Pursuing Academic Librarianship: Pathways to Librarian Positions

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Abstract

The purpose of the study is to support library and information science (LIS) students and recent graduates considering academic librarianship by helping them strategize their career preparation and job search endeavors based on recent graduates' experiences. We employed a nationwide survey to quantify demographic characteristics, experiences during LIS studies, pre-professional experiences, aspects of the job search, and information about first librarian positions of recent graduates in the United States seeking positions as academic librarians. This article focuses on the respondents who obtained a librarian position, particularly how some respondents become academic librarians after their first librarian position is in a non-academic library while others do not. We explore whether there are statistically significant differences in the backgrounds and experiences of respondents that distinguish between the pathways to librarian positions. Results show few differences among the two groups of survey respondents who first obtain a non-academic librarian position. On the other hand, findings reveal statistically significant differences among the two groups of survey respondents who obtain an academic librarian position. Differences include the age of respondents; conference participation; pre-professional employment in a public, school, or special library; and when respondents start applying for librarian positions. The average amount of time needed to obtain a first librarian position by position pathway is significantly different for both non-academic librarian and academic librarian positions. Free-text responses about respondents' job searches organized by position pathway provide additional insight into the circumstances that

contribute to whether or not respondents obtain an academic librarian position as well as describe challenges experienced in the competitive academic librarianship job market

Keywords: academic libraries, career preparation, recent LIS graduates, job search, employment barriers, position pathways, career path movement

Obtaining an academic librarian position after graduating with a library and information science (LIS) graduate degree in the United States (U.S.) can be challenging in the current academic librarianship job market, and little evidence-based guidance is available for those considering pursuing academic librarianship. To help strategize career preparation and job search endeavors, we undertook a study that quantifies recent graduates' experiences in these areas. In the first article published about this study (Iglesias et al., 2023), we provided an overview of the three areas which impact candidates' prospects for securing professional employment in an academic library — the academic librarianship job market, the candidate preparing for and executing the job search, and the search committee involved in the hiring process — in addition to contributing a short description on diversity initiatives to frame the LIS literature related to this study. We determined which factors led to survey respondents either not obtaining or obtaining an academic librarian position for different population groups represented in the study. Factors appeared to differ for the overall, predominantly white, cisgender female, not of Hispanic, Latino, or Spanish origin survey population than for persons of color, and also for respondents of Hispanic, Latino, or Spanish origin. In a subsequent article published on the study, we also showed factors differed for cisgender men (Iglesias & Gard, 2023). One initial study finding revealed pre-professional employment either in a public library or school library was negatively associated with obtaining an academic librarian position for the overall survey population. This leads to several questions. What are the experiences of survey respondents who obtain their first librarian position in a non-academic library environment in terms of their quest to become an academic librarian? How do some respondents overcome this potential hinderance by going on to obtain an academic librarian position while others do not? The topic of recent graduates obtaining an academic librarian position after having first been employed as a librarian in another library environment has not been analyzed in prior research studies that examined job preparation and entry into the profession nor in the research published on career path movement between library environments, but this area merits exploration. Taking a

closer look at recent graduates' position pathways provides a deeper understanding of the job attainment landscape.

In the current article, we continue exploring recent graduates' experiences in pursuing academic librarianship by turning our attention to the survey respondents who obtained a librarian position. We investigate whether there are statistically significant differences in the backgrounds and experiences of respondents that distinguish between the three pathways to librarian positions:

- **non-academic librarians:** respondents whose first librarian position is in a non-academic library environment who have not yet obtained an academic librarian position.
- **indirect academic librarians:** respondents whose first librarian position is in a non-academic library environment who have since obtained an academic librarian position.
- **direct academic librarians**: respondents whose first librarian position is in an academic library.

In order to gain a fuller picture, we also examine the free-text responses from the final survey item about respondents' job searches organized by position pathway.

To undertake the study, we created a survey with questions divided into the following five sections: survey eligibility & demographics, experiences during LIS studies, pre-professional experiences, job search, and first librarian position. With the exception of duration to first librarian positions and whether an academic or non-academic librarian position is obtained, specific survey questions about study respondents' first librarian positions are outside the scope of this article. Aside from the current article on this study, we have already published two articles—Iglesias et al., 2023 and Iglesias & Gard, 2023—and will be publishing a minimum of one more research article from the dataset generated by this survey—Iglesias & Gard, 2024. The current research questions are outlined below.

Research Questions

- Are there significant differences in the backgrounds and experiences of non-academic librarian respondents and indirect academic librarian respondents?
- Are there significant differences in the backgrounds and experiences of direct academic librarian respondents and indirect academic librarian respondents?
- On average, how long does it take from graduating with an LIS degree to obtaining first librarian positions based on position pathway?

The answers to these questions provide insight particularly pertinent for students and recent graduates already with experience or considering working in a non-academic library environment, either in a pre-professional or professional-level role, who would like to become an academic librarian. To provide further context about recent graduates' job search journeys, we additionally examine survey respondents' free-text responses from the final survey item organized by position pathway to reveal the strategies and circumstances that may have contributed to respondents either obtaining or not obtaining academic librarian positions. By knowing more about recent pathways as well as what may impede entry into academic librarianship our research provides guidance into the profession on what to anticipate and how to strategize the career preparation and aspects of the job search by quantifying recent graduates' experiences. The benefits of this research will additionally extend to colleagues working at graduate schools of LIS and academic libraries to better support LIS students and recent graduates interested in academic librarianship.

Literature Review

This literature review begins with an overview of the academic librarianship job market followed by research studies on recent graduates' career preparation and job search endeavors in pursuing academic librarianship in the U.S. We then review publications on career path movement between library environments. An additional overview of LIS research on part-time employment further frames literature related to the topics addressed in the current article.

The Academic Librarianship Job Market

Recent data indicate librarians predominantly work in public libraries (42%) while librarians working in colleges, universities, and professional schools make up only 22% of the librarian workforce in the U.S. (Department for Professional Employees, 2023). Between the academic years 2009/2010 and 2018/2019, approximately 60,588 people graduated with a Master's degree from an LIS program in the U.S. (National Center for Education Statistics, 2020). Among graduates during that time span whose race or ethnicity is specified, approximately 81.51% identified as white (National Center for Education Statistics, 2012, 2014, 2016, 2018, 2020b). Approximately 18.50% identified as male and the remaining as female (National Center for Education Statistics, 2012b, 2012c, 2014b, 2014c, 2016b, 2016c, 2018b, 2018c, 2020c, 2020d); data are not provided outside of the gender binary. The coursework for some programs can be taken exclusively online so it is unknown how many graduates were living in the U.S. when

they earned their degrees. Additional unknowns are how many of these recent graduates sought employment as a librarian in an academic library and how many landed such a position. However, according to earlier studies, a substantial percentage of graduates would like to work in academic libraries while the numbers of those who have actually obtained such a position are low. One study showed that among those wanting to work in an academic library less than half gained employment in an academic library (Moran et al., 2010). In another study the percent was lower at just approximately a third becoming employed in an academic library among those wanting to work in such an environment (Marshall et al., 2010). Whether obtained employment was at the paraprofessional/pre-professional or professional level was not specified for either study.

Breaking into one's first professional position in an academic library can be challenging under regular circumstances, but, as during the Great Recession (December 2007 to June 2009), new graduates are again in a time of change due to the COVID-19 global pandemic (January 2020 to May 2023), which has negatively impacted the job market. If the Great Recession is any indicator, repercussions from the pandemic may be felt for years, making research that documents the realities faced by recent LIS graduates in securing professional employment particularly valuable to students and recent graduates who are considering pursuing a position as an academic librarian. The Great Recession "led to one of the most significant setbacks that the library profession has ever experienced, and its impact continues to be felt" (Torres, Gold, & Donnelly, 2022, p. 6) — there were significant fluctuations in library employment in subsequent years, including an 8% unemployment rate for librarians and information specialists in January 2012. Layoffs and budget cuts may have been among the related variables impacting this situation (Torres et al., 2022), and new LIS graduates may have been especially compelled to take precarious employment including part-time, temporary, or underpaid work in light of the availability of fewer professional positions (Maatta, 2010).

In an analysis of job announcements, Reser and Schuneman (1992) uncovered that just 17.7% of advertised academic librarian jobs required no previous work experience. Beile and Adams (2000) used similar study parameters and had related results finding that 20.1% of job ads were for entry-level positions. Tewell's (2012) frequently cited content analysis study of job advertisements likewise confirmed there continued to be a lack of entry-level positions in academic libraries in the U.S. with approximately only one-fifth of positions (about 20.0%) advertised as entry level. In a smaller pilot study Tewell further discovered that institutions hiring positions

advertised as entry level were not likely to fill these positions with entry-level applicants. That study informs the current study, as both occurred during periods of economic turmoil. Unemployment rates rose sharply again for the libraries, archives, and other information services industry from 3.3% in 2019 to 8.3% for the year 2020 (U.S. Bureau of Labor Statistics, 2021), which was the first year of the pandemic. While the percentage of entry-level jobs appears to have stayed consistent over the years, when the overall number of jobs goes down, this likely translates to increased competition for entry-level jobs as more experienced candidates compete with recent graduates for these positions.

Experiences of Recent Graduates

Other than what we have published on our study – Iglesias et al., 2023; Iglesias & Gard, 2023 – just four research studies have been recently published from the perspective of new graduates in the U.S. on what experiences helped them obtain a position in an academic library—Eckard et al. (2014), Reed et al. (2015), Cunningham and Ruffin (2015), and Goodsett and Koziura (2016). Variations of the search terms "library school student," "recent graduates," "employment," and "academic library" were used to locate these studies with an additional criterion being they were an original research study. None of these four studies explored recent graduates' position pathways. Including our study, all five determined applying early for positions was a success strategy (though, in our initial analyses, this was found to be the case for the overall survey population but not for respondents who identified as persons of color or respondents of Hispanic, Latino, or Spanish origin [Iglesias et al., 2023]; additional analyses likewise did not find this to be the case for cisgender men [Iglesias & Gard, 2023]). All studies also stressed the importance of students gaining pre-professional experience in an academic library as preparation for the job search (though in our study we did not find associations for this among either respondents who identified as persons of color or for cisgender male respondents). A separate study by Piper and Wilairat (2021) further explored the specific topic of LIS students' experiences with paid employment during their LIS programs. One result revealed students who had children under 18 were about 50% less likely to have graduate employment than peers without dependents of any age.

The duration for most recent graduates to secure employment in an academic library varied between accepting a job before graduating to obtaining employment in less than twelve months post-graduation, though whether the position was at the professional level was frequently unclear. Among those who found employment,

approximately 20% to 50% of study participants secured employment while a student (Eckard et al., 2014; Reed et al., 2015; Cunningham & Ruffin, 2015; Goodsett & Koziura, 2016), whereas our study of more recent graduates (Iglesias et al., 2023) found the average duration to be approximately 1.8 years post-graduation for the overall study population while a maximum of nine years was needed for respondents to obtain their first academic librarian position. In our study only 3.3% of respondents secured employment as an academic librarian while a student. Eckard et al. (2014) additionally determined other factors that increased a candidate's odds of having a successful job search. These included attending professional conferences, participating in committee work, and authoring or co-authoring a publication, which our results did not corroborate. Attending workshops and seminars additionally increased a candidate's odds according to their study, an area we did not explore.

In our study's initial analyses (Iglesias et al., 2023) and in additional analyses (Iglesias & Gard, 2023), we compared the backgrounds and experiences of recent graduates who had not yet obtained an academic librarian position with those who had obtained one. We uncovered additional factors as well, with one being that applying for jobs out of state was significantly associated with successful job search outcomes for the overall survey population. Unlike the other studies, we furthermore determined which factors were significantly associated with unsuccessful academic librarian job search outcomes. Moreover, we identified that persons of color, those who identified as Hispanic, Latino, or of Spanish origin, and cisgender men showed different outcomes in comparison to the overall survey population. Among other factors, pre-professional employment in a public or school library was negatively associated with obtaining an academic librarian position for the overall survey population, which was predominantly white, cisgender female, and not of Hispanic, Latino, or Spanish origin. For prospective job candidates in a competitive job market, knowing more about why this is the case can help contribute to strategizing their job searches.

Other than the current article and the first two articles already published on this study, we are preparing a fourth manuscript that likewise utilizes the current study's dataset (Iglesias & Gard, 2024). The focus is on learning about the kinds of first librarian positions recent graduates obtain while comparing the positions of different population groups represented in the study as well as comparing first librarian positions by position pathway. We are not aware of this topic having been analyzed in prior research studies.

Career Path Movement between Library Environments

In the LIS literature, most accounts of career path movement between library environments, also described as transitioning to a different library type, are personal accounts. There have been few research studies published on this topic, which LeBeau (2008) attributed in part to challenges in finding commonalities among these experiences since every individual has a unique situation. LeBeau conducted a survey on the experiences of business librarians who moved into academic business librarianship from other library environments. The largest numbers came from public libraries, those who transferred internally from other academic library positions, and academic business librarians just entering the workforce from library school. He also explored challenges they faced after transitioning to their new environment. Only one survey respondent expressed that their ability to handle the transition was questioned by others, leading LeBeau (2008) to speculate that job stereotyping may be "…more of a concern expressed behind closed doors on search committees than out in the open to candidates" (p. 302).

Subsequent studies by Noh (2010), who surveyed librarians in South Korea, and Franks (2017), who surveyed librarians in the U.S., looked at general patterns to career path movement between library environments regardless of specific job position. For example, Noh (2010) found the majority of public librarians as well as academic librarians did not change to a different library environment over the course of their career. Similarly, just over a quarter of Franks' (2017) survey respondents reported having worked in more than one library environment. She extended research on the topic of career path movement by revealing many survey respondents reported encountering biased attitudes from employers and fellow librarians when trying to change to a different library environment. This may be an indication that job stereotyping exists, has increased, or is discussed more openly now than in the past. Franks further asserted that sometimes respondents' own personal biases kept them from trying to move into an academic library environment because they were under the impression that they would not meet the qualifications. She suggested future research to reveal the number of years worked within each library environment, which may be influenced by the age of the librarian as well as the total number of years in the LIS profession. Indeed, research focused on our topic of recent LIS graduates who have tried to transition into academic librarianship after having experience working in a non-academic library environment appears to thus far be non-existent in the published literature. Insight into such experiences including the number of years working in different library environments and whether age plays a role would be helpful for

students and recent graduates wanting to make informed decisions about pursuing entry into academic librarianship.

Part-Time Employment in Libraries

Similar to the LIS literature on career path movement between library environments, there are few research studies on part-time employment in libraries. Recent research on this topic comprises Wilkinson's (2015; 2016) two studies, in which she looked at part-time experiences across library environments. Wilkinson (2015) explored the results of a survey of recent graduates who have held part-time positions, either in paraprofessional or professional capacities. Most were employed in an academic library, a public library, or in both. Over half of all respondents reported holding multiple part-time positions concurrently. Respondents needed to undertake part-time employment due to the difficult job market and to gain experience in order to become employed in a full-time position. For a small number of respondents, their location was an important reason why they worked part time. Wilkinson (2015) additionally stressed the following, which is particularly germane to our current study:

> [F]or recently graduated librarians, part-time librarianship is strongly connected to the availability of full-time, entry-level library positions […] [M]any of this survey's respondents took on part-time positions in order to gain library experience so they could be more competitive when applying to full-time, entry-level librarian jobs (p. 359).

She concluded new graduates were facing underemployment and economic uncertainty based on data about low salaries and few benefits.

Wilkinson's (2016) content analysis study of part-time job ads for professional library jobs in two U.S. states included job ads from all types of libraries, though just under half of all advertised positions were in academic libraries. Among all ads, about 90% were in the public services position type. Technical services positions made up the fewest number of job ads. Wilkinson conjectured that "the lack of part-time positions in [technology-focused] areas may be explained by a tendency for such positions to be advertised as paraprofessional" (p. 77). Required experience varied greatly with about half of part-time positions requiring no experience. However, many jobs required experience in specific library environments rather than a number of years of experience. Wilkinson believed this implied that even the part-time job market might be somewhat competitive. Additionally helpful to know for those pursuing academic librarianship is that Wilkinson found advertising of part-time positions in libraries to be extremely local

as opposed to how full-time positions are advertised. This may contribute to decreased competition for such positions.

In summary, for current students and recent graduates considering pursuing academic librarianship, research on the position pathways recent graduates took to land professional-level employment will help support navigating their own career paths. This is an area that has not been analyzed in previous research. Research from the perspective of new graduates on what experiences helped them prepare for and obtain a position in an academic library did not take position pathways into account nor have the few studies on career path movement from one type of library environment to another placed attention on recent graduates. Meanwhile, the recent LIS research on part-time employment in libraries provides evidence new graduates have relied on part-time employment to gain entry into librarianship and as such contributes to the discussion of our study.

Methodology

Study Population and Survey Distribution

To be included in this study survey respondents needed to be at least 18 years of age and living in the U.S. (including U.S. territories) when they earned a Master's degree in LIS or an equivalent degree from an institution in the U.S. during the academic years 2009/2010 to 2018/2019. They had applied for librarian positions – requiring a Master's degree in library and/or information science from an ALA-accredited program – in an academic or research library.

The lead author and a colleague distributed an invitation to participate in the survey with a link to the survey in the last week of July 2021. We stopped collecting survey data after a six-week period. Efforts were made to receive participation from a wide geographic area as well as to reach demographically-diverse survey respondents. We posted the survey invitation to ALA Connect's community pages (electronic mailing lists) for ALA and the ALA divisions ACRL and Core and additionally asked a colleague to post the invitation on the Public Library Association (PLA) community page. Furthermore, we contacted all of ALA's national associations of librarians of color – the American Indian Library Association, Asian/Pacific American Librarians Association, Black Caucus of the American Library Association, Chinese American Librarians Association, and REFORMA, the National Association to Promote Library & Information Services to Latinos and the Spanish Speaking – and asked that they consider posting the survey invitation to their respective memberships. In addition, we

contacted every U.S. state and U.S. territory library association for which we could find contact information. Recipients of the invitation to participate were encouraged to widely distribute the survey link.

Survey Overview

We collected data via a survey using REDCap electronic data capture (Appendix A) to quantify recent graduates' career preparation and job search endeavors. The survey addressed respondents' time during LIS studies up through their first academic librarian position if they had obtained one. Survey questions were divided into five sections: survey eligibility & demographics, experiences during LIS studies, pre-professional experiences, job search, and first librarian position. Most survey questions were multiple choice and required to answer. There additionally were a number of optional open-ended survey items. These were provided to ensure applicable answer choices were available and for the purpose of learning more about experiences that contributed to or hindered entry into academic librarianship. Answer choices provided for the survey question for respondents to describe their race or family origin were based on the U.S. census data collection for race. Answer choices for the questions about primary job category were based on Tewell's (2012) primary job categories.

The survey included branch logic for respondents to be routed to subsequent questions based on their answers to previous questions. In this way, respondents skipped over questions that did not apply to their situation. There were four main lengths of the survey based on respondents' librarian position pathway. After meeting the eligibility requirements, all respondents were asked to answer the applicable questions contained in the first four survey sections. The number of questions asked then differed in the final survey section – the first librarian position section – depending on whether a librarian position was obtained and in what type of library. The four survey lengths were as follows, starting with the smallest number to the largest number of survey questions:

1. Survey respondents who had not yet obtained a librarian position in any type of library environment were asked the fewest number of questions. After being asked to specify the reason(s) that may have hindered their job search pathway to a librarian position, they were routed to the final survey item that was provided to all respondents ("Please tell us any additional information you would like to share related to your job search or this survey").
2. Direct academic librarian respondents were asked questions about their first academic librarian position before being routed to the final survey item.

3. Non-academic librarian respondents were asked information about their first non-academic librarian position followed by being asked to specify the reason(s) that may have hindered their transition into academic librarianship. After this, they were routed to the final survey item.
4. Finally, indirect academic librarian respondents were asked information about both positions, their first non-academic librarian position followed by questions about their first academic librarian position. They were then provided the final survey item. This fourth group answered the most questions.

A second survey (Appendix B) was linked to the main survey for two purposes. Respondents could provide their contact information if they wished to be included in a drawing for the chance of being randomly selected to receive one of five Amazon gift cards worth $25 each for taking part in the survey. The second purpose was to find respondents who had a mentor during LIS studies and were interested in potentially being interviewed as part of a second study; interested respondents could provide their contact information. Those interviewed were given the option of receiving a $25 Amazon gift card for participating in an interview.

Data Clean-Up

Nine hundred thirty-two survey responses were received. Of these, 361 responses were used for the analysis. The lead author and a colleague came to a consensus on the reasons for excluding responses. We removed a total of 571 responses for the following reasons: being ineligible to participate in the survey based on participant requirements or not consenting to participate (n = 42) and for leaving the survey entirely blank or not completing the survey, with most falling into the latter category having completed less than half of the survey items (n = 89). After much discussion, we made the decision to remove an additional group of responses (n = 440) due to a number of concerns about the integrity of the data. These were submitted on four separate days at the end of the survey submission window, frequently submitted at the same time or within a short time span of each other. Most had nonsensical or the exact same wording included in the free-text responses among two or more submissions. Also, the corresponding linked survey showed an email address had always been provided for the gift card drawing and the name given frequently did not match the email address, which was unlike earlier submissions.

Coding

The lead author and a colleague coded several of the free-text survey responses by hand using descriptive coding that was included in the two previously published articles about this study. Descriptive coding "assigns labels to summarize in a word or short phrase […] the basic topic of […] qualitative data" (Saldaña, 2021). We came to a consensus in determining the codes and met after independently applying coding to ensure agreement.

For coding the responses for the survey item on gender identity—for which study respondents were asked to describe their gender identity in a free-text field—we initially modified codes based on Fernandez et al.'s (2016) suggestions for collecting comprehensive and inclusive demographic data. We discovered Fernandez et al.'s study after the survey had launched; otherwise, the question would have been multiple choice with the answer selections informed by Fernandez et al.'s recommendations in lieu of a free-text response in order to facilitate analyzing the responses. In addition, we consulted the PFLAG National Glossary (2023) to better understand definitions for gender identity. We also initially agreed to categorize the responses "woman" and "female" as "cisgender female" while categorizing "man" and "male" as "cisgender male" even though just five respondents had added the gender modifier "cisgender." We made this decision because we preferred to err on the assumption that the vast majority of these respondents were likely cisgender who have been afforded the privilege of not being expected to quantify their gender identity beyond male/man or female/woman. To not add "cisgender" we decided would have been to "reinforce ideal standards of masculinity or femininity," the definition of gender normativity (Merriam-Webster, 2023). Though it is possible that a transgender individual may have described their gender identity without a modifier, we reasoned these numbers would be small if present. The Williams Institute estimates that 0.5% of the U.S. adult population identifies as transgender (Herman et al., 2022). After independently coding the responses, we met to come to a consensus on the few instances for which we had applied different codes. The lead author has since decided to consistently use the terms "women" and "men" as nouns and "female" and "male" as adjectives following the APA style guide on gender (American Psychological Association, 2022) because we are describing people outside of a strictly biological context (sex) and are instead describing the social construct (gender); however, when discussing the research or data of other authors, we will include the terms used by those authors. These changes from how our data appeared in the first article published on this dataset (Iglesias et al., 2023) were informed by reflection of the information provided in the APA style guide on gender

(American Psychological Association, 2022) and other publications on this topic. In addition to discovering Fernandez et al. (2016), the lead author has since also read Bryant et al.'s (2019) study, which provides a more recent example of gender identity data collection beyond the gender binary. If we were to launch our survey today, the gender identity survey item would be comprised of a combination of the suggestions put forth by Fernandez et al. (2016), the example provided by Bryant et al. (2019), and consulting the APA style guide on gender and would likely have the following answer choices: agender, genderqueer, cisgender man/cisgender male, cisgender woman/cisgender female, transgender man/transgender male, transgender woman/transgender female, and a gender not listed (please specify). That being said, the terminology is evolving in this area.

Statistical Analyses

We used chi-square tests of independence to identify factors associated with obtaining an academic librarian position. We compared the demographic characteristics of respondents who had not obtained an academic librarian position to those of respondents who had obtained an academic librarian position and compared the demographic characteristics, experiences during LIS studies, pre-professional experiences, and job search characteristics of respondents who had obtained a librarian position: non-academic librarians, indirect academic librarians, and direct academic librarians. P-values were computed using Monte Carlo simulation (Hope, 1968) in analyses comparing subgroups of respondents and in analyses for respondents as a whole where expected counts were small. We used two independent sample t-tests to test for differences in time to obtain non-academic and academic librarian positions. Graduation year and year first librarian position was obtained were recorded using ranges (e.g., 2018/2019). The midpoints of the ranges (e.g., 2018.5) were used in calculating time from graduation to first librarian position. An alpha level of .05 was used to determine statistical significance, and an alpha level of .07 was used to determine borderline statistical significance. Analyses were performed using R version 4.2.2 (R Foundation for Statistical Computing, Vienna, Austria) and SAS version 9.4 (SAS Institute, Cary, NC).

Results

Of 361 respondents, 275 (76.2%) had obtained an academic librarian position at the time of survey completion (Table 1). Sixty-nine percent of respondents who had not obtained an academic librarian position were identified as cisgender women as

compared to 76.0% of respondents who had obtained an academic librarian position. The percentages of respondents who identified as agender, genderqueer, transgender man, or transgender woman were similar for those who had not obtained and those who had obtained academic librarian positions (3.5% versus 3.6%, respectively) as were the percentages of single race persons of color (15.1% versus 13.5%, respectively) and the percentages of respondents who were of Hispanic, Latino, or Spanish origin (9.3% versus 9.5%, respectively). Forty percent of respondents who had not obtained an academic librarian position were between the ages of 25 and 34 years as compared to 46.2% of respondents who had obtained an academic librarian position. Roughly half of respondents who had not obtained an academic librarian position graduated in academic year 2016/2017, 2017/2018, or 2018/2019.

Table 1

Study Population Characteristics (N = 361)

Variable	Characteristics	Frequency Has not obtained academic librarian position (*n* = 86)	Percent	Frequency Has obtained academic librarian position (*n* = 275)	Percent	*P*-value
Regrouped gender identity						0.250
	Another gender[a]	3	3.5	10	3.6	
	Cisgender man	17	19.8	31	11.3	
	Cisgender woman	59	68.6	209	76.0	
	Undisclosed	7	8.1	25	9.1	
Regrouped race						0.751
	Multiple races	6	7.0	13	4.7	
	Single race, person of color[b]	13	15.1	37	13.5	
	Single race, white	62	72.1	213	77.5	
	Undisclosed	5	5.8	12	4.4	
Ethnicity						0.985
	Hispanic/Latino/Spanish origin	8	9.3	26	9.5	
	Not Hispanic/Latino/Spanish origin	74	86.1	235	85.5	
	Undisclosed	4	4.7	14	5.1	

[a] Another gender combines agender (*n* = 0 has not obtained; *n* = 1 has obtained), genderqueer (*n* = 1 has not obtained; *n* = 8 has obtained), transgender man (*n* = 1 has not obtained; *n* = 1 has obtained), and transgender woman (*n* = 1 has not obtained; *n* = 0 has obtained).

[b] Single race person of color combines American Indian or Alaska Native (*n* = 2 has not obtained; *n* = 2 has obtained), Asian (*n* = 6 has not obtained; *n* = 16 has obtained), Black or African American (*n* = 4 has not obtained; *n* = 12 has obtained), Hawaiian or Other Pacific Islander (*n* = 0 has not obtained; *n* = 1 has obtained), and other race (*n* = 1 has not obtained; *n* = 6 has obtained).

Variable	Characteristics	Frequency Has not obtained academic librarian position (*n* = 86)	Percent	Frequency Has obtained academic librarian position (*n* = 275)	Percent	*P*-value
Age						0.296
	18-24	1	1.2	0	0.0	
	25-34	34	39.5	127	46.2	
	35-44	32	37.2	99	36.0	
	45-54	11	12.8	35	12.7	
	55-64	6	7.0	12	4.4	
	65-74	0	0.0	0	0.0	
	>74	0	0.0	0	0.0	
	Undisclosed	2	2.3	2	0.7	
Academic year graduated						0.083
	2018/2019	22	25.6	35	12.7	
	2017/2018	13	15.1	24	8.7	
	2016/2017	9	10.5	27	9.8	
	2015/2016	7	8.1	36	13.1	
	2014/2015	6	7.0	19	6.9	
	2013/2014	6	7.0	19	6.9	
	2012/2013	8	9.3	30	10.9	
	2011/2012	6	7.0	34	12.4	
	2010/2011	4	4.7	22	8.0	
	2009/2010	5	5.8	29	10.6	

Variable	Characteristics	Frequency Has not obtained academic librarian position (*n* = 86)	Percent	Frequency Has obtained academic librarian position (*n* = 275)	Percent	*P*-value
Where living when graduated, region[c]						0.480
	Midwest	21	24.4	84	30.6	
	Northeast	16	18.6	48	17.5	
	South	24	27.9	83	30.2	
	West	25	29.1	60	21.8	
	U.S. territory	0	0.0	0	0.0	

[c] At least one study respondent was living in every U.S. state when they graduated with the exception of the following: AR, MN, NE, NV, NH, SD, UT, WV, WY (and D.C)

Non-Academic Librarians & Indirect Academic Librarians

Non-academic librarian respondents and indirect academic librarian respondents were similar in terms of gender identity, race, ethnicity, age, academic year graduated, and region where living when graduated (Table 2).

Table 2

Demographics, Comparing Non-Academic Librarian Respondents & Indirect Academic Librarian Respondents

Variable	Characteristics	Frequency Non-academic librarian (n = 49)	Percent	Frequency Indirect academic librarian (n = 45)	Percent	*P*-value
Regrouped gender identity						0.840
	Another gender[a]	2	4.1	1	2.2	
	Cisgender man	8	16.3	5	11.1	
	Cisgender woman	35	71.4	35	77.8	
	Undisclosed	4	8.2	4	8.9	
Regrouped race						0.674
	Multiple races	2	4.1	2	4.4	
	Single race, person of color[b]	4	8.2	8	17.8	
	Single race, white	41	83.7	33	73.3	
	Undisclosed	2	4.1	2	4.4	
Ethnicity						0.654
	Hispanic/Latino/Spanish origin	6	12.2	3	6.7	
	Not Hispanic/Latino/Spanish origin	40	81.6	40	88.9	
	Undisclosed	3	6.1	2	4.4	

[a] Another gender combines agender (n = 0; n = 0), genderqueer (n = 1; n = 1), transgender man (n = 1; n = 0), and transgender woman (n = 0; n = 0).
[b] Single race person of color combines American Indian or Alaska Native (n = 2; n = 0), Asian (n = 1; n = 4), Black or African American (n = 1; n = 3), Hawaiian or Other Pacific Islander (n = 0; n = 1), and other race (n = 0; n = 0).

Variable	Characteristics	Frequency Non-academic librarian (n = 49)	Percent	Frequency Indirect academic librarian (n = 45)	Percent	*P*-value
Age						0.792
	18-24	0	0.0	0	0.0	
	25-34	18	36.7	16	35.6	
	35-44	19	38.8	19	42.2	
	45-54	7	14.3	4	8.9	
	55-64	4	8.2	6	13.3	
	65-74	0	0.0	0	0.0	
	>74	0	0.0	0	0.0	
	Undisclosed	1	2.0	0	0.0	
Academic year graduated						0.247
	2018/2019	7	14.3	2	4.4	
	2017/2018	5	10.2	3	6.7	
	2016/2017	6	12.2	4	8.9	
	2015/2016	4	8.2	7	15.6	
	2014/2015	5	10.2	4	8.9	
	2013/2014	6	12.2	1	2.2	
	2012/2013	5	10.2	3	6.7	
	2011/2012	4	8.2	8	17.8	
	2010/2011	3	6.1	6	13.3	
	2009/2010	4	8.2	7	15.6	

Variable Characteristics	Frequency Non-academic librarian ($n = 49$)	Percent	Frequency Indirect academic librarian ($n = 45$)	Percent	*P*-value
Where living when graduated, region					0.817
Midwest	12	24.5	13	28.9	
Northeast	8	16.3	9	20.0	
South	14	28.6	9	20.0	
West	15	30.6	14	31.1	
U.S. territory	0	0.0	0	0.0	

Non-academic librarian respondents were more likely than indirect academic librarian respondents to report conference participation (34.7% versus 15.6% respectively, p-value = .051), differences of borderline statistical significance (Table 3).

Table 3

Experiences During LIS Studies, Comparing Non-Academic Librarian Respondents & Indirect Academic Librarian Respondents

Variable	Characteristics	Frequency Non-academic librarian (n = 49)	Percent	Frequency Indirect academic librarian (n = 45)	Percent	P-value
Professional development activities						
	Conference attendance	35	71.4	34	75.6	0.825
	Conference participation	17	34.7	7	15.6	0.051
	Grant writing	6	12.2	5	11.1	1.000
	Job-seeking preparation	35	71.4	28	62.2	0.390
	Mentoring program participant	10	20.4	7	15.6	0.603
	Publication	2	4.1	5	11.1	0.259
	Research methods course	24	49.0	21	46.7	0.840
	Thesis option	6	12.2	4	8.9	0.756
	Other	10	20.4	6	13.3	0.426
	None	1	2.0	3	6.7	0.358
Service opportunities						
	Committee work	11	22.4	12	26.7	0.818
	Joined library association(s)	41	83.7	35	77.8	0.617
	Student group(s)	22	44.9	18	40.0	0.681
	Other	3	6.1	4	8.9	0.708
	None	6	12.2	5	11.1	1.000

Thirty-five percent of non-academic librarian respondents reported pre-professional employment in an academic library as compared to 53.3% of indirect academic librarian respondents (Table 4). Non-academic librarian respondents were more likely than indirect academic librarian respondents to have completed public library coursework (44.9% versus 28.9%, respectively). Regarding special library coursework, non-academic librarian respondents were more likely than indirect academic librarian respondents to

have undertaken this area of coursework (32.7% versus 15.6% respectively, p-value = .056), differences of borderline statistical significance.

Table 4

Pre-Professional Experiences, Comparing Non-Academic Librarian Respondents & Indirect Academic Librarian Respondents

Variable	Characteristics	Frequency Non-academic librarian (*n* = 49)	Percent	Frequency Indirect academic librarian (*n* = 45)	Percent	*P*-value
Academic library						
	Coursework	30	61.2	23	51.1	0.410
	Employment	17	34.7	24	53.3	0.097
	Internship/Practicum	10	20.4	13	28.9	0.481
	Volunteer	3	6.1	5	11.1	0.474
Archives[a]						
	Coursework	19	38.8	14	31.1	0.512
	Employment	6	12.2	9	20.0	0.404
	Internship/Practicum	14	28.6	11	24.4	0.816
	Volunteer	11	22.4	11	24.4	1.000
Public library						
	Coursework	22	44.9	13	28.9	0.125
	Employment	19	38.8	18	40.0	1.000
	Internship/Practicum	7	14.3	7	15.6	1.000
	Volunteer	9	18.4	9	20.0	1.000
School library						
	Coursework	9	18.4	5	11.1	0.392
	Employment	5	10.2	5	11.1	1.000
	Internship/Practicum	3	6.1	2	4.4	1.000
	Volunteer	3	6.1	0	0.0	0.230
Special library						
	Coursework	16	32.7	7	15.6	0.056
	Employment	7	14.3	12	16.7	0.192
	Internship/Practicum	13	26.5	7	15.6	0.231
	Volunteer	6	12.2	3	6.7	0.463

[a] If the archives was a department within another organization, respondents were directed to select the organization type within which the archives department was located.

Among non-academic librarian respondents, higher percentages reported having applied for positions in the archives, electronic services, generalist, public services, and technical services job categories than did indirect academic librarian respondents (Table 5). However, only in applying for positions in the primary job category of archives were the differences of borderline statistical significance (55.1% versus 35.6% respectively, p-value = .064). Sixty-one percent of non-academic librarian respondents applied for jobs out of state compared to 68.9% of indirect academic librarian respondents.

Table 5

Job Search, Comparing Non-Academic Librarian Respondents & Indirect Academic Librarian Respondents

Variable	Characteristics	Frequency Non-academic librarian (*n* = 49)	Percent	Frequency Indirect academic librarian (*n* = 45)	Percent	*P*-value
Started applying for librarian positions						0.250
	>7 months before graduation	12	24.5	13	28.9	
	4-7 months before graduation	18	36.7	13	28.9	
	2-3 months before graduation	10	20.4	4	8.9	
	1 month before graduation	1	2.0	4	8.9	
	After graduation	8	16.3	11	24.4	
Applied for primary job category/categories						
	Administrative	5	10.2	9	20.0	0.244
	Archives	27	55.1	16	35.6	0.064
	Electronic services	16	32.7	10	22.2	0.349
	Generalist	41	83.7	33	73.3	0.308
	Public services	40	81.6	31	68.9	0.229
	Technical services	29	59.2	20	44.4	0.201
	Other	6	12.2	5	11.1	1.000
Applied for jobs out of state						0.522
	Yes	30	61.2	31	68.9	
	No	19	38.8	14	31.1	

Direct Academic Librarians & Indirect Academic Librarians

Compared to indirect academic librarian respondents, direct academic librarian respondents were more likely to be between the ages of 25 and 34 (48.3% versus 35.6%, respectively) and less likely to be between the ages of 35 and 64 (50.9% versus 64.4%) (p-value = .024) (Table 6).

Table 6

Demographics, Comparing Direct Academic Librarian Respondents & Indirect Academic Librarian Respondents

Variable	Characteristics	Frequency Direct academic librarian (n = 230)	Percent	Frequency Indirect academic librarian (n = 45)	Percent	P-value
Regrouped gender identity						0.986
	Another gender[a]	9	3.9	1	2.2	
	Cisgender man	26	11.3	5	11.1	
	Cisgender woman	174	75.7	35	77.8	
	Undisclosed	21	9.1	4	8.9	
Regrouped race						0.858
	Multiple races	11	4.8	2	4.4	
	Single race, person of color[b]	29	12.6	8	17.8	
	Single race, white	180	78.3	33	73.3	
	Undisclosed	10	4.3	2	4.4	
Ethnicity						0.792
	Hispanic/Latino/Spanish origin	23	10.0	3	6.7	
	Not Hispanic/Latino/Spanish origin	195	84.8	40	88.9	
	Undisclosed	12	5.2	2	4.4	

[a] Another gender combines agender (n = 1; n = 0), genderqueer (n = 7; n = 1), transgender man (n = 1; n = 0), and transgender woman (n = 0; n = 0).
[b] Single race person of color combines American Indian or Alaska Native (n = 2; n = 0), Asian (n = 12; n = 4), Black or African American (n = 9; n = 3), Hawaiian or Other Pacific Islander (n = 0; n = 1), and other race (n = 6; n = 0).

Variable	Characteristics	Frequency Direct academic librarian (*n* = 230)	Percent	Frequency Indirect academic librarian (*n* = 45)	Percent	*P*-value
Age						0.024
	18-24	0	0.0	0	0.0	
	25-34	111	48.3	16	35.6	
	35-44	80	34.8	19	42.2	
	45-54	31	13.5	4	8.9	
	55-64	6	2.6	6	13.3	
	65-74	0	0.0	0	0.0	
	>74	0	0.0	0	0.0	
	Undisclosed	2	0.9	0	0.0	
Academic year graduated						0.293
	2018/2019	33	14.3	2	4.4	
	2017/2018	21	9.1	3	6.7	
	2016/2017	23	10.0	4	8.9	
	2015/2016	29	12.6	7	15.6	
	2014/2015	15	6.5	4	8.9	
	2013/2014	18	7.8	1	2.2	
	2012/2013	27	11.7	3	6.7	
	2011/2012	26	11.3	8	17.8	
	2010/2011	16	7.0	6	13.3	
	2009/2010	22	9.6	7	15.6	

Variable Characteristics	Frequency Direct academic librarian ($n = 230$)	Percent	Frequency Indirect academic librarian ($n = 45$)	Percent	*P*-value
Where living when graduated, region					0.230
Midwest	71	30.9	13	28.9	
Northeast	39	17.0	9	20.0	
South	74	32.2	9	20.0	
West	46	20.0	14	31.1	
U.S. territory	0	0.0	0	0.0	

Direct academic librarian respondents were more likely than indirect academic librarian respondents to report conference participation (36.1% versus 15.6% respectively, p-value = .011) (Table 7).

Table 7

Experiences During LIS Studies, Comparing Direct Academic Librarian Respondents & Indirect Academic Librarian Respondents

Variable	Characteristics	Frequency Direct academic librarian (*n* = 230)	Percent	Frequency Indirect academic librarian (*n* = 45)	Percent	*P*-value
Professional development activities						
	Conference attendance	165	71.7	34	75.6	0.712
	Conference participation	83	36.1	7	15.6	0.011
	Grant writing	21	9.1	5	11.1	0.771
	Job-seeking preparation	154	67.0	28	62.2	0.606
	Mentoring program participant	47	20.4	7	15.6	0.544
	Publication	36	15.7	5	11.1	0.502
	Research methods course	111	48.3	21	46.7	0.875
	Thesis option	20	8.7	4	8.9	1.000
	Other	40	17.4	6	13.3	0.521
	None	12	5.2	3	6.7	0.730
Service opportunities						
	Committee work	58	25.2	12	26.7	0.849
	Joined library association(s)	182	79.1	35	77.8	0.838
	Student group(s)	120	52.2	18	40.0	0.148
	Other	12	5.2	4	8.9	0.498
	None	32	13.9	5	11.1	0.646

Direct academic librarian respondents were more likely than indirect academic librarian respondents to report pre-professional employment in an academic library (68.3% versus 53.3% respectively, p-value = .059) and to report having volunteered in a school library (9.1% versus 0.0% respectively, p-value = .054) (Table 8), differences of borderline statistical significance. Direct academic librarian respondents were less likely to report pre-professional employment in a public library (21.7% versus 40.0%, respectively, p-value = .010), a school library (1.7% versus 11.1%, respectively, p-value = .007), or a special library (9.1% versus 26.7% respectively, p-value = .004). This group of

respondents was additionally less likely to report taking coursework related to a school library (4.3% versus 11.1% respectively, p-value = .068), a difference of borderline statistical significance.

Table 8

Pre-Professional Experiences, Comparing Direct Academic Librarian Respondents & Indirect Academic Librarian Respondents

Variable	Characteristics	Frequency Direct academic librarian ($n = 230$)	Percent	Frequency Indirect academic librarian ($n = 45$)	Percent	*P*-value
Academic library						
	Coursework	140	60.9	23	51.1	0.257
	Employment	157	68.3	24	53.3	0.059
	Internship/Practicum	95	41.3	13	28.9	0.138
	Volunteer	17	7.4	5	11.1	0.538
Archives[a]						
	Coursework	76	33.0	14	31.1	0.855
	Employment	48	20.9	9	20.0	1.000
	Internship/Practicum	69	30.0	11	24.4	0.487
	Volunteer	41	17.8	11	24.4	0.407
Public library						
	Coursework	42	18.3	13	28.9	0.144
	Employment	50	21.7	18	40.0	0.010
	Internship/Practicum	17	7.4	7	15.6	0.094
	Volunteer	41	17.8	9	20.0	0.832
School library						
	Coursework	10	4.3	5	11.1	0.068
	Employment	4	1.7	5	11.1	0.007
	Internship/Practicum	3	1.3	2	4.4	0.181
	Volunteer	21	9.1	0	0.0	0.054
Special library						
	Coursework	39	17.0	7	15.6	0.840
	Employment	21	9.1	12	26.7	0.004
	Internship/Practicum	41	17.8	7	15.6	0.831
	Volunteer	20	8.7	3	6.7	0.781

[a] If the archives was a department within another organization, respondents were directed to select the organization type within which the archives department was located.

Direct academic librarian respondents were more likely than indirect academic librarian respondents to start applying for librarian positions prior to graduation (89.1% versus 75.6% respectively, p-value = .007) and less likely to report having applied for administrative positions (7.8% versus 20.0% respectively, p-value = .021) (Table 9).

Table 9

Job Search, Comparing Direct Academic Librarian Respondents & Indirect Academic Librarian Respondents

Variable	Characteristics	Frequency Direct academic librarian (*n* = 230)	Percent	Frequency Indirect academic librarian (*n* = 45)	Percent	*P*-value
Started applying for librarian positions						0.007
	>7 months before graduation	35	15.2	13	28.9	
	4-7 months before graduation	95	41.3	13	28.9	
	2-3 months before graduation	51	22.2	4	8.9	
	1 month before graduation	24	10.4	4	8.9	
	After graduation	25	10.9	11	24.4	
Applied for primary job category/categories						
	Administrative	18	7.8	9	20.0	0.021
	Archives	85	37.0	16	35.6	0.882
	Electronic services	43	18.7	10	22.2	0.692
	Generalist	136	59.1	33	73.3	0.104
	Public services	171	74.3	31	68.9	0.461
	Technical services	82	35.7	20	44.4	0.313
	Other	27	11.7	5	11.1	1.000
Applied for jobs out of state						0.113
	Yes	184	80.0	31	68.9	
	No	46	20.0	14	31.1	

Average Length to Obtaining First Librarian Positions

Among 82 respondents whose first librarian position was in a non-academic library, the mean time from graduation to first librarian position was greater for non-academic librarian respondents than for indirect academic librarian respondents (2.2 years versus 1.3 years, respectively p-value = .021) (Table 10). The mean time to first academic librarian position was 1.5 years for direct academic librarian respondents as compared to 3.6 years for indirect academic librarian respondents (p-value = <.0001).

Table 10

Years to First Librarian Position

	N	Mean	Std Dev	Minimum	Maximum	*P*-value
Non-academic librarian position						
Non-academic librarians	46	2.152	2.097	0.000	8.000	0.021
Indirect academic librarians	36	1.278	1.233	0.000	5.000	
Academic librarian position						
Direct academic librarians	222	1.496	1.512	0.000	9.000	<0.0001
Indirect academic librarians	44	3.591	2.453	0.000	9.000	

Note. Calculations do not include the 20 respondents who obtained a position while an LIS student – 11 obtained their first non-academic librarian position and 8 obtained their first academic librarian position while a student; one additional respondent obtained both their first non-academic and first academic librarian positions while still a student.

Discussion

The key findings answer our research questions pertaining to quantifying the demographic characteristics, experiences during LIS studies, pre-professional experiences, aspects of the job search, and the average length of time to obtain first librarian positions among recent graduates in the U.S. seeking positions as academic librarians in terms of pathways to librarian positions.

Non-Academic Librarians & Indirect Academic Librarians

Our findings show just three differences of borderline statistical significance between the non-academic librarian respondents and the indirect academic librarian respondents. In the area of experiences during LIS studies, a larger percentage of non-academic librarians report participating in conferences (specified in the survey to include presentations, posters, and papers) than indirect academic librarian respondents. This could be an indication that the majority of these conferences focused on areas related to non-academic librarianship or if it was a general library conference, such as an annual conference hosted by a state library association, participation conceivably took place primarily in areas outside of academic librarianship. However, this cannot be substantiated by the data since respondents were not asked to provide information about the type of conference in which they participated and in which specific capacities. If the conferences were not focused on academic librarianship, this finding may be an indication that non-academic librarian respondents participate more due to a deeper commitment to non-academic librarianship than indirect academic librarian respondents. Future studies could explore what types of conferences current LIS students and recent graduates attend and in what ways they participate that are most beneficial for job attainment in academic libraries.

In the area of pre-professional experiences, undertaking special library coursework is borderline significantly different in terms of a higher percentage of non-academic librarians having this experience. The third difference of borderline statistical significance when comparing these two groups is in the area of the job search. The findings show that higher percentages of non-academic librarian respondents apply for positions in the archives primary job category.

Because the backgrounds and experiences are similar between non-academic and indirect academic librarian respondents, significant differences revealed between direct and indirect academic librarian respondents should likewise also exist between direct academic and non-academic librarian respondents. That being said, one likely exception is regarding pre-professional employment in an academic library, which is borderline significantly different when comparing direct and indirect academic librarian respondents. A difference of statistical significance may have been determined in this area if we had directly compared the experiences of direct academic and non-academic librarian respondents. Among non-academic librarian respondents, 34.7% report having pre-professional employment in an academic library. In comparison, 68.3% of direct academic librarian respondents report having this experience while 53.3% of indirect academic librarian respondents report it. It is important to note that from this survey item it is unknown whether the pre-professional employment is undertaken during or after LIS studies and that when employment takes place could play a role in position

outcomes, particularly in a competitive job market when every advantage is crucial—the sooner one has employment working in an academic library, the sooner they may be better qualified for entry-level academic librarian employment. That approximately double the percentage of direct academic librarian respondents have pre-preprofessional employment in an academic library in comparison to non-academic librarian respondents coupled with the additional differences likely contributed to non-academic librarian respondents not yet having obtained an academic librarian position at the time they took the survey.

While we observed few differences between non-academic and indirect academic librarian respondents among the areas investigated, these data alone do not demonstrate why some respondents who first obtain a non-academic librarian position go on to obtain an academic librarian position (indirect academic librarian respondents) while others have not yet done so (non-academic librarian respondents). Additional information pertaining to the job search would likely help explain some of the differences between these groups. Survey questions in the job search section do not specify for respondents to provide answers based on the library environment for which the job searches were made. A ramification is therefore that the answers provided may not have solely been based on job searches performed for academic librarian positions but rather for a combination of librarian positions sought and such differences may matter. For example, a respondent may have applied for positions for one primary job category in one type of non-academic library environment but not for such positions in an academic library, particularly if entry-level positions were not found for that primary job category. Answers provided about the actual positions obtained reveal additional differences between these two groups of respondents, which we will look at in more depth in our upcoming publication based on this dataset that we are preparing (Iglesias & Gard, 2024).

Direct Academic Librarians & Indirect Academic Librarians

Our findings reveal seven differences of statistical significance when comparing the backgrounds and experiences of direct academic librarian respondents and indirect academic librarian respondents. In addition, there are three differences of borderline statistical significance. In the area of demographics, there are significant differences in age. Direct academic librarian respondents more likely identify their age as 25-34 and are less likely to be between the ages of 35 and 64 when compared to indirect academic librarian respondents. One potential reason for this difference is that respondents 35 and older may have more interpersonal responsibilities (such as family obligations) than those in the younger age group, which could impact the job search, such as in terms of these respondents being more selective in the positions for which they apply and decide to accept (regarding scheduling, location, salary and benefits, etc.). This

potential explanation cannot be confirmed from the data since we did not ask about respondents' familial obligations, but this merits further study. As mentioned in the literature review, Piper and Wilairat (2021) found that LIS students who had children under 18 were about 50% less likely to have paid graduate employment in libraries than peers without dependents of any age. As such, post-graduation employment decisions among recent graduates who are caring for children may also be impacted. It is important to note that we did find that family responsibilities were among the reasons that impacted why some respondents did not apply for jobs for which they would need to move out of state. In our earlier analyses, we had found applying for jobs out of state was significantly associated with a successful academic librarian job search outcome for the overall survey population, whereas we did not find this factor associated with a successful job search outcome among respondents who identified as a person of color of a single race, those who identified as Hispanic, Latino, or of Spanish origin, or respondents identified as cisgender men (Iglesias et al., 2023; Iglesias & Gard, 2023). Reasons moving out of state was not an option were coded as: personal relationships—these mainly included references to caring for children, financial (spouse's job), financial (spouse's job not specified), did not want to move, not necessary, and other. This question was optional to answer among those who reported that moving out of state was not an option; since not all respondents for whom this situation applied included a response to this optional, free-text response survey item, we do not know if reasons varied by position pathways as to why moving out of state was not an option. However, when viewing the coded responses of solely the respondents who obtained a librarian position (so among respondents of all position pathways), personal relationships was the most frequent reason provided (46 times), followed by financial (spouse's job) at 22, and then financial (spouse's job not specified) at nine; the reason "not necessary" was given just four times.

Regarding experiences during LIS studies, conference participation is significantly different between these two groups, with those who directly become academic librarians participating in library conferences in higher percentages than indirect academic librarian respondents. As such, and given the earlier described result that conference participation is higher among non-academic librarian respondents than indirect academic librarian respondents, we speculate that conference participation of direct academic librarian respondents may have been at conferences specifically focused on academic libraries or that if it was at a general library conference, participation took place in areas focused on academic librarianship. However, this cannot be confirmed by the data. If this were the case, information about conference participation and at which types of conferences respondents participate may be an indication of the level of commitment a respondent has to working in a particular library environment and the main focus of their job search. While that cannot be confirmed by our data, the finding is, however, an indication that conference participation is more important for recent

graduates than simple conference attendance in the current job market, when looked at through differences based on position pathway. To put this into context with other studies related to the preparation and the job search of recent graduates pursuing academic librarianship, Eckard et al.'s (2014) study based on an earlier group of recent graduates ascertained that attending professional conferences increased a candidate's odds of obtaining employment in an academic library. Neither conference attendance nor conference participation was associated with a successful academic librarian job search outcome for any of the population groups that we previously analyzed in our study when we compared survey respondents who had obtained an academic librarian position with those who had not yet obtained one (Iglesias et al., 2023; Iglesias & Gard, 2023). Future studies on this topic should have respondents specify whether or not the conference was focused on academic librarianship. It may also be insightful to learn about when conference participation took place—either during LIS studies or after LIS degree attainment—in addition to how respondents participated.

In the area of pre-professional experiences, direct academic librarian respondents are more likely than indirect academic librarian respondents to report pre-professional employment in an academic library and to report having volunteered in a school library, though these differences are of borderline statistical significance. On the other hand, direct academic librarian respondents are significantly less likely to report pre-professional employment in a public, school, or special library. This group of respondents is additionally less likely to report taking coursework related to a school library, a difference of borderline statistical significance. These findings are an indication that the type of pre-professional employment in particular is important in terms of position pathway with pre-professional employment experience in academic libraries being a difference of borderline significance for obtaining one's first librarian position in an academic library, whereas pre-professional employment in non-academic library environments is detrimental to academic librarian position attainment in this regard but in specifically which capacities is unclear from these data. For example, is this in part due to the biased attitudes of employers, of respondents themselves, a combination, or otherwise? Many participants in Franks' (2017) survey reported encountering bias when trying to change library environments. These were, however, the impressions from the job seekers themselves, and it may be challenging to confirm the extent of possible biased attitudes among employers related to job stereotyping. That being said, something else to consider regarding pre-professional employment is the job market. In a competitive academic librarianship job market in particular, it may not be surprising if search committee members were to remove candidates with employment experience in a non-academic library from further consideration in an effort to weed out candidates less aligned with position requirements and narrow down the list of candidates. Wilkinson's (2016) study points to a related issue. That study found that while required experience varied greatly and about half required no

experience, many part-time job ads for entry-level librarian positions required experience in specific library environments as opposed to a number of years of experience.

On the topic of the job search, when one starts to apply for librarian positions is significantly different between these two groups with direct academic librarian respondents more likely to start applying for librarian positions four to seven months prior to graduation. This may be a sign that the academic librarianship job market is competitive since applicants applying earlier would have less competition from fellow LIS students likewise on the cusp of graduating. Direct academic librarian respondents are statistically less likely to report having applied for administrative positions than indirect academic librarian respondents. However, the survey item does not specify in which type of library the respondents applied for positions in these primary job categories. Since the first librarian position of indirect academic librarian respondents is in a non-academic library, the administrative positions applied for may have been for non-academic librarian positions that directly built on this experience. More important may be that there are not any primary job categories for which direct academic librarian respondents report having applied significantly more often.

Average Length of Time to Obtaining First Librarian Positions

Our results show statistically significant differences exist in the average length of time to obtaining first librarian positions by position pathway for both obtaining first non-academic and academic librarian positions and provide a more in depth look at durations to first librarian positions that we initially explored in earlier publications from this dataset (Iglesias et al., 2023; Iglesias & Gard, 2023), in which we explored durations to first academic librarian positions for different population groups represented in the study. There appears to be two waves of obtaining librarian positions. In non-academic libraries, the first wave (the group first to attain employment) includes indirect academic librarian respondents obtaining librarian positions whereas in academic libraries the first wave includes direct academic librarian respondents obtaining librarian positions. For first librarian positions in either a non-academic or academic library, indirect academic librarian respondents obtain employment the fastest on average at 1.3 years post-graduation for their first librarian position, which is in a non-academic library. The direct academic librarian respondents gain their first librarian positions as the next fastest group to obtain a librarian position (here in an academic library) on average after 1.5 years. This is followed by the non-academic librarian respondents who gain employment in their first librarian position after 2.2 years on average. Finally, the indirect academic librarian respondents obtain their first academic librarian position after 3.6 years on average.

Indirect academic librarian respondents work in their first non-academic librarian position for approximately 2.3 years, or at least it takes on average 2.3 years post-graduation to obtain their first academic librarian position (calculated by subtracting the mean length of time to get the non-academic librarian position from when they obtained an academic librarian position). That number is similar to the amount of time it takes for non-academic librarian respondents to gain their first non-academic librarian position, which is 2.2 years. This could be an indication that the non-academic librarian respondents are in part obtaining entry-level positions in non-academic libraries that are vacated by the indirect academic librarian respondents, but more data would be needed to confirm this possibility.

Supporting the possibility that the indirect academic librarian respondents obtain, in part, the positions that are vacated by the direct academic librarian respondents, is that studies have shown that entry-level academic librarian positions in the U.S. have consistently made up approximately 18% to 20% of total academic librarian positions (Tewell, 2012; Beile & Adams, 2000; Reser & Schuneman, 1992). This may mean there is an approximate set number of entry-level positions each library has and the number of these positions being open fluctuates. Most new LIS graduates will likely apply for entry-level positions, though not all will, as evidenced by respondents applying for the administrative primary job category. That being said, this topic is nuanced. For example, after indirect and direct academic librarian respondents obtain their first academic librarian position, they may not stay in academic librarianship, instead sometimes changing to non-academic librarian positions as exemplified by some of the respondents' answers to the final survey item about their job searches.

Respondents' Perspectives of Their Job Search

The free-text responses from the final survey item about respondents' job searches ("Please tell us any additional information you would like to share related to your job search or this survey") provide a fuller view of respondents' job search journeys though more frequently respondents described challenges they encountered. Through illustrating the difficulties some recent graduates have encountered in searching for a position, these accounts provide useful information for helping others better navigate potential issues they too may face. These responses also help to contextualize the strategies and circumstances that contributed to respondents either obtaining or not obtaining an academic librarian position. Below we provide representative quotes from the survey. Several distinctions are apparent when looking at the responses organized by position pathway.

Non-Academic Librarians' Responses

Thirty-one (63.3%) of the 49 non-academic librarian respondents included a response to the final survey item. An overall impression from the responses articulated by the non-academic librarian respondents is that some may have stopped pursuing academic librarian positions for a number of reasons, including being content in their current library environments, for economic reasons (better pay and benefits in a non-academic library), and that none voiced an ongoing job search. Important to note, though, is that the survey captures a moment in time; at the time of the survey these respondents had not yet obtained an academic librarian position, but this does not mean that this is their final job search outcome. Our earlier study analyses indicated that while the average length to obtain an academic librarian position differed by population group, on average the duration ranged from 1.46 years among cisgender men as the fastest group to obtain a position to on average 1.92 years among respondents of Hispanic, Latino, or Spanish origin who needed the longest amount of time to obtain their first academic librarian position. In addition, the maximum number of years needed to obtain an academic librarian position varied from four years for cisgender men to a maximum of nine years for some of the other population groups (Iglesias et al., 2023; Iglesias & Gard, 2023).

A few respondents specifically indicated they were content in their non-academic librarian positions:

"I am incredibly happy and enjoy the […] public library that I have worked in […]. I am able to try new exciting programs, purchase book titles for the youth collection, and write grants for additional opportunities within our community."

The vast majority of non-academic librarians who included a response expressed sentiments about a challenging job search in pursuing academic librarianship. A number of non-academic librarians commented that their experience in non-academic libraries was not considered, though more description was not provided as to how they came to this perspective of how others viewed their work experience. Though some of these respondents acknowledged experience is required for entry-level academic librarian positions, none mentioned that they tried gaining experience in a pre-professional/paraprofessional capacity in an academic library as a step to gaining experience. Based on the majority of responses, it appears they were not willing or not able to earn less or to work in a precarious position in order to help close a potential experience gap:

"[…M]ost academic library positions' "Require" section lists X years at a research library. This is a catch-22 for me: I cannot get a job because I cannot get the experience needed for the job...without getting the job […]"

"[…]No amount of mentorship, job training, coursework or personal connections can change the fact that the job market is saturated with candidates like me."

> I had at least two different positions [they] wanted me to apply for. At that time, it was too difficult to figure out how to work his school schedule into mine or my husband's work schedule. The University offered no flex time. Secondly, I had very few of the list of education and skills preferred. They certainly don't want to train anyone. They want you to come ready to go.

"I would prefer to work in an Academic Library […] but was not in a position to turn down full-time employment with benefits […]"

> During the years since my graduation, I have applied for a variety of academic positions, primarily in my geographic area. One major factor for me in my search is rate of pay, I have found that in my geographic area I can have a better pay rate by continuing to working in public library administration and I would have to take a large pay cut to be able to switch back to academic libraries.

> The biggest reason I have decided to no longer pursue work as an academic librarian […] is that almost all of the entry level positions I have seen are short-term or limited positions. I […] withdrew myself from consideration because it was only a 2-year term position. I was not willing to risk having no job at the end of 2 years. I instead opted for work [that…] offers far more job security.

"It is incredibly difficult to find a full-time, permanent position in an academic librarian position."

A few respondents in this pathway commented on not having published nor presented being perceived barriers to gaining academic librarian positions as well as not having a second master's degree. This appears to give weight to Franks' (2017) finding that sometimes one's own personal biases in assuming they are not qualified hold some back from applying and trying to change library environments. On the other hand, we do not know on what these perceptions are based.

Important to note are the related responses some non-academic librarian respondents provided earlier in the survey when asked the free-text response survey item, "Please specify reason[s] that may have hindered your transition into academic librarianship." Reasons were coded as: available schedule, discrimination/hiring bias, geographic, job market, lack of experience, no longer searching (work in non-academic library), work experience in non-academic library, and other. This question was optional to answer; since not all non-academic librarian respondents included a response to this free-text response survey item, we do not know the full range of

perceived reasons that were barriers to an academic librarian position. That being said, the job market was the top perceived reason provided by non-academic librarian respondents (15 included this response), whereas six non-academic librarian respondents specifically indicated they were, "No longer searching (work in a non-academic library)."

Indirect Academic Librarians' Responses

Twenty-seven (60.0%) of the 45 indirect academic librarian respondents included a response to the final survey item. Statements from indirect academic librarians provide further insight into job search experiences, particularly how they moved from their first librarian position in a non-academic library to eventually obtain employment as an academic librarian. A handful in this group commented that their pre-professional experience working in an academic library led them to easily obtain their first academic librarian position with some mentioning they were in the right place at the right time, such as by working in a paraprofessional position when they were promoted to a professional librarian role. Similar to non-academic librarian respondents, issues of low pay and precarious entry-level positions in academic librarianship were also among the challenges faced by indirect academic librarian respondents. However, unlike the comments voiced by the non-academic librarians, the indirect academic librarians described taking steps to increase their academic library experience, which sometimes entailed taking short-term, part-time, and paraprofessional jobs in academic libraries as well as relocating for these positions. As such, in comparison to non-academic librarians, some indirect academic librarians appeared to be more willing or more able to earn less or to work in a precarious position:

"Exceptionally small college and low salaries for the state permitted me to apply for and obtain this position."

"[…]It's taken me about five years, 3 jobs, and moving across the continent to obtain a job at an academic library.[…]"

> My first job out of library school was a temporary, grant-funded position. I was not an internal candidate per se but the job was offered to me (I didn't have to apply for it) because I had worked [there] during graduate school. For each of my subsequent three jobs I have had to do a long-distance, interstate move.

Several respondents stated they were working in non-academic library environments after having worked as an academic librarian due to the challenging academic librarianship job market:

Job searching in academia is hard in the Midwest. I worked part time for 2 years and in those 2 years only found 1 full time academic librarian job I was qualified for in the drivable area. It was very competitive and I did not get the job. I have since gone back to public libraries as it's much easier to get employed full time for a reasonable salary in that subfield of libraries.

With the exception of my first job [as a non-academic librarian] I have been in temporary/term jobs since graduation […]. I have moved to four states post graduation, and have been working for a library in two of these. Have been in [*redacted*] and it took about a year to get a 3 month term job at an academic library. One temporary job I have had since then was through a library employment company. The rest I applied for. Currently a contract employee at a public library, in year 4 of a […] project.

Direct Academic Librarians' Responses

One hundred forty-three (62.2%) of the 230 direct academic librarian respondents included a response to the final free-text survey item. These respondents sometimes described happening to be in the right place at the right time:

"Acquired job via blind CV to local college opening new branch campus"

"Happened to get lucky. When the lead librarian interviewed me, she talked for 45min straight, and I didn't interrupt her. She thought the interview went well and hired me!"

I actually originally applied for a different position, for which my employer hired someone else. They communicated to me that they did want to hire me for a different position they were formulating, then when it was ready, I was hired quickly.

"I applied for a position at the same community college where I completed my practicum. I had the advantage of knowing the library director and having been trained in cataloging by the former holder of the position."

"I felt a lot of stress throughout the process, but I was extremely fortunate that I secured a job shortly after graduating. I estimate that I sent out 30-40 applications, but I was hired after my first flyout interview."

[…]I went from a part-time library assistant at a public library to Dean of Libraries at a small academic library. I was unable to advance in any manner at the public libraries in this area. My getting the job as Dean of Libraries was

partly due to contacts, partly due to having a doctorate (in another field), and largely due to sheer luck.

[…]I got my first part-time librarian job because of word-of-mouth. A previous coworker called me to tell me that her place of employment (a community college) was looking for a part-time librarian and she recommended me. Her boss also knew my current boss (I was a library assistant at the time), and they spoke about it and encouraged me to pursue it. […] Getting that job was a whirlwind experience that kind of just fell into my lap.

An unexpected discovery were the challenges some direct academic librarian respondents described even though they had landed an academic librarian position. For some, an academic librarian position was not the final outcome of their job search, as the challenging job market led some direct academic librarians to leave academic librarianship for better positions in other library environments:

"[…] I feel that I am stuck in part-time purgatory!"

"[…] I have held a combination of part-time librarian jobs for 3.5 years now. Still do not have a full-time job 4 years post-graduation, despite many applications and interviews."

"I had been working as an intern for over 4 years, at the same library, before I was hired for my first librarian position."

"My first librarian position was 12 hours a week as an adjunct. Each year was a new 9 month contract and additional hours until it became fixed term and 30 to 40 hours a week."

"Before getting the full time professional librarian position, I worked a part time paraprofessional job in the same small academic library for about a year."

After graduating with my MLS, I worked for a year as a substitute teacher while actively job searching. In [*redacted*], I was hired as a general circulation worker at my present institution, a position that only required a high school degree. After a year, I was promoted to a supervisory circulation position. Four years after starting at my institution, I was promoted to an academic librarian.

It was extremely difficult to obtain a FT librarian position. I had to do a lot of PT jobs before ending at my current FT position. My career trajectory also shifted from academic to public librarianship along the way due to the limited opportunities in the academic field.

Unlike respondents in the other position pathway groups that provided responses to this survey item, a number of direct academic librarian respondents additionally stated they had submitted particularly high numbers of job applications in their quest of becoming an academic librarian. Also, more respondents in this group wrote about having to relocate for positions:

> Applied to over 100 library positions, over 75% academic, some public library. Interviewed for at least 20 of those positions, including flying or driving out to at least 5 different states. Re: the library for my first librarian position, I had applied for a position in [*redacted*], but did not get it. I applied again for a permanent position [two years later], but the search was canceled and I was offered a new residency position, instead. A year after accepting the residency position, I applied and interviewed for a permanent, tenure-track position at my library and was offered the position. In short, it took a lot of work to obtain my current academic librarian position!

> So I did not move for my first librarian job as it was at the same institution that I had a staff position (and honestly, it wasn't exactly a librarian job, but a faculty-level, non-librarian line, but essentially should be librarian). I did move several times between the years I graduated from library school in [*redacted*] and my professional level position in [5 years later]. I had a fellowship [5 years earlier in a different state], temporary position [1 year after fellowship], paid internship with benefits [in the year after the temporary position that lasted for a year], nonprofit library-related organization [in the year after the paid internship, that lasted for a year and was located in a different state], and staff position [for the following two years]. I applied to about 100 jobs during the first job search around [*redacted*], tried to apply for out of state jobs, and had a really hard time even getting interviews. The recession was super bad, and I never actually got the job I was working toward originally[…]

> I applied for 44 jobs before I was offered my first position. I had the privilege of being able to move essentially anywhere; many of my classmates who had families or other obligations in specific places are still unemployed two years after graduation. I've recently been talking to MLIS students who are shocked to hear that the job search is difficult […]

> I did not want to move to the South, but I did want to work. I was very grateful to have a job at an academic library at a time when many of my colleagues from library school were still seeking employment.[…]

> Staying in state was not an option when I was graduating because there is a great deal of library degree saturation in [*redacted*] due to the there being three library

schools in the state. I knew that me and my partner would be moving to a different state. I applied to more than 20 jobs. I had 4 on campus interviews. Only one of those 4 was in [my state], and it was the only job I did not get an offer for. I have never in fact in my career stayed in state during a job search. Academic libraries require you to move far and often.

The higher reported number of job applications in addition to relocating for jobs described in the free-text answers may partly be attributed to the varying amounts of pre-professional employment experience (either in academic or in non-academic library environments). While higher percentages of direct academic librarian respondents indicated having pre-professional employment in academic libraries than other respondent groups, the percentages were much lower than the other groups in terms of pre-professional employment in non-academic library environments. This likely put direct academic librarian respondents at a disadvantage in terms of gaining professional-level employment in a non-academic library environment should they have pursued it. Having less experience in non-academic library environments, they may have felt restricted to primarily focus their job search on trying to obtain employment in academic libraries.

Several direct academic librarian respondents also expressed concerns that library schools were producing more graduates than the job market could handle:

> I applied for 75 jobs all across the US in [*redacted*]. I only had 2 interviews after more than 6 months of applying for jobs each week. I only got one job offer. It was a low paying job that I had to move out of state for, and uproot my family from our home in the process. I'm still at the same job over 10 years later despite being willing to move for a better job, and despite applying for 50 or more jobs over the past 10 years. No luck. I would never encourage anyone to go into this field. Even with two Master's degrees, 10 years of professional level experience, willingness to move, etc. -- I still can't land a 'good' library job. I blame library schools. They are diploma mills. There are too many library schools and too many graduates each year that further weaken the opportunities of all those looking for employment as a librarian. As it stands, library schools do more harm than good. We need no more than 5 library schools total in the US. We need no more than 200 library school graduates per year in the US. There are simply not enough quality jobs in the library world, an over abundance of librarians looking for work doesn't help anything. Seriously, library schools are enemy number 1 for librarians.

I think most Library schools do a disservice to their students by continuing to focus their curriculum on K-12 schools and public libraries, of which there is an extreme job shortage and part of the reason candidates have to fight so hard to find positions. However, niche and specialized library professions like medicine and law are the most lucrative and have the highest job prospects. Yet, very few MLIS schools focus on the curriculum for those fields. I attended [*redacted*] for my degree, and they had ONE Health Science Library course that was an optional elective in the summer. My knowledge of anatomy and hard sciences from my undergrad landed me in my current role, and I think many library schools are selling their students short by not evolving and adapting to job markets and trends.

Responses to the final survey item about the job search support Wilkinson's (2015) findings about part-time jobs sometimes being an entry point for recent graduates into librarianship and ideally a means of gaining experience to better compete for full-time, entry-level librarian positions. Conversely, not undertaking part-time work in academic libraries may contribute to impeding or delaying entry into academic librarianship based on the responses provided to this final survey item about the challenges respondents faced while on the job search. The combination of having less pre-professional employment in academic libraries than other respondent groups and not undertaking part-time work in academic libraries (in addition to some respondents no longer searching for employment in academic libraries), appear to put non-academic librarian respondents at a disadvantage in pursuing academic librarianship in the recent job market. It should also be pointed out that in a competitive job market part-time work may be challenging to gain and part-time work may provide less paths into full-time, entry-level positions as these positions become increasingly harder to reach due to increased competition for these positions if the overall number of open positions decreases. This speaks to the responses given by both indirect and direct academic librarian respondents; several stated that after they obtained their pursued academic librarian position, they moved on to positions in non-academic libraries due to unsustainable working conditions such as being poorly paid or unable to gain a full-time position. As a result, an academic librarian position was not their final outcome.

Respondents from all three position pathways referenced the competitive academic librarianship job market, but it is important to point out that not all respondents provided responses to the final survey item and that full participation in answering this final item would likely have shown additional aspects of recent graduates' job searches in pursuing academic librarianship. Nonetheless, the majority of responses described challenges faced during the job search. These types of experiences represent just over half of the total number of non-academic librarian survey respondents and roughly a third of the total number of both indirect and direct

academic librarian survey respondents. In our additional analyses (Iglesias & Gard, 2024), we will explore the actual jobs obtained by survey respondents. These data further help to explain differences experienced by position pathway, including specifying the number of respondents whose first librarian positions involved precarious forms of employment.

Limitations and Future Research

A limitation is that the findings in the current article reflect the overall survey population, which is predominantly white, cisgender female, and not Hispanic, Latino, or of Spanish origin. By concentrating on the survey respondents who have obtained librarian positions, we are looking at a reduced number of survey respondents, and the counts of subsets of the survey population—by race, gender identity, and ethnicity—are therefore further reduced from the full study participant counts, which is why we did not run additional analyses to compare the backgrounds and experiences of position pathways by population groups represented in the survey. The analyses published in our first articles using this study dataset (Iglesias et al., 2023; Iglesias & Gard, 2023) showed that factors for obtaining and not obtaining an academic librarian position appeared to differ for different population groups analyzed in the study in terms of race, gender identity, and ethnicity. It is therefore likewise feasible that different results would be identified for these demographic groups when comparing the position pathways among survey respondents who have obtained librarian positions.

A second limitation regarding demographics is that we had not included a survey item asking about the ability and disability status of survey respondents. We put much effort into trying to obtain comprehensive demographic data for this study, but it was not until after the survey launched that we discovered Fernandez et al.'s (2016) article on collecting comprehensive and inclusive demographic data and realized we had not specified this item in the data collection.

In order to avoid survey fatigue, we did not include additional survey items for respondents to answer. Future research about recent graduates pursuing academic librarianship could explore a number of areas including what pre-professional and professional forms of employment are held beyond the first librarian positions and in what capacities as these experiences, as shown by respondents' responses to the final survey item about their job searches, are particularly needed to help further explain which experiences lead to librarian position attainment. As one survey respondent put it, to "paint a more vivid picture," we could have asked "more about the job trajectory after the first job and questions about why the participant took that job/left that job." Indeed, because numerous respondents described needing to take multiple jobs before becoming an academic librarian, knowing more about these positions could likely help

others to strategize the job search. In addition, it would be informative to ascertain how long on average the journey is for those who start in a part-time or temporary academic librarian position to gain a full-time academic librarian position if one is obtained and the steps of how this is achieved. Another topic for additional research is how issues connected with the age of recent graduates impact pathways into librarian positions, especially regarding interpersonal relationships including family responsibilities. Additional suggested areas of future research pertain to conference participation and primary job categories. Recent graduates could be asked more about what types of conferences they attended and in what ways they participated. When asking recent graduates about primary job categories to which they applied, respondents could be asked to specify the type of library environment at which the position was sought. These data would likely yield additional valuable insights.

In summary, the backgrounds and experiences are largely similar for non-academic librarian and indirect academic librarian respondents. In terms of the areas investigated, only three times are there differences of borderline statistical significance when comparing these two groups: non-academic librarian respondents are more likely to report conference participation than indirect academic librarian respondents, to have undertaken special library coursework during their LIS studies, and to have applied for jobs under the archives primary job category. We speculate that conference participation was at a non-academic library focused conference, but this cannot be confirmed from the data since we did not ask respondents to specify more about their conference participation. Because the backgrounds and experiences are similar between non-academic and indirect academic librarian respondents, significant differences revealed between direct and indirect academic librarian respondents should likewise be expected to exist between direct academic and non-academic librarian respondents. One likely exception though is regarding pre-professional employment in an academic library, which is borderline significantly different when comparing direct and indirect academic librarian respondents. Approximately double the percentage of direct academic librarian respondents had pre-preprofessional employment in an academic library when compared to non-academic librarian respondents.

The one statistically significant difference between these two groups—non-academic and indirect academic librarians—is the duration to first non-academic librarian position. On average, indirect academic librarian respondents obtain employment in their first non-academic librarian position 1.3 years after graduation whereas non-academic librarian respondents need on average 2.2 years, which we conjecture may in part be the case due to non-academic librarian respondents obtaining entry-level, non-academic librarian positions when these are vacated by the indirect academic librarian respondents. However, this reason cannot be substantiated by the data and merits further study.

Responses included in the final survey item provide insight into several ways these groups appear to have varied in their approaches to the job search. In addition, respondents wrote about several challenges they experienced regarding the academic librarianship job market—low wages, temporary or part-time positions, and few full-time opportunities for recent graduates. Though the issue of age is not directly broached among these respondents, and in the survey, respondents were not asked about interpersonal responsibilities, an increase in age may generally correspond in part with increased interpersonal responsibilities such as caring for children, which could influence career decisions. For example, this could influence for which jobs recent graduates choose to apply as well as whether or not they apply for jobs out of state. Non-academic librarian respondents did express being selective in staying in secure positions with adequate pay, which in part may account for why they did not mention exploring alternative routes to gaining academic library experience such as through accepting pre-professional and part-time positions (an initial step that indirect academic librarian respondents described having undertaken). On the other hand, non-academic librarian respondents may have perceived the requirements for such types of positions to be out of their reach. The lower percentage of non-academic librarian respondents having pre-professional experience working in an academic library as compared to respondents in the other librarian position pathways could have contributed to this perception. Future research could therefore explore whether there is a relationship between an increase in age and an increase of interpersonal responsibilities in terms of how this may impact the search for an academic librarian position.

In contrast, significant differences are observed when comparing direct and indirect academic librarian respondents in all survey sections—demographics, experiences during LIS studies, pre-professional experiences, and the job search. A larger percentage of direct academic librarian respondents identify their age between 25 and 34-years old. Conference participation is higher among direct academic librarians, and we conjecture that participation is predominantly at academic library-focused conferences or with a focus on academic librarianship if participation was at a general library conference though this cannot be confirmed by the data. Direct academic librarian respondents are significantly less likely to report pre-professional employment in a public, school, or special library. This finding has several implications, but the topic is nuanced. For example, it points to direct academic librarian respondents potentially being less competitive for the alternative of trying to obtain a non-academic librarian position should they be dissatisfied with the quality or the availability of entry-level academic librarian positions. They may as such be inclined to limit their job search to working in an academic library even if entry-level, full-time positions are hard to reach in that environment. As for indirect academic librarian respondents, while their experiences working in non-academic library settings may hinder their candidacy for academic librarian positions to some extent on the one hand, at the very least in terms

of the duration to the first academic librarian position, this experience also makes them more competitive for positions in non-academic libraries should they need to seek out an alternative to employment in an academic library. Meanwhile, a substantial percentage of non-academic librarian respondents report engaging in pre-professional employment in a public, school, or special library and a smaller percentage in this group have pre-professional employment working in an academic library compared with respondents in the other position pathways. Having higher percentages of pre-professional employment in a non-academic library likely hindered their ability to become an academic librarian as of the time of the survey to some degree while, on the other hand, this experience likely made them more competitive for non-academic librarian positions compared to direct academic librarian respondents.

Direct academic librarian respondents are significantly more likely to start applying for librarian positions four to seven months prior to graduation. In addition, direct academic librarian respondents are less likely to report applying for administrative positions than indirect academic librarian respondents, potentially indicating that the administrative positions are non-academic librarian positions that built on these respondents' prior non-academic library experience, though this is unclear from our data. The duration to first academic librarian position differs significantly between the direct academic librarian respondents and the indirect academic librarian respondents. On average, direct academic librarian respondents obtain their first academic librarian position 1.5 years post-graduation whereas indirect academic librarian respondents need on average 3.6 years. These differences are not surprising given that indirect academic librarian respondents first gain employment in a professional position as a non-academic librarian before eventually obtaining their first academic librarian position. However, given that on average indirect academic librarian respondents obtain their first librarian position in a non-academic library at 1.3 years post-graduation, one wonders if some of these respondents would have been direct academic librarians if they had waited a little longer before accepting their first librarian position.

Direct and indirect academic librarian respondents appear to be similar in their approaches to the job search based on the responses provided in the final survey item, which illustrated challenges some respondents had experienced. They wrote about sometimes needing to accept multiple part-time, temporary positions after graduation, at times at the paraprofessional level, and many of these respondents expressed that it was challenging to then move into a full-time position in academic libraries. Several respondents described leaving academic librarian positions for employment in non-academic libraries due to poor financial conditions in academic librarianship. In contrast to respondents in the other two position pathways, direct academic librarian respondents described submitting particularly high numbers of job applications. They

wrote more frequently about needing to relocate for positions than indirect academic librarian respondents while a few also expressed concerns about library schools producing more graduates than the market could handle. That being said, a commonality expressed across all position pathways for the final survey item points to a competitive academic librarianship job market, but the topic is complicated. Additional circumstances including the feasibility of undertaking precarious forms of employment as well as whether a candidate is willing or able to relocate out of state and the academic librarianship job market—the number of jobs as well as the types of positions potentially available for entry-level applicants—all play a part in job search outcomes and merit additional exploration.

Conclusion

This is the first research that explores the topic of recent LIS graduates in the U.S. obtaining an academic librarian position after having first been employed as a librarian in another library environment. The results will be of particular interest to LIS students and recent graduates considering pursuing academic librarianship, both those who already have experience or those contemplating working in a non-academic library environment, either in a pre-professional or professional-level role. Our analyses in this article focus on the survey respondents who obtained a librarian position, and it is important to keep in mind that based on earlier studies a substantial percentage of graduates among the general population of recent LIS graduates would like to work in academic libraries, while the numbers of those who have actually obtained such a position are low. We wanted to learn more about why some recent graduates pursuing academic librarianship who obtain their first librarian position in a non-academic library environment go on to obtain an academic librarian position while others have not yet done so. This inquiry is based on our earlier study findings that revealed pre-professional employment either in a public or school library was negatively associated with obtaining an academic librarian position for the overall survey population. To do so, we quantified the demographics, academic and pre-professional experiences, aspects of the job search, and the time needed to obtain a librarian position. We investigated whether there are statistically significant differences between respondents' three pathways to librarian positions: non-academic librarians, indirect academic librarians, and direct academic librarians.

Results show the backgrounds and experiences are largely similar for non-academic librarian and indirect academic librarian respondents among the areas explored in our survey. Three differences of borderline statistical significance include higher percentages of non-academic librarian respondents participating in conferences, undertaking special library coursework, and applying for jobs in the archives primary job category. Due to the similarities between these groups, significant differences

revealed between direct and indirect academic librarian respondents should likewise also be attributed to exist between direct academic and non-academic librarian respondents, with one exception pertaining to pre-professional employment in an academic library for which about double the percentage of direct academic librarian respondents had this experience in comparison to non-academic librarian respondents.

In comparing the backgrounds and experiences of direct academic librarian and indirect academic librarian respondents, our findings reveal that significant differences exist in all areas of the survey—demographics, experiences during LIS studies, pre-professional experiences, and the job search. A higher percentage of direct academic librarian respondents are 25 to 34 years old, participate in conferences, and start applying for positions four to seven months prior to graduation. Direct academic librarian respondents are less likely to report pre-professional employment in a public, school, or special library and are less likely to report applying for administrative positions than the indirect academic librarian respondents. Three differences of borderline statistical significance are present in the area of pre-professional experiences. Direct academic librarian respondents report having higher percentages of academic library experience in addition to volunteering in school libraries whereas indirect academic librarian respondents engage in school library coursework in higher percentages than direct academic librarian respondents.

Both the findings regarding when respondents start to apply for positions prior to graduation as well as in which library environments it may be better not to have pre-professional employment when pursuing academic librarian positions (which may translate to a shorter path to a potential first academic librarian position) appear to be indicative of a competitive job market, but the topic is nuanced. For example, a candidate's age may play at least an indirect role in job attainment outcomes since, at an increased age, respondents may have increased interpersonal responsibilities (such as caring for children or being in a committed relationship) that impact which jobs are pursued. While age was not mentioned in the responses survey respondents provided to the final survey item about the job search, non-academic librarian respondents did indicate they were either not willing or able to earn less or work in a precarious position. Those were several of the ways indirect and direct academic librarian respondents described as having contributed to their job search pursuits in becoming an academic librarian.

Statistically significant differences do exist in the average length to obtaining first librarian positions by position pathway for both obtaining first non-academic and first academic librarian positions. These results provide an additional view of the duration to recent graduates' first librarian positions that we initially began to explore in our earlier publications (Iglesias et al., 2023; Iglesias & Gard, 2023). Prior studies showed the

percentage of entry-level academic librarian positions among all academic librarian positions has remained consistent, so it is plausible that in part indirect academic librarian respondents obtain the entry-level academic librarian positions when these positions are vacated by the direct academic librarians. This inference merits continued exploration. We will look more into this topic in our additional analyses from the dataset generated by this survey (Iglesias & Gard, 2024), in which we focus on aspects of the first librarian positions respondents obtain. Differences observed in first librarian positions based on position pathways provide further insight into how some respondents are able to go on to obtain an academic librarian position after having obtained their first librarian position in a non-academic library while others do not.

It is important to stress that the analyses and ensuing results discussed in this article reflect the overall survey population, which is predominantly white, cisgender female, and not Hispanic, Latino, or of Spanish origin. Based on our earlier analyses, differences may emerge if there were a larger dataset on which additional analyses could be performed based on subsets of the different population groups represented in the study. Furthermore, these findings alone do not demonstrate why some respondents who first obtain a non-academic librarian position go on to obtain an academic librarian position while others have not yet done so. In order to gain a fuller picture, we also examined the free-text responses from the final survey item about respondents' job searches that we organized by position pathway. These responses help to contextualize how respondents' job searches in pursuit of academic librarianship differ by position pathway. Part-time positions and other forms of precarious work were described by some respondents as ways to help bridge the experience gap and in the hope this would eventually lead to a full-time, entry-level academic librarian position. Among non-academic librarian respondents, though some acknowledged experience is required for entry-level academic librarian positions, they may not have been willing or able to earn less or work in a precarious position in order to help close any potential experience gaps. On the other hand, some respondents wrote about encountering better working conditions in non-academic library environments in comparison to their perspectives of entry-level positions in academic libraries. Based on the insights gained from responses about respondents' job searches and few observed differences between non-academic and indirect academic librarian respondents, additional information is still needed to gain a fuller picture of why some respondents who first obtain a non-academic librarian position go on to obtain an academic librarian position (indirect academic librarian respondents) while others have not yet done so (non-academic librarian respondents). Future research could take a number of directions including the need to know more about recent graduates' job trajectories beyond their first positions, as this could help show additional differences based on position pathway.

Across all three pathways to librarian positions, survey respondents described a challenging academic librarianship job market. As one respondent wrote:

> [There] needs to be more discussion by higher education institutions and professional associations to convey the realities of the job market before one chooses Librarianship or Archives as a career. Jobs are competitive and people need to know that before pursuing graduate level education.[…]

Finding that first academic librarian position can be challenging for recent graduates, and there are few research studies on this topic. The periodic publication of studies that quantify LIS career preparation and job search outcomes such as the current study provide much-needed clarity to these endeavors so that those considering pursuing academic librarianship have the data to better understand the employment landscape, what might await them, and how to strategize the journey.

Acknowledgements

Study data were collected and managed using REDCap electronic data capture tools hosted at New Mexico State University.[1,2] REDCap (Research Electronic Data Capture) is a secure, web-based software platform designed to support data capture for research studies, providing (a) an intuitive interface for validated data capture; (b) audit trails for tracking data manipulation and export procedures; (c) automated export procedures for seamless data downloads to common statistical packages; and (d) procedures for data integration and interoperability with external sources.

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Appendix A

Survey Instrument: Pathways to Becoming an Academic Librarian

Survey: Pathways to Becoming an Academic Librarian

Consent to Participate in a Research Study

To participate, we need your permission. Here is information about the survey:

The researchers for this survey are Aubrey Iglesias, Cataloging Librarian, and Tiffany Schirmer, Library Specialist, Sr., both at New Mexico State University (NMSU).

The purpose of this study is to quantify the academic and pre-professional experiences of recent Library and Information Science (LIS) graduates to better understand what variables may significantly influence job search outcomes in order to help future colleagues navigate entry into academic librarianship and reduce barriers to entry into the profession. The aggregated results from this survey may appear in presentations and in open-access academic journal publications.

This survey takes approximately 10 -15 minutes to complete and includes demographic as well as multiple-choice questions with options to write in additional information. All study participants will remain anonymous. Participation in this survey is completely voluntary. You may end participation in the survey at any time without penalty, and your responses will not be submitted if you choose to end your participation before submitting your answers. There are no foreseeable risks involved in participating in this study other than those encountered in day-to-day life.

At the end of this survey, you can enter into a drawing for a chance to be randomly selected to receive one of five Amazon gift cards worth $25 each as a small token of appreciation. Your contact information will be kept separately from your survey responses. We are also looking for interview participants for the second part of this study, which is focused on graduates who had a mentor during their LIS studies. This would be another chance to receive a $25 Amazon gift card. (Note: per NMSU policy, employees of NMSU in addition to people who were born outside the U.S. and are not considered permanent residents of the U.S. are ineligible to be awarded a gift card. Also, multiple gift cards should not be given to the same individual.)

This study has been approved through NMSU's IRB approval (#21263). If you have questions or concerns: The Principal Investigator (PI) in charge of this survey is Aubrey Iglesias, Cataloging Librarian/Assistant Professor at NMSU, who may be reached at 575-646-7490.

Survey participant requirements

Survey requirements are that you are at least 18 years of age, you were living in the United States (including U.S. territories) when you earned a Master's degree in Library and Information Science (LIS) or an equivalent degree from an institution in the U.S. during the academic years 2009/2010–2018/2019, and you have applied for librarian positions (positions requiring a Master's degree in library and/or information science from an ALA-accredited program) in an academic or research library.

By selecting "I agree," you are saying you:

  have read the above information voluntarily agree to participate are 18 years of age or older. Thank you in advance for your participation.

○ I agree
○ I disagree

Survey eligibility & demographics

Did you earn a Master's degree in Library and Information Science (LIS) or an equivalent degree from a United States institution while living in the U.S. (including U.S. territories), and have you applied for librarian positions* in an academic or research library? (Select one.)

*positions requiring a Master's degree in library and/or information science from an ALA-accredited program

◯ Yes
◯ No

In which academic year did you earn a Master's degree in LIS? (Select one.)

Note: 2018/2019 equals Fall 2018-Summer 2019

◯ 2018/2019
◯ 2017/2018
◯ 2016/2017
◯ 2015/2016
◯ 2014/2015
◯ 2013/2014
◯ 2012/2013
◯ 2011/2012
◯ 2010/2011
◯ 2009/2010
◯ I did not graduate in any of the academic years listed.

Where in the United States were you living when you earned a Master's degree in LIS? (Select one.)

○ Alabama
○ Alaska
○ American Samoa
○ Arizona
○ Arkansas
○ California
○ Colorado
○ Connecticut
○ Delaware
○ District of Columbia
○ Florida
○ Georgia
○ Guam
○ Hawaii
○ Idaho
○ Illinois
○ Indiana
○ Iowa
○ Kansas
○ Kentucky
○ Louisiana
○ Maine
○ Maryland
○ Massachusetts
○ Michigan
○ Minnesota
○ Mississippi
○ Missouri
○ Montana
○ Nebraska
○ Nevada
○ New Hampshire
○ New Jersey
○ New Mexico
○ New York
○ North Carolina
○ North Dakota
○ Northern Mariana Islands
○ Ohio
○ Oklahoma
○ Oregon
○ Palau
○ Pennsylvania
○ Puerto Rico
○ Rhode Island
○ South Carolina
○ South Dakota
○ Tennessee
○ Texas
○ Utah
○ Vermont
○ Virgin Islands
○ Virginia
○ Washington
○ West Virginia
○ Wisconsin
○ Wyoming
○ I was not living in the United States when I earned a graduate degree in LIS.

How do you describe your gender identity? (Select one.)

◯ Please specify...
◯ I prefer not to answer.

Please describe your gender identity

_____

Please select the answer that best describes your ethnicity: (Select one.)

Note: The term 'Hispanic or Latino or Spanish Origin' is defined as a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture of origin, regardless of race.

◯ Hispanic or Latino or Spanish Origin
◯ Not Hispanic or Latino or Spanish Origin
◯ I choose not to specify my ethnicity.

Please select the answer(s) that best describes your race or family origin: (Select all that apply.)

☐ American Indian or Alaska Native
☐ Asian
☐ Black or African American
☐ Hawaiian or Other Pacific Islander
☐ White
☐ Other
☐ I choose not to specify my race.

What is your age? (Select one.)

◯ 18-24 years old
◯ 25-34 years old
◯ 35-44 years old
◯ 45-54 years old
◯ 55-64 years old
◯ 65-74 years old
◯ 75 years or older
◯ I choose not to specify my age.

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Experiences during LIS studies

In which of the following professional development activities did you participate during LIS studies? (Select all that apply.)

- ☐ Conference attendance
- ☐ Conference participation (presentations, posters, papers)
- ☐ Grant writing
- ☐ Job-seeking preparation (resume/CV & cover letter review, interview practice, etc.)
- ☐ Mentoring program participant
- ☐ Publication
- ☐ Research methods course
- ☐ Thesis option
- ☐ Other
- ☐ None

Please specify if this was part of a formal mentoring program through your LIS program or otherwise and anything else you would like to share regarding the mentorship.

_____

Please specify "Other"

_____

In which of the following service opportunities did you participate during LIS studies? (Select all that apply.)

- ☐ Committee work
- ☐ Joined library association(s)
- ☐ Student group(s)
- ☐ Other
- ☐ None

Please specify "Other"

_____

Pre-professional experiences

In which of the following did you participate? (Select all that apply.)

	Coursework	Employment	Internship/Practicum	Volunteer
Academic Library	☐	☐	☐	☐
Archives*	☐	☐	☐	☐
Public Library	☐	☐	☐	☐
School Library	☐	☐	☐	☐
Special Library	☐	☐	☐	☐

Job search

When did you start applying for librarian positions? (Select one.)

◯ More than 7 months before graduation
◯ 4-7 months before graduation
◯ 2-3 months before graduation
◯ 1 month before graduation
◯ After graduation

Please specify how long after graduation:

_____

Select the primary job category/categories in which you have applied for jobs. (Select all that apply.)

☐ Administrative (sample job title: "Dean of Libraries")
☐ Archives ("Archives and Special Collections Librarian")
☐ Electronic services ("Systems / Emerging Technologies Librarian")
☐ Generalist ("Librarian")
☐ Public services ("Reference and Instruction Librarian")
☐ Technical services ("Cataloging Librarian," "Metadata Librarian," "Acquisitions Librarian")
☐ Other

Please specify "Other"

_____

Have you applied for jobs for which you would need to move out of state? (Select one.)

◯ Yes
◯ No

Please specify reason(s) moving out of state was not an option for you:

_____

First librarian position

Have you obtained your first librarian position in any type of library? (Select one.)

◯ Yes
◯ No, not yet

Please specify if position was temporary, part-time, and/or part of a residency program: (Select all that apply.)

☐ Temporary
☐ Part-time
☐ Part of residency program
☐ None of the above

Please specify reason(s) that may have hindered your job search pathway to a librarian position:

_____

Were you an internal or external candidate when you obtained your first librarian position? (Select one.)

◯ Internal
◯ External

In which primary job category was your first librarian position? (Select one.)

◯ Administrative (sample job title: "Dean of Libraries")
◯ Archives ("Archives and Special Collections Librarian")
◯ Electronic services ("Systems / Emerging Technologies Librarian")
◯ Generalist ("Librarian")
◯ Public services ("Reference and Instruction Librarian")
◯ Technical services ("Cataloging Librarian," "Metadata Librarian," "Acquisitions Librarian")
◯ Other

Please specify "Other"

_____

During which academic year did you get your first librarian position? (Select one.)

Note: 2020/2021 equals Fall 2020-Summer 2021

◯ 2020/2021
◯ 2019/2020
◯ 2018/2019
◯ 2017/2018
◯ 2016/2017
◯ 2015/2016
◯ 2014/2015
◯ 2013/2014
◯ 2012/2013
◯ 2011/2012
◯ 2010/2011
◯ 2009/2010

Did you move out of state for your first librarian position? (Select one.)

◯ Yes
◯ No

I moved to:

○ Alabama
○ Alaska
○ American Samoa
○ Arizona
○ Arkansas
○ California
○ Colorado
○ Connecticut
○ Delaware
○ District of Columbia
○ Florida
○ Georgia
○ Guam
○ Hawaii
○ Idaho
○ Illinois
○ Indiana
○ Iowa
○ Kansas
○ Kentucky
○ Louisiana
○ Maine
○ Maryland
○ Massachusetts
○ Michigan
○ Minnesota
○ Mississippi
○ Missouri
○ Montana
○ Nebraska
○ Nevada
○ New Hampshire
○ New Jersey
○ New Mexico
○ New York
○ North Carolina
○ North Dakota
○ Northern Mariana Islands
○ Ohio
○ Oklahoma
○ Oregon
○ Palau
○ Pennsylvania
○ Puerto Rico
○ Rhode Island
○ South Carolina
○ South Dakota
○ Tennessee
○ Texas
○ Utah
○ Vermont
○ Virgin Islands
○ Virginia
○ Washington
○ West Virginia
○ Wisconsin
○ Wyoming
○ Other

Please specify "Other"

In what type of library was your first librarian position? (Select one.)
 *Note: If the Archives was a department within another organization, select the organization type within which the Archives department was located.

◯ Academic Library
◯ Public Library
◯ School Library
◯ Special Library
◯ Archives (stand alone)*
◯ Other

Please specify "Other"

_____

Although your first librarian position was not in an academic library, have you since become an academic librarian? (Select one.)

◯ Yes
◯ No, not yet

Please specify if your first academic librarian position was temporary, part-time, and/or part of a residency program: (Select all that apply.)

☐ Temporary
☐ Part-time
☐ Part of residency program
☐ None of the above

Please specify reason(s) that may have hindered your transition into academic librarianship:

_____

Were you an internal or external candidate when you obtained your first academic librarian position? (Select one.)

◯ Internal
◯ External

In which primary job category was your first academic librarian position? (Select one.)

◯ Administrative (sample job title "Dean of Libraries")
◯ Archives ("Archives and Special Collections Librarian")
◯ Electronic services ("Systems / Emerging Technologies Librarian")
◯ Generalist ("Librarian")
◯ Public services ("Reference and Instruction Librarian")
◯ Technical services ("Cataloging Librarian," "Metadata Librarian," "Acquisitions Librarian")
◯ Other

Please specify "Other"

_____

During which academic year did you get your first academic librarian position? (Select one.)

Note: 2020/2021 equals Fall 2020-Summer 2021

◯ 2020/2021
◯ 2019/2020
◯ 2018/2019
◯ 2017/2018
◯ 2016/2017
◯ 2015/2016
◯ 2014/2015
◯ 2013/2014
◯ 2012/2013
◯ 2011/2012
◯ 2010/2011
◯ 2009/2010

Did you move out of state for your first academic librarian position? (Select one.)

◯ Yes
◯ No

I moved to:

○ Alabama
○ Alaska
○ American Samoa
○ Arizona
○ Arkansas
○ California
○ Colorado
○ Connecticut
○ Delaware
○ District of Columbia
○ Florida
○ Georgia
○ Guam
○ Hawaii
○ Idaho
○ Illinois
○ Indiana
○ Iowa
○ Kansas
○ Kentucky
○ Louisiana
○ Maine
○ Maryland
○ Massachusetts
○ Michigan
○ Minnesota
○ Mississippi
○ Missouri
○ Montana
○ Nebraska
○ Nevada
○ New Hampshire
○ New Jersey
○ New Mexico
○ New York
○ North Carolina
○ North Dakota
○ Northern Mariana Islands
○ Ohio
○ Oklahoma
○ Oregon
○ Palau
○ Pennsylvania
○ Puerto Rico
○ Rhode Island
○ South Carolina
○ South Dakota
○ Tennessee
○ Texas
○ Utah
○ Vermont
○ Virgin Islands
○ Virginia
○ Washington
○ West Virginia
○ Wisconsin
○ Wyoming
○ Other

Please specify "Other"

Please tell us any additional information you would like to share related to your job search or this survey.

Confidential

Appendix B
Survey Instrument: Additional Information
Additional information

Thank you for supporting this research study! Your survey responses have been submitted.

Please consider completing the additional information below.

If you had a mentor during your LIS studies, would you be willing to potentially take part in a 20-minute telephone interview on the topic of navigating the academic library job market landscape after having a mentor during LIS studies?

You would have the possibility of receiving a $25 Amazon gift card as a small token of our appreciation for participating in an interview. (Note: per New Mexico State University policy, employees of New Mexico State University in addition to people who were born outside the U.S. and are not considered permanent residents of the U.S. are ineligible to be awarded a gift card. Also, multiple gift cards should not be given to the same individual) (Select one.)

○ I am not interested in participating in an interview or did not have a mentor during my LIS studies.
○ I had a mentor during my LIS studies and would be interested in possibly being contacted for an interview.

Please provide your email address to be potentially contacted for an interview

_____

Please provide your contact information below if you would like to have the chance of being randomly selected to receive one of five Amazon gift cards worth $25 for participating in this survey. Your contact information will not be associated with the survey answers you previously submitted.

Note: per New Mexico State University policy, employees of New Mexico State University in addition to people who were born outside the U.S. and are not considered permanent residents of the U.S. are ineligible to be awarded a gift card. Please do not include your contact information if either situation applies to you.

First and last name:_____ Email address:_____