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RESEARCH ARTICLE

Research Productivity Among Scholarly Communication Librarians

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ABSTRACT

Introduction: A growing number of academic libraries have specialized their support for scholarly communication by creating new positions or by expanding units with a focus on providing relevant services. This study was undertaken to explore the extent to which librarians with scholarly communication responsibilities produce research and scholarship, their motivations for doing so, the nature of that productivity, and the perceived impact of that activity on their professional responsibilities.

Methods: The authors administered a survey of librarians who identified as having their primary job responsibilities in scholarly communication.

Results: Almost all study participants produced their own scholarly work. However, a high percentage indicated that they received no relevant training in their library degree programs, and the majority experienced imposter syndrome pertaining to their own scholarship. Although most respondents were motivated to produce research by institutional expectations for promotion and tenure, greater percentages were driven by personal or professional interests. In addition, participants indicated a strong correlation between producing their own scholarship and their ability to effectively carry out their professional responsibilities.

Discussion: There may be an emerging convention for scholarly communication librarianship, i.e., one that includes open education services. Findings suggest a need for scholarly communication training to be more prominent in library degree programs. They also point to the utility of making research production a job requirement, regardless of institutional expectations for professional advancement.

Conclusion: The authors argue for adjustments in library education curricula and the inclusion of research production in the portfolios of scholarly communication librarians. Future research directions are proposed.

Keywords: scholarly communication librarians, research productivity, imposter syndrome, library education

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IMPLICATIONS FOR PRACTICE

- The premise that producing research and scholarship improves professional practice
 in the library field is generally accepted, regardless of practitioners' functional roles.
 However, the results of this study suggest that producing their own scholarship may
 hold greater relevance for librarians who specialize in the provision of scholarly communication services.
- 2. Academic library administrators are encouraged to emphasize the importance of scholarship in the portfolios of scholarly communication librarians, regardless of institutional requirements for professional advancement.
- 3. Scholarly communication librarianship is a burgeoning specialty practice in the library field. However, the results of this study suggest that there are prevalent senses of unpreparedness and imposter syndrome among its practitioners. Library educators are therefore encouraged to adjust or complement library and information science (LIS) curricula to better prepare librarians as practitioners and scholars in this area.

INTRODUCTION

Two leading circumstances help to explain why scholarly communication represents either a new or an expanding service area in many academic libraries. The fundamental transformation of the scholarly information life cycle to a digital one has accentuated the need for expertise with new and evolving frameworks for information creation, dissemination, evaluation, and preservation. In addition, decreased governmental support for the academy and intensified competition for external funding is forcing postsecondary administrators to devote greater attention to the financial benefits that come from increasing the research productivity of their faculty. Libraries are favorably positioned to address these shifts, and accordingly, many have established strategic roles at their institutions to "develop more efficient, economical, and accessible models for research and scholarly communication" (Newman et al., 2007, p. 19).

Scholarly communication librarianship characteristically includes the provision of services related to scholarly publishing, open access, institutional repositories, research data, copyright, bibliometrics, and digital scholarship. More specialized services are also beginning to emerge in related areas of authors' rights, grant writing, funding compliance, and research integrity. Recognizing scholarly communication librarianship as a burgeoning area of professional practice, scholars in the field have examined its growth, diversification of roles, professional expectations, and challenges. Interestingly, however, no study to date has included an analysis of research productivity among the field's practitioners.

There are many reasons to study the research productivity of scholarly communication librarians. As noted by Wiberley et al. (2006), the production of research is a measure of health and strength in the field of librarianship generally. Furthermore, among the "main tenets identifying academic librarianship, the production of scholarship, or the requirement to publish, is a central component" (Simons, 2021, p. 29). Beyond the imperative from Wiberley et al. (2006) and Simons (2021) for all areas of academic librarianship to produce research, scholarly communication librarians may feel a greater obligation to engage in scholarship due to the focus and nature of their roles. Practitioners are expected to be leaders and experts in the provision of a wide variety of scholarly publishing-based services to research-producing faculty who are not only experts in their own fields but are often highly experienced in scholarly publishing themselves (Hackstadt, 2020; Owens, 2021). If "greater engagement with active channels of scholarly communication translates into better informed professional practice" (Hollister, 2016, p. 368), then librarians in this area should be producing scholarship as part of the natural scientific development of their own field and participating in the very structures and practices that they support in their daily work. For these reasons, the research questions driving this study are as follows:

- To what extent do librarians with scholarly communication responsibilities produce research?
- What is the nature of the research that they produce?
- What are their motivations for producing research?
- How does research production affect their professional practice?

LITERATURE REVIEW

Librarian research productivity

Discourse concerning librarian produced research is commonly framed by the persistent contestations over academic status of the field's practitioners. The related literature is profuse, chronologically ranging, and at times divisive. As noted by Kingma and McCombs (1995), "Faculty status for academic librarians is a topic which has consumed the attention of the profession for the last forty years" (p. 248), and "The philosophical debate as to the pros and cons of faculty status for academic librarians will probably continue *ad infinitum*" (p. 263). Still, the research aspect of librarians' work has long been codified by the field's leading professional associations. As early as 1972, the Association of College and Research Libraries (ACRL) underscored the importance of librarian produced research in its *Joint Statement on Faculty Status of College and University Librarians*.

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Notwithstanding the debate over academic status, there appears to be broad consensus over the challenges that come from librarians producing research. Hoffmann et al. (2017) listed the most common challenges as described in the literature: those are time constraints, lack of institutional support, and lack of relevant training or experience (p. 104). In addition, Silva et al. (2017) contended that the professional master's degree in library science provides "uneven preparation" to help librarians succeed in academia (p. 430). Recognizing that these challenges are "well described" in the literature, Kennedy et al. (2020) showed that scholars in this area have largely turned their attention to analyses of the influences on research successes (p. 182).

There also appears to be a broad consensus regarding the benefits of librarian produced research. In 1994, Black and Leysen laid a cornerstone by summarizing how being an active researcher sharpens professional skills, broadens perspectives, promotes stronger relationships with teaching faculty, and bolsters professional self-esteem. As it pertains to the present investigation, Black and Leysen (1994) also argued that producing research "fosters a broad perspective of the field, strengthens librarians' knowledge of current issues, shapes the dialogue surrounding those issues, and leads to innovative approaches and a responsiveness to change" (p. 230). These observations are also well described in the literature and have been upheld by decades of supporting research and opinion.

More recent studies on research productivity are focused on institutional support structures (Sheikh et al., 2020; Gill & Gosine-Boodoo, 2021), research collaborations (Monroe-Gulick et al., 2013; Kennedy et al., 2020), environmental cultures (Sapon-White et al., 2004; Walters, 2016), skill development (Exner, 2019; Crampsie et al., 2020; Shonhe, 2020), and the motivations that drive productivity (Fennewald, 2008; Perkins & Slowik, 2013; Hollister, 2016). The work of Hoffman et al. (2017) suggests that all these factors have an influence on librarian produced research. A related wing of scholarship in this area is focused on quantitative analyses of productivity among librarians in specific countries or geographic regions (e.g., Ramos-Eclevia et al., 2018; Fiawotoafor et al., 2019; Kha & Mai, 2019).

The literature also includes a tenuous but potentially troubling line of investigation that appears to indicate a long-term decline in librarian produced research. Blecic et al. (2017) and Finlay et al. (2013) confirmed this trend, continuing a narrative that was established through earlier studies by Wiberley et al. (2006) and by Mitchell and Reichel (1999). It would be useful to the profession in general to have more recent data to analyze. Still, if the findings of these successive works do constitute a trend, the implications may be stark. To this point, Wiberley et al. (2006) posited the following: "To compete in the marketplace of disciplines, relatively small and comparatively young fields such as LIS need knowledge of themselves and

of their standards more than do older fields such as chemistry and history that the general public as well as academics understand better" (p. 215). More to the purpose of the present investigation, however, Finlay et al. (2013) stressed that "The apparent disengagement of librarians from the traditional channels of scholarly communication will necessarily decrease librarians' familiarity with scholarly communication, and this in turn may affect how librarians, especially those employed at academic institutions, interact with students and academics who are conducting research" (p. 417).

Except for examinations of the productivity among health sciences librarians (Fenske & Dalrymple, 1992; Lessick et al., 2016), there appears to be a lack of previous investigation undertaken with the purpose of corresponding research productivity to individual functional areas within libraries. Therefore, the authors of this paper believe that the present investigation fills a gap in the professional literature, with particular interest to the growing field of scholarly communication librarianship.

Trends in scholarly communication librarianship

The relatively rapid growth of scholarly communication librarianship and demand for appropriately skilled librarians is a well-established phenomenon in the literature. The ACRL established the widely accepted scholarly communication definition in 2003¹, and, in 2010, the ACRL named it "... a top trend in academic librarianship" (ACRL Research Planning and Review Committee, 2010, p. 286). In a review of library job advertisements on the American Library Association jobLIST, Finlay et al. (2015) found that "[j]obs mentioning scholarly communication have increased each year since 2009" (p. 11). Today, the literature defines scholarly communication librarianship as "a core academic librarianship competency" (Bonn et al., 2020, p. 1).

The literature examining trends in scholarly communication librarianship describes emerging and diversifying competencies and responsibilities (Rodriguez, 2018; Fernández-Molina et al., 2020; Read & Cox, 2020) and explores the experiences and needs of practitioners in the workplace (Bonn et al., 2020; Owens, 2021). Scholarly communication skill areas have been defined by NASIG core competencies (Rodriguez, 2018), and the changing nature of this area of librarianship is illuminated by studies on job descriptions over time (Finlay et al., 2015; Xia & Li, 2015; Hackstadt, 2020). Expectations of scholarly communication librarians range from expertise on open access publishing and institutional repositories to the provision of digital scholarship and data management services. Increasingly, scholarly

¹ "[T]he system through which research and other scholarly writings are created, evaluated for quality, disseminated to the scholarly community, and preserved for future use" (ACRL, 2003, p. 1).



communication librarians are expected to develop dedicated areas of knowledge such as copyright expertise (Finlay et al., 2015; Fernández-Molina et al., 2020) and specialized technological skills (Read & Cox, 2020). Given such a diverse and demanding list of competencies, there appears to be a significant opportunity for practitioners to influence the advancement of the field by way of conducting their own research.

METHODS

The authors developed a Web-based questionnaire (see Appendix) to solicit input from librarians whose primary professional responsibilities are in scholarly communication. The term "scholarly communication" was defined for potential study participants as the system through which research and scholarship is created, evaluated, disseminated, and preserved through formal and informal channels. To further clarify, standard examples of scholarly communication services were given, including scholarly publishing, open access initiatives, library publishing, publication funding (i.e., subvention), institutional repositories, research data services, authors' rights and/or copyright, impact metrics, and digital scholarship.

The questionnaire was developed and administered on the Web and subscription-based Qualtrics XM platform, and it was pretested to assess clarity and to establish the average time required for completion. Instrument questions were designed to collect information about the extent to which scholarly communication librarians produce research and scholarship, their motivations for doing so, the nature of that productivity, and the perceived impact of that activity on their professional responsibilities. Study participants were also prompted to provide contextual information concerning their professional ranks and titles, their educational backgrounds, the Carnegie Classifications of their affiliated institutions, and the depth of their experience in scholarly communication librarianship.

To solicit relevant participation, the questionnaire was posted on the email-based ACRL Scholarly Communication Discussion Group community forum, which is open to all interested professionals and does not require membership. The questionnaire was distributed in February 2022; it was open for three weeks and generated 94 total responses. Nine insufficiently completed questionnaires were disqualified, resulting in a sample size of 85. At the time of this study, the ACRL Scholarly Communication Discussion Group was populated by 906 subscribers. The questionnaire instrument and all other aspects of this study were approved by the authors' institutional review boards. Collected data was stripped of any identifiable information, and it is openly available on the Open Science Framework website (Hollister & Jensen, 2022).

LIMITATIONS

A growing body of literature appears to show that survey-based research may be considered less substantial and less mandatory if participation is solicited through email (Daikeler et al., 2020). Nonetheless, the authors believed that this method was appropriate for commencing with an exploratory line of investigation, and they followed recommended best practices: e.g., multiple email reminders and a survey instrument that required less than ten minutes to complete. Given the ratio of respondents to the number of subscribers to the ACRL Scholarly Communication Discussion Group community forum, the findings in this paper are not generalizable. However, the authors would argue that the collected data are sufficiently sized and compellingly informative to allow for relevant analysis and commentary.

RESULTS

To simplify the reporting of the results, percentages are rounded to the nearest whole numbers. Therefore, the sum of percentages will not always equal 100. In addition, some study participants did not respond to all questions; data presented here are based on numbers and percentages of responses to each individual questionnaire prompt.

About the respondents

Two-thirds (67%) of respondents were affiliated with Carnegie Classification research universities, followed by 21% in master's/doctor of philosophy (MA/PhD)-granting institutions and 12% in four-year colleges. No respondents reported affiliations with community colleges. A total of 61% of the respondents had tenure related positions: 35% were tenure-track faculty, and 26% were tenured. A total of 19% were administrative or professional staff, 12% had non-faculty academic appointments, and 8% were non-tenure track faculty (e.g., clinical, extension, visiting and adjunct). All study participants self-identified as practitioners of scholarly communication librarianship. As shown in Table 1, the word "scholarly" (i.e., "scholarly communication," "scholarly publishing") was by far the most common term found in respondents' professional job titles (63%), and 58% had the phrase "scholarly communication(s)" in their titles. Another popular job title term was "open" (i.e., "open access," "open education," "open science"). The majority (55%) of respondents reported having scholarly communication work as a primary part of their professional portfolios for two-to-five years, 11% worked in that area for less than two years, and 34% worked in that area for six or more years.

Respondents were asked to specify their job responsibilities and were given a list of scholarly communication duties from which to choose. On average, survey respondents specified seven



Professional title includes term*	Number of respondents	Percent of respondents
Scholarly	52	63%
Open	12	14%
Data	9	11%
Digital	8	10%
Publish/publishing	8	10%
Scholarship	8	10%
Research	7	8%
Copyright	5	6%
Does not include any of above	3	4%

^{*}Some titles include multiple terms from this list.

Table 1. Most common terms in job titles

different specialty areas in their job portfolios, led by the provision of services related to open access initiatives (95%), scholarly publishing (90%), and institutional repositories (84%). Interestingly, nearly one-quarter (22%) of the respondents also selected the "Other" option and used a supplemental text box to add "open education," "open educational resources" (OER), or "OER" as a professional responsibility.

Ninety-six percent of the study participants reported having an advanced degree in library and information science (LIS). Strikingly, however, only one respondent among them believed that their LIS degree program provided adequate education or training to prepare for their current scholarly communication responsibilities. Greater than two-thirds (70%) of the respondents reported that they received "no relevant scholarly communications training" while earning their LIS degrees, and the remaining 28% reported having received "some" relevant education or training. A large majority (71%) of questionnaire respondents reported that they currently experience imposter syndrome related to their scholarly communication responsibilities. A total of 19% indicated that they had previously experienced imposter syndrome, and 11% had no experience with that condition.

Research productivity

Ninety-one percent of the study participants confirmed that producing research and scholar-ship was part of their professional portfolios. Cross-tabulating this data with information about the respondents showed a stronger relationship between their professional ranks than with the types of institutions in which they worked. Only 44% of administrative or professional staff reported that they produce research. Except for one non-tenured faculty respondent, the 9% of those who do not produce research were from this group. One hundred

Professional research expectations	Number of respondents	Percent of respondents
It is required	43	57%
It is encouraged	22	29%
It is based on personal prerogative	10	13%
Total	75	100%

Table 2. Expectation of research production in terms of professional responsibilities

percent of tenured faculty, tenure-track faculty, and those with non-tenure academic appointments reported that they produce their own research and scholarship. As shown in Table 2, greater than half of the research producing respondents reported that it is a requirement in their professional portfolios.

Study participants were prompted with a Likert scale of 1 to 5 to rate the value that they believe their institutions attribute to a set of scholarly outputs in terms of tenure, promotions, rewards, or merit pay: 1 being the lowest value, and 5 being the highest. As seen in Table 3, peer-reviewed journal articles emerged as the most valuable output, with a mean score ($\bar{\mu}$) of 4.88. Ninety-one percent of respondents ranked peer-reviewed journal articles with the highest value (5) to promotion, tenure, or other professional rewards. Two other scholarly output types received mean scores above 4: scholarly/creative books ($\bar{\mu}=4.47$) and research grants ($\bar{\mu}=4.32$). Conference presentations ($\mu=3.91$), scholarly/creative book chapters ($\mu=3.84$), and professional awards ($\mu=3.39$) received scores that placed them in the middle values. The lowest-scoring outputs included digital scholarship ($\bar{\mu}=2.93$), scholarly/creative exhibits ($\bar{\mu}=2.38$), and non-peer reviewed articles such as those in trade publications, weblogs, or newspapers ($\bar{\mu}=2.23$). Only peer-reviewed journal articles and conference presentations received no ranking votes below

Scholarly output types	Mean score $(5 = highest)$
Peer-reviewed journal articles	4.88
Scholarly or creative books	4.47
Research grants	4.32
Conference presentations	3.91
Scholarly or creative book chapters	3.84
Professional awards	3.39
Digital scholarship	2.93
Scholarly or creative exhibits	2.38
Non-peer reviewed articles*	2.23

^{*}E.g., trade publications, weblogs, newspapers, etc.

Table 3. Value attributed to different forms of scholarly productivity



a value of 3. All other scholarly outputs received scores that ranged from 1 to 5, except non-peer-reviewed articles, which did not receive any scores of 5.

Librarians with scholarly communication responsibilities reported that they are most likely to produce conference presentations, peer-reviewed journal articles, and non-peer reviewed journal articles. Every survey respondent reported giving at least one conference presentation, and 43% had more than 10 presentations listed on their curriculum vitae (CV). Fourteen respondents (19%) had authored a book, and 61% had written at least one book chapter. Peer-reviewed journal articles were produced by most respondents (95%), with the majority (59%) having between one and five on their CV, 15% with six to ten, and 21% with greater than ten. More than half of respondents had written at least one non-peer reviewed article (87%), research grant (63%), and/or book chapter (61%) or won a professional award (55%). Scholarly/creative exhibits, books, and digital scholarship were the least produced type of scholarship, with most respondents (81%) having none of these types of outputs on their CV.

Study participants were also asked whether their scholarly outputs were typically focused on LIS topics, a mix of LIS topics and those in other academic disciplines, or mostly non-LIS topics. Not surprisingly, 84% indicated that they produce mainly LIS-related research. However, 10% of the respondents reported that half of their scholarship is focused on non-LIS disciplines, and 4% conducted most of their research in non-LIS fields. Respondents who produced half or more of their scholarship outside of LIS topics specified the following academic fields: health sciences and nursing (3); business studies (2); nutrition/dietetics (2); veterinary medicine; humanities/creative studies; ethics; science and technology studies; women and gender studies; sleep and academic performance; public speaking; and student success. Three of these respondents co-authored or collaborated with faculty in the non-LIS disciplines, and six of them reported that they produce scholarship in multiple non-LIS fields.

Motivations for producing scholarship

The next set of questions was focused on respondents' motivations for producing scholarship. As shown in Figure 1, reappointment, tenure, or permanent appointment (RTP) was the highest ranked extrinsic motivator.

When asked to rank, on a Likert scale of 1 to 5, their own extrinsic motivations for producing research, respondents valued most highly the options of "Reappointment, tenure, or permanent appointment (RTP)" ($\mu = 4.31$) and "Promotion or professional advancement" ($\mu = 4.29$). Ranked slightly lower were "Professional expectations or post-tenure review"

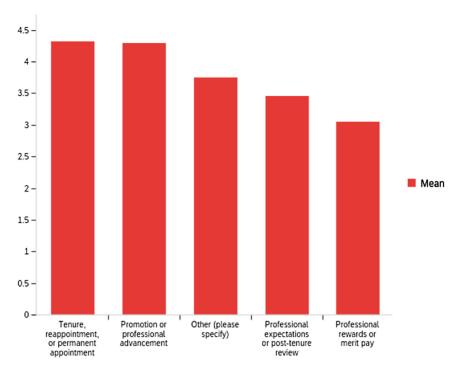


Figure 1. Extrinsic motivations for producing scholarship*

*Mean scores based on a Likert scale of 1 (lowest) to 5 (highest).

 $(\mu=3.45)$ and "Professional rewards or merit pay" $(\mu=3.15),$ in which the merit pay option received the most scores of 1 (lowest value) or 2. Of the 59 respondents who chose to rank RTP, 86% gave it the highest value (5), meaning that RTP is their greatest extrinsic motivator. Sixty-three percent of respondents ranked promotion/advancement with the highest value (5). Of the six relevant "Other" responses, two motivations were listed and ranked here that could be considered intrinsic: "My own interest" and "To get to present in person at conferences." Useful "Other" responses describing extrinsic motivations included "Respect among faculty," "Building strong portfolio in case I decide to seek other jobs," and "None of the above apply to my position." The average mean score for responses to this prompt was 3.77, which compares interestingly to the results of the following question about intrinsic motivations.

Intrinsic motivation options scored evenly and high, with all options gaining mean scores above 4 (see Figure 2). The top scorers were "Personal or professional interests" (μ = 4.48; 95% of scores 4 or 5) and "Personal or professional fulfillment" (μ = 4.40). "Intellectual curiosity," "Desire to improve professional performance," and "Desire to contribute to professional discourse" received mean scores of 4.27, 4.23, and 4.01, respectively. In the free response "Other" option, three respondents named "Opportunities to collaborate" as a motivation. The average mean score for responses to this prompt was 4.28.

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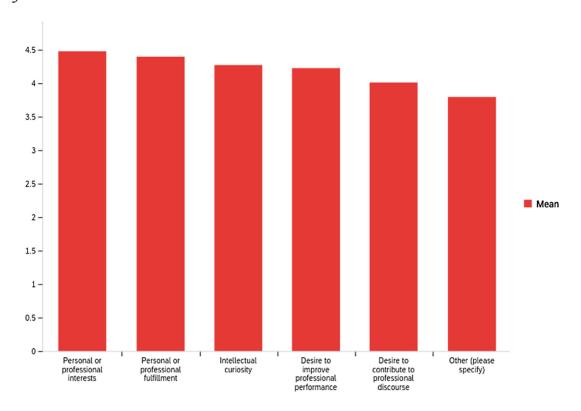


Figure 2. Intrinsic motivations for producing scholarship *Mean scores based on a Likert scale of 1 (lowest) to 5 (highest).

Finally, 57% of the respondents indicated that producing their own research and scholarship was "very important" to the effectiveness of carrying out their scholarly communication duties. Another 36% reported that producing scholarship was "important" to their professional work, 5% identified it as "not important," and 1% suggested that it was "irrelevant."

DISCUSSION

Results of this investigation may begin to establish key baseline patterns for understanding the nature of research productivity among scholarly communication librarians. For instance, 88% of the survey participants were affiliated with Carnegie-classified research universities or MA/PhD-granting institutions. Logic holds that research production is critical to the success of these types of institutions; therefore, there is greater need for librarians who specialize in scholarly communication services. A total of 81% of the respondents held academic appointments, and 61% were tenured or in tenure-track positions. These figures correspond well with previous research on librarian faculty status at research universities (Walters, 2016).

Nearly one-quarter of respondents to this survey, when asked to describe their job duties, chose to add an "Other" option and named "open education" as part of their responsibilities. Principles of open education are not included in older definitions of scholarly communication (e.g., Borgman, 2000; ACRL, 2003), nor are they shown in earlier job announcement research (Xia & Li, 2015) or included in the Association of Research Libraries' Scholarly Communication Librarian Position Description template (n.d.). More recent papers such as Hackstadt's (2020) examination of scholarly communication librarian position announcements identified numerous job descriptions with OER-related responsibilities, and Larson's (2020) analysis of open education librarian position descriptions showed emerging connections to scholarly communication services. Viewed together, these factors may indicate a recent and more generalized understanding of scholarly communication librarianship, including services related to open education. They might also signal an incipient catch-all name convention not found in previous research by Finlay et al., who held that "no clear title or job description for scholarly communication librarianship has emerged" (2015, p. 1). As it pertains to the present investigation, these data also suggest that librarians with scholarly communication responsibilities produce research in a wide variety of specialty areas, including open education. The authors believe that this finding might serve as the basis for an interesting line of future analysis.

The extent to which librarians with scholarly communication responsibilities produce research is addressed in two ways. Ninety-one percent of the respondents indicated that producing research and scholarship was part of their professional portfolios. Given the high percentage of respondent affiliations with research universities or MA/PhD-granting institutions, these figures are not surprising, and they are supported by previous studies showing the impact of institutional structures on research productivity (e.g., Hoffmann et al., 2017). However, the results raise some questions concerning the forms of research and scholarship being produced: e.g., the high percentages of works produced that yield lesser value in terms of professional advancement and, vice versa, the low percentages of works produced that are deemed to have greater value. On a Likert scale of 1 to 5, and with a mean score $(\bar{\mu})$ of 4.88, respondents ranked peer-reviewed journal articles as the most highly valued form of research productivity in terms of potential promotions, rewards, merit pay, or tenure. This was followed by the production of scholarly or creative books ($\bar{\mu} = 4.47$) and successful grant activity ($\bar{\mu} = 4.32$). However, the most reported form of scholarly production was conference presentations (100%), which was ranked fourth in terms of professional value ($\bar{\mu} = 3.91$). More strikingly, the third most reported form of scholarly output was non-peer-reviewed articles (87%), despite being ranked last in terms of professional value ($\bar{\mu} = 2.23$). A total of 95% of the respondents produced peer-reviewed journal articles; however, 59% produced between just one to five of those works, and notwithstanding that book authorship is characteristically among the most significant of scholarly undertakings, only 19% of the respondents reported having

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published such works. Altogether, these figures are intriguing, particularly given that tenure and promotion were the survey respondents' highest ranked extrinsic motivators for producing research.

The apparent misalignment between research production and the professional value associated with different forms of scholarly output may be explained in part by limited experience in the field: two-thirds (66%) of the respondents had zero to five years of scholarly communication experience. It may also be explained in part by voluminous published literature regarding the challenges to librarian produced research: time constraints, lack of institutional support, and lack of relevant training or experience (e.g., Hoffmann et al., 2017). However, two of the present study's key findings appear to provide more revealing insights. A total of 70% of the respondents received no scholarly communication education or training while earning their LIS degrees, and another 28% reported that they only received some relevant instruction. Respondents commonly interpreted this question in two ways: a lack of instruction in scholarly communication topics or a lack of research skills training. As noted by one study participant, "LIS curricula in general does not prepare students to produce their own research, much less to assist academics with theirs." In addition, 90% of the study participants reported that they experienced imposter syndrome as it pertained to their own scholarship, as illustrated by the following respondent commentary:

"My own feelings of imposter syndrome in various areas of schol[arly] com[munication] work directly relate to how much personal researcher experience I have: in areas where my experience is strong, I am highly confident, but in areas where my experience is weak (for instance, certain types of data, compliance procedures, and analysis methods that are common in other fields but haven't factored into my work), I feel far less prepared to teach or support others."

These factors may have implications in terms of LIS curricula. If the present study's participants are a fair representation of the scholarly communication librarian community, then there appears to be a need for more focused training on producing research, particularly for students on the academic librarian track. Complementary analysis by Hollister (2017) confirmed that LIS students rarely receive scholarly communication instruction, but once introduced to that subject matter, it piques their educational interests and helps to shape their career goals. Accordingly, there appears to be both a need and a desire for scholarly communication training to be more prominent in LIS curricula.

By far, the leading external motivations for producing research were conditions related to tenure ($\bar{\mu}=4.31$) and promotion ($\bar{\mu}=4.29$). This finding is not a surprise. It would be disingenuous to deny that professional advancement is a strong incentive for producing research,

particularly for this survey's respondents who were predominantly affiliated with research universities or MA/PhD-granting institutions. Other extrinsic motivators such as post-tenure review, rewards, and merit pay received mean scores well below 4.00. Interestingly, however, all intrinsic motivators listed on the questionnaire received mean scores greater than 4.00, and two of them, personal or professional interests ($\bar{\mu}=4.48$) and personal or professional fulfilment ($\bar{\mu}=4.40$), ranked higher than promotion and tenure. Although respondents were not prompted to comment on their intrinsic motivations for producing research, some did, as typified by this reflection: "I don't have to publish, but I want to." Some participants noted the intellectual curiosity aspect: e.g., "This is an evolving space, we need to know so much more." Others underscored an ethical standpoint: e.g., "It would be hypocritical to encourage the practice of open scholarship if I did not do it myself." Additional participants framed their motivations around the desire to improve faculty perceptions of librarians: e.g., "It raises the esteem of librarians in the eyes of non-library peers/colleagues," and "I believe this lends me more authority to speak about schol[arly] comm[unication] issues with my non-library faculty colleagues."

The average mean score data may also be helpful when considering extrinsic versus intrinsic motivations for producing research and scholarship. The survey question concerning intrinsic motivations yielded a higher average mean score ($\bar{\mu} = 4.28$) compared with extrinsic motivations ($\bar{\mu} = 3.77$). The authors presumed that extrinsic motivations—particularly RTP would correlate highly with scholarly production among respondents from research universities and/or those from MA/PhD-granting institutions. However, only 57% of all respondents indicated that producing scholarship was a requirement in their professional portfolios: 50% of those from research universities, 59% from MA/PhD-granting institutions, and 50% from four-year colleges. At the same time, all respondents reported higher average mean scores for intrinsic motivations than for extrinsic motivations: the only exception being RTP, as one would expect. Therefore, it appears to be true that RTP is a strong motivation for producing research. However, the authors believe that these data also suggest a natural attraction or a feeling of kinship among respondents as it relates to the production of research and scholarship. If so, this moves the discussion beyond the nature of scholarly communication librarianship at research universities and the related expectations for professional advancement. Accordingly, it would be useful for future investigation in this area to employ qualitative methods to gain a more nuanced understanding of scholarly communication librarians' relative experiences, attitudes, and behaviors, particularly compared with those of librarians who serve in other functional roles or who work in libraries with differing Carnegie Classifications.

Finally, a convincing 93% of the survey respondents indicated that producing their own research and scholarship had an impact on the effectiveness of carrying out their scholarly communication responsibilities. This perspective was emphasized by numerous



substantiating comments: e.g., "I would not be able to guide my faculty without the experience of publishing myself," "I apply what I do on the job to my research and vice versa," and "It should be a required qualification for anyone involved in scholarly communication librarianship to also be a producer of their own research and scholarship." The authors of this study would argue that this finding relates directly to job performance, and importantly, it stands aside from tiresome ongoing arguments concerning librarian faculty status and its association with research productivity. Notwithstanding the broadly held notion that research output improves practice in the library field more generally, the nature of the professional services provided by scholarly communication librarians appears to provide higher degrees of relevance and practical application to producing research and scholarship in that specialty area of the field. Given the arc of growth in scholarly communication librarianship and its emergent critical role within the academy, library administrators might do well to consider making research and scholarship a more prominent feature of practitioners' professional portfolios, regardless of institutional expectations associated with professional advancement.

CONCLUSION

This research appears to indicate high levels of scholarly production among librarians whose primary job responsibilities are in scholarly communication services, particularly those with academic appointments and those who are affiliated with Carnegie Classification research universities or MA/PhD-granting institutions. The authors were disappointed that the survey generated no responses from community college librarians, and they believe further investigation is merited concerning scholarly communication librarianship in this class of postsecondary institutions.

A large percentage of study participants were motivated to produce research by institutional requirements for professional advancement, but interestingly, higher percentages were intrinsically motivated by personal or professional interests and personal or professional fulfilment. Other intrinsic motivations to produce research, such as intellectual curiosity, and the desire to improve professional practice also ranked highly among survey respondents, which may indicate a particular affinity for the nature of scholarly communication work. Generally, the academic library field might benefit from future research that compares extrinsic and intrinsic motivations to produce research among librarians with different functional roles.

The majority of study participants reported producing scholarly products that yield lesser value in terms of tenure, promotion, rewards, and merit pay. The authors believe that there may be a correlation between this and one of this investigation's key findings: namely, the compellingly high percentage of respondents who reported that they received no or just some education or training in their LIS degree programs to effectively carry out their scholarly communication responsibilities. The authors would also argue that this may, in part, explain

another key finding: the equally compelling and high percentage of respondents who reported experiencing imposter syndrome as it related to their own scholarship. This aligns with previous research by Owens (2021), which showed greater levels of imposter syndrome among librarians with scholarly communication responsibilities compared with other types of academic librarians. Owens (2021) found that a surplus of professional responsibilities, as might reasonably be associated with scholarly communication roles and as shown in this examination, correlates with increased levels of imposter phenomenon. As it follows, Owens (2021) also found that greater research productivity negatively correlated with the prevalence of imposter syndrome among scholarly communication librarians. Given the growth of this specialty field, the authors of this study believe that scholarly communication education and training should therefore be more prevalent in LIS curricula. The recent OER+ ScholComm project (n.d.) is independently advancing this notion by supporting the creation of an open textbook for LIS programs to develop new scholarly communication librarians and to train current and future practitioners. Still, future research is encouraged that examines the extent to which scholarly communication subject matter is included in LIS curricula, the nature of that education or training, and whether and how it is evolving.

Finally, a persuasively high percentage of the survey participants reported that producing their own research and scholarship had a positive impact on their professional work. Although the notion that producing scholarship improves professional performance is generally understood, the types of services provided by scholarly communication librarians appear to provide higher degrees of relevance and practical application. Therefore, the authors would argue the need to produce research and scholarship may be greater among scholarly communication practitioners. Given the emergent nature of scholarly communication librarianship, the authors also contend that producing relevant research also provides practitioners with an opportunity to genuinely influence the advancement and direction of the field.

REFERENCES

Association of College and Research Libraries. (1972). *Joint statement on faculty status of college and university librarians*. American Library Association. https://www.ala.org/acrl/standards/jointstatementfaculty

Association of College and Research Libraries. (2003). *Principles and strategies for the reform of scholarly communication 1*. American Library Association. https://www.ala.org/acrl/publications/whitepapers/principlesstrategies

Association of College and Research Libraries, Research Planning and Review Committee. (2010). 2010 top ten trends in academic libraries: A review of the current literature. *College & Research Libraries News*, 71(6), 286–292. https://doi.org/10.5860/crln.71.6.8385

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Association of Research Libraries. (n.d.). *Generic template: Scholarly communication librarian position description*. https://www.arl.org/resources/generic-template-scholarly-communication-librarian-position-description/

Black, W., & Leysen, J. (1994). Scholarship and the academic librarian. *College and Research Libraries*, 55(3), 229–241. https://doi.org/10.5860/crl 55 03 229

Blecic, D., Wiberley S., Jr., De Groote, S., Cullars, J., Shultz, M., & Chan, V. (2017). Publication patterns of U.S. academic librarians and libraries from 2003 to 2012. *College and Research Libraries*, 78(4), 442–458. https://doi.org/10.5860/crl.78.4.442

Bonn, M., Cross, W., & Bolick, J. (2020). Finding our way: A snapshot of scholarly communication practitioners' duties & training. *Journal of Librarianship and Scholarly Communication*, 8(1). https://doi.org/10/2162-3309.2328

Borgman, C. L. (2000). Digital libraries and the continuum of scholarly communication. *Journal of Documentation*, 58(4), 412–430. https://doi.org/10.1108/EUM0000000007121

Crampsie, C., Neville, T., & Henry, D. (2020). Academic librarian publishing productivity: An analysis of skills and behaviors leading to success. *College and Research Libraries*, 81(2), 248. https://doi.org/10.5860/crl.81.2.248

Daikeler, J., Bošnjak, M., & Manfreda, K. L. (2020). Web versus other survey modes: An updated and extended meta-analysis comparing response rates. *Journal of Survey Statistics and Methodology*, 8(3), 513–539. https://doi.org/10.1093/jssam/smz008

Exner, N. (2019). *Development of research competencies among academic librarians* [Doctoral dissertation, University of North Carolina at Chapel Hill]. University of North Carolina at Chapel Hill. https://doi.org/10.17615/p159-ya91

Fennewald, J. (2008). Research productivity among librarians: Factors leading to publications at Penn State. *College and Research Libraries*, 69(2), 104–116. https://doi.org/10.5860/crl.69.2.104

Fenske, R. E., & Dalrymple, P. W. (1992). Factors influencing research productivity among health sciences librarians. *Bulletin of the Medical Library Association*, 80, 353–360.

Fernández-Molina, J.-C., Martínez-Ávila, D., & Silva, E. G. (2020). University copyright/scholarly communication offices: Analysis of their services and staff profile. *The Journal of Academic Librarianship*, 46(2), 102133. https://doi.org/10.1016/j.acalib.2020.102133

Fiawotoafor, T., Dadzie, P., & Adams, M. (2019). Publication output of professional librarians in public university libraries in Ghana. *Library Philosophy and Practice*, 2303. https://digitalcommons.unl.edu/libphilprac/2303

Finlay, C., Tsou, A., & Sugimoto, C. (2015). Scholarly communication as a core competency: Prevalence, activities, and concepts of scholarly communication librarianship as shown through job advertisements. *Journal of Librarianship and Scholarly Communication*, 3(1). https://doi.org/10.7710/2162-3309.1236

Finlay, S. C., Ni, C., Tsou, A., & Sugimoto, C. R. (2013). Publish or practice? An examination of librarians' contributions to research. *portal: Libraries and the Academy, 13*(4), 403–421. https://doi.org/10.1353/pla.2013.0038.

Gill, M., & Gosine-Boodoo, M. (2021). A case for purposeful mentorship in research and publishing at a Caribbean academic library. *Journal of Academic Librarianship*, 47(2), 1–13. https://doi.org/10.1016/j.acalib.2020.102302

Hackstadt, A. (2020). Leadership, development, and expertise: A qualitative content analysis of scholarly communication librarian position announcements. *Journal of Librarianship and Scholarly Communication*, 8, 1–19. https://doi.org/10.7710/2162-3309.2376

Hoffmann, K., Berg, S., & Koufogiannakis, D. (2017). Understanding factors that encourage research productivity for academic librarians. *Evidence Based Library and Information Practice*, *12*(4), 102–122. https://doi.org/10.18438/B8G66F

Hollister, C. (2017). Perceptions of scholarly communication among library and information studies students. *Journal of Librarianship and Scholarly Communication*, *5*(1), eP2180. https://doi.org/10.7710/2162-3309.2180

Hollister, C. (2016). An exploratory study on post-tenure research productivity among academic librarians. *Journal of Academic Librarianship*, 42(4), 368–381. https://doi.org/10.1016/j.acalib.2016.04.021.

Hollister, C., & Jensen, J. (2022). Research data for "Research Productivity Among Scholarly Communication Librarians." *Open Science Framework*. https://doi.org/10.17605/OSF.IO/B9DYW

Kennedy, M. R., Brancolini, K. R., & Kennedy, D. P. (2020). An exploratory study of accomplished librarian-researchers. *Evidence Based Library and Information Practice*, *15*(1), 179–217. https://doi.org/10.18438/eblip29655

Kha, S. M., & Mai, T. T. N. (2019). Doing research: An emerging task of academic librarians for university development in Vietnam. *portal: Libraries and the Academy, 19*(4), 615–634. https://doi.org/10.1353/pla.2019.0038

Kingma, B. R., & McCombs, G. M. (1995). The opportunity costs of faculty status for academic librarians. *College and Research Libraries*, 56(3), 258–264. https://doi.org/10.5860/crl 56 03 258

Larson, A. (2020). Open education librarianship: A position description analysis of the newly emerging role in academic libraries. *International Journal of Open Educational Resources*, *3*(1), 35–46. https://doi.org/10.18278/jioer.3.1.4

Lessick, S., Perryman, C., Billman, B. L., Alpi, K. M., De Groote, S. L., & Babin T. D. Jr., (2016). Research engagement of health sciences librarians: A survey of research-related activities and attitudes. *Journal of the Medical Library Association*, 104(2), 166–173. https://doi.org/10.3163/1536-5050.104.2.015

Mitchell, W., & Reichel, M. (1999). Publish or perish: A dilemma for academic librarians? *College and Research Libraries*, 60(3), 232–243. https://doi.org/10.5860/crl.60.3.232

Volume 11, 1

Monroe-Gulick, A., O'Brien, M. S., & White, G. W. (2013). *Librarians as partners: Moving from research supporters to research partners*. ACRL 2013 Proceedings. http://www.ala.org/acrl/sites/ala.org.acrl/files/content/conferences/confsandpreconfs/2013/papers/GulickOBrienWhite Librarians.pdf

Newman, K. A., Blecic, D. D., & Armstrong, K. (2007). Scholarly communication education initiatives: SPEC kit 299. Association of Research Libraries.

OER + ScholComm. (n.d.). Scholarly communication and open culture. https://lisoer.wordpress.ncsu.edu/book/

Owens, E. (2021). Impostor phenomenon and skills confidence among scholarly communications librarians in the United States. *College & Research Libraries*, 82(4), 490. https://doi.org/10.5860/crl.82.4.490

Perkins, G. H., & Slowik, A. J. W. (2013). The value of research in academic libraries. *College and Research Libraries*, 74(2), 143–157. https://doi.org/10.5860/crl-308

Ramos-Eclevia, M., Janio, R. V., Vinzon, M. R., Eclevia Jr., C. L., & Apolinario, R. R. U. (2018). Researching together: Exploring research productivity and collaboration of librarians in ASEAN countries. *Journal of the Australian Library and Information Association*, 67(3), 307–320. https://doi.org/10.1080/24750158.2018.1501868

Read, A., & Cox, A. (2020). Underrated or overstated? The need for technological competencies in scholarly communication librarianship. *The Journal of Academic Librarianship*, 46(4), 102155. https://doi.org/10.1016/j.acalib.2020.102155

Rodriguez, M. (2018). NASIG core competencies for scholarly communication librarians. *Technical Services Quarterly*, 35(3), 306–308. https://doi.org/10.1080/07317131.2018.1456869

Sapon-White, R., King, V., & Christie, A. (2004). Supporting a culture of scholarship for academic librarians. *portal: Libraries and the Academy, 4*(3), 407–421. https://doi.org/10.1353/pla.20040044

Sheikh, A., Malik, A., & Mahmood, K. (2020). Research practices of LIS professionals in Pakistan: A study of attitudes, involvement and competencies. *Journal of Information Science*, 48(5), 587–599. https://doi.org/10.1177/0165551520972033

Shonhe, L. (2020). Continuous professional development (CPD) of librarians: A bibliometric analysis of research productivity viewed through WoS. *Journal of Academic Librarianship*, 46(2), 102106. https://doi.org/10.1016/j.acalib.2019.102106

Silva, E., Galbraith, Q., & Groesbeck, M. (2017). Academic librarians' changing perceptions of faculty status and tenure. *College and Research Libraries*, 78(4), 428–441. https://doi.org/10.5860/crl.78.4.428

Simons, M. (2021). Academic librarianship: Anchoring the profession in contribution, scholarship, and service. Rowman & Littlefield.

Walters, W. H. (2016). The faculty subculture, the librarian subculture, and librarians' scholarly productivity. *portal: Libraries and the Academy, 16*(4), 817–843. https://doi.org/10.1353/pla.2016.0054

Wiberley, S. E., Hurd, J. M., & Weller, A. C. (2006). Publication patterns of U.S. academic librarians from 1998 to 2002. *College and Research Libraries*, 67(3), 205–216. http://dx.doi.org/10.5860/crl.3.205.

Xia, J., & Li, Y. (2015). Changed responsibilities in scholarly communication services: An analysis of job descriptions. *Serials Review*, 41(1), 15–22. https://doi.org/10.1080/00987913.2014.998980



APPENDIX: SURVEY QUESTIONNAIRE

- 1. What is your professional title (e.g., Scholarly Communications Officer, Open Science Strategist, Digital Scholarship Librarian, Research Data Specialist, etc.)?
 - [Text box]
- 2. Which of the following ranks best qualifies your current professional position?
 - Tenure-track faculty
 - Tenured faculty
 - Non-tenured faculty (e.g., clinical, visiting, extension, adjunct)
 - Non-faculty academic appointment
 - Administrative or professional staff
 - Other (please specify) [text box]
- 3. Please indicate the scholarly communication librarianship responsibilities that are included in your professional portfolio. (Please select all that apply.)
 - Scholarly publishing
 - Open access initiatives
 - Library publishing
 - Publication funding (i.e., subvention)
 - Institutional repositories
 - Open science services
 - Research data services
 - Authors' rights and/or copyright
 - Impact metrics
 - Digital scholarship
 - Other (please specify) [text box]
- 4. How long have scholarly communication responsibilities been your primary professional portfolio?
 - 0-1 year
 - 2-5 years
 - 6-10 years
 - 10+ years

- 5. Is the production of your own research and scholarship part of your professional portfolio in any way?
 - Yes
 - No

[Survey ends for respondents with "No" answers]

- 6. Which of the following best qualifies the production of your own research and scholarship in terms of your professional responsibilities?
 - It is required
 - It is encouraged
 - It is based on personal prerogative
- 7. Please indicate the value your institution attributes to the following forms of scholarly productivity in terms of your potential promotions, rewards, merit pay, or tenure. (Please rank each item on a scale of 1 to 5, with 1 being the lowest ranking and 5 being the highest.)
 - Scholarly or creative books 1 2 3 4 5
 - Scholarly or creative book chapters 1 2 3 4 5
 - Peer reviewed journal articles 1 2 3 4 5
 - Non-peer reviewed articles (trade publications, weblogs, newspapers, etc.)
 1 2 3 4 5
 - Research grants 1 2 3 4 5
 - Conference presentations 1 2 3 4 5
 - Digital scholarship 1 2 3 4 5
 - Scholarly or creative exhibits 1 2 3 4 5
 - Professional awards 1 2 3 4 5
- 8. Please indicate the numbers of the following scholarly accomplishments listed on your current curriculum vitae.
 - Scholarly or creative books 0 1-5 6-10 10+
 - Scholarly or creative book chapters 0 1-5 6-10 10+
 - Peer reviewed journal articles 0 1-5 6-10 10+
 - Non-peer reviewed articles (trade publications, weblogs, newspapers, etc.) 0 1-5
 6-10 10+
 - Research grants 0 1-5 6-10 10+



- Conference presentations 0 1-5 6-10 10+
- Digital scholarship 0 1-5 6-10 10+
- Scholarly or creative exhibits 0 1-5 6-10 10+
- Professional awards 0 1-5 6-10 10+
- 9. Does the body of your research and scholarly work focus mostly on library and information sciences (including scholarly communications) topics, or mostly on topics in other academic disciplines? (Choose one.)
 - Mostly library and information sciences-related topics
 - About half library and information sciences topics and half other disciplines
 - (Follow up: Which other disciplines? [text box])
 - Mostly non-LIS topics in other disciplines
 - (Follow up: Which other disciplines? [text box])
- 10. Please indicate the extent to which the following *extrinsic* motivators drive your research and scholarly production. (Please rank each item on a scale of 1 to 5, with 1 being the lowest ranking and 5 being the highest.)
 - Tenure, reappointment, or permanent appointment 1 2 3 4 5
 - Professional expectations or post-tenure review 1 2 3 4 5
 - Promotion or professional advancement 1 2 3 4 5
 - Professional rewards or merit pay 1 2 3 4 5
 - Other (please specify) [text box]
- 11. Please indicate the extent to which the following *intrinsic* motivators drive your research and scholarly production. (Please rank each item on a scale of 1 to 5, with 1 being the lowest ranking and 5 being the highest.)
 - Intellectual curiosity 1 2 3 4 5
 - Personal or professional interests 1 2 3 4 5
 - Personal or professional fulfillment 1 2 3 4 5
 - Desire to contribute to professional discourse 1 2 3 4 5
 - Desire to improve professional performance 1 2 3 4 5
 - Other (please specify) [text box]

- 12. Please indicate the extent to which producing your own research and scholarship has an impact on the effectiveness of carrying out your scholarly communication responsibilities.
 - It is irrelevant
 - It is not important
 - It is important
 - It is very important
- 13. Kindly explain your answer to question # above.
 - [Text box]