional level and requires a rigorous application process to determine research library status, membership in ACRL is at the individual level and only requires being a member of ALA and paying annual dues.) Hernon, Powell, and Young’s (2003) subsequent study proposed to determine if there were noticeable differences in views of academic leadership between library leaders at research institutions (ARL libraries) and those at smaller, less research-focused institutions. Hernon, Powell, and Young’s (2003) monograph includes the complete ranked lists of attributes. To produce these lists, they calculated the means of the individual rankings for each attribute, then ordered them accordingly to those means. One of the primary differences between the lists was that the ACRL deans
added educational attainment and experience (in both work and scholarship) to the relevant themes. Among the top-ranked qualities in the final list were communication, vision, managing change, strategic leadership, interpersonal skills, technological knowledge, library operations, and planning (Hernon, Powell, & Young, 2003).

Although these lists dealt with leadership traits, rather than methods by which these traits could be obtained, Hernon, Powell, and Young (2003) also considered advanced degrees held by library deans. The results of their study revealed that for educational attainment (listed among “personal attributes”), academic library deans rated the importance of possessing a MLS as 9 out of 10 (10 being the most important), and of having a second advanced degree as 6.6 out of 10. Comments in the qualitative section included, “PhD preferred (for credibility with other deans and senior directors),” “the doctoral degree adds status,” and “earning a PhD is a very helpful experience as well as bringing a credential similar to other deans and directors” (Hernon, Powell, & Young, 2003, p. 74). This emphasis on the importance of advanced degrees other than the MLS segues into a proposal for a doctorate program in managerial leadership in the information profession. (This program has since been adopted by Simmons College, where Hernon is a faculty member [Simmons Graduate School of Library and Information Science, 2012].)

Finally, Hernon, Powell, and Young (2003) surveyed library leaders about different preparation methods by which academic library deans could obtain the traits listed in their previous studies. They contacted 30 library leaders, primarily at academic libraries, of whom 18 agreed to participate for a 60% response rate. The survey listed
traits from the previous studies, and asked participants to rate four preparation methods for each. The preparation methods considered were work experience, mentoring, leadership institutes, and “other” (for which the participants were asked to enter their own response). The utility of each method for a particular leadership trait was rated on a 5-point Likert scale (1 being minimally useful and 5 being entirely).

Hernon, Powell, and Young (2003) grouped the resulting means for each preparation method into a table to relate them to the desired academic leadership traits. ARL deans gave higher scores overall to each preparation method than did the ACRL deans. Library deans asked to comment on the survey said this finding was not surprising, since ARL deans have a small, close-knit peer group and may have more opportunities for development opportunities such as peer mentors and leadership programs. Work experience was consistently rated high related to many of the desired traits. However, leadership institutes were rated as particularly beneficial for traits such as commitment to staff diversity, making the library a visible presence on the campus, trends in higher education, and topical issues such as intellectual property rights (Hernon, Powell, & Young, 2003). The commenting deans also noted that low scores for mentoring could reflect the lack of opportunity or time for such relationships, rather than an inherent lack of utility. Formal education such as a doctorate or a subject master’s in business were among the options listed by the participants as relevant “other” preparation methods. The commenting deans also recommended that future research move away from a focus on the designations of ARL versus ACRL libraries, by using Carnegie classifications for institutions (Hernon, Powell, & Young, 2003). Hernon,
Powell, and Young (2003) suggested that relevance of preparation methods is highly individual, and is related to the opportunities that are available to a particular dean. They concluded that much research remains to be performed about preparation for library leadership.

Connecting Attributes to Academic Leadership Domains

In order to judge the appropriateness of Rosser, Johnsrud, and Heck’s (2003) academic leadership domains for the present study, I compared them to Hernon, Powell, and Young’s (2003) two lists of leadership traits (from the ARL deans and ACRL deans). The table in Appendix C indicates the close relationship between them. The only Rosser, Johnsrud, and Heck (2003) domain that was not reflected in both of the library dean lists was that of “research, professional, community, and campus endeavors” (p. 12). None of the items in this domain were reflected in Hernon, Powell, and Young’s (2003) original list from the ARL library deans. However, the ACRL deans’ list from the follow-up study included three concepts related to this domain: “respect for scholarship and learning,” “record of scholarly achievement,” and “strong service orientation” (Hernon, Powell, & Young, 2003, p. 70-71). All of the other leadership domains were reflected in both lists of attributes ranked by library deans. The table in Appendix C also draws from later studies, which are discussed below.

Leadership Traits of Academic Library Deans Valued by Hiring Administrators

Fitsimmons (2008) built on Hernon, Powell, and Young’s (2003) list of library leadership attributes to determine how the senior administrators responsible for hiring library deans view such traits. He compared the hiring administrators’ rankings of these attributes to the deans’ rankings presented in Hernon, Powell, and Young’s original
study (2003). To do this, Fitsimmons surveyed 320 senior academic administrators responsible for hiring academic library deans. He purposefully selected participants at a broader range of institutional types than did Hernon, Powell, and Young in order to further the generalizability of his findings. Fitsimmons (2005) faxed survey invitations to all 3,921 chief academic officers for institutions awarding associate’s degrees or higher that were listed in the Higher Education Directory and had a fax number. He sent invitations to his entire population because he anticipated a response rate of 25% or less, due to the busy lifestyles of senior administrators. Fitsimmons’s survey used the same final list of attributes and the same 1-10 ranking system as Hernon, Powell, and Young’s study. Fitsimmons (2005) also collected institutional characteristics, provided an area for open-ended comments, and allowed participants to add leadership attributes that they felt were missing from the list.

Fitsimmons (2005) collected 320 useable responses for an 8.2% response rate; 312 of these completed the entire survey. Like Hernon, Powell, and Young, he calculated the mean of each ranked attribute. Fitsimmons then used the Spearman rank correlation coefficient to show the strength of the correlation between the rankings of hiring administrators in his study, and those of the library deans in Hernon, Powell, and Young’s study. His confidence level was 94.7% with a confidence interval of ±5% (Fitsimmons, 2005). The means in the managerial attributes of the rankings of the library deans and the hiring administrators showed a statistically significant correlation ($r_s = .64, p < .05$). The correlation was stronger in for the means of personal attributes ($r_s = .78, p < .05$). Finally, the areas of knowledge rankings also showed a statistically
significant correlation ($r_s = .63, p < .05$). These results indicate that although there were slight differences in the individual rankings, overall there was agreement between the attitudes of library deans and hiring administrators regarding the types of leadership attributes that are important for an academic library dean (Fitsimmons, 2005).

The Fitsimmons (2008) study also explored the educational preparation of library administrators. In his findings, library deans rated the importance of a MLS higher than did their hiring administrators. Likewise, hiring administrators at baccalaureate and associate’s institutions viewed advanced degrees other than the MLS as less important than did library deans. However, administrators at doctoral-granting and master’s-granting institutions agreed with the library deans’ rating of advanced degrees other than the MLS as being 6.0 out of 10 (10 being the most important).

The hiring administrators added 60 additional leadership attributes in Fitsimmons’s (2005) study that were not present in the original lists in the Hernon, Powell, and Young (2003) studies. I added these attributes to the table in Appendix C as further evidence for determining the suitability of the academic leadership domains defined by Rosser, Johnsrud, and Heck (2003) for the present study. A number of the leadership attributes from the Fitsimmons (2005) study fit the Rosser, Johnsrud, and Heck domains well.

Leadership Traits of Library Deans Related to Emotional Intelligence

Hernon built on his earlier study with Powell and Young (2003) to create a related investigation using the theory of emotional intelligence leadership (Hernon and Rossiter, 2006). Hernon and Rossiter aimed to produce a list of emotional intelligence attributes that library deans believe are important for library leaders, and to determine which of
these traits can be learned. They surveyed 70 out of the 102 then-serving ARL library deans for a response rate of 68.6%. They also conducted follow-up interviews by phone and in-person with eight respondents to gain more information about the impact of gender, geographic location, and length of tenure as dean on the importance of specific leadership attributes. To create the instrument, Hernon and Rossiter (2006) performed a content analysis of academic library dean job announcements in *College & Research Library News* from 2000 to 2004. They created a list of leadership attributes identified in these job announcements that fit into the five categories of emotional intelligence as defined by Goleman (1995): self-awareness, self-regulation, motivation, empathy, and social skill. The participants were asked to rank the five traits they considered the most important (1 being the most important and 5 being the least, but still highly important) in each of the five categories. Means were calculated for each trait, and items were ranked accordingly in the final study.

Because many of these leadership traits deal with personal qualities or emotional traits, they do not all directly relate to the Rosser, Johnsrud, and Heck (2003) leadership domains. However, there are notable similarities, particularly relating to the domains of vision and goal-setting and interpersonal relationships. Related to vision and goal-setting, “skill at diagnostic, strategic, and tactical reasoning” was ranked fifth in the “self-regulation” category ($M = 2.82$) (Hernon & Rossiter, 2006, p. 264). In the “motivation” category, three of the top-ranked five items related to the vision and goal-setting domain (Hernon & Rossiter, 2006, p. 265). “Visionary—able to build a shared vision and rally others around it,” was ranked as the most important quality ($M = 1.58$). “Motivate people
to develop and adhere to a shared vision” was ranked second ($M = 2.87$), and “articulate direction for the library” was ranked fourth ($M = 2.69$) (Hernon & Rossiter, 2006, p. 265).

The items related to the Rosser, Johnsrud, and Heck interpersonal relationships domain were all listed in the emotional intelligence category for “empathy” (Hernon & Rossiter, 2006). The highest-ranked item in this category was “treat people with dignity and respect” ($M = 2.68$) (Hernon & Rossiter, 2006, p. 266). Tied for second rank were “attract, build, and retain talent” ($M = 2.54$), and “good interpersonal and people skills” ($M = 2.78$); they were tied according to frequency, rather than by means. Ranked third in this category was “keep organization focused on quality service” ($M = 3.27$), which corresponds to Rosser, Johnsrud, and Heck’s “quality of education in the unit” domain.

In the final category, “social skill,” the highest-ranked item is related to the communication skills domain, “ability to function in a political environment,” ($M = 2.19$). Second was “effective in leading change” ($M = 2.52$), which corresponds with the Rosser, Johnsrud, and Heck domain of management of the unit (Hernon & Rossiter, 2006, p. 267). Again, the parallels between academic leadership domains in these studies show the usefulness of applying the Rosser, Johnsrud, and Heck domains to a study of academic library deans.

Kreitz (2009) used Hernon and Rossiter’s instrument to perform a similar study three years later. Her aim was to determine if qualities would be ranked similarly for both academic library deans and members of their senior management team. She re-categorized the instrument items according to an updated model of emotional
intelligence, and piloted it with two library directors, two senior library administrators, and one human resources manager. After revising the instrument according to their feedback, she sent it to eight Association of Research Libraries (ARL) institutions that agreed to participate in the study. At those institutions, six academic library deans and 21 members of the libraries’ senior management teams responded (Kreitz, 2009).

The participants were asked to rank the overall importance of these traits, first for academic library deans, and then for senior management team members (only the rankings for the academic library deans will be considered here). Unlike the Hernon and Rossiter (2006) study, participants were asked to rank the top ten instead of the top five. Final ranks were recoded so that the highest rank was 10 and the lowest 1, with 0 indicating items not ranked in the top ten (Kreitz, 2009). As in the Hernon and Rossiter (2006) study, “articulating and communicating direction of the library” was the top-ranked item in the “self-management” category ($M = 8.33$) (Kreitz, 2009, p. 539). In the “social awareness” category, the second-rated item was “attract, build, and retain talent” ($M = 7.67$) (Kreitz, 2009, p. 540). The relevant items in Kreitz’s (2009) “relationship management” category were the top three ranked items: “visionary—able to build a shared vision and rally others around it” ($M = 6.83$), “effective in leading change” ($M = 6.33$), and “motivate people to develop and adhere to a shared vision” ($M = 5.50$) (Kreitz, 2009, p. 542). These findings strengthen the findings from Hernon and Rossiter’s (2006) study, and provide further evidence that the Rosser, Johnsrud, and Heck model of academic leadership domains are appropriate to use for a study of academic library deans. Kreitz’s (2009) study does not directly address preparatory
methods or how these traits are to be otherwise acquired, though she suggests that these findings could influence graduate education in library science.

Preparation Methods of Academic Library Deans

Advanced Degrees

O’Keeffe (1998) studied the deans of small college libraries (institutions with 2,000 enrolled students or less) to determine their preparedness for the role based on their educational attainment, past experience, and professional activity. She piloted her survey with 32 library deans, and mailed the final survey to every Baccalaureate I and Baccalaureate II college in twelve midwestern states, a population of 195 institutions, 189 of which had library deans at the time. She received 158 responses, for an 84% response rate.

Respondents were asked to list their education, work experience, publication record, and professional activities, as well as to create a list of skills they believed essential to succeeding as a college library dean. The survey particularly focused on qualities and skills that helped deans lead successfully in their first year of deanship. All of the respondents held a master’s in library science (MLS), and 38% held a subject master’s. Of those, 86% earned their subject master’s before their first library dean position (O’Keeffe, 1998). Of the 14% who held doctorates, 64% earned it before their first library dean position. O’Keeffe did not directly draw conclusions about this educational attainment related to her research question, “what level of experience and qualifications is desirable going into a director’s position.” Instead, she looked at the qualifications as a group. Her analysis showed that men tend to have more
qualifications than women, that 20% of the first-time deans only had one prior year of experience as a degreed professional librarian, and that 20% of the deans were alumni of the institutions they served.

O’Keeffe’s (1998) data shows that previous experience of small college library deans is markedly different than previously assumed. In particular, the large number who had less than one year of professional experience could be due to smaller hiring pools resulting from the geographic location or the desirability of this position at small institutions, or perhaps due to different hiring practices and priorities at such institutions. It is interesting to note that although 20% of the participants had less professional experience than is generally expected before becoming dean, a greater percentage possessed advanced degrees other than the MLS than in previous studies of larger institutions (McAnally & Downs 1973, Cohn 1976, Karr 1984). This may indicate that for some institutions, particularly small ones, formal education is an acceptable preparatory method and a suitable replacement for prior administrative and even prior librarian experience.

McCracken (2000) studied the educational background of academic library deans at selective liberal arts institutions. His aim was to expand on O’Keeffe’s (1998) study of small but less-selective institutions. He selected every other Baccalaureate I institution entry from the Carnegie Classification of Institutions of Higher Education, which had 166 such institutions listed. By gathering information from association directories, college catalogs, websites, and other sources, he was able to locate educational information and length of tenure for 80 academic library deans. McCracken (2000) confirmed and
revised this information through emails to the deans (79% responded). Among the deans studied, 47 were men (59%) and 33 were women (41%). McCracken (2000) found that 40% of the deans held a second master’s degree and 20% possessed doctorates. Only one of the deans did not possess a MLS. McCracken found no correlation between the possession of a doctorate and the size of the institution (according to full-time student enrollment).

Lin (2001) describes changes in academic library dean position announcements in 1992 and 1997. She theorized that the changes in the role of academic library deans as described in the literature (detailed in Chapter 1 of the present study), would be reflected by a similar difference in the criteria listed for deans in job announcements in two different periods. She performed a content analysis of 274 job announcements (excluding duplicate announcements) in *Chronicle of Higher Education* and *College & Research Library News* (Lin, 2000). These publications were chosen because they are both the most frequently used and most respected sources for such job announcements in academic libraries. Lin (2000, 2001) analyzed these announcements by noting the frequency of certain criteria in the sections for candidate qualifications and job expectations or responsibilities. She categorized the criteria by using categories drawn from the literature on academic library deans and in particular from O'Keeffe’s (1998) study that also considered job announcements. Lin (2000) then ranked the items by frequency and percentages, and calculated chi-square to determine if there were statistically significant differences in the job criteria listed in 1992 and 1997.
In both 1992 and 1997, the ALA-accredited MLS was the most commonly required criteria; 89.74% of the announcements listed the ALA-MLS as required in 1992, and 93.96% did so in 1997 (Lin, 2000). In addition, the requirements for a second master’s degree rose by 5.00% and for a doctorate rose by 8.65% in those years. This difference in educational requirements was found to be statistically significant ($\chi^2 = 6.27$, $df = 2$, $p < .05$). The job announcements sought these additional advanced degrees in diverse fields, instead of requiring a doctorate in library science.

Regarding the job criteria categories overall, education was the highest-ranked criteria in both years (Lin, 2000). In 1992, this was followed by management skills, type of workplace experience, and administrative experience. In 1997, the same categories occupied the top four slots but in slightly different positions. Administrative experience moved from rank 4 to rank 2, and management skills moved from 2 to 4. Type of workplace experience remained at rank 3 (the most frequent criteria in this category was experience in the academic library workplace). The difference in ranks was found to be statistically significant ($\chi^2 = 9.83$, $df = 13$, $p < .05$). Additionally, Lin (2000) noted that there was anecdotal evidence in the job announcements that library deans’ reporting lines had an added administrative layer in 1997 that was not indicated in 1992.

Drawing from her data and the literature, Lin (2000) concluded by listing a number of important qualities for academic library deans. The first three qualities she mentions are: have vision, think cross-culturally, and be concerned with the quality of service. These directly relate to three of Rosser, Johnsrud, and Heck’s (2003) seven
academic leadership domains: vision and goal setting, support for institutional diversity, and quality of education.

Position descriptions can be problematic because of the potential that the listed qualifications may represent a search committee’s unrealistic desires, instead of accurately reflecting the individual that is ultimately hired. However, these descriptions are ultimately valuable because they reflect what hiring administrators and search committees believe are important qualifications for the position (Lin, 2000; Person & Newman, 1990). Even in cases where there is little library expertise on the search committee, members are familiar with the educational attainment expected in their institution’s culture and what is required to work within it administratively. Therefore, it is important to include this perspective when looking at traits and preparation for deans.

Formal and Informal Mentoring

Research literature about mentoring future library leaders emphasizes its benefits for encouraging women and minorities to become leaders (Bonnette, 2004; Kirkland, 1997; Mavrinac, 2005). This literature was particularly prevalent during the 1980s, during which the leadership gender imbalance in librarianship reached a peak (Moran, 1983; McNeer, 1988). Librarianship as a profession was traditionally characterized by large numbers of women, while the few men employed in the profession were quickly promoted as managers, directors, and deans (Fennell, 1978; Kirkland, 1997). Mentoring, along with leadership development programs and widespread efforts to narrow the gender gap, helped improve the situation to the point that women now outnumber men in academic library dean positions (Deyrup, 2004; Moran, Leonard, & Zellers, 2009). However, studies reveal that despite the increased number of women in
positions of library leadership, there is still not a representative percentage in these positions compared to the percentage of women in the field of academic librarianship as a whole.

The most notable study in this area is Kirkland’s (1997) study of women in academic library administration. Kirkland created two surveys for this study. The first survey was sent to 50 female librarians in 28 states and the District of Columbia; 12 replied for a 24% response rate. The survey contained four open-ended questions and asked the participants to describe any experiences or observations of incidents involving what Kirkland termed “deprivation behavior.” These behaviors included women being denied the opportunity for professional responsibilities, purposeful delays in or denial of communication, lack of recognition or approval, and using women against each other (Kirkland, 1997). Most of the respondents related incidents fitting one or more of these categories of deprivation behavior. The survey also asked participants to describe any means by which they believed women’s advancement in library leadership could be encouraged. Two of the most common answers were mentoring and developing networks of female library administrators.

Next, Kirkland (1997) developed a second survey to determine the methods (which she referred to as factors) that had helped current female academic library administrators to reach their positions. The survey asked only one question, in which participants were asked to rank the three most important factors in their career advancement. Of the 135 potential participants, 61 responded for a 45% response rate. Kirkland (1997) reported, “no other single factor came close to mentors in significance”
Mentoring was the factor most frequently ranked as 1 \( (f = 13) \), which designated it as the most important factor. When frequencies for the second and third ranked factors were added (without being weighted), mentoring was the second-most frequent factor \( (f = 25) \) after geographic mobility \( (f = 34) \). Unfortunately, Kirkland did not include a weighted count or other further statistical analysis of the rankings, which might have revealed more about the relative importance of each factor in the study. Academic degrees, mobility, and service activity in professional organizations were other key factors in female career advancement identified by this study. Kirkland concluded that mentoring is a key strategy for continuing the journey toward gender parity in academic library administration.

Although much literature exists urging more support for mentoring as a strategy to retain and promote librarians from underrepresented groups, there is little empirical research about the outcomes of formal or informal mentoring for these librarians. Damasco and Hodges (2012) mention this gap in their study on the tenure and promotion of academic librarians from minority groups. They distributed an online survey on tenure and promotion experiences to the email lists for several professional library organizations, specifically requesting the participation from minority groups. Because there is no way to definitively determine the population of academic librarians that are minorities, Damasco and Hodges did not have a way to determine an adequate sample size, and thus report a response rate. They left the survey open for six weeks and distributed the link widely, in an effort to get as many responses as possible. They received 91 responses, 60 of which were useable (Damasco & Hodges, 2012). In order
of highest response, respondent ethnicities were reported as: Black or African-American (41.7%), Asian (21.7%), Hispanic or Latino (16.7%), Multiracial/multiethnic (16.7%), American Indian/Alaskan Native (1.7%), and Native Hawaiian or Pacific Islander (1.7%). Over three-quarters of the respondents were women (76.7%). Over half had worked as degreed librarians for 9 years or longer; 50.0% held subject master’s in various fields, and 6.7% held doctorates.

Damasco and Hodges (2012) asked about several methods of preparing for tenure or promotion, both related to how important each method was, and then how effective each method was. Formal mentoring was perceived as important by 70.7% of respondents, but it was not viewed as very effective (only 30.0% rated it as effective or very effective). Informal mentoring was viewed as both important (88.3%) and effective (56.7%). In part, this finding may be due to the fact that more respondents experienced informal mentoring than mentoring; 36.7% chose not applicable for formal mentoring versus 16.7% for informal mentoring. Damasco and Hodges (2012) also mention that the selective nature of leadership training programs leads to few opportunities for most minority librarians, which may in turn be a factor in the lower rate of participation in formal mentoring programs.

Comments from respondents indicate the range of opinion on the value of mentoring. One said, “I feel that mentoring has played a vital role in my success in my current position” (Damasco & Hodges, 2012, p. 295). However, some respondents indicated that formal mentoring programs, particularly those in which mentors and mentees are assigned rather than chosen, can be negative experiences. One librarian
said, “These programs imply that the problem is with the librarians of color, that librarians of color need to be taught to assimilate” (Damasco & Hodges, 2012, p. 295). The authors concluded that simply creating formal mentoring or other leadership programs for minority librarians was not enough, that regular evaluation of their effectiveness should be performed. They also highlighted the need for continued study in this area.

Studies of Multiple Preparation Methods

Del Favero’s (2006) study of academic deans looked at how their preparation methods for deanship varied according to their disciplinary background. She also sought to discover which preparation methods were most effective for their position as dean. She mailed the survey to a national sample of 421 deans, receiving 210 useable responses, for a response rate of 49.8%. Of the respondents, 69% were male. The survey consisted of 128 items tracking administrative behavior and preparation (Del Favero, 2001). Participants ranked six preparation methods according to the most effective for learning about their role as dean: relationships with faculty leaders, committee service, leadership training, past administrative experience, mentoring, and trial and error (Del Favero, 2006).

Past administrative experience was the method most often ranked as 1 (66%) or 2 (14%), showing that this was perceived as the most influential preparation. Relationships with faculty members was the next highest ranked, with 14% of the respondents ranking it at the top, and 24% ranking it second. Mentoring was ranked fourth, largely due to the fact that 36% of the respondents chose not applicable, indicating that it is not commonly experienced (Del Favero, 2006). Leadership training
was ranked last, with 23% of the respondents ranking it sixth, and 34% of the respondents indicating not applicable. Del Favero (2006) commented that the potential utility of formal leadership training was difficult to ascertain without knowing if the respondents' lack of experience with this method was due to a lack of such available leadership training opportunities, or because academic deans are not predisposed to attend such training programs. Looking at how the top rankings for this method were divided between years of administrative experience may provide another clue. Leadership training was ranked first or second by only 9% of the deans who had been in their position for less than five years, while 17% of the deans with five or more years of experience gave it these top rankings (Del Favero, 2006). Although this was not found to be statistically significant ($H = 1.61, p > .05$), Del Favero interpreted this to suggest that experienced deans may value the experience of other leaders more, and may also have greater opportunities to experience such training.

Greicar (2009) built upon Del Favero’s study to develop a shorter, more targeted instrument to study the preparatory methods experienced by academic deans. Her study also explored which methods were most relevant to deanship, but did not explore the deans’ prior disciplinary background. Greicar used two of Del Favero’s preparatory methods (leadership training and mentoring, which she divided between formal and informal), and developed three others drawn from a review of the literature on the preparation of academic deans (on-the-job training, professional conferences and seminars, and a doctoral degree in higher education). Greicar used Heck, Johnsrud, and Rosser’s (2000, 2003) seven academic leadership domains to produce an
instrument that identifies how relevant deans’ preparation methods are to each domain. Methodological comments on Greicar’s instrument are included in Chapter 3, as the present study uses a modified version of it.

Greicar sent her survey to 1,185 academic deans at four-year higher education institutions. She received 310 responses for a 26.2% response rate, 193 men (62.3%) and 117 women (37.7%). The respondents ranged in age from 32 to 83 (\(M = 56.7\)), were primarily White, non-Hispanic (90.6%), and many held a PhD (73.5%). The most commonly experienced preparation method in her study was on the job training (\(f = 280, 90.3\%\)). The only other methods experienced by at least 25% of the respondents were informal mentoring (\(f = 197, 63.5\%\)) and conferences or seminars (\(f = 174, 56.1\%\)).

Greicar (2009) considered differences in preparatory method experienced by gender, ethnicity, and number of years as an academic library dean by looking at frequencies and percentages. There were no obviously dramatic differences in methods experienced by groups, but no statistical significance was calculated to confirm this.

In the second part of the survey, respondents rated each preparation method’s contribution to their effectiveness in each of the seven academic leadership dimensions developed by Rosser, Johnsrud, and Heck (2003). Respondents used a Likert rating of 1 to 4, 1 indicating a minimal contribution, 2 as moderate, 3 as significant, and 4 as very significant (Greicar, 2009). On the job training was the preparation method rated the highest (significant or very significant) for each of the seven leadership dimensions, with a mean ranging from 2.83 to 3.46. As comparison, the next-highest mean for any
method was 2.65 for informal mentoring as related to management of an academic affairs unit. All of the other preparation methods had means lower than 2.0.

Greicar considered these results by summing the percentage of Likert-ranked very significant and significant responses, as well as by comparing the means and standard deviations. She considered each variable at the item-level, rather than combining variables measuring similar characteristics into a scale (for instance, summing all seven items for on the job training into a scale measuring the overall relevance of this method to academic library leadership as a whole). Transforming these variables into scaled variables containing continuous scores would have allowed her to perform additional, nuanced statistical analysis on her data.

Greicar (2009) also considered the effect that gender and ethnicity might have had on perceived effectiveness of each method. To do this, she used the item-level variable asking each preparation method's contribution to overall preparation for deanship. Independent samples t-tests showed there was statistically significant difference in attitude with respect to gender for the contribution of conferences and seminars ($t(283) = -2.32, p < .05$) and training programs ($t(254) = -2.25, p < .05$). She reported that the effect size was large for conferences ($r^2 = 19\%$) and moderate to small for training programs ($r^2 = 2\%$). She found no statistically significant difference in perceived contribution with respect to ethnicity. Greicar performed similar analyses for each preparation method and each leadership dimension, looking for significant differences by gender or by ethnicity. While she found some statistically significant results, the effect sizes were fairly small (2% to 4%).
Greicar (2009) concluded that the high frequency of respondents having experienced on the job training (90%) or informal mentoring (60%) versus more formal methods indicated a lack of opportunities, funding, and encouragement in those endeavors. Formal mentoring and advanced degrees in higher education were reported as the least commonly experienced methods. Her data on the widespread lack of academic deans holding advanced degree in the field of education supports Del Favero’s (2005) finding that the majority of academic deans have a terminal degree in the discipline in which they were socialized as faculty. Greicar (2009) further observes that a problem with mentoring may be that the majority of available mentors with experience as academic deans are white males, and thus may not be seen as effective or relevant mentors by women or minority deans. She points out that more effective mentoring practices should be considered, if diversity in leadership is truly a goal of higher education.

Summary

Much of the existing literature on academic library leadership has concentrated on determining the most desirable attributes of library leaders. This literature was studied and compared with a set of scaled domains of academic leadership to measure these qualities in academic deans. The sets of library leadership traits were determined to fit well with the broader academic leadership domains.

While much of the library-specific literature focused on research institutions, specifically members of the Association of Research Libraries, several important studies have included broader institutional types. Studies attempting to identify best methods of
preparation for the role of academic library dean have separately considered the impact of educational attainment and mentoring. In particular, mentoring has been hailed as an effective method of promoting women and minority librarians into leadership positions. However, the research literature on the topic is still evolving.

Studies of academic deans have considered the effectiveness of various preparation methods as related to their academic leadership roles. However, no study previously performed a study considering multiple preparation methods of academic library deans, particularly considering their relevance to academic leadership. The present study adapted an instrument used to measure the relevance of six preparatory methods of academic deans to the smaller and functionally unique population of academic library deans. This instrument and the methodological details of this study are described in Chapter 3.
CHAPTER 3
METHODOLOGY

Introduction

I surveyed academic library deans to determine their methods of preparing for administrative positions in academic libraries and the relevance of those methods to seven dimensions of academic leadership as defined by Rosser, Johnsrud, and Heck (2000, 2003). The goal of this study is to test the research questions as presented in Chapter 1, which are repeated below. This chapter details the methodology used to test these questions. This chapter is organized into four sections: selection of participants, data collection, instrumentation, and data analysis.

This study examined four primary research questions. First, what preparation methods do academic library deans experience? Second, what preparation methods do academic library deans perceive as the most beneficial, and does this vary by ARL status? Third, what value do deans place on advanced degrees (other than the MLS), particularly compared to on the job training? Finally, what value do current deans place on mentoring, and does this vary by gender or minority status?

Selection of Participants

The population for this study was chief administrative officers of academic libraries at over 3,600 degree-granting post-secondary institutions in the United States. The position titles used to determine the chief administrative officer of the libraries, referred to in this study as academic library deans, include: dean of libraries, library dean, library director, director of libraries, university librarian, and head librarian. This
study defined an academic library according to the guidelines developed by the National Center for Educational Statistics (NCES) for the Academic Library Survey (ALS) (National Center for Educational Statistics [NCES], 2006). NCES defines academic libraries as organizations that serve a degree-granting higher education institution and which have: total library expenditures that exceed $10,000 annually, an organized collection of print or other materials, paid and trained library staff to provide services, established hours of operation, and physical facilities to support the staff, collection, and services (National Center for Educational Statistics [NCES], 2006; National Center for Educational Statistics [NCES], 2010a, 2010b). This population included institutions from all Carnegie classifications (the basic categories being associate’s colleges, doctorate-granting universities, master’s colleges and universities, baccalaureate colleges, special focus institutions, and tribal colleges) in an effort to produce broadly generalizable results (Carnegie Foundation for the Advancement of Teaching, 2010).

Kaplowitz, Hadlock, and Levine (2004) compared online and mail surveys and found that survey response for online-only surveys was closer to 20% than the 30% or higher for printed and mailed surveys. Response rate for this survey was expected to be low because the population consisted of individuals with demanding schedules. According to Krejice and Morgan (1970), the appropriate minimum sample size for a population of 4,000 is 351. This corresponds with population and sample sizes in similar studies in the literature on academic administrators. Greicar’s (2009) study, whose instrument I modified for use in this study, specified a population of academic deans at four-year institutions and sent the instrument to 1,185 academic deans, resulting in 310
useable responses (26% response rate). Fitsimmons (2005, 2008) surveyed administrators responsible for hiring academic library deans, and included associate-granting institutions to calculate a population of 4,364 from the *Higher Education Directory*. He sent his instrument to each dean whose directory entry included a fax number; he received 320 useable responses, an 8.2% response rate. Del Favero (2001, 2006) used multistage cluster sampling to obtain a sample of 421 academic deans from Carnegie Research and Doctoral institutions, and ultimately received 210 usable responses, a response rate of 49.8%. Moran’s (1983) study of academic library administrators obtained 320 useable responses, after mailing surveys to the 444 administrators for which she could locate contact information out of a population of 695 listed in the *American Library Directory*, a 72% response rate. These highly varied response rates indicate that academic administrators are an unpredictable population, possibly due to their varied level of activity at different times in the academic calendar.

The target population was identified using *HED-Connect*, the continually updated online version of the *Higher Education Directory* (Higher Education Publications, Inc., 2012a). Academic library deans were identified by retrieving records for individuals matching the *HED-Connect* manpower code 08, defined as “Head Librarian - Directs the activities of all institutional libraries” (Higher Education Publications, Inc., 2012b). These records were retrieved between July 23 and August 5, 2012. Names and email addresses were pulled from these records and saved. They were added to a participant panel in Qualtrics, the software chosen to administer the online survey. Using Qualtrics enabled me to send personalized email invitations and to ensure that reminder
messages were only sent to deans who had not already responded to the survey. In cases where the email address was not present in *HED-Connect*, they were located on institutional library websites. If no email address could be found for either the dean or the library, that individual was not included in the study.

One week before the survey was scheduled to open, a pre-survey email was sent that detailed the nature and purpose of the study and the periods it would be open (see Appendix D). This was done in order to increase awareness of the study and thus increase the response rate, as well as to determine invalid email addresses and instances in which library deans had retired or left positions. The email also served as an introduction to the survey research, maximizing the contact points with potential participants to encourage participation. Invalid email addresses and individuals incorrectly identified as deans by *HED-Connect* were deleted from the final sample as discovered. Individuals indicating that they were acting deans, interim deans, or had retired within the last few months were included in the study. Administrators who responded to the message indicating that they would be absent during the two-week period that the survey was open were kept in the sample group, but unsubscribed from future reminder emails, as a professional courtesy. The pre-survey email was sent to every member in the population of academic library deans for which an email address could be found. Similar studies of academic administrators (including those cited above) have used this method to obtain samples because the population is small and expected to produce a small response rate due to high-level administrative duties and busy schedules (Fitsimmons, 2005; Greicar, 2009; Moran, 1983).
Data Collection

The survey was provided online using Qualtrics survey software; the link to the survey was emailed directly to each prospective participant (see Appendix E). The first page of the survey included the informed consent notice (Appendix A). This notice provided information about the purpose of the study, the participants’ right to stop at any time, and included contact information for the author and supervising investigator.

Clicking “I agree” took the participant to the second page of the survey, signaling informed consent. Clicking “I do not agree” immediately exited the participant from the survey. The initial email included a deadline of two weeks; however, the survey was kept open for one additional week. This allowed several individuals to complete the survey who had indicated interest, but were out of town during the initial study dates. Qualtrics tracked responses as they were received, so follow-up emails were sent to non-responders only.

The survey was opened on a Monday morning and the survey invitation emails were sent shortly thereafter (see Appendix F for the invitation message). Reminder emails containing the URL to the survey were sent the following Friday (four days later) and the following Tuesday (four days after the first reminder). See Appendix F for the text of the reminder message. Independent-sample t-tests were performed to judge whether the 390 early responders (those who responded before the first reminder) differed from the 350 late responders (those who responded after the first or second reminder), as a measure of response bias. Only the scaled variable for conferences and seminars reported a statically significant difference between the two response groups at
the alpha-level of .05 ($t_{509} = -2.80, p = .005$). Since the two response groups were statistically similar on every other scaled variable, they were judged to be similar enough to dismiss concerns of response bias.

Participants were given the option to submit their email address at the end of the survey in order to receive a copy of the completed study. These emails were added to a new panel in Qualtrics for this purpose. Upon completion of this dissertation, these individuals will be emailed an electronic copy. All participant information was used in the aggregate only; access to the data on Qualtrics is password-restricted.

Instrumentation

In her review of the literature on academic library leaders, Fagan (2012) suggested specifically applying the Rosser, Johnsrud, and Heck (2003) academic leadership domains to the study of academic library leaders. Greicar’s (2009) survey instrument is an appropriate choice because it not only measures preparation methods but includes their specific relevance to these leadership domains. I received permission from Greicar to use her instrument for this purpose (see Appendix G).

Original Instrument

I used a modified version of the Professional Preparation of Academic Deans Questionnaire (PPADQ), developed by Margo B. Greicar for her 2009 dissertation, *The Professional Preparation of Academic Deans*. Greicar applied her instrument to a population of deans of academic areas, whereas I applied it to academic library deans. The PPADQ uses Rosser, Johnsrud, and Heck’s (2000, 2003) model of seven domains of academic leadership to test which preparatory methods are most effective for specific
aspects of a dean’s role. The seven leadership domains defined in this model (as described in Chapters 1 and 2) are: vision and goal setting, management of an academic affairs unit, interpersonal relationships, communication skills, research/professional/campus endeavors, quality of education in the unit, and support for institutional diversity (Heck, Johnsrud, & Rosser, 2000). The authors created a 58-item instrument administered to faculty supervised by academic deans to determine their effectiveness across these seven leadership domains. Greicar (2009) applied this model to her survey, a self-study of academic deans, not to test for effectiveness in these domains but rather to judge how perceived effectiveness of various preparatory methods might be divided differently between the seven leadership areas.

The PPADQ tracks six methods by which deans prepare for their administrative position: formal mentoring, informal mentoring, on the job training, professional conferences and/or seminars, an advanced degree in higher education or related field, and professional training programs. The instrument measures how important each of these preparatory methods are to the deans’ perceived effectiveness in each of the seven academic leadership areas (Greicar, 2009; Rosser, Johnsrud, & Heck, 2000, 2003). The PPADQ has 21 items, 11 of which are demographic. The perceived importance of each preparation method to each leadership dimension is graded on a 5-item Likert scale, with 0 being not applicable, 1 being minimal, 2 as moderate, 3 as significant, and 4 being very significant. The final item is an open-ended comments section.
Validity and reliability. Greicar (2009) submitted the PPDAQ for review by a six-member panel of higher education experts to determine content validity. This panel included teaching faculty and administrators at several levels, including an academic dean. After feedback from this panel, the instrument was revised and piloted with 20 academic department chairs (department chairs were used instead of deans, in order to minimize impact on the final study’s potential sample size). Results from this pilot study were analyzed and determined to demonstrate content validity. Greicar mentioned that the pilot was also conducted to determine reliability, but specific statistical results were not reported in her dissertation.

Modification of Instrument

In order to provide the instrument online using Qualtrics, the original survey was modified (see Appendix H for IRB approval). To decrease the chance of errors in reported data, I changed questions asking about participants' year, country of birth, and type of advanced degree(s) earned from free-text to pre-formatted drop-down lists. Multiple-choice questions regarding gender, ethnicity, and institutional characteristics were adjusted so that the software only allowed respondents to choose one response. Question 13, regarding which preparation methods were experienced, was changed to allow multiple responses. The data from this question, indicating which methods were experienced, was used to adjust how subsequent questions were displayed to participants. Any preparation methods not selected in Question 13 were automatically removed from the rest of the survey, shortening it by eliminating irrelevant questions. Thus, the Likert valuation for the modified instrument (1 to 4) varies from Greicar’s (1 to 5), because not applicable was not included as a Likert-ranked response option.
Additional modifications were made in order to apply Greicar’s instrument more directly to the academic library environment (see Appendix B). Throughout the instrument, “academic dean” has been replaced with “academic library administrator.” Areas that refer to higher education have been adjusted to more clearly relate to academic libraries; all references to “unit” or “academic unit” have been replaced with “library.” Likewise, references to “faculty” and “unit members” have been adjusted to “librarians and library staff.” The instance of the phrase “service excellence” has been changed to “institutional service excellence” to distinguish institutional committee and related service from services the library provides (such as reference, circulation, etc). “Teaching” was changed to “library service” or “provision of library services” in order to preserve the original instrument’s goal of indicating the primary duty of the area. In academic library studies, librarian research and service parallel the academic faculty experience. However, instruction (a primary faculty function) is typically equated with a librarian’s primary duties. These duties vary according to a librarian’s position. Research commonly focuses on reference librarians, whose primary duties include reference services or library instruction. Librarians in non-reference positions, however, have varied primary functions such as cataloging, digitization, or other duties. Thus, this study uses “library service” to indicate the wide range of services that fulfill the primary mission of the academic library, paralleling instruction, an important function of an academic unit.

In the PPADQ survey section that defines each of the preparatory methods, I made several modifications (see Appendix B). “Doctoral degree in higher education” has
been replaced by “Advanced degree(s)” and the defining text has been updated accordingly. I also replaced the listed training program examples with those more specific to the academic library context. The programs listed are well-known and have been mentioned specifically in the research literature. In the leadership dimensions section, I changed “management of an academic affairs unit” to “management of an academic library.” “Quality of education in the unit” has been edited to “quality of library services,” to maintain the original instrument’s focus on the primary mission of the unit—in the case of the library, to provide key information services such as reference, document delivery, and circulation.

Additionally, the demographic portion of the PPADQ instrument was modified both for clarity and to more accurately measure variables related to the research questions. “Age” was replaced with “year of birth.” The original question regarding institutional control was expanded into Questions 5, 6, 7, and 8 to include student full-time enrollment, basic Carnegie classification, and Association of Research Libraries (ARL) status in addition to control. The PPADQ questions regarding degree type and field were combined and reformatted into Question 9, a matrix that includes degree type, subject, and year attained. The PPADQ question regarding tenure status was deleted because not all academic librarians are eligible for tenure-track positions. Questions about experience and position titles were combined and reformatted into Question 12, a matrix that records each position title, number of years in that position, and the employing institution’s ARL status.
Pilot Study

Because Greicar did not report specific reliability results for her instrument and it was considerably modified for use in the present study, a pilot study was conducted. A convenience sample of 31 individuals was selected based on their past administrative experience, current experience in an assistant administrative or department head position, or their background in higher education and academic library research. No current academic library deans were included in the pilot, in order to minimize the effect on the potential sample size of the full study. Participants were solicited by email, given a link to the online survey, and encouraged to leave feedback either in the survey’s comments section or by email. Their opinion was solicited on terminology, appropriateness of measures used, and length of time to take the survey.

Twenty-three individuals responded, resulting in a 74.2% response rate. The respondents provided detailed feedback, particularly regarding answer options and word choice. For instance, an “other” option for preparation methods was added based on feedback from multiple pilot participants. The survey was revised accordingly and received modification approval from the University of North Texas’s Institutional Review Board. The modifications appear in the final survey instrument (see Appendix B).

The Cronbach’s alpha for the instrument (consisting of six scaled variables) was .79. The only summed scale reported to improve this statistic if removed was the scale on advanced degrees, which would increase to .80. However, the Cronbach’s alpha was already high, and removing this variable would not increase it considerably. Since this variable was an important part of the original instrument and the research questions for this study, it was retained in the final instrument.
The Cronbach alphas for each scaled variable are reported in Table 1; all of the variables had high alphas. For several of the scales, there was a slight improvement in the Cronbach alpha if the item related to diversity was removed. However, this improvement was slight enough (one thousandth of a point) that it was judged more important to retain the properties of the original instrument, allowing comparisons to Greicar’s data. Therefore, no items were removed from any scales. Additional reliability data is reported for the final survey results in Chapter 4.

Table 1

Pilot Study’s Reliability of Scales (Preparation Methods’ Relevance to 7 Academic Leadership Dimensions)

<table>
<thead>
<tr>
<th>Preparation Methods</th>
<th>Cronbach’s alpha (scale-level)</th>
<th>instrument alpha if scale deleted</th>
<th>n</th>
<th>M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formal mentoring</td>
<td>.990</td>
<td>.719</td>
<td>22</td>
<td>4.95</td>
</tr>
<tr>
<td>Informal mentoring</td>
<td>.977</td>
<td>.763</td>
<td>22</td>
<td>12.78</td>
</tr>
<tr>
<td>On-the-job training</td>
<td>.965</td>
<td>.752</td>
<td>22</td>
<td>18.14</td>
</tr>
<tr>
<td>Conferences &amp; seminars</td>
<td>.978</td>
<td>.735</td>
<td>22</td>
<td>10.86</td>
</tr>
<tr>
<td>Advanced degrees</td>
<td>.979</td>
<td>.798</td>
<td>22</td>
<td>3.04</td>
</tr>
<tr>
<td>Training programs</td>
<td>.976</td>
<td>.756</td>
<td>22</td>
<td>5.55</td>
</tr>
</tbody>
</table>

Data Analysis

Data was formatted using Microsoft Excel and was analyzed using IBM SPSS (Statistical Package for the Social Sciences) Version 20. The specific statistical analysis used for each research question is listed in Table 2. The variables of primary interest are discussed in more detail below.
## Research Questions and Data Analyses

<table>
<thead>
<tr>
<th>Research Question</th>
<th>DVs</th>
<th>IVs</th>
<th>Data Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What preparation methods do academic library deans experience?</td>
<td>Preparation methods</td>
<td></td>
<td><em>f, %</em></td>
</tr>
<tr>
<td>2a. What preparation methods do academic library deans perceive as the most beneficial?</td>
<td>Preparation methods</td>
<td></td>
<td><em>M, SD</em></td>
</tr>
<tr>
<td>2b. Does this vary according to the employing institution’s Association of Research Libraries (ARL) status?</td>
<td>Preparation methods</td>
<td>ARL status</td>
<td><em>t-test</em></td>
</tr>
<tr>
<td>3a. What value do deans place on advanced degrees (beyond the MLS)? Do deans perceive advanced degrees to be a more beneficial preparation method than on-the-job training?</td>
<td>Advanced degree(s)</td>
<td>On-the-job training</td>
<td><em>M, SD</em></td>
</tr>
<tr>
<td>3b. Is there a significant difference in perceived value of advanced degrees between deans that hold doctorates and those who either hold second master’s, MDs, or JDs?</td>
<td>Advanced degree(s)</td>
<td>Highest degree attained</td>
<td><em>t-test</em></td>
</tr>
<tr>
<td>3c. Do deans perceive that advanced degrees specifically increase their leadership ability in research and professional development?</td>
<td>Advanced degree(s)</td>
<td></td>
<td><em>X^2</em></td>
</tr>
<tr>
<td>3d. Do deans perceive that advanced degrees provide better preparation than on-the-job-training in administrative leadership areas?</td>
<td>Advanced degree(s)</td>
<td></td>
<td><em>X^2</em></td>
</tr>
<tr>
<td>4a. What value do current deans place on mentoring? Does this vary by gender? If so, are these differences affected by age?</td>
<td>Formal mentoring</td>
<td>Gender</td>
<td><em>t-test</em></td>
</tr>
<tr>
<td>4b. Does this perceived value of mentoring vary by minority status?</td>
<td>Formal mentoring</td>
<td>Minority status</td>
<td><em>t-test</em></td>
</tr>
</tbody>
</table>
Item Variables and Scaled Variables

The primary variables of interest were the preparation methods that deans experienced, and the perceived relevance of those methods to academic leadership. These variables were tracked in the survey by Questions 13 through 21 (see survey in Appendix B). Question 13 asked respondents to select which participation method(s) they had experienced. Respondents were able to select multiple options on this question, unless “none” was selected. If respondents entered “other” as a preparation method experienced, they were asked to type this method into a text box.

Questions 14 through 21 were matrices of Likert-response questions. Each question pertained to a specific dimension of academic leadership as defined by Rosser, Johnsrud, and Heck (2003). Each preparation method that a respondent selected on Question 13 was displayed with Likert-ranked options indicating how important that preparation method was to the specific academic leadership dimension considered in the main question. Preparation methods that respondents did not select as experienced in Question 13 were not displayed in subsequent questions.

Variables were imported into SPSS at the item level, then summed to produce scores (scaled variables). For instance, there are X variables in the SPSS dataset that pertain to the preparation method of formal mentoring. The first variable, ExpFM, is dichotomous and indicates whether or not a respondent experienced formal mentoring, as asked in Question 13. This variable is not included in the summed scale variable. The second variable, OverallFM, is a Likert-ranked response indicating the answer to Question 14, which asked the degree of importance that formal mentoring contributed to the respondents’ overall preparation as an academic library administrator. The third
variable, VisionFM, is a Likert-ranked response indicating the answer to Question 15, which asked the degree to which formal mentoring contributed to the respondents’ effectiveness in vision and goal-setting. The fourth variable, MgmtFM, is a Likert-ranked response indicating the answer to Question 16, which asked the degree to which formal mentoring contributed to the respondents’ effectiveness in the management of an academic library. The fifth variable, RelateFM, is a Likert-ranked response indicating the answer to Question 17, which asked the degree to which formal mentoring contributed to the respondents’ effectiveness in developing and maintaining interpersonal relationships with faculty, staff, and students. The sixth variable, CommFM, is a Likert-ranked response indicating the answer to Question 18, which asked the degree to which formal mentoring contributed to the respondents’ effectiveness with communication skills. The seventh variable, ResFM, is a Likert-ranked response indicating the answer to Question 19, which asked the degree to which formal mentoring contributed to the respondents’ effectiveness in maintaining and pursuing professional development, research and institutional endeavors. The eighth variable, LibFM, is a Likert-ranked response indicating the answer to Question 20, which asked the degree to which formal mentoring contributed to the respondents’ effectiveness in advancing the quality of library services. Finally, the ninth variable, DiversFM, is a Likert-ranked response indicating the answer to Question 21, which asked the degree to which formal mentoring contributed to the respondents’ effectiveness in supporting and advancing institutional diversity. Variables OverallFM, VisionFM, MgmtFM, RelateFM, CommFM, ResFM, LibFM, and DiversFM were summed to create the scale variable SUMfm.
Data analyses considered these variables primarily at the scale-level, though item-levels were also considered for the third research question (see Table 2). The level of each variable being considered is addressed in each analysis presented in Chapter 4. Item variables were analyzed with nonparametric methods, because they are ordinal (Likert-ranked). Scaled variables were analyzed with parametric methods, since the summed scores are continuous.

Effect Size Post-Hoc Tests

Effect size was calculated in order to determine the magnitude of the results of the various statistical analyses listed above. Eta and eta squared were used to determine the effect size for the parametric analyses, and Cramer’s V was used to determine the effect size for the chi-squares (Cohen, 1988; Cohen, 1992). By showing the magnitude of the statistical difference between groups of participants, these statistics assist in determining a more complete and accurate interpretation of the resulting data.

Summary

This chapter has described the methodology I used to study the preparation methods of academic library deans. I contacted all academic library deans for which an email address could be located, in order to assure an adequate sample. The instrument was administered online through Qualtrics, by emailing each potential participant directly with the online survey URL. The instrument used (the PPADQ) and its modifications were discussed. Once the data was collected, several statistical analyses were run, including frequency distributions, t-tests, chi-square, and ANOVA. Finally,
effect size was calculated using eta and/or eta squared for the parametric analyses, and Cramer’s V for the chi-square analyses.
CHAPTER 4
RESULTS

Introduction

The purpose of this study was to determine the preparation methods experienced by academic library deans, and how relevant they perceived these methods to be for academic leadership. This chapter will present the results of the data analysis for the four research questions presented in the previous chapter. First, the demographic and institutional characteristics of the sample will be reported. Then, the reliability measures of the summed scale items in the inventory will be presented. Finally, the findings will be organized by each research question.

Demographic Profile

Sample and Response Rate

The participants were academic library deans from degree-granting institutions of higher education in the United States. The sample size was 2,460 (originally 2,501, but adjusted for individuals incorrectly identified as academic library deans). When the survey was closed, 844 responses were received, 749 of which completed the survey for a response rate of 30.4%. Incomplete responses were list-wise deleted from the sample.

Gender Nationality, and Ethnicity

The majority of the respondents were female (n = 462, 61.7%); there were 287 males (38.3%). This indicates the gender representativeness of the sample, corresponding to the 50-60% of female academic library deans found in the literature (Moran, Leonard, & Zellers, 2009). Respondents were ethnically homogenous, with the
majority being White, non-Hispanic ($f = 674, 90.0\%$). This indicates the sample’s ethnic representativeness of the population, since 85% of all academic librarians and 95% of library deans at research institutions are White (Davis & Hall, 2007; Hipps, 2006; Kyrillidou & Morris, 2011; Kyrillidou & Young, 2006). The largest minority group was Black, non-Hispanic ($f = 29, 3.9\%$). Frequencies and percentages for the whole sample are presented in Table 3.

Table 3

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>f</th>
<th>N%</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Indian or Alaska native</td>
<td>7</td>
<td>0.9</td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>10</td>
<td>1.3</td>
</tr>
<tr>
<td>Black, non-Hispanic</td>
<td>29</td>
<td>3.9</td>
</tr>
<tr>
<td>Hispanic</td>
<td>17</td>
<td>2.3</td>
</tr>
<tr>
<td>White, non-Hispanic</td>
<td>674</td>
<td>90.0</td>
</tr>
<tr>
<td>Race/ethnicity unknown</td>
<td>4</td>
<td>0.5</td>
</tr>
<tr>
<td>Other</td>
<td>8</td>
<td>1.1</td>
</tr>
</tbody>
</table>

The majority of the respondents were born in the United States ($f = 717, 95.7\%$) with Canada a distant second ($f = 10, 1.3\%$), followed by the United Kingdom and Northern Ireland ($f = 4, 0.5\%$), China ($f = 3, 0.4\%$), and Afghanistan ($f = 2, 0.3\%$). The following thirteen nationalities were each selected once, for .01% each of the sample, as shown in Table 4.
Table 4

**Respondents’ Nationality, Arranged by Frequency**

<table>
<thead>
<tr>
<th>Nationality</th>
<th>f</th>
<th>N%</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States of America</td>
<td>717</td>
<td>95.7</td>
</tr>
<tr>
<td>Canada</td>
<td>10</td>
<td>1.3</td>
</tr>
<tr>
<td>UK and Northern Ireland</td>
<td>4</td>
<td>0.5</td>
</tr>
<tr>
<td>China</td>
<td>3</td>
<td>0.4</td>
</tr>
<tr>
<td>Afghanistan</td>
<td>2</td>
<td>0.3</td>
</tr>
<tr>
<td>Argentina</td>
<td>1</td>
<td>0.1</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>1</td>
<td>0.1</td>
</tr>
<tr>
<td>Cuba</td>
<td>1</td>
<td>0.1</td>
</tr>
<tr>
<td>Germany</td>
<td>1</td>
<td>0.1</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>1</td>
<td>0.1</td>
</tr>
<tr>
<td>Hungary</td>
<td>1</td>
<td>0.1</td>
</tr>
<tr>
<td>Indonesia</td>
<td>1</td>
<td>0.1</td>
</tr>
<tr>
<td>Iran</td>
<td>1</td>
<td>0.1</td>
</tr>
<tr>
<td>Mexico</td>
<td>1</td>
<td>0.1</td>
</tr>
<tr>
<td>Philippines</td>
<td>1</td>
<td>0.1</td>
</tr>
<tr>
<td>Romania</td>
<td>1</td>
<td>0.1</td>
</tr>
<tr>
<td>South Africa</td>
<td>1</td>
<td>0.1</td>
</tr>
<tr>
<td>Venezuela</td>
<td>1</td>
<td>0.1</td>
</tr>
</tbody>
</table>

Age

The participants ranged from 28 to 77 years old, with a mean age of 56.4 (SD = 8.8, \(MDn = 58.0, Mo = 60.0\)). The majority of participants were between the ages of 40 and 65 (5.9% < 40, 11.0% > 65). The 25\(^{th}\) percentile was 52, the 50\(^{th}\) percentile was 58, and the 75\(^{th}\) percentile was 62. Frequencies for reported ages are shown in Figure 1.

Two birth years reported as 2000 that resulted in two ages of 12 were presumed to be errors and were removed from all statistical calculations of ages (n = 747).
Most of the respondents held master’s in library science (n = 662, 88.4%). Out of the 75 that did not report having earned a MLS, five listed PhDs in library and information science, and 6 listed “other” degrees in library science. That leaves 64 respondents without some form of library science education. Of those, 13 had degrees in education (including PhDs and EdDs), five had degrees in religion, two had law degrees (both had JDs, one also had a LLM), and one had a MBA.

The total numbers of degrees reported were 1,040 master’s degrees (including MLSs), 105 PhDs, 36 EdDs, 13 JDs, and one MD. “Other advanced degree” was selected 49 times; many of these were listed as certificates of advanced graduate study in library and information science (for instance, library administration). Nine respondents
listed no advanced degrees. Of the total 1,040 master's degrees, 667 were reported as MLSs (five respondents reported more than one MLS), 343 as subject master's, and 30 left the subject area blank (see Figure 2 for the percentages by discipline). Examining cases in which a master's degree subject was left blank showed that of those 30, six listed a subject for another master's degree. This could suggest that those six deans possessed MLSs, although this cannot be determined with certainty.

![Masters Degrees by Disciplinary Area (including MLS)](image)

**Figure 2.** Masters degrees by disciplinary area (including MLS).

The majority of the 343 subject master's (excluding the MLSs) were earned in the disciplinary area of the humanities and arts \((f = 193, 51.74\%)\), with 58 being education-related and 18 being business degrees (see Figure 3). The second highest disciplinary area for subject master's was the professions and applied sciences \((f = 109, 29.22\%)\), with 55 master’s in history, 49 in religion, and 40 in English literature. Most of the
doctorates were earned in education ($f = 54$, 38.30%), with 18 PhDs and 36 EdDs. The second-highest subject category for doctorates was library and information science ($f = 46$, 32.62%). See Figure 4 for the total percentages by disciplinary area, and Figure 5 for percentages by disciplinary area excluding PhDs in library and information science.

Figure 3. Subject masters degrees by disciplinary area (excluding MLS).
Figure 4. Doctorate degrees by disciplinary area (including LIS).

Figure 5. Doctorate degrees by disciplinary area (excluding LIS).
Experience in Higher Education and Administration

Respondents reported working in higher education before obtaining their first academic library administrative position from no time at all to 38 years \( (n = 503, \ M = 10.5, \ SD = 8.0, \ MDn = 9.0, \ Mo = 0.0) \). The standard deviation of eight years shows there was a wide spread of experience between respondents. Thirty-six respondents had no previous experience in higher education before becoming an academic library administrator. See Figure 6 for the full frequencies, based on data rounded to the nearest full year. Time that respondents had been academic library administrators ranged from less than one year to 47 years, with a mean of 13.5 years \( (n = 529, \ SD = 9.8, \ MDn = 11.7, \ Mo = 4.0) \). See Figure 7 for the full frequencies, based on data rounded to the nearest full year.

![Figure 6. Years in higher education before academic library administration.](image-url)
Figure 7. Years as an academic library administrator.

Institutional Characteristics

The largest group of respondents came from master’s colleges and universities \( (f = 217, 29.0\%) \), then associate’s colleges \( (f = 173, 23.1\%) \), followed by doctorate-granting universities \( (f = 159, 21.2\%) \) and baccalaureate colleges \( (f = 155, 20.7\%) \). Small groups of respondents came from special focus institutions \( (f = 41, 5.5\%) \) and tribal colleges \( (f = 2, 0.3\%) \), and two were classified as unknown \( (f = 2, 0.3\%) \). The full frequency distribution for institutional types and funding controls can be seen in Table 5.

Table 6 shows that the distribution of institutional types in this sample correspond closely to the distribution of institutional types represented in the 2009 Association of College & Research Libraries Survey, which had 1,448 respondents (Stewart, 2011). However, neither of these is entirely representative of the 3,689 academic libraries in the United States, as shown in the data from the Integrated Postsecondary Education
Data System (National Center for Educational Statistics [NCES], 2011; Stewart, 2011).

The present study’s distribution of institutions is representative of baccalaureate and master’s colleges and universities, but has more respondents from doctorate-granting institutions and fewer respondents from associate’s institutions. Therefore, the findings should be interpreted with particular caution related to academic library administrators at these types of institutions. See Table 7 for the full-time student enrollment for each institution.

Table 5

<table>
<thead>
<tr>
<th>Employing Institutional Types and Funding Controls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Funding Control</td>
</tr>
<tr>
<td>-----------------------------------</td>
</tr>
<tr>
<td>Basic Carnegie classification</td>
</tr>
<tr>
<td>Associate’s Colleges</td>
</tr>
<tr>
<td>Baccalaureate Colleges</td>
</tr>
<tr>
<td>Master’s Colleges and Universities</td>
</tr>
<tr>
<td>Doctorate-granting Universities</td>
</tr>
<tr>
<td>Special Focus Institutions</td>
</tr>
<tr>
<td>Tribal Colleges</td>
</tr>
<tr>
<td>Unknown</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>
Table 6

Institutional Types Compared to Major Studies

<table>
<thead>
<tr>
<th>Basic Carnegie classification</th>
<th>ACRL Survey</th>
<th>IPEDS data</th>
<th>this study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associate’s Colleges</td>
<td>24%</td>
<td>50%</td>
<td>23.1%</td>
</tr>
<tr>
<td>Baccalaureate Colleges</td>
<td>23%</td>
<td>22%</td>
<td>20.7%</td>
</tr>
<tr>
<td>Master’s Colleges and</td>
<td>33%</td>
<td>19%</td>
<td>29.0%</td>
</tr>
<tr>
<td>Universities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doctorate-granting Universities</td>
<td>20%</td>
<td>8%</td>
<td>21.2%</td>
</tr>
<tr>
<td>Other</td>
<td>n/a</td>
<td>n/a</td>
<td>6.1%</td>
</tr>
</tbody>
</table>

Table 7

Employing Institution’s Student Fulltime Enrollment

<table>
<thead>
<tr>
<th>Student FTE</th>
<th>f</th>
<th>N%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 2,500</td>
<td>325</td>
<td>43.4%</td>
</tr>
<tr>
<td>2,500+</td>
<td>173</td>
<td>23.1%</td>
</tr>
<tr>
<td>5,000+</td>
<td>111</td>
<td>14.8%</td>
</tr>
<tr>
<td>10,000+</td>
<td>84</td>
<td>11.2%</td>
</tr>
<tr>
<td>20,000+</td>
<td>34</td>
<td>4.5%</td>
</tr>
<tr>
<td>30,000+</td>
<td>11</td>
<td>1.5%</td>
</tr>
<tr>
<td>40,000+</td>
<td>9</td>
<td>1.2%</td>
</tr>
<tr>
<td>Unknown</td>
<td>2</td>
<td>0.3%</td>
</tr>
<tr>
<td>Total</td>
<td>749</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Reliability of Instrument Scales

The reliability of the scales was calculated using Cronbach’s alpha. The n for each scale varied, as this depended on how many participants had experienced each preparatory method. The full reliability measures of each scaled variable can be seen in Table 8 (see Appendix I for full reliability statistics for item-level variables, grouped by scale). None of the alphas were found to improve if one of the items was removed from
any scale, so no items were removed. Each scale measures the relevance of the particular preparation method with respect to overall academic leadership.

Table 8

**Reliability of Scales for Preparation Methods’ Relevance to 7 Academic Leadership Dimensions**

<table>
<thead>
<tr>
<th>Preparation Methods</th>
<th>Cronbach’s alpha</th>
<th>n</th>
<th>Summary item mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formal mentoring</td>
<td>.909</td>
<td>117</td>
<td>2.427</td>
</tr>
<tr>
<td>Informal mentoring</td>
<td>.885</td>
<td>449</td>
<td>2.720</td>
</tr>
<tr>
<td>On-the-job training</td>
<td>.864</td>
<td>649</td>
<td>3.121</td>
</tr>
<tr>
<td>Conferences &amp; seminars</td>
<td>.887</td>
<td>511</td>
<td>2.533</td>
</tr>
<tr>
<td>Advanced degrees (other than the MLS)</td>
<td>.872</td>
<td>230</td>
<td>2.621</td>
</tr>
<tr>
<td>Training programs</td>
<td>.880</td>
<td>240</td>
<td>2.616</td>
</tr>
<tr>
<td>“Other” methods</td>
<td>.887</td>
<td>110</td>
<td>2.809</td>
</tr>
</tbody>
</table>

Testing the Research Questions

The data was gathered using scales based on ordinal Likert-ranked data. The Likert valuation for each item was: **minimal** (1), **moderate** (2), **significant** (3), and **very significant** (4). Nonparametric statistical methods were used when considering item-level ordinal data. This is appropriate because the Likert items are discrete, not continuous. When considering summed scores and means, however, parametric statistics were used. This is appropriate because the scores (the sum of eight Likert-ranked items) are continuous, rather than ranked like the individual items. Both descriptive and inferential statistical methods were used to test the research questions. An alpha level of significance of .05 was used for each analysis.
Question 1: Preparation Methods Experienced

What preparation methods do academic library deans experience? Respondents were asked to list any and all preparation methods they experienced. The preparation method options were: formal mentoring, informal mentoring, on the job training, professional conferences and/or seminars, an advanced degree (other than the MLS), and professional training programs or institutes. There was also an option to select “other” and list a different method in a text box, or to select “none.” See Table 9 for the full frequencies and percentages. The most commonly experienced method of preparation was on the job training ($f = 649, 86.6\%$). Only 19 respondents (2.5\%) reported experiencing no preparation method of any kind.

Table 9

<table>
<thead>
<tr>
<th>Preparation Method</th>
<th>f</th>
<th>N%</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-the-job training</td>
<td>649</td>
<td>86.6%*</td>
</tr>
<tr>
<td>Conferences and seminars</td>
<td>511</td>
<td>68.2%</td>
</tr>
<tr>
<td>Informal mentoring</td>
<td>449</td>
<td>59.9%</td>
</tr>
<tr>
<td>Training programs</td>
<td>240</td>
<td>32.0%</td>
</tr>
<tr>
<td>Advanced degrees</td>
<td>230</td>
<td>30.7%</td>
</tr>
<tr>
<td>Formal mentoring</td>
<td>117</td>
<td>15.6%</td>
</tr>
<tr>
<td>Other</td>
<td>110</td>
<td>14.7%</td>
</tr>
<tr>
<td>None</td>
<td>19</td>
<td>2.5%</td>
</tr>
</tbody>
</table>

*Respondents were able to select more than one preparation method experienced, so percentages add to over 100%.

One hundred and ten respondents included “other” methods of preparation, which they entered into a text box in the survey. Some of these entries included multiple preparation methods; when separated, they resulted in 121 “other” preparatory methods, which are summarized in Table 10. The most common preparatory methods in
this category were: previous non-academic library experience (20.7%), other coursework (14.9%), and personal research and professional reading (10.7%). Non-academic library experiences included business, military, computer science, and public libraries. Relevant coursework cited included MLS management courses; two deans mentioned completing their MLS while in their current position. Among the interesting methods noted were observing library deans that were both good and bad examples (5.8%) and learning “by the seat of the pants” (3.3%). A few respondents entered preparatory methods already tracked in the survey, such as leadership programs, conferences, on the job training, and formal and information mentoring.

Question 2: Preparation Perceived as Most Beneficial

2a. What preparation methods do academic library deans perceive as the most beneficial? The scaled variables were used to determine which of the preparation methods were rated the highest on the summed scores. Histograms for the data showed most of the scores as normally distributed (see Appendix J). The exception was the histogram for on the job training, which showed a large frequency of high scores. However, the calculated skewness of -0.58 falls within the accepted range for normally distributed data. Therefore, the means were considered to be good descriptions of the perceived value of each preparation method. Table 11 shows the n and measures of central tendency for each preparation method. The preparation methods rated the highest were on the job training ($M = 24.97, SD = 5.07$), which is indicated in boldface in the table, and “other” ($M = 22.47, SD = 6.30$). Since the “other” category was actually made up of the 121 methods, it cannot be counted as a single preparation method.
Therefore the second-highest valued preparation method was actually informal mentoring ($M = 21.76$, $SD = 5.65$).

Table 10

<table>
<thead>
<tr>
<th>Other preparation method</th>
<th>$f$</th>
<th>percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>previous non-academic-library experience</td>
<td>25</td>
<td>20.66%</td>
</tr>
<tr>
<td>other coursework</td>
<td>18</td>
<td>14.88%</td>
</tr>
<tr>
<td>personal research, professional reading</td>
<td>13</td>
<td>10.74%</td>
</tr>
<tr>
<td>leadership programs / workshops</td>
<td>11</td>
<td>9.09%</td>
</tr>
<tr>
<td>observing library deans (good or bad)</td>
<td>7</td>
<td>5.79%</td>
</tr>
<tr>
<td>doctorate coursework (not completed)</td>
<td>6</td>
<td>4.96%</td>
</tr>
<tr>
<td>undergraduate education</td>
<td>6</td>
<td>4.96%</td>
</tr>
<tr>
<td>advanced LIS certificates</td>
<td>5</td>
<td>4.13%</td>
</tr>
<tr>
<td>learning by &quot;the seat of the pants&quot;</td>
<td>4</td>
<td>3.31%</td>
</tr>
<tr>
<td>internship</td>
<td>3</td>
<td>2.48%</td>
</tr>
<tr>
<td>teaching (at various levels)</td>
<td>3</td>
<td>2.48%</td>
</tr>
<tr>
<td>involvement in professional organization</td>
<td>3</td>
<td>2.48%</td>
</tr>
<tr>
<td>networking</td>
<td>2</td>
<td>1.65%</td>
</tr>
<tr>
<td>life experience, common sense</td>
<td>2</td>
<td>1.65%</td>
</tr>
<tr>
<td>prior library management positions</td>
<td>2</td>
<td>1.65%</td>
</tr>
<tr>
<td>formal mentoring</td>
<td>2</td>
<td>1.65%</td>
</tr>
<tr>
<td>conferences</td>
<td>1</td>
<td>0.83%</td>
</tr>
<tr>
<td>on the job training (formal)</td>
<td>1</td>
<td>0.83%</td>
</tr>
<tr>
<td>informal mentoring outside the library</td>
<td>1</td>
<td>0.83%</td>
</tr>
<tr>
<td>no mentoring by professional librarians</td>
<td>1</td>
<td>0.83%</td>
</tr>
<tr>
<td>experience as graduate student scholar</td>
<td>1</td>
<td>0.83%</td>
</tr>
<tr>
<td>sabbatical</td>
<td>1</td>
<td>0.83%</td>
</tr>
<tr>
<td>campus/community service and leadership</td>
<td>1</td>
<td>0.83%</td>
</tr>
<tr>
<td>grant-writing and project management experience</td>
<td>1</td>
<td>0.83%</td>
</tr>
<tr>
<td>12-hr. SHED</td>
<td>1</td>
<td>0.83%</td>
</tr>
</tbody>
</table>
Table 11

Descriptive Statistics for Scaled Variables, Arranged by Descending Mean

<table>
<thead>
<tr>
<th>Preparation method</th>
<th>n</th>
<th>M</th>
<th>SD</th>
<th>MDn</th>
<th>Mo</th>
<th>95% CI (UL, LL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>On the job training</td>
<td>649</td>
<td>24.97</td>
<td>5.07</td>
<td>25.0</td>
<td>32.0</td>
<td>24.58, 25.36</td>
</tr>
<tr>
<td>Other</td>
<td>110</td>
<td>22.47</td>
<td>6.30</td>
<td>23.0</td>
<td>22.0</td>
<td>21.28, 23.66</td>
</tr>
<tr>
<td>Informal mentoring</td>
<td>449</td>
<td>21.76</td>
<td>5.65</td>
<td>22.0</td>
<td>24.0</td>
<td>21.24, 22.29</td>
</tr>
<tr>
<td>Advanced degrees</td>
<td>230</td>
<td>20.97</td>
<td>5.99</td>
<td>22.0</td>
<td>24.0</td>
<td>20.19, 21.74</td>
</tr>
<tr>
<td>Training programs</td>
<td>240</td>
<td>20.93</td>
<td>5.56</td>
<td>21.0</td>
<td>24.0</td>
<td>20.22, 21.63</td>
</tr>
<tr>
<td>Conferences and seminars</td>
<td>511</td>
<td>20.27</td>
<td>5.44</td>
<td>21.0</td>
<td>17.0</td>
<td>19.79, 20.74</td>
</tr>
<tr>
<td>Formal mentoring</td>
<td>117</td>
<td>19.42</td>
<td>5.98</td>
<td>21.0</td>
<td>22.0</td>
<td>18.32, 20.51</td>
</tr>
</tbody>
</table>

2b. Does preparation perceived as most beneficial vary according to the employing institution’s Association of Research Libraries (ARL) status? An independent-samples t-test was performed to determine the perceived value of on the job training for deans at ARL institutions ($M = 24.52$, $SD = 4.99$) compared with deans at non-ARL institutions ($M = 25.05$, $SD = 5.02$). The two groups did not vary in a statistically significant way regarding their perception of the value of on the job training by ARL status ($t_{[640]} = -0.88$, $p > .05$). Thus, there is no statistically significant difference between the ARL and non-ARL institutions in the distribution of their perceived benefit of on the job training.

In fact, the only preparatory method in which ARL deans were statistically significantly different from non-ARL deans was formal mentoring ($t_{[112]} = 2.16$, $p < .05$). ARL deans ($M = 22.75$, $SD = 4.63$) viewed formal mentoring as more valuable than did non-ARL deans ($M = 18.87$, $SD = 6.01$). Formal mentoring actually had the second-highest mean for all preparation methods among ARL deans (only preceded by on the
job training). Examining the frequencies showed that ARL deans and non-ARL deans experience formal mentoring at similar percentages; 13.95% of ARL deans reported experiencing it compared with 15.57% of non-ARL deans.

**Question 3: Perceived Value of Advanced Degrees**

3a. What value do deans place on advanced degrees (other than the MLS)? Do deans perceive advanced degrees to be a more beneficial preparation method than on-the-job training? As shown in Table 11 in research question two, the mean indicates that advanced degrees ($M = 20.97$, $SD = 5.99$) are generally seen as a beneficial preparation method. Breaking this scaled variable into the eight item-level variables shows that advanced degrees are viewed as more beneficial in the areas of vision and goal-setting, communication, research and professional development, and quality of library services (each $M = 3$, *significant*). Advanced degrees are viewed as less relevant to the areas of management, interpersonal relationships, and diversity (each $M = 2$, *moderate*).

When compared to on the job training ($M = 24.97$, $SD = 5.07$), advanced degrees ($M = 20.97$, $SD = 5.99$) appear to be less valued by library deans. To provide more context for these means, I divided them by 8 to relate them to the original Likert valuation (since it was created by summing 8 item-level variables). This produces a value of 2.62 for advanced degrees, which is between the values for *moderate* (2) and *significant* (3). On the job training becomes 3.12, between the values for *significant* (3) and *very significant* (4).

I also calculated a Pearson’s product-moment correlation to judge any relationship between perceived value of on the job training and advanced degrees. I
excluded cases pairwise, so that only cases considered were those in which a respondent both held an advanced degree other than the MLS and had experienced on the job training. This produced a statistically significant result ($r = 0.19, p < .05$). However, the low value of the Pearson’s $r$ suggests that it is a weak relationship. To better judge the strength of this relationship, I calculated the coefficient of determination, which confirms that this is in fact a very small relationship ($r^2 = 0.04$).

3b. Is there a significant difference in perceived value of advanced degrees between deans that hold doctorates and those that do not (who either hold second master’s, MDs, or JDs)? Responders were divided into two groups, those who held doctorates, and those who held subject master’s, JDs, or MDs. (The rationale for this division was between research or education-focused degrees versus subject specialties, including professional degrees.) If a respondent held a doctorate and either a subject master’s, JD, or MD, they were classified as a doctorate-holder. Those respondents holding only a MLS or “other” degree were excluded from this analysis. There were 200 total respondents who held an advanced degree in addition to a MLS and who answered all items pertaining to both preparation methods considered (on the job training and advanced degrees).

An independent samples $t$-test was performed and found to be statistically significant ($t[198] = -5.54, p < .05$). Deans holding a subject master’s, JD, or MD ($M = 18.87, SD = 6.15$) did not view advanced degrees other than the MLS as beneficial as did deans holding a doctorate ($M = 23.28, SD = 5.10$). Converted to the original 4-point Likert valuation, the means become 2.36 (moderate) for deans with subject master’s, MDs, or JDs, and 2.91 (significant) for deans holding doctorates.
An investigation of the 8 item-level variables making up the scale for advanced degrees showed that the statistically significant difference between the two groups of deans varies in every item variable. The one-way ANOVA calculated $F$ values ranged from 4.65 to 29.09 ($p < .05$ for each), although the omega-squareds ranging from .03 to .20 indicate that the effects were individually small to moderate.

3c. Do deans perceive that advanced degrees specifically increase their leadership ability in research and professional development (according to Heck, Johnsrud, and Rosser’s seven domains of academic leadership)? For this question, only one item was used from the advanced degree scale, that pertaining to the academic leadership domain “maintaining and pursuing professional development, research and institutional endeavors.” The central tendency, frequencies, and percentages in Table 12 demonstrate that nearly half of the respondents considered advanced degrees very significant to their leadership in the area of research ($n = 230$, $M = 3$, $SD = 1$, $Mo = 4$). When the significant and very significant responses are added together, they account for 76.1% of all responses. As listed above in the analysis for research question 3b, all one-way ANOVAs for advanced degrees at the item-level showed statistically significant differences between deans with respect to highest degree earned ($p < .05$). The item for leadership dimension of research and professional development shows the highest $F$ ratio, 29.09, indicating a pronounced difference in attitudes between deans with subject master’s, JDs, or MDs ($M = 2.69$, $SD = 1.01$) and those with doctorates ($M = 3.64$, $SD = 0.62$). However, this finding should be interpreted with some caution, since the omega-squared shows that just 19.63% of the variance in attitudes on this item can be accounted for by the difference in deans’ highest degree earned.
The chi-square indicates that the observed distribution of responses is statistically significantly different from the expected distribution, which is an even distribution with a frequency of 57 per Likert response option ($\chi^2 = 82.2$, $df = 3$, $p < .05$). Because three of the standardized residuals have absolute values greater than 2.00, this indicates that they are major contributors to this result: minimal (-4.42), moderate (-3.50), and very significant (7.06). The negative sign on the standardized residuals for minimal and moderate indicate the direction of their contribution (low observed frequencies), while the high positive value for very significant indicates its comparatively high frequency.

Table 12

<table>
<thead>
<tr>
<th>Likert response</th>
<th>n%</th>
<th>$f_o$</th>
<th>$f_e$</th>
<th>residual</th>
<th>standardized residual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimal</td>
<td>10.4%</td>
<td>24.0</td>
<td>57.5</td>
<td>-33.5</td>
<td>-4.42</td>
</tr>
<tr>
<td>Moderate</td>
<td>13.5%</td>
<td>31.0</td>
<td>57.5</td>
<td>-26.5</td>
<td>-3.50</td>
</tr>
<tr>
<td>Significant</td>
<td>27.8%</td>
<td>64.0</td>
<td>57.5</td>
<td>6.5</td>
<td>.86</td>
</tr>
<tr>
<td>Very significant</td>
<td>48.3%</td>
<td>111.0</td>
<td>57.5</td>
<td>53.5</td>
<td>7.06</td>
</tr>
</tbody>
</table>

3d. Do deans perceive that advanced degrees provide better preparation than on-the-job-training in the specific administrative leadership areas of vision and goal-setting, management of an academic library, or communication with external constituents and upper administrators? To test this question, I considered the frequencies of Likert responses for both on the job training and advanced degrees for Questions 15, 16, and 18 (see Appendix B). Considering both preparation methods related to the leadership dimension of vision and goal-setting, the chi-square was is not
statistically significant \( (\chi^2 = 4.65, df = 9, p > .05) \). Calculated effect sizes were also small \( (\eta = .10, \eta^2 = .05, V = .09) \).

Since the expected frequencies in several response categories were less than five, the critical value above could be a poor fit for the data (Huck, 2008). Therefore, the responses were collapsed from four to two \( (\text{minimal} \text{ and} \text{ moderate} \text{ forming} \text{ one} \text{ response} \text{ category}, \text{the} \text{ other} \text{ being} \text{ significant} \text{ and} \text{ very} \text{ significant}) \). However, the result of the collapsed response categories confirms the earlier test’s conclusion that the difference of frequencies between these two variables is not statistically significant \( (\chi^2 = 0.61, df = 1, \eta = .06, V = .06) \). As some of the expected cell counts for the variables related to management and to communication were also less than five, these response categories were also collapsed from four to two. As above, the results for on the job training and advanced degrees with respect to management of an academic library were not statistically significant \( (\chi^2 = 1.72, df = 1, p > .05) \). Again, the effect sizes were small \( (\eta = .09, V = .09) \).

Finally, a chi-square was calculated for on the job training and advanced degrees with respect to communication. In this case, the result was statistically significant \( (\chi^2 = 7.51, df = 1, p < .05) \). This indicates that on the job training and advanced degrees are significantly different with respect to how well they prepare deans to communicate. The only standard residual that approaches 2.00 is that for the \text{minimal/moderate} category of each variable, which is 1.70 (see Table 13). This indicates that while the \text{minimal/moderate} cases may not be major contributors to the significant chi-square
value, they are the most likely suspects. The eta of 0.17 indicates a small-to-medium effect size; the Cramer’s V of 0.17 indicates a small effect size.

To judge which of these two preparation methods was perceived as more effective for communication, I next considered the measures of central tendency. The means indicated that on the job training ($M = 3.06$, $SD = 0.94$) was perceived to be more effective preparation for communication than advanced degrees ($M = 2.62$, $SD = 1.01$). This is further supported by the modes; on the job training most commonly had a value of 4 (very significant), while advanced degrees had a mode of 3 (significant).

Table 13

<table>
<thead>
<tr>
<th>On the Job Training</th>
<th>Advanced Degrees</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Minimal/moderate</td>
<td>Significant/very significant</td>
<td>Total</td>
</tr>
<tr>
<td>Minimal/moderate</td>
<td>$f_0$</td>
<td>23.0</td>
<td>18.0</td>
</tr>
<tr>
<td></td>
<td>$f_0$</td>
<td>16.3</td>
<td>24.7</td>
</tr>
<tr>
<td></td>
<td>$r%$</td>
<td>11.4%</td>
<td>9.0%</td>
</tr>
<tr>
<td></td>
<td>standardized residual</td>
<td>1.7</td>
<td>-1.3</td>
</tr>
<tr>
<td>Significant/very significant</td>
<td>$f_0$</td>
<td>57.0</td>
<td>103.0</td>
</tr>
<tr>
<td></td>
<td>$f_0$</td>
<td>63.7</td>
<td>96.3</td>
</tr>
<tr>
<td></td>
<td>$r%$</td>
<td>28.4%</td>
<td>51.2%</td>
</tr>
<tr>
<td></td>
<td>standardized residual</td>
<td>-0.8</td>
<td>0.7</td>
</tr>
<tr>
<td>Total</td>
<td>$f$</td>
<td>80.0</td>
<td>121.0</td>
</tr>
<tr>
<td></td>
<td>$r%$</td>
<td>39.8%</td>
<td>60.2%</td>
</tr>
</tbody>
</table>

Question 4: Perceived Value of Mentoring

4a. What value do current deans place on mentoring? Does this vary by gender?

If so, are these differences affected by age? To test this research question, I considered responses for both formal mentoring ($n = 117$) and informal mentoring ($n = 449$).

Independent $t$-tests were performed on each summed score (parametric methods were
used to test this question because it pertains to the means of the summed scores). A \( t \)-test revealed that perceived value of formal mentoring for women (\( M = 19.58, SD = 6.12, n = 74 \)) and men (\( M = 19.14, SD = 5.76, n = 43 \)) did not differ in a statistically significant way (\( t[115] = -0.38, p > .05 \)). However, the second \( t \)-test revealed that the difference between the perceived value of informal mentoring for women (\( M = 22.18, SD = 5.51, n = 287 \)) and men (\( M = 21.01, SD = 5.83, n = 162 \)) was statistically significant (\( t[447] = -2.12, p < .05 \)). The eta (0.10) and eta-squared (0.01) show that this difference between men and women on perceived benefit of informal mentoring is small.

Next, I tested the potential effect of age group on perceived value of informal mentoring among women. Women were grouped into six age ranges based on their decade of birth. Two cases were eliminated as errors, because they reported the year 2000 as their year of birth. The one-way ANOVA results showed no statistically significant differences between age groups (\( F = 0.75, p > .05 \)). See Table 14 for the full ANOVA results.

Table 14

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>( F )</th>
<th>( p )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>115.119</td>
<td>5</td>
<td>23.024</td>
<td>.754</td>
<td>.584</td>
</tr>
<tr>
<td>Within Groups</td>
<td>8549.486</td>
<td>280</td>
<td>30.534</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>8664.605</td>
<td>285</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4b. Does this perceived value of mentoring vary by minority status? To consider this question, the variable for ethnicity was recoded into a dichotomous variable denoting minority status. As with the previous question concerning gender differences,
this question was tested for both formal mentoring \((n = 116)\) and informal mentoring \((n = 443)\) using \(t\)-tests. Ethnicities reported as “race/ethnicity unknown” and “other” were excluded from this analysis.

A \(t\)-test revealed that perceived value of formal mentoring for minorities \((M = 22.88, SD = 6.41, n = 17)\) and non-minorities \((M = 18.74, SD = 5.68, n = 99)\) differed in a statistically significant way \((t[114] = 2.73, p < .05)\). The eta \((0.25)\) and eta-squared \((0.06)\) show that this difference between minorities and non-minorities has a medium effect size. The second \(t\)-test revealed that the perceived value of informal mentoring for minorities \((M = 24.46, SD = 5.10, n = 37)\) and non-minorities \((M = 21.52, SD = 5.65, n = 406)\) also differed with statistical significance \((t[441] = 3.05, p < .05)\). The eta \((0.14)\) and eta-squared \((0.02)\), however, indicate a fairly small effect size for the difference between minorities and non-minorities on perceived benefit of informal mentoring.

I also explored the item-level variables for formal and informal mentoring’s value for supporting and advancing institutional diversity, since it is related to this research question. The item variable was found to be statistically significantly different than a normal distribution \((\chi^2 = 20.27, df = 3, p < .05)\). Likewise, the item variable for informal mentoring related to leadership in institutional diversity showed a statistically significant different distribution \((\chi^2 = 44.85, df = 3, p < .05)\). However, the measures of central tendency indicate that both formal mentoring \((M = 2.06, SD = 0.99, MDn = 2, Mo = 2)\) and informal mentoring \((M = 2.24, SD = 1.01, MDn = 2, Mo = 1)\) showed more attitudes clustered around the \textit{minimal} and \textit{moderate} Likert valuations.
Summary

In this study, the most commonly-experienced and most highly-valued preparatory method for academic library deans was on the job training. Advanced degrees other than the MLS were perceived as valuable by the deans, but not overwhelmingly so. This perception of advanced degree value differs in a statistically significant way between deans that hold subject master’s and deans that hold doctorates. However, most deans consider advanced degrees to be specifically relevant to their research and professional development. Female deans did consider informal mentoring to be more important than did male deans, although the difference has a small measure of magnitude. This attitude was not shown to vary with age. Minorities rank both formal and informal mentoring considerably higher than non-minorities. In the following chapter, the statistical analyses presented here will be evaluated and discussed in terms of how they relate to the existing research literature.
CHAPTER 5
SUMMARY, DISCUSSION, AND CONCLUSIONS

Introduction

This chapter presents a brief summary of the study, before discussing the findings of the previous chapter. The discussion evaluates and interprets this study’s results in the context of the existing literature. Subjects for future research are discussed, and finally conclusions are made.

Summary of the Study

Currently, there are no acknowledged standards for the preparation of academic library deans. There is little empirical data on the preparatory methods experienced by library deans, and most of the large-sample studies of them are descriptive analyses focused on demographic and educational variables. Although most position descriptions for library deans list a master’s degree in library science as a requirement, this is not universal (Hernon, Powell, & Young, 2001, 2002, 2003; Lin, 2000, 2001). In practice, many past academic library administrators have not possessed any degree in library science (Karr, 1984; Wong & Zubatsky, 1985). Furthermore, there is great debate on whether a doctorate should be required or preferred for a library dean, and if so, in what subject (Bell, 2006; Crowley, 2004; Downey & Hoffman, 2009; Gilman, 2003, 2005; Herubel, 2006; Jones, Mitchell, & Major, 1998; Macklin, 2006; Oder, 2003).

Positions in library leadership continue to elude many women and minorities. Although librarianship in general and academic librarianship specifically have traditionally been and remain female-heavy professions, women have not yet reached
representative numbers in administrative positions (Moran, Leonard, & Zellers, 2009). Minorities continue to be underrepresented in librarianship in general, and even more dramatically in administrative positions (Johnson, 2007; Neely & Peterson, 2007; Wheeler, 2000). Library literature has promoted mentoring to encourage and better prepare women and minorities for leadership positions. However, few studies have quantitatively investigated how women and minorities in leadership positions view the relevance and value of mentoring. There is a need for empirical study of the preparation methods that are experienced by current academic library deans, and which methods they perceive as most valuable.

This study was designed to investigate the preparation methods experienced by academic library deans, and to determine the methods that they perceive as most beneficial to their preparation as academic leaders. This information may inform those who aspire to become academic library deans about the most beneficial preparation methods experienced by current deans. It may also guide the improvement or creation of relevant training and curricula for future academic library deans. Finally, this study can help search committees and hiring committees make informed decisions about the appropriate types of education to look for in library dean candidates. However, because this study is based on self-report measures and is not related to objective measures of leader effectiveness, these results should be interpreted with caution.

This study sought to answer four primary research questions. First, it considered what preparation methods academic library deans experience. Second, it considered which methods deans perceived to be the most beneficial. Third, it looked at the value
that deans placed on advanced degrees as a preparatory method. Finally, the study looked at the value that deans placed on mentoring, particularly those deans that were female or had minority status. The full research questions will be presented in order as they are considered in the discussion of the findings.

The instrument chosen for this study was a modified version of Greicar’s (2009) Professional Preparation of Academic Deans Questionnaire (PPADQ). The instrument was modified for clarity, as well as to more accurately reflect the academic library environment. It was also modified for use online with the Qualtrics software. A pilot study was performed to verify content validity and to test reliability. Item-level Likert-ranked variables were analyzed using nonparametric methods, and scale-level continuous variables were analyzed using parametric methods. Effect sizes were calculated in order to communicate the magnitude of findings.

Discussion of the Findings

Question 1: Preparation Methods Experienced

What preparation methods do academic library deans experience? On the job training was the most commonly experienced preparatory method ($f = 649$, $n = 749$, 86.6%). In descending order, the other preparatory methods experienced were: conferences and seminars (68.2%), informal mentoring (59.9%), training programs (32.0%), advanced degrees other than the MLS (30.7%), formal mentoring (15.6%), and other methods (14.7%). Nineteen deans (2.5%) indicated they did not experience any preparation for deanship. The most commonly-experienced “other” preparatory methods were previous management or administrative experience outside of academic libraries,
other coursework, and personal research and professional reading.

This finding corresponds to Greicar’s (2009) finding that on the job training is the most commonly experienced method among academic deans. In one of Hernon, Powell, and Young’s (2003) studies, deans indicated that experience on the job is the most valuable method of obtaining the leadership traits desired by potential library deans. Hernon, Powell, and Young (2003) further mention that on the job experience is one of the two traditional methods of becoming an effective library leader—the other being mentoring.

One unexpected result highlights a potential problem in the application of the instrument. Only 230 deans listed “advanced degrees other than the MLS” as a preparation method that they experienced. However, in the educational section of the survey (Question 9), 403 deans listed holding subject master’s, doctorates and/or other advanced degrees. This could mean that the 173 deans who possessed such a degree but did not select “advanced degrees other than the MLS” as a preparation method viewed this experience as irrelevant to their preparation for academic leadership. This could suggest that the results for the scaled variable regarding advanced degrees, as considered below in research Question 3, are inaccurate because they do not reflect the 173 deans who viewed their advanced degrees as only of minimal value to their academic leadership. In that case, the reported attitudes may indicate a greater perceived value for advanced degrees than actually exists. Given that the precise reason that these respondents did not select advanced degrees as a preparation method experienced is unknown, results pertaining to advanced degrees other than the
MLS should be interpreted with caution, and seen as an area for future research.

Question 2: Preparation Perceived as Most Beneficial

2a. What preparation methods do academic library deans perceive as the most beneficial? The scaled variables were considered to determine which preparation method was viewed as most beneficial. Since skewness was not pronounced for any of these variables, the means were considered to be a sufficient method of description for each variable (see the histograms in Appendix J). The mean scores for the preparation methods, presented in descending order, were: on the job training (24.97), informal mentoring (21.76), advanced degrees (20.97), training programs (20.93), conferences and seminars (20.27), and finally formal mentoring (19.42). Although “other” preparation methods had the second-highest mean (22.47), this cannot be taken as evidence that this category was the second-most beneficial preparation method. Respondents entered 121 potential “other” methods into this category, which were later classified into 25 categories. Since this category is actually made up of 25 other methods of preparation, it cannot be evaluated by its mean compared to the other preparation methods.

On the job training not only had the highest mean, it also had the lowest standard deviation (5.07). This could indicate that there was more agreement among respondents about the value of this preparation method. The small standard deviation could also be due at least in part to the large subsample size, since the n for this method was the largest of all the preparation methods. The median (25.00) and mode (32.00) for on the job training were also the highest among all preparation methods. Taken as a whole, then, on the job training was clearly the preparation method that these deans perceived as most beneficial.
Determining which methods were perceived as second or third most beneficial is more difficult. Once “other” has been eliminated, the other five means are all closely grouped, as are their standard deviations and medians. The modes are noticeably higher for advanced degrees, training programs, and informal mentoring; each mode equals 24.00, two points higher than the mode for formal mentoring. However, the different ns for each group make interpreting these numbers difficult.

Answering this question is inherently challenging because only two respondents experienced all seven preparation methods. Respondents only judged the efficacy of preparation methods that they personally experienced. Therefore, the perceived value of these methods cannot be effectively compared within respondent cases. Additionally, this perceived effectiveness of preparation was determined through self-report (as listed in the limitations) and was not connected to objective measures of academic leadership effectiveness. Thus, while perceived value was determined, this cannot be directly linked to the objective effectiveness of library deans. This will be mentioned later in this chapter as an area for future research to explore.

The result that deans perceived on the job training to be most beneficial is not surprising. As stated in the discussion for research question one, it is viewed as one of the traditional methods of training for academic library deans (Hernon, Powell, & Young, 2003). Furthermore, because on the job training was the method experienced most frequently, it may be that this method is familiar and thus valued by library deans. Deans who have access to on the job training may not feel the need to seek out other methods of preparation for leadership. This could be an instance of “point of need” training, which
is more effective simply because it occurs when the need to learn the library dean role is imminent. Training institutes, advanced degrees, or personal research conducted before taking a position as dean, by contrast, may not be as fresh in the mind once the individual is in such a position.

2b. Does preparation perceived as most beneficial vary according to the employing institution’s Association of Research Libraries (ARL) status? An independent-samples t-test was performed on the summed variable for on the job training, to compare deans at ARL institutions ($M = 24.52$, $SD = 4.99$) with deans at non-ARL institutions ($M = 25.05$, $SD = 5.02$). The two groups did not vary in their perception of the value of on the job training by ARL status ($t[640] = -0.88$, $p > .05$). Both found it equally useful.

The only preparatory method in which ARL deans showed statistically significantly different views from non-ARL deans was formal mentoring ($t[112] = 2.16$, $p < .05$). ARL deans ($M = 22.75$, $SD = 4.63$) viewed formal mentoring as more valuable than did non-ARL deans ($M = 18.87$, $SD = 6.01$). Formal mentoring had the second-highest mean for all preparation methods among ARL deans (only preceded by on the job training). My initial suspicion was that ARL deans were more likely to experience formal mentoring programs. However, the frequencies showed that ARL deans and non-ARL deans experience formal mentoring at similar percentages; 13.95% of ARL deans reported experiencing it compared with 15.57% of non-ARL deans.

It may be that formal mentoring is regarded more positively in ARL-member institutions because of their closeness as an organization, and their institutions’ emphases on professional development. The ARL website and publications indicate
organizational sponsorship of several programs involving formal mentoring, such as the Leadership and Career Development Program, which was designed to help prepare mid-career academic librarians from underrepresented groups for leadership positions (Association of Research Libraries [ARL], 2012b; Neely, 2009; Wittkopf, 1999). In addition, ARL has sponsored research on formal mentoring in libraries (Wittkopf, 1999). Both deans and academic librarians in non-leadership positions may be more exposed to the idea of formal mentoring and to actual formal mentoring programs when employed at ARL-member institutions.

The lack of meaningful differences in the five preparation methods (other than formal mentoring) indicates that studies regarding the preparation and education of ARL deans may be more broadly relevant than suggested by O’Keeffe (1998) and McCracken (2000). This supports the findings of Fitsimmons (2005), whose research showed that desired academic library dean leadership qualities vary little between library deans at ARL institutions and hiring administrators at a variety of institutional types. This could mean that studies like those performed by Hernon, Powell, and Young (2001, 2002, 2003, 2004) on the activities and attributes of ARL library deans may be relevant to academic library deans overall, not just to deans at ARL institutions. Caution should still be used when making such an intuitive leap, particularly in special focus institutions, in which this study’s data shows that different educational attainment may be expected or more beneficial.

Question 3: Perceived Value of Advanced Degrees

3a. What value do deans place on advanced degrees (other than the MLS)? Do academic library deans perceive advanced degrees to be a more beneficial preparatory
method than on the job training? Advanced degrees other than the MLS were generally viewed as a beneficial preparation method, though not overwhelmingly so ($M = 20.97$, $SD = 5.99$). Dividing the mean by eight to relate it to the original Likert valuation (since it was created by summing eight item-level variables) produces a value of 2.62, which is between the values for moderate (2) and significant (3). Breaking the scaled variable into the item-level variables shows that advanced degrees are viewed as more beneficial in the areas of vision and goal-setting, communication, research and professional development, and quality of library services (each $M = 3$, significant). Advanced degrees are viewed as less relevant to the areas of management, interpersonal relationships, and diversity (each $M = 2$, moderate).

This finding should be interpreted with some caution because only deans who held degrees other than a MLS judged the effectiveness of such degrees. Thus, the positive perception of advanced degrees other than the MLS is not unexpected. Deans who have such degrees may be biased to believe they are effective preparation, in part because that may have been a reason for obtaining one or more of these degrees. It is difficult to make a more definitive statement about this finding without performing additional research.

As discussed in the section above for research question 2, directly comparing preparation methods is problematic, because of the different $ns$ between each summed variable. In addition, as mentioned in the discussion of research question one, 173 deans did not select “advanced degrees” as a preparatory method despite holding degrees other than the MLS. This may mean that the statistical results presented above
reflect higher perceived value than exist in actuality. However, the high measures of central tendency for on the job training (as described above in research question 2) clearly indicate that it is viewed as a more beneficial preparation method than advanced degrees, regardless of these potential problems with the data.

This finding agrees with the general tone of library literature. That is, advanced degrees other than the MLS are generally viewed as positive credentials, but there is great debate over how practical and applicable they are for the responsibilities of library deanship. In addition, the very fact that 173 deans possessing advanced degrees other than the MLS did not list them as experienced preparatory methods is telling. In any case, rather than providing a clear answer, this finding only adds to the complexity surrounding the issue of appropriate education for library deans.

3b. Is there a significant difference in perceived value of advanced degrees between deans that hold doctorates and those that do not (who either hold second master’s, MDs, or JDs)? An independent samples t-test indicated that deans’ perceptions of value for advanced degrees relevant to academic leadership differ in a statistically significant way depending on their highest degree earned ($t[198] = -5.54, p < .05$). Deans holding a subject master’s, JD, or MD ($M = 18.87, SD = 6.15$) did not view advanced degrees other than the MLS as beneficial as did deans holding a doctorate ($M = 23.28, SD = 5.10$). Converted to the original 4-point Likert valuation, the means indicate that deans with subject master’s, MDs, or JDs perceive the value of advanced degrees as moderate, and deans holding doctorates perceive their value to be significant. An investigation of the eight item-level variables making up the scale for advanced degrees showed that this statistically significant difference between the two
groups of deans exists in every item related to academic leadership. The one-way ANOVAs calculated $F$ values ranged from 4.65 to 29.09 ($p < .05$ for each). The omega-squareds ranging from .03 to .20 indicate that the effects were individually small to moderate.

Parsing the value of advanced degrees between deans holding doctorates and deans holding subject master’s makes the finding for research question 3a more useful. This finding confirms comments in the literature that a doctorate is useful for a library dean as a peer credential with academic deans and to provide experience with rigorous, in-depth research. The lower perceived value for deans with subject master’s may indicate that the degree’s traditional purpose, to provide in-depth subject expertise, is not useful for most library deans. Additional research on this potential difference of perceived value between deans with doctorates and deans with subject master’s should be explored further, particularly considering the 173 deans that did not report advanced degrees other than the MLS as an experienced preparation method.

3c. Do deans perceive that advanced degrees specifically increase their leadership ability in research and professional development (according to Heck, Johnsrud, and Rosser’s seven domains of academic leadership)? As listed above in the analysis for research question 3b, all one-way ANOVAs for advanced degrees at the item-level showed statistically significant differences between deans according to highest degree ($p < .05$). The item for leadership dimension of research and professional development shows the highest $F$ ratio, 29.09, indicating a pronounced difference in attitudes between deans with subject master’s, JDs, or MDs ($M = 2.69$, $SD = 1.01$) and those with doctorates ($M = 3.64$, $SD = 0.62$). However, this finding should
be interpreted with some caution, since the omega-squared shows that just 19.63% of the variance in attitudes on this item can be accounted for by the difference in deans’ highest degree earned. The central tendency and frequencies for the item-level variable as a whole \((n = 230, M = 3.14, SD = 1.01, Mo = 4)\) indicate that most deans consider advanced degrees to be very significant (48.3%) or significant (27.8%) to their research and professional development. This distribution of responses was found to be statistically significant \((\chi^2 = 82.24, df = 3, p < .05)\).

Given the result for the previous question, 3b, it is not surprising that deans with doctorates consider advanced degrees more relevant to the specific leadership domain of research and professional development. This is particularly logical considering the intensive research nature of many doctoral programs. It is interesting that for this particular item-level variable, deans with subject master’s also consider advanced degrees relevant, although to a lesser degree than the deans holding doctorates.

3d. Do deans perceive that advanced degrees provide better preparation than on-the-job-training in the specific administrative leadership areas of vision and goal-setting, management of an academic library, or communication with external constituents and upper administrators? Responses indicated no statistically significant difference between the perceived value of on the job training versus advanced degrees for either vision and goal setting \((\chi^2 = 0.61, df = 1, p > .05)\) or managing an academic library \((\chi^2 = 1.72, df = 1, p > .05)\). This lack of difference between perceived preparatory value could indicate that deans in this study perceived both experience and education as equally valuable and effective.
The only statistically significant difference between on the job training and advanced degrees was in the item variable related to the academic leadership dimension of communication ($\chi^2 = 7.51$, $df = 1$, $p < .05$). This had a small to medium effect ($\eta = .17$, $V = .17$). This indicates that although the perceived values of on the job training and advanced degrees are statistically significantly different with respect to how well they prepare deans to communicate, this difference is not dramatic. Measures of central tendency indicated that on the job training ($M = 3.06$, $SD = 0.94$) was perceived to be a more effective preparation for communication than advanced degrees ($M = 2.62$, $SD = 1.01$).

When considered with the earlier parts of this research question and question 2, it is apparent that on the job training is perceived to be a dramatically more valuable preparation method compared to the other methods. This is apparent at the scale-level and the item-level variables. This agrees with Greicar's (2009) finding related to academic deans, and to Hernon, Powell, and Young's (2003) finding that library deans believe on the job experience is the best method for learning leadership traits.

Question 4: Perceived Value of Mentoring

4a. What value do current deans place on mentoring? Does this vary by gender? If so, are these differences affected by age? In general, academic library deans viewed the value of formal mentoring ($M = 19.42$, $SD = 5.98$) as moderate with regard to academic leadership, and informal mentoring ($M = 21.76$, $SD = 5.65$) as significant. Perceived value of formal mentoring did not differ by gender ($t[115] = -0.38$, $p > .05$). However, the perceived value of informal mentoring differed in a statistically significant manner by gender ($t[447] = -2.12$, $p < .05$). The measures of central tendency show that
women ($M = 22.18$, $SD = 5.51$) place greater value on informal mentoring than do men ($M = 21.01$, $SD = 5.83$). However, the eta (0.10) and eta-squared (0.01) indicate that the effect of this difference is small. A one-way ANOVA clarified that female deans’ attitude toward informal mentoring was not affected by age ($F = 0.75$, $p > .05$). Therefore, the perceived value of informal mentoring does differ based on gender, but it is a small effect.

This confirms library literature that promotes the effectiveness of mentoring as a strategy to encourage and move women toward positions of library leadership (Kirkland, 1997). The effectiveness of formal and informal mentoring for all academic deans, and particularly women, has likewise been confirmed in higher education literature (Gibson, 2004; Nies & Wolverton, 2000). Higher education literature also supports the finding that informal mentoring is perceived to be more effective than formal mentoring (Dunbar & Kinnersley, 2011; Ragins & Cotton, 1999). Since this study indicates a higher perceived value for informal mentoring than formal mentoring (which had a lower overall mean, indicating only moderate value for academic leadership), this suggests that librarianship’s push for formal mentoring programs may not be as valuable as finding ways to foster informal mentoring. Mentoring relationships should be encouraged to grow naturally, perhaps signaling that what is actually needed is more encouragement and institutional support for experienced library leaders to reach out to new or potential library leaders.

Since individuals become library deans at different ages and various career stages, it is difficult to interpret the lack of any statistically significant difference by age.
(Moran, 1983). If women tended to become library deans at a particular age, then the lack of difference in perceived value of informal mentoring by decade of birth might suggest that these attitudes are no different for women who became deans in the 1980s versus those who did so in the 2000s. However, since decade of entry into leadership isn’t provided in the current study, the only conclusion that can be drawn from this is that female attitudes about informal mentoring do not vary meaningfully by decade of birth.

4b. Does this perceived value of mentoring vary by minority status? The perceived value of both formal mentoring \((t[114] = 2.73, p < .05)\) and informal mentoring \((t[441] = 3.05, p < .05)\) differed in a statistically significant way by minority status. Measures of central tendency revealed that minorities viewed both forms of mentoring as more beneficial than did non-minorities. Minorities viewed the value of both formal and informal mentoring as significant to academic leadership, while non-minorities ranked the value of formal mentoring as only moderate (they rated informal mentoring as significant). The effect size for these attitude differences was medium for formal mentoring and small for informal mentoring.

This indicates that formal mentoring programs designed to encourage underrepresented groups to take positions as library leaders are well-received and effective. One such program is ARL’s Leadership and Career Development Program, which enrolls mid-career academic librarians from underrepresented groups in an 18-month fellowship that includes a formal mentoring relationship with an established library leader (Association of Research Libraries [ARL], 2012b; Neely, 2009). A related program is the Association of College and Research Libraries’s (ACRL) Spectrum
Scholar Mentor Program, which provides scholarships and assigns mentors for library science students of color (Association of College and Research Libraries [ACRL], 2012). Programs such as these should be given continued support. In addition, the higher education literature indicates mentoring’s value for supporting and connecting minority faculty and administrators, particularly women (Smith & Crawford, 2007; Turner, 2002).

At the item level, formal mentoring’s perceived value for supporting institutional diversity was found to be statistically significantly different from a normal distribution ($\chi^2 = 20.27, df = 3, p < .05$). This finding also held true for informal mentoring and diversity ($\chi^2 = 44.85, df = 3, p < .05$). However, the measures of central tendency revealed that these attitudes are clustered around the minimal and moderate Likert valuations. This indicates that although formal and informal mentoring may be beneficial in encouraging minorities in positions of academic leadership, these types of initiatives may not as effectively teach all library deans how to support and advance diversity in their institutions. This aspect of leadership should be considered as a potentially valuable addition to existing training programs and institutes.

Practical Implications

Implications for Academic Library Deans and Future Library Leaders

The academic library deans in this study perceived that their best learning about academic leadership happened on the job. The most positive aspect of this finding is that on the job training was also the most commonly experienced method among deans (86.6%). As informal mentoring was perceived to be the next most valuable preparation, deans should foster existing relationships with effective library leaders. These and the
following recommendations should be viewed with caution, considering the instrument was used for self-report. Preparation methods perceived as beneficial cannot be tied to the actual effectiveness (or lack thereof) of the deans in this study.

This study suggests that a MLS is the most consistent standard for a position as an academic library dean, and that subject master’s and doctorates are most commonly obtained in the humanities and the professions and applied sciences. Degrees in education appear to be popular whether they are master’s, EdDs, or PhDs. Prospective deans should not assume that they need a doctorate to obtain an administrative position, as only 18.83% of the respondents reported holding a doctorate. This study shows that educational requirements appear to be highly dependent on individual institutional expectations.

However, the findings for research questions 3b and 3c indicate that deans with doctorates do perceive value in these degrees with respect to preparation for academic leadership in general, and particularly in the area of research and professional development. The difference in attitudes about the value of advanced degrees between deans holding doctorates and those holding subject master’s suggests that while subject master’s are not highly relevant to deanship, doctorates are beneficial. Thus, academic librarians who are interested in earning an advanced degree other than the MLS may be best served by seeking a doctorate instead of a subject master’s, if they are also interested in pursuing a career in library administration. Although the investment of time, effort, and money are greater with a doctorate, there may be a greater practical payoff for those who attain deanship. In addition, the perceived value of
advanced degrees was higher for all deans with respect to research and professional development. Thus, academic librarians working at institutions where librarians have faculty status, are eligible for tenure, and/or are required to perform and publish research, any advanced degree (but particularly a doctorate) may be beneficial.

Implications for Female and Minority Academic Librarians

Informal mentoring was widely viewed as beneficial. Particularly women and minorities who are new library deans or who desire such positions should seek out formal mentor programs or informal mentor relationships. Formal mentoring is viewed as most beneficial by minority librarians, while informal mentoring is viewed as highly effective preparation by both minorities and women. This finding suggests that institutions and professional organizations should find ways to increase current mentoring programs and further encourage members to find opportunities to act as informal mentors. Too few respondents reported experiencing either form of mentoring, related to how beneficial it was perceived to be. Those who are established or retired library deans who are minorities or women would benefit the profession greatly by seeking ways to mentor newer deans and academic librarians.

Implications for Search Committees and Hiring Administrators

For the deans in this study, the master's in library science was the most common educational attainment. This confirms the finding in the literature that the MLS is the standard educational preparation for library deans (Hernon, Powell, & Young, 2003; Lin, 2001; McCracken, 2000; O'Keefe, 1998). A doctorate may be an appropriate preferred qualification, if being seen as a peer to other academic deans is a concern or if the institution has a special focus requiring a specific specialization. However, search
committees should be aware of the potential of such a requirement to dramatically reduce their hiring pool.

Implications for the Academic Library Profession

Formal mentoring programs for minorities should be further publicized and potentially expanded. The low participation in formal mentor programs in this study (only 15.62%) indicates that while these programs are judged effective by minorities, too few are being served (just 17 minorities and 74 women reported experiencing formal mentoring). Informal mentoring, particularly for women and minorities, should also be encouraged. Recurring obstacles to increasing mentoring in higher education are the amount of initiative required by both the mentor and mentee, and the typical lack of recognition for such activities by tenure review committees (Nies & Wolverton, 2000). Professional associations and individual institutions should find solutions to these obstacles, and enable and encourage current library leaders to reach out to up-and-coming leaders.

Coursework, particularly MLS management courses, were listed as some of the helpful “other” preparation methods. Studies by MacKenzie and Smith (2007, 2008, 2009) indicated that such curricula appear in just over half of all library science programs. Thus, these courses should be made more broadly available. Library science schools should explore potential partnerships with schools of business and of education, in order to provide more targeted courses for those seeking library leadership positions. This interdisciplinary focus would expose students not only to management training, but also to the way that higher education institutions work.
Recommendations for Further Research

Replication of this study would be valuable, as repeated results are the foundation of robust research. Repeating this study at regular intervals (for instance, every five years) could produce valuable longitudinal data about academic library deans’ preparation experiences and attitudes toward them. Performing follow-up studies with small groups of individuals from this study could reveal potential changes in individual deans’ attitudes about the value of their preparatory experiences over time. This could indicate if some preparation methods are more helpful for deans in their first few years of leadership, as opposed to deans who have been in administration for a long time.

In order to produce clear results, subsequent studies using this instrument should consider improving the survey by further editing the wording for clarity. In particular, respondents’ apparent disconnect between educational attainment (Question nine) and advanced degrees as an experienced preparation method (Question 13) should be addressed. More detailed instructions for Question 13 could indicate that all methods experienced should be selected regardless of perceived relevance, and that level of perceived relevance will be asked in later questions.

Connecting respondents’ perceived value of experienced preparation methods to more objective 360 measures of their academic leadership effectiveness would enhance future replicative studies. Fagan (2012) suggests using Rosser, Johnsrud, and Heck’s (2000; 2003) original instrument to measure the academic leadership effectiveness of academic library deans. This instrument is intended to be used by faculty and staff members to judge the effective leadership of academic deans (Rosser, Johnsrud, &
Heck, 2003). This data could be compared to Rosser, Johnsrud, and Heck’s original findings about academic deans. It could also be used on a recurring basis by institutions as an evaluative measure of their deans. Applying both the Rosser, Johnsrud, and Heck instrument and the present study’s survey to the same groups of deans and their staff could help determine the preparation methods viewed as most valuable by library deans who are evaluated as the most effective leaders. Such a study would add greatly to the literature.

More direct connections between the specific educational attainment of deans and their attitudes regarding preparation methods would contribute more to the findings of the current study, particularly related to advanced degrees other than the MLS. Deans could be divided into groups based on either degree type or degree subject area, and further examined for significant differences with regards to perceived value of advanced degrees in academic leadership. Institutional stratification of these results would also be informative. This may help better interpret the complex data surrounding attitudes about the value of advanced degrees.

Another potential expansion on this study would be to look at the time particular degrees were earned, with respect to the career paths of academic library deans. Lindquist and Gilman (2008, 2010) looked at when doctorates were earned relative to beginning a career in academic librarianship. Their study determined which academic librarians decided to earn PhDs, versus the PhD-holders who decided to move into librarianship (and potentially earn a MLS) after a previous academic career in teaching, research, or administration. Karr (1984) and Wong and Zubatsky (1985) looked at time
of degree attainment related to first academic library administrative position, but this has
not been explored in-depth since. Looking at career paths of current library deans would
provide more insight into when and why academic library deans obtain doctorates
versus MLSs.

The finding of no statistically significant difference between the perception of on
the job training and advanced degree other than the MLS for the leadership areas of
library management and vision and goal setting should be further explored. Future
studies concentrating on this area could examine educational attainment, number of
years in library administration, institutions worked at, and previous management
positions. This is also an area where qualitative study could be useful to explore deans’
perceptions about their experiences and education.

The preparatory methods listed under “other” reveal a potential avenue for future
research. Commonly-cited methods were management or administrative experience
outside of academic libraries, coursework (either in the MLS, at the undergraduate level,
or advanced degrees in progress), and personal research. These preparatory methods
could be added to the existing instrument to compare their frequency and perceived
value to the methods included in the present study.

Qualitative studies with similar research questions would provide more insight on
the most common and most positively-perceived preparatory methods experienced by
academic library deans. The studies of Hernon, Powell, and Young (2001, 2002, 2003,
2004; Young, Powell, & Hernon, 2003) on leadership attributes of ARL deans addressed
similar concerns first in a qualitative manner, particularly related to mentoring and the
value of advanced degrees other than the MLS. This study could be repeated with deans at less-studied institutional types, such as associate’s colleges, special focus institutions, and tribal colleges. Such studies would help determine key similarities and differences in preparatory experiences between deans at these institutions versus those at large research institutions. Furthermore, Hernon, Powell, and Young (2003) limited their consideration of methods by which deans attain desired leadership attributes to mentoring and educational attainment, mentioning other preparation methods only briefly. Subsequent qualitative studies could expand that focus to ask deans more in-depth questions about how their experiences with on the job training, conferences and seminars, and leadership programs or institutes contributed to their effectiveness in academic leadership.

A specific focus for future qualitative research should be on female and minority academic library deans. Beyond preparation for deanship, questions should be asked regarding what motivated their interest in leadership, what barriers they faced, and what helped them successfully reach, retain, and thrive in such positions. It could also be valuable to study female and minority academic librarians nearing the end of their careers who do not have positions of leadership. Discovering if their flat career trajectory was of their own preference or if they experienced insurmountable barriers could further our understanding of how to encourage and prepare individuals for leadership positions.

Conclusions

This investigation revealed that while there is no professionally acknowledged
standard for preparation as an academic library dean, the most commonly experienced and valued preparation is on the job training. The most commonly-held degree in this study was the MLS (88.38%), confirming that institutional hiring practices tend to follow the Association of College and Research Libraries’ (2007) statement that this is the appropriate degree for academic librarians. The findings also revealed that academic library deans with advanced degrees other than the MLS tend to earn subject master’s or doctorates in the humanities or the professions and applied sciences. Deans with doctorates tend to view their education other than the MLS as more directly relevant to academic leadership than do deans with subject master’s, MDs, or JDs. Deans also value previous management or administrative experience outside of academic libraries as a relevant preparatory experience.

This study showed that while both formal and informal mentoring were viewed as valuable experiences, such experiences are not available to all deans. In particular, women perceived informal mentoring to be valuable for academic leadership. Although it is commendable that 62.12% of the women in this study experienced informal mentoring, one has to wonder if the percentage of female library deans in this study (61.7%) would be greater and thus more representative of women in academic librarianship as a whole (85%) if mentoring was more widespread (American Library Association [ALA], 2012; Davis & Hall, 2007). Promoting formal mentoring for academic librarians from underrepresented groups is even more important. Not only are minorities still dramatically underrepresented in academic librarianship overall (15%), but in this study minority deans showed extremely high appreciation for the value of formal
mentoring programs related to academic leadership. Existing academic library mentor programs for underrepresented groups should continue to be developed and promoted, if parity is to be reached in librarianship and library leadership.
APPENDIX A

INFORMED CONSENT NOTICE
Before agreeing to participate in this research study, it is important that you read and understand the following explanation of the purpose, benefits and risks of the study and how it will be conducted.

Title of Study: The Preparation of Academic Library Administrators

Student Investigator: Starr Hoffman, University of North Texas (UNT) Department of Counseling and Higher Education.
Supervising Investigator: Dr. Marc Cutright, UNT Department of Counseling and Higher Education.

Purpose of the Study: You are being asked to participate in a research study that involves an online survey. This survey will ask about experiences that may have prepared you for your administrative position, including: formal mentoring, informal mentoring, on the job training, professional conferences and/or seminars, advanced degrees, and professional training programs. This study aims to identify which of these experiences are most common and are perceived to be the most beneficial.

Study Procedures: You will be asked to answer an online survey that will take about 15 minutes of your time.

Foreseeable Risks: No foreseeable risks are involved in this study.

Benefits to the Subjects or Others: This study is not expected to be of any direct benefit to you, but we hope to learn more about how academic library administrators perceive they have professionally benefited from their training, education, and other preparatory experiences. We hope to learn which preparatory experiences are the most common, and which most directly relate to administrators’ tasks. This knowledge may contribute to academic librarianship by helping potential library administrators make informed decisions about their education and training, by affecting change in training or educational programs in library administration, and/or by informing search committees for administrative library positions about current educational and experiential trends.

Compensation for Participants: None

Procedures for Maintaining Confidentiality of Research Records: Your personally identifying information, such as your name and employing institution, will not be asked in this survey. Your responses will be linked to an anonymous unique identifying number, and will be stored in a password-protected account. The confidentiality of your individual information will be maintained in any publications or presentations regarding this study.

Questions about the Study: If you have any questions about the study, you may contact:
   Starr Hoffman at (email redacted)
   Dr. Marc Cutright at (email redacted)
Review for the Protection of Participants: This research study has been reviewed and approved by the UNT Institutional Review Board (IRB). The UNT IRB can be contacted at (940) 565-3940 with any questions regarding the rights of research subjects.

Research Participants’ Rights: Your participation in the survey confirms that you have read all of the above and that you agree to all of the following:

- Starr Hoffman has explained the study to you and you have had an opportunity to contact her with any questions about the study.
- You have been informed of the possible benefits and the potential risks of the study.
- You understand that you do not have to take part in this study, and your refusal to participate or your decision to withdraw will involve no penalty or loss of rights or benefits.
- The study personnel may choose to stop your participation at any time.
- You understand why the study is being conducted and how it will be performed.
- You understand your rights as a research participant and you voluntarily consent to participate in this study.
- You understand you may print a copy of this form for your records.

*I have read all of the above information regarding this study and understand what it says. I am 18 years or older and voluntarily agree to participate in this research project by checking the “I agree” button below.*

Answer options provided:

- I agree
- I do not agree
APPENDIX B
THE PREPARATION OF ACADEMIC LIBRARY ADMINISTRATORS

Adapted from Margo Greicar (2009).
Survey Instrument

The survey text is replicated below; notes are in italics. Notes indicate the programming logic as used in Qualtrics, when necessary. Boldface is presented as it was used in the instrument formatting, for clarity.

Instructions:
Please invest a few minutes of your time to provide your experiences and perceptions concerning the method of preparation for your role as an academic library administrator. The survey should take less than 15 minutes of your time.

Section I: Demographics

1. Gender:
   _____M
   _____F

2. Year of birth: *Qualtrics generated a drop-down list of years*

3. Country of origin: *Qualtrics generated a drop-down list of countries*

4. Ethnicity:
   ___American Indian or Alaska native
   ___Asian or Pacific Islander
   ___Black, non-Hispanic
   ___Hispanic
   ___White, non-Hispanic
   ___Race/ethnicity unknown
   ___Other
5. Please select your current employing institution's Basic Carnegie Classification (click link for more information). *(URL links to Carnegie Foundation web page with classification definitions.)*

___ Associate's Colleges
___ Baccalaureate Colleges
___ Master's Colleges and Universities
___ Doctorate-granting Universities
___ Special Focus Institutions
___ Tribal Colleges
___ Unknown

6. Please select your current employing institution’s student full-time enrollment (FTE).

___ Less than 2,500
___ 2,500 – 4,999
___ 5,000 – 9,999
___ 10,000 – 19,999
___ 20,000 – 29,999
___ 30,000 – 39,999
___ 40,000 or more
___ Unknown

7. Please select your current employing institution's control (funding type).

___ Private
___ Public
8. Is your current institution's library a member of the Association of Research Libraries (ARL)? *(URL links to ARL website.)*

_____ yes  
_____ no  
_____ Unknown

9. Please list the type and subject of each advanced degree you have completed. *(Respondents were able to enter up to five separate degrees.)*

<table>
<thead>
<tr>
<th>degree type</th>
<th>field/subject</th>
<th>year attained</th>
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</thead>
<tbody>
<tr>
<td>Masters (MLS, MA, MS, MLIS, etc.)</td>
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<tr>
<td>PhD</td>
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<tr>
<td>EdD</td>
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<td>MD</td>
<td></td>
<td></td>
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<tr>
<td>JD</td>
<td></td>
<td></td>
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<tr>
<td>Other advanced degree</td>
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</tbody>
</table>

10. How many years did you work in higher education before obtaining your first appointment as an academic library administrator (dean or associate dean)? Include all fulltime non-student positions, including paraprofessional positions. Please list years (and months, if needed) in whole numbers.

__________ years  
__________ months

11. How many years have you been an academic library administrator? Please list years (and months, if needed) in whole numbers.

__________ years  
__________ months
12. Please list your current and two other most recent positions in academic libraries. (Respondents were able to enter up to three positions.)

<table>
<thead>
<tr>
<th>dropdown box to label each position</th>
<th>position title</th>
<th>ARL member library? (yes/no)</th>
<th>years in position (please list total number of years, in whole numbers)</th>
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</thead>
<tbody>
<tr>
<td>• current (or most) recent position</td>
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<tr>
<td>• previous position</td>
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<td>• concurrent position</td>
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Section II: Method(s) of Preparation
In this section, you are asked two questions specific to your method(s) of preparation for your role as an academic library administrator. The six most common methods of preparation of academic administrators and their definitions, as derived from research, are:

- **Formal mentoring**: a process where an institution matched you with a veteran academic and/or library administrator to nurture, support, and guide your professional development.*

- **Informal mentoring**: a voluntary process where an experienced academic and/or library administrator was able to nurture, support, and guide your professional development.*

- **On the job training**: an informal practice where you learned the responsibilities, demands, ethics, duties, and details of the position after your appointment as an academic library administrator.*

- **Professional conferences and/or seminars**: you have attended professional conferences and/or seminars related specifically to the academic library administrator position.*

- **Advanced degree(s)**: you have completed or are completing a subject master's degree (that is, a master's degree in a subject other than library science) or doctoral degree (in any subject, including library science).*

- **Professional training programs**: you have attended a professional institute or training program, including but not limited to: Harvard's Leadership Institute for Academic Librarians, Harvard’s Advanced Leadership Institute for Senior Academic Librarians, Texas Library Association’s TALL Texans Institute.*

*In the online survey, these definitions appeared in the questions below, when the participant moused over each answer option.*
13. Which of the following method(s) of preparation for academic library administration did you experience? Please check all that apply. If you experienced a significant preparation method that is not listed below, please select “other” and type it in.

___Formal mentoring
___Informal mentoring
___On the job training
___Professional conferences and/or seminars
___Advanced degree(s)
___Professional training programs
___Other

14. For the following items, please indicate the degree of importance each item contributed to your preparation as an academic library administrator.

1 = not applicable, 2 = minimal, 3 = moderate, 4 = significant, 5 = very significant

___Formal mentoring
___Informal mentoring
___On the job training
___Professional conferences and/or seminars
___Advanced degree(s)
___Professional training programs
___Other
Section III: Dimensions of Leadership
In this section, you are asked to indicate the degree to which each method of preparation has contributed to your effectiveness in seven dimensions of leadership specific to the position of an academic library administrator. Below are the seven dimensions of academic library administrator leadership used in this survey. (To read each term’s definition, place your cursor over the blue text.)

Vision and goal setting
The ability to articulate clearly the strategic goals of the library, encourage ideas and creativity, create an atmosphere conducive to high librarian performance, demonstrate vision and long-range planning, emphasize library service excellence appropriately, emphasize research excellence appropriately, emphasize institutional service excellence appropriately, advocate for resources needed by the library, encourage librarian and staff development, encourage development of innovative library services, provide leadership for the library/department level initiatives.*

Management of an academic library
The ability to ensure that fair administrative procedures are followed, exercise fair and reasonable judgment in allocating resources, manage change constructively, delegate work effectively, handle administrative tasks in a timely manner, be an effective problem solver, demonstrate knowledge of departments and programs within the library, maintain an effective and efficient staff.*

Interpersonal relationships
The ability to demonstrate understanding of the needs and concerns of librarians and library staff, treat individuals fairly and with respect, maintain positive and productive relationships within the library, maintain positive and productive relationships external to the library, demonstrate awareness of the quality of professional work of librarians and library staff, be accessible to faculty and staff within the library, demonstrate understanding of the needs and concerns of students, be accessible to students.*

Communication skills
The ability to listen to and communicate with librarians and library staff, listen to and communicates with external constituencies, effectively represent the library to the rest of the university, effectively communicate the library’s priorities to the upper level administration, effectively represent the library to the rest of the university, produce clear reports and correspondence.*

Professional development, research and institutional endeavors
The ability to maintain an active research/scholarly agenda, pursue professional growth opportunities, engage in effective provision of library services, contribute
service to professional organizations, contribute service to community and campus projects.*

Quality of library services
The ability to advance the library’s services effectively, handle external accreditation reviews effectively, recruit new personnel and/or promotes recruitment skillfully, demonstrate a commitment to ensuring a fair promotion process.*

Support for institutional diversity
The ability to demonstrate commitment to advancing and supporting equal employment opportunities, demonstrate commitment to mentoring of women and librarians or staff from underrepresented groups, provide reasonable accommodation for persons with disabilities, ensure the staff is educated in EEO/AA concerns.*

*In the online survey, these definitions appeared when the participant moused over each bolded phrase in the questions below.

15. Please indicate the degree to which each method of preparation has contributed to your effectiveness in vision and goal setting.

1 = not applicable, 2 = minimal, 3 = moderate, 4 = significant, 5 = very significant

___Formal mentoring
___Informal mentoring
___On the job training
___Professional conferences and/or seminars
___Advanced degree(s)
___Professional training programs
___Other
16. Please indicate the degree to which each method of preparation has contributed to your effectiveness in the management of an academic library.

1 = not applicable, 2 = minimal, 3 = moderate, 4 = significant, 5 = very significant

___Formal mentoring
___Informal mentoring
___On the job training
___Professional conferences and/or seminars
___Advanced degree(s)
___Professional training programs
___Other

17. Please indicate the degree to which each method of preparation has contributed to your effectiveness in developing and maintaining interpersonal relationships with faculty, staff, and students.

1 = not applicable, 2 = minimal, 3 = moderate, 4 = significant, 5 = very significant

___Formal mentoring
___Informal mentoring
___On the job training
___Professional conferences and/or seminars
___Advanced degree(s)
___Professional training programs
___Other
18. Please indicate the degree to which each method of preparation has contributed to your effectiveness with communication skills.

1 = not applicable, 2 = minimal, 3 = moderate, 4 = significant, 5 = very significant

___ Formal mentoring
___ Informal mentoring
___ On the job training
___ Professional conferences and/or seminars
___ Advanced degree(s)
___ Professional training programs
___ Other

19. Please indicate the degree to which each method of preparation has contributed to your effectiveness in maintaining and pursuing professional development, research and institutional endeavors.

1 = not applicable, 2 = minimal, 3 = moderate, 4 = significant, 5 = very significant

___ Formal mentoring
___ Informal mentoring
___ On the job training
___ Professional conferences and/or seminars
___ Advanced degree(s)
___ Professional training programs
___ Other
20. Please indicate the degree to which each method of preparation has contributed to your effectiveness in advancing the quality of library services.

1 = not applicable, 2 = minimal, 3 = moderate, 4 = significant, 5 = very significant

___Formal mentoring
___Informal mentoring
___On the job training
___Professional conferences and/or seminars
___Advanced degree(s)
___Professional training programs
___Other

21. Please indicate the degree to which each method of preparation has contributed to your effectiveness in supporting and advancing institutional diversity.

1 = not applicable, 2 = minimal, 3 = moderate, 4 = significant, 5 = very significant

___Formal mentoring
___Informal mentoring
___On the job training
___Professional conferences and/or seminars
___Advanced degree(s)
___Professional training programs
___Other
22. Please leave any comments you have on your preparation for and experience as an academic library administrator.

Thank you taking the time to complete this survey. Your efforts are greatly appreciated. Please remember to clear your browser’s cache and page history after you submit the survey.

23. If you are interested in receiving a copy of the completed research study, please submit your email address: _____________. This email will not be connected with your survey responses in any way.
APPENDIX C
ACADEMIC LEADERSHIP DOMAINS COMPARED TO DESIRED TRAITS FOR LIBRARY LEADERS
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<tr>
<td><strong>Vision and Goal Setting</strong>&lt;br&gt;Articulates clearly the strategic goals of the unit&lt;br&gt;Encourages ideas and creativity&lt;br&gt;Creates an atmosphere conducive to high faculty performance&lt;br&gt;Demonstrates vision and long-range planning&lt;br&gt;Emphasizes teaching excellence appropriately&lt;br&gt;Emphasizes research excellence appropriately&lt;br&gt;Emphasizes service excellence appropriately&lt;br&gt;Advocates for resources needed by the unit&lt;br&gt;Encourages faculty development&lt;br&gt;Encourages curriculum/program development&lt;br&gt;Provides leadership for the unit/subunit level initiatives</td>
<td>Ensures that planned action is implemented and evaluated&lt;br&gt;Articulates direction for the library&lt;br&gt;Builds a shared vision for the library&lt;br&gt;Thinks outside the box is open-minded&lt;br&gt;Builds consensus in carrying out strategic directions&lt;br&gt;Promotes professional growth in staff&lt;br&gt;Nurtures the development of new programs and services</td>
<td>Vision in formulating programs and implementing strategies to integrate print and electronic resources&lt;br&gt;Team building and participatory management&lt;br&gt;Ability to plan, implement, and assess strategic goals&lt;br&gt;Experience with long-range planning&lt;br&gt;Ability to serve as an advocate for the library&lt;br&gt;Commitment to professional development of library personnel&lt;br&gt;Proven facilitative leadership skills&lt;br&gt;A record of innovative and effective leadership</td>
<td>Further the cause of library sciences in an environment of shrinking resources</td>
</tr>
<tr>
<td><strong>Management of the Unit</strong>&lt;br&gt;Insures that fair administrative procedures are followed&lt;br&gt;Exercises fair and reasonable judgment in the allocation of resources&lt;br&gt;Manages change constructively&lt;br&gt;Delegates work effectively&lt;br&gt;Handles administrative tasks in a timely manner&lt;br&gt;Effective problem solver&lt;br&gt;Demonstrates knowledge of departments and programs within the unit&lt;br&gt;Maintains an effective and efficient staff</td>
<td>Manages fiscal resources/budgets&lt;br&gt;Exercises good judgment&lt;br&gt;Manages and shapes change&lt;br&gt;Delegates authority&lt;br&gt;Analyses and solves problems&lt;br&gt;Facilitates a productive work environment</td>
<td>Managerial ability in personnel, fiscal, budget, and program matters&lt;br&gt;Experience with change management&lt;br&gt;Documented record of problem solving&lt;br&gt;Proven ability to foster team building and participatory management</td>
<td>Can adapt to multiple presidents and provosts and they come and go&lt;br&gt;Able to focus on larger issues and delegate others&lt;br&gt;Pro-active&lt;br&gt;Efficient use of personnel caused by changes in libraries&lt;br&gt;Managing difficult employees</td>
</tr>
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</tr>
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</table>
| **Interpersonal Relationships**  
Demonstrates understanding of the needs and concerns of unit members.  
Treats individuals fairly and with respect  
Maintains positive and productive relationships within the unit  
Maintains positive and productive relationships external to the unit  
Demonstrates awareness of the quality of professional work of unit members  
Demonstrates sensitivity to career and mentoring needs of unit members  
Accessible to faculty and staff within the unit  
Demonstrates understanding of the needs and concerns of students  
Accessible to students | Has good interpersonal skills  
Is able to function in a political environment  
Demonstrates effective networking skills  
Treats people with dignity and respect  
Promotes professional growth in staff  
Is accessible  
Responds to the needs of various constituencies  
Is accessible | Strong interpersonal skills  
Ability to work in a networked, collegial environment  
Commitment to professional development of library personnel | Record of fairness with staff  
Ability to administer professional staff members  
Learning-centered and student-centered |
| **Communication Skills**  
Listens to and communicates with unit members  
Listens to and communicates with external constituencies  
Effectively represents the unit and its members to the rest of the university  
Effectively communicates the unit's priorities to the upper level administration  
Effectively communicates the upper level administration priorities to chairs  
Produces clear reports and correspondence | Is articulate (good oral, written, and presentation skills)  
Is a good listener  
Develops and fosters partnerships with groups and organizations on and off campus  
Develops a campus visibility for the library  
Brings issues of broad importance to the university community  
Is an advocate for librarians' role in higher education  
Sets priorities | Excellent oral and written communication skills  
Listening skills  
Ability to work collaboratively with campus colleagues  
Ability to articulate vision for library within the institution | Ability to understand, work effectively with, and relate to all campus constituent groups  
Ability to deal with both internal and external environments  
Must be an advocate for personnel, not just the “library” |
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<tr>
<td><strong>Research/Professional/Community/Campus Endeavors</strong></td>
<td><strong>Maintains an active research/scholarly agenda</strong></td>
<td><strong>Respect for scholarship and learning</strong></td>
<td><strong>Professional activities</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Pursues professional growth opportunities</strong></td>
<td><strong>Record of scholarly achievement</strong></td>
<td><strong>Professional qualities to be considered a “peer” by academic deans</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Engages in effective teaching</strong></td>
<td><strong>Strong service orientation</strong></td>
<td><strong>Record of continuing professional development</strong></td>
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<tr>
<td></td>
<td><strong>Contributes his/her services to professional organizations</strong></td>
<td></td>
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</tr>
<tr>
<td></td>
<td><strong>Contributes his/her services to community and campus projects</strong></td>
<td></td>
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<tr>
<td><strong>Quality of Education in the Unit</strong></td>
<td><strong>Nurtures the development of new programs and services</strong></td>
<td><strong>Firm commitment to quality</strong></td>
<td><strong>Commitment to the educational function of library staff and faculty</strong></td>
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<tr>
<td><strong>Advances the unit’s undergraduate and graduate programs effectively</strong></td>
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<tr>
<td><strong>Advocates appropriate curriculum offerings</strong></td>
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<tr>
<td><strong>Handles external accreditation reviews effectively</strong></td>
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<tr>
<td><strong>Recruits new personnel and/or promotes recruitment skillfully</strong></td>
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<tr>
<td><strong>Demonstrates a commitment to ensuring a fair tenure and promotion process</strong></td>
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<tr>
<td><strong>Support for Institutional Diversity</strong></td>
<td><strong>Is committed to staff diversity (and is culturally sensitive)</strong></td>
<td><strong>Commitment to diversity</strong></td>
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<tr>
<td><strong>Demonstrates commitment to advancing and supporting equal employment opportunities</strong></td>
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<td></td>
<td></td>
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<tr>
<td><strong>Demonstrates commitment to mentoring of women and faculty from underrepresented groups</strong></td>
<td></td>
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<tr>
<td><strong>Provides reasonable accommodation for persons with disabilities</strong></td>
<td></td>
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</tr>
<tr>
<td><strong>Ensures staff are trained in EEO/AA concerns</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX D
PRE-SURVEY EMAIL MESSAGE
Dear ${m://FirstName},

In one week, I will be sending you a link to an online survey. I am asking for your help completing my dissertation study, by completing this short survey about your experience as a library administrator. The purpose of this study is to discover current trends in education, training, and other administrative preparation among current academic library administrators, and which of these preparatory methods are perceived as effective.

The survey should take approximately 15 minutes to complete. You will not be asked for any personally identifying information, and results will only be used in the aggregate. I will be pleased to share the results of this study upon your request. This study has been approved by the University of North Texas IRB (Institutional Research Board). More information about this is included in the Informed Consent Form on the first page of the online survey. Please submit your response on or before Friday, August 24th.

I would greatly appreciate your sharing your experiences preparing for your position as an academic library administrator. If you are not an administrator at your library, please consider forwarding this email to someone in such a position.

If you have any questions, or would like to know more about this study, please contact me at: (email redacted)
Many thanks,

Starr Hoffman
PhD candidate
University of North Texas
Department of Counseling and Higher Education
(email redacted)

Dr. Marc Cutright
University of North Texas
Department of Counseling and Higher Education
(email redacted)
APPENDIX E

INVITATION EMAIL MESSAGE
Dear ${m://FirstName},

There are currently no agreed-upon standards of preparation or education for academic library administrators. In addition, there is little information comparing the effectiveness of existing preparatory methods.

I am asking for your help completing my dissertation study, by completing a short survey about your own experience. The purpose of this study is to discover current trends in education, training, and other administrative preparation among current academic library administrators, and which of these preparatory methods are perceived as effective.

The results of this survey may inform search committees about common and relevant backgrounds for academic library administrators, and may impact the education and support of librarians who hope to become future academic library administrators.

The survey should take less than 15 minutes to complete. You will not be asked for any personally identifying information, and results will only be used in the aggregate. I will be pleased to share the results of this study upon your request. This study has been approved by the University of North Texas IRB (Institutional Research Board).

More information about this is included in the Informed Consent Form on the first page of the online survey. Please submit your response on or before Friday, August 24th.

To take the survey, please click here: ${l://SurveyLink?d=Take the Survey}

Or copy and paste the URL below into your internet browser: ${l://SurveyURL}

More information about this study is available here: (link redacted)
If you have any questions about this study, please contact me at: (email redacted)

I appreciate your time and the valuable information that you can provide.
Many thanks,

Starr Hoffman
PhD candidate
University of North Texas
Department of Counseling and Higher Education
(email redacted)

Dr. Marc Cutright
University of North Texas
Department of Counseling and Higher Education (email redacted)
APPENDIX F

REMINDER EMAIL MESSAGE
Dear $m://FirstName,

*Thank you* if you already responded to the online survey I sent earlier this week. I appreciate your time and effort.

If you have not responded yet, please take the time to do so by August 24th. Your response will provide insights into current trends in education, training, and other administrative preparation among current academic library administrators. Please be assured that your individual responses are confidential, and results will only be used in the aggregate.

Follow this link to the Survey: $l://SurveyLink?d=Take the Survey

Or copy and paste the URL below into your internet browser:

$l://SurveyURL

If you are *not* an administrator at your library, please let me know so that I may remove you from this list. Please also consider forwarding this email to someone in such a position.

Please let me know if you have any questions, or would like to know more about this study.

Many thanks,

Starr Hoffman  
PhD candidate  
University of North Texas  
Department of Counseling and Higher Education  
(email redacted)
APPENDIX G

PERMISSION TO USE INSTRUMENT
Hi Starr,
I apologize for the delay in getting back to you. Yes, you certainly can use the survey. I hope you find it very beneficial. Good luck with your research endeavors!
Margo
APPENDIX H

INSTITUTIONAL REVIEW BOARD APPROVAL LETTER
August 13, 2012

Dr. Marc Cutrigat
Student Investigator: Starr Hoffman
Department of Higher Education
University of North Texas

Institutional Review Board for the Protection of Human Subjects in Research (IRB)
RE: Human Subject Application #12-353

Dear Dr. Cutrigat:

The UNT IRB has received your request to modify your study titled "The Preparation of Academic Library Administrators." As required by federal law and regulations governing the use of human subjects in research projects, the UNT IRB has examined the request to modify your data collection instrument. The modification to this study is hereby approved for use with human subjects.

Please contact Jordan Harmon, Research Compliance Analyst, at (940) 565-3940, or Boyd Herndon, Director of Research Compliance, at (940) 565-3941, if you wish to make changes or need additional information.

Sincerely,

Patricia L. Kaminski, Ph.D.
Associate Professor
Chair
Institutional Review Board

PK/jh
APPENDIX I

SCALED VARIABLES AND RELIABILITY MEASURES
<table>
<thead>
<tr>
<th>Preparation Method Scales</th>
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<th>SD</th>
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<tr>
<td>Support for institutional diversity</td>
<td>0.90</td>
<td>2.06</td>
<td>0.99</td>
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</tbody>
</table>

| **Informal mentoring (α = 0.89, n = 449)** |                   |     |    |
| Overall academic leadership | 0.87              | 3.08| 0.86|
| Vision and goal-setting    | 0.87              | 2.60| 0.96|
| Management of the unit     | 0.87              | 2.96| 0.89|
| Interpersonal relationships | 0.87              | 2.85| 0.98|
| Communication skills       | 0.86              | 2.60| 0.96|
| Research/professional/campus endeavors | 0.87 | 2.61 | 0.96 |
| Quality of library services | 0.87              | 2.81| 0.96|
| Support for institutional diversity | 0.88 | 2.24 | 1.01 |

| **On the Job Training (α = 0.86, n = 649)** |                   |     |    |
| Overall academic leadership | 0.86              | 3.53| 0.67|
| Vision and goal-setting    | 0.85              | 3.00| 0.94|
| Management of the unit     | 0.85              | 3.43| 0.76|
| Interpersonal relationships | 0.85              | 3.08| 0.95|
| Communication skills       | 0.84              | 3.06| 0.94|
| Research/professional/campus endeavors | 0.85 | 2.85 | 0.90 |
| Quality of library services | 0.84              | 3.36| 0.82|
| Support for institutional diversity | 0.86 | 2.65 | 1.05 |

*Table continued on next page.*
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<tr>
<th>Preparation Method Scales</th>
<th>( \alpha ) if item deleted</th>
<th>( M )</th>
<th>SD</th>
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APPENDIX J

HISTOGRAMS FOR SUMMED SCALE VARIABLES
Histogram of Other Preparation Methods

- Mean = 22.47
- Std. Dev. = 6.298
- N = 110
REFERENCES


academic officers with those recommended by academic library directors. *Advances in Library Administration and Organization, 26*, 265-315.


