Evidence Based Library and Information Practice

Article

The Scholarly Communications Needs of Faculty: An Evidence Based Foundation for the Development of Library Services

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Abstract

Objectives – This exploratory research seeks to broadly understand the publishing behaviours and attitudes of faculty, across all disciplines, at the University of Saskatchewan in response to the growing significance of open access publishing and archiving. The objective for seeking this understanding is to discover the current and emerging needs of researchers in order to determine if scholarly communications services are in demand here and, if so, to provide an evidence-based foundation for the potential future development of such a program of services at the University Library, University of Saskatchewan.

Methods – All faculty members at the University of Saskatchewan were sent personalized email invitations to participate in a short online survey during the month of November 2012. The survey was composed of four parts: Current Research and Publishing Activities/Behaviours; Open Access Behaviours, Awareness, and Attitudes; Needs Assessment; and Demographics. Descriptive and inferential statistics were calculated.

Results – The survey elicited 291 complete responses – a 21.9% response rate. Results suggest that faculty already have a high level of support for the open access movement, and considerable awareness of it. However, there remains a lack of knowledge regarding their rights as authors, a low familiarity with tools available to support them in their scholarly communications activities, and substantial resistance to paying the article processing charges of some open access journals.

Survey respondents also provided a considerable number of comments – perhaps an indication of their engagement with these issues and desire for a forum in which to discuss them. It is reasonable to speculate that those who chose not to respond to this survey likely have less interest in, and support of, open access. Hence, the scholarly communications needs of this larger group of non-respondents are conceivably even greater.

Conclusion – Faculty at the University of Saskatchewan are in considerable need of scholarly communications services. Areas of most need include: advice and guidance on authors' rights issues such as retention of copyright; more education and support with resources such as subject repositories; and additional assistance with article processing charges. The University Library could play a valuable role in increasing the research productivity and impact of faculty by aiding them in these areas.

Introduction

The Association of Research Libraries (ARL) defines scholarly communications as "the system through which research and other scholarly writings are created, evaluated for quality, disseminated to the scholarly community, and preserved for future use" (Association of Research Libraries, n.d.). The scholarly communications landscape has arguably changed more in the last two decades than in the entire history of the academic journal (see Soloman, 2013). The rise of the Internet has not only enabled the rapid shift from print to online, but has also enabled the development of new tools, new formats, and even new business models for open access journal publishing.

"Open access literature is digital, online, free of charge, and free of most copyright and licensing restrictions" (Suber, 2004). Researchers can make their articles open access by publishing in an open access journal ("gold") or by self-archiving a copy of their manuscript in an open repository ("green"). The Budapest Open Access Initiative of 2002 (Chan et al., 2002) is widely viewed as the defining event when this movement was born, and since then it has grown rapidly. In fact, Lewis (2012) argues that gold open access will be the dominant mode of publishing within the next decade. The transition to an open access environment is perhaps one of the central topics in scholarly communications at present and permeates many related aspects such as impact

metrics, peer review, and copyright. Additionally, many institutions and major funding agencies are now mandating that their researchers and funding recipients make the products of their research openly available. Researchers need to adapt to these changes and their implications quickly.

Academic librarians are uniquely positioned to assist faculty in navigating this complex and rapidly evolving scholarly communications landscape. Librarians deal with publishers on a routine basis as part of their professional practice and also increasingly as publishing researchers themselves. The missions of academic libraries largely involve supporting the academic and research agendas of their institutions. In light of these conditions, many academic libraries are extending their support services to encompass various scholarly communications initiatives such as hosting and managing institutional repositories, education and outreach on open access issues, establishing author's funds to pay the article processing charges of some gold open access journals, and supporting campus-based open access journal publishing activities. At the present time, the University Library, University of Saskatchewan offers no services of this kind for faculty.

The University of Saskatchewan is the largest university in the province of Saskatchewan, Canada, with more than 21,000 students and over 1000 faculty. It is a public medical-doctoral

institution offering a wide range of programs and courses including many professional and post-graduate degrees. In 2011, the University of Saskatchewan joined the U15 Group of Canadian Research Universities, a group of 15 research intensive universities that advocates for public policies to advance research and innovation in Canada. Since joining the U15, the University of Saskatchewan has greatly enhanced its focus on increasing research output and metrics, and increasing performance in Tri-Agency funding (see *Promise and Potential: The Third Integrated Plan* http://www.usask.ca/plan/index.php).

The three main federal funding bodies in Canada are often collectively known as the "Tri-Agency" or "Tri-Council." This group released a draft Open Access Policy in October 2013 (see NSERC, 2013) that will require fundees to make publications resulting from their funded research open access by either the green or gold route. This policy is expected to be launched in late 2014 or early 2015.

Literature Review

Surveys of Authors for Opinions and Awareness of Open Access

Since the origin of the open access movement the opinions, concerns, and levels of awareness of authors have been tracked in numerous studies. Although little is known locally regarding faculty attitudes on open access, many such surveys have been carried out at other institutions and more broadly by government agencies, publishers, and various interest groups over the years.

Xia (2010) used a longitudinal approach to analyze these numerous surveys of researchers' attitudes and behaviours on open access covering a period of 20 years beginning in the early 1990s. Unsurprisingly, this meta-analysis discovered a steady increase over time in the

awareness of researchers, as well as an increase in author participation in open access publishing. However, researchers' concerns on the quality/reputation of open access journals, and perceived lack of peer-review in these journals, remained constant over this time (Xia, 2010).

Recently, two large-scale international and cross-disciplinary studies were also conducted, both between 2009 and 2011: the SOAP and PEER surveys.

The SOAP (Study of Open Access Publishing) survey was financed by the European Commission and is the largest study of its kind conducted to date, with almost 54,000 respondents – most of whom are active researchers. The majority of these respondents (89%) have a favourable view of open access and indicate that openly available articles are beneficial to their fields. The most significant barrier to publishing in an open access venue is the availability of funding to pay article processing charges, followed closely by the perceived lack of quality open access journals in the researcher's discipline (Dallmeier-Tiessen et al., 2011).

In contrast, the PEER (Publishing and the Ecology of European Research) survey studied the perceptions, motivations and behaviours of authors and readers specifically regarding open repositories. The final report of the study concludes that although researchers have a favourable view of open access and general awareness of it, few of them associate it with self-archiving and many are confused about the different types of repositories and versions of articles posted in them (Fry et al., 2011). Another key conclusion of the PEER study is that "academic researchers have a conservative set of attitudes, perceptions and behaviours towards the scholarly communication system and do not desire fundamental changes in the way research is currently disseminated and published" (Fry et al., 2011, p. 76).

Scholarly Communications Services Offered by Academic Libraries

Many academic libraries have responded to the quickly changing scholarly communications environment by developing a range of services to support researchers. A 2007 ARL SPEC Kit (#299) surveyed ARL libraries about the nature of library-initiated scholarly communications educational activities. Of the 73 responding libraries, 75% indicate that they offer such education at their institutions while 18% do not but plan to. Only five responding libraries do not offer these services or another unit on campus has this responsibility (Newman, Blecic, & Armstrong, 2007). A more recent SPEC Kit (#332), *The Organization of Scholarly Communication Services*, reports that 93% of the 60 ARL libraries responding to the SPEC Kit survey offer scholarly communication services; of these, 76% indicate that the library is the main leader in this area at their institution. Among the services offered, all libraries are active in advising and educating authors about copyright and retaining their copyright, and "76% of the responding libraries offer services related to hosting and managing digital content, 71% offer campus-based publishing services, and 55% provide the services associated with supporting research, publishing, and creative works" (Radom, Feltner-Reichert, & Stringer-Stanback, 2012, p. 13). Libraries at non-ARL institutions are also offering the same kinds of services, but at somewhat lower rates of adoption (Thomas, 2013).

A 2009 survey of 21 members of the Canadian Association of Research Libraries (CARL) found that nearly all maintain an institutional repository for faculty self-archiving, and a majority are involved in open access educational activities and have designated individuals or teams with related responsibilities (Greyson, Vezina, Morrison, Taylor, & Black, 2009). In another survey of 18 CARL libraries 12 of the respondents reported having dedicated funds to support open access, nine of which include money to fund faculty article processing charges in gold open access journals (Fernandez & Nariani, 2011).

There are a wide variety of leadership structures currently in place in libraries to carry out these initiatives – from single individuals to committees or entire departments (Burpee & Fernandez, 2014; Radom et al., 2012). At other institutions, scholarly communications activities have been incorporated directly into liaison responsibilities (see Malenfant, 2010; and Wirth & Chadwell, 2010). Although it is conceivable that other units on campus, such as research offices, may also provide these services to faculty, in practice it is librarians who often feel a greater mandate in the education and promotion of open access. Research offices are more likely to focus on assisting researchers in successfully achieving grant funding (Greyson et al., 2009).

Aims

The main aim of this exploratory study is to discover the current and emerging needs of university faculty in an effort to determine if scholarly communications services are in demand and, if so, to provide an evidence based foundation for the potential future development of such a program of services. No previous research of this kind has been carried out at the University of Saskatchewan. Results from this study will therefore also provide a benchmark from which to compare any future data collected here.

Methods

An online survey was created using Fluid Surveys software. The survey consisted of 18 questions in all; 4 questions involved a possible follow-up question depending on the answer given by the participant. Therefore, the maximum number of questions a participant could encounter was 22. The full survey instrument is available in the Appendix.

The first question of the survey: "In the last ten years have you disseminated the results of your research/artistic work?" was the only required question. Respondents who answered "no" to this would be excluded from the study. This enabled the survey to collect responses only from actively publishing researchers. All other questions in the survey were not required.

Questions were divided into four broad areas: Current Research and Publishing Activities/Behaviours; Open Access Behaviours, Awareness, and Attitudes; Needs Assessment; and Demographics. Considerable effort was made to ensure that the language in the survey questions could apply to the scholarly communications practices in a wide range of disciplines. The survey included 11 comment boxes that were distributed throughout in an effort to collect additional qualitative data; none of these boxes were required.

No incentives were offered for participation, so the survey was kept brief in order to encourage participants to complete it once started. The average time actually taken to complete the survey was just under 13 minutes.

An email invitation to participate was sent to all faculty members, in all disciplines, at the University of Saskatchewan. Access could not be obtained to a pre-existing email distribution list for all faculty, so instead an email list was manually constructed in Excel by visiting departmental webpages. However, each department manages their own faculty lists on their webpages, so there is no consistency across campus on clearly and accurately identifying the status of individuals listed; and the lists were not always up-to-date. Therefore, no effort was made to limit this survey to faculty of a particular rank or status; and it is likely that some individuals outside of faculty (e.g., sessionals or lecturers) might have been inadvertently invited to participate as well. A more practical and efficient means for creating an accurate email list for faculty could not be devised.

The email list was imported into the survey software which then generated personalized invitations for each faculty member. In total, 1327 invitations were sent. The survey remained open for the month of November 2012; two reminder emails were sent. The survey responses were anonymous.

Statistical analysis of the results was performed within the survey software itself and in the statistical software package SPSS.

This study was granted ethical approval by the Behavioural Research Ethics Board of the University of Saskatchewan.

Results

Of the 1327 survey invitations that were sent out, 338 responses were received of which 291 were complete. This is an overall response rate of 21.9%.

The results outlined in this section are taken only from the 291 complete responses; responses of those who did not fully complete the survey were excluded from the analysis. Some respondents did not answer all of the questions in the survey – this explains why the total count for individual questions may be less than 291. Only the key findings are reported and are herein organized according to dominant themes that emerged; they do not necessarily follow the original sequence of the survey. A more complete account of the results of this study is openly available (see Dawson, 2014).

Open Access Awareness, Support, and Participation

Participants were provided with Peter Suber's (2004) definition of open access and they were then asked to assess their understanding of this term. In this study, "understanding" is being considered equivalent to "awareness."

All 291 participants responded to this question with 91% indicating that they either understand

the concept well, or have some knowledge of it (Table 1). This is a high level of general awareness. Only four individuals indicated that they were not aware of the concept.

Although faculty claim a reasonably high level of awareness of open access, their knowledge of the details of open access options available is lower. Only 33% indicate that they are aware of a subject repository in their discipline (Table 2). It is unclear, however, if this seemingly low level of awareness might actually be due to the lack of these outlets for some disciplines.

Faculty knowledge of hybrid journals is higher with 53% answering that they are aware if this option and a further 18% "somewhat aware." Still, nearly a third of the respondents do not know about the hybrid journal option (Table 3).

The next question was designed to assess the individual's level of support for the overarching philosophy of open access. The first paragraph of the Budapest Open Access Initiative (Chan et al., 2002) was included above the question to clarify what was meant by "philosophy" of open access.

Table 1
Please rate your level of understanding of "open access" (N = 291)

Response	Count	Percentage
I understand it well	95	33%
I have some knowledge of it	169	58%
I have heard of it but I am not sure what it is	23	8%
I was not aware of it	4	1%

Table 2
Are you aware of a subject repository* in your discipline? *an online archive available for researchers/creators in your discipline to post copies of their works* (N = 291)

Response	Count	Percentage
Yes	97	33%
No	156	54%
Not sure	38	13%

Table 3
Are you aware of "hybrid journals"*? *traditional journals that offer an option to authors to make their individual articles open access for a fee* (N = 290).

Response	Count	Percentage
I am aware of this option	154	53%
I am somewhat aware of this option	54	18%
I was not aware of this option	82	28%

A strong majority (94%) of respondents either strongly support or somewhat support the philosophy of open access as described in the Budapest Open Access Initiative (Figure 1).

Respondents' opinions on open access were also gauged by providing a number of statements and asking respondents to decide to what extent they agreed or disagreed (Figures 2 & 3). Respondents once again display their strong support for open access with 92% either strongly agreeing or agreeing to the statement "Results of publicly-funded research should be made available for all to read without barriers." Although the respondents to this survey appear to predominantly be open access supporters, a majority (83%) also do not want to pay article processing charges with their grant money.

The level of respondents' prior participation in open access publishing or archiving was assessed. All 291 participants responded to this question with 101 indicating that they have never made their works open access; the remaining 190 respondents have made their works open access in the past (Figure 4). These 190 individuals also indicated *how* they did this: through an open access journal or book, self-archiving in a repository or personal website, through a hybrid journal, or "not sure how." This last option was included for those respondents who may have delegated

publishing and archiving responsibilities to co-authors. Of all of these "Yes" options, there were a total of 275 responses – indicating that many of the 190 "Yes" respondents have participated in open access in several different ways. A follow-up Comments box was provided to the 101 individuals who had not made their works open access to allow them to explain their reasons. Of the 81 responses here, 43% indicated that the cost of article processing fees were too high, 20% had concerns regarding the quality of journals (i.e. no peer review, low impact factors), and 17% felt that they did not know enough about open access to be confident publishing this way (Figure 4).

Authors and Copyright

Faculty should have freedom to choose outlets to publish in. However, they should also be informed and empowered to negotiate their publication agreements in order to retain rights important to them – such as the right to deposit a copy of the manuscript in an open repository to comply with funder's requirements. Several questions investigated faculty opinions and behaviours regarding author transfer of copyright to publishers. The majority of respondents (77%) either agree or strongly agree with the statement "Researchers should retain the copyright to their published works" while 79% also indicate that they do not have the time/interest/expertise to negotiate the copyright terms (Figures 5 & 6).
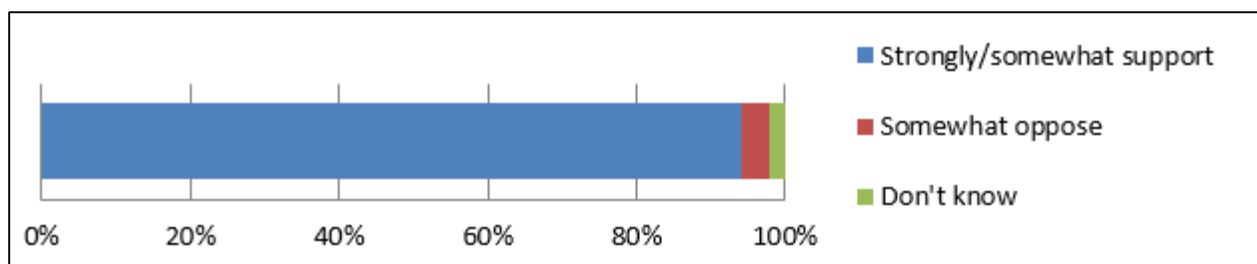

Figure 1
How would you characterize your support for the philosophy of open access as outlined in the paragraph above? (Strongly Support = 56%; Somewhat Support = 38%; Somewhat Oppose = 4%; Strongly Oppose = 0%; Don't Know = 2%.   N = 289).
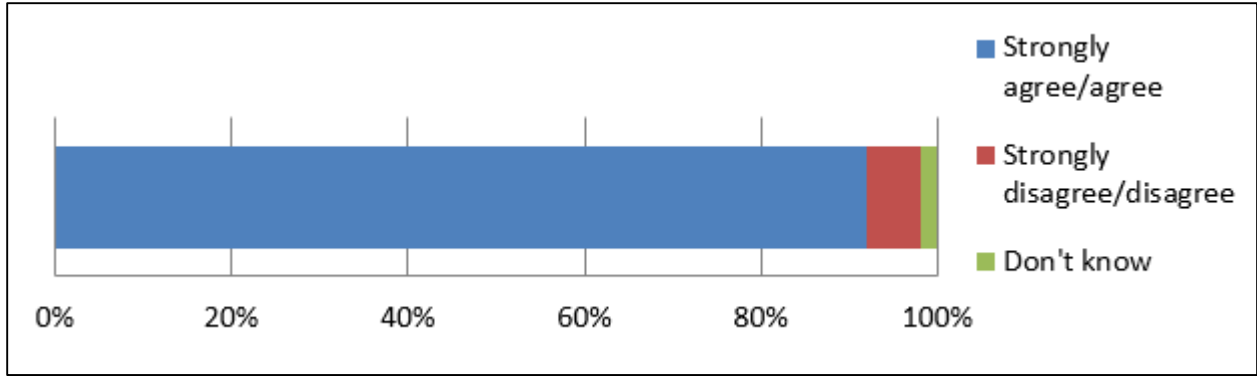
Figure 2
Results of publicly-funded research should be made available for all to read without barriers (Strongly Agree = 59%; Agree = 33%; Disagree = 5%; Strongly Disagree = 1%; Don't Know = 2%. N = 289).
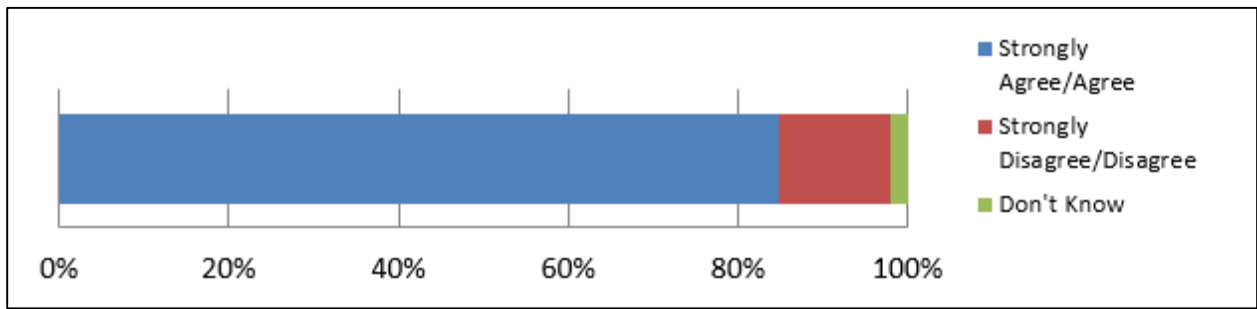

Figure 3
I do not want to spend my grant funds on publishing fees (Strongly Agree = 36%; Agree = 47%; Disagree = 12%; Strongly Disagree = 1%; Don't Know = 5%. N = 289).
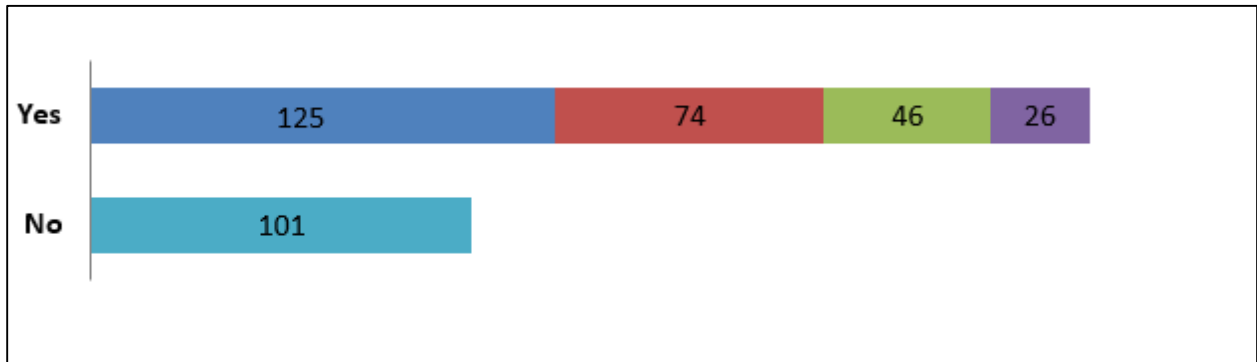

Figure 4
Have you ever made any of your publications or artistic works available on an open access basis? How? Check all that apply. (N = 291).
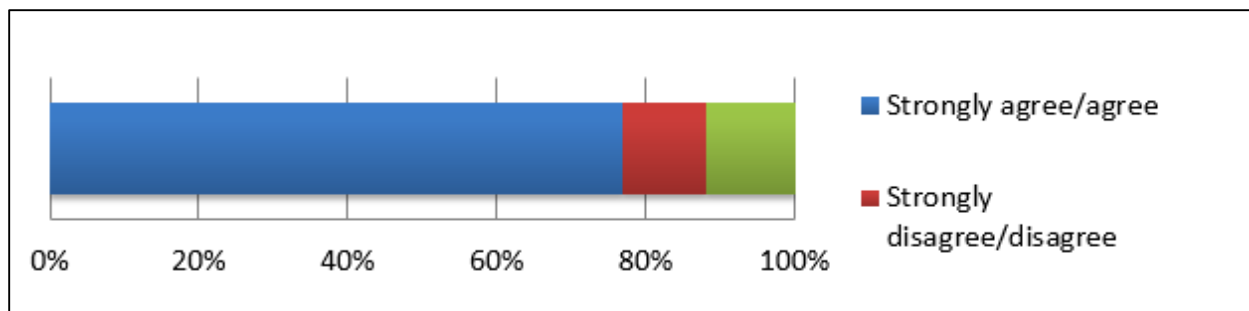
Figure 5

Researchers should retain their copyright (Strongly Agree = 25%; Agree = 52%; Disagree = 10%; Strongly Disagree = 1%; Don't Know = 12%. N = 289).
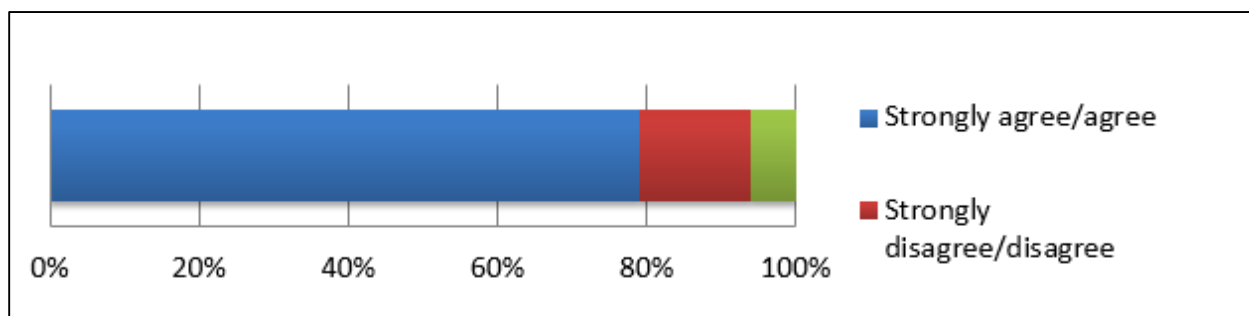

Figure 6

I do not have the time/interest/expertise to negotiate copyright terms (Strongly Agree = 21%; Agree = 58%; Disagree = 13%; Strongly Disagree = 2%; Don't Know = 6%. N = 288).

Another question asked more specifically about how the respondents handle their copyright transfer agreements from publishers. An overwhelming majority (99%) usually sign the agreement "as is" (Table 4). Five of the 11 remarks left in the Comments box after this question center on the belief that these terms are not negotiable or participants indicate they did not know they were negotiable. Of the 287 respondents to this question only 4 (1%) indicate that they modify copyright transfer agreements. A follow-up question asked these four respondents how they have modified their agreements. Three have replaced the publisher's terms with their own and one has attached an addendum.

Support for Possible Library Initiatives

When asked about possible major library scholarly communications initiatives the majority of respondents either strongly support or somewhat support (between 70% and 80%) all of them (Table 5; Figure 7). Although the University Library has an institutional repository, it is currently only available for electronic theses and dissertations and librarian research output. A repository for research publications, available to all faculty on campus, is the major initiative most favoured by respondents (78% strongly/somewhat support). Hosting and support for online publications is the next most popular major initiative (76% strongly/somewhat support). A Publications Fund, administered by the University's Research Services unit, is already in existence and will support up to $1000 of article processing charges for open access publishing. Some respondents referred to this fund in their comments and remarked that there was no need to duplicate services on campus in this regard.

Finally, participants were asked how they would like to learn more about, and stay up-to-date on scholarly communications topics (Table 6). The top three answers, each with more than 50% of the responses, are: online guides, discipline-specific seminars, and occasional newsletters. These are relatively minor library initiatives that would require significantly less funding and staff time than those major initiatives discussed above.

Demographics of Respondents

The majority of participants in this survey conduct research in the health sciences (Figure 8), have been involved in research and publishing for either 10-19 years (33%) or 20 or more years (45%), and have been awarded tenure (68%).

Table 4
How do you usually handle the copyright terms in your publishing contracts? (N = 287).

Response	Count	Percentage
I may or may not examine the copyright terms of the contract – I just sign it as is	111	39%
I examine the copyright terms of the contract and usually sign it as is	172	60%
I modify the copyright terms of the contract before signing	4	1%

Table 5
How strongly would you support the following possible University Library initiatives?

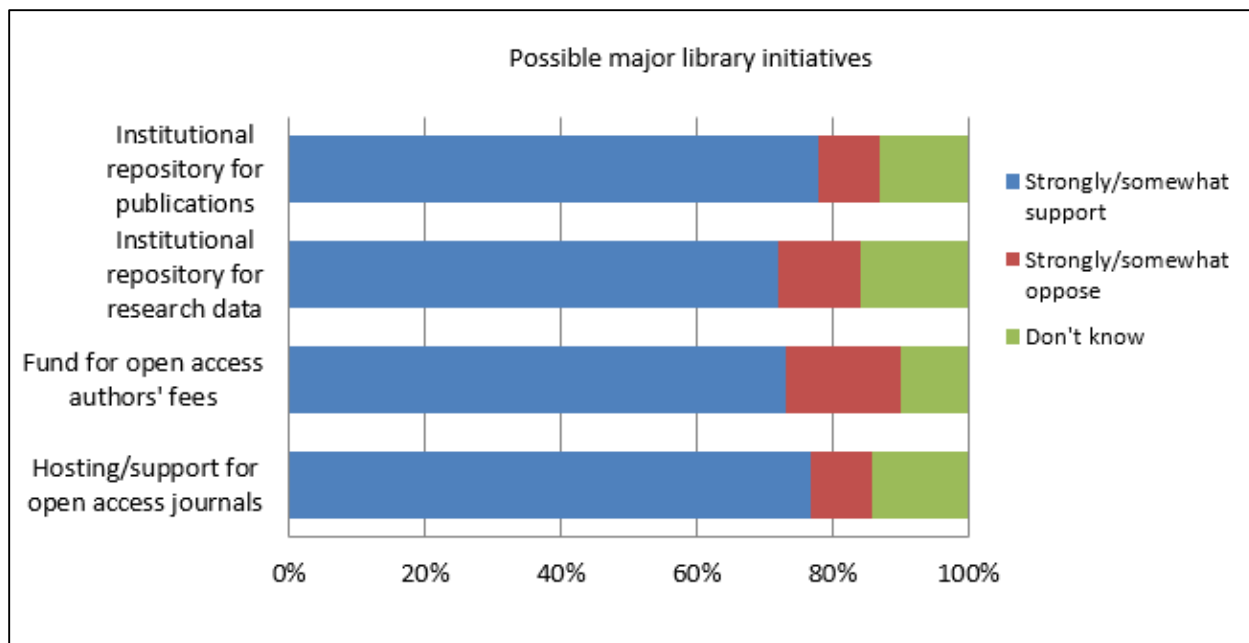| Possible Initiatives	Strongly support	Somewhat support	Somewhat oppose	Strongly oppose	Don't know	Total Responses (N)
Institutional repository for publications	97 (34%)	127 (44%)	17 (6%)	10 (3%)	37 (13%)	288
Institutional repository for research data	88 (31%)	119 (41%)	24 (8%)	11 (4%)	46 (16%)	288
Fund for open access authors' fees	110 (38%)	101 (35%)	34 (12%)	14 (5%)	30 (10%)	289
Hosting/support for open access journals	105 (36%)	115 (40%)	20 (7%)	7 (2%)	41 (14%)	288

Figure 7

A visual representation of Table 5. ("Strongly Support" and "Somewhat Support", and "Strongly Oppose" and "Somewhat Oppose" responses are combined. N = 288, 289)

Table 6

Which possible University Library initiatives would you find useful in order to learn about, and stay up-to-date on, scholarly communications topics (such as open access)? Check all that apply. (N = 272).

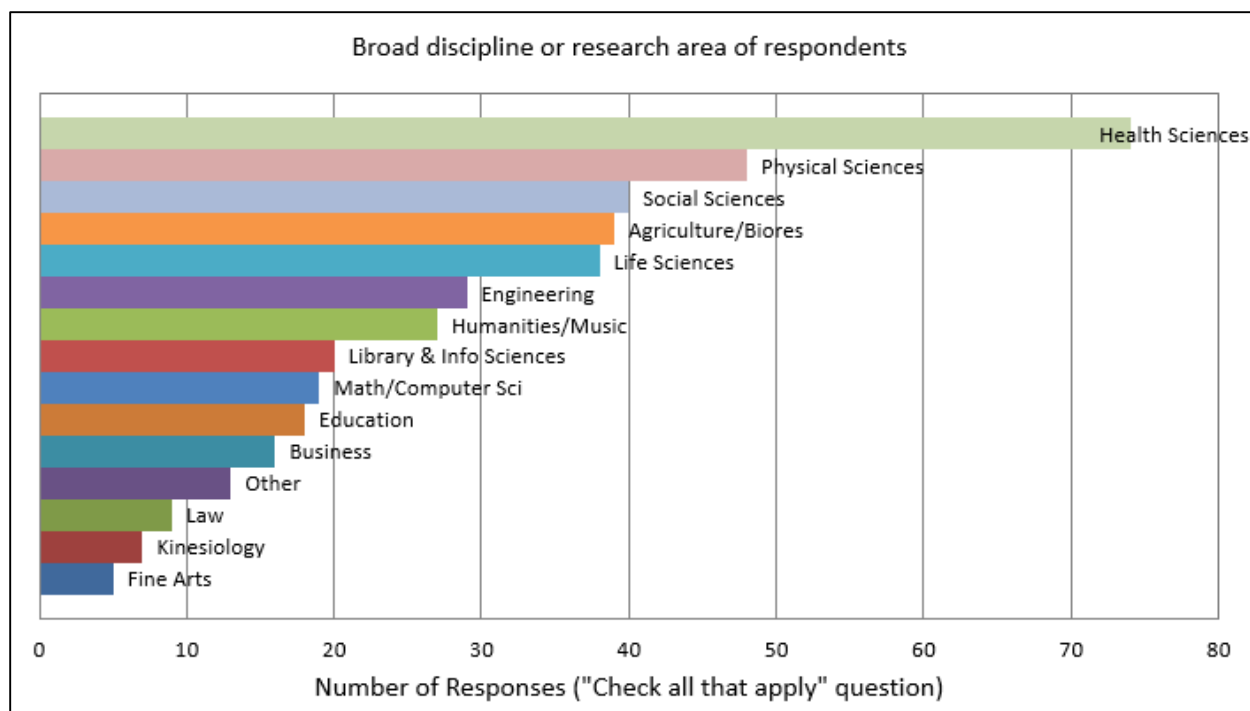| Response	Count	Percentage
Online guide to resources and information	199	73%
Seminars/workshops tailored for your discipline/department	165	61%
Occasional newsletters	144	53%
Individual consultations with a librarian	126	46%
Seminars/workshops open to all	119	44%
Blog postings	62	23%
Open discussion group	49	18%
All of the above	30	11%

Figure 8
What is your broad discipline/research area(s)? Check all that apply. (N = 288).

Discussion

Limitations: Nonresponse Bias

In an effort to increase survey response rates the invitation emails included a short but descriptive subject line: "Survey on Open Access: Invitation to participate". The unintended result of this may have been encouraging the participation of faculty who already have an interest in this topic, and discouraging the rest. The high levels of support for open access seen throughout this survey may be indicative of this effect: the pool of faculty that responded may represent those that already have a favourable attitude in this regard. Those with little interest or no opinions on the topic simply may not have responded to the survey at the same rate. Therefore, it is likely that this study experienced *nonresponse bias*. For this reason, the results are likely skewed and cannot be viewed as generalizable to all faculty.

However, keeping this in mind, several interesting themes emerged in this study.

The Contradictions: Authors' Rights and Article Processing Charges

There are two striking contradictions in these results. Although the pool of respondents to this survey seems to predominantly include those faculty members already supportive and knowledgeable on open access, it is startling to see their almost complete lack of action regarding authors' rights issues such as maintaining their copyright, and their strong resistance to paying article processing charges for gold journals from grant funds. It is sobering to consider the greater extent to which these concerns might exist among the larger group of non-respondents on campus.

Similar surveys of faculty have also noted this contradiction regarding copyright. Moore (2011) found a very high percentage of University of

Toronto faculty (93%) usually sign publisher's copyright transfer agreements as-is despite also agreeing (58%) that managing copyright is important. The University of California's survey reports comparable results and they note that "The disconnect between attitude and behavior is acute with regard to copyright" (University of California, 2007, p. 1). This seems to be a widespread phenomenon since all responding libraries in the 2013 ARL SPEC Kit survey offer services to "advise and educate authors about copyright, retaining rights, etc." (Radom et al., 2012, p. 13). By far, the strongest scholarly communications need exhibited by University of Saskatchewan faculty is in education and guidance on authors' rights issues such as how to modify and negotiate copyright transfer agreements from publishers.

Author reluctance to pay article processing charges is not a new issue, in fact some of the earliest studies of authors' opinions on open access noted this resistance to paying fees (Rowlands, Nicholas, & Huntington, 2004; Schroter, Tite, & Smith, 2005). More recently, a survey of Canadian researchers' publishing behaviours found strong support for open access in principle (83%) but considerably less agreement that it is worth the financial cost (43%); and even fewer (14%) agree that funding for article processing charges is readily available (Phase 5 Research, 2014). The majority of gold open access journals funded in this way are in the field of biomedicine, and this is also where the highest article processing charges are (Soloman & Björk, 2012). The majority of respondents to the present survey are from the field of health sciences. Due to the prevalence of such charges in this field it might be expected that authors are becoming accustomed to using their grant funds for this purpose – but the results herein suggest that this is not the case. It has been shown that providing authors with funds specifically to pay article processing charges offers an incentive for faculty to publish in gold open access journals (Nariani and Fernandez, 2012).

The University of Saskatchewan Publications Fund is available for any costs associated with publishing – including author fees for open access journals. However, the fund is a limited pot of money so applications for this kind of support are in direct competition with other requests (such as for pages charges or reproduction of colour prints). A specific fund to pay article processing charges in addition to this fund may encourage more researchers to publish in gold journals. Additionally, services to assist authors in locating open access journals that don't charge fees would also be helpful. More investigation and discussion on how best to support authors in this area is required.

Awareness vs. Detailed Knowledge

The results of the survey indicate that this group of faculty already has a high level of basic awareness of open access. However, more detailed knowledge may be lacking – and it is this detailed knowledge which may be necessary to enable researchers to actually follow-through and make their publications open access. It is logical to speculate that this lack of detailed knowledge is even greater among the larger group of non-respondents on campus.

One area where faculty seem to lack knowledge is in locations to archive their works: only 33% of respondents knew of a subject repository in their discipline. This could be due to the fact that not all disciplines have such repositories yet, but likely also relates to greater awareness of gold open access in comparison to green open access. The PEER study found that few researchers associate open access with self-archiving (Fry et al., 2011) and Björk et al. (2010) reported that the gold option is more dominant in life and health sciences compared with other disciplines where the green option is more well-known. Since the majority of respondents to the present survey were from the health sciences this disciplinary factor may be at play here.

Other studies have reported a similar discrepancy between open access awareness and detailed knowledge. For example, Moore's (2011) survey of University of Toronto faculty found that awareness of open access is very high and the principle is strongly supported but the actual understanding of the different options is more limited. Morris and Thorn's (2009) research found that there is substantial support among researchers for the principle of open access, though it is unclear how many actually fully understand the issue and less than half know what self-archiving is. And Swan and Brown (2007) noted that researchers may assess their level of awareness and understanding of open access higher than it actually is; while they may be familiar with the concept they are not knowledgeable about how to actually carry through and make their publications open access.

It is clear that the University of Saskatchewan researchers who responded to this survey are aware of open access but may need assistance in clarifying the details and options available.

Engagement with Open Access

Although a 21.9% response rate to this survey may at first glance seem to be low, it is actually similar to or higher than those attained in other comparable online surveys of university researchers (Coonin & Younce, 2010; Kocken & Wical, 2013; Mischo & Schlembach, 2011; Moore, 2011). The University of California even states that their response rate of 22.9% is "relatively high" and that this, in addition to lengthy comments left by respondents, indicates that "Faculty are strongly interested in issues related to scholarly communication" (University of California, 2007, p. 2). A similar conclusion is reached in the present study.

In total, 347 comments were left in the 11 optional textboxes distributed throughout this survey. Some of these comments voiced very impassioned opinions on open access. Combined with the relatively high survey

response rate, this extensive use of comments boxes suggests a high level of engagement with this topic on campus, and a desire for further discussion. The University Library could provide a forum to enable and facilitate these discussions in an interdisciplinary setting.

Recommendations

1. ***Develop authors' rights support services.*** A clear outcome of this study is that there is almost no awareness or action on the part of faculty when negotiating with publishers to retain some of their rights as authors. Librarians, perhaps in collaboration with the university's Copyright Office, could support faculty in this area. This would require some professional development for librarians, but since research is a requirement for librarians at the University of Saskatchewan we already encounter copyright transfer agreements during our activities as publishing authors. Encouraging more awareness of authors' rights issues for librarians as authors would be a reasonable first step in this direction.

2. ***Expand initiatives to support authors in paying article processing charges.*** Another clear conclusion of this study is that, even among this group of open access supporting faculty, there is strong resistance to paying article processing charges for gold journals from their grant funds. The University Library could investigate options to supplement the Publications Fund with a fund that is specifically designed just for supporting authors publishing in gold open access journals, or by supporting emerging economic models for open access journal publishing such as PeerJ (by purchasing institutional publishing plans). An additional related initiative could be assisting authors in locating alternate open access outlets that do not

charge fees, and raising their awareness of the green route to open access.

3. ***Invest in an ongoing program of open access educational and awareness-raising initiatives.*** Results of this study show that responding faculty have a high level of support and awareness of open access but may lack some detailed knowledge such as the tools available and practical steps to take in making their publications open access. This need is likely even greater among the larger group of non-respondents on campus. Faculty indicated in this survey that online guides, discipline-specific seminars, and occasional newsletters are their preferred means to learn and stay up-to-date on scholarly communications issues.

Implementation of any or all of these recommendations would require the reallocation of library financial and human resources to support them. Many libraries have created a Scholarly Communications Librarian position specifically to coordinate and lead such initiatives; and other institutions have established teams to share in these responsibilities. Either way, if the University Library chooses to act on these recommendations, librarian expertise and resources will need to be assigned to get these initiatives off the ground and in order to make an effective difference in supporting researchers on campus.

Conclusion

The results of this study indicate that faculty at the University of Saskatchewan are in considerable need of scholarly communications services. The faculty who responded to the survey are already strong supporters of open access and highly aware and engaged in the topic. However, it is likely that this survey experienced non-response bias: those individuals with prior interest and knowledge of open access were possibly more inclined to participate than those without. It is therefore reasonable to speculate that the scholarly communications needs of this larger group of non-respondents may be even greater. Areas of most need include: advice and guidance on authors' rights issues such as retention of copyright; assistance paying article processing charges or seeking alternate publishing outlets; and education and support with resources that enable open access. The need for such services is likely to increase with the implementation of the upcoming Tri-Agency Open Access Policy.

Librarians are the logical professionals on campus to provide such a suite of programs and services, indeed many academic libraries already offer scholarly communications services as part of their mandate to support the research mission of their institutions. The University Library could play a valuable role in increasing the research productivity and impact of faculty by aiding them in these areas.

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Appendix: The Survey Instrument

Open Access Publishing and Faculty at the University of Saskatchewan: An Exploratory Study

Part A: Current Research & Publishing Activities/Behaviours

In the last <u>ten years</u> have you disseminated the results of your research/artistic work?
- ○ Yes

- ○ No

In the last <u>ten years</u> how have you disseminated the results of your research/artistic work? Please <u>estimate</u> the number of items in each category.

	None	1-10 items	10 + items
Published a peer-reviewed journal article	○	○	○
Published a book	○	○	○
Contributed a chapter to an edited book	○	○	○
Published a paper in a conference proceedings	○	○	○
Given a conference presentation or poster	○	○	○
Displayed work in an exhibition, or installation	○	○	○

Other (please specify):

How do you <u>usually</u> handle the copyright terms in your publishing contracts?

○   I may or may not examine the copyright terms of the contract – I just sign it as is

○   I examine the copyright terms of the contract and usually sign it as is

○   I modify the copyright terms of the contract before signing

Comments:

[   ]

In what ways have you modified the terms in your contracts with publishers? Check all that apply.

☐   I have replaced the publisher's terms with my own

☐   I have attached an addendum (such as the SPARC Author Addendum)

☐   Other (please specify): _____

Do you produce a large amount of data in digital format* in your research/artistic work?
*for example: analyses, measurements, counts, images, music, film, etc

○   Yes

○   No

○   Sometimes

Do you have concerns about storing and managing this data and/or providing access to this data to other researchers/creators?

○   Yes

○   No

○   Sometimes

Comments:

[   ]

Part B: Open Access Behaviours, Awareness, and Attitudes

Open Access definition: Open-access (OA) literature is digital, online, free of charge, and free of most copyright and licensing restrictions. What makes it possible is the internet and the consent of the author or copyright-holder. There are two primary vehicles for delivering OA for scholarly works: OA journals (or books), and OA archives or repositories. OA journals perform peer review and then make the approved contents freely available to the world. OA archives or repositories do not perform peer review, but simply make their contents freely available to the world. (Based on Peter Suber's "A Very Brief Introduction to Open Access" http://www.earlham.edu/~peters/fos/brief.htm)

Please rate your level of understanding of "open access."

- ○ I understand it well

- ○ I have some knowledge of it

- ○ I have heard of it but I am not sure what it is

- ○ I was not aware of it

Comments:

"Philosophy" of Open Access

The Budapest Open Access Initiative (paragraph 1): An old tradition and a new technology have converged to make possible an unprecedented public good. The old tradition is the willingness of scientists and scholars to publish the fruits of their research in scholarly journals without payment, for the sake of inquiry and knowledge. The new technology is the internet. The public good they make possible is the world-wide electronic distribution of the peer-reviewed journal literature and completely free and unrestricted access to it by all scientists, scholars, teachers, students, and other curious minds. Removing access barriers to this literature will accelerate research, enrich education, share the learning of the rich with the poor and the poor with the rich, make this literature as useful as it can be, and lay the foundation for uniting humanity in a common intellectual conversation and quest for knowledge. (http://www.soros.org/openaccess/read)

How would you characterize your support for the philosophy of open access as outlined in the paragraph above?

- ○ Strongly support

- ○ Somewhat support

- ○ Somewhat oppose

○ Strongly oppose

○ Don't know

Comments:

Are you aware of "hybrid journals"*?
*traditional journals that offer an option to authors to make their individual articles open access for a fee

○ I am aware of this option

○ I am somewhat aware of this option

○ I was not aware of this option

Have you ever made any of your publications or artistic works available on an open access basis? Check all that apply.

☐ Yes, through self-archiving (in an online repository or personal website)

☐ Yes, through publishing in an OA journal or book

☐ Yes, through a hybrid journal

☐ Yes, but I'm not sure how

☐ No (Please comment below on any particular reasons you may have for not making your publications available on an open access basis)

Comments:

To what extent do you agree or disagree with the following statements?

	Strongly agree	Agree	Disagree	Strongly disagree	Don't know
Results of publicly-funded research should be made available for all to read without barriers	○	○	○	○	○
Open access leads to the publication of poor quality research	○	○	○	○	○
Open access will increase the citations to, and impact of, my publications	○	○	○	○	○
Researchers should retain the copyright to their published works	○	○	○	○	○
Open access publications are not properly peer-reviewed	○	○	○	○	○

I do not have the time/interest/expertise to negotiate the copyright terms in my publishing contracts	○	○	○	○	○
I do not want to spend my grant funds on publishing fees	○	○	○	○	○
I have trouble telling the scam publishers apart from the legitimate open access publishers	○	○	○	○	○
My current tenure and promotion standards discourage me from making my publications open access	○	○	○	○	○

Comments:

┌─────────────────┐
│   │
└─────────────────┘

Are you aware of a subject repository* in your discipline?
*an online archive available for researchers/creators in your discipline to post copies of their works

○ Yes

○ No

○ Not sure

Do you currently serve as an editor for a traditional (non-open access) publication?
○ Yes

○ No

Do you currently serve as an editor for an open access publication?
○ Yes

○ No

Many universities are now implementing open access mandates requiring researchers to deposit copies of their publications in open online repositories. If the University of Saskatchewan established an institutional repository, how strongly would you support a similar mandate here?

○ Strongly support

○ Somewhat support

○ Somewhat oppose

○   Strongly oppose

○   Don't know

Comments:

[   ]

Scholarly communication costs money. Whom do you think should be responsible for the publication costs? Check all that apply.

Note: the first two options comprise the majority of the current model

☐   The University Library through subscriptions to for-profit publishers

☐   The University Library and researchers through subscriptions and membership fees to scholarly societies

☐   Funding agencies

☐   Your department/school/college

☐   Authors

☐   Readers

☐   Other (please specify): _____

Comments:

[   ]

Part C: Needs Assessment

Many academic libraries have developed services to support the scholarly communications activities of researchers at their institutions. The questions in Part C are intended to ascertain the level of support for the development of similar services at the University of Saskatchewan.

How strongly would you support the following possible University Library initiatives?

	Strongly support	Somewhat support	Somewhat oppose	Strongly oppose	Don't know
An institutional repository for open archiving of publications	○	○	○	○	○
An institutional repository for open archiving of digital research/artistic data	○	○	○	○	○

| A library-administered fund to help pay authors' fees in open access or hybrid journals | ○ | ○ | ○ | ○ | ○ |
| Hosting and support services for online publications | ○ | ○ | ○ | ○ | ○ |

Comments:

[ ]

Which possible University Library initiatives would you find useful in order to learn about, and stay up-to-date on, scholarly communications topics (such as open access)? Check all that apply.

☐ Seminars/workshops open to all

☐ Seminars/workshops tailored for your discipline/department

☐ Occasional newsletters

☐ Blog postings

☐ Online guide to resources and information

☐ Individual consultations with a librarian

☐ Open discussion group

☐ All of the above

Other suggestions? Please comment below.

[ ]

Part D: Demographics

Questions in this section are intended to ascertain any trends related to respondents' discipline, experience, and rank.

What is your broad discipline/research area(s)? Check all that apply:

☐ Agriculture and Bioresources

☐ Business/Management/Finance

☐ Education

☐ Engineering

☐ Fine Arts

☐   Health Sciences (Medicine, Vet. Medicine, Dentistry)

☐   Humanities/Music

☐   Kinesiology

☐   Law

☐   Library and Information Science

☐   Life Sciences

☐   Mathematics/Computer Science

☐   Physical Sciences

☐   Social Sciences

☐   Other (please specify): _____

How many years have you been actively involved in research and publishing (or the creation and display of artistic work)?

○   0-9 years

○   10-19 years

○   20 years or more

Have you been awarded tenure at the University of Saskatchewan?

○   Yes

○   No

○   Other (please specify): _____

How many years has it been since you were awarded tenure at the University of Saskatchewan?

○   0-9 years

○   10-19 years

○   20 years or more

Please hit submit to complete the survey.