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“Open Access APCs Are Already a Scam”: Knowledge and Opinions of Open Access and Article Processing Charges From Faculty at a Large Public University

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RESEARCH ARTICLE

“Open Access APCs Are Already a Scam”: Knowledge and Opinions of Open Access and Article Processing Charges From Faculty at a Large Public University

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Introduction: In the 2020s, open access (OA) continues to act as a challenging force in the ever-shifting landscape of scholarly communication. The objective of this study was to survey faculty at an R1 research institution about their perspectives on OA publishing, article processing charges (APCs), and knowledge of the institutional repository (IR).

Methods: This study employed an anonymous online survey of 415 faculty members, with a response rate of 12.77% (53 responses). The survey collected both quantitative and qualitative data from respondents.

Results and Discussion: Results showed engagement with OA publishing but skepticism of APCs as a reasonable alternative to subscription-based funding models. Survey respondents were also mostly unaware of the library's IR self-archiving service.

Conclusion: For-profit OA business models do not serve academics, and they and scholarly communications librarians should better collaborate to advocate for transitioning away from APCs. The article concludes by sharing how the author changed practice based on the results of the study.

Keywords Open Access, Article Processing Charges, Open Access Publishing Models

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IMPLICATIONS FOR PRACTICE

1. Findings may inform scholarly communications librarians on how faculty, particularly in the social and physical sciences, currently perceive open access publishing practices.
2. Scholarly communications experts in the library should be more vocal to faculty members about their criticisms of article processing charges and commercial open access business models.
3. Librarians should continue efforts to encourage faculty members to deposit accepted manuscripts to institutional repositories as a means of moving away from article processing charges.

INTRODUCTION

In 2022, the Budapest Open Access Initiative (BOAI), whose 2002 Declaration and guidelines launched the modern open access (OA) movement, released a new set of recommendations to mark their twentieth anniversary (BOAI, 2022). After first noting that OA publication is not the end of the research process but rather the means “to the equity, quality, usability, and sustainability of research,” the initiative made recommendations that included favoring distribution channels that do not exclude authors on economic grounds, meaning OA repositories (including institutional repositories [IRs]) and journals that do not assess article processing charges (APCs), and transitioning away from APCs. Additionally, the BOAI recommended that when authors and institutions do pay for OA, they concentrate their efforts towards nonprofit and academic organizations rather than commercial, for-profit publishers. This article presents the findings of a survey conducted among faculty members at an R1 institution based in the southwest United States in advance of further outreach and education efforts from the university library about OA. The results offer insight into this university community’s perspectives on OA publishing, particularly the impacts of APCs on their publication practices and knowledge of the library’s IR. The results of this study will help the library customize advocacy efforts for the advantages and principles of OA publishing as well as for the evolving needs, expectations, and rights of faculty researchers.

Surveying university faculty about their OA perceptions and experiences is a familiar topic for the scholarly communications field. Objections to adopting OA publishing habits continue to decrease with time, but many faculty members still perceive these publications as costly, detrimental to tenure and promotion, and lacking in quality (Shook & Vecchione, 2022). That said, researchers do associate publishing OA with a sense of social responsibility and

do enjoy that their open publications are more likely to be cited, when they can afford it (Heaton et al., 2019). Yang & Li (2015) reported that most of their faculty were engaged with and willing to publish OA but that they were still mostly unaware of library-provided scholarly communications tools, platforms, or expertise. Gaines (2015) found that science faculty who had the highest perceived OA knowledge were also the most skeptical of the OA business model. Shook & Vecchione (2022) also emphasized that many of their faculty members understand the complexities of the modern academic publishing environment and the ethical conundrums attached to, for example, the amount of free editorial, peer review, and authorship labor from scholars that publishing companies receive in addition to APCs and subscription fees (p. 20).

The current study was devised with the intention of gathering local opinions and perceptions of OA publishing so that we could better target our outreach efforts. The primary research questions were

1. To what extent are campus faculty familiar with and engaged in OA publishing?
2. What are faculty members' opinions of scholarly publishing as it relates to OA and the payment of APCs?

METHODS

This survey of university faculty was conducted during the fall 2022 semester. A Tenopir et al. (2015) survey instrument that had been created to investigate sustainable OA models for large North American research institutions regarding APCs was employed for this study and was lightly modified for local use. The original instrument, described in depth in Tenopir et al. (2017), asked a wide range of questions regarding basic professional demographics, publishing and archiving habits, experience and familiarity with OA publishing, and Likert-type scale ratings asking for agreement with factors related to journal publishing, OA, and APCs. The Likert-type response options were numbered 1 to 5, with 1 being “strongly disagree” and 5 being “strongly agree.”

The author's modifications for this study included narrowing the questions to a faculty-only sample, aligning a question about current employment position to the university's faculty ranking hierarchy, using the university's names for OA resources, and adding a question about awareness of the library's IR. The appendix of this article contains the text of the survey as used. The university institutional review board approved the survey under Exempt status.

The author received a list of university faculty members and their email addresses from the university's office of information technology. According to the university's fact book, there were 2,056 tenured, tenure-track, and non-tenure-track faculty members on campus in fall 2022 (Texas Tech University, n.d.). At this university, librarians and archivists have tenured/pre-tenure faculty status equal to that of other faculty members across campus and were thus included in the sample. With a 95% confidence level and 5% margin of error, it was determined that a sample size of roughly 20%, or 220 people, would constitute a sample that would be broadly generalizable beyond this campus. Using the RANDOM.org random number generator, 415 randomly selected faculty members were contacted via university email inviting them to take the survey, which was housed on the Springshare LibWizard platform (Springshare, 2022; Haahr, 2024). No personally identifiable information was collected on the survey platform.

Analysis

Quantitative data from the Likert-type responses were exported from LibWizard and analyzed in Microsoft Excel. The author used Excel to calculate the mean, median, and standard deviation for each question as well as to generate charts and figures. Qualitative data, collected from responses to "Other" fields and the final open-ended question, are presented as recorded on the survey platform, with minor edits for anonymity and readability.

RESULTS

Sample composition

Of the 415 faculty members contacted, 53 people (12.77%) completed the survey. Of these submissions, 18 respondents (33.96%) identified themselves as being employed at the full Professor/Librarian/Archivist level, 14 people (26.42%) identified as Associate Professor/Librarian/Archivist, and 11 people (20.75%) identified as Assistant Professor/Librarian/Archivist. Ten people (18.87%) identified themselves as being in non-tenure track faculty positions, such as Lecturer, Professor of Practice, Research Faculty, or Other. Since the purpose of conducting this study in fall 2022 was to gain baseline insight into faculty viewpoints in order to implement outreach efforts on campus in the spring 2023 semester, the author accepted the number of results received during the initial run of the survey. Given such a small sample size, however, the results will not be statistically significant and cannot be considered broadly generalizable.

Fifty-two respondents identified their general area of study. Almost half of the respondents (44.23%) identified their general area of study as the Social Sciences, which also included Business, Education, Libraries, and Law. Eight people (15.38%) studied the Arts and Humanities; four people (7.69%) studied Engineering and Computer Science; seven people (13.46%) studied Life Sciences and Medicine; eight people (15.38%) studied Physical Sciences; and two people (3.85%) responded Other. Figure 1 displays the comparison of respondents' current position to their area of study. Given the high representation of the broad Social Sciences field in the sample, it was worth breaking out the subject discipline responses to ensure that the librarians, assumed to be better versed in matters of OA than their colleagues across campus, who were included in the survey were not over-represented (Table 1). Only one self-identified librarian participated in the survey. The author also recognized that the over-representation of Social Sciences faculty in the sample did not generally align with the overall subject field distribution of the university faculty population in fall 2022 (Texas Tech University, n.d.); however, the Central Limit Theorem (CLT) was used to assume the sample's "normality," or the normal distribution of the sample along a bell curve. The CLT states that when a sample is "sufficiently large," which is conventionally considered to be a sample size of at least 30, and the sampling is random, then the mean of the sampling distribution is equal to the mean of the population, even when the sample does not align along the same bell curve as the population does (Turney, 2023). The CLT holds in the present study because the results come from a simple random sample and are therefore independent variables, and with a sample size greater than 30 people, the sample is sufficiently large enough to assess statistical validity (Kwak & Kim, 2017).

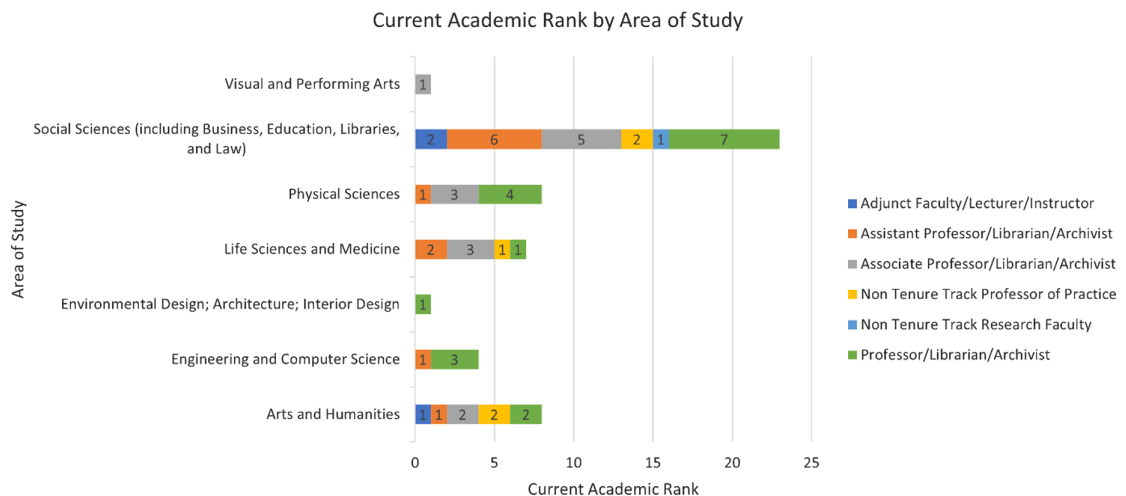


Figure 1. Current position compared to area of study.

Social Sciences subject discipline	Count of subject disciplines
Did not specify subject discipline	3
Communication	2
Psychology	2
Libraries	1
social psychology	1
Mathematics Education	1
Business–Information Systems	1
Accounting	1
Economics	1
Marketing	1
political science	1
Crisis/Risk/Health Communication, Public Relations	1
Public Administration	1
Education Policy	1
Retail Management	1
Family and Consumer Sciences Education	1
Teaching and Learning in Literacy Education	1
HDFS	1
Hospitality	1
Grand Total	23

Table 1. Count of Social Sciences survey participants by subject discipline (Note: “HDFS” stands for “Human Development and Family Sciences”).

Scholarly publishing behaviors and opinions

The survey respondents were presented with several questions to determine their scholarly publishing habits and opinions. First, they were asked to identify roughly how many journal articles or conference proceedings, including those in press, they had published in the last three years. Over half of respondents (66.03%) reported having published at least six articles in that timeframe. Overall repository self-archiving was low, and when it did occur, they almost always deposited their work to subject repositories rather than the IR. They were asked to identify how important it was to them, on a Likert scale from 1 to 5, with 1 being “Not Important” and 5 being “Very Important,” that certain audiences were able to access their publications. The results are displayed in [Table 2](#) and [Figure 2](#).

Audience Group (1 = Not Important; 5 = Very Important)	Median	Mean	Std. Dev.
Researchers/faculty at other research-intensive academic institutions	5	4.69	0.81
Researchers/faculty at different types of academic institutions (e.g., teaching-focused)	4	4.10	1.14
Practitioners outside of academia in industry, business, and/or my field	3	3.34	1.38
Policymakers in government or non-government organizations	3	3.27	1.48
The general public	2	3.0	1.32

Table 2. For each of the following groups, how important is it to you that they can access your research publications?

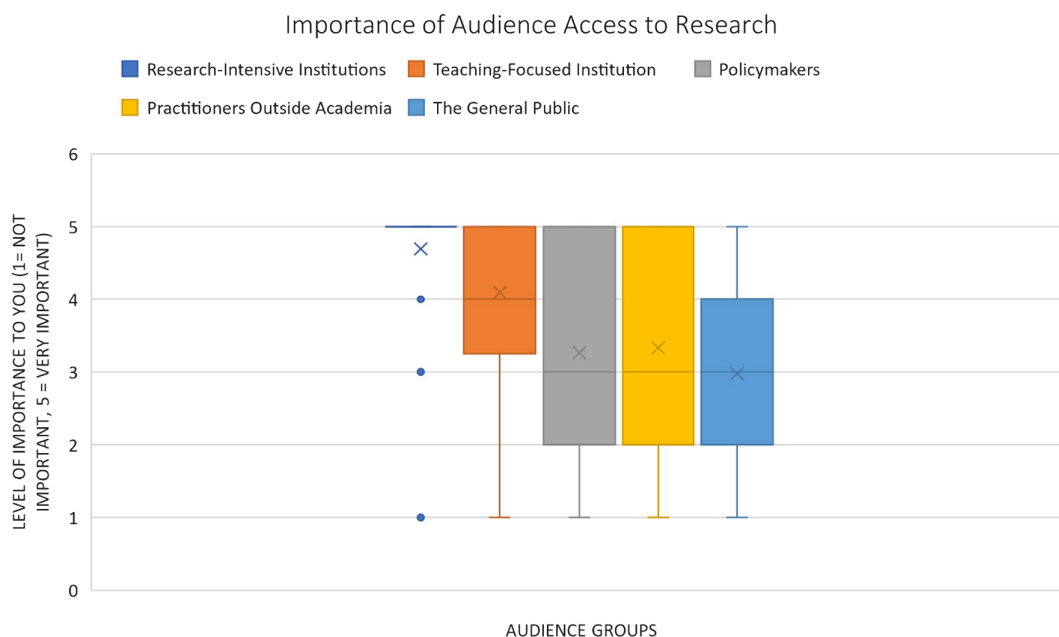


Figure 2. Box-and-whisker plot displaying data from the question “For each of the following groups, how important is it to you that they can access your research publications?”

The next question asked what factors the respondents considered when choosing a journal to submit their manuscript to and to rank the importance on a Likert scale from 1 to 5, with 1 being “Not Important” and 5 being “Very Important.” The results are displayed in [Table 3](#) and [Figure 3](#). Respondents rated “Fit with scope of journal” and “Quality and reputation of journal” as the most important factors in their decision. “Open access” was the least important factor for the respondents when choosing a journal.

Decision Factor (1 = Not Important; 5 = Very Important)	Median	Mean	Std. Dev.
Quality and Reputation of Journal	5	4.69	0.54
Fit with Scope of Journal	5	4.67	0.55
Audience	5	4.29	1.02
Impact Factor	4	4.13	0.99
Time from Submission to Publication	4	3.71	1.05
Likelihood of Acceptance	4	3.54	1.09
Editor or Editorial Board	3	3.16	1.45
Open Access	2	2.56	1.27

Table 3. Please rate the importance of the following factors in choosing a journal for submission/publication of your work.

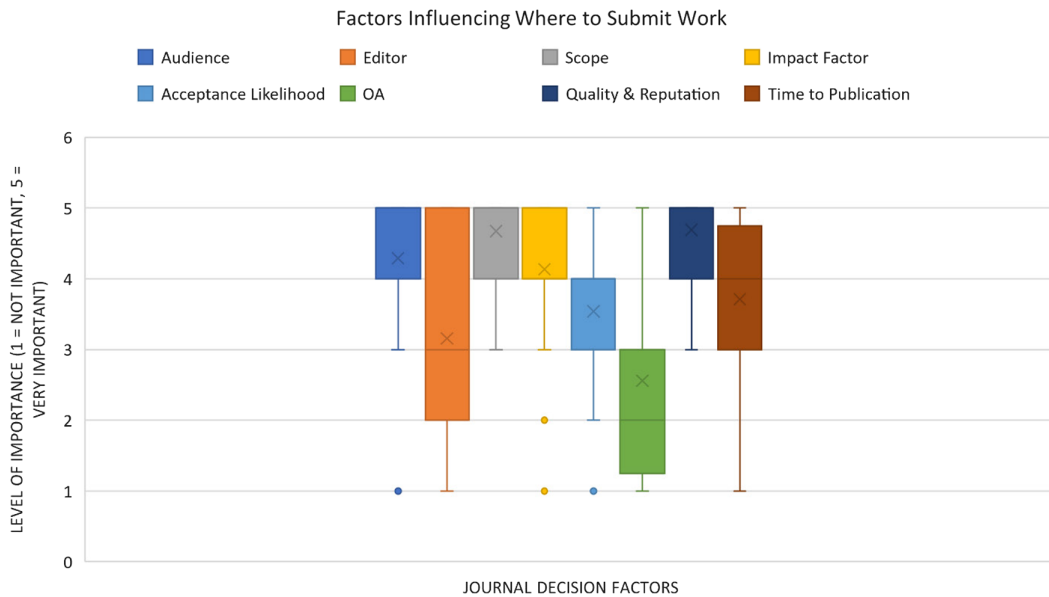


Figure 3. Box-and-whisker plot displaying data for the question “Please rate the importance of the following factors in choosing a journal for submission/publication of your work.”

Familiarity with OA publishing

The respondents were then asked to rate their familiarity with OA publishing on a Likert scale from 1 to 5, with 1 being “Not at All Familiar” and 5 being “Very Familiar.” Nearly half (43.40%) of those taking the survey considered themselves to be “Familiar” to “Very Familiar” with OA publishing. They were then asked whether they had published in an OA journal. Thirty-two people (60.38%) responded “Yes,” and 21 people (39.62%) responded “No.”

The 32 people who indicated they had published in an OA journal were then presented with a following question about whether they or their co-authors had paid an APC. Twenty-three respondents (71.88%) indicated “Yes,” and nine respondents (28.13%) indicated “No.” When asked approximately how much they had paid recently in APCs, they responded with a range from \$300 to \$3800. Most said they paid for the APCs from a variety of research funder/granting agency, lab, and personal funds.

Opinions on OA publishing

All survey respondents were asked to consider a hypothetical scenario in which the journals where they typically publish became fully OA with APCs as the only means to publication and, as such, what would be the highest fee they would consider reasonable based on the source of those funds. They were presented with a list of potential funding sources and a range of dollar amounts they would consider pulling from these sources. The results are displayed graphically in Figure 4. Most respondents felt that no APC was reasonable to publish in their current journals, particularly if the funding was coming from them personally. More were willing to consider APCs, especially priced under \$1000, if the funding were coming from their discretionary research or departmental funds. For APCs in the range of \$1000–\$1999, many respondents would consider the university-sponsored OA fund, which distributes individual funding to authors up to \$1000 on a first-come, first-served basis. For any APCs above \$1000, authors must pursue other funding sources.

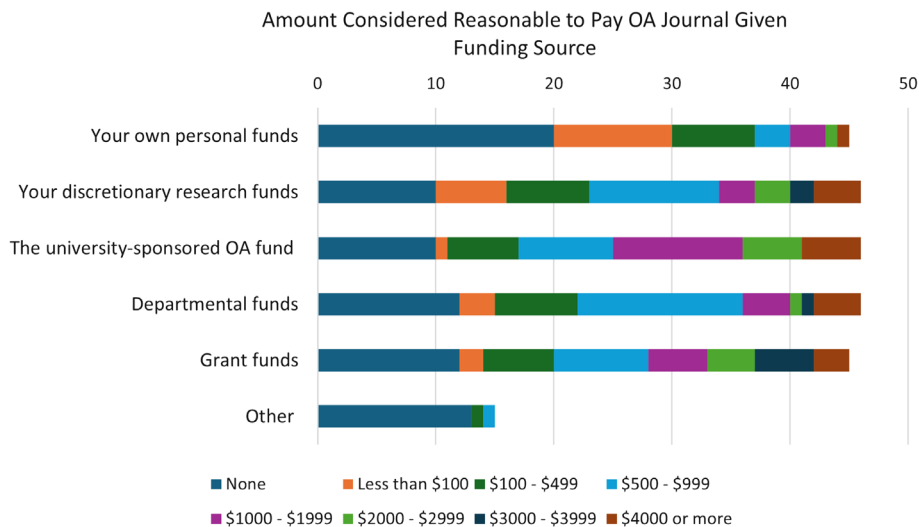


Figure 4. Given this hypothetical scenario, if you were asked to pay an APC to publish an article in one of these journals, please indicate the highest fee that you consider reasonable if the funds were coming from the following sources.

One Physical Sciences professor noted the following in the “Other” field:

“I would stop publishing if they all move to pay to play. Open access APCs are already a scam.”

Table 4 and Figure 5 show the results of the respondents being asked to indicate, using a Likert scale from 1 to 5 (with 1 being “Disagree Strongly,” 5 being “Agree Strongly,” and including a “Not Sure” option), their level of agreement with a series of statements about OA publishing. The responses indicated moderate agreement with the statement that OA journals are of lower quality than subscription-based journals but general disagreement with statements that paying APCs is a reasonable alternative to subscription fees and that APC amounts reflect a journal’s quality.

OA Opinion (1 = Strongly Disagree; 5 = Strongly Agree)	Median	Mean	Std. Dev
Articles published in OA journals are of lower quality	3	3.16	1.17
Paying APCs for OA is a reasonable alternative to subscription fees	2	2.46	1.21
APC amount reflects journal quality	2	1.98	1.12

Table 4. Please indicate your level of agreement with each of the following statements.

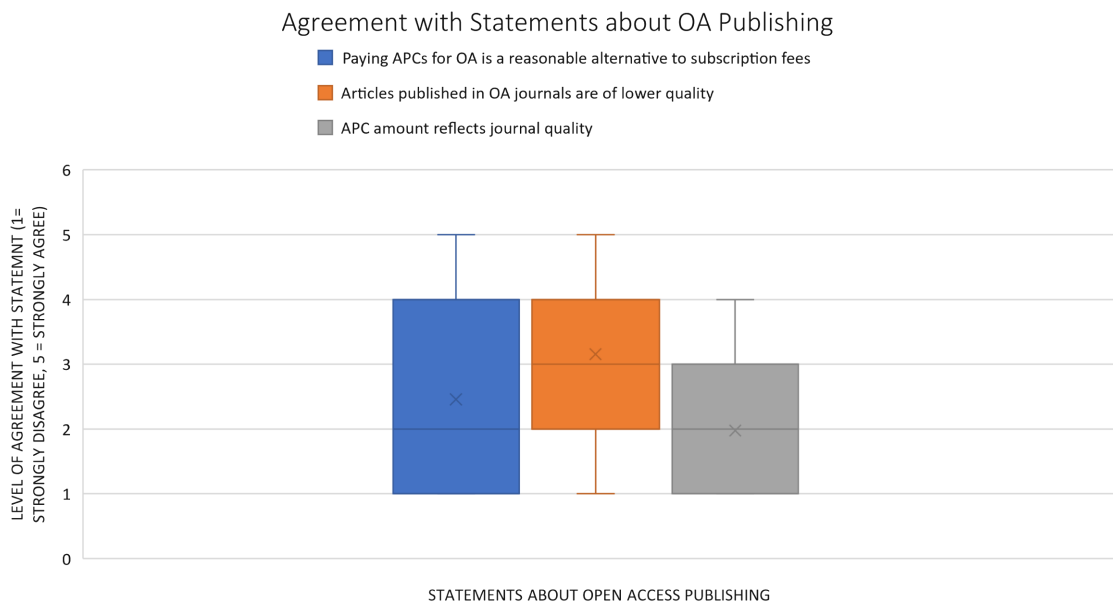


Figure 5. A box-and-whisker plot displaying data from the question “Please indicate your level of agreement with each of the following statements.”

Table 5 and Figure 6 display the results of a question asking survey respondents’ opinions on OA publishing, in which they were asked to again consider the scenario in which all their journals became fully OA with APCs as the only means to publication and to indicate their level of agreement with a series of statements accordingly. Respondents agreed most with the statement that researchers from institutions with less funding would find it difficult to publish in the all-APC scenario. They also disagreed that research quality would increase.

OA Opinion (1 = Strongly Disagree; 5 = Strongly Agree)	Median	Mean	Std. Dev.
People from institutions with less money would have limited ability to publish	5	4.30	1.00
My ability to publish would be limited	3	3.53	1.34
I would find alternative ways to publish my research	3	3.30	1.29
More people would read and use my research	3	3.26	1.39
There would be increased media coverage of scholarly research	3	2.49	1.33
The overall quality of published research would increase	2	2.19	1.30

Table 5. Please indicate your level of agreement with each of the following statements, given the scenario in which your journals became fully OA with APCs.

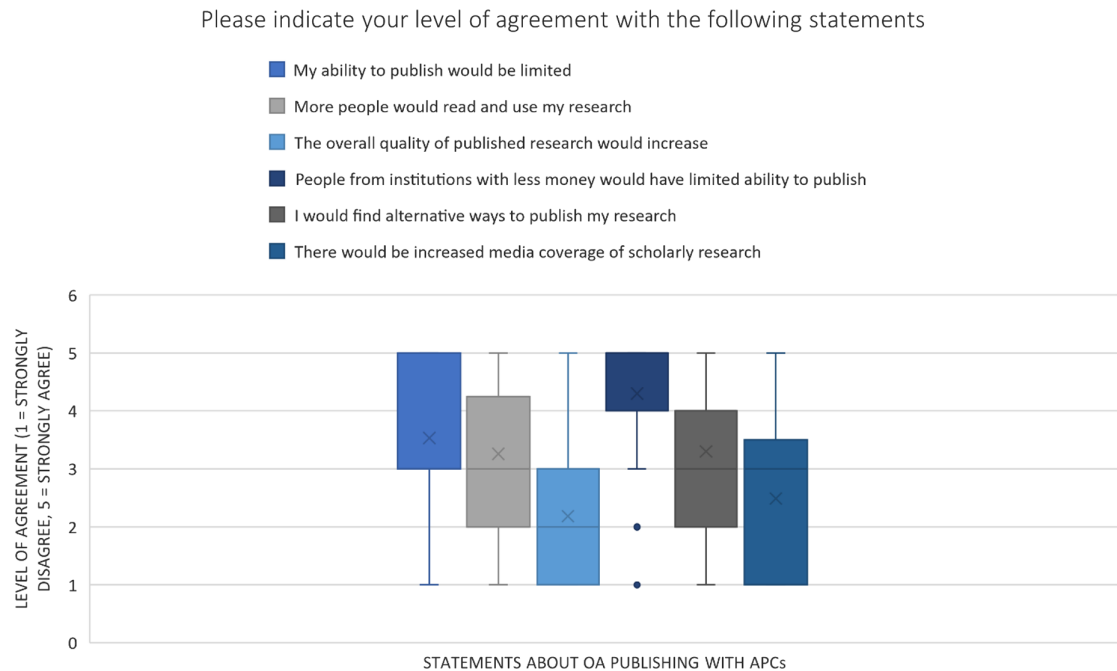


Figure 6. Box-and-whisker plot displaying data from the question “Please indicate your level of agreement with each of the following statements, given the scenario in which your journals became fully OA with APCs.”

Familiarity with IR

The final question on the survey asked respondents whether, before this survey, they were familiar with the library’s IR, a service that has existed for university researchers to deposit their work since 2005. The university does not have an OA policy mandating deposit of work to the IR. All 53 respondents answered the question. Thirteen people (24.53%) said “Yes,” and 40 people (75.47%) said “No.” These responses are displayed in [Figure 7](#).

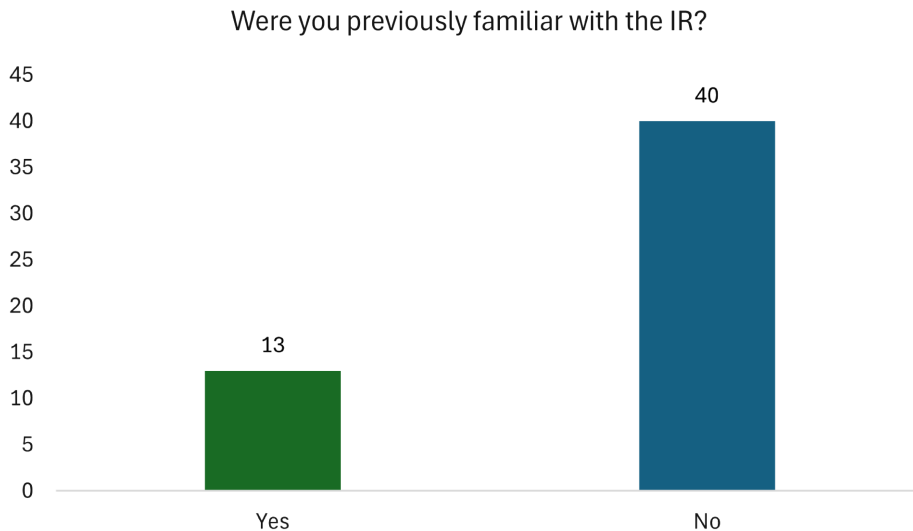


Figure 7. Before this survey, were you familiar with the institutional repository?

Final comments from survey respondents

Respondents were given the option to leave comments at the end of the survey. The responses included the following:

- *“If we are going to be encouraged to pursue open access journals - departments need funding to help pay it. It is often the first thing that gets cut out of grants because we are already too stretched to cut supplies or students.”* (Associate Professor, Physical Sciences)
- *“I am a very strong advocate for open access materials including journal articles, datasets, and data analysis softwares. I have been strongly benefited by the open access resources which motivated me to contribute to open access efforts. ... One thing, we need to always remember though as the open access articles became more available, some other entities are*

playing big roles in earning money. This is predatory journals. We have strong evidence that as the open access journals became available, the 'bad people' came to work and are continuously affecting the academic environment and degrading the quality of overall work. Also, we the professionals can judge the materials and can reject to read those. But, our students are not able to judge the materials and learn wrong thing always. I feel very bad when I see that some reputed researchers also publish in those low-impact low quality and even predatory often to show a high number of publications in their portfolio. As a researcher and educator, I feel responsible and thus strongly advocate for good open access journals and strive for quality over quantity.” [sic] (Assistant Professor, Physical Sciences)

- *“1) This push to open access has the potential to cause great harm for people in academic fields that already have good preprint servers that people use. 2) As it becomes mandated, the library should prioritize help for people in the academic fields for which the library is saving money, and not steer those savings into buying books that no one reads.” (Professor, Physical Sciences)*

DISCUSSION

The results of this study reflect a faculty that engages with OA publishing but is skeptical of the APC funding model. The amount that these academics are willing pay to cover OA fees varies according to the source of funding, a finding that corresponds with existing research (Tenopir et al., 2017). They do not want to pay APCs more than \$100 from their own private funds, but they generally find prices between \$500 and \$2000 to be tolerable when paid for out of departmental or institutional funds. Overall, though, the respondents do not agree that APCs are a reasonable alternative to subscription fees. They are also concerned that researchers at institutions with less funding would not be able to publish their work if APCs are required. Since most respondents were from social science disciplines, which tend to have lower funding than the physical or life sciences, this attitude also aligns with what Tenopir et al. (2017) found in their study. Like what Dalton et al. (2020) discussed, however, physical sciences faculty also expressed concern for their future publishing intentions if their only options were to publish in journals charging APCs.

The original survey instrument was created, in part, to gauge researcher interest in *gold*, or APC-funded, fully OA models (Tenopir et al., 2017; Dalton et al., 2020). Since the instrument's creation in 2015, many journals have committed to switching from a hybrid OA model, which generates revenue from both toll-access and APCs to the gold OA model, primarily thanks to European Plan S requirements instituted in 2020 (Coalition S, n.d.). Generally, fully OA journals charge lower APCs than those operating under a hybrid subscription

model, but prices are currently on the rise for both models, increasing just over 4% in 2022 (Pollock & Staines, 2023).

For-profit publishers have been the primary financial beneficiaries of an academic publishing model that relies on scholars' uncompensated editorial and authorial labor and the *publish-or-perish* tenure-and-promotion mindset. Publishers often argue that higher APCs are correlated with prestigious, impactful journals, but that is not the opinion of this study's survey respondents, nor is it reflected in studies measuring journal impact factors (Puehringer et al., 2021). Puehringer et al. further argue that, because public universities rely heavily on taxpayer support, these publishers essentially receive a "public subsidy" for their highly profitable product (p. 2). All of this serves to highlight the comments some of this survey's respondents shared that view fully OA publication as dubious at best. One professor described APCs as "a scam" and a "pay-to-play" model. Dalton et al. (2020) felt that the spread of "predatory publishers" was to blame for what they described as the conflation of APCs with "the concept of 'pay-to-play' publishing" (p. 91), but commercial publishers operating at a high profit margin off the backs of academics trying to fulfill research requirements should be regarded, at a minimum, as exploitative.

While recognizing that the loudest voices do not always represent the majority's views, another professor's comment that "the library should prioritize help for people in the academic fields for which the library is saving money, and not steer those savings into buying books that no one reads" does imply that there are those faculty on campus who feel that librarians do not understand their field's scholarly publishing needs. Academic librarians should see these viewpoints as an opportunity to increase our visibility on campus as advocates, allies, and collaborators. Librarians need to lead scholarly communications efforts not just as servants of their colleagues but as equal partners, brimming with expertise and ready to advocate for equitable publishing practices.

Library next steps and avenues for future research

Based on the BOAI20 recommendations as well as the results of this survey indicating that faculty were largely unaware of the library's IR, the author (who curates the IR faculty research collection) renewed efforts to encourage faculty to take advantage of repository-based, or *green*, OA options (BOAI, 2022). Using a list she received monthly from Scopus, she individually contacted authors who had published non-OA articles to inform them that they were allowed to deposit their author-accepted manuscript to the IR, usually under an embargo, and then she offered her service as a mediated depositor. Between June and November 2023, the author added over 40 accepted manuscripts to the collection, a significant increase for this repository. Faculty often replied to her emails

stating that this was the first time they had heard of the IR. Perhaps future research can include running this survey again with those specific authors to gather their thoughts on OA funding models.

These efforts will continue, especially ahead of the 2025 implementation of the White House Office of Science and Technology Policy (OSTP)'s "Nelson Memo" guidance, which states that federal agencies should require publications and data resulting from federally funded research to be "publicly accessible without an embargo on their free and public release" (Nelson, 2022). Authors will need help navigating new rules, new expectations, and new ways that corporate academic publishers will seek to profit from their taxpayer-funded labor. Scholarly communications librarians have that expertise and should continue working to make themselves visible as allies and advocates to their campus colleagues.

Limitations

As stated earlier, the resulting sample size of this survey was too small to be considered statistically significant, and, as such, the findings cannot be considered broadly generalizable. Since respondents self-selected to complete the survey, they may have decided to do so based on existing perspectives about OA, which could introduce bias into the results. Finally, faculty from Social Sciences were overrepresented in the sample, so the findings may not accurately reflect the perspectives of university faculty from other academic disciplines.

CONCLUSION

The results of this survey offer insights into the perspectives and experiences of university faculty at an R1 research institution regarding OA publishing, APCs, and awareness of their IR. They serve as a jumping-off point for further exploration and discussion within the scholarly publishing community. The results suggest engagement with OA but a dissatisfaction with current funding models, both within the academic publishing industry and at the institutional level. The author's actions and success after the survey indicate there is still potential for targeted outreach efforts regarding IRs and self-archiving to be impactful. It is imperative for scholarly communications librarians to continue to meaningfully engage with faculty about OA, adapt their services, and foster collaborative efforts to promote ethical, equitable OA practices and facilitate the dissemination of research.

REFERENCES

BOAI (Budapest Open Access Initiative). (2022, March). The Budapest Open Access Initiative: 20th anniversary recommendations. Retrieved from <https://www.budapestopenaccessinitiative.org/boai20/>

Dalton, E., Tenopir, C., & Björk, B.-C. (2020). Attitudes of North American academics toward open access. *portal: Libraries and the Academy*, 20(1), 73–100. <https://doi.org/10.1353/pla.2020.0005>

Gaines, A. M. (2015). From concerned to cautiously optimistic: Assessing faculty perceptions and knowledge of open access in a campus-wide study. *Journal of Librarianship and Scholarly Communication*, 3(1), eP1212. <https://doi.org/10.7710/2162-3309.1212>

Heaton, R., Burns, D., & Thoms, B. (2019). Altruism or self-interest? Exploring the motivations of open access authors. *College & Research Libraries*, 80(4), 485. <https://doi.org/10.5860/crl.80.4.485>

Kwak, S. G., & Kim, J. H. (2017). Central limit theorem: The cornerstone of modern statistics. *Korean Journal of Anesthesiology*, 70(2), 144–156. <https://doi.org/10.4097%2Fkjae.2017.70.2.144>

Nelson, A. (2022, August 25). Memorandum for the heads of executive departments and agencies: Ensuring free, immediate, and equitable access to federally funded research [press release]. The White House Office of Science and Technology Policy. Retrieved from <https://www.whitehouse.gov/wp-content/uploads/2022/08/08-2022-OSTP-Public-Access-Memo.pdf>

Coalition S. (n.d.). *Plan S: Transformative journals*. European Science Foundation. Retrieved from <https://www.coalition-s.org/addendum-to-the-coalition-s-guidance-on-the-implementation-of-plan-s/>

Pollock, D., & Staines, H. (2023, March 14). News & views: Open access charges—Continued consolidation and increases. Delta Think. Retrieved from <https://deltathink.com/news-views-open-access-charges-continued-consolidation-and-increases-2/>

Puehringer, S., Rath, J., & Griesebner, T. (2021). The political economy of academic publishing: On the commodification of a public good. *PLoS ONE*, 16(6), e0253226. <https://doi.org/10.1371/journal.pone.0253226>

Haahr, M. (2024). [RANDOM.org](https://www.random.org/). Retrieved from <https://www.random.org/>

Shook, E., & Vecchione, A. (2022). Faculty perceptions of open access publishing: Investigating faculty publishing habits to evaluate library collection alignment. *Journal of Librarianship and Scholarly Communication*, 10(1), eP13216. <https://doi.org/10.31274/jlsc.13216>

Springshare. (2022). *LibWizard*. Springshare LLC, Miami, FL. Retrieved from <https://www.springshare.com/libwizard/>

Tenopir, C., Dalton, B. D., & Jones, M. K. (2015). Pay it forward: Investigating a sustainable model of open access article processing charges for large North American research institutions survey instrument. University of Tennessee Knoxville School of Information Sciences – Faculty Publications and Other Works [repository]. Retrieved from https://trace.tennessee.edu/utk_infosciopubs/48

Tenopir, C., Dalton, E. D., Christian, L., Jones, M. K., McCabe, M., Smith, M., & Fish, A. (2017). Imagining a gold open access future: Attitudes, behaviors, and funding scenarios among authors of academic scholarship. *College & Research Libraries*, 78(6), 824. <https://doi.org/10.5860/crl.78.6.824>

Texas Tech University. (n.d.). Texas Tech University fact book. Retrieved from <https://techdata.irs.ttu.edu/FactBook/>

Turney, S. (2023, June 22). Central Limit Theorem | Formula, definition & examples. Scribbr. Retrieved from <https://www.scribbr.com/statistics/central-limit-theorem/>

Yang, Z. Y., & Li, Y. (2015). University faculty awareness and attitudes towards open access publishing and the institutional repository: A case study. *Journal of Librarianship and Scholarly Communication*, 3(1), eP1210. <https://doi.org/10.7710/2162-3309.1210>

**APPENDIX A:
Survey Instrument**

1. Current Position
 - a. Adjunct Faculty/Lecturer
 - b. Assistant/Associate/Full Professor of Practice
 - c. Assistant Professor/Librarian/Archivist
 - d. Associate Professor/Librarian/Archivist
 - e. Professor/Librarian/Archivist
 - f. Research Faculty
 - g. Other (please indicate)
2. Highest degree
 - a. PhD
 - b. EdD
 - c. MD
 - d. JD
 - e. MA/MS
 - f. Other (please indicate)
3. Please indicate year highest degree was earned
4. What is your general area of primary scholarly activity?
 - a. Arts and Humanities
 - b. Engineering and Computer Science
 - c. Life Sciences and Medicine
 - d. Mathematics
 - e. Physical Sciences
 - f. Social Sciences (Including Business, Education, Librarianship, and Law)
 - g. Other
5. What is your specific subject discipline?

6. How many journal articles or conference proceedings (as an author or co-author), including those in-press, have you published in the past three years?
 - a. None
 - b. 1-5
 - c. 6-10
 - d. 11-20
 - e. 20 or more
7. How many authors (including you) were on the last paper you published?
 - a. No co-authors, just me
 - b. 2 (myself and one additional co-author)
 - c. 3-5
 - d. 6-9
 - e. 10-20
 - f. 20 or more
8. Do you regularly publish with co-authors located at institutions besides Texas Tech?
 - a. Yes
 - b. No
9. How many other scholarly works (e.g., books, book chapters) have you published in the past three years?
 - a. None
 - b. 1-5
 - c. 6-10
 - d. 11-20
 - e. 20 or more
10. Approximately what percentage of the research you have published in the last three years do you make available through non-institutional repositories (e.g., arXiv, PubMed Central, SSRN, RePEC, etc)?
11. ... the Texas Tech ThinkTech institutional repository?
12. ... your own personal website?

13. For each of the following groups, how important is it to you that they are able to access your research publications? (1 [Not Important] – 5 [Very Important], 6 [Not Applicable])
 - a. Researchers/faculty at other research-intensive academic institutions
 - b. Researchers/faculty at different types of academic institutions (e.g., teaching-focused)
 - c. Policymakers in government or non-government organizations
 - d. Practitioners in industry and business
 - e. The general public
14. Please list any other groups for whom you consider access to your research publications important.
15. Please rate the importance of each of the following factors in choosing a journal for submission/publication of your work (1 [Not Important] – 5 [Very Important], 6 [Not Applicable]):
 - a. Audience
 - b. Editor or editorial board
 - c. Fit with scope of journal
 - d. Impact factor
 - e. Likelihood of acceptance
 - f. Open access
 - g. Quality and reputation of journal
 - h. Time from submission to publication
16. What (if any) other factors do you consider when choosing a journal for submission of your work?
17. Please rate your level of familiarity with Open Access publishing:
 - a. 1 - Not at all familiar
 - b. 2
 - c. 3
 - d. 4
 - e. 5 – Very familiar
18. Have you ever published in an Open Access journal?
 - a. Yes
 - b. No

19. [If Yes to 23] Have you or your co-authors paid article processing charges (either directly or through your institution, grant, or other funds) for any of the open access articles you have published?
 - a. Yes
 - b. No
20. [If Yes to 24] For approximately how many articles have you paid article processing charges?
21. [If Yes to 24] We would now like to ask about your most recent article(s) for which you paid APCs. If you have indicated that you have paid APCs for more than three articles, we will only ask you about the most recent three.
 - a. How much (in US dollars) was paid for the APCs of your most recent articles
22. What was the source(s) of these funds? (Check all that apply)
 - a. My personal funds
 - b. My lab
 - c. My co-author's personal funds
 - d. My co-author's lab
 - e. Research funder/granting agency
 - f. The Open Access Publication Initiative from the TTU Office of Research and Innovation
 - g. My department
 - h. Don't recall/not sure
 - i. Other (please specify)
23. [If No to 23 or 24] Within the last three years, when submitting to and/or publishing in a journal, have you paid fees, other than open access fees for (check all that apply):
 - a. None
 - b. Submission
 - c. Color Charges
 - d. Reprints
 - e. Image rights
 - f. Page charges
 - g. Other (please specify)

24. What sources of funds have you used to pay such charges? (Check all that apply)
- My personal funds
 - My lab
 - My co-author's personal funds
 - My co-author's lab
 - Research funder/granting agency
 - A fund at my (or my co-author's) library or research office
 - My department
 - Don't recall/not sure
 - Other (please specify)
25. Suppose the journals in which you typically publish became fully Open Access with article processing charges. If you were to pay an article processing charge to publish an article in one of these journals, please indicate the highest fee you would consider reasonable if the funds were coming from:

	None (1)	Less than \$100 (2)	\$100-\$499 (3)	\$500-\$999 (4)	\$1000-\$1999 (5)	\$2000-\$2999 (6)	\$3000-\$3999 (7)	\$4000 or more (8)
Your own personal funds (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Your discretionary research funds (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
An Open Access publication fund through the library (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Departmental or other institutional research funds (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Grant funds (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (Please specify) (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Figure 8. Response grid for question 25 with the options of your own personal funds (1), your discretionary research funds (2), an open access publication funded through the library (3), departmental or other institutional research funds (4), grant funds (5), other (please specify) (6).

26. Before this survey, were you familiar with the ThinkTech institutional repository?
 - a. Yes
 - b. No
27. Please share any other thoughts you might have.