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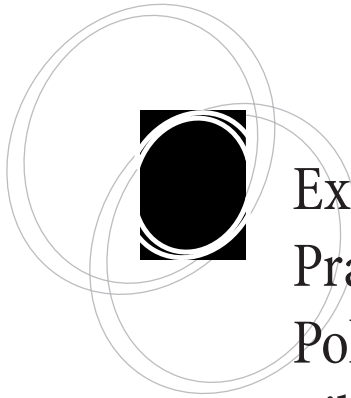
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Exploring Open Access Practices, Attitudes, and Policies in Academic Libraries

Rachel Elizabeth Scott, Caitlin Harrington, and Ana Dubnjakovic

abstract: This article reports the results of a 2019 survey of academic librarians that investigated their attitudes, practices, and policies regarding open access (OA). This study asks if academic librarians write policies to ensure that they approach OA intentionally and systematically across all library services. The results indicate that, though librarians report favorable beliefs about OA and integrating OA into technical and public services, they seldom create OA policies.

Introduction

Due to increasing resource costs, competing needs for space, and the rapid proliferation of open access (OA) content, services, and platforms, OA has become increasingly central to library collections and services. But it requires the informed support of professionals in all areas of academic libraries. This study seeks to acknowledge the growing importance of OA publishing models to academic libraries, both as a positive step toward more open and inclusive content and as a complex phenomenon requiring thoughtful integration into existing library services, collections, and systems. The extent to which OA is favorably perceived by academic librarians has been well-documented in the literature, but the intentional integration of OA into academic library services, collections, and systems has not. To address the question of how academic librarians view the role and limitations of OA in their local contexts, this study investigates whether they consider OA resources a valid part of their collections and if they write policies to ensure an intentional and systematic approach to OA.

Broadly speaking, the two dominant models of OA publishing are green and gold. Green OA is when authors self-archive online or somehow make available a version of their manuscript, typically through institutional or subject repositories. Gold OA refers to a journal that publishes articles online, without an embargo or toll access to readers. Both green and gold OA are included as OA in this study.

OA is increasingly discussed at both the institutional and library level. This study takes as its focus policies written by librarians for in-house practices and procedures and does not investigate institutional or consortial policies (for example, open access mandates for faculty authors). With the understanding that policies are not created in a vacuum, but rather are related to institutional demographics, current practices, and librarian attitudes, the authors composed a survey instrument that addressed each of these areas. Participants described their institution, answered questions about institutional OA practices, shared their personal attitudes (concerns and contributing factors) toward OA, and indicated whether their institution has policies related to OA. By investigating academic librarians' responses, the authors aimed to answer two research questions, namely: (1) Are institutional demographics associated with OA practices, attitudes, or policies? and (2) Are librarians' attitudes associated with institutional OA practices or policies?

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Literature Review

A survey of the literature indicates that academic librarians increasingly and actively engage in work involving OA. Librarians in technical services, and in collection development specifically, authored some of the earliest scholarship on integrating OA into library services. Increasingly, however, librarians in scholarly communication and public services also write about services and programming to engage an array of users in OA education and adoption.[1]

OA in Technical Services

As Cheryl Collins and William Walters describe, users' adoption of OA resources not only depends on their access and availability but also "(1) users must be able to identify particular articles that meet their needs, and (2) they must be able to retrieve those articles."[2] It is not enough for OA content to exist; libraries must also make it discoverable for their users alongside paid resources. Aaron McCollough's 2017 study of OA monographs found that the discoverability of OA resources in library catalogs was related to the availability of aggregated metadata from a trusted source and participation in consortial OPAC (online public access catalog) agreements.[3]

The *Directory of Open Access Journals* and *Directory of Open Access Books* provide two examples of metadata sources that librarians can turn on or track within their knowledge base, which maintains ongoing information related to serials, such as title history or revised ISSNs (International Standard Serial Numbers), or in their discovery layer or

link resolver, interfaces that direct users to content when institutional access is available. Collins and Walters's 2010 study found that 27 out of 30 libraries studied used an A-to-Z list (such as Serials Solutions 360 Core or Ex Libris SFX) to provide title-level access to OA journals, and only two libraries used their OPAC for OA journal access.[4] While MARC (machine-readable cataloging) records provided increased subject access and authority control, individually cataloging OA serial titles was laborious and time-consuming.[5]

Despite being free, OA content incurs cost in the time spent managing access or cataloging resources. Chris Bulock and Nathan Hosburgh's 2015 survey found that hybrid OA, a model in which OA content is presented alongside paid content within a single journal title, presented unique access issues.[6] Because most knowledge bases and electronic resource management systems (ERMS) manage metadata at the title level, librarians cannot provide immediate or single-click access to individual OA articles. Additionally, vendors may not regularly update OA collections in their knowledge base. Therefore, the onus falls on libraries to discover and report any inaccuracies within the knowledge base. Sandra Cowan and Chris Bulock identified a

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possible solution for the problem of item-level hybrid OA metadata. Instead of relying on institutional holdings, information discovery systems could use the NISO (National Information Standards Organization) recommended metadata element "free_to_read" that content providers would include in their metadata.[7]

Adelia Grabowsky describes a variety of ways that collection development and technical services librarians can advocate for and promote OA.[8] Including OA content in library catalogs or subject guides, sharing OA titles during instruction sessions or reference interviews, and featuring OA on the library's website are some approaches to promoting OA that many librarians already employ for their general collection.[9]

OA in Scholarly Communication and Public Services

The Association of College and Research Libraries (ACRL) white paper "Intersections of Scholarly Communication and Information Literacy" describes how changes in scholarly communication and information literacy have informed the work of instruction librarians, including opportunities to educate students about OA publishing.[10] The shift to OA digital theses and dissertations at the University of Washington in Seattle

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was presented as an example in this report, which highlights the need for librarians to become involved in discussions about copyright and ownership.[11] Julia Rodriguez describes how Oakland University Libraries in Auburn Hills, Michigan, identified a

need for OA training for librarians in preparation for serving as liaisons with teaching faculty on issues of scholarly communication.[12] Linlin Zhao expands on Jeffrey Beall's idea of "scholarly publishing literacy," a hybrid of concepts relating to both information literacy and scholarly communication, to include the components that have changed since the appearance of OA.[13] Zhao argues that librarians, as experts in information literacy and advocates of OA, are poised to educate and lead their institutions' faculty in publishing trends.

Academic Librarian Publishing Practices

Given the challenges academic libraries face concerning the rising cost of serials subscriptions and libraries' professed support of OA, one might assume that academic librarians would lead by example and publish their articles in OA journals. Teresa Auch Schultz used the database Web of Science to study the OA behaviors of "OA researchers" from 2010 to April 2017; 46 percent of the articles were published OA, and 53.9 percent were published behind a paywall.[14] Wanyenda Leonard Chilimo and Omwoyo Bosire Onyancha analyzed the OA practices of 56 LIS journals that published articles on the topic of OA and found hybrid journals with unconditional post-print archiving permissions to be the most common model.[15]

Academic Library Investment in OA

David Lewis suggested in 2017 that 2.5 percent of libraries' collections budget should be devoted to an open scholarly commons. For Lewis, such a commons would include open source software for publishing, archiving, and reading; disciplinary repositories; large open access collections; and a range of tools for scholars to openly share and access scholarship, as well as preservation, advocacy, and other support services. Libraries' investment in such a commons, he argued, would ensure that "the world's scientific, scholarly, and cultural heritage [would be] discoverable and freely available to everyone in the world now and in the future."[16] Christine Turner and Marilyn Billings discussed work at the University of Massachusetts Amherst to embrace the 2.5 percent challenge and create an infrastructure that makes local scholarship and special collections discoverable.[17]

Gold OA presents diverse opportunities for library support. Libraries may contribute to the article processing charge (APC) required by many publishers to publish gold OA. Another strategy to address publishers' fees is consortial "crowdsourced" OA funding, employed by SCOAP (Sponsoring Consortium for Open Access Publishing in Particle Physics)[3] and Knowledge Unlatched, two international organizations that support OA publishing. Libraries can contribute funds to make OA content accessible for everyone; an increase in membership results in lower costs per member. John Willinsky and Matthew Rusk considered alternate OA funding models beyond library-funded APCs and subscriptions.[18]

Colleges and universities also invest in OA—by paying article processing charges, for instance—even if the library does not. Just as funds may be provided by the library, they might also be allocated by the provost's office or the office of research. Funding OA, whether by the library or the broader academic institution, essentially redistributes costs from the educational institutions that consume research to those that generate research.

Under a fully gold OA model, many colleges and universities would pay far less than they currently do; on the other hand, elite universities would pay much more.[19] Recent studies have shown how this redistribution of publishing costs perpetuates inequity and can be damaging to scholars in low- and middle-income countries.[20]

Institutional repositories (IRs) are another means by which the academic library can invest in OA, as an IR increases exposure and centralizes access to local OA scholarship. IRs may be outside the library's jurisdiction on some campuses, but many libraries play a meaningful role in their development and maintenance. The degree of librarian participation depends on several factors, including staffing, technical expertise, and campus relationships. Librarians' experience with information and access management, along with their commitment to promote locally produced scholarship, make them prime candidates to advocate for institutional repositories.

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Tony Horava and Michael Levine-Clark surveyed a small group (n = 16) of academic librarians actively engaged in collection development and found that over two-thirds of the respondents' institutions financially support OA in one form or another.[21] Importantly for the study at hand, Horava and Levine-Clark also investigated collection development policies and discovered that most respondents already had retreated from or were moving away from prescriptive policies. Newer policies were less prescriptive and allowed institutions to respond more nimbly to a rapidly changing environment.

Sharon Dyas-Correia and Rea Devakos similarly surveyed a select group of librarians at research libraries on the integration of OA into collection development policies.[22] Although 83.3 percent responded that collection development policies should address OA, only 51.6 percent indicated that their policy did so. Several respondents expressed concern about whether a collection development policy was the right place to articulate support for OA, and others questioned the timeliness and helpfulness of an official policy: "I worry, if we have to spell them all out, we'll never keep up."[23]

The institutions surveyed in studies by Horava and Levine-Clark and by Dyas-Correia and Devakos were not intended to represent all academic libraries. Most academic libraries are not part of an elite research institution, and the study at hand affirms this diversity. Despite differences in the populations targeted, however,

> **Despite indicating strong support for OA, few librarians write policies specifying how OA will be integrated into their library's services, collections, and systems.**

the concerns about writing a formal OA collection development policy articulated by Horava and Levine-Clark and Dyas-Correia and Devakos align with the findings of this study. Despite indicating strong support for OA, few librarians write policies specifying how OA will be integrated into their library's services, collections, and systems.

Methods

The University of Memphis is an urban public research university in Tennessee with a fall 2019 enrollment of 21,685 and a Carnegie classification of Doctoral Universities: Higher Research Activity. The University of Memphis Institutional Review Board reviewed this study and designated it as exempt from review.

To prepare for the survey, the authors searched the literature for examples of academic libraries crafting internal policies related to OA. When they uncovered little material, they expanded the search to literature outlining how librarians incorporated OA content into their collection or services. Using examples and best practices from the literature, the authors composed questions that address institutional demographics, institutional OA practices, librarian attitudes toward OA, and institutional policies related to OA. The complete survey instrument is provided in Appendix A.

With a variety of understandings about OA, it was important to establish how the term *open access* would be used throughout the survey instrument. The survey began with a working definition of OA: "In this study, OA refers to scholarship or other published content, that is digitally accessible without subscription, purchase, or other additional cost. That is, we are focusing on the question of cost (gratis OA) and not questions of copyright or license (libre OA)."[24]

The authors designed the survey based on issues identified in the literature and through their professional practice. The survey instrument is based around four main areas: institutional demographics (highest degree conferred, public or private, student enrollment, and resource budget); current OA practices (for example, "Does your library actively add open access content to library platforms?"); attitudes toward OA (for example, "What contributes to your promotion of OA?" and "What concerns do you have about OA?"); and existing policies related to OA (for example, "Does your library have a cataloging policy related to OA content?"). In addition to collecting these data points separately, the authors conducted statistical analysis to investigate the two previously stated research questions.

The authors built the survey in Qualtrics, the University of Memphis's survey software, and sent survey links to several e-mail lists relevant to academic librarianship. The lists were intentionally broad to ensure reaching academic librarians across diverse specializations and institution types. A complete list of the e-mail distribution lists is available in Appendix B. After the initial e-mail, a reminder was sent about one week before the survey closed. The survey was available from February 27 to March 15, 2019.

The authors examined the survey responses and investigated appropriate statistical analysis methods for the data collected. Of the 265 respondents who began the survey, 181 identified as working in an academic library and successfully completed the survey. Responses from those who did not work in academic libraries were omitted, as were submissions in which the demographic portion of the survey was not completed. Data were analyzed using SPSS v.26 for all inferential and descriptive statistical procedures.

Limitations

The primary limitation of the study relates to the sample, which was nonrandom and lacked a sampling frame—that is, a clear delineation of the population that should be

included in the results. The demographic portion of the survey included a question related to the institutional collection or resource budget, and responses that did not answer this inquiry were omitted. This requirement may have reduced the participation of academic librarians who do not work with collections or who lack access to institutional budget information. Some institutions may have been represented by multiple respondents; individuals were surveyed rather than institutions. Additionally, definitions were not provided for all questions, and participants accordingly responded with their individual perceptions when asked to interpret such terms such as *promote*.

While the authors took utmost care to use only statistical methods appropriate for the data at hand, several challenges inherent in data (that is, categorical variables with independent groups) necessitated the use of chi-square analysis, which might be viewed as a less than ideal fit. This method is employed to compare observed data with the results expected and to confirm association between two variables. Under ideal circumstances, it would be used only for randomly sampled data. However, literature is full of examples using chi-square analysis in convenience sampled data. Mary McHugh suggests that, in such cases, more replication studies are needed to confirm study results.[25] Additionally, upon further examination of the population itself using last available enrollment and degree level data from the National Center for Education Statistics (NCES), the authors determined that the sample in the current study represents a close match. For instance, the current study sample included 54 percent doctoral institutions, followed by 26 percent master's degree granting institutions, while the four-year colleges in United States, per the last available data from 2018, included 41.5 percent doctoral and 25.9 master's granting institutions.[26] Moreover, the largest enrollment category in the current study sample (that is, 2,001 to 10,000 at 36 percent) matches the mean of enrollment for four-year colleges in the United States for 2018 (that is, 4,600).[27]

Survey Results

Demographics

The majority of respondents (54 percent) indicated that the highest degree conferred by their institution is a doctoral degree, followed by master's (26 percent), associate's (12 percent), and bachelor's (8.8 percent) degrees. The majority of respondents (56 percent) are employed by a public institution. Respondents from smaller institutions, based on total spring 2019 enrollment (2,001 to 10,000 at 36 percent and 2,000 or fewer at 22 percent), were more highly represented than those from institutions with larger student bodies (above 30,000 at 11 percent and 20,001 to 30,000 at 12 percent). The greatest number of respondents (35 percent) had a resource budget ranging from $1,000,000 to $10,000,000, but this was closely followed by those reporting a budget of less than $250,000 (30 percent) and on of $250,001 to $1 million (27 percent).

OA Practices

This section of the survey asked respondents about their current practices. To the question, "To what degree is open access a collection strategy at your institution?" 46 percent responded "minimally," followed by 31 percent reporting "increasingly." Only

2 percent replied that OA was "not at all" a strategy, and 4 percent answered that it was "essential." Subsequent questions dealt with the specific library platforms to which OA content was added. Responses are provided in Figure 1; 61 percent indicated that OA was added to at least one platform, and 17 percent reported that OA content was not added to library platforms.
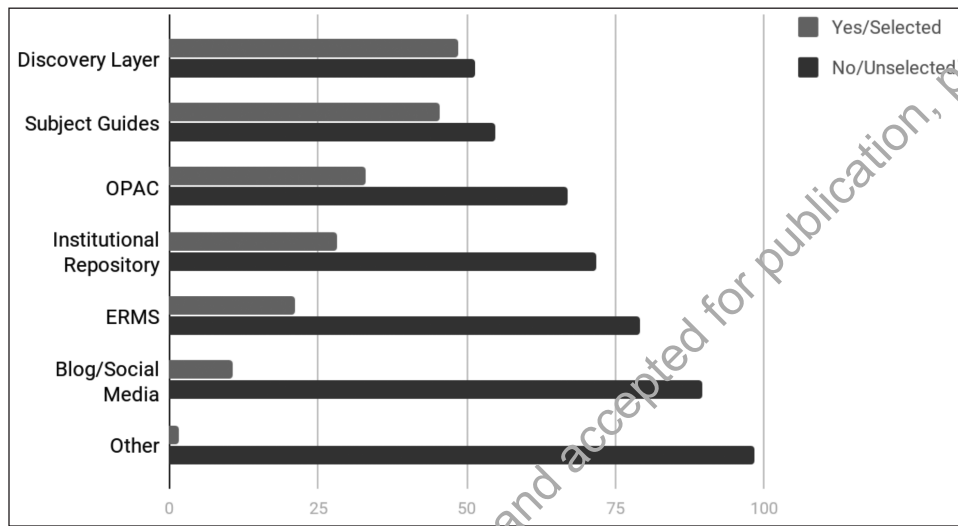

Figure 1. Survey respondents' answers regarding the platforms to which their library adds OA content.

The next questions focused on whether OA is incorporated into public services, and specifically, instruction, reference, and outreach; responses are shown in Figure 2. Fifty-five percent of respondents indicated that librarians at their institution promoted OA resources in outreach and in reference or research consultations. Fifty-one percent reported that library personnel offering instruction at their institution teach OA resources. Fewer than 20 percent of respondents said that librarians at their institutions do not incorporate OA into instruction, outreach, or reference and research consultations.

Attitudes toward OA

This section inquired after respondents' attitudes toward OA. Only two questions were posed, the first asking what contributes to participants' promotion of OA and the second inquiring about OA-related concerns. Participants were instructed to select all answers that applied for both questions. Figure 3 shows factors that contribute to respondents' promotion of OA; it is most closely related to free content (59 percent), relevance of content (50 percent), desire to advocate for OA (49 percent), the vast and growing number of OA outlets (44 percent), desire to engage with or learn about OA (43 percent), and the quality of OA content (42 percent).
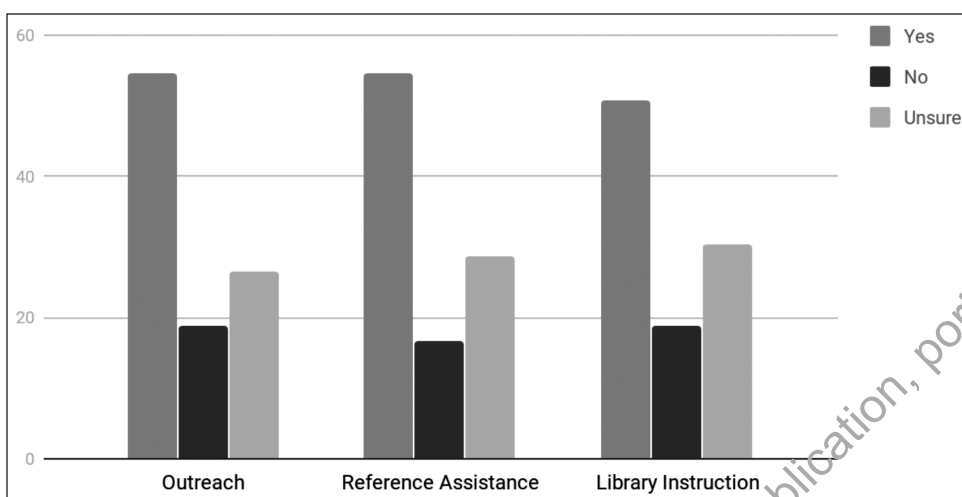
Figure 2. Survey respondents' answers regarding into which public services outlets their library incorporates OA.
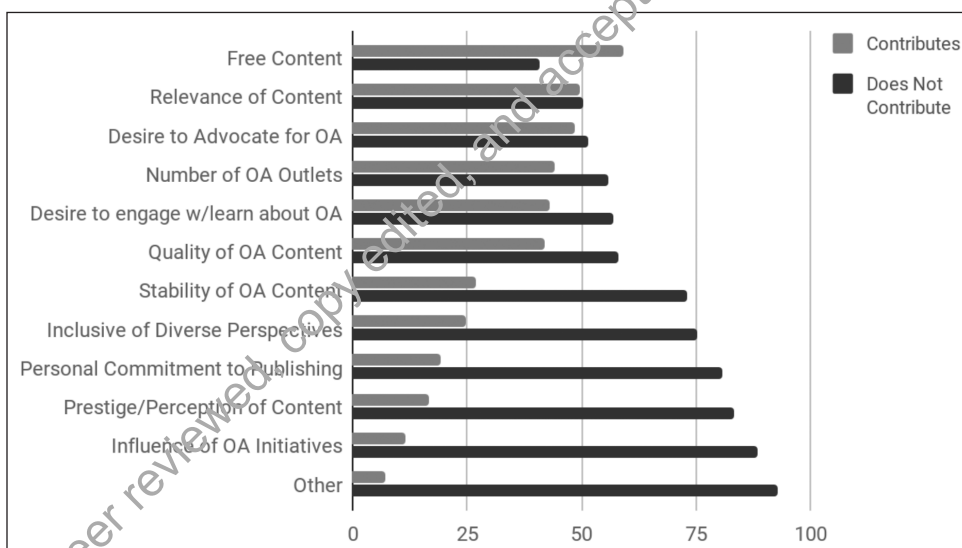
Figure 3. Survey respondents' answers to the question "As a library professional, what contributes to your promotion of OA?"

Figure 4 indicates that respondents are most concerned about the stability of OA content (53 percent); inclusion of potentially unvetted sources (48 percent); presence of so-called "predatory publishers," who charge publishing fees to authors without providing editorial services (46 percent); quality of content (45 percent); lack of understanding or training on OA (31 percent); and the prestige or perception of OA content (29 percent).
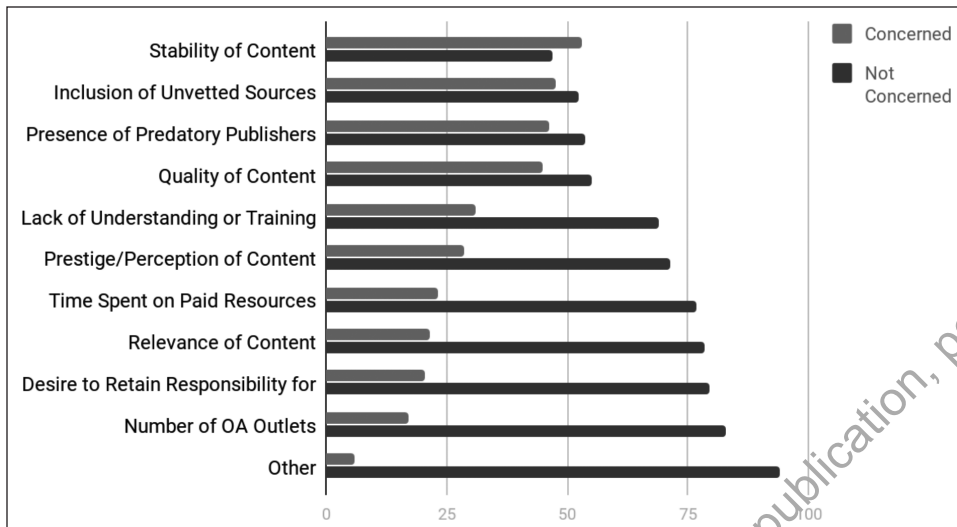
Figure 4. Survey respondents' answers to the question "As a library professional, what concerns do you have regarding OA?"

OA Policies

The final section of the survey posed questions related to existing policies in various areas of respondents' academic libraries. Participants were asked whether their institution had a formal policy, no policy, or an informal understanding regarding OA for each of the departments listed, or whether the respondent did not know (Figure 5).

Figure 5. Status of OA policies by department, according to survey respondents.

Multivariate Results

RQ1: Do Institutional Demographics Play a Role in OA Practices, Attitudes, or Policies?

Chi-square analysis was conducted to determine possible association between institutional demographics and the degree to which OA was identified as a collection strategy at respondents' institutions. Results indicate no significant difference in the scores for public (M = 2.1, SD = 1.11) and privat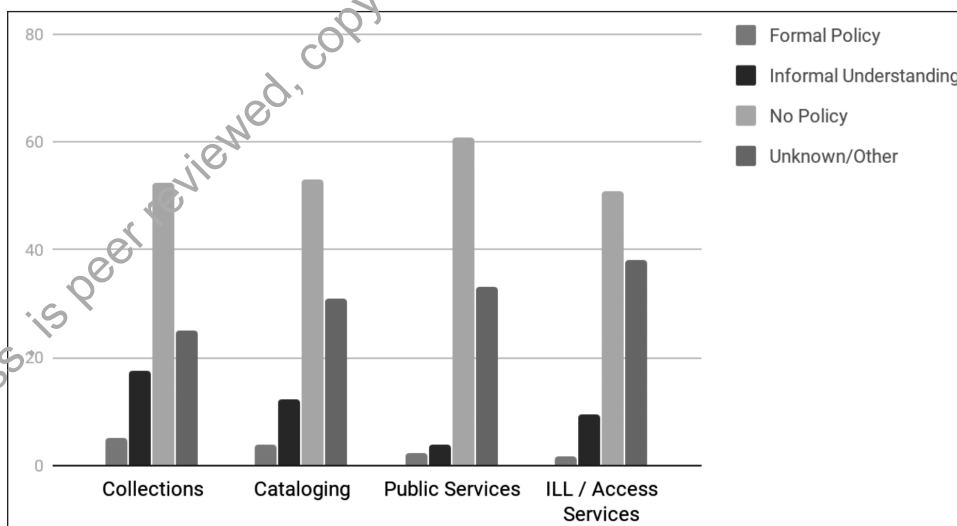e (M = 2.0, SD = 1.1) institutions [t (179) = 0.62, p = .54] regarding the role of OA in collection development. Evidently, public and private institutions follow similar practices in this regard.

> **Substantively, institutions held the same views on OA regardless of enrollment figures, degrees awarded, or budget resources.**

Looking at enrollment levels, the effect of student body size on the role of OA in collection management was also not significant [F(4, 176) = 0.73, p = .57]. Degrees granted [F(3, 177) = 0.19, p = .95] and budget resources [F(4, 176) = 0.21, p = .93] were also not significant. Substantively, institutions held the same views on OA regardless of enrollment figures, degrees awarded, or budget resources.

RQ2: Do Librarians' Attitudes Influence OA Practices or Policies?

There was a weak but direct and statistically significant correlation between valuing OA as an institutional strategy and library contribution of OA materials to institutional repositories (r_s = 0.301, p <.001). Although not overwhelmingly, an increase in identifying OA as an important institutional strategy was associated with contribution of OA materials to an institutional repository.

To determine possible associations between actively adding OA content to library platforms and librarians' OA beliefs, chi-square analysis was conducted (see Table 1). Statistically significant relationships were found across three groups (that is, working in a library that actively added OA, working in one that did not add OA, or unaware whether it did or not) and engaging with and learning about OA [X^2 (2) = 6.037, p < .05], quality of OA content [X^2 (2) = 15.309, p < .001], stability of OA content [X^2 (2) = 8.683, p < .05], and relevance of OA resources [X^2 (2) = 16.376, p < .001]. Associations were also found for institutional practices of actively adding OA material and personal commitment to publish in OA [X^2 (2) = 10.153, p < .01].

Librarians at institutions that actively added OA content to their online platforms reported higher than expected levels of OA engagement and perceptions of its quality and relevance. Librarians in institutions that did not actively add OA content reported quality and stability as motivators for the promotion of OA content in higher numbers than expected. Stability of content had little to do with the likelihood of promoting OA across groups; this result may indicate that decisions to add OA content to library platforms may not be based on stability or may be made despite perceived instability. Personal commitment to publishing OA was a motivator to promote OA content for librarians working in institutions that actively added OA materials, as was free content.

Table 1.

Chi-square analysis of relationship between adding open access (OA) content to library platforms and librarians' attitudes toward OA and its perceived benefits

Contributes to promoting OA	Unknown		Actively adds OA		Does not add OA	
	Observed	Expected	Observed	Expected	Observed	Expected
Learning about or engaging with OA	9	20.4	64	54.7	17	14.9
Quality of content	7	17.2	51	46.2	18	12.6
Stability of content	5	11.1	31	29.8	13	8.1
Relevance of content	9	20.4	64	54.7	17	14.9
Publishing in OA	1	7.9	28	21.3	6	5.8
Free content	14	24.2	76	65	17	17.7

There was no association between institutional participation in OA and motivations to engage with OA collections based on the perceived prestige of OA content [$X^2(2) = 3.738$, $p = .15$], diverse perspectives covered [$X^2(2) = 1.657$, $p = .437$], or OA plans and incentives [$X^2(2) = 5.023$, $p = .081$].

Next, the authors explored the relationship between adding OA resources to library platforms and concerns librarians might have regarding OA (see Table 2). Statistically significant relationships were identified across three groups (that is, working in a library that actively added OA, working in one that did not add OA, or unaware whether it did or not) with lack of training [$X^2(2) = 6.011$, $p < .05$], quality of OA content [$X^2(2) = 9.729$, $p < .05$], its

> **Personal commitment to publishing OA was a motivator to promote OA content for librarians working in institutions that actively added OA materials, as was free content.**

stability [$X^2(2) = 16.379$, $p < .001$], prestige of OA resources [$X^2(2) = 9.425$, $p < .05$], presence of predatory publishers [$X^2(2) = 16.185$, $p < .001$], inclusion of unvetted resources [$X^2(2) = 7.663$, $p < .05$], and time spent managing paid resources [$X^2(2) = 9.466$, $p < .05$]. In contrast, no such relationships were found for desire to maintain responsibility for library collections [$X^2(2) = 2.2408$, $p = .300$], relevance of OA content [$X^2(2) = 4.924$, $p = .085$], and growing number of OA outlets [$X^2(2) = 0.356$, $p = 8.37$].

Concerns regarding lack of OA training were highest for those working in libraries that actively added OA content; however, librarians whose institutions do not add OA

Table 2.

Chi-square analysis of relationship between adding OA content and librarians' attitudes toward and concerns about OA

Concerns	Unknown		Actively adds OA		Does not add OA	
	Observed	Expected	Observed	Expected	Observed	Expected
Lack of training	7	12.7	36	34	13	9.3
Quality of content	10	18.3	58	49.2	13	13.4
Stability of content	11	21.7	70	58.3	15	15.9
Prestige of content	4	11.8	37	31.6	11	8.6
Predatory publishing	10	19	64	51	10	13.9
Unvetted sources	12	19.5	60	52.3	14	14.3
Management time	4	9.5	34	25.5	4	7.0

resources expressed smaller, but higher than expected, levels of concern over inadequate training. Unease regarding predatory publishing, unvetted resources, management time, and the quality and stability of OA content all had higher than expected results for those working in institutions that actively add OA resources but were not concerns among other groups. The experience of actively managing OA content appears to increase unease regarding its quality and stability, as well as its cost in management time. Actively adding OA content to library platforms raises awareness about predatory publishing and the inclusion of potentially unvetted resources.

The experience of actively managing OA content appears to increase unease regarding its quality and stability, as well as its cost in management time.

Finally, the authors investigated if the perceived level of importance of OA as a collection strategy differed for institutions with formal, informal, or no OA policies in the areas of collections, cataloging, public services, and interlibrary loan. One-way ANOVA results regarding OA collection policies indicate a significant difference among groups ([$F_{(2, 133)}$ = 5.039, p = .008]. Specifically, post hoc Bonferroni comparisons indicate the mean score for formal policy (M = 3.0, SD = 0.5) was higher than that for no policy (M = 2.22, SD = 0.746); however, there was no difference between the remaining groups. These results point to a higher level of importance of OA as a collection strategy for institutions with formal OA collection policies than for those with informal understandings. No significant results were found among groups regarding cataloging, public services, and interlibrary loan OA policies.

Discussion

Demographics

The institutional setting in which academic librarians work has a profound influence on their daily responsibilities, opportunities, and expectations. Reviewing organizational charts for academic libraries at institutions that confer doctoral degrees, for example, one finds librarians working in more specialized capacities than those at institutions conferring only associate's or bachelor's degrees. Libraries at institutions that award doctoral degrees tend to have more personnel, with larger allocations for resource acquisition, than institutions that confer only less advanced degrees. More personnel and larger budgets lead to more specialized positions and workflows to support acquiring and maintaining varied resources. Different institutional contexts do not necessarily lead to different OA attitudes, practices, or policies. The findings within our sample show that librarians at diverse institutions held similar views on the extent to which OA is a collection strategy regardless of enrollment figures, degrees granted, whether their institution is public or private, or institutional resources budget. This may be explained, perhaps, by the self-selection of the participants with an interest in OA to complete the survey.

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Practices

A majority of respondents (61 percent) indicated that OA content was added to their library's online platforms, and although this is a clear majority of respondents, it does not approach consensus. Librarians take seriously their responsibility to carefully curate collections, and adding OA content can diminish their control over the collection.[28] This concern has been studied as relates to introducing OA into collections, as well as uncurated collection models.[29] At 49 percent, discovery layers were the platform most frequently selected as having OA content added.

A simple act of selection, however, fails to account for the personnel time and effort involved in addressing access problems related to adding OA content in the discovery layer, a topic well established in the literature.[30] Discovery layers were closely followed by subject guides (45 percent) as a platform to which OA content is added, and with the integration of journal holdings management software and subject guide platforms, activating OA content in the subject guide is also relatively simple. Similar to issues with the discovery layer, responding to access issues from enabled OA content becomes the challenge.

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Links to OA content in discovery layers and subject guides can be dynamically generated and updated, while OPAC records tend to be more static. Perhaps this explains why librarians indicated they add OA content to the OPAC at lower rates (33 percent). Lower responses for IR (28 percent) and electronic resource management systems (ERMS, 21 percent) raise a variety of questions: Do respondents not provide an IR, or does the IR contain content that is not primarily OA? Do librarians prefer to activate OA content directly in the discovery layer and not via an ERMS? The abbreviation ERMS may have confused some respondents. Blog/social media received the lowest rate of response (11 percent), indicating that participants seldom use social platforms for content management.

More than half of respondents indicated that OA was incorporated into instruction, reference, and outreach services, and fewer than 20 percent of respondents said that it was not included in these service areas. Respondents were not asked to report how it was incorporated or the extent of integration, or to provide any evidence that it was indeed incorporated. That a majority of respondents were sufficiently confident to respond that OA is part of these public services is telling, however, and is consistent with the growing literature of OA-related programming and services in reference, instruction, and outreach.[31] Incorporating OA into library platforms and services requires labor and an infrastructure; without positive attitudes toward OA, librarians would not likely invest in either.

Attitudes

The attitudes of survey respondents echo the findings of previous studies. OA is prized because its content is free, relevant, and vast; and academic librarians feel compelled to advocate, engage with, and learn about OA because it is related to their professional work.[32] Respondents' concerns are also consistent with previous research; in our sample, respondents indicated anxiety about the stability and prestige of OA content, inclusion of potentially unvetted sources, and predatory publishers. Less than a quarter of respondents indicated a personal commitment to publishing in OA (19 percent). This number dovetails recent findings from Tina Neville and Camielle Crampsie's exploratory study of academic librarian OA awareness and practices. They found that, although half of librarians reported OA as a consideration in where to submit their research, "scope and fit to topic" and peer review were more important.[33]

> **OA is prized because its content is free, relevant, and vast; and academic librarians feel compelled to advocate, engage with, and learn about OA because it is related to their professional work.**

Few respondents (12 percent) indicated that OA initiatives (such as Plan S)[34] contributed to their promotion of OA; this raises the question of the influence of such large-scale initiatives without local mandates. Policy is a form of advocacy, but without local mandates, will initiatives and policy make a difference? Respondents to this survey expressed high levels of confidence (42 percent) and concern (45 percent) about the quality of OA content; surveying OA as a monolith can yield seemingly contradictory

results. OA content is diverse in content, format, description, and delivery, and academic librarians' individual responses to survey questions likely have as much to do with their experiences and responsibilities as the substance of the questions.

Statistical analysis revealed that practical experience with OA was associated with an increased expression of concerns about it. As one works to integrate OA into the library systems and services for which one is responsible, challenges and problems may surface. Similarly, perceived benefits of OA were also associated with institutional OA practices. The more personal experiences librarians have in managing access to, teaching, and creating OA, the more they appreciate it as a complex, diverse, and multifaceted opportunity.

Policies

Collection development is an area of academic libraries that traditionally has written formal policies that deal explicitly with resources.[35] Respondents indicated that collections was the area with the highest rate of formal policies (5 percent) as well as informal understandings (18 percent). Public services had the highest rate of "no policy" (61 percent), while cataloging and access services/interlibrary loan (ILL) both had relatively high rates of informal understandings, at 12 percent and 9 percent, respectively. These results are consistent with studies reporting a decreasing number of policies in academic libraries, but no previous study has surveyed academic librarians on the creation of OA policies across library units.

The results of the statistical analysis within our sample indicate a higher level of importance for OA as a collection strategy at institutions that have a formal OA policy for collection development than at institutions with informal understandings. This association was not identified in the analysis of policies for cataloging, public services, or ILL/access services. The topic of OA frequently comes up in cataloging and interlibrary loan e-mail lists, and increasingly in scholarly literature dedicated to both areas.[36] OA has been central to collection development for almost two decades, and cataloging and interlibrary loan have contended with it for several years. The lack of policies and informal understandings in public services may be related to the relative distance of OA from the daily responsibilities of reference and instruction librar-ies, or perhaps to their creation of departmental policies. This study was designed to be inclusive of most academic library units, but it has revealed that neither OA nor policies are consistent from one library department to another. OA is still relatively new, frequently less than stable, and complex. It may be that the best practices needed to write formal policies have not yet been established for OA, or academic librarians may no longer find formal policies the most appropriate means by which to articulate their practices.

> **OA has been central to collection development for almost two decades, and cataloging and interlibrary loan have contended with it for several years.**

Conclusion

As the first paper to investigate the existence of OA policies in academic library settings, this study adds to the literature by evincing the lack of written OA policies across libraries' technical, access, and public services. Despite the growing importance of OA to academic library services and collections, most librarians have not formally and explicitly articulated OA policies for their local settings. Where previous research has highlighted the disconnect between librarians' OA attitudes and their personal practices as authors, this study underscores instead the disparity between librarians' OA attitudes and their professional practices in an institutional context.[37]

In the *Fundamentals of Collection Development and Management*, Peggy Johnson suggests that "open access is often addressed in academic libraries' collections policy," but this study reveals that many libraries do not cover OA in their policies, for collections or otherwise.[38] Horava and Levine-Clark found that academic libraries have moved away from creating long and specific policies, to shorter and more open statements that allow librarians to respond with more flexibility to the variety of new challenges that come their way.[39] Few respondents reported having policies or informal understandings in place to address OA specific to public, technical, or access services. Further study is needed to determine if this phenomenon is peculiar to OA, or if policies are simply on the decline in academic libraries. It is clear, however, that despite being a topic of great interest, most academic librarians have not explicitly articulated how OA materials and services should be treated in their local settings. The lack of OA policies has implications for how the profession will be poised to integrate OA into future library services, platforms, and resources.

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Appendix A

Survey Instrument

Caitlin Harrington and Rachel Scott of the University of Memphis invite you to participate in this study of open access (OA) policies in academic libraries. In this study, OA refers to scholarship, or other published content, that is digitally accessible without subscription, purchase, or other additional cost. That is, we are focusing on the question

of cost (gratis OA) and not questions of copyright or license (libre OA). Many studies have highlighted the OA perceptions and attitudes of librarians. This study seeks to establish the extent to which OA is written into academic library policies.

We expect this survey to take approximately 15 minutes to complete. This survey is anonymous and entirely voluntary; you may exit at any point. Although you will not receive any direct benefit for participating, we anticipate that this study will reveal current practices, benefits, and limitations of OA policies in academic libraries. This instrument was submitted to the local Institutional Review Board (IRB) and was determined not to require IRB approval or review.

Please respond by Friday, March 15, 2019.

Part 1: Demographic

1. What best describes the library in which you work?

   - Academic library (1)
   - Government library (2)
   - Public library (3)
   - School library (4)
   - Special library (5)

2. What is the highest degree conferred by your institution?

   - Doctoral degree (1)
   - Master's degree (2)
   - Bachelor's degree (3)
   - Associate's degree (4)

3. Is your institution a public or private?

   - Public (1)
   - Private (2)

4. What is the total spring 2019 enrollment at your institution?

   - 2,000 or less (1)
   - 2,001–10,000 (2)
   - 10,001–20,000 (3)
   - 20,001–30,000 (4)
   - More than 30,000 (5)

5. In the last fiscal year, approximately how much of your budget was allocated to purchased or subscription resources?

   - Less than $250,000 (1)
   - $250,001–$1,000,000 (2)
   - $1,000,001–$10,000,000 (3)
   - $10,000,001–$20,000,000 (4)
   - Over $20,000,000 (5)

Part 2: Institutional OA Practices

6. ITo what degree is open access a collection strategy at your institution?

    - Not at all: we do not link to OA content or promote it. (1)

    - Minimally: we provide limited access to OA content but do not consider it to be integral to our collections. (2)

    - Increasingly: we provide access to OA content in various ways and rely heavily on it. (3)

    - Essential: OA content is equally important as purchased/licensed collections. (4)

    - Other (5) _____

7. IDoes your library actively add open access content to library platforms?

    - Yes (1)

    - No (2)

    - Unknown (3)

    - Other (4) _____

8. ITo which platforms is OA content added? Select all that apply.

    - Discovery layer (1)

    - Online public access catalog (OPAC) (2)

    - Electronic resource management system (ERMS) (3)

    - Subject guides, such as LibGuides (4)

    - Library blogs or social media platforms (5)

    - Institutional repository, or other locally hosted platform (6)

    - Other (7) _____

9. IDo library personnel offering instruction at your institution teach open access resources?

    - Yes (1)

    - No (2)

    - Unknown (3)

    - Other (4) _____

10. IDo library personnel offering reference or research assistance at your institution promote open access resources?

    - Yes (1)

    - No (2)

    - Unknown (3)

    - Other (4) _____

11. IDo library personnel offering outreach (workshops, events, etc.) at your institution promote open access resources?
    - Yes (1)
    - No (2)
    - Unknown (3)
    - Other (4) _____

Part 3: OA Attitudes

12. IAs a library professional, what contributes to your promotion of OA? Select all that apply.
    - Desire to engage with and learn more about OA (1)
    - Desire to advocate for OA (2)
    - Quality of content (3)
    - Stability of content (4)
    - Relevance of content (5)
    - Prestige/perception of content (6)
    - Vast and growing number of open access outlets (7)
    - More inclusive of diverse perspectives (8)
    - Personal commitment to publishing in OA (9)
    - Influence of Plan S and other OA policies and initiatives (10)
    - Free content (11)
    - Other (12) _____

13. IAs a library professional, what concerns do you have regarding OA? Select all that apply.
    - Lack of understanding or training on open access (1)
    - Desire to maintain responsibility for and control of library collections (2)
    - Quality of content (3)
    - Stability of content (4)
    - Relevance of content (5)
    - Prestige/perception of content (6)
    - Presence of so-called "predatory publishers" (7)
    - Vast and growing number of open access outlets (8)
    - Inclusion of potentially unvetted sources (9)
    - Time spent managing paid resources (10)
    - Other (11) _____

Part 3: Policies

14. IDoes your library have a collection policy related to open access content?
    - Yes (1)
    - No (2)
    - Informal understanding (3)
    - Unknown (4)
    - Other (5) _____

15. IPlease share a link to or paste the OA collection policy.

16. IPlease describe the informal understanding related to OA and collections.

17. IDoes your library have a cataloging policy related to open access content?
    - Yes (1)
    - No (2)
    - Informal understanding (3)
    - Unknown (4)
    - Other (5) _____

18. IPlease share a link to or paste the OA cataloging policy.

19. IPlease describe the informal understanding related to OA and cataloging.

20. IDoes your library have a public services policy related to open access content?
    - Yes (1)
    - No (2)
    - Informal understanding (3)
    - Unknown (4)
    - Other (5) _____

21. IPlease share a link to or paste the OA public services policy.

22. IPlease describe the informal understanding related to OA and public services.

23. IDoes your library have an interlibrary loan or access services policy related to open access content?
    - Yes (1)
    - No (2)
    - Informal understanding (3)
    - Unknown (4)
    - Other (5) _____

24. IPlease share a link to or paste the OA access services policy.

25. IPlease describe the informal understanding related to OA and access services.

Appendix B

List of e-mail groups to which the survey was posted, with sponsor of each group and intended audience.

autocat@listserv.syr.edu—Syracuse University, New York, cataloging professionals in libraries throughout the world

cjcls-l@lists.ala.org—American Library Association (ALA), community and two-year college libraries and learning centers

collib-l@lists.ala.org—ALA, College Libraries Section

iacrl@list.railslibraries.info—Illinois Association of College and Research Libraries

ili-l@lists.ala.org—ALA, Information Literacy Instruction Discussion List

library@tbr.edu—Tennessee Board of Regents, Library List

lita-erm@lists.ala.org—ALA, LITA (Library Information Technology Association) / ALCTS (Association for Library Collections and Technical Services) Electronic Resources Management Interest

lita-l@lists.ala.org—Library and Information Technology Association List

mla-l@list.indiana.edu—Indiana University, Music Library Association List

moug-l@oclclists.org—OCLC, Music OCLC Users Group

pcclist@listserv.loc.gov—Library of Congress, Program for Cooperative Cataloging List

resshare-ig@carli.illinois.edu—University of Illinois, Resource Sharing interest group

scholcomm@lists.ala.org—ALA, Scholarly Communications Section

serialst@listserv.nasig.org—North American Serials Interest Group, Serials in Libraries Discussion Forum

sierra@listserv.iii.com—Innovative Interfaces, Inc., Sierra Users Group List

tla-l@listserv.utk.edu—University of Tennessee, Tennessee Library Association List

Notes

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3. Aaron McCollough, "Does It Make a Sound: Are Open Access Monographs Discoverable in Library Catalogs?" *portal: Libraries and the Academy* 17, 1 (2017): 179–94, https://doi.org/10.1353/pla.2017.0010.
4. Collins and Walters, "Open Access Journals in College Library Collections," 205.
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