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An examination of North American Library and Information Studies faculty perceptions of and experience with open-access scholarly publishing

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ABSTRACT

Open-access (OA) scholarly publishing has grown steadily in academia for the past few decades as an alternative to traditional, subscription-based journal publishing. This research presents the descriptive analysis of a systematic survey of North American library and information science (LIS) faculty about their attitudes toward and experience with OA publishing. The study reveals that LIS faculty tend to be more experienced with and knowledgeable about open access than their colleagues in other disciplines. A majority of LIS faculty is very critical of what is perceived to be detrimental control exercised by publishers over the scholarly communication system and agrees that major changes need to be made to this system. Although a majority of LIS faculty considers OA journals to be comparable to traditional journals, a sizable minority remains unconvinced of the purported benefits of open-access journals. The perceived constraints of the tenure and promotion system within the academy tend to limit LIS faculty engagement with open-access publishing in ways similar to other academic disciplines. There thus exists a disconnect between proclaimed support for and actual engagement with open access.

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1. Introduction

As tends to be the case with many technological advances, researchers began investigating the opportunities and challenges associated with electronic publishing soon after its advent. In general, proponents contended that electronic distribution would significantly expand accessibility of information and thus the reach of research. Conversely, early critics articulated serious reservations about the rigor of the scholarship disseminated through electronic distribution channels, as well as the ability to ensure long-term preservation of such work. This perceived lack of rigor, coupled with the traditional and conservative reward structures for tenure and promotion within the academy that are based heavily on the prestige of journal titles, meant that publication in electronic journals was often considered to be a risky venture in terms of career advancement. Part of this concern may have been legitimate given that, according to Cronin and Overfelt (1995), in 1994 only 70 of the 400 electronic journals then in existence were peer-reviewed.

In any event, both champions and skeptics of electronic publishing engaged in a variety of studies that explored the perspectives of researchers, research funders, publishers, librarians, and policymakers regarding the electronic publishing of scholarly materials (Creaser, 2010; Mercer, 2011; Swan, 2008). With the emergence of the open-access movement in the late 1990s, the number of studies dedicated to ascertaining author attitudes toward and experience with open access increased substantially across a wide range of disciplines. Some of this research was driven by an underlying desire to understand the motivations that drive authors to publish in open-access journals (Harley, Earl-Novell, Arter, Lawrence, & King, 2007; Mischo & Schlembach, 2011; Morris & Thorn, 2009; Nicholas & Rowlands, 2005; Palmer, Speier, Wren, & Hahn, 2000; Rowlands, Nicholas, & Huntington, 2004; Swan & Brown, 2004; The University of California Office of Scholarly Communication & California Digital Library eScholarship Program, 2007; Warlick & Vaughan, 2007). A better appreciation of such motivation, it was reasoned, would provide guidance for those involved in electronic publishing projects about how to ensure that journals were responding to author needs and thus positioned to thrive long-term. Other studies sought evidence that might suggest strategies of which publishers of open-access journals could avail themselves to improve the perceptions of such journals within academia (Frass, Cross, & Gardner, 2013; Schonfeld & Housewright, 2010).

1.1. Problem statement

Although library and information science/studies (LIS) faculty members have undertaken some of this work and have been part of some

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studies, no research that focuses on LIS faculty exclusively and systematically has been conducted. This represents a significant gap in the extant literature, particularly given that access is a foundational issue for both the discipline and the profession. While it might be presumed that LIS faculty have a particular affinity for open access given their disciplinary and professional tenets, this presumption lacks any empirical support. Given the dearth of research about open access specific to LIS, it is similarly impossible to determine whether any of the beliefs and concerns about open-access publishing found among faculty in other disciplines are shared by LIS colleagues. To respond to these lacunae, the present study employed a detailed, self-administered electronic survey to explore North American LIS faculty awareness of, attitudes toward, assessment of, and experience with open-access scholarly publishing. This study also goes beyond previous research in its attempt to ascertain the willingness of LIS faculty to become active promoters of open-access scholarly publishing. The findings presented below are based on a descriptive analysis of these survey results.

2. Literature review

According to Xia (2010), since 1994, surveys about authors' attitudes toward and experience with open-access publishing have been administered every year to academics across a wide range of disciplines and locations. As Togia and Korobili (2014) observe, attitudes and behaviors regarding open access vary across disciplines. Unsurprisingly, awareness of open-access journal publishing has increased substantially since the mid-1990s from around 50% to 85% by 2007. Similarly, over the last decade and a half, there has been a gradual increase in the number of academics publishing in open-access journals, which, as Xia (2010) points out, may be a consequence of the proliferation of open-access journals across many disciplines, as well as expanding awareness among academics of the existence of such journals. This increase in the number of authors availing themselves of open-access publication venues notwithstanding, Xia (2010) argues that the rate of this form of academic publishing has yet to reach a high overall level. Although he points out that methodological and corresponding analytical challenges for comparing different surveys across time render definitive conclusions problematic, one explanation may be that scholars' support for open-access publishing may still be honored more in theory than in practice. Indeed, a number of researchers have noted a disjuncture between rhetoric and practice among both faculty and academic librarians when it comes to open-access publishing (see, for example, Grandbois & Beheshti 2014; Mercer 2011; Xia, Wilhoite, & Myers 2011).

2.1. Attitudes toward versus actual practice with open access

A survey conducted by the University of California Office of Scholarly Communication in 2006 among a little over half of the system's faculty revealed a serious disconnect between purported attitudes and actual behavior in respect of scholarly publishing. Although substantial numbers of respondents indicated the need for changes to the current scholarly communication system, in practice the majority of faculty members conformed to the traditional model that relies on publication in peer-reviewed, subscription-based journals (The University of California Office of Scholarly Communication & California Digital Library eScholarship Program, 2007). Although sizable numbers of respondents bemoaned the failure of the tenure and promotion system to keep pace with new developments in scholarly communication and thus focus too intently on publications in traditional publication venues, very few admitted a willingness to alter their behavior or to take an active role in instigating change to this system. Seventy-five percent claimed that their publishing activities were likely to stay the same (see also, for example, Morris & Thorn, 2009). Indeed, although about two-thirds of respondents claimed to be aware of or knowledgeable about gold and green open-access models,[1] only 21% had published in open-access journals, and even fewer (14%) had deposited an article in an electronic subject or institutional repository (The University of California Office of Scholarly Communication & California Digital Library eScholarship Program, 2007). As several studies have revealed, much of this disconnect between claimed support for open access and actual publication practices can be traced to anxiety among faculty members about the impact of open-access publishing on their careers.

2.2. Open access and career prospects

Swan and Brown (2004) determined that some of the early concerns articulated by researchers about open-access publishing remain important for substantial numbers of both open-access and non-open-access authors. For example, 40% of open-access authors and 42% of non-open-access authors rated as important concerns about open-access journals adversely affecting chances for appointment and promotion. Respondents from both cohorts voiced similar concerns that publishing in open-access journals might adversely affect their chances of attracting research grants, their career in general, and the impact of their published work. The latter was an even more pronounced concern for those authors who had not published in open-access journals previously — 74% considered it important as compared to 42% for those who had published previously in an open-access journal) (Swan & Brown, 2004).

Other researchers have also determined that the perceptions and realities of the tenure and promotion system exercise a strong braking effect on the uptake of open-access publishing among faculty (Gaines, 2015; Harley et al., 2007; Migheli & Ramello, 2014). Harley and her colleagues concluded that such institutional inertia, coupled with perceptions that electronic publishing lacks rigorous peer review and is thus of lower quality and prestige, has meant that conventional, high status print publications remain the preferred scholarly communication venue among a majority of academics. Dalton (2013) similarly observed that career-related factors strongly influence library faculty and practitioners' decisions about appropriate journals in which to publish their work. But beyond career considerations, substantial numbers of faculty have indicated additional, related concerns about open-access journals.

2.3. General faculty concerns about open-access publishing

In his review of previous studies, Xia (2010) ascertained that reasons for not publishing in open-access journals include unfamiliarity with appropriate venues (as opposed to familiarity with open access in general), concerns about low prestige, lack of rigorous peer review, low impact factors, and corresponding poor citation rates. According to Swan and Brown (2004), those authors who have never availed themselves of open-access journals perceive such venues as having a smaller number of readers and thus lower citation rates, and generally possessing lower prestige and quality than traditional journal publications. The overwhelming reason, however, why these authors have not published in open-access journals is their unfamiliarity with any suitable venues in their fields (Swan & Brown, 2004).

Although their small study was limited to semi-structured interviews with 14 biomedical faculty members, Warlick and Vaughan (2007) found that impact factor, target audience, and speed of publication of a journal were the leading considerations driving authors' decisions about where to publish their work. Most of their respondents believed that open-access journals have lower impact factors than

[1] The primary distinction between gold and green open access is based on venue or delivery vehicle (i.e., journal or repository) rather than price or user rights, which delineates gratis from libre. Gold open access refers to peer-reviewed publication in an open-access journal, whereas green open access involves deposit of the work in an institutional or subject repository.

traditional journals. In an earlier survey among business school faculty, Palmer et al. (2000) determined that, overall, respondents did not consider electronic journals to be of the same quality as their print comparators. Frass et al. (2013) similarly found that 34% of respondents agreed to some degree that open-access journals are of lower quality, 30% believed that open-access journals have lower production standards than subscription journals, and 16% agreed to some degree that open-access publication provides no fundamental benefits.

Research among University of California faculty revealed concern among a substantial number of respondents that gold or green open-access models could increase low-quality research outputs (The University of California Office of Scholarly Communication & California Digital Library eScholarship Program, 2007). Several non-open-access authors equated open-access journals with vanity publishing found in the monograph publishing world and consequently believed that open-access publishing models run the risk of driving down standards in academic publishing. Similarly, a study commissioned by the United Kingdom Publishers Association found that authors from countries in which open access was not widespread tended to associate open-access journals with ephemeral publishing, poor archiving, and low prospects for career advancement (Nicholas & Rowlands, 2005; Rowlands et al., 2004). According to these researchers, one of the biggest findings from their survey was the high level of ignorance among scholars about open-access publishing: "There is clearly a need for the publishing community to raise awareness of these issues and to sensitize a largely complacent author population" (Rowlands et al., 2004, p. 273). Indeed, as several researchers have determined, those faculty who have experience with open-access journals tend not to attribute such concerns to this modality of academic publishing and instead emphasize its benefits over the traditional model.

2.4. Why faculty choose to publish in open-access journals

Indeed, one of the more interesting, albeit not altogether unsurprising, findings made by Swan and Brown (2004) is the almost polar opposite perceptions about open-access publishing among those who have published in such venues as compared to those who have not. Among those with open-access publishing experience, the predominant motivation is a commitment to the principle of free access to research, followed by perceived rapid speed of publication, which increases the readership base and hence citation rates of articles. Although the rank order was reversed, Creaser (2010) similarly found that these two desiderata were most important for motivating authors to publish in open-access journals. A majority of authors with open-access experience also considers the open-access journals in which they publish to enjoy higher prestige and quality than traditional journals in their fields (Creaser, 2010; Swan & Brown, 2004). Research conducted among authors who had published in any of Taylor & Francis's journals in 2011 revealed similar findings: the top three cited potential advantages of open-access publication were, in order of agreement, wider circulation, faster publication, and higher visibility than subscription journals (Frass et al., 2013).

As might be anticipated, authors who have experience with open access believed that peer-review standards are as rigorous in open-access journals as they are in traditional journals (Palmer et al., 2000; Swan & Brown, 2004). Palmer et al. (2000) further determined that those faculty who read electronic journals were less likely to attribute peer-review problems to such publication venues. Based on their findings, these authors suggested that the content delivery mechanism (print or electronic) might be much less important for academics than the quality and perceived legitimacy of the journal itself.

2.5. Publication fees as a potential barrier to open-access publishing

A more prominent potential hindrance to a broader uptake of open-access publishing among faculty stems from the imposition of author processing fees that figure prominently in gold models. Mischo and Schlembach (2011) found concern among engineering faculty about the author pays model, as well as a reluctance among respondents to self-archive in their university's institutional repository. Apprehension about the gold model stemmed from the costs to authors, the overall economics of such a system, and the potential for conflicts of interest between scholarly rigor and the lure of profit from article processing fees. Indeed, an overwhelming 96% of respondents indicated that they publish their research primarily or exclusively (80% exclusively) in commercial publisher or professional society publications, and only 7% of respondents indicated that they would publish all or many of their articles in open-access journals in the future (Mischo & Schlembach, 2011). Not surprisingly, Mischo and Schlembach (2011) interpret their results as demonstrative of very underwhelming support for the gold model of scholarly publication among engineering faculty.

Conversely, Swan and Brown (2004) found that publication fees were not rated highly by many non-open-access authors as a potential barrier to publishing in open-access journals, although substantial numbers of respondents indicated concern about the implications of author processing charges for researchers from developing countries, from disciplines that do not attract much research funding, and from junior researchers with no grant support. Similar concerns were found by researchers who conducted case study interviews among faculty from five different disciplines at the University of California, Berkeley (Harley et al., 2007). In her work, Creaser (2010) determined that researchers from the arts, humanities, and social sciences were the least likely to know how to pay for these fees, while academics from the biological and medical fields were most likely to know how to meet these payment demands, with many indicating that these could be paid through grant funding. Indeed, all of Warlick and Vaughan's (2007) biomedical faculty respondents who had paid an article processing fee to publish in an open-access journal obtained this funding as part of their grant funding. No doubt for this reason, most respondents did not believe that article processing charges pose a disincentive to publish in open-access journals (Warlick & Vaughan, 2007). Overall, Creaser (2010) determined that tenure-track academics were less likely than their tenured colleagues to be aware of the existence of funding sources to pay for article processing fees.

Relative lack of concern about the hindering effect article processing fees may exercise on publication in open-access venues could be explained by the low numbers of academics who have actually had to remit such fees. For example, Swan and Brown (2004) determined that, among open-access authors, 45% had paid article processing fees. Creaser (2010) similarly ascertained that only about one-third of authors who had published articles in an open-access journal had paid a fee to do so. Frass et al. (2013) found an even lower level of experience with article processing fees, with only 8% of respondents having paid a fee to make an article free to access in a journal in the 12 months prior to their study. If experience with and concern about article processing fees associated with the Gold model of open access is mixed, what is the situation in respect of the more economical green model of open access?

2.6. Green open access

Interestingly, Swan and Brown (2004) found that green open access (deposit in an institutional repository) was not well known among respondents and only small minorities (around 10%) had ever self-archived their articles in an institutional or subject-specific repository. Respondents claimed a willingness to deposit in electronic repositories if they are available (87% among open-access authors and 77% among non-open-access authors), but, as Swan and Brown (2004) pointed out, evidence from champions of green open access demonstrates that authors are not highly motivated to comply, largely due to purported torpor within the academy at the level of both authors and institutions. According to results from a survey conducted by ITHAKA among faculty

at various American universities, only slightly less than 30% of respondents had actually deposited any research outputs into an electronic repository, although almost 80% indicated that they were likely to make such a deposit in the future (Schonfeld & Housewright, 2010). Such findings reinforce the importance of repository deposit mandates, which, as Gargouri, Larivière, Gingras, Carr, and Harnad (2012) maintain, can triple the rate of green open access.

Use of such material was even lower, with less than 20% of faculty members indicating that they used materials deposited in an institutional or discipline-specific repository (Schonfeld & Housewright, 2010). Morris and Thorn (2009) found somewhat higher usage (47%) of repository materials by academic peers among their survey of learned society members' attitudes toward open access. The dominant concern about relying on materials deposited in repositories revolves around quality, with many researchers expressing a concern that the work may not have been peer-reviewed or that the version available is not the definitive publication of record (Schonfeld & Housewright, 2010).

Creaser (2010) reported that many of the academics who participated in her survey were unfamiliar with their institutions' policies in respect to open access, let alone whether the institution maintained an institutional repository (43%). In fact, only 24% of research respondents employed at institutions that had an open-access policy in place were aware of it. Although substantial levels of ignorance about institutional repositories and policies remained, Creaser (2010) pointed out that this level represents an improvement over results from a 2005 survey in which over 70% of academics reported that they did not know whether their institution had an electronic repository.

2.7. Common themes in the literature in respect of open-access publishing

Despite the substantial differences in terms of scope of coverage across the various studies that have been conducted in respect of attitudes toward and experience with open-access publishing, the previous discussion reveals a number of common themes. For example, a commitment to the free availability of research is a leading motivation for publishing in open-access journals. Relative speed of open-access publishing is another important motivation for engaging in this mode of scholarly dissemination. Reasons for not publishing in open-access journals include unfamiliarity with appropriate venues (as opposed to familiarity with open access in general), concerns about low prestige, lack of rigorous peer review, low impact factors, and corresponding poor citation rates, as well as the potential negative impact such perceptions about open access may exercise on career prospects.

3. Methods

To respond to the study's overarching goal of determining LIS faculty attitudes toward and experience with open access, data were collected using a self-administered web survey. The survey instrument was adapted from a survey developed and executed by Alma Swan and Sheridan Brown in 2004 in the United Kingdom. The web survey was created and administered using Qualtrics online survey software.

Given the relatively small population size and typical problems with low response rates for surveys, it was decided to send the survey to all North American LIS faculty members (excluding Puerto Rico) rather than develop a random sample of participants. The American Library Association maintains a database of all accredited LIS programs in North America. The public websites of each school were consulted to obtain the email addresses of all tenured and tenure-track faculty members to be included in the survey. Since most adjunct faculty are not required to publish as part of their position, these faculty members were not included in the survey. Given the nature of the discipline, it was assumed that the American Library Association database and the faculty information contained on individual school websites were accurate and current. A final list of 1017 faculty member emails was compiled and loaded into Qualtrics. This population was comprised of 316 assistant professors, 304 associate professors, 262 full professors, 134 professors emeriti, and 1 professional faculty member whose rank was unspecified. The decision to include professors emeriti was made to ensure breadth of participation. This decision may have been somewhat ill-considered. As a number of emails sent directly from retired faculty members declining participation made clear, many have not been involved in publishing for quite some time and thus did not feel well placed to offer any insights on the topic.

Subsequent to study approval by the authors' institutional review board, all members of this population were sent an email explaining the purpose and goals of the study and inviting completion of the survey. Those who accepted the invitation were asked to follow the provided URL to access and complete the survey. Survey participants were similarly informed that participation was completely voluntary and confidential. Participants were guaranteed that no response data would be linked back to their identity during either the analysis or reporting and write-up stages of the project. The survey was open for a total of six weeks. Reminder emails were sent twice, at 2-week intervals, to those study participants who had not yet completed the survey. As an additional confidentiality safeguard, this reminder process was done automatically using Qualtrics survey software.

The survey instrument was pre-trialed and modified slightly before being distributed to the entire population. The instrument was translated into French in order to facilitate inclusion of faculty members in Quebec. However, it was determined that the translation was sub-optimal and therefore participants from Quebec were sent the English version. The instrument contained 51 questions, although several of these included multiple sub-questions.[2] Most of the questions employed agree/disagree, Likert-scale, or ranking response categories. Some questions offered participants the opportunity to provide additional detail. Respondents were able to skip any questions to which they did not wish to respond. Based on pre-trialing, completion of the survey was projected to require up to 25 minutes. As part of the effort to guarantee confidentiality, the researcher did not track time required by individual participants. 276 surveys were completed, yielding a response rate of just over 27%.

With the exception of emeriti faculty, the distribution of respondents according to faculty rank matches fairly closely the distribution of faculty ranks in the broader population. Assistant and associate professors are slightly over-represented (35 and 34%, respectively, completed the survey and these ranks comprise, respectively, 31 and 30% of the population). Full professors are slightly under-represented (25% completed the survey and this rank makes up 26% of the broader population). Slightly less than 5% of the responses come from professors emeriti, although they comprise 13% of the population. As already alluded to, it might make sense not to include retired faculty members should this survey be conducted in the future.

4. Findings

Recognizing that open access is one element of the broader scholarly communication system, the survey instrument also queried respondents about their perceptions of the latter. Thus, the findings presented in this section of the article move from the scholarly communication system more broadly, through general publishing practices, to the various facets of open access more specifically.

4.1. LIS faculty attitudes toward the current scholarly communication system

As found in other surveys across a variety of academic disciplines, substantial numbers of LIS faculty respondents (62%) agree that all scholarly articles should be free for everyone to access online. Eighty-

[2] A copy of the survey instrument can be found at the following URL: https://pantherfile.uwm.edu/peekhaus/public/LIS%20Faculty%20Perceptions%20of%20and%20Experience%20with%20Open%20Access_Survey%20Instrument.pdf

seven percent of respondents believe that increasing journal subscription costs are a burden on their institution. Only slightly more than a quarter (27%) of survey participants believe that researchers have access to most of the articles they need, while the majority (56%) of respondents think that this desire for easy access to scholarly literature is frustrated in practice.

These beliefs about costs and access no doubt help explain why substantial numbers of LIS faculty survey respondents are not satisfied with the current state of the scholarly communication system. As shown in Figure 1, 26% of participants think that minor changes are needed and 60% believe that substantial changes are required. A mere 3% are happy with the status quo of scholarly communication. Although faculty across a range of other disciplines have also articulated their dissatisfaction with the current state of the scholarly communication system, the proportion of dissatisfied LIS faculty is higher, which may be explained by the fact that LIS scholars, by virtue of their discipline, are likely more attuned to these issues. This might also account for the large number of respondents (72%) who agree to some extent that LIS scholars should be at the forefront of efforts to expand open access to research. Indeed, only 20% of respondents articulate some degree of concern that a significant move to open access may disrupt the established system of scholarly publishing.

Respondents articulated a variety of reasons why they are or are not concerned that a transition to open-access publishing might disrupt the current system. A few dominant themes emerged. There was a strong perception among a substantial number of respondents that the current system of scholarly communication is "broken," "obsolete," "prone to manipulation," "based on the commodification of information," and "deeply flawed," and thus requires significant disruption. Multiple respondents pointed out their belief that commercial control, in particular, has been detrimental to the system of scholarly communication and must end. Nonetheless, and perhaps not unexpectedly, many articulated concerns about what a disruption to the status quo would entail. Several respondents indicated that they felt it important to maintain elements of the scholarly publishing process such as the peer-review process in the event of any disruption. Others voiced some concern about the quality of published research in open-access journals, articulated a fear that only scholars with funds to pay publishing fees would be able to participate in an open-access system, or suggested that greater open access would increase the number of journals, which would tax an already limited pool of faculty willing to act as peer-reviewers and serve on editorial boards. Conversely, others were far more optimistic about what disruption might do to the publishing landscape. Some argued that greater open access would compel current publishers to review pricing and licensing agreements. A number of respondents opined that any kind of transition would be slow to unfold, while others believed that change is inevitable and academics must adjust accordingly (although in some cases this appears to be more resigned acquiescence than excitement). Several argued that any changes to the scholarly communication system would entail a co-evolution of open-access and traditional publishing. Finally, several respondents indicated that younger academics appear more willing to engage with open access, which should introduce change into the system as these colleagues progress into the ranks of tenured faculty.

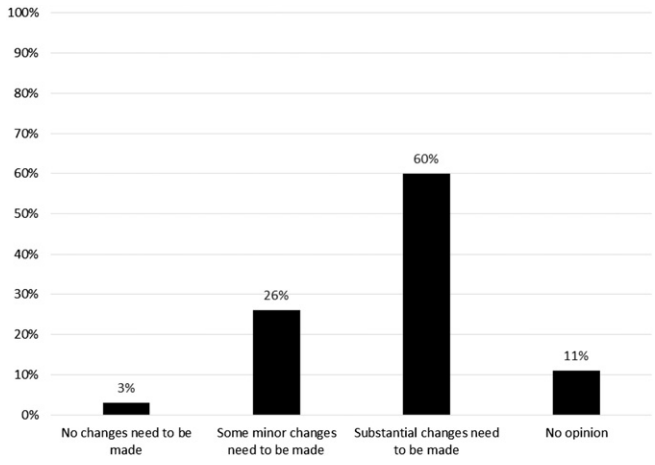

Fig. 1. Opinions about state of the current scholarly communication system.

Although almost two-thirds (63%) of respondents agree that publishers are an essential part of the scholarly communication process, a similar proportion of participants believes that the dissemination of research is a common good that should not be monetized in any way. Aligned with this rejection of the monetization of scholarly communication, 69% of respondents believe that the control exercised by commercial publishers is detrimental to the dissemination of scholarly work. Thus, while LIS faculty value the role of publishers in the scholarly communication system, they similarly appear to be concerned about the impact of the profit motive on the dissemination function of the system. This suggests that LIS faculty may be amenable to a system of scholarly communication in which publishers operate on a non-profit basis, as is typical for university presses, many scholarly societies, and a growing handful of academic libraries that publish their own journals (see, for example, the Library Publishing Coalition project — http://www.librarypublishing.org/).

4.2. LIS faculty publishing practices

Although less than half of respondents (46%) think that high journal costs make it difficult for them to access the research literature they need, 72% agree that high journal prices impede access to their own work by others. That having been said, and similar to findings in a number of other studies, less than a quarter of respondents (23%) deliberately publish in journals that are affordable to readers. In fact, only 45% of respondents consider low or no subscription costs for readers to be an important criterion for deciding where to publish their work. In addition to the constraints of the contemporary tenure and promotion system of the academy, this finding might also be explained by the fact that ascertaining which journals appropriate to an academic's research are reasonably priced for readers would entail a fairly onerous amount of work on already overloaded faculty.

Similar to their colleagues in other disciplines, LIS faculty consider a number of factors to be important when deciding where to submit their work for publication (Table 1). For example, 97% consider a journal publisher's reputation to be important or very important. Speed of publication is an important or very important motivating factor for 85% of respondents when deciding where to publish their work. Both impact factor and weight of the publication venue in tenure and promotion decisions are important or very important factors for over 80% of study participants. Copyright retention and the ability to place a published version of their work on a website are important or very important considerations for 54% of respondents.

While 80% of respondents had submitted a manuscript or had an article published in a subscription-based journal in the 12 months prior to the survey, only 37% had done the same in an open-access journal. However, from a longer-term perspective, this proportion is higher, with 53% of respondents having published at least once in an open-access journal. This difference, of course, begs the question of whether LIS faculty have reduced their engagement with gold open access or whether this is, instead, a reflection of the somewhat desultory nature of the scholarly publishing cycle. Roughly 67% of respondents would welcome more open-access journals in their field of research. Recent deposition of scholarly output in electronic repositories (i.e., green open access) is not widespread among LIS faculty, with only 35% and 24%, respectively, having deposited an article or other research, such as working papers and technical reports, over the past year. Again, however, the proportion of deposition is higher when considered over a longer time frame; 50% of respondents indicate that they had deposited at least

Table 1
Factors considered when selecting publication venues.

	Very important	Important	Not very important	Not at all important	No response	Total
Journal's or book publisher's reputation.	187	80	5	0	4	276
% within question total	**67.8**	**29.0**	**1.8**	**0**	**1.4**	**100**
Journal's impact factor.	111	111	42	8	4	276
% within question total	**40.2**	**40.2**	**15.2**	**2.9**	**1.4**	**100**
Publication venue's weight in tenure and promotion considerations.	130	93	38	10	5	276
% within question total	**47.1**	**33.7**	**13.8**	**3.6**	**1.8**	**100**
My ability to retain copyright of my article.	39	109	106	18	4	276
% within question total	**14.1**	**39.5**	**38.4**	**6.5**	**1.4**	**100**
My ability to put the pre-publication version of my work in a website.	54	100	96	22	4	276
% within question total	**19.6**	**36.2**	**34.8**	**8**	**1.4**	**100**
My ability to put the published version of my work in a website.	49	99	105	19	4	276
% within question total	**17.8**	**35.9**	**38.0**	**6.9**	**1.4**	**100**
My ability to submit my manuscript online.	74	109	69	20	4	276
% within question total	**26.8**	**39.5**	**25.0**	**7.2**	**1.4**	**100**
Availability of my article in both print and electronic versions.	60	119	81	12	4	276
% within question total	**21.7**	**43.1**	**29.3**	**4.3**	**1.4**	**100**
Low or no subscription costs to readers.	24	101	120	25	6	276
% within question total	**8.7**	**36.6**	**43.5**	**9.1**	**2.2**	**100**
Speed of publication.	87	147	36	3	3	276
% within question total	**31.5**	**53.3**	**13.0**	**1.1**	**1.1**	**100**

one research output in an electronic repository at one time or another. Looking forward one year, 57% and 36% of survey participants, respectively, expect to increase their publishing activities in open-access journals or deposition of articles in electronic repositories. Relatively low recent engagement with the different modes of open access, however, cannot be explained by lack of awareness.

4.3. Awareness of open access

Indeed, as might be expected given the nature of the discipline and the more than a decade of experience, LIS faculty are relatively more knowledgeable about open access than their colleagues in most other disciplines (Table 2). Approximately 73% of LIS faculty consider themselves knowledgeable or very knowledgeable about institutional repositories of open-access content, although that proportion of knowledgeability falls to 57% for disciplinary repositories, which indicates that more could be done to increase the number of LIS-specific repositories and their visibility among faculty. Seventy-seven percent of respondents claim to be either knowledgeable or very knowledgeable about open-access journals and another 21% are aware but do not know much. Seventy and 72% of respondents, respectively, have been aware of institutional repositories and open-access journals for longer than three years. Again, however, the proportion of respondents knowledgeable about disciplinary repositories is lower, with just under 57% being knowledgeable for longer than three years. Interestingly, and perhaps somewhat surprisingly, 58% of survey participants indicated that they are unaware of the differences between gold and green models of open access. However, given the broader expressed levels of knowledgeability about open-access journals and repositories, this finding may be an artifact of unfamiliarity with these idiomatic terms rather than the actual concepts and their distinctive modes of providing access to scholarly works.

Respondents are relatively well informed about initiatives in their country to promote open-access publishing, with 68% claiming to be aware of such efforts. Such initiatives, as cited by survey participants, include the following: funding body mandates (e.g., in the United States, the National Institutes of Health and National Science Foundation, as well as new federal policy from the White House; in Canada, the Canadian Institutes of Health Research, the National Research Council, and the Social Sciences and Humanities Research Council); the Association of Research Libraries in the United States and the Canadian Association of Research Libraries; PubMed and Public Library of Science; the Scholarly Publishing and Academic Resources Coalition (SPARC); the Public Knowledge Project; E-LIS; and various professional society and campus-level open-access initiatives. Indeed, 45% of respondents indicate that their institution had developed an open-access publishing initiative within the previous year. Some of these initiatives include the following: university mandates for faculty to archive their work in electronic repositories; the creation of electronic institutional and disciplinary repositories (in one case, apparently funded by the Institute of Museum and Library Services to grow, maintain, and create metadata); admonitions from a university president for faculty to create and use open-access textbooks; the creation of funding pools on which faculty may draw to pay for open-access article processing fees; a partnership with a university press to host open-access journals; creation of a course about open access and adding content about open access to existing courses; open-access workshops; and electronic deposit of student theses and dissertations.

Table 2
Levels of knowledge about scholarly dissemination.

	Very knowledgeable	Knowledgeable	Aware, but don't know much	Not aware	No response	Total
Institutional repositories of open-access content.	86	116	64	5	5	276
% within question total	**31.2**	**42.0**	**23.2**	**1.8**	**1.8**	**100**
Disciplinary repositories of open-access content.	57	101	92	21	5	276
% within question total	**20.7**	**36.6**	**33.3**	**7.6**	**1.8**	**100**
Fully open-access journals (all journal articles freely available without university or individual subscription)	83	128	57	2	6	276
% within question total	**30.1**	**46.4**	**20.7**	**0.7**	**2.2**	**100**
Blogs/wikis	78	124	64	5	5	276
% within question total	**28.3**	**44.9**	**23.2**	**1.8**	**1.8**	**100**

Table 3
Perceived benefits and deficits of open access.

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	No response	Total
Open access offers wider circulation of research than publication in a subscription-based journal.	77	118	59	14	2	6	276
% within question total	**27.9**	**42.8**	**21.4**	**5.1**	**0.7**	**2.2**	**100**
Open access journals have a larger readership by researchers than subscription-based journals.	37	52	137	38	5	7	276
% within question total	**13.4**	**18.8**	**49.6**	**13.8**	**1.8**	**2.5**	**100**
Open access journals are cited more heavily than subscription-based journals.	22	28	130	69	19	8	276
% within question total	**8.0**	**10.1**	**47.1**	**25**	**6.9**	**2.9**	**100**
Open access journals are of a lower quality than subscription-based journals.	8	44	101	95	20	8	276
% within question total	**2.9**	**15.9**	**36.6**	**34.4**	**7.2**	**2.9**	**100**
Open access journals have lower production standards (e.g., copyediting, typesetting) than subscription-based journals.	8	47	114	79	21	7	276
% within question total	**2.9**	**17**	**41.3**	**28.6**	**7.6**	**2.5**	**100**
Open access journals have faster publication timeframes than subscription-based journals.	34	135	82	16	1	8	276
% within question total	**12.3**	**48.9**	**29.7**	**5.8**	**0.4**	**2.9**	**100**
There are no fundamental benefits to open access publication.	4	6	44	118	97	7	276
% within question total	**1.4**	**2.2**	**15.9**	**42.8**	**35.1**	**2.5**	**100**

4.4. Assessments and perceptions of open-access publishing

A majority of respondents (78%) believes that open access offers some fundamental benefits, although another 16% remains uncertain (Table 3). Almost two-thirds of survey participants (61%) agree that open-access journals are published faster than subscription-based journals, while 30% remain uncertain and 6% disagree. A substantial majority (71%) of participants agrees that open-access journals offer wider circulation of research than traditional subscription-based journals. That having been said, a sizable number (21%) of LIS faculty remain unsure about the circulation benefits of gold open access. Such uncertainty increases to 50% when asked whether researchers read open-access journals more than subscription-based journals. Approximately one-third of respondents believe this to be the case. Similarly, many respondents (47%) are unsure about whether open-access journals enjoy any citation advantages over traditional journals. In fact, 32% of participants disagree that open-access journals are cited more heavily than subscription-based journals, while only 18% agree. While there is some conflicting debate on this issue, these latter findings are a little surprising given that a number of bibliometric studies have revealed that, although there is variation across disciplines, research published in open-access journals tends to enjoy a citation advantage over metered content of anywhere between 25 and 250% (Antelman, 2004; Donovan & Watson, 2011; Eysenbach, 2006; Gargouri et al., 2010; Hajjem, Harnad, & Gingras, 2005; Norris, Oppenheim, & Rowland, 2008).

Moreover, LIS faculty remain somewhat uncertain about the quality of open-access journals compared to subscription-based journals (Table 4). Although 42% of respondents do not believe that open-access journals are of a lower quality than their subscription-based rivals, a sizable proportion of LIS faculty remains unsure whether there exist quality differences between open-access journals and traditional journals (37% neither agree nor disagree that open-access journals are lower quality). Almost one in five respondents (19%) believes that open-access journals are lower quality than subscription-based journals. Although 53% of respondents consider a publication in an open-access journal to be of quality comparable to a publication in a traditional journal, almost a quarter would evaluate a publication in an open-access journal less favorably. Slightly more than 8% of LIS faculty believe that publications in open-access journals are better quality than those in traditional journals.

4.5. Open access and faculty career prospects

Similar to findings from a number of previous surveys among faculty members in other disciplines, LIS faculty believe that tenure and promotion committees are less convinced about the quality of open-access journals (Table 5). Only 34% of respondents think that a tenure and promotion committee would consider open-access publications as being of quality comparable to publications in a traditional journal, while 44% believe that open-access publications would be evaluated less favorably. Approximately 18% of respondents remain uncertain about how their faculty colleagues would compare open-access publications to traditional publications for tenure and promotion decisions (a sizable proportion that may be indicative of the 'black box' that is the tenure and promotion process for many academics).

These perceptions about how tenure and promotion committees would assess work published in open-access journals, no doubt, help explain why a majority of respondents either agrees with (29%) or is uncertain (26%) about whether publishing work in such journals would negatively impact prospects for promotion. That having been said, only 20% of respondents are concerned about the impact on their career more broadly from publishing in open-access journals, although a relatively large number (27%) remains uncertain. Similarly, only about 25% of LIS faculty believe that publishing in open-access journals would limit

Table 4
Evaluation of publications in an open-access peer-reviewed journal versus a traditional, subscription-based peer-reviewed journal.

	Count	% within question total
OA very unfavorable	5	**1.8**
OA of somewhat lesser quality	61	**22.1**
OA of comparable quality	145	**52.5**
OA of somewhat better quality	3	**1.1**
OA very favorable	20	**7.2**
Unsure	35	**12.7**
No response	7	**2.5**
Total	276	**100**

Table 5
Beliefs about how promotion and tenure committees would evaluate publications in an open-access peer-reviewed journal versus a traditional, subscription-based peer-reviewed journal.

	Count	% within question total
OA very unfavorable	23	**8.3**
OA of somewhat lesser quality	99	**35.9**
OA of comparable quality	95	**34.4**
OA of somewhat better quality	0	**0**
OA very favorable	4	**1.4**
Unsure	50	**18.1**
No response	5	**1.8**
Total	276	**100**

Table 6
Reasons for not publishing in an open-access journal.

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	No response	Total
I object in principle to paying a publication fee to publish in OA journals.	22	38	31	9	6	3	109
% within question total	**20.2**	**34.9**	**28.4**	**8.3**	**5.5**	**2.8**	**100**
I always publish my work in the same journals and am satisfied with this way of working.	5	30	45	23	4	2	109
% within question total	**4.6**	**27.5**	**41.3**	**21.1**	**3.7**	**1.8**	**100**
I could not identify any OA journals in which to publish.	7	35	33	29	2	3	109
% within question total	**6.4**	**32.1**	**30.3**	**26.6**	**1.8**	**2.8**	**100**
I am not familiar enough with OA journals in my field to feel confident about submitting work.	4	35	33	30	5	2	109
% within question total	**3.7**	**32.1**	**30.3**	**27.5**	**4.6**	**1.8**	**100**
I perceive the readership to be smaller than for a subscription-based journal.	1	22	36	42	5	3	109
% within question total	**0.9**	**20.2**	**33**	**38.5**	**4.6**	**2.8**	**100**
I perceive the OA journals in my field to have low prestige.	9	38	31	22	6	3	109
% within question total	**8.3**	**34.9**	**28.4**	**20.2**	**5.5**	**2.8**	**100**
I perceive the OA journals in my field to have low impact.	10	39	34	19	4	3	109
% within question total	**9.2**	**35.8**	**31.2**	**17.4**	**3.7**	**2.8**	**100**
I perceive the OA journals in my field to have slower publication times than traditional journals.	0	2	50	47	7	3	109
% within question total	**0**	**1.8**	**45.9**	**43.1**	**6.4**	**2.8**	**100**
I perceive the OA journals in my field to have poor peer-review procedures in place.	4	20	51	26	5	3	109
% within question total	**3.7**	**18.3**	**46.8**	**23.9**	**4.6**	**2.8**	**100**
I think articles published in OA journals may be cited less frequently.	4	29	45	23	5	3	109
% within question total	**3.7**	**26.6**	**41.3**	**21.1**	**4.6**	**2.8**	**100**
I am concerned about the archiving of work published in OA journals.	5	20	37	35	8	4	109
% within question total	**4.6**	**18.3**	**33.9**	**32.1**	**7.3**	**3.7**	**100**
I cannot find funds to pay the publication fee for OA journals.	12	30	42	17	5	3	109
% within question total	**11.0**	**27.5**	**38.5**	**15.6**	**4.6**	**2.8**	**100**
I was not attracted by the editor/editorial board.	5	8	74	13	7	2	109
% within question total	**4.6**	**7.3**	**67.9**	**11.9**	**6.4**	**1.8**	**100**
My decision was influenced by my institution.	12	25	37	22	10	3	109
% within question total	**11**	**22.9**	**33.9**	**20.2**	**9.2**	**2.8**	**100**
My decision was influenced by my grant awarding body.	2	4	57	29	14	3	109
% within question total	**1.8**	**3.7**	**52.3**	**26.6**	**12.8**	**2.8**	**100**
My decision was influenced by my co-publishing colleagues.	5	17	47	24	13	3	109
% within question total	**4.6**	**15.6**	**43.1**	**22**	**11.9**	**2.8**	**100**

the potential impact of their own work, although 22% neither agree nor disagree. However, substantial numbers of respondents (38%) articulate some disquietude about the capacity of open-access journals to guarantee the permanence of their work, while 34% of participants do not have such concerns.

4.6. Reasons why LIS faculty do not publish in open-access journals

As shown in Table 6, among those LIS faculty who have never published in an open-access journal, 55% agree that an objection in principle to paying publication fees dissuaded them from doing so. Nearly 40% of those faculty members who have not published in an open-access journal have not done so because they could not find funds to pay publication fees, which, as outlined in the literature review, aligns with findings among faculty in the arts, humanities, and social sciences, but is much higher than faculty colleagues in natural science and medical disciplines. Roughly 39% of these respondents could not identify appropriate open-access journals in which to publish, and 36% believed themselves insufficiently familiar with open-access journals in order to make a confident submission decision. Sizable numbers of faculty who have not published in an open-access journal believe that such journals in their field have low prestige (43%) and low impact (45%). Although only 22% of these LIS faculty with no open-access publishing experience believe that open-access journals in their field have poor peer-review processes, 47% are uncertain about the rigor of peer review in open-access journals. Just over 30% of these respondents are also concerned about low citation rates in open-access journals, although, again, a high number of non-open-access faculty (41%) neither agrees nor disagrees that articles published in open-access journals may be cited less frequently. Slightly more than one-third of respondents (34%) who have never published in an open-access venue indicate that their institution influenced their decision.

On a promising note, three-quarters of these respondents indicate that they would publish in an open-access journal if they could identify a venue that surmounted the reasons that have thus far hindered them from engaging with open access.

4.7. The economics of publishing in open-access journals

Fifty-three percent of survey participants agree to some extent that open access will be more cost effective in the long-term than the current subscription-based model of academic publishing. Eleven percent disagree and 32% are unsure. Slightly less than 50% of respondents believe that neither they nor their institutions should have to pay any fees to publish their research in an open-access journal. Twenty-one percent would be willing to accept article processing fees up to $500, while less than 5% think authors or their institutions should pay fees in excess of $500. However, almost 22% of survey participants are unsure about what would be an appropriate amount for such fees. The following proportions of respondents believe that article processing fees should come from the following sources: research grants (57%); departmental funds (45%); library/institutional funds (38%); commercial sponsors (15%); personal funds (9%).[3] Respondents were also provided with an 'other' category, of which 22% availed themselves. Beyond a forceful reiteration by several respondents about their complete rejection of paying to publish their work and very strong resistance against using personal funds, many suggested that direct government subsidy would be an appropriate source of funds to cover article processing fees. Other proposed funding sources include portions of learned society membership fees, professional development grants, foundation money,

[3] Respondents were permitted to choose multiple sources and so the total does not sum to 100.

Table 7
Experience with depositing in electronic repositories.

	Preprint form	No response[a]	Total	Final, peer-reviewed form	No response[a]	Total
Posted an article on my personal web page.	42	234	276	27	249	276
% within question total	**15.2**			**9.8**		
Posted an article on my department's web page.	6	270	276	10	266	276
% within question total	**2.2**			**3.6**		
Deposited an article in an electronic institutional repository.	51	225	276	58	218	276
% within question total	**18.5**			**21**		
Deposited an article in an electronic subject repository.	18	258	276	20	256	276
% within question total	**6.5**			**7.2**		

[a] This question was only displayed for those respondents who had previously deposited research outputs to an electronic repository.

university institutional research overhead funds, and a mix of all sources.

Compared to their colleagues in many other disciplines, LIS faculty are less likely to have paid an article processing fee to publish in an open-access journal (only 8% of those respondents who have published in an open-access journal indicate that they paid a fee to do so). It is unclear whether the journals in which these authors published either do not rely on article processing fees to fund their operations or whether the researchers obtained fee waivers from the publisher. In any event, this is an interesting finding that might be connected to the objection in principle to paying publication fees articulated by a majority of LIS faculty that has never published in an open-access journal. Among those respondents who incurred an article processing fee, these fees were paid for using mainly research grants, followed by library/institutional and personal funds.

When asked about hybrid open-access models, in which authors pay a fee to have their article made freely accessible to readers in an otherwise subscription-based journal, only 5% of respondents would definitively remit such fees to a publisher. Thirty-three percent might possibly pay such fees, while 37% and 22%, respectively, would probably or definitely not. Those respondents who would not pay a hybrid open-access journal fee were asked to elaborate on why they would not do so. Here again, lack of funds and a strong rejection of having to pay to publish research results were expressed by many respondents. In the words of one respondent, which sum up quite nicely a theme articulated by many others: "I don't have that kind of discretionary income! I'm an academic!" Along similar lines, several of these participants emphatically reject the hybrid model for offering publishers a mechanism to collect double revenue streams from authors through article processing fees and readers (or their proxies in the form of libraries) through subscriptions, which has become known colloquially as double-dipping. Indeed, several respondents reinforced their dissatisfaction about the high profits extracted by commercial publishers through the free labor provided by academics in their roles as authors, reviewers, and editors within the scholarly communication system. A number of respondents thought that remitting hybrid fees would be a waste of money and would instead make a preprint or other permissible version of the manuscript available through an institutional repository and via email to anyone who directly requested a copy of the article.

4.8. Electronic repositories and archiving (green open access)

Fifty percent of respondents have deposited at least one research output in an electronic repository. As Table 7 demonstrates, such deposition tends to be made more often to electronic institutional repositories (19% of pre-prints and 21% of final, peer-reviewed forms) than to subject repositories (7% of pre-prints and final, peer-reviewed forms, respectively). This underlines the point made earlier about the need to create and publicize LIS electronic repositories more vigorously. Asked prospectively about their expectations within the year to engage with electronic repositories, an overwhelming majority of respondents does not expect any changes in levels of deposition.

Among those respondents who had posted their work to an electronic repository, the following were articulated as important reasons for doing so: the potential for electronic repositories to broaden the dissemination of research more generally (93%); expands exposure of both previously published (88%) and not previously published (73%) work; increases an academic institution's leverage with commercial publishers (44%); and improves the prospects for tenure and/or promotion (41%). These same considerations were found to be important in roughly the same proportions among those survey participants who had not previously deposited their work in an electronic repository when asked to consider what might motivate them to do so in the future.

Two-thirds of respondents who avail themselves of green open access post their work themselves to electronic repositories. Someone from the library uploads scholarly works to repositories on behalf of one-third of these survey respondents, while graduate students/teaching assistants and departmental administrative assistants post material for 12 and 6% of LIS faculty, respectively.[4] When asked who should be responsible for archiving articles published in open-access journals, three-quarters of respondents indicated publishers, followed by scholarly institutions (55%), scholarly societies (45%), library consortia (41%), national libraries (38%), authors themselves (30%), and national governments (17%).[5]

LIS faculty appear much more willing to comply with green rather than gold models of open access (Tables 8 and 9). While only 42% of survey participants indicate that they would willingly publish the results of their research in an open-access journal if required under the terms and conditions of a research grant, 85% would willingly deposit a copy of the article in an electronic repository if required by their funding body or employer. An additional 24% of respondents would publish their article in an open-access journal, albeit unwillingly, if required by the terms and conditions of their grant. Twelve percent of respondents would refuse such terms and conditions and look for alternative sources of research funding, while 20% are unsure.

4.9. LIS faculty willingness to engage in more radical efforts to subvert commercial publisher control of the scholarly communication system

As pointed out earlier, substantial numbers of LIS faculty reject the monetization of scholarly communication and articulate concerns about what is perceived to be detrimental control exercised by commercial publishers over the scholarly communication system. Are LIS faculty therefore willing to engage in more radical strategies to exorcize such commercial control?

Slightly more than a third of respondents would be willing to join the boycott of Elsevier sparked by Tim Gowers as part of the effort to challenge the high costs of journals charged by the major for-profit

[4] Respondents were permitted to choose multiple responses and so the total does not sum to 100.

[5] Respondents were permitted to choose multiple responses and so the total does not sum to 100.

Table 8
Willingness to comply with research funding mandates to publish research results through open access (gold model).

Gold open access	Count	% within question
I would willingly accept such terms.	115	**41.7**
I would accept such terms, but unwillingly.	67	**24.3**
I would not accept such terms and would look elsewhere for funding.	33	**12**
Unsure	54	**19.6**
No response	7	**2.5**
Total	276	**100**

Table 9
Willingness to comply with employer or funder mandates to deposit copies of publications in electronic repositories (green model).

Green open access	Count	% within question
I would do so willingly.	235	**85.1**
I would do so, but unwillingly.	11	**4**
I would not be prepared to do so.	3	**1.1**
Unsure	20	**7.2**
No response	7	**2.5**
Total	276	**100**

publishers.[6] Thirty percent of survey participants would not support this boycott, while a similar proportion remains unsure. Forty-eight percent of respondents agree to some extent that one strategy within LIS in response to the serials crisis would be for editorial boards to resign en masse from journals owned by for-profit publishers in order to establish new journals that could be offered to libraries and other subscribers at lower prices. Nineteen percent of survey participants disagree that this would be a viable strategy, and 30% are unsure. Respondents who are members of an editorial board were asked whether they would be willing to engage in this type of action. Approximately 36% of editorial board survey participants affirmed their willingness to resign and establish new, lower-cost alternative journals, while 33% remain unsure and 32% would not be willing to do so. A theme repeated by several respondents for their hesitation in engaging in such a strategy is the significant amount of work involved in establishing new journals with sufficient prestige and impact to attract strong research. Along similar lines, many respondents articulated dubiousness about the prospects for success of such a strategy. Several others pointed out that working for change within an organization would be more productive than boycotts or efforts to establish competing journals. A number of participants also indicated a certain level of loyalty and commitment to the journal of which they are an editorial board member and thus concern about undertaking actions that would be detrimental to it, even if it is owned by a commercial publisher.

[6] This protest grew organically out of the blog posting in mid-January 2012 by Cambridge University mathematician Timothy Gowers, in which he wrote that he would no longer publish papers in any of Elsevier's journals or serve as a referee or editor for them. By mid-April of the same year, almost 10,000 researchers from around the world had pledged to support the boycott of Elsevier. Support appears to have plateaued at just under 15,000 signatories by mid-2014. The online statement of protest, which was organized by Tyler Neylon, raises three key objections to the business practices of Elsevier. First, individual journal prices are much too high. Second, because of these high prices, libraries are compelled to avail themselves of publisher-developed bundles when ordering serials. Very often, these bundles include journals that are superfluous to a particular library's collection. Finally, Elsevier supported the proposed *Research Works Act* in the United States, a bill introduced in the House of Representatives in December 2011 that would have reversed and banned federal policies that require researchers who receive federal funding to deposit their research papers in open-access repositories within one year of publication. In the face of substantial pressure, Elsevier formally withdrew its support for this bill on 27 February 2012. However, in its statement, the company made it clear that it will continue to oppose legislated efforts to extend open-access mandates. On the same day, the sponsors of the bill announced that they will no longer try to move it through Congress.

5. Discussion

As articulated in the introduction, this study sought to explore North American LIS faculty awareness of, attitudes toward, assessment of, and experience with open-access scholarly publishing. Recognizing that open access is one element of the broader scholarly communication system, the survey instrument also queried respondents about their perceptions of the latter. Similar to attitudes among faculty across a range of disciplines, LIS faculty articulate their dissatisfaction with the current state of the scholarly communication system. Although a majority of LIS faculty attributes a critical role to publishers within the scholarly communication system, large numbers similarly believe, in ways aligned with scholars across the disciplinary spectrum, that the dissemination of scholarly research is a public good that should not be monetized. LIS faculty are thus very critical of what is perceived to be detrimental control exercised by for-profit publishers over the scholarly communication system. This may explain why many LIS faculty are not concerned that a significant move to open access would be detrimental to the broader scholarly communication system. However, LIS faculty do not appear to be particularly amenable to engaging in more radical action to reduce commercial control over the scholarly communication system.

While LIS faculty are more knowledgeable about and have more experience with open access than their disciplinary brethren, which may be an artifact of the age of much previous research, the perceived constraints of the tenure and promotion system within the academy tend to limit their engagement with open-access publishing in ways similar to their academic colleagues. Moreover, and similar to colleagues in other disciplines, a majority of LIS faculty believes that tenure and promotion committees remain dubious about the quality of open-access journals. Career concerns may explain why less than a quarter of respondents deliberately publish in journals that are affordable to readers and instead makes publishing venue decisions based on considerations of a journal publisher's reputation, speed of publication, impact factor, and weight of the publication in tenure and promotion decisions. Indeed, barely a majority of respondents has ever published in an open-access journal or deposited their research in an electronic repository, despite the fact that almost three-quarters of respondents agree to some extent that LIS faculty should be at the forefront of efforts to expand open access to scholarly research. Thus, and similar to findings made by other researchers in other disciplines, there is a disconnect between LIS faculty support for unhindered access to research and their own publishing practices, which tend to remain informed and constrained by the parameters of the academy's traditional reward structure.

Although a majority of LIS faculty believes that open-access publishing offers a variety of benefits, including speed of publication and wider circulation than traditional journals, sizable minorities remain unconvinced that these benefits accrue to open-access journals. Similarly, some LIS faculty are somewhat uncertain about the quality of open-access journals compared to subscription-based journals. While a large minority believes that open-access journals are of quality comparable to their traditional rivals, a sizable proportion of LIS faculty remains unsure and almost a fifth of respondents believe that open-access journals are lower quality. LIS faculty exhibit even more uncertainty about purported citation advantages of open-access journals over subscription-based venues.

Among those LIS faculty who have not availed themselves of open-access venues, a majority was put off by article processing fees. Indeed, and similar to their colleagues in the arts, humanities, and social sciences, considerable numbers of LIS faculty have not published in an open-access journal because they could not find the money to pay publication fees, because they could not identify appropriate venues in which to publish their work, because they perceive the open-access journals in their field to have low prestige and impact, or because they are uncertain about the rigor of peer review in open-access journals more generally.

That having been said, three-quarters of these LIS faculty members would publish in an open-access journal if such concerns were overcome. Given that only 8% of respondents who have published in an open-access journal paid a fee to do so, remission of article processing fees may, in practice, be an easily surmounted hurdle to broader uptake of open-access publishing among LIS faculty. This begs further research into the funding models of open-access LIS journals.

Although LIS faculty indicate more of a willingness to comply with green rather than gold open-access mandates, only a half of respondents has actually deposited work in an electronic repository and a majority does not expect to change levels of deposition. Given that the green model is the more economical form of open access, the general commitment among substantial majorities of LIS faculty to the free provision of access to scholarly research reinforces the point made above about the need to create and publicize more aggressively LIS electronic repositories.

This study has several limitations. First, the findings presented are limited to LIS faculty in North America. Second, the results presented here are based entirely on descriptive statistical analyses and thus unable to illuminate possible relationships between the variables discussed above. Inferential analyses of these data that test whether any of the perceptions of, attitudes toward, and experience with open access differ across respondents based on faculty rank and tenure status, beliefs about how tenure and promotion committees would assess open-access publications, experience publishing in open-access journals, knowledgeability of open access, and future likelihood of publishing an article in an open-access journal can be found in Peekhaus and Proferes (2015). The third limitation is a function of the chosen data collection method. As with all surveys, the present study is limited by the fact that the underlying data are based on self-reports of past activity and, in some cases, prospective or hypothetical action. Although electronic surveys provide a cost- and time-efficient instrument for collecting data from a large number of geographically dispersed subjects, they do not yield the same rich detail as interviews. Further research based on interviews might provide deeper and more nuanced information about faculty perceptions of and engagement (or lack thereof) with open-access publishing, which could be particularly useful for developing strategies to surmount some of the current hurdles to wider uptake of open access among LIS faculty. Fourth, given the difficulties of comparing results from different surveys administered across multiple temporal and spatial spans, drawing direct comparisons between LIS and other faculty is impossible. Therefore, and where possible, the discussion could only highlight areas of commonality and difference between LIS and other faculty in respect of scholarly communication, in general, and open access, in particular. Future research might consider administering the survey to faculty across a range of disciplines. Fifth, the data collected in this study reflect a synchronic moment in time and thus are unable to speak to historical changes in LIS faculty attitudes toward and engagement with open access. The present study may provide a baseline from which future longitudinal research conducted at periodic intervals could chart such change.

6. Conclusion

As the first systematic exploration of LIS faculty experience with and attitudes toward open-access publishing, the results from this study fill a gap in our knowledge base about actual levels of support for and commitment to the foundational principle of access that informs both the discipline and the profession. In addition to highlighting areas of commonality and difference between LIS and other faculty in respect of scholarly communication, in general, and open access, in particular, this study raises important questions about how to address the concerns LIS faculty articulate in respect of the contemporary scholarly communication system. While there are a number of findings in this study that should give proponents of open access a sense of optimism, such as the fundamental belief that scholarly work should be considered a public good, this survey also highlights some of the deeper structural issues within the academy and the perceptions of LIS faculty around those structural issues that may inhibit greater participation in open-access publishing. Developing ways to respond to these issues at both the individual level among LIS faculty and the structural level within the academy will be important next steps for all in order to address what is perceived by most in this discipline to be an unsatisfactory current state of scholarly communication.

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