Challenges, Successes, and Possibilities: How MLS- and PhD-holding Librarians Perceive their Roles in Academic Libraries

Yulia V. Sevryugina, Craig Smith, and Gabriel Mordoch

abstract: This paper discusses perceptions regarding the roles of PhD- and MLS (or MLIS)-holding librarians within academic libraries in the United States gathered via a survey conducted in 2019. Based on a review of previous literature and the results of the survey—which present mixed opinions about PhD holders as librarians—the authors provide recommendations for ways libraries can effectively address some of the tensions regarding the role of PhD holders within academic librarianship. This article is useful for librarians of all educational backgrounds, PhD holders who are considering the transition to a library career, and library administrators involved in the hiring process.

Introduction

Tensions over PhD holders entering academic librarianship have surfaced in library science literature regularly since the 1980s, when Jeffrey Cooper, Janet Gertz, and Mark Sandler discussed the experiences of three PhD holders who, imbued with a sense of mission, found in librarianship the opportunity to “redirect their interests, skills, and efforts to contribute to society.” Cooper, Gertz, and Sandler emphasized the scholarly nature of librarianship and refuted the argument that, rather than representing a reaction to scanty opportunities within the traditional academic path, the decision of PhD holders to reenter school to pursue a library degree reflected their “sincere commitment to becoming good librarians.”

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In the 1990s, a number of publications by Deanna Marcum, Mary Grosch and Terry Weech, William Jones, and Jean-Pierre Herubel addressed the increasing tensions between PhD and MLS holders within academic librarian communities. Deanna Marcum expressed concerns with the massive decline in enrollment at university library schools at that time. Marcum argued that an MLS or MLIS degree by itself was no longer sufficient to exercise the profession with competency and fulfill libraries’ “educational mission successfully.” Grosch and Weech joined the conversation by conducting a survey of librarians who held a subject master’s degree in addition to the MLS, focusing specifically on perceived values of such degrees in relation to three areas: work, salary, and career advancement. Not surprisingly, the majority of respondents perceived their subject master’s degree as an advantage, “important to their career advancement.” Not without some irony, Jones posed the question: “How many degrees are enough?” to educate an academic librarian. In the end, Jones concluded that academic librarians need not just “to obtain as much formal training as possible,” but also “to acquire second master’s and PhDs and to begin to find ways of putting that training to work in the institutions in which they are employed.” Herubel further inquired: “To ‘degree’ or not to ‘degree’?” While recognizing that “a librarian does not need a subject master’s, much less a doctorate, in order to make a major contribution to an academic community,” Herubel noticed that the “lack of academic credentials may make it very hard [for a subject librarian] to be perceived as making a significant contribution and impossible to be perceived as an equal partner in the educational enterprise.”

The debate around the relevance and importance of an advanced degree other than the MLS for academic librarians took a new turn in the 21st century. Mary Johnson observed that academic librarianship was emerging as a new kind of scholarly opportunity for PhD holders, suggesting also that it could become a first-choice career path for recent PhD holders instead of being viewed as a back-up option. Johnson also addressed the creation of a new program of postdoctoral fellowships for recent PhDs in the field of the Humanities. Designed by the Council on Library and Information Resources (CLIR), this program provides an alternative entry point into the librarianship. Fellowship programs like this have elicited mixed opinions among library professionals because they represent a bypassing of the MLS, established by the Association of College & Research Libraries (ACRL) as the terminal degree required for the academic librarianship profession.

In 2005, Jennifer Mayer and Lori Terrill surveyed the opinions of academic librarians regarding the value of having a PhD degree in addition to an MLS. The results indicated that a PhD equips MLS graduates with research skills and increased credibility in academic contexts, which were positive contributors to their job performance as librarians. Arguments against librarians obtaining PhDs, Mayer and Terrill observed, include the fact that MLS holders can acquire subject and research expertise through means other than a doctoral education. Mayer and Terrill found that the decision about whether to pursue a PhD for academic librarians depended on individual career goals and local institutional culture. In a similar vein, Thea Lindquist and Todd Gilman showed that although an MLS was still required to ensure long-term career mobility, exceptions to this rule were becoming increasingly common. A case study by José Montelongo et al. in 2010 demonstrated that an advanced degree, especially a doctoral degree, positively impacts the performance of college librarians in core duty areas such as teaching, research,
and collection development. In 2016, Jennifer Ferguson analyzed the requirements for advanced subject degrees for academic librarians and concluded that “a second advanced degree is … usually an advantage…” and “…it is a significant advantage for librarians who are or intend to become subject specialists.”

In the present study, the authors focused on the contemporary perceptions regarding PhD-holding librarians within academic libraries. The last survey on this topic was presented in two papers by Lindquist and Gilman in 2008 and 2010, one focused on “data and trends” and the other on “experiences and perceptions.” Lindquist and Gilman surveyed a total of 664 librarian PhD holders working in academic libraries in the United States and Canada, of whom 59 percent had obtained their PhDs in Humanities and Arts and 15.5 percent did not also hold an MLS degree. The present study was conducted throughout 2019 and reflects opinions of 200 respondents, both MLS and PhD holders, whose disciplinary backgrounds represent equally well the four subject areas of Humanities and Arts, Applied Sciences, Social Sciences, and Natural Sciences, making it more inclusive than prior studies. The main questions the authors explored were:

1. Is librarianship viewed as a viable career option for PhD holders, and do perceptions on this differ as a function of one’s own degree?
2. How are PhD-holding librarians perceived within academic libraries, and do these perceptions differ based on one’s own degree?
3. What value do PhD-holding librarians add to academic libraries, and where do such librarians need to supplement their existing training in order to serve libraries and patrons effectively?

The survey revealed that the question of a librarian’s educational background can be a point of strong disagreement and even anger, yet it can also elicit useful ideas about how librarians with different educational backgrounds can work together effectively. After describing methodology and results, the authors will provide a set of recommendations that may be helpful to hiring managers, human resources representatives, and library leaders as they make choices about staffing libraries and promoting teamwork in academic library settings.

Methods

Preparation and distribution of the survey

In April 2018, a team comprised of two of the study authors and two librarian colleagues designed a survey to investigate the perceptions of academic library employees about the positive and negative aspects of academic librarians holding a PhD degree (See Appendix A). The University of Michigan Health Sciences and Behavioral Sciences Institutional
Review Board classified this research as exempt. The team identified librarians working in academic research libraries in the United States as the target participant group, and the authors especially sought librarians with a range of educational backgrounds, professional and career pathways, and job responsibilities. The authors distributed the survey on eight librarians’ listservs that differed in subject specialization and were all associated with professional library associations such as the American Library Association (ALA) and the Association of College & Research Libraries (ACRL) (See Appendix B). The survey data were collected between April 19 and July 6, 2019, a field period of 11 weeks. No incentives were offered to study participants. In all, 200 responses were recorded, which constitute a 3.24 percent response rate based on the listservs’ member count (6,169).

The 24-question survey was administered using Google Forms. The combination of both closed- and open-ended questions could be characterized as follows: three demographic questions, ten questions exploring participants’ job roles and responsibilities, eight questions addressing participants’ perceptions toward PhD holders in librarianship, and three general questions about librarianship. Closed-ended questions were subjected to quantitative analysis, and the responses to the open-ended questions were coded using an inductive approach.18

Participants

Respondents were asked to record their highest level of educational attainment (See Table 1). Although the authors only asked for the highest level of educational attainment, respondents had the option to indicate that they had attained multiple degrees, which enabled a nuanced report on degree combinations. For the analyses presented in this study, the authors divided participants into three groups:

- PhD (N = 63): participants with a PhD (some also had MLS or analogous degrees);
- MLS (N = 124): participants whose highest attainment degree was the MLS, MLIS or an analogous degree (some also had a BS/BA or MS/MBA degree);
- Other (N = 13): participants who did not have either PhD or MLS and MLIS degrees. Most of these respondents had an MS degree.

The PhD holders, but not MLS and MLIS degree holders, are sometimes referred to in the text as advanced subject degree holders. Given that central research questions involved comparisons between PhD and MLS and MLIS holders, the formal statistical analyses included only those two groups. The 13 participants with other types of educational backgrounds are included in the tables, but not in formal statistical analyses. Other characteristics of the study participants, library role, for example, are presented in the Results section.

Coding of open-ended responses

The authors coded the open-ended responses to the following questions:

1. In your opinion, is a PhD useful for academic librarians?
2. Which areas of librarianship could benefit from hiring PhD holders?
3. Indicate librarian jobs for which candidates MUST possess an MLS degree in addition to a PhD?
4. Which challenges did you encounter when transitioning to librarianship?
5. What benefits or positive attributes do PhD holders bring to academic librarian positions?
6. What drawbacks do you see from hiring PhD holders?

The coding schemes for these open-ended questions were developed using an inductive process during conversations held within the research team (See Appendix C). Following the development of the coding schemes, the authors used several approaches to ensure interrater agreement and reliability among coders. First, for coding categories that clearly contained five or fewer possible responses, disagreements among coders were resolved through discussion. Second, for coding categories that had the clear potential to contain larger numbers of responses, Cohen’s kappa (κ) was used as a formal check on interrater reliability between two raters (See Appendix C). The authors used the common benchmark of .70 or greater as a cutoff for acceptable levels of agreement, and even where this cutoff was exceeded, the authors followed up by resolving any disagreements on coding via discussion (in all cases, disagreements were easily resolved). Finally, in a few cases where κ < .70, the authors revisited the approach to coding for the relevant categories to ensure that the coding system was understood and agreed upon by all coders; independent coding was then conducted again, and interrater reliability was reassessed and found to be acceptable.

### Table 1.

Highest level of educational attainment among respondents.

<table>
<thead>
<tr>
<th>Degree</th>
<th>Number (%) respondents</th>
<th>Assigned category</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD only</td>
<td>47 (23.5%)</td>
<td>PhD</td>
</tr>
<tr>
<td>PhD + MLS/MLIS</td>
<td>14 (7%)</td>
<td>PhD</td>
</tr>
<tr>
<td>PhD + Postdoc</td>
<td>10 (5%)</td>
<td>PhD</td>
</tr>
<tr>
<td>EdD or JD</td>
<td>2 (1%)</td>
<td>PhD</td>
</tr>
<tr>
<td>MLS/MLIS only</td>
<td>91 (45.5%)</td>
<td>MLS</td>
</tr>
<tr>
<td>MS/MBA/MD* + MLS/MLIS</td>
<td>33 (16.5%)</td>
<td>MLS</td>
</tr>
<tr>
<td>MS/MBA/MD* only</td>
<td>7 (3.5%)</td>
<td>Other</td>
</tr>
<tr>
<td>BS/BA + MLS/MLIS</td>
<td>3 (1.5%)</td>
<td>MLS</td>
</tr>
<tr>
<td>Other (as in survey)</td>
<td>6 (3%)</td>
<td>Other</td>
</tr>
</tbody>
</table>

**Notes:** Total number of respondents is 200.

*MS/MBA/MD degrees were combined in the survey into one category. Based on accompanied responses, we strongly believe there were no MDs among the participants, although we cannot entirely rule out this possibility due to the survey set-up.

Several participants checked their highest degree of educational attainment in the survey as “Other,” meaning it was other than postdoc, PhD, MLS or analogous, MS, MBA, or MD, BS, or BA. Of them, one had ABD; two were in administration with an education in Professions / Applied Sciences: Law, Health Sciences, Education, Business, Administration; and two were subject liaisons.
Statistical Analysis

Descriptive analysis of the data and the Mann-Whitney test were conducted on the Statistical Package for Social Sciences version 28 (SPSS). An effect size for the Mann-Whitney calculations was estimated as \( r = \frac{z}{\sqrt{N}} \). Tables display percentages (and numbers) of respondents for each answer category. Percentages may not sum to 100 percent due to rounding and to the fact that for some questions, such as benefits, drawbacks, challenges, teaching responsibilities, and jobs, respondents were allowed to select several answer categories. Chi-square tests were conducted to analyze many of the categorical variables except when this was not possible due to low cell sizes. In tables presenting multiple response categories, the chi-square test was used to examine two by two tables where the presence of a focal response category was coded as one and its absence as zero. Cramer’s V was used to measure the strength of association and is denoted as V.

For the interpretation of the effect size (V values), the researchers used the following cutoffs: no association < 0.05/df, very small < 0.1/df, small < 0.3/df, medium < 0.5/df, and large > 0.5/df (note, that df = 1 for most of the tables).

Results

Study Participants

Education

Most survey respondents, or 45.5 percent, held a single MLS or equivalent degree and 23.5 percent of respondents held a single PhD degree. Only 7 percent of respondents indicated holding dual MLS and PhD degrees. A very small number of respondents (<5 percent) had Master of Science (MS), Bachelor of Science (BS), Doctor of Education (EdD), or Juris Doctor (JD) degrees (See Table 1).

Discipline

The respondents were asked to select the discipline in which they had obtained their highest education, and four disciplines were offered as response options based on the classification supplied by Lindquist and Gilman, as well as an “other” category:

- Humanities and Arts, such as History, English, Foreign Language, Philosophy, Music, Theater;
- Professions/Applied Sciences, such as Law, Health Sciences, Education, Business, Administration;
- Social Sciences, such as Anthropology, Political Sciences, Geography, Communication, Sociology, Linguistics, Psychology, Archaeology;
- Natural Sciences, such as Life Sciences, Physical Sciences;
- Other.

The authors asked respondents to self-identify, which led to some confusion since neither Engineering nor Library Information Science (LIS) were defined in any of the categories. As a result, 86 percent of MLS holders selected the “other” category, and nine percent of PhD holders did not select any specific discipline. The authors manually sorted out the responses from the “other” category by assigning MLS holders to the group of Professions/Applied Sciences. However, whenever a respondent indicated having an
MLS combined with a degree from a different discipline, the authors considered the respondent as belonging to the other discipline. When respondents self-identified as one out of four defined disciplinary categories, the authors accepted respondents’ selections as they were. Once the responses were sorted, data analysis, as shown in Table 2, revealed that 19.5 percent of all respondents were in Humanities and Arts, 14 percent in Applied Sciences, 15.5 percent in Social Sciences, 22.5 percent in Natural Sciences, and 28.5 percent in “other.” Importantly, the nearly equal distribution across a range of disciplines suggests that the data presented herein were not biased toward any broad disciplinary area, as has been true of some past studies.22

Table 2.
Respondents’ discipline in which they obtained their highest education

<table>
<thead>
<tr>
<th>Degree</th>
<th>Humanities</th>
<th>Professions/Sciences</th>
<th>Social Sciences</th>
<th>Natural</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Applied Sciences</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PhD</td>
<td>24% (15)</td>
<td>16% (10)</td>
<td>16% (10)</td>
<td>35% (22)</td>
<td>10% (6)</td>
</tr>
<tr>
<td>MLS</td>
<td>19% (23)</td>
<td>12% (15)</td>
<td>16% (20)</td>
<td>15% (18)</td>
<td>39% (48)</td>
</tr>
<tr>
<td>Other</td>
<td>8% (1)</td>
<td>23% (3)</td>
<td>8% (1)</td>
<td>39% (5)</td>
<td>23% (3)</td>
</tr>
<tr>
<td>Total</td>
<td>20% (39)</td>
<td>14% (28)</td>
<td>16% (31)</td>
<td>23% (45)</td>
<td>29% (57)</td>
</tr>
</tbody>
</table>

Note 1: There were a total of 200 respondents.

Library positions

Forty-two percent of the survey respondents identified themselves as subject liaisons, of whom 36 percent held a PhD and 61 percent held an MLS or analogous degree. There was not a significant association between respondent degree type and whether respondents were subject liaisons or not ($\chi^2 = 0.59, df = 1, V = 0.06, p = .44$). Seven to 11 percent of respondents worked in instructional services, also known as learning and teaching; administration; and collection development. The authors observed a slightly higher number of MLS respondents working in instructional services, although this difference was not significant. The data showed an association between respondent degree type and whether respondents were administrators, with 15 percent of administrator respondents indicating they held a PhD, and six percent an MLS ($\chi^2 = 3.84, df = 1, V = 0.15, p = .05$). Eight percent of respondents did work focusing on rare books/special collections, archives, and cataloging. Sixteen percent of respondents held jobs in categories other than those supplied as response options in the survey; it was apparent from responses to other questions that these librarians did work related to scholarly communication, information technology (IT), website design, Geographic Information Systems (GIS), visualization, writing, student experience, project management, digital scholarship, data-related services (statistics, data science, data management, digital humanities), and as “functional experts” in support of campus research (See Table 3).
The respondents with degrees other than an MLS or PhD worked as administrators, subject liaisons, and in collection development. Due to the small sizes of the groups with other degree types in other positions, the authors were not able to run the chi-square analyses for these roles.

**Years of Experience and Faculty Status**

The authors asked survey participants to indicate a group that best matched their years of experience in the library profession. Respondents were rather equally distributed across the years of experience categories, with a slight underrepresentation among early-career librarians, who comprised only 11-12 percent of the sample (See Table 4). Further, every years-of-experience group was well represented within each disciplinary area. Most survey respondents—65 percent, or 129 of 199—indicated that they had faculty status at their institutions, though those without faculty status were also well represented.

**Timeline of obtaining PhD**

The authors asked survey participants to indicate whether they earned their PhD degree before, while, or after becoming librarians. Table 5 shows that most PhD-holding respondents earned their PhD degrees before becoming librarians. Sixteen percent of surveyed PhD holders earned their PhDs after becoming librarians, and most of them had already earned an MLS degree. Slightly more than half of dual PhD and MLS degree holders had earned their PhDs before becoming librarians, and about one third of them pursued their PhDs after becoming librarians.
Table 4.
Respondents’ years of experience in librarian positions

<table>
<thead>
<tr>
<th>Degree</th>
<th>&lt; 2 years</th>
<th>2-5 years</th>
<th>6-10 years</th>
<th>11-20 years</th>
<th>&gt; 20 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD</td>
<td>11% (7)</td>
<td>24% (15)</td>
<td>25% (16)</td>
<td>19% (12)</td>
<td>21% (13)</td>
</tr>
<tr>
<td>MLS</td>
<td>12% (15)</td>
<td>18% (22)</td>
<td>21% (26)</td>
<td>24% (30)</td>
<td>24% (30)</td>
</tr>
<tr>
<td>Other</td>
<td>15% (2)</td>
<td>8% (1)</td>
<td>0</td>
<td>46% (6)</td>
<td>31% (4)</td>
</tr>
<tr>
<td>Total</td>
<td>12% (24)</td>
<td>19% (38)</td>
<td>21% (42)</td>
<td>24% (48)</td>
<td>24% (47)</td>
</tr>
</tbody>
</table>

Note: There were 199 respondents in each chi-square analysis.

Table 5.
Timeline of earning a PhD and becoming a librarian

<table>
<thead>
<tr>
<th>Degree</th>
<th>PhD \rightarrow Librarian</th>
<th>PhD while Librarian</th>
<th>Librarian \rightarrow PhD</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD only</td>
<td>67% (33)</td>
<td>18% (9)</td>
<td>12% (6)</td>
</tr>
<tr>
<td>PhD + MLS</td>
<td>57% (8)</td>
<td>14% (2)</td>
<td>29% (4)</td>
</tr>
<tr>
<td>PhD all</td>
<td>65% (41)</td>
<td>18% (11)</td>
<td>16% (10)</td>
</tr>
</tbody>
</table>

Note: There were 191 respondents in each chi-square analysis.

Perceptions and Opinions

Utility of the PhD degree in librarianship

The authors asked academic librarians whether the PhD degree was useful in librarianship; the largest group of respondents, 48 percent, indicated that “it depends,” while 37 percent answered “yes” and 16 percent said “no.” An initial omnibus chi-square test revealed a significant association between the degree held by respondents—PhD or MLS—and their response to this question ($\chi^2 = 41.03$, df = 2, $V = 0.47$, $p < .001$). Follow-up pairwise contrasts were used to clarify this result. First, 58 percent of MLS holders gave the “it depends” response, as compared to 29 percent of PhD holders; this difference was statistically significant ($\chi^2 = 14.61$, df = 2, $V = 0.28$, $p < .001$). Second, 20 percent of MLS holders answered “yes” to this question, as compared to 67 percent of PhD holders; this difference was also statistically significant ($\chi^2 = 39.98$, df = 1, $V = 0.47$, $p < .001$). Finally, 22 percent of MLS holders answered “no,” as compared to 5 percent of PhD holders, which was also a significant difference ($\chi^2 = 9.23$, df = 1, $V = 0.22$, $p = .002$; See Table 6).
Thirty-one percent of respondents indicated that the PhD degree is useful for positions where faculty relations and subject expertise are important. Other contingent factors respondents cited were the type of institution, discipline, and even one’s personal commitment to librarianship.

When those who gave this answer were asked to clarify the “it depends” responses, the most common factor people cited was position type. Thirty-one percent of respondents indicated that the PhD degree is useful for positions where faculty relations and subject expertise are important. Other contingent factors respondents cited were the type of institution, discipline, and even one’s personal commitment to librarianship.

Since most respondents acknowledged the usefulness of a PhD degree, whether firmly or dependent on other factors, the authors wanted to examine which aspects of a PhD degree the respondents considered beneficial in librarianship (See Table 7). Seven categories emerged, and these are listed below, with the most common responses listed first:

1. Disciplinary expertise, such as knowledge of disciplinary jargon and overall understanding of the domain;
2. Research experience, such as having a professional perspective on the research process, scholarly communication, writing, and publishing;
3. Enhanced relationships with students and faculty, such as trust and respect of faculty, deans, and students, that emerge from shared experiences and connection through better understanding of research needs;
4. Academic mindset, such as being committed to education, being an active consumer of new knowledge, and enjoying work that demands intellectual engagement;
5. Innovation, such as bringing novel perspectives and approaches to library tasks;
6. Teaching skills and experience;
7. Project management skills and an administrative perspective.

As might be expected, 73 percent of respondents with PhDs emphasized their familiarity with the research process as an asset, whereas only 32 percent of MLS holders identified this as a benefit of holding a PhD; this difference was significant ($\chi^2 = 29.11$, df = 1, $V = 0.34$, $p < .001$). The authors also found a significant association wherein PhD holders were more likely than MLS holders to believe that their educational status elevates their relationships with constituents through mutual trust, respect, and connection ($\chi^2 = 7.11$, df = 1, $V = 0.20$, $p = .01$). The authors observed no association between the degree one holds and the belief that disciplinary expertise is one of the main benefits of a PhD degree (See Table 7).

The authors asked participants whether there are any areas of librarianship that could benefit from hiring PhD holders. In line with previous study findings, most respondents indicated that subject liaison positions would benefit most from hiring PhD holders. A PhD was also viewed as advantageous for special collections work, administrative positions, archives, collection development, and instructional and reference services (listed in descending order of endorsement). Across all eight categories of jobs that the authors
Table 6.
Usefulness of PhD for academic librarians

<table>
<thead>
<tr>
<th>Degree</th>
<th>Yes</th>
<th>No</th>
<th>Total</th>
<th>It depends on Value of faculty relations &amp; subject expertise</th>
<th>Other factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD</td>
<td>67% (42)</td>
<td>5% (3)</td>
<td>29% (18)</td>
<td>24% (15)</td>
<td>5% (3)</td>
</tr>
<tr>
<td>MLS</td>
<td>20% (24)</td>
<td>22% (27)</td>
<td>58% (71)</td>
<td>34% (42)</td>
<td>24% (29)</td>
</tr>
<tr>
<td>Other</td>
<td>54% (7)</td>
<td>8% (1)</td>
<td>39% (8)</td>
<td>39% (5)</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>37% (73)</td>
<td>16% (31)</td>
<td>48% (94)</td>
<td>31% (62)</td>
<td>16% (32)</td>
</tr>
</tbody>
</table>

Note: There were 198 respondents in each chi-square analysis.

Table 7.
Beneficial aspects of the PhD training for librarians

<table>
<thead>
<tr>
<th>Deg</th>
<th>Expertise</th>
<th>Research</th>
<th>Relations</th>
<th>Acad.</th>
<th>Novelty</th>
<th>Teach</th>
<th>Proj mgmt</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD</td>
<td>48% (30)</td>
<td>73% (46)</td>
<td>52% (33)</td>
<td>8% (5)</td>
<td>8% (5)</td>
<td>8% (5)</td>
<td>3% (2)</td>
</tr>
<tr>
<td>MLS</td>
<td>52% (64)</td>
<td>32% (39)</td>
<td>32% (40)</td>
<td>9% (11)</td>
<td>7% (9)</td>
<td>7% (8)</td>
<td>2% (3)</td>
</tr>
<tr>
<td>Other</td>
<td>54% (7)</td>
<td>46% (6)</td>
<td>31% (4)</td>
<td>15% (2)</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>51% (101)</td>
<td>46% (91)</td>
<td>39% (77)</td>
<td>9% (18)</td>
<td>7% (14)</td>
<td>7% (13)</td>
<td>3% (5)</td>
</tr>
</tbody>
</table>

\( \chi^2 \) 0.27 29.11 7.11 0.05

V 0.04 0.40 0.20 0.02

\( \rho \) .61 <.001 .01 .83

Note: There were 173 respondents in each chi-square analysis. For each category only the PhD and MLS groups were formally compared.

could subject to formal statistical analysis, the PhD holders were significantly more likely than MLS holders to say that these jobs could benefit from hiring PhD holders (See Table 8; \( p \)-values ranged from .004 to < .001). Seven percent of respondents suggested other jobs not listed in the original survey, among which were scholarly communication, GIS, and systems. Only three percent of respondents, pooling across PhD and MLS holders, indicated that all librarian jobs would benefit from hiring PhD holders. Virtually none of the respondents indicated that no jobs at all would benefit from PhD holders.
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Table 8.
Areas of librarianship that could benefit from hiring PhD holders

<table>
<thead>
<tr>
<th>Degree</th>
<th>Subject Liaison</th>
<th>Special</th>
<th>Administration</th>
<th>Archives</th>
<th>Collection development</th>
<th>Learning &amp; Reference</th>
<th>Cataloging</th>
<th>Other jobs</th>
<th>It depends on</th>
<th>All jobs</th>
<th>No job</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD</td>
<td>94% (59)</td>
<td>62% (39)</td>
<td>60% (38)</td>
<td>52% (33)</td>
<td>51% (32)</td>
<td>60% (38)</td>
<td>48% (30)</td>
<td>30% (19)</td>
<td>8% (5)</td>
<td>2% (1)</td>
<td>3% (2)</td>
</tr>
<tr>
<td>MLS</td>
<td>71% (88)</td>
<td>38% (47)</td>
<td>27% (34)</td>
<td>31% (38)</td>
<td>27% (33)</td>
<td>23% (29)</td>
<td>22% (27)</td>
<td>12% (15)</td>
<td>6% (7)</td>
<td>9% (11)</td>
<td>3% (4)</td>
</tr>
<tr>
<td>Other</td>
<td>92% (12)</td>
<td>46% (6)</td>
<td>39% (5)</td>
<td>23% (3)</td>
<td>46% (6)</td>
<td>23% (3)</td>
<td>31% (4)</td>
<td>15% (2)</td>
<td>15% (2)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>80% (159)</td>
<td>46% (92)</td>
<td>39% (77)</td>
<td>37% (74)</td>
<td>36% (71)</td>
<td>35% (70)</td>
<td>31% (61)</td>
<td>18% (36)</td>
<td>7% (14)</td>
<td>6% (12)</td>
<td>3% (6)</td>
</tr>
</tbody>
</table>

χ²: 12.78 9.69 19.10 8.38 10.77 24.78 13.17 9.16
V: .026 .023 .032 .212 .024 .036 .27 .22
ρ: <.001 .002 <.001 .004 .001 <.001 <.001 .002

Note: There were 185 respondents in each chi-square analysis. For each category only the PhD and MLS groups were formally compared.

Drawbacks of hiring PhD holders

As noted earlier in Table 6, about 16 percent of respondents indicated that a PhD is not useful for library work (this response was given by 22 percent of MLS respondents and 5 percent of PhD holders). Respondents identified five drawbacks connected to hiring PhD holders. These are listed below in descending order of how commonly the drawbacks were cited:

1. A lack of understanding of library functions, culture, ethics, work, common values, full spectrum of services and partnerships; a lack of professional acculturation to librarianship and its core values (including privacy and intellectual freedom); and a lack of generalist skills and knowledge;
2. The tensions that can crop up between colleagues with different degree types due to lack of mutual respect;
3. The threat of devaluing the MLS degree as more PhD holders enter the library profession— as stated by one respondent, PhD holders “dilute the profession as though the MLS is somehow not enough;”
4. A lack of a service focus in performing librarian duties—as one respondent put it, a lack of the “basic values of customer service;” and
5. The cost, implying the higher salaries that PhD holders can demand.
The responses for the four major categories were ranked similarly by both PhD and MLS holders. The only significant association the authors found was between the degree one holds (PhD or MLS) and whether they believed that hiring PhDs would devalue the MLS degree ($\chi^2 = 5.08$, df = 1, $V = 0.17$, $p = .02$; (See Table 9).

Informal analysis revealed that only six percent of respondents, the majority of whom were either newly hired PhD holders or MLS and PhD librarians who worked in the library for over 20 years, said that there are no drawbacks to hiring PhD holders. Another five percent of respondents indicated that there are no drawbacks if, in addition to a PhD, their colleagues also held an MLS degree. Four percent of respondents indicated that it depends on whether PhD holders are “happy being librarians”, “self-identify as librarians”, or their PhD degree “correlates to librarianship.”

Table 9.
Potential drawbacks in hiring PhD holders

<table>
<thead>
<tr>
<th>Degree</th>
<th>Library skills</th>
<th>Tensions focused</th>
<th>Devalue MLS</th>
<th>Non-service-focused</th>
<th>Cost if MLS</th>
<th>None if MLS</th>
<th>None</th>
<th>It depends</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD</td>
<td>43% (27)</td>
<td>29% (18)</td>
<td>3% (2)</td>
<td>8% (4)</td>
<td>8% (5)</td>
<td>14% (9)</td>
<td>2% (1)</td>
<td>3% (2)</td>
</tr>
<tr>
<td>MLS</td>
<td>48% (59)</td>
<td>33% (41)</td>
<td>14% (17)</td>
<td>11% (13)</td>
<td>9% (11)</td>
<td>2% (2)</td>
<td>6% (7)</td>
<td>5% (6)</td>
</tr>
<tr>
<td>Other</td>
<td>31% (4)</td>
<td>15% (2)</td>
<td>8% (4)</td>
<td>15% (2)</td>
<td>8% (1)</td>
<td>0</td>
<td>8% (1)</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>45% (90)</td>
<td>31% (61)</td>
<td>10% (20)</td>
<td>10% (19)</td>
<td>9% (17)</td>
<td>6% (11)</td>
<td>5% (9)</td>
<td>4% (8)</td>
</tr>
</tbody>
</table>

$\chi^2$  .38  .39  5.08  .17  .17  .35  .83
$V$  0.05  0.05  0.05  0.07  0.02  0.35  0.83
$\rho$  .54  .55  .52  .35  .35  .83

Note: There were 164 respondents in each chi-square analysis. For each category, only the PhD and MLS groups were formally compared.

Thirty-one percent of respondents expressed concerns about tensions between colleagues holding different degree types due to a lack of mutual respect. Thus, some respondents with PhD degrees felt that they had been passed over for promotions and made to feel undervalued by their colleagues. Some respondents with MLS degrees expressed tensions in working with PhD holders for whom, in their opinion, librarianship was an “unimportant career,” “boredom,” “a career afterthought,” or “a temporary career.” There was also concern among some MLS holders that their
PhD-holding colleagues are “not so engaged” and had either “no respect for the profession,” “no passion for the position,” or “an attitude of librarianship being less difficult.”

**Challenges of transitioning to librarianship**

One of the major challenges cited by respondents related to hiring PhD holders was PhD holders’ lack of understanding of library culture and its function as a customer service provider. The fuller set of challenges the survey respondents experienced in transitioning to librarianship, either as an MLS or a PhD holder, are listed here in descending order of how commonly they were cited by respondents (See Table 10):

1. Work culture challenges, such as becoming familiar with library culture, autonomy, institutional norms, institutional support, and work schedule, as well as establishing professional relationships with new colleagues and vendors;
2. Challenges of developing a set of library skills, subject expertise, or understanding the full spectrum of responsibilities in one’s position;
3. Job search challenges in finding a librarian job;
4. Challenges related to underutilization and undervaluing of PhD holder’s skill sets;
5. Challenges related to forming professional relationships with the academic community, patrons, and library colleagues;
6. Challenges of going through the tenure process;
7. Work-life balance (WLB), for example raising children or pursuing a degree while working.

Ten percent of respondents reported experiencing few or no challenges in transitioning to the librarian role; the chi-square test indicated that this group was equally likely to include PhD and MLS holders. Interestingly, the authors observed that 70 percent of respondents, who identified the job search as the challenge, were hired between 1998 and 2008, a span that included two major recessions in the United States (in 2000 and 2007). Notably, two major aspects of transitioning, work culture and skills, were equally challenging for both MLS and PhD holders (See Table 10).

**Role of the MLS degree**

Responses to open-ended survey questions revealed a strong concern regarding the devaluing of the MLS degree as more PhD holders enter librarianship. In fact, 10 percent of respondents, the majority of whom had an MLS, saw this as one of the major drawbacks in hiring PhD holders (although 5 percent indicated that there are no drawbacks if a person has an MLS degree in addition to a PhD; See Table 9). The comments indicated that the tension among librarians is not a result of one’s skills or abilities but mainly a result of MLS-holding respondents feeling pressure to defend the value of their terminal degrees. Only 17 percent of all librarian respondents felt extremely welcoming to PhD holders; PhD-holding librarians (35 percent) were significantly more welcoming of PhD holders when compared to their MLS-holding colleagues (8 percent); a Mann-
Whitney test was significant ($Z = -3.82, p < .001, r = 0.28$; See Table 11). It is also worth noting that the acceptance of PhD holders within the library varied across generations. Librarians hired after 2009 were more welcoming of PhD holders without MLS degrees compared to older generations of librarians; a Mann-Whitney test was significant ($Z = -1.94, p = .05, r = 0.14$).

Table 11.
Perceptions toward PhD holders without MLS in new librarian roles

<table>
<thead>
<tr>
<th>Degree</th>
<th>1-Not welcoming</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5-Extremely welcoming</th>
<th>Mean (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD</td>
<td>14% (9)</td>
<td>10% (6)</td>
<td>30% (19)</td>
<td>11% (7)</td>
<td>35% (22)</td>
<td>3.4 (1.4)</td>
</tr>
<tr>
<td>MLS</td>
<td>21% (26)</td>
<td>29% (35)</td>
<td>27% (33)</td>
<td>15% (19)</td>
<td>8% (10)</td>
<td>2.6 (1.2)</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>15% (2)</td>
<td>39% (5)</td>
<td>39% (5)</td>
<td>8% (1)</td>
<td>3.4 (0.9)</td>
</tr>
<tr>
<td>Total</td>
<td>18% (35)</td>
<td>22% (43)</td>
<td>29% (57)</td>
<td>16% (31)</td>
<td>17% (33)</td>
<td>2.9 (1.3)</td>
</tr>
</tbody>
</table>

Note: There were 117 respondents in each chi-square analysis. WLB is Work-life balance. For each category, only the PhD and MLS groups were formally compared.
The data in Table 12 reflect respondents’ opinions about whether an MLS degree is necessary, when one already holds a PhD. When asked whether PhD holders should have an additional MLS degree, a slight majority replied “yes.” Data showed that MLS holders were significantly more likely than PhD holders to assert that PhD holders should also have an MLS (or similar) degree for librarian positions ($\chi^2 = 20.13, df = 1, V = 0.39, p < .001$). Additionally, PhD holders who also held an MLS degree appeared to show more support for acquiring an additional MLS degree, as compared to PhD holders without an MLS (57 percent versus 31 percent, respectively; formal comparisons were not conducted since only 14 people in the sample had both degrees). Twenty one percent of dual PhD and MLS degree holders indicated that an MLS degree is not needed, and this was true of 39 percent of respondents holding a single PhD. In analyzing this question, the authors focused on the “yes” and “no” responses of PhD and MLS holders; however, the authors note that nearly identical percentages of PhD holders and MLS holders responded that PhD holders need an additional MLS degree “only for some” librarian positions.

### Table 12.
Necessity of an MLS (or similar) degree in addition to PhD

<table>
<thead>
<tr>
<th>Degree</th>
<th>Yes</th>
<th>No</th>
<th>Only for some</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD</td>
<td>37% (23)</td>
<td>35% (22)</td>
<td>29% (18)</td>
</tr>
<tr>
<td>MLS</td>
<td>63% (78)</td>
<td>10% (12)</td>
<td>27% (33)</td>
</tr>
<tr>
<td>Other</td>
<td>46% (6)</td>
<td>0</td>
<td>54% (7)</td>
</tr>
<tr>
<td>Total</td>
<td>54% (107)</td>
<td>17% (34)</td>
<td>29% (58)</td>
</tr>
</tbody>
</table>

*Note:* There were 199 respondents in the chi-square analysis.

The authors then asked which librarian jobs should require an MLS degree for PhD holders. The results, shown in Table 13, indicated that positions in cataloging and collection development are those for whom the MLS degree was most often viewed as a must, in addition to the PhD degree. Librarians with PhDs working in learning and teaching, special collections, as well as those in subject liaison roles were less likely to be viewed as needing an additional MLS degree. Three percent of all respondents, all MLS degree holders, indicated that “all librarian jobs should require an MLS” and 2 percent of respondents, among whom were both PhD and MLS degree holders, stated that an “MLS should not be required for any librarian job.” Four percent of respondents indicated that an “MLS is useful but should not be required for any job,” and 7 percent stated that whether it should be required depends on other factors. Among additional factors are the type of the job and its responsibilities, the institutional culture, previous experiences working in a library or associated fellowship programs, personal skills and
background, as well as one’s field of study. Based on a couple of examples provided by respondents, an administrative job in a research-oriented university, or being a former CLIR fellow, or having experience working in a library would qualify an individual without an MLS degree for a librarian job.

The authors found significant associations between the degree one holds and whether they believe that an MLS is required for librarian positions in collection development, administration, reference and instructional services, or subject liaison roles (p-values ranged from .008 to < .001); with regard to these positions, MLS holders were significantly more likely to view an MLS degree as necessary when compared to PhD holders. Across the full sample of respondents, being a subject liaison and working in learning and teaching were two librarian roles where an MLS degree was viewed as least necessary. Additionally, many MLS degree holders viewed both archives and special collections as areas that should least require an MLS. The size of other groups was too small to run the chi-square analyses.

Table 13.
Librarian jobs where an MLS degree is a MUST for PhD holders.

<table>
<thead>
<tr>
<th>Degree</th>
<th>Cataloging</th>
<th>Collection development</th>
<th>Administration</th>
<th>Reference services</th>
<th>Archives</th>
<th>Special collections</th>
<th>Subject liaison</th>
<th>Learning &amp; teaching</th>
<th>It depends on</th>
<th>MLS is useful</th>
<th>All jobs</th>
<th>No job</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD</td>
<td>70% (44)</td>
<td>48% (33)</td>
<td>44% (28)</td>
<td>40% (38)</td>
<td>46% (29)</td>
<td>46% (29)</td>
<td>38% (24)</td>
<td>35% (22)</td>
<td>2% (1)</td>
<td>3% (2)</td>
<td>0 (0)</td>
<td>3% (2)</td>
</tr>
<tr>
<td>MLS</td>
<td>76% (94)</td>
<td>68% (40)</td>
<td>65% (81)</td>
<td>69% (86)</td>
<td>57% (70)</td>
<td>55% (68)</td>
<td>61% (48)</td>
<td>59% (73)</td>
<td>11% (13)</td>
<td>4% (5)</td>
<td>4% (5)</td>
<td>2% (2)</td>
</tr>
<tr>
<td>Other</td>
<td>69% (4)</td>
<td>62% (8)</td>
<td>62% (8)</td>
<td>31% (9)</td>
<td>77% (10)</td>
<td>62% (5)</td>
<td>39% (5)</td>
<td>23% (3)</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Total</td>
<td>74% (147)</td>
<td>61% (122)</td>
<td>59% (117)</td>
<td>58% (115)</td>
<td>55% (109)</td>
<td>53% (105)</td>
<td>53% (105)</td>
<td>49% (98)</td>
<td>7% (14)</td>
<td>4% (7)</td>
<td>3% (5)</td>
<td>2% (4)</td>
</tr>
</tbody>
</table>

Note: There were 187 respondents in each chi-square analysis. For each category, only the PhD and MLS groups were formally compared.
What does Librarianship Entail?

Tables 14 through 18 present data related to the elements that comprise an academic librarian’s job responsibilities. Most, or sixty-five percent, of librarians who responded to this survey had faculty status and seventy-one percent had served on an institutional governing body or committee (See table 14). Seventy-one percent also provided instruction to graduate and undergraduate students in both small (10-20 students) and large (over 100 students) groups, and many indicated teaching over 10 sessions per semester (See Table 15). Sixty-six percent of respondents indicated spending over 20 percent of their work time on research and dissemination of scholarly output (Table 16) and 48 percent had applied for institutional or national funding to support various aspects of their work (Table 17). Half of all respondents felt strong encouragement in their libraries to conduct research as part of their positions (See Table 18).

The authors did not find any significant associations between the degree one held and interest in serving on governmental or other institutional committees (Table 14). However, the authors did find a significant association between respondents’ years of experience and whether respondents had already served on institutional committees (Table 14). Not surprisingly, librarians who had more than ten years of experience (hired before 2009) were more likely to have served on at least one institutional governing body or committee (81 percent) as compared to librarians working in the library for fewer than 5 years (58 percent hired 2014-2019; $\chi^2 = 9.60$, df = 1, $V = 0.26$, $p = .002$) or between 6 and 10 years (65 percent hired 2009-2013; $\chi^2 = 4.10$, df = 1, $V = 0.18$, $p = .043$). Among librarians who had more than ten years of experience in the library, the percentage of librarians not interested in committee work was the smallest (9 Percent).

When analyzing teaching responsibilities, the authors found no significant associations between respondent degree and their range of teaching responsibilities. Roughly half of both PhD and MLS holders indicated that they teach over ten sessions per semester (See Table 15).

When analyzing respondents’ research activity (Table 16), the author found that 72 percent of librarians conducted research, although MLS holders were less likely than PhD holders to have conducted research (63 versus 87 percent, respectively; $\chi^2 = 11.67$, df = 1, $V = 0.25$, $p < .001$). PhD-holding librarians were also more likely than MLS holders to apply for institutional and national funding (62 versus 40 percent, respectively; Table 17); this difference was statistically significant ($\chi^2 = 8.41$, df = 1, $V = 0.212$, $p = .004$). On average, both MLS and PhD holders received supervisor encouragement to conduct research (Table 18), however there was a range where some people were not encouraged and others were, and a Mann-Whitney test indicated that the patterns of results were similar for both MLS and PhD holders ($Z = -0.66$, $p = .51$).

The results indicated that academic librarians teach, conduct research, and perform service, which truly reflects the faculty status of librarian positions. Therefore, the authors asked whether respondents perceived librarians as academics. Sixty percent of respondents considered all librarians to be academics (See Table 19). Another 36 percent of respondents felt that only selected categories of librarians are academics. There was no significant association between respondent degree and whether they consider all or only some librarians to be academics ($\chi^2 = 2.90$, df = 1, $V = 0.13$, $p = .09$). Only four percent of librarians, exclusively MLS holders, believed librarian positions to be non-academic.
Table 14.
Service in institutional governing bodies and/or committees

<table>
<thead>
<tr>
<th></th>
<th>Served</th>
<th>Not served</th>
<th>Interested</th>
<th>Not interested</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Degree (N = 199)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PhD</td>
<td>72% (44)</td>
<td>28% (17)</td>
<td>16% (10)</td>
<td>12% (7)</td>
</tr>
<tr>
<td>MLS</td>
<td>70% (80)</td>
<td>30% (35)</td>
<td>14% (16)</td>
<td>17% (19)</td>
</tr>
<tr>
<td>Total</td>
<td>71% (134)</td>
<td>29% (55)</td>
<td>14% (27)</td>
<td>15% (28)</td>
</tr>
<tr>
<td>$\chi^2$</td>
<td>.13</td>
<td>.20</td>
<td>.81</td>
<td></td>
</tr>
<tr>
<td>$V$</td>
<td>0.03</td>
<td>0.033</td>
<td>0.068</td>
<td></td>
</tr>
<tr>
<td>$\rho$</td>
<td>.72</td>
<td>.66</td>
<td>.37</td>
<td></td>
</tr>
</tbody>
</table>

| **Years hired (N = 188)** |        |            |            |               |
| 2014-2019                 | 58% (33) | 42% (24) | 21% (12) | 21% (12) |
| 2009-2013                 | 65% (26) | 35% (14) | 15% (6) | 20% (8) |
| Before 2009               | 81% (74) | 19% (17) | 10% (9) | 9% (8) |
| Total                    | 71% (133) | 29% (55) | 14% (27) | 15% (28) |
| $\chi^2$                 | 10.10  | 3.57      | 5.20      |               |
| $V$                      | 0.23   | 0.14      | 0.17      |               |
| $\rho$                   | .006   | .17       | .074      |               |

*Note:* Categories “Interested” and “Not interested” only correspond to the “Not served” group. For each category, only the PhD and MLS groups were formally compared.

However, when respondents were asked whether librarians who are academics should have the same academic training as their faculty colleagues, 79 percent replied “no” (See Table 20). This majority was largely represented by MLS respondents (89 percent). Sixty-three percent of PhD holders also replied “no,” but the remaining 37 percent of PhD holders did feel that librarians should have the same training as their faculty colleagues if they are to be considered academics (Table 15). The difference between PhD and MLS holders on this question was significant ($\chi^2 = 18.02, df = 1, V = 0.31, p < .001$). Only 16 percent of the librarians who perceived all librarians to be academics, and 29 percent of librarians who perceived only some librarians to be academics, expressed that academic librarians should have the same academic training as other academic faculty (Table 20); this difference was significant ($\chi^2 = 4.46, df = 1, V = 0.15, p = .04$).

**Discussion**

The primary goal of this study was to explore current perceptions among academic librarians regarding the value of a PhD degree in the broad field of librarianship. The authors also considered the roots of these perceptions, their correlates, and how libraries can effectively address some of the tensions described.
Table 15.
Teaching responsibilities

<table>
<thead>
<tr>
<th>Degree</th>
<th>Do not teach</th>
<th>Type of students</th>
<th>Number of students</th>
<th>Number of sessions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N = 184</td>
<td>Undergrad</td>
<td>Grad</td>
<td>Mix</td>
</tr>
<tr>
<td>PhD</td>
<td></td>
<td>5%</td>
<td>7%</td>
<td>9%</td>
</tr>
<tr>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
<td>(47)</td>
<td>(19)</td>
</tr>
<tr>
<td>MLS</td>
<td></td>
<td>10%</td>
<td>14%</td>
<td>8%</td>
</tr>
<tr>
<td>(11)</td>
<td>(16)</td>
<td>(9)</td>
<td>(77)</td>
<td>(22)</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td>17%</td>
<td>33%</td>
<td>0</td>
</tr>
<tr>
<td>(2)</td>
<td>(4)</td>
<td>(6)</td>
<td>(2)</td>
<td>(2)</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>9%</td>
<td>13%</td>
<td>8%</td>
</tr>
<tr>
<td>(16)</td>
<td>(24)</td>
<td>(14)</td>
<td>(130)</td>
<td>(43)</td>
</tr>
<tr>
<td>(\chi^2)</td>
<td>2.05</td>
<td>2.56</td>
<td>2.59</td>
<td>2.21</td>
</tr>
<tr>
<td>(V)</td>
<td>.11</td>
<td>.12</td>
<td>.14</td>
<td>.13</td>
</tr>
</tbody>
</table>

Note: There were \(N\) respondents in each chi-square analysis. For each category, only the PhD and MLS groups were formally compared.

Table 16.
Conducting research and sharing its findings

<table>
<thead>
<tr>
<th>Degree</th>
<th>No</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD</td>
<td>13% (8)</td>
<td>87% (55)</td>
</tr>
<tr>
<td>MLS</td>
<td>37% (45)</td>
<td>63% (78)</td>
</tr>
<tr>
<td>Other</td>
<td>2% (3)</td>
<td>77% (10)</td>
</tr>
<tr>
<td>Total</td>
<td>28% (56)</td>
<td>72% (143)</td>
</tr>
</tbody>
</table>

Note: There were 199 respondents in the chi-square analysis.
Table 17.
Seeking grant support

<table>
<thead>
<tr>
<th>Degree</th>
<th>Applied</th>
<th>Never applied</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD</td>
<td>62% (39)</td>
<td>38% (24)</td>
</tr>
<tr>
<td>MLS</td>
<td>40% (49)</td>
<td>61% (75)</td>
</tr>
<tr>
<td>Other</td>
<td>54% (7)</td>
<td>46% (6)</td>
</tr>
<tr>
<td>Total</td>
<td>48% (95)</td>
<td>53% (105)</td>
</tr>
</tbody>
</table>

Note: There were 200 respondents in the chi-square analysis.

Table 18.
Encouragement to conduct research by library administration

<table>
<thead>
<tr>
<th>Degree</th>
<th>1-Not encouraged</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5-Very much encouraged</th>
<th>Mean (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD</td>
<td>13% (8)</td>
<td>11% (7)</td>
<td>22% (14)</td>
<td>21% (13)</td>
<td>33% (21)</td>
<td>3.5 (1.4)</td>
</tr>
<tr>
<td>MLS</td>
<td>15% (18)</td>
<td>13% (16)</td>
<td>24% (29)</td>
<td>19% (23)</td>
<td>30% (37)</td>
<td>3.4 (1.4)</td>
</tr>
<tr>
<td>Other</td>
<td>23% (3)</td>
<td>8% (1)</td>
<td>23% (3)</td>
<td>31% (4)</td>
<td>15% (2)</td>
<td>3.1 (1.4)</td>
</tr>
<tr>
<td>Total</td>
<td>15% (29)</td>
<td>12% (24)</td>
<td>23% (46)</td>
<td>20% (40)</td>
<td>30% (60)</td>
<td>3.4 (1.4)</td>
</tr>
</tbody>
</table>

Note: There were 194 respondents in a Mann-Whitney analysis including PhD and MLS holders (the Other group was not included).

Table 19.
Perceptions regarding whether all librarians are academics

<table>
<thead>
<tr>
<th>Degree</th>
<th>Yes</th>
<th>Selected categories</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD</td>
<td>57% (36)</td>
<td>43% (27)</td>
<td>0</td>
</tr>
<tr>
<td>MLS</td>
<td>66% (81)</td>
<td>29% (35)</td>
<td>6% (7)</td>
</tr>
<tr>
<td>Other</td>
<td>23% (3)</td>
<td>77% (3)</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>60% (120)</td>
<td>36% (72)</td>
<td>4% (7)</td>
</tr>
</tbody>
</table>

Note: There were 199 respondents in the chi-square analysis.
Utility of the PhD degree in Librarianship

Eighty-five percent of respondents agreed that a PhD is useful for work in academic libraries as it equips librarians with:

1. disciplinary expertise (51 percent);
2. insight into scholarly communication, research, and publishing (46 percent); and
3. enhanced relationships with constituents through shared academic experiences and connections to research (39 percent).

Additionally, survey respondents recognized that a PhD education is associated with an academic mindset, intellectual rigor, being a life-long learner, bringing novel approaches to the job, project management skills, a commitment to education, and prior teaching experience. In this respect, librarians’ perceptions of the utility of the PhD degree in librarianship have not changed since the earlier studies of Day and Szurek, Lindquist and Gilman, as well as many others.23

Day and Szurek found that a PhD degree “positively affected [subject liaisons’] understanding of pedagogy, learning styles, educational psychology, and instructional technology; an in-depth experience with research strategies and methods; as well as an understanding of research culture, scholarly communication, and potential difficulties and roadblocks encountered during a large research process, such as a thesis.”24 The survey by Lindquist and Gilman highlighted the following skills that PhD holders acquired during their studies and used in their current library jobs: knowledge of the research process in a subject area, familiarity with scholarly communication, subject expertise, knowledge of the literature in the subject area, teaching experience, and language skills.25 A survey by Vitae found parallels to the above-listed skills in a study of key transferable competencies reported by doctoral graduates that leave university research and are successful in their new roles. These included: communication, critical
thinking, problem-solving, teamwork and collaboration, independent working, project management, adaptability, time management, and networking.26 “The PhD is more than the ‘academic ticket,’” states Michael Ridley, “it is evidence of scholarship at a level commensurate with academic responsibilities and obligations.”27

The majority of respondents indicated that the PhD’s usefulness for librarianship depends on the type of position. The PhD degree was generally agreed to be an advantage for positions where subject knowledge and mutually respectful relationships with faculty are of paramount importance. As such, the survey participants in the current study felt that subject liaison positions could benefit the most from hiring PhD holders. Other librarian positions, where having a PhD was identified as a bonus, were special collections, administration, archives, collection development, and instructional services. Interestingly, Lindquist and Gilman showed that doctorate degree holders were especially likely to work in collection development and rare books or special collections. Considering that 59 percent of the survey respondents from Lindquist and Gilman’s study were PhD holders in the Humanities and Arts, it seems unsurprising that collection development and rare books or special collections were focal areas for many of those doctoral degree holders, at least in 2006. In fact, Lindquist and Gilman mention that the majority of their survey respondents would be retired by 2010.28 For comparison, in present study, only five percent of librarians in these positions held a PhD degree.

The Research Aspect of Librarianship

PhD respondents emphasized research expertise (73 percent) and enhanced relationships with their academic constituents (52 percent) as prime benefit of a PhD subject degree. Considering that PhD holders spend a substantial part of their graduate school training in performing original research, it is understandable that their research experience and skill sets are considered a primary asset. Since the librarians in this study worked in research universities, where being knowledgeable about the research cycle is of value, it was interesting to see that the research-related benefits of a PhD degree for librarians were acknowledged by only 32 percent of MLS holders, whereas the disciplinary expertise of PhD holders was equally acknowledged as a benefit by both PhD and MLS holders. A possible explanation for this discrepancy may be the saliency of research skills for both groups, with the benefits of deep research experiences being more salient for PhD holders.
The results also showed that most librarians in academic and research libraries, both PhD and MLS holders, are encouraged to conduct research by their supervisors. Seventy-two percent of respondents were spending over 20 percent of their working time on research and dissemination of its findings, and nearly half of them (48 percent) applied for grant funding. In line with the observed engagement in research by academic librarians, ALA lists the “need to be able to discover, interpret, and generate research…” and “…understand the importance of engaging in the research foundations and scholarly communications” as one aspect of its core competencies for librarians related to research and evidence-based practice. A strong demand for a community of confident librarian-researchers is also evidenced by the proliferation of educational programs and institutes such as the Institute for Research Design in Librarianship (IRDL), the Medical Library Association Research Training Institute for Health Sciences Librarians (MLA RTI), and the very successful CLIR Postdoctoral Fellowships in Academic Libraries program. Moreover, the ability of library and information professionals to competently produce research is required for the LIS field to be a profession. As Primoz Juznic and Jose Urbanička explain: “Research does help LIS professionals to learn more about their work, perform better and offer a higher level of service to their clientele and users.”

A report commissioned by Research Libraries UK (RLUK) in 2021 “to investigate the role of academic and research library staff as partners and leaders in the initiation, production, and dissemination of academic and scholarly research” concluded that libraries are becoming increasingly important partners in research, which provides an opportunity “for library staff to further contribute as active collaborators and leaders in research.” Denise Koufogiannakis and Ellen Crumley alert, however, that librarians lack three important components that set the stage for research: training, experience, and an interest. The latter stems from a commonplace absence of “a positive research environment that includes high institutional expectations; a variety of institutional supports for research; and extrinsic rewards, such as salary increases, tenure, promotion, and opportunities for advancement,” which is critical for creating an accomplished librarian-researcher. Authors plead with library administrators to fulfill their responsibility of establishing a supportive and encouraging environment for librarians’ research and promoting librarians’ research practices to the academic community within the library.

Montelongo et al. presented compelling evidence that the “prestige of a library is enhanced when librarians publish scholarly articles and make conference presentations in their nonlibrary disciplines” and offered suggestions on balancing traditional librarian duties with pursuing a nonlibrary research agenda. Further, Montelongo et al. noted that librarians with doctorate degrees “have background in research methods necessary to undertake research in both librarianship and their nonlibrary field.” Indeed, among this study’s participants, PhD holders were more likely than MLS holders to be engaged in research activities (87 versus 63 percent, respectively) and grant writing (62 versus 40 percent, respectively). This opens an opportunity for PhD-holding librarians to serve as mentors to other colleagues interested in developing their research skills. The authors’ argument is not that PhD-holding librarians are best suited to conduct research projects; there are many competent MLS-holding librarian-researchers. It would likely be of benefit to the work of libraries, however, if the extra research experience and training held by PhD-holding librarians was harnessed effectively.
The Teaching Aspect of Librarianship

Surprisingly, in the present study, the prior teaching experience acquired by many PhD holders was mentioned as a benefit by only seven percent of respondents. Similarly, when asked which areas of librarianship could benefit from hiring PhD holders, learning and teaching received only 35 percent of the endorsements across all respondents. This finding is intriguing, given the fact that most PhD candidates teach several semesters of college-level courses as part of their PhD programs and, through this process, often obtain valuable instructional training. In addition, many PhD candidates are directly involved in mentoring and tutoring undergraduate students. This experience is valuable considering the ever-increasing role of academic librarians as educators and an ongoing transformation of their teaching identities in response to the needs of their students and the expectations of their faculty. Indeed, both PhD and MLS holders who responded to this survey reported providing instruction to graduate and undergraduate students in both small (10-20 students) and large groups (> 100 students), and nearly half of them have taught over ten sessions per semester. Certainly, the pedagogical experience of PhD holders can be a useful asset to academic libraries, where teaching is one of the job responsibilities of many librarians.

Tensions regarding Educational Backgrounds

Based on the above-mentioned benefits, one might expect that PhD holders would be welcome in academic librarian positions. However, only 17 percent of librarians surveyed felt “extremely welcoming” toward PhD holders, and the majority of those who felt this way were PhD holders themselves. It is also interesting that the acceptance of PhD holders within academic libraries varied among generations. Younger generations of librarians (hired after 2009) were more positive about the hiring of PhD holders without MLS degrees, while older generations of librarians (hired before 2009) were less welcoming. This outcome resonates with the result of Betsy Simpson’s study that showed library directors who are either new or spent more than 20 years in their positions were more likely than those with 5 to 20 years of experience to require an MLS degree.

The authors also asked respondents about their reasons for preferring MLS holders over PhD holders in academic libraries. Survey participants suggested that PhD holders may lack generalist knowledge, an understanding of the full spectrum of services and partnerships, and thus, lack a grasp of the library’s function, culture, and its core values, such as privacy and intellectual freedom. While those things are important,
they are not specifically unique to PhD holders (just as engagement in research is not specific to PhD holders). Survey findings indicate that elements of library culture, such as autonomy, institutional norms, institutional support, work schedule, acclimatization to new colleagues, experience with vendors, generalist skills, subject expertise, and general responsibilities in one’s position are challenges encountered by both PhD and MLS holders when they first enter librarian jobs. Many of these skills and values are role-specific and should be included in the onboarding course for any new librarian, regardless of their educational background.

Tensions between MLS and PhD colleagues were recognized as the second major drawback in hiring PhD holders. About half of MLS holders felt negatively about PhD holders taking librarian jobs. Some respondents with an MLS degree expressed concerns about sharing the library workplace with PhD holders. It was not uncommon for MLS holders to worry that PhD-holding librarians view librarianship as an “unimportant career,” “a career afterthought,” or “a temporary career.” Some MLS-holding respondents felt concerned about PhD holders who decided to “try librarianship” after failing to obtain a faculty position and were “insulted when PhD holders were given the rank, title, and salary of faculty librarians.” Such social dynamics would benefit from facilitated conversation and perspective taking, so that negative views of colleagues do not hamper workplace collaborations and put a strain on relationships. Further, human resources departments should pay increased attention to title and salary equity issues when hiring librarians of all backgrounds, so that disparities between PhD holders and MLS holders are mitigated and do not create rifts or disadvantaged groups of employees.

Ten percent of respondents, the majority of whom were MLS holders, viewed the absence of an MLS degree for PhD-holding librarians as a drawback. However, respondents were more positive about the hiring of PhD holders who also had an MLS degree. Survey responses indicated a clear concern that the credibility and value of the MLS degree would be compromised with the increased hiring of librarians who had only the PhD. One of the respondents shared: “Hiring PhD holders normalizes that practice for librarians, potentially raising the bar for requirements for other librarians.” Another respondent compared hiring PhD holders to the “academizing of nursing where frontline skills became devalued to educational achievement.” Addressing these reasonable concerns is not easy but finding explicit and skilled ways to do so will increase the sense of fairness and collegiality in academic libraries.

Current Roles of Librarians in Academia

The present study shows that many current academic librarians serve on institutional governing bodies or committees, provide instruction to both graduate and undergraduate students, and are engaged in doing research and disseminating scholarly outputs. In many respects, academic librarians are true academics, and indeed, this is how 60 percent of survey respondents felt. Most survey respondents held faculty status, which is well justified considering the scope of activities in which librarians take part. Unfortunately, the Standards for Faculty Status for College and University Librarians assembled by ACRL are rarely implemented fully at any given institution. The faculty status for librarians is often nominal, wherein librarians are not eligible for sabbaticals or grants.
that are available to other research faculty. Other PhD-holding faculty in university systems do not entirely understand the academic librarians’ roles in educating students and conducting original research, and they do not view the terminal degree of the master’s level librarian as a qualifying credential for faculty status.

When the authors asked whether librarians who are academics should have similar academic training to their faculty colleagues, the majority answered “no.” In fact, only 16 percent of librarians who perceived all librarians as academics, and 29 percent of librarians who considered only some librarians as academics, agreed that academic librarians should have the same academic training as other academic faculty. This is in line with a 2018 survey study conducted by Ridley, who found that “while the PhD may be important and valuable for the individual, establishing it as a requirement seems premature and even unwanted.” This is understandable considering numerous existing opportunities to enhance librarians’ expertise through attendance at specialized schools, online and/or in-person training sessions, as well as through mentoring and invaluable on-the-job experience.

While not all librarians may need a PhD, PhD holders are needed in academic libraries. Deanna Marcum, President of CLIR when its postdoctoral fellowship was created, explained that in order to remain “partners in the scholarly enterprise,” the role of academic librarians must evolve along with the emerging technology and knowledge foundation. In exploring the roles of library liaisons, Day and Szurek found that survey respondents with a doctoral degree “could better assess the value and relevancy of resources, match the research interests of faculty with available materials, and make informed selection and deselection decisions with less faculty feedback.” Eleanor Warren noted that “Doctoral graduates are suited to the new roles in scholarly communication and research support, in different, but complementary, ways to those with library and information science qualifications.” Rachel Clarke and Young-In Kim warned that “lack of diversity in educational and disciplinary backgrounds” of librarians “leaves a disconnect with the most recent calls for increased research, resources, and education.”

Recommendations

To foster a welcoming environment for PhD holders in academic libraries, the authors recommend:

- Library leaders acknowledge and harness the research and teaching expertise and abilities of individuals with PhDs and utilize their strengths to enhance the role of academic libraries in research and teaching.

- Library administration and human resources departments provide opportunities for PhD holders to share and further develop their skills.

To ameliorate tensions between PhD and MLS holders within academic libraries, the authors suggest:

- Library leaders provide an incentivized, welcoming environment for various types of intercultural and cross-unit collaborations, wherein librarians with different educational backgrounds and disciplinary knowledge can work together and benefit from one another’s unique perspectives.
• Human resources departments carefully consider title and salary equity issues when hiring new librarians to ensure that no disparities exist between employees doing similar work.

To address the concerns that PhD holders, as well as many MLS holders, may not be familiar with library function and culture and the nature of their librarian duties when they first enter the librarianship, the authors recommend:

• The onboarding course for any new librarian position address topics such as library culture, institutional norms, institutional support, vendor-interaction strategies, overview of various library departments, one’s work schedule, and general responsibilities in one’s position. As part of an on-boarding process, it is important to offer meetings with new colleagues, constituents, and vendors.

To promote diversity in educational and disciplinary backgrounds of librarians, the authors advocate:

• When appropriate, job postings for librarian positions consider a relevant advanced degree as equivalent to an MLS. Position descriptions might include language such as, “the ALA-accredited master’s degree or equivalent combination of a relevant advanced degree and experience” to signal openness to hiring from diverse educational backgrounds.

Study Limitations

The authors acknowledge that the sampling strategy for this study had certain drawbacks. One of this was the estimated response rate of 3.24 percent. Low response rates are known to stem from survey fatigue, survey length, and general indifference. As noted in previous studies, the response rates may be convenient but poor proxy for response bias. Yet, the authors realize that in absence of any financial incentive, the survey may primarily appeal to people holding strong opinions on the subject.

In utilizing listservs for survey sampling, the authors acknowledge difficulty in precisely evaluating how well the survey responses represent the population under study. The authors did ask respondents to identify their disciplinary background (Table 2), their area of work (Table 3), and their years of experience in librarian positions (Table 4). Additionally, to enrich the sampling strategy based on listservs alone, the survey was distributed to librarians at a large academic library in the Midwest United States. The survey had a limited number of demographic questions, which made it difficult to address the role of intersectionality in librarians’ perspectives. In a follow-up study, the authors plan to include demographic questions that could add more depth and nuance to the research questions.

The authors made their best effort to distribute the survey within the two-weeks period but the fact that not all listservs had the same amount of time to respond (Table 1) could potentially reduce the response rate for certain groups. To account for this difference, a field period of eleven weeks was chosen, based on previous recommendations for online surveying. A post-hoc assessment of response rates showed that the field period of four weeks would be sufficient.
Finally, the authors acknowledge that perceptions may have changed since the time of survey distribution. The COVID-19 pandemic and research personnel leaves caused a postponement of survey analysis. Despite the delays, the authors believe that this and similar studies have an important place in the ongoing conversation about the post-pandemic workplace culture in academic libraries.53

Conclusion

The present study demonstrated that librarianship is a viable career option for PhD holders, especially in subject liaison positions. It is generally recognized that a PhD degree is associated with disciplinary expertise, trust and respect for faculty and students, and experience-based insight into the research lifecycle. The latter can be especially useful in finding innovative ways to engage with the academic community through the development of new services as well as an independent research agenda.

It is worth noting, however, that academic libraries are complex environments, where social, economic, demographic, and educational diversity among librarians has yet to be achieved.54 As such, PhD holders in librarian roles reported their skills being underused and their opinions undervalued. Data suggest that one of the main reasons for wariness about hiring PhD holders in libraries is the risk of devaluing the MLS degree and concern of MLS holders over PhD becoming a requirement for librarian positions. The conundrum revealed in the survey responses is that although the majority of librarians in academic libraries perceive themselves as academics, they are uncertain about the idea of having a similar academic training as other academic faculty. The authors’ argument is not that the PhD should be a requirement but that moving toward a truly diverse and respectful environment would benefit the work of libraries overall, empower its employees, and enrich relationships with the constituents that libraries serve. It is the authors’ hope that the workplace climate of academic libraries can provide welcoming spaces for librarians with a variety of educational and disciplinary backgrounds.

In the future, the authors would like to explore whether acceptance of PhD-holding colleagues in librarianship also varies among disciplines, as STEM librarianship, for example, has long recognized the importance of recruiting beyond the MLS.

Acknowledgements

The authors thank all study participants for taking the time to complete the survey and share their opinions. The authors gratefully acknowledge librarians Sigrid Anderson and Loyd Mbau for their help in survey design. The authors are also grateful to Lori Tschirhart and Svetla Baykoucheva for their insightful discussions about this article, and to Clarence Tolliver and Claire Salant for their help with manuscript editing.

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Appendix A

Survey Instrument: Transitioning from PhD to Librarianship

Transitioning from PhD to Librarianship

Dear participants,

This survey will help us to understand the current perception about the status of librarians holding the PhD degree. Please take this survey only if you serve in academic library. The University of Michigan Health Sciences and Behavioral Sciences Institutional Review Board has determined that this research is exempt from IRB oversight.

Thanks,

1. In your opinion, is a PhD useful for academic librarians?
   Mark only one oval.

   - Yes
   - No
   - Only for positions where faculty relations and/or subject expertise are important
   - Other

2. If you replied Other in previous question, please specify here

3. How do you feel about PhD-holders without MLS in new librarian roles?
   Mark only one oval.

   - Not welcoming
   - Extremely welcoming

4. In your opinion, do PhD-holders need to additionally have MLS (or similar) degree for librarian positions?
   Mark only one oval.

   - Yes
   - No
   - Only for some
5. Indicate librarian jobs for which candidates MUST demonstrate MLS degree in addition to PhD?

Check all that apply.

- Subject liaisons
- Instructions
- Collections
- Archives
- Rare books/special collections
- Cataloging
- Reference
- Administration
- Other

6. If you answered Other in previous question, please specify here.

7. Which areas of librarianship could benefit from hiring PhD-holders? (check all that apply)

Check all that apply.

- Subject liaisons
- Instructions
- Collections
- Archives
- Rare books/special collections
- Cataloging
- Reference
- Administration
- Other
- I don’t know

8. If you answered Other in previous question, please specify here.

9. What benefits or positive attributes do PhD-holders bring to academic librarian positions?

10. What drawbacks do you see from hiring PhD-holders?
11. Do you consider librarians academics?

Mark only one oval.

- Yes
- No
- Only some of them

12. For librarians who are academics, should they have the same academic training (i.e. the PhD) as their faculty colleagues?

Mark only one oval.

- Yes
- No

13. CLIR (Council on Library and Information Resources) - Postdoctoral Fellowships in Academic Libraries that aims to bring newly-minted Ph.D. holders in the humanities into academic libraries.

Mark only one oval.

- I have heard of CLIR but never applied
- I am one of CLIR fellows
- I have never heard of this program before
- I have applied but was not granted this fellowship

14. In which discipline is your highest education?

Mark only one oval.

- Humanities & Arts: History, English, Foreign Language, Philosophy, Music, Theatre
- Professions/Applied Sciences: Law, Health Sciences, Education, Business, Administration.
- Social Sciences: Anthropology, Political Sciences, Geography, Communication, Sociology, Linguistics, Psychology, Archaeology
- Natural Sciences: Life Sciences, Physical Sciences Other

15. If you answered Other in previous question, please specify
16. Indicate your highest level of educational attainment
Check all that apply.
- [ ] Postdoc in subject discipline
- [ ] PhD
- [ ] MLS or analogous
- [ ] MS, MBA, or MD
- [ ] BS
- [ ] BA
- [ ] Other

17. Do you have faculty status?
Mark only one oval.
- [ ] Yes
- [ ] No

18. Have you ever served in institutional governing bodies and/or committees?
Mark only one oval.
- [ ] Once
- [ ] More than once
- [ ] I applied but never had a chance I’m not interested

19. In your position as Librarian, have you ever been granted institutional or national research funding?
Mark only one oval.
- [ ] Once
- [ ] Many times
- [ ] Never, although I tried
- [ ] Never, but I never tried

20. Are you encouraged to conduct research for your position?
Mark only one oval.
No [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 Very much so
21. How much of your working time do you spend doing research and disseminating its results?

Mark only one oval.
- I do not do any research
- Up to 20% of my time is spent on research
- I spend about half of my work time doing research
- I spend over 60% of my work time on research

22. Do you collaborate with librarians-PhDs?

Mark only one oval.
- Yes
- No
- Maybe, I have never asked whether they have a PhD

23. If you perform any teaching in your job, select all that apply.

Check all that apply.
- Graduate students
- Undergraduate students
- Do not teach at all
- Classes of 10-20 students
- Classes over 100 students
- Less than 5 sessions/semester
- 5-10 sessions per semester
- Over 10 sessions per semester

24. If you have a PhD, did you earn it before or after becoming a librarian?

Mark only one oval.
- Before becoming a librarian
- After I became a librarian
- Do not have PhD
- While I worked as a librarian
25. How many years have you spent in your job?
Mark only one oval.
☐ Less than 2
☐ 2-5
☐ 6-10
☐ 11-20
☐ over 20

26. Which challenges did you encounter when transitioning to Librarianship?

27. What is your main area of work?
Mark only one oval.
☐ Subject liaison
☐ Archives
☐ Cataloging
☐ Reference
☐ Administration
☐ Rare books/special collections
☐ Instructions
☐ Collections Other

28. What do you like most about your job?

29. Any comment?
### Appendix B

Contacted electronic discussion lists (with member counts as of Mar 15, 2021).

<table>
<thead>
<tr>
<th>Listserv</th>
<th>Acronym</th>
<th>Member count</th>
<th>Date posted in 2019</th>
<th>Discipline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry librarians at large research universities</td>
<td>ARL-Chem</td>
<td>66</td>
<td>April 19</td>
<td>Natural Sciences</td>
</tr>
<tr>
<td>Geoscience Information Society</td>
<td>GEONET</td>
<td>400</td>
<td>April 23</td>
<td>Natural Sciences</td>
</tr>
<tr>
<td>Chemical Information Sources Discussion List</td>
<td>ChmInf-l</td>
<td>1,296</td>
<td>April 18</td>
<td>Natural Sciences</td>
</tr>
<tr>
<td>ACRL Science &amp; Technology Section Discussion List</td>
<td>STS-I</td>
<td>2,000</td>
<td>April 23</td>
<td>All</td>
</tr>
<tr>
<td>Librarian members of the Africana</td>
<td>Afrilbs- revendors</td>
<td>83</td>
<td>April 25</td>
<td>Social Sciences</td>
</tr>
<tr>
<td>Librarians Council</td>
<td>Hasafan</td>
<td>1,000</td>
<td>April 26</td>
<td>Humanities &amp; Social Sciences</td>
</tr>
<tr>
<td>Association of Jewish Libraries</td>
<td>les-l</td>
<td>645</td>
<td>April 30</td>
<td>Humanities &amp; Arts</td>
</tr>
<tr>
<td>ALA Literature in English Section Discussion List</td>
<td>History- I-RUSA</td>
<td>525</td>
<td>April 30</td>
<td>Humanities &amp; Social Sciences</td>
</tr>
<tr>
<td>University of Michigan Librarians</td>
<td></td>
<td>154</td>
<td>May 1</td>
<td>All</td>
</tr>
</tbody>
</table>
## Appendix C

Coding of open-ended responses: categories, their definitions, and the Cohen’s interrater reliability (two raters).

<table>
<thead>
<tr>
<th>Category</th>
<th>Definition</th>
<th>k</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Q1. In your opinion, is a PhD useful for academic librarians?</strong>&lt;br&gt;Offered Answers: Yes/No/Only for positions where faculty relations and/or subject expertise are important/Other.</td>
<td></td>
<td>0.96</td>
</tr>
<tr>
<td>Yes, useful</td>
<td>PhD is useful or can be useful, or in general, more education is useful, or useful for a specific position(s).</td>
<td></td>
</tr>
<tr>
<td>No, not useful</td>
<td>PhD as a degree is not useful.</td>
<td></td>
</tr>
<tr>
<td>It depends on</td>
<td>It depends on some factors.</td>
<td></td>
</tr>
<tr>
<td><strong>Q2. Which areas of librarianship could benefit from hiring PhD holders?</strong>&lt;br&gt;Offered Answers: Subject liaisons/Instructions/Collections/Archives/Rare books/special collections/Cataloging/Reference/Administration/I don’t know/Other.</td>
<td></td>
<td>0.72</td>
</tr>
<tr>
<td>All jobs</td>
<td>All jobs could benefit.</td>
<td></td>
</tr>
<tr>
<td>No job</td>
<td>No job could benefit.</td>
<td>0.49</td>
</tr>
<tr>
<td>It depends on</td>
<td>It could benefit depending on.</td>
<td>0.86</td>
</tr>
<tr>
<td>Other jobs</td>
<td>Jobs other than those in offered answers: visualization, statistical, writing centers, first year experience, project management, “functional experts,” particularly in support of campus research, digital scholarship, data science, data services, data management, data curation, digital humanities, systems librarians, IT, website designer, GIS (geographic information system), acquisition editors in university press.</td>
<td>0.96</td>
</tr>
<tr>
<td><strong>Q3. Indicate librarian jobs for which candidates MUST demonstrate MLS degree in addition to PhD?</strong>&lt;br&gt;Offered Answers: Subject liaisons/Instructions/Collections/Archives/Rare books/special collections/Cataloging/Reference/Administration/I don’t know/Other.</td>
<td></td>
<td>0.79</td>
</tr>
<tr>
<td>MLS is useful but not MUST</td>
<td>MLS degree is useful but shall not be required.</td>
<td></td>
</tr>
<tr>
<td>No job MUST have MLS</td>
<td>There is no job that shall require an MLS degree.</td>
<td></td>
</tr>
<tr>
<td>All Librarian jobs MUST have MLS</td>
<td>All Librarian jobs shall require an MLS degree.</td>
<td></td>
</tr>
<tr>
<td>It depends on</td>
<td>Whether MLS is required or not depends on.</td>
<td></td>
</tr>
<tr>
<td>Other jobs</td>
<td>Jobs other than those in offered answers: systems librarians, IT, resource sharing.</td>
<td></td>
</tr>
</tbody>
</table>
### Q4. Which challenges did you encounter when transitioning to librarianship?

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skills &amp; knowledge</td>
<td>Lack of librarian skills or subject expertise, or not fully understanding the role of the position.</td>
<td>0.80</td>
</tr>
<tr>
<td>Library work culture</td>
<td>Acceptance and understanding of the library culture, autonomy, institutional norms, institutional support, interactions with vendors or colleagues, fixed schedule, racial issues.</td>
<td>0.68</td>
</tr>
<tr>
<td>None</td>
<td>There were no challenges, or not much, including when someone says: “No challenges because I was trained as a librarian.”</td>
<td>0.70</td>
</tr>
<tr>
<td>Work &amp; Life</td>
<td>When transition to the new job happened at the same time as unpredictable life challenges, like raising kids, or getting a degree.</td>
<td>0.40</td>
</tr>
<tr>
<td>Relations with faculty</td>
<td>Forming relationships with constituents, especially faculty.</td>
<td>0.66</td>
</tr>
<tr>
<td>Job search</td>
<td>Finding a job was challenging.</td>
<td>0.88</td>
</tr>
<tr>
<td>Tenure process</td>
<td>Any mention of tenure process and related stress.</td>
<td>0.80</td>
</tr>
<tr>
<td>Undervalued PhD</td>
<td>Mention of undervalued or underutilized PhD.</td>
<td>0.87</td>
</tr>
</tbody>
</table>

### Q5. What benefits or positive attributes do PhD holders bring to academic librarian positions?

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationships enhanced by Trust / Respect / Connection</td>
<td>Heigthen institutional perceptions about academic librarians, trust &amp; respect of constituents, administrators, ease of bonding with constituents, self-identifying with them, understanding their needs due to shared experiences.</td>
<td>0.76</td>
</tr>
<tr>
<td>Teaching</td>
<td>Teaching experience &amp; skills, ability to train students, develop curricula. Does not include statements about “commitment to education.”</td>
<td>0.80</td>
</tr>
<tr>
<td>Research</td>
<td>Research skills, experience, understanding of research process, scholarly communication, writing, publishing.</td>
<td>0.92</td>
</tr>
<tr>
<td>Disciplinary expertise</td>
<td>Knowledge, jargon, understanding of a topic, domain expertise.</td>
<td>0.87</td>
</tr>
<tr>
<td>Novelty</td>
<td>Different perspective on things, new strength, broader services.</td>
<td>0.51</td>
</tr>
<tr>
<td>Project management</td>
<td>Project management skills and administrative perspective.</td>
<td>0.75</td>
</tr>
<tr>
<td>Academic mindset</td>
<td>Being academic, having academic training, sense of integrity, intellectual rigor, and being life-long learners, being committed to education or advancing teaching and learning processes.</td>
<td>0.55</td>
</tr>
<tr>
<td>No or negative</td>
<td>No benefits or negative comments.</td>
<td>0.76</td>
</tr>
</tbody>
</table>
### Q6. What drawbacks do you see from hiring PhD holders?

<table>
<thead>
<tr>
<th>Drawback</th>
<th>Description</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of librarian skills and knowledge of library functions</td>
<td>Lack of understanding of library functions including culture, ethics, spectrum of services and partnerships, core values such as privacy and intellectual freedom, lack of librarian skills and general knowledge. This category does not include an absence of an MLS degree.</td>
<td>0.88</td>
</tr>
<tr>
<td>Lack of mutual respect</td>
<td>Lack of appreciation of PhD colleagues or by PhD colleagues, tension with colleagues, various negative comments about PhD colleagues not being interested in the job or taking it as a career afterthought, various discrimination issues, and comments about PhDs being less collaborative, or less willing to share.</td>
<td>0.89</td>
</tr>
<tr>
<td>None</td>
<td>Means solid none.</td>
<td>0.91</td>
</tr>
<tr>
<td>None if MLS</td>
<td>Many people replied None if MLS, so it was put in separate category.</td>
<td>0.68</td>
</tr>
<tr>
<td>It depends on</td>
<td>Means that there are no drawbacks unless and then goes some conditional statement. It does not include None if MLS that is in separate category.</td>
<td>0.74</td>
</tr>
<tr>
<td>MLS Devaluation</td>
<td>Devalue MLS.</td>
<td>0.82</td>
</tr>
<tr>
<td>Pay</td>
<td>Salary adjustment, either too low salary for PhD or fear of raising librarian salaries.</td>
<td>0.97</td>
</tr>
<tr>
<td>Lack of service focus</td>
<td>Low interest in providing librarian services.</td>
<td>0.65</td>
</tr>
</tbody>
</table>

### Notes

3. Marcum, “For University Librarians of the Future.”
4. Grosh and Weech, “Perceived Value of Advanced Subject Degrees.”
5. Grosh and Weech, “Perceived Value of Advanced Subject Degrees.”
7. Herubel, “To ‘Degree’ or Not to ‘Degree.’”


24. Day and Szurek, “Beyond the MLS.”

26. “What do research staff do next?”
43. Ridley, “Academic Librarians and the PhD.”
44. Crowley, “Redefining the Status of the Librarian.”


47. Day and Szur, “Measuring the Applications of the Subject Doctorate.”


