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Faculty Perceptions of Open Access Publishing: Investigating Faculty Publishing Habits to Evaluate Library Collection Alignment

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RESEARCH ARTICLE

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ABSTRACT

Introduction: This investigation, originally conceived as a method for informing Albertsons Library on creative solutions to the collections budget shortfall, sought to determine an institution's faculty perceptions of publishing and/or using open access (OA) materials, as well as to identify future mechanisms that would shift perceptions of OA publishing to a more favorable light, thereby fostering adoption of OA materials in faculty research and teaching.

Methods: The study used an anonymous electronic survey of 468 faculty members, with a response rate of nearly 34%.

Results and Discussion: Respondents indicated a mixed set of adoption, with equal distribution in willingness to engage with OA journals and publications. Quality of OA publications, combined with concerns for tenure and promotion, holds faculty back from utilizing OA journals and publications in their own research and in the classroom.

Conclusion: The data collected through the course of this perceptions survey provide important insight into the perceptions of faculty at this point in time, laying the groundwork for future surveys to evaluate growth in engagement with OA publishing. Though the data provided do not immediately alleviate collections budget constraints at Albertsons Library, the survey contributed to a more holistic understanding of faculty publishing behavior in OA journals.

Keywords: open access, publishing, faculty publishing behavior, R2 institution

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IMPLICATIONS FOR PRACTICE

1. Faculty perceptions of open access (OA) publishing vary based on rank, experience, and discipline.
2. Faculty are not clear on the nuances between OA publishing models (green, gold, etc.), leading to significant misunderstandings regarding the perceived high cost and low quality of OA publishing.
3. Incentives for publishing OA should address the concerns over negative outcomes in the tenure and review process, as well as the lack of time available for engaging with OA publications in lieu of established, traditional journals with perceived prestige in their field.

INTRODUCTION

The impetus for this research study was to possibly inform budgetary decisions at an academic library of an R2 institution with increasing focus on the funded research enterprise. Rising inflation costs combined with limited budgets and rapid growth in the research endeavor at Boise State University led Albertsons Library to make difficult collections decisions several years in a row. As a result, the researchers sought to understand faculty publishing behaviors and perceptions regarding library collections and open access (OA) publishing with the purpose of exploring creative solutions to the budget shortfall. OA is defined by the Scholarly Publishing and Academic Resources Coalition as “the free, immediate, online availability of research articles coupled with the rights to use these articles fully in the digital environment.” OA publications may offer solutions to faculty in finding credible, reliable research and information while alleviating the budget shortfall through eliminating publisher paywalls. The purpose of this study was threefold: (1) to determine the perceptions of OA publishing held by Boise State University faculty, (2) to glean insight into the status of engagement with OA by Boise State University faculty, particularly through evaluation of rank and/or discipline to discover trends, as well as to identify barriers to publishing or using OA publications, and (3) to ultimately ascertain whether the library should seek approaches to elevating the view of OA publications by faculty that could lead to library collection budgets with less investment in paywalled journals.

Faculty members at Boise State University are heralded for their innovation and attention to student success as led by their new president, Dr. Marlene Tromp, and recognized in the U.S. News and World Report’s “Top 50 Most Innovative Schools” list ([Boise State University, 2018](#)). Dr. Tromp, in a campus-wide email on October 29, 2021, has encouraged each member of the campus to embrace the “Blue Turf Thinking” ([Boise State University “This is blue](#)

turf thinking,” n.d.) mindset, in which all work is viewed “not about doing more with less but doing our work in ways that envision a better future, that see our students and their needs more clearly, that take new approaches to research and to service.” This commitment to overcoming challenges in unique and innovative ways has been adopted by Albertsons Library in the pursuit of stabilizing the collections budget. The insight gained through the work of this study may provide important data for future collections decisions.

LITERATURE REVIEW

Information professionals have conducted studies about the perception of faculty regarding OA publishing, and about the OA landscape, since the Budapest Open Access Initiative (BOAI) was signed in February 2002. In preparation for the deployment of a perceptions-based survey to all faculty in an increasingly research-focused R2 institution, the researchers evaluated literature regarding the factors that authors consider when deciding where to publish as well as the literature regarding author views of OA publishing. More recent perception-based studies were favored for several reasons: the dramatic changes in the OA landscape, the growing and widespread adoption of transformative agreements (which create more opportunity for authors to become familiar with OA publishing), the well-established presence of the authors’ institutional repository services within the institution, and increased awareness due to federal OA mandates for taxpayer-funded monies.

Faculty perceptions of scholarly communications and OA

A variety of studies of faculty perceptions of issues in scholarly communications have been published since the signing of the BOAI, providing important insight into author perceptions of the ecosystem, choices in where to publish, and/or attitudes toward OA publishing. In 2007, the University of California (UC) Office of Scholarly Communication (OSC) and the California Digital Library (CDL) eScholarship Program released a report based on over 1000 UC respondents providing their perceptions of the scholarly communications landscape (OSC & CDL, 2007). In 2010, the Center for Studies in Higher Education at UC, Berkely, published a report (Harley et al., 2010) based on interviews with 160 faculty participants who shared their perceptions of what characteristics define where and how they publish, which are discussed throughout this literature review in the following paragraphs. The resulting study provides important insight into early faculty publication behaviors.

Studies have also been undertaken to determine how, specifically, authors choose publication venues. A survey borne out of the evaluation of United States and Canadian university promotion and tenure documents surveyed participants from 55 institutions to evaluate

publication venue decisions as they relate to promotion and tenure (Niles et al., 2020). Fenlon et al. (2016) administered a survey focused on both scholars in the humanities and those at historically black colleges and universities.

The literature surrounding faculty perceptions specific to OA publishing are a mix of survey populations. They include studies on authors within a defined discipline, within a specific institution, or by specific populations across multiple institutions. Most used a self-administered survey to assess perceptions, whereas some also incorporated qualitative data in the form of interviews of respondents to better understand knowledge and awareness of OA in their specific field, institution, or the broader scholarly communications landscape.

A large-scale study of the OA publishing perceptions landscape was administered in 2010 by a group of publisher, library, and funding researchers financed by the European Commission (Dallmeier-Tiessen et al., 2011). The study, titled the Study of Open Access Publishing (SOAP) project, consisted of a 23-question survey distributed worldwide resulting in over 38,000 valid responses. The SOAP project provides a foundational glimpse into faculty perceptions particularly centered around OA publishing.

Many smaller perception studies followed. Several of the perception studies administered have assessed attitudes of OA publishing at the institution (Gaines, 2015; Yang & Li, 2015; Serrano-Vicente et al., 2016; Heaton et al., 2019), whereas a handful of studies gauged perceptions of a discipline-specific population (Lwoga & Questier, 2015; Peekhaus & Proferes, 2015, 2016; O'Hanlon et al., 2020). One study surveyed researchers across Germany (Eger et al., 2015), agnostic of discipline or institution. All studies provide important insights into institutional, disciplinary, and country-specific contexts concerning faculty perceptions of OA.

Of note, many of the OA-specific surveys did not provide explanations of OA or open educational resources to participants. Yang and Li (2015), Lwoga and Questier (2015), and Peekhaus and Proferes (2015) provided small descriptions of OA or scholarly communications for participants. O'Hanlon et al. (2020), who conducted an interview, chose participants who both were early-career and had already published an OA article. Similarly, Heaton et al. (2019) used Scopus data to find names of faculty to whom they could send their survey who had published OA within the 2016 calendar year. Dallmeier-Tiessen et al. (2011), Gaines (2015), Eger et al. (2015), and Serrano-Vicente et al. (2016) provided little or no explanation of OA. The survey distributed by Niles et al. (2020) focused on factors related to choosing publication venues, providing partial explanations for the options presented in each question.

A lack of providing explanations and definitions for participants is significant because there could be different interpretations, perceptions, and models of OA, as well as (mis)information on the dangers of OA journals more likely being “predatory.” By not providing more context, the survey results were the organic thoughts and perceptions of participants. For the purposes of this study, the authors chose to not provide any explanations or descriptions of terms to allow survey participants the opportunity to provide their organic thoughts based on their own interpretations.

Knowledge of OA

Knowledge of OA and the ancillary components (open educational resources [OER], scholarly communications, etc.) appears quite widespread by the faculty respondents surveyed in the literature, even early on in the movement. Indeed, the 2007 OSC & CDL study (5 years after the BOAI) noted that “approximately two-thirds of faculty respondents” were aware of OA. The Center for Studies in Higher Education’s 2010 case studies (Harley et al., 2010) documented many cases of disciplinary willingness to embrace OA publication models. Gaines (2015) reported that 72% of respondents claimed to be familiar with OA. Yang and Li (2015) note that 90% of those who responded were aware of OA journals within their field. Similarly, Lwoga and Questier (2015) found a rate of 93.5% of awareness among respondents across the health sciences universities in Tanzania.

Another iteration of judging respondents’ familiarity with OA across the studies was to ask participants whether they believe research should be OA. Dallmeier-Tiessen et al. (2011) report an 89% agreement with the question of “Do you think your research field benefits, or would benefit, from journals that publish open access articles?” Similarly, Serrano-Vicente et al. (2016) found that 90% of respondents agreed that publications should be open and available on the Internet as soon as possible. Peekhaus and Proferes (2016), who surveyed North American information science faculty, reported that 62% of respondents think publications should be “free for everyone to access online.” Gaines (2015) reports that 57% of faculty surveyed at the University of Idaho reported that their discipline does currently or would benefit from OA journals.

Barriers to adoption

Barriers to the adoption of faculty authors publishing in OA journals or using them as a foundation for research and teaching generally follow a few themes: murkiness regarding the effect on tenure and promotion (T&P), the lack of name recognition or prestige of OA journals, and the high costs associated with gold OA are all major factors in an author’s decision to publish via the traditional, paywalled route.

With the exception of Lwoga & Questier (2015), who found that the three biggest hurdles in OA adoption among those involved in health sciences in Tanzania was “slow Internet connectivity, lack of awareness, and inadequate skills” (p. 42) the other studies consulted generally followed the three main aforementioned trends. Harley et al.’s (2010) study consisting of interviews with 160 authors engaged in scholarly communications found that the “stature and selectivity of the publication outlet” along with the “appropriateness for targeted audiences” (p. 10) were the most likely indicators of where one would publish. Of respondents to the SOAP project survey (Dallmeier-Tiessen et al., 2011), 42% provided comments in an open-text field describing why they had not published an OA article. The comments were coded according to themes to provide an overview of the barriers authors cite when not publishing OA. The top-three reasons that respondents had not published an OA article were related to funding (39%), journal quality (30%), and accessibility (8%). Note that accessibility in this case refers to whether “the author has had a bad experience with an OA journal, their paper has not been accepted or the respondent thinks there are no OA journals in their field” (p. 7). The top reasons in similar studies indicate faculty priorities when considering where to publish. Gaines (2015) found that the “relevance of the journal to their field” was of the highest importance when deciding where to publish, and College of Science faculty were particularly concerned about the potential for OA to produce poorer quality research. Lack of quality was a common complaint among respondents.

Another major issue brought forth in the studies was the lack of clarity surrounding OA publications in the processes of promotion and tenure. Harley et al. (2010) concluded that “enthusiasm for the development and adoption of technology should not be conflated with the hard reality of T&P requirements” (p. 12). Peekhaus and Proferes (2015, 2016) report that a significant percentage of participants (18%) were unclear about how T&P committees would evaluate OA publications, whereas another 44% felt that OA “publications would be evaluated less favorably” (2015; p. 649). Gaines (2015) found that a mere 15% of respondents felt that they had “institutional/departmental support” for publishing in an OA publication.

Niles et al. (2020) report an interesting finding when asking authors their perceptions of OA publishing for review, promotion, or tenure (RPT). Through a series of 10 logit models, the authors were able to find correlations and publication choice. Considerations for RPT, more so than any other demographic factor (rank, age, gender, or type of institution), appears to have the biggest effect on deciding where to publish (ranging across 8 of 10 of the models). Furthermore, the aspects perceived as important to the RPT process include the “name recognition” and “public availability” of the journals under consideration.

Rank and age were also considered in many studies to determine whether these were contributing factors in publishing OA. In 2010, Harley et al. “found no evidence to suggest that

‘tech-savvy’ young graduate students, postdoctoral scholars, or assistant professors are bypassing traditional publishing practices” (p. 9). When considering the rank of the researchers and whether they had already published an OA article, Eger et al. (2015) concluded that there is indeed a higher chance of a researcher having published OA as their academic status increased. Participants in Yang and Li’s (2015) study of Texas A&M faculty were largely tenured (83%), which may indicate a higher willingness to engage with OA topics. Serrano-Vicente et al. (2016) reported that 84% of faculty between the ages of 45 and 60 had published OA, whereas only 48% of the 25 to 30 age group had. Peekhaus and Proferes’ (2015) results also support the theory that tenured/senior faculty are more likely to publish OA. Gaines (2015) noted that faculty with more experience felt more comfortable explaining OA to colleagues and were more likely to understand the differences in publication models.

O’Hanlon et al. (2020), on the other hand, who interviewed 15 early-career researchers at Memorial Sloan Kettering Center, found that nine of the interviewees supported the National Institute of Health’s Public Access Policy and described it as “second nature.” The policy had been in place for most, if not all, of the interviewees’ professional lives and was now a reality of their field. This is of note especially for institutions with OA policies put in place over a decade ago and requires further exploration to gauge whether time is a factor in acceptance of the policy.

Lack of prestige, name recognition, or perceptions of lesser quality of OA publications were seen as another major barrier when authors considered publishing in OA journals. The OSC/CDL (2007) study found that only 21% of faculty had published OA, and “many respondents voiced concerns [that]...open access journals or repositories might produce a flood of low-quality output” (p. 7). Gaines (2015) found that respondents were evenly split in perceptions regarding whether OA publications were of the same quality as traditionally published articles, but besides the relevancy of the journal to their field, faculty chose articles based on quality and prestige. Eger et al. (2015) reported that authors’ main reason for not choosing to publish in an OA journal was the “standing or reputation” of the journal. Peekhaus and Proferes (2015), through the survey of North American library and information science faculty, found that 19% of respondents believe that OA journals are of lesser quality, and 37% are unsure whether the quality is the same as that of traditional journals. Similarly, Peekhaus and Proferes (2016) also found that 97% of survey respondents consider the “publisher’s reputation to be important or very important.” Niles et al. (2020) report that “overall prestige” was the second most cited reason for choosing where to publish, following T&P considerations.

The cost of OA publishing was another major factor identified by study participants. There was significant confusion between the green OA model (authors share a post-print via an

institutional repository) versus the gold OA model (authors pay an article processing charge [APC] to publish OA) or the hybrid model (paying the APC to publish OA in an otherwise closed journal), indicating that there is a large amount of education that still needs to happen with authors. Many authors surveyed were not familiar with the nuance, rightfully viewing OA publishing as prohibitively expensive. Some comments gathered in the OSC/CDL (2007) survey voiced concerns about models in which the authors must pay to publish. A 2016 Jisc study found that APCs have risen about £100 per year since 2014 (Shamash, 2017).

Heaton et al. (2019), using Scopus data to evaluate Utah State University faculty OA publishing trends, found that 68% of journals in their study charged an average APC of \$1,514.36. Only 5% of those who paid an APC used “personal funds,” suggesting that the rest of authors had access to funding elsewhere. Gaines (2015) reported, perhaps unsurprisingly, that faculty within the College of Science at the University of Idaho were the most well-versed and comfortable with the difference between green and gold OA models and grant-funded OA mandates. However, Gaines (2015) also found that concerns over the cost of OA publishing was a theme throughout the survey results.

O’Hanlon et al. (2020) writes, “The genuine openness of these ‘hybrid OA’ journals, though, is questionable given that high APCs create barriers to publishing in them, leading authors to look elsewhere or to opt out of the ‘open’ option” (p. 56). Similarly, it seems engagement with green OA is quite low. In 2007, only 14% of faculty had submitted a peer-reviewed manuscript to their institutional repository (OSC & CDL, 2007). Peekhaus and Proferes (2016) reported that only 35% of those surveyed had deposited a research article into a repository in the previous year. Yang and Li’s (2015) study of faculty at an institution with an institutional repository report that only 27% of respondents were aware of the repository and only 7% had actually added work to the repository.

The awareness of OA publishing, combined with the belief that research should be free and available online is hopeful considering the untenable and rising costs of paywalled journal publications for Boise State University. Though engagement is lower and highly variable depending on career rank and discipline, the findings reported in the literature suggest that there is both an appetite and an understanding of where scholarly communications need to grow with regard to faculty authors embracing OA publishing as an alternative to traditionally paywalled content. The survey conducted at Boise State University attempts to shed more light on the local context of faculty perceptions and provide important insight into how Boise State University may further support faculty authors while reducing the necessity to consistently cut the collections budget.

METHODS

Boise State University is a publicly funded R2 institution in the Mountain West of the United States in Boise, Idaho. The university serves over 24,000 students in 221 programs ([Boise State University “Facts and figures,” n.d.](#)) and has grown considerably within the past several years both in size and research output, straining resources. Boise State University was selected for this site study in order to explore informing decision making at the library collections level and to establish a baseline of faculty perceptions of OA upon which to build future studies.

This study was classified as exempt by the Boise State University Institutional Review Board. Boise State’s Institutional Research shared a list of all faculty members’ names and email addresses. For the purposes of this study, faculty were considered any employee with teaching responsibilities, including traditional tenured and tenure-track faculty, clinical faculty, emeritus faculty, lecturers and instructors, and adjunct faculty. The contact information was loaded into Qualtrics, but the survey data were collected anonymously, and no identifying information was collected as a part of the survey. After consulting with colleagues and reviewing survey instruments in the published literature, the researchers collected a set of questions to potentially ask faculty. The researchers adapted the survey instruments used by Dallmeier-Tiessen et al. (2011) and Gaines (2015). Dallmeier-Tiessen et al.’s (2011) survey instrument asked participants foundational questions to gauge perceptions, similar to the intent of this study. [Gaines’ 2015](#) survey was administered to a similarly sized institution to that of the co-PI’s also located in the Mountain West. Questions 12 and 13 (see [Appendix A](#)) were added by the co-PIs to assess whether the pandemic was having a significant impact on attitudes of OA publishing. After the survey was deployed, two email reminders were scheduled to be sent to faculty.

The consent process was included in the deployment of the survey, and the recruitment process consisted of one email sent to all Boise State University faculty inviting them to participate in the research. There were no incentives available for this survey. The first three questions of the survey were open-ended and asked information regarding the participant’s area of study, rank, and length of time as a researcher. Although the open-ended nature of these questions required additional time devoted to coding the answers and cleaning the data, the value of having the data and allowing respondents to list their position as they wanted to protected the validity of the data and allowed faculty to be as honest and anonymous as they wanted to be.

The survey instrument was sent to 1,383 faculty at Boise State. While 498 started the survey, 469 completed the survey, exceeding the necessary sample size of 450 that will indicate that the survey is representative of the faculty population of Boise State University. This response rate of 33.9% is much larger than similar institutionally based perception surveys. [Gaines \(2015\)](#) reported a 23% response rate, [Dawson \(2014\)](#) received a 21.9% response rate,

Serrano-Vicente et al. (2016) reported a 17% response rate, and Yang & Li (2015) had an 11% response rate. There is a 99% \pm 5% confidence interval rating for this survey due to the response rate. Two reminder emails were sent to faculty requesting they complete the survey.

External validity threats are important to address in any survey studying perceptions of human subjects. The survey was deployed soon after budget cuts were announced. Those budget cuts did lead to the cancellation of certain collections. The cancellations occurred within the first 2 weeks of the start of the Fall 2020 semester. Additionally, history is an external validity threat when a single factor may influence response. This survey was administered during a global pandemic, classes shifting online at both Boise State University and at institutions across the world, societal upheaval, budgetary uncertainty, and political strife. As such, the external validity threats in the area of history were much higher than normal. We do not yet know how this affects the validity of our responses.

The researchers used an inductive method of coding called “inductive coding,” which was derived organically for the questions about perceptions of budgets, collections, and OA. Inductive coding was used wherein the co-PIs reviewed the comments first and derived the codes or themes after reviewing the data. In the instance of coding the faculty role and discipline, the codes were determined by deductive coding or a priori coding.

The researchers utilized thematic coding to analyze the open-ended responses. Both investigators read through and created themes individually. Together in conversation, they developed definitions for codes and discussed how they applied to the data, thereby establishing interrater reliability. Once themes with appropriate definitions were created for each open-ended question (Q9, Q11, Q15, and Q16), they again coded each comment with the normalized themes. Together, the researchers evaluated and discussed the chosen codes, and then agreed on the final themes.

RESULTS AND DISCUSSION

Respondents to this survey represented all major colleges and academic divisions (Figure 1). Faculty were asked to provide their discipline or area of study, which were used to identify specific colleges and provide a broad overview of represented disciplines within the data. Faculty were also asked to provide their rank or position type, although this was optional. Based on these data, respondents were broken down into four categories: Tenured, Tenure Eligible, Not Eligible for Tenure, and No Rank Given. Outside of those respondents who did not provide their rank, tenured faculty (those at an associate, full, or emeritus status) were the largest representation (Figure 2). The next largest group of respondents was those not eligible for tenure, followed by those eligible for (but have not yet achieved) tenure. Given this

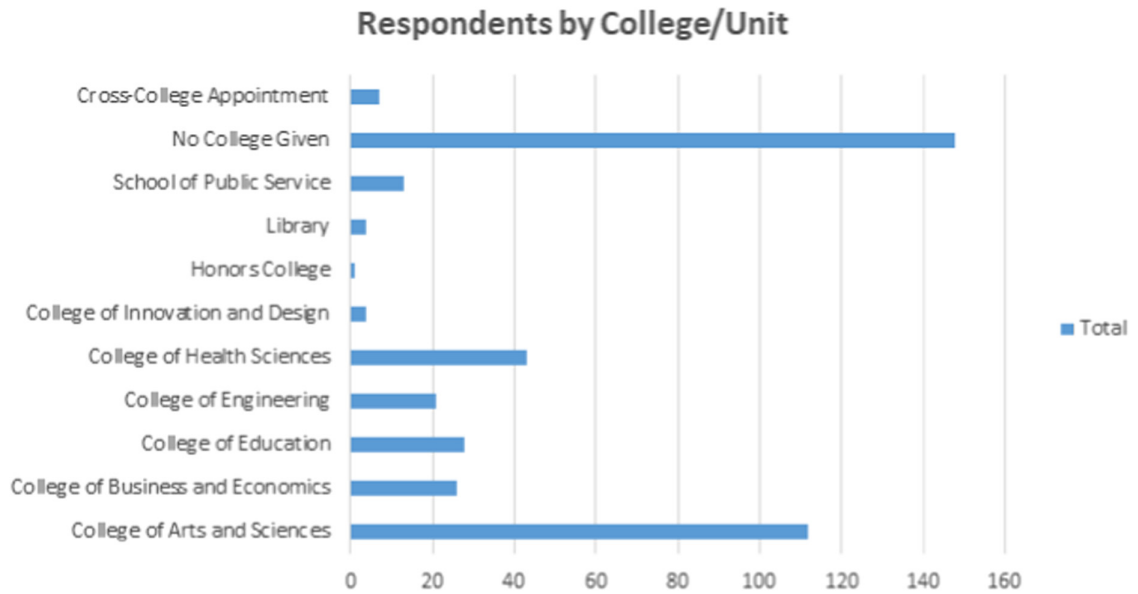


Figure 1. Breakdown of survey respondents by college

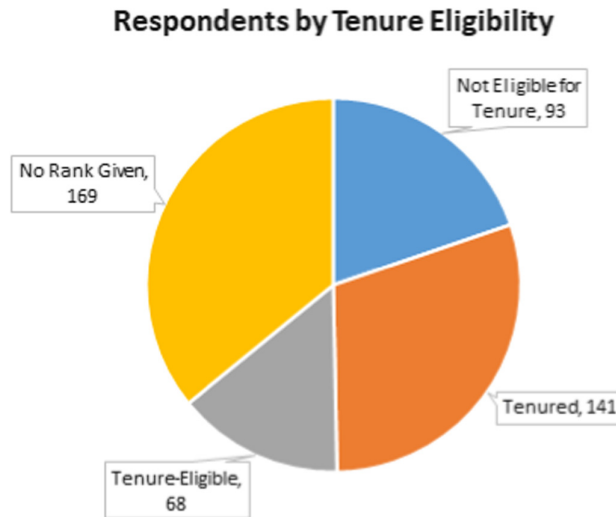


Figure 2. Respondents categorized by eligibility for tenure

response, it may be unsurprising that the majority of respondents fell within the 6- to 10-year range of being an active researcher (Figure 3).

When asked whether their field of study published any journals with OA articles, the majority of all categories (No Rank Given, Not Eligible for Tenure, Tenured, and Tenure Eligible)

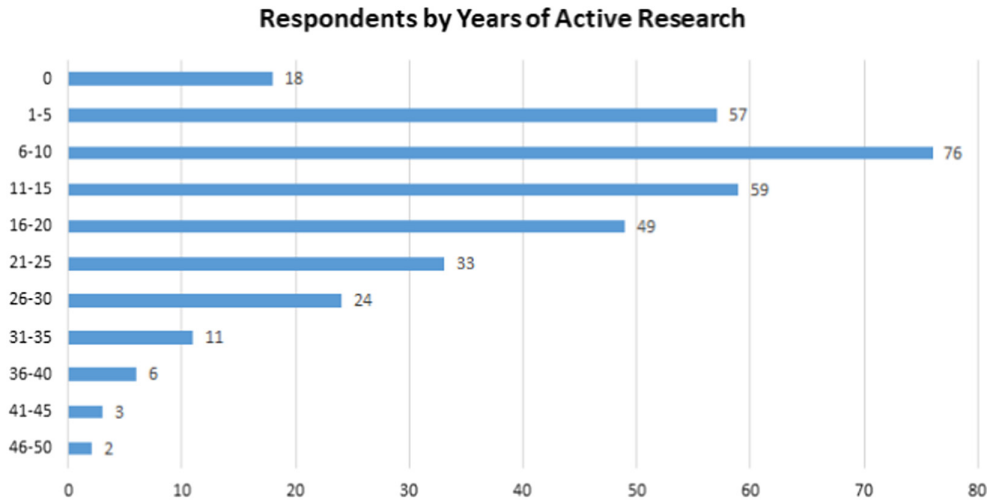


Figure 3. Years of active research as indicated by survey respondents

responded in the affirmative (Figure 4). It is worth noting, however, that no definition is given for the model under which these articles are published, leaving interpretation up to the respondent. It is unclear whether survey participants are knowledgeable about the nuance between open publication models, such as the differences between green and gold publishing. This lack of clarification for those taking the survey was intentional to assess their initial perception and establish a baseline for future analysis at Boise State University.

Participants were asked to consider whether their respective research field does currently benefit, or would benefit from, journals that publish OA journals (Figure 5). Similar to the

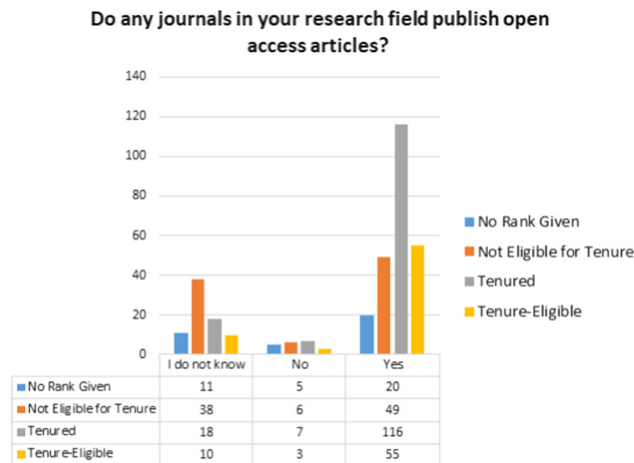


Figure 4. Do any journals in your research field publish open access articles? (by tenure eligibility)

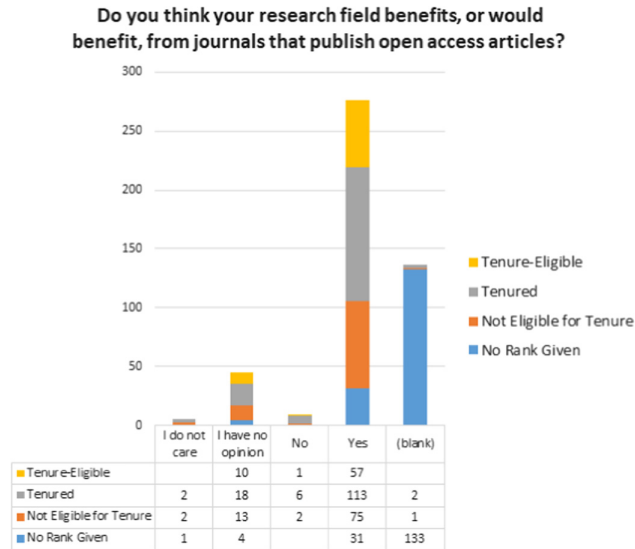


Figure 5. Do you think your research field benefits, or would benefit, from journals that publish open access articles? (by tenure eligibility)

previous question, most respondents answered in the affirmative, with one exception. Many respondents without an assigned rank, due to a missing job title, did not answer the question. As this was another instance in which no explanation was given, could this be an area in which a definition could have garnered more responses? Plans to redeploy this survey are underway with the inclusion of explanatory information, which we propose could make this question easier for individuals to answer.

A majority of respondents felt neutral, at best, in considering whether the current publishing model works well (Figure 6). The majority of tenure-eligible respondents fell along this same spectrum, with very few agreeing or strongly agreeing that the current publishing model works well. No explanation for the “current scholarly publishing model” was provided to study participants, leaving it open to their own interpretation. Based on the literature review and comments, it could be assumed that participants viewed the “current publishing model” as that of publishing in paywalled journals requiring subscriptions for access.

A high number of tenured faculty responded with disagreement that the current scholarly publishing model works well. This finding may align with Eger et al. (2015), Yang and Li (2015), Serrano-Vicenta et al. (2016), and Peekhaus and Proferes’ (2015) findings that higher-ranked faculty and/or those with more publishing experience tended to publish more often in OA journals. Tenured faculty survey respondents are most likely to have benefited from what would be considered the “current publishing model,” making it surprising that they do not view the model

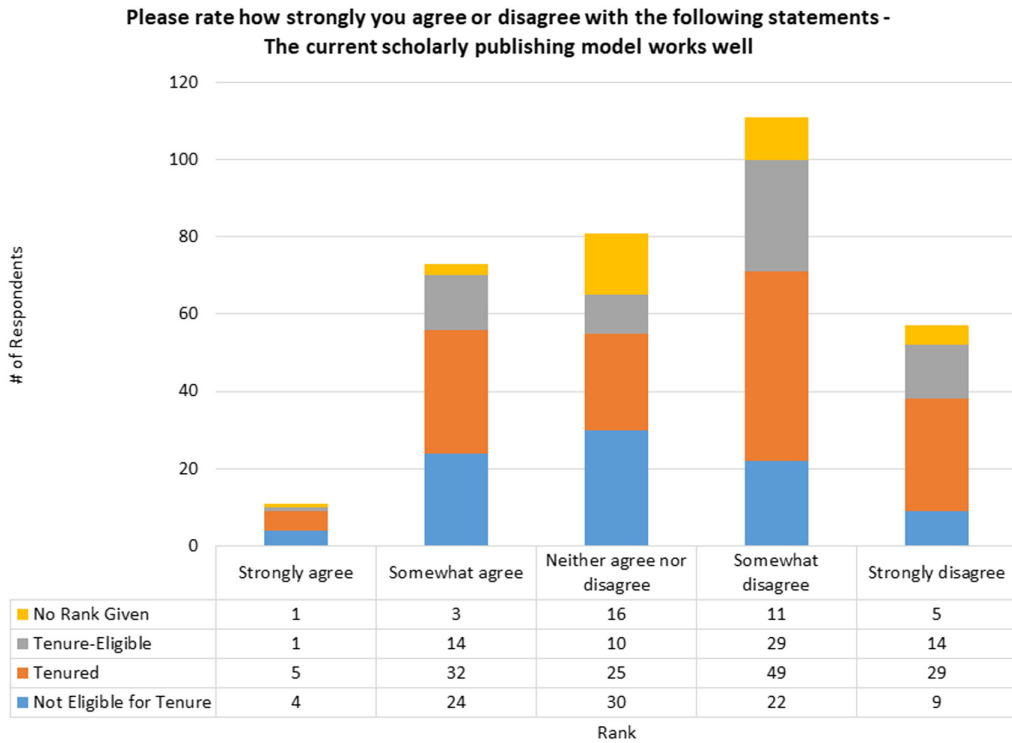


Figure 6. Please rate how strongly you agree or disagree with the following statements: The current scholarly publishing model works well (by tenure eligibility)

as working well. Combined with the findings from the literature review wherein faculty in higher ranks are more likely to publish or use an OA publication, it is likely that a change in the T&P processes recognizing the quality of OA journals would have a significant, positive impact on the overall perception of OA publications.

When asked to consider whether “open access journals lack peer review,” most respondents indicated a neutral stance, followed by a fairly even distribution between “somewhat agree” and “somewhat disagree” (Figure 7). The same cannot be said for “strongly agree” and “strongly disagree.” “Strongly disagree” had a high response rate, indicating that there may be a robust contingent of researchers on campus who believe that OA publications follow the same protocols to ensure that quality articles are published through peer review. “Somewhat agree” also received a substantial amount of respondents, indicating that there may still be a perception that OA publications do not employ the peer review process.

Following the question regarding peer review, respondents were asked whether they agreed with the statement “OA journals are of the same quality as subscription journals” (Figure 8). Faculty were evenly split. This aligns with Gaines’ (2015) findings concerning faculty

Please rate how strongly you agree or disagree with the following statements - Open access journals lack peer review

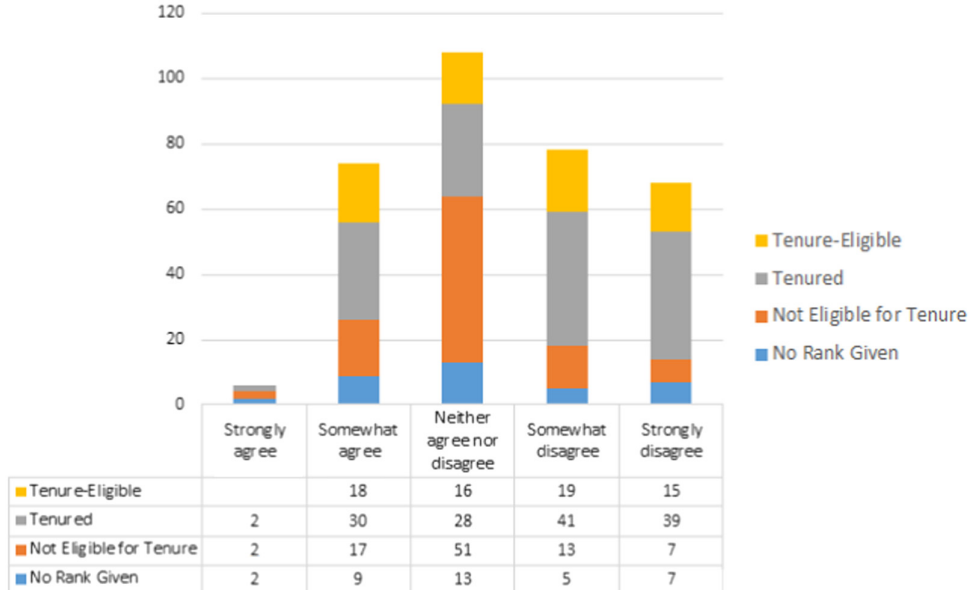


Figure 7. Please rate how strongly you agree or disagree with the following statements: Open access journals lack peer review (by tenure eligibility)

Please rate how strongly you agree or disagree with the following statements - Open access journals are the same quality as subscription journals

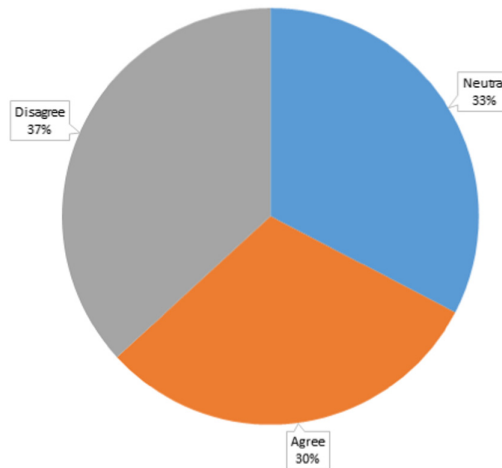


Figure 8. Please rate how strongly you agree or disagree with the following statements: Open access journals are the same quality as subscription journals (by tenure eligibility)

perceptions of OA quality at the University of Idaho. Two-thirds of respondents to this survey either agree or are neutral on whether OA journals are of comparable quality to subscription journals. This result may suggest that a majority of faculty at Boise State University might not perceive OA journal quality as negative. However, the perception of lesser quality of OA journals persists among faculty at Boise State.

Question 9 asked respondents to identify all perceived barriers to publishing in an OA publication from a list of possible choices, including an invitation to an open-text field (Figure 9). Figure 9 depicts the coded comments. As you can tell by the results, lack of name recognition of a journal was the most important factor in publishing in OA journals.

Faculty were asked to indicate how their perceptions have changed (Figure 10) to invite survey respondents to consider their perceptions on various aspects of the scholarly communications lifecycle that had changed in the past 6 months. This question was an attempt to capture initial changes in perception brought on by the pandemic. Ultimately, the results were not particularly insightful because a majority of participants ranked their priorities as “about the same,” indicating very little shift due to the pandemic (Figure 10). Question 11

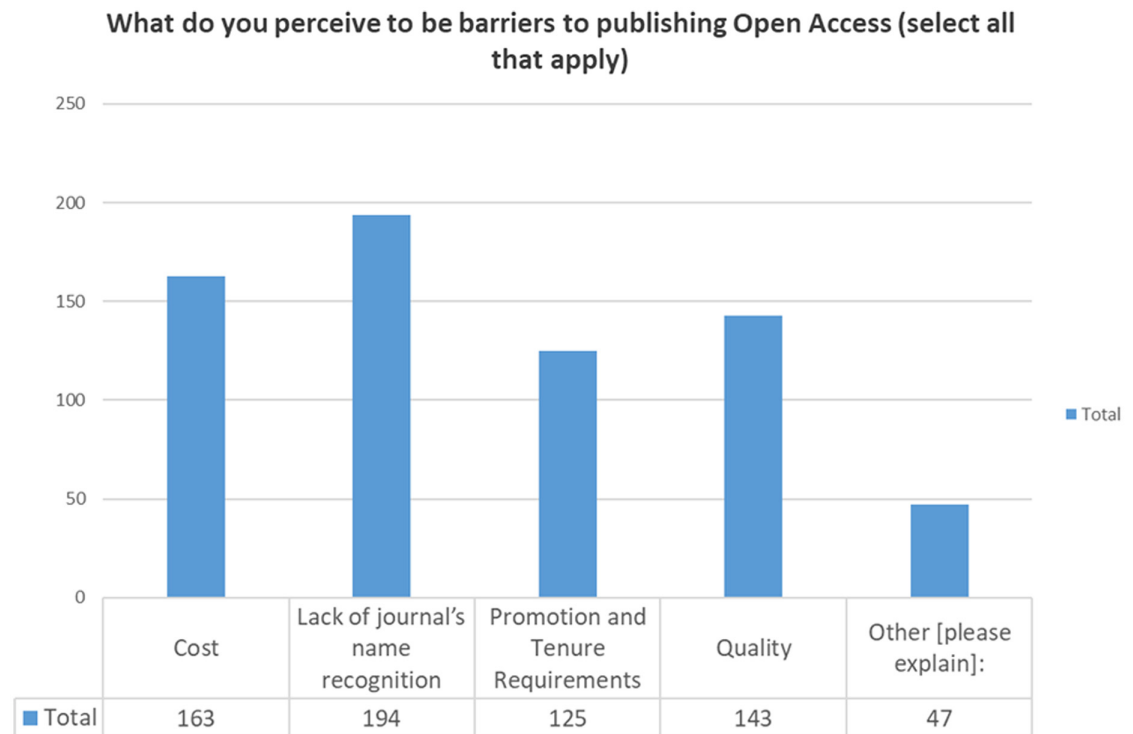


Figure 9. What do you perceive to be barriers to publishing open access (select all that apply)?

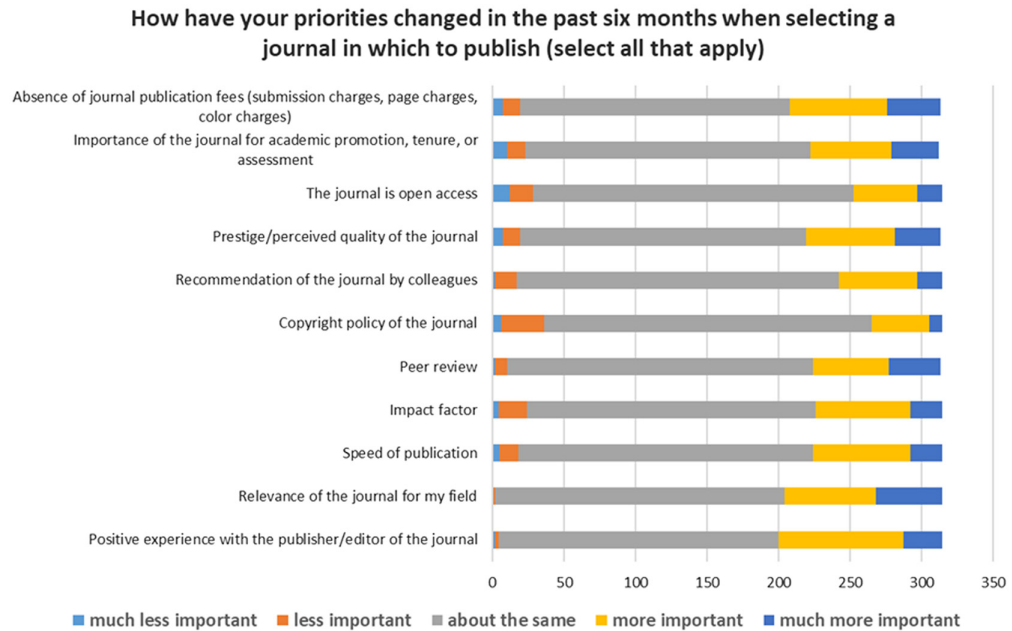


Figure 10. How have your priorities changed in the past 6 months when selecting a journal in which to publish (select all that apply)?

asked respondents to elaborate on their answers in question 10. Very few responses were recorded, making coding of comments impossible.

Questions 12 and 13 asked faculty to consider whether their perceptions of reading (Figure 11), submitting to (Figure 12), or sharing OA journal articles (Figure 13), or assigning OA articles as course materials (Figure 14), has changed significantly from prior to the pandemic. Respondents were asked to rank their change in perception based on a rating scale matrix with the following choices: Extremely Unlikely, Somewhat Unlikely, Neither Likely nor Unlikely, Somewhat Likely, and Strongly Likely. There were not strong connections with regard to individuals' perceptions changing based on the pandemic although individuals reported that they did seem slightly more likely to use OA materials.

The results of this survey align with previously conducted OA perception surveys. More respondents answered the question about attitudes since the pandemic began, whereas the before-the-pandemic question had fewer responses. The result of this is noticeable as it may appear as if many more respondents assign OA articles in their courses, but in fact, it may be that more individuals responded to the first question. Though OA publishing continues to garner a large following, there are ongoing barriers to widespread adoption by faculty at Boise State University. These barriers are eroding over time but include the perceptions of quality, cost, time, and faculty T&P.

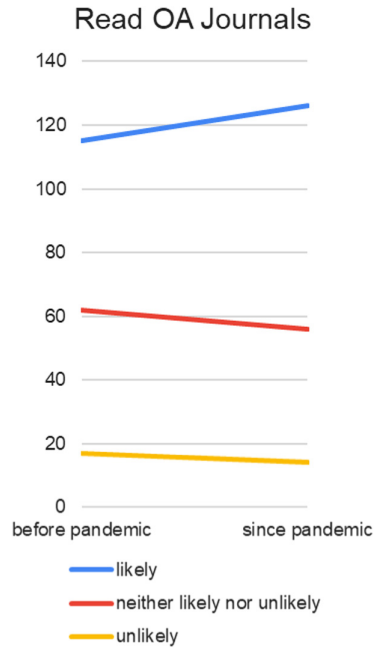


Figure 11. How likely respondents were to read OA journals before and since the pandemic

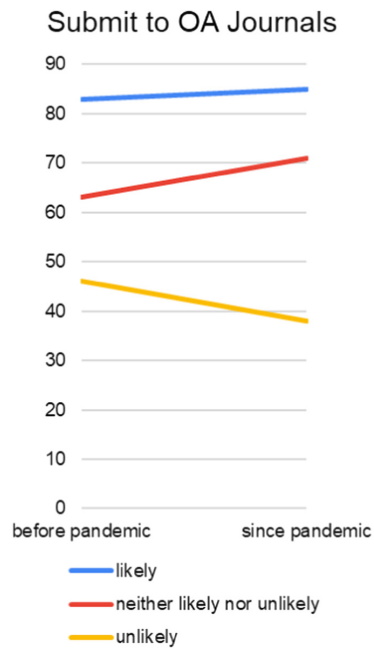


Figure 12. How likely respondents were to submit to OA journals before and since the pandemic

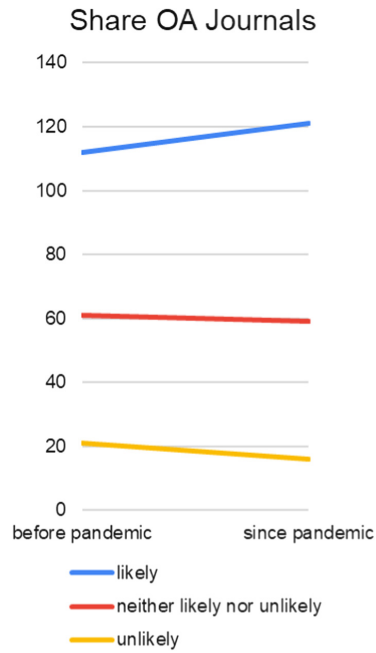


Figure 13. How likely respondents were to share OA journals before and since the pandemic

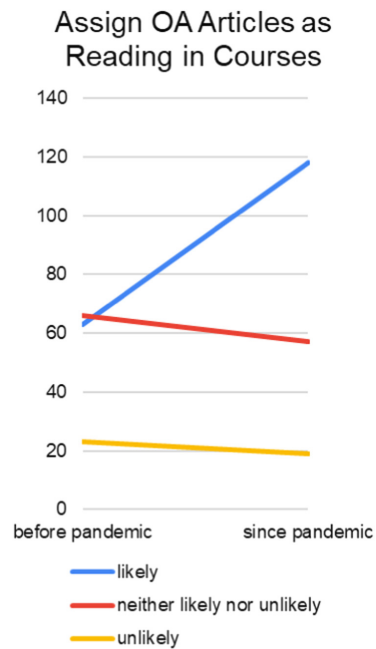


Figure 14. Likelihood of respondents to assign OA articles as reading in their courses

Understanding of OA

Survey respondents demonstrated an understanding of the scholarly communications landscape and some of the challenges therein. Faculty submitted many comments that illustrated their understanding of the publishing arena and the complications. Comments from two respondents elucidated sophisticated views. One respondent described how the publishing industry operates using the labor of faculty serving as reviewers and editors:

“The long-standing system of authors providing free work, disciplinary colleagues providing free labor as reviewers and editors, and then publishers charging substantial prices for hard copy or electronic access is a scam and embarrassment to higher education. The oligopoly of top journals owned by a handful of for-profit publishers systematically abuses the system.”

Another respondent indicated that they advocate for using systems that benefit the time of the user, despite the possible legal constraints:

“I support [OA] publishing wholeheartedly, and we need to keep pushing. Meanwhile, I teach my students to pirate at sci-hub. They paid for the research and the researcher salaries with their tax money, and hiding knowledge for greed holds back humanity. I feel zero regret depriving greedy high-profit rentier leeches of investment income when the scientists get nothing for their work”

These responses indicate that at least some of the faculty authors at Boise State are fully aware of the budgetary constraints and inequities present in academic publishing. A majority of respondents agree that their field could or currently does benefit from OA publications (Figure 5). Nevertheless, significant barriers obstruct widespread acceptance of OA publishing.

Barriers

When asked to identify the biggest barriers to engaging with OA publishing, a perception of lesser quality of OA publications was a primary factor when faculty considered a journal in which to publish (Figure 9). This perception aligns with the findings from Gaines (2015), Eger et al. (2015), and Peekhaus and Proferes (2016). Many comments, coded in Figure 15, indicate the concern of a lack of quality, including the following:

- “Lack of rigorous peer review”
- “The system may be flooded with nonsense”

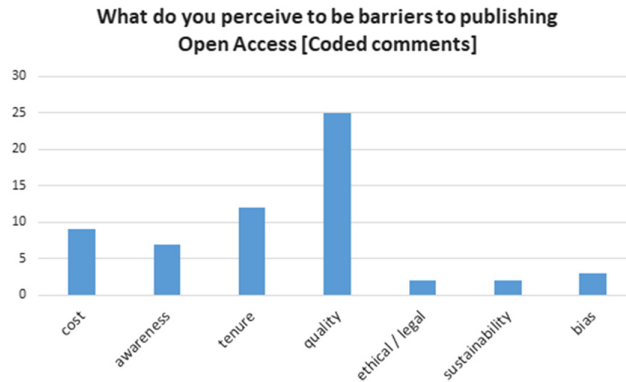


Figure 15. What do you perceive to be barriers to publishing open access (coded themes based on researcher definitions in Appendix B)

- “PERCEIVED reputation/quality of online journals. They are highly variable in terms of quality (like print journals), but they are perceived as lower quality by many.”

The second most cited barrier from the study results was faculty concerns regarding T&P. Once again, the results of this survey track with the findings of previous studies. Peekhaus and Proferes (2015, 2016) and Gaines (2015) both found that respondents either did not receive support for publishing in an OA journal or knew that their potential tenure and/or promotion would suffer. Comments (coded in Figure 15) surrounding concerns with tenure and/or promotion included the following:

- “I published a few articles in [OA] journals and I was reprimanded for it.”
- “Prestige. Not fully respected by my peers.”
- “Gatekeeping on the part of faculty who bias toward those venues in which they have published.”
- “It suffers from a bad reputation and is not seen kindly for promotion.”

The final question invited survey participants to share any final thoughts on OA, publishing in general, research, or the budget. Figure 16 represents the coded comments, with quality and cost being the most often mentioned issues. Comments such as this one—“In my field, open access is largely a joke; some quality journals have an open access option, but the fees are very high so almost no scholars choose to publish open access”—indicate that gold or hybrid models of OA might be the most recognizable OA publishing models, wherein the onus of payment sometimes falls on the shoulders of the author. Many respondents acknowledge that publishing is not (nor has it ever been) free, but that the shift to OA and the cost for authors has made some question the system.

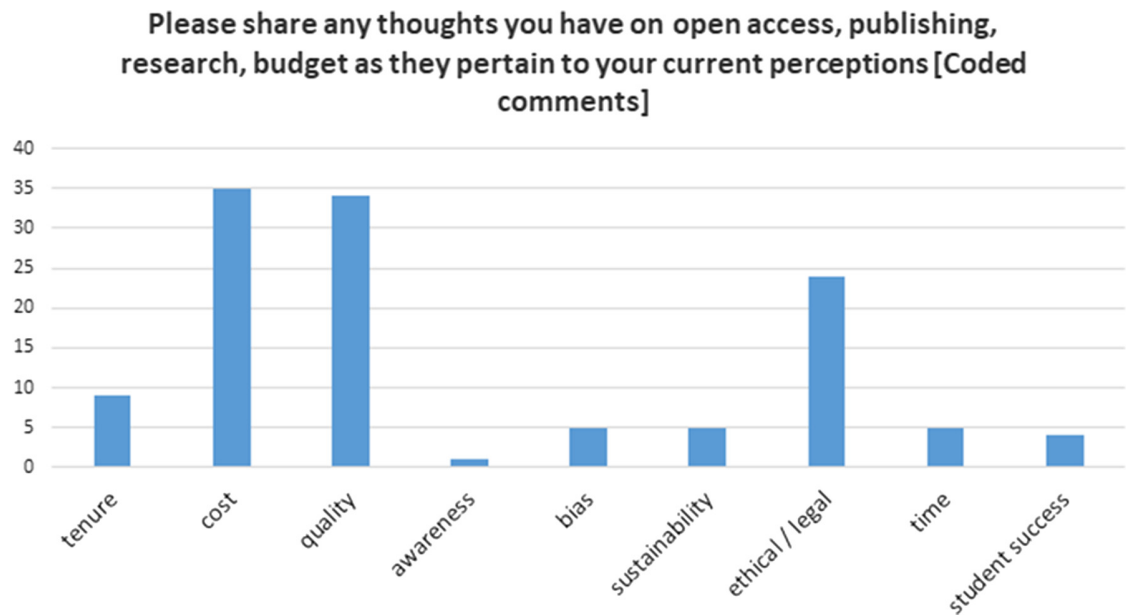


Figure 16. Please share any thoughts you have on open access, publishing, research, or budget as they pertain to your current perceptions (coded themes based on researcher definitions in Appendix B)

- “My only real knowledge is that they are pricey (and sometimes judged as ‘vanity’ publications).”
- “[OA] is great, but all the cost gets pushed onto the PI rather than the university under the subscription way of doing things.”

CONCLUSION

Survey results from Boise State University align with the previous literature about faculty perceptions of OA publishing. In those articles, authors claim that respondents are familiar with OA publishing, although they may not have an expert grasp on the distinctions between models. Perceptions of respondents in this study suggest that there may still be misconceptions that persist regarding alleged “predatory” publishers, a perceived lack of quality in OA journals, and how the model of paying to publish places the onus of funding on the author rather than the institution. Respondents cite these misconceptions—along with concerns around the implications that publishing in an OA journal might have on the T&P process—as the reason that OA publishing engagement is limited.

The data resulting from this perceptions survey will be used to continue to analyze collections decisions; however, a large-scale reliance on OA publications to fill collections gaps and alleviate the budget shortfall is unlikely without large investments by Boise State to ensure that

OA publications are considered the same quality as traditional publications for the purposes of T&P. Additionally, Albertsons Library needs to continue to both educate faculty about the various models of OA publishing and provide tools for evaluating the quality and authenticity of publications, regardless of OA status. Education should focus not solely on the tenure-eligible and tenured faculty but faculty from all statuses and types. This can provide a clearer understanding and knowledge of OA publishing.

As the study continues to be administered in the coming years, the survey itself should be used as an educational and marketing tool. The co-investigators intentionally omitted explanations for questions or concepts, such as the “current scholarly publishing model” question discussed earlier. In light of comments conflating models of OA publishing, or confusion surrounding the nuance between OA and OER, future iterations of this survey will include explanations of models, links to resources, and other information to also use the survey as an informative tool for respondents. Yang & Li (2015) reported great success with this form of survey and recognized its potential as an outreach and educational tool. In providing explanations, the survey can also supply respondents with information regarding where on their campus to receive further help with OA publishing questions. Another way to improve the survey is utilizing additional quantitative questions and demographics to track additional correlation factors that create a likelihood to engage with OA.

This survey can also serve as a guide for other public R2 universities and libraries facing difficult budgetary decisions while the research enterprise of the institution continues to expand. Though OA publishing on its own is unlikely to solve a collections budget shortfall, insight into the perceptions held by faculty around OA publishing will provide data tracking the baseline willingness to engage with OA while also allowing future deployments of the survey to gauge trends longitudinally. Additionally, understanding the barriers faced by faculty at an institution will inform methods of encouraging OA publication use in research and the classroom.

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APPENDIX A - SURVEY INSTRUMENT

1. What is your faculty rank at Boise State University? [optional]
2. What is your discipline area or areas? [optional]
3. Approximately how many years have you been an active researcher?
 - a. 0
 - b. 1-5
 - c. 6-10
 - d. 11-15
 - e. 16-20
 - f. 21-25
 - g. 26-30
 - h. 31-35
 - i. 36-40
 - j. 41-45
 - k. 46-50
 - l. 50+
4. How easily can you gain online access to peer-reviewed journal articles of interest for your research?
 - a. Very easily
 - b. Quite easily
 - c. With some difficulties
 - d. I can rarely access the articles I need
 - e. I do not know
5. Do you search any of the following websites for your research? (Yes or No)
 - a. ArXiv
 - b. Researchgate
 - c. Academia.edu
 - d. Sci-Hub
 - e. ScholarWorks
 - f. Google Scholar
 - g. PubMed

6. Do any journals in your research field publish open access articles?
 - a. Yes
 - b. No
 - c. I do not know
7. Do you think your research field benefits, or would benefit, from journals that publish open access articles?
 - a. Yes
 - b. No
 - c. I have no opinion
 - d. I do not care
8. Please rate how strongly you agree or disagree with the following statements (Rating scale matrix with the following choices: Strongly disagree, Somewhat disagree, Neither agree nor disagree, Somewhat agree, Strongly agree)
 - a. Publicly funded research should be made available to the public without barriers
 - b. The current scholarly publishing model works well
 - c. Open access journals lack peer review
 - d. Open access publishing is more cost-effective than subscription-based publishing
 - e. There are no benefits to open access publication
 - f. Researchers should retain the rights to their published work and allow it to be used by others
 - g. It would not be beneficial to the general public to have access to scientific and medical articles
 - h. Open access journals are the same quality as subscription journals
 - i. Open access articles are cited more heavily than those in subscription journals
9. What do you perceive to be barriers to publishing Open Access (select all that apply):
 - a. Cost
 - b. Quality
 - c. Promotion and Tenure Requirements
 - d. Lack of journal's name recognition
 - e. Other [please explain]:

10. How have your priorities changed in the past six months when selecting a journal in which to publish (Rating scale matrix with the following choices: Much less important, Less important, About the same, More important, Much more important)
 - a. Speed of publication
 - b. Positive experience with the publisher/editor of the journal
 - c. Relevance of the journal for my field
 - d. Impact factor
 - e. Peer review
 - f. Copyright policy of the journal
 - g. Recommendation of the journal by colleagues
 - h. Prestige/perceived quality of the journal
 - i. The journal is open access
 - j. Importance of the journal for academic promotion, tenure, or assessment
 - k. Absence of journal publication fees (submission charges, page charges, color charges)

11. Would you like to explain your answer? If so, please provide us with more information. [optional]

12. This question assesses your attitude toward submitting to, citing, reading, or sharing open access resources since March 2020 when the university switched to remote working and learning due to the pandemic. Please rate your likeliness to engage with open access on the scale below (Rating scale matrix with the following choices: Extremely unlikely, Somewhat unlikely, Neither likely nor unlikely, Somewhat likely, Strongly likely)
 - a. Read open access journals
 - b. Submit to open access journals
 - c. Share open access journal articles
 - d. Assign open access articles as reading in courses

13. This question asks you to recall your attitudes prior to the pandemic toward submitting to citing, and reading, or sharing open access. Please rate your likeliness to engage with open access on the scale below (Rating scale matrix with the following choices: Extremely unlikely, Moderately unlikely, Slightly unlikely, Neither likely nor unlikely, Slightly likely, Moderately likely, Extremely likely)
 - a. Read open access journals
 - b. Submit to open access journals

- c. Share open access journal articles
 - d. Assign open access articles as reading in courses
14. Based on your current perception of budgetary constraints, what concerns might you have regarding your research and teaching? [optional]
 15. Please share any thoughts you have on open access, publishing, research, budget as they pertain to your current perceptions. [optional]

APPENDIX B - DEFINITION OF THEMES IN COMMENTS

What do you perceive to be barriers to publishing Open Access (select all that apply): - Other (please explain):

- quality
 - quality of open access journals/publications
- tenure
 - impact regarding the journal's perceived prestige or its consideration for promotion and tenure review
- cost
 - cost for publishing OA/budget
- awareness
 - awareness/visibility of OA opportunities
- bias
 - classism, racism, sexism, discipline, etc.
- sustainability
 - viability and sustainability of the journals themselves and how they impact the world around them
- ethical/legal
 - ethical and/or legal concerns (including mention of predatory publishing)/ distrust in OA publishing model
- none
 - No answer/non-answer

Please share any thoughts you have on open access, publishing, research, budget as they pertain to your current perceptions:

- tenure
 - impact for promotion and tenure review
- cost
 - cost for publishing OA/budget
- quality
 - quality of open access journals/publications
- awareness
 - awareness/visibility of OA opportunities
- bias
 - classism, racism, sexism, discipline, etc.
- sustainability
 - viability and sustainability of the journals themselves and how they impact the world around them
- ethical/legal
 - ethical and/or legal concerns (including mention of predatory publishing) OR altruism of OA publishing
- time
 - time being the main problem in job of research and teaching, creating a barrier to publishing openly OR mentions the speed of OA publishing
- student success
 - concerns over student success diminishing due to budget constraints OR advocating for OA to provide better access to students