OSI POLICY PERSPECTIVES



ABOUT OSI POLICY PERSPECTIVES

The OSI Policy Perspectives series offers broad, common ground perspectives on key issues in scholarly communication. Each report summarizes the current state of a particular issue and what we know about it, and also attempts to articulate the perspectives and lessons of experience from all stakeholder groups in scholarly communication on this issue (particularly but not exclusively as expressed in OSI conversations) and identify what common ground might exist for building broadly acceptable policy.

OSI is not a democratic body that speaks with one voice on any particular issue. Trying to reconcile the views, intentions, and motivations of all the different actors, communities and groups in the scholarly communication space—which are very rarely entirely aligned—is challenging. We acknowledge, therefore, that these reports may be (and in fact, probably are) an imperfect reflection of the many perspectives and ideas in this group. The fact that these reports sometimes need to be published in a rush, in response to policy commenting deadlines and other pressures only makes this imperfection more likely.

We also acknowledge, however, that OSI often considers a wider range of perspectives than established policy making bodies in scholarly communication, and that our relative strength is showcasing this range of perspectives and noting how they differ, and importantly, how they share common ground. To this end, we hope it is valuable to produce these reports, however imperfect, and share them with the scholarly communication community and beyond.

© 2023 OSI. Except where otherwise noted, this report is free to use and reuse under a CC-BY-NC-ND license. Cover photo CC-0 by Josep Monter Martinez. Most of conclusion section of this report is the same as the conclusion section of OSI Policy Perspective 6 (Hampson 2023), and has been reprinted here with permission.

ACKNOWLEDGMENTS: Thank you to the many researchers from around the world who contributed their time and perspectives to the development of this report. Thank you as well to Joyce Ogburn for her editorial review, to QuillBot AI for rewrite suggestions on several problematic paragraphs, and to George Mason University Press.

AUTHOR CONFLICT STATEMENT: The author of this report, Glenn Hampson, is the program director and principal investigator for OSI, which receives funding from foundations, UNESCO, commercial publishers, and individual participants by way of conference fees. Funders, however, have no privileged input into OSI policy deliberations apart from being equal members of the OSI community. OSI has many voices contributing to documents such as this, and endeavors to maintain an inclusive and balanced perspective on scholarly communication issues.

DISCLAIMER: In this report, the authors have attempted to accurately represent the perspective and ideas of the broad open solutions community, and in particular UNESCO and OSI participants, alumni and observers. However, it is possible that this attempt is incomplete and/or inaccurate. Any responsibility for errors, omissions and/or misrepresentations rests solely with the lead author. Also, the findings and recommendations expressed herein also do not necessarily reflect the opinions of all co-authors, contributors, individual OSI participants, alumni, or observers, or any of the institutions, trustees, officers, or staff affiliated with these individuals.

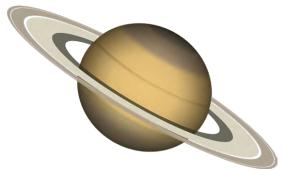
PRIOR AND OTHER VERSIONS: There are no prior public versions of this document.

CITATION: Hampson, G. 2023. OSI Policy Perspective 5: Summary of OSI2022 Research Communication Surveys. Open Scholarship Initiative (OSI). doi: 10.13021/osi2023.3552

SUMMARY OF OSI2022

RESEARCH COMMUNICATION SURVEYS

Executive Summary	1
Introduction	2
Methodology	3
Survey Results	3
Discussion	18
Conclusion	23
Funding & Conflicts of Interest	24
References	24
Annex: Raw Survey Data	26



SUMMARY OF OSI2022

RESEARCH COMMUNICATION SURVEYS

Despite being key stakeholders in the research communication process, researchers have never been widely consulted on the creation of worldwide research communication policies. In order to better understand researcher viewpoints and to better inform future policy reform efforts, OSI conducted a number of surveys in early and mid-2022.

EXECUTIVE SUMMARY

Research is a profession, subject to the same types of incentives and pressures as any other profession. It should therefore come as no surprise that what researchers want most from research communication reforms are solutions that prioritize their individual career needs. These needs include paying less for publishing, having the freedom to publish where they choose (because choosing the best available journal is important for recognition and advancement), ensuring that the work they conduct and publish is of high quality, collaborating more effectively with their peers, being able to read other research work more easily, and having their institutions better support them. Our current global research communication reform efforts, such as open access (OA) and open science, have yet to effectively address these concerns, focusing instead on implementing policies like replacing the subscription model and requiring CC-BY licensing.

The Open Scholarship Initiative (OSI) conducted two global surveys of researchers in the spring and summer of 2022 to determine how this audience felt about open access policies. While the number of researchers who participated in these surveys was too small to reach any statistically significant conclusions, the responses we received were consistent with previous researcher surveys and suggest that most researchers are not being adequately served by OA policies and that these policies should focus instead on higher research communication priorities. More research is recommended.

ABOUT OSI

The Open Scholarship Initiative (OSI) is a diverse, inclusive, global network of high-level experts and stakeholder representatives working together in partnership with UNESCO to develop broadly accepted, comprehensive, sustainable solutions to the future of open scholarship that work for everyone everywhere. This document reflects the input of the individuals listed here as well as contributions from other OSI participants who are not listed. The findings and recommendations expressed do not necessarily reflect the opinions of these individuals, OSI participants, OSI participant institutions, or the agencies, trustees, officers, or staff of these institutions.

OSI is managed by the Science Communication Institute (SCI), a US-based 501c3 nonprofit charity. OSI serves as part of the Network for Open Access to Scientific Information and Research (NOASIR) for the United Nations Educational, Scientific and Cultural Organization (UNESCO). For more information about OSI, please visit osiglobal. org.





INTRODUCTION

fforts to reform scholarly communication through open access have been happening for decades now. In recent years, however, the global influence of open access policies has expanded. In 2019, Plan S was launched in the EU; in 2020, the enormous University of California system penned a transformative agreement with Elsevier (other universities have also reached their own one-off agreements with Elsevier and other publishers); in 2021, UNESCO adopted a new global policy defining and advocating for open science; and in 2022, the US adopted a new policy (the Nelson Memo) requiring all federally funded research to be available immediately and free of charge.

Whereas OA reforms prior to 2019 tended to be more institutional or regional, the reach of more recent actions and policies has been global. This is particularly true in the case of Plan S, which directly affects only a subset of EU researchers and a small fraction of the overall number of research papers published annually, but whose ripple effects have been far reaching. Publishers everywhere quickly adjusted their business plans and product offerings to align with the requirements of this plan, affecting researchers around the globe. Similar policies from UNESCO and the US have followed suit, in effect multiplying Plan S into a global tidal wave of change.

Plan S and many other OA policies are based on the 2002 Budapest Open Access Initiative (BOAI; see BOAI 2002).¹ This viewpoint maintains that open access involves not just being free to read but also promptly accessible (zero embargo), and licensed in a way that maximizes free reuse (with a CC-BY license). Other definitions of OA used today differ from policy to policy and frequently include a number of additional characteristics. Plan S, for instance, also prohibits publishers from combining free and paid content in the same journals (referred to as hybrids), outlines where and how research data should be deposited, and necessitates publisher disclosure of operational costs and profit.

This mandate-based approach to OA policy is not embraced by everyone. Early in 2015, in collaboration with UNESCO, the Open Scholarship Initiative (OSI) was founded in order to better understand the wide range of viewpoints in this field and to help facilitate the creation of OA policies and strategies based on facts, best practices, common ground, and shared objectives. One of OSI's most significant findings has been that researchers are vastly underrepresented in policy conversations regarding OA. This isn't inherently the fault of open access proponents and policymakers; rather, the lack of representation has led to research communication policies that are primarily focused on meeting the demands of libraries and research funders rather than those of researchers.²

In light of this underrepresentation, OSI set out in early 2022 to gauge the attitudes of open access policies among researchers worldwide. The data from non-OSI surveys paints a very clear picture of researcher priorities,³ but specific information is still lacking, such as the reason(s) for needing CC-BY licenses (if any), and how open access policies rank in relation to the broader priorities researchers have for non-communication issues like funding, recruiting, and salary. In this broader context, is OA still a priority? And do the specific requirements imposed by OA regulations, such as CC-BY, align with the incentives, needs and priorities of researchers? The majority of past studies also lacked free form responses. The surveys conducted by OSI gave researchers a chance to share their ideas.

^{3.} See Box 1 on page 20, and also the "other researcher surveys" listings in the References section of this report.





^{1.} As amended in 2003 by subsequent conferences in Berlin and Bethesda.

^{2.} Of course, libraries and funders serve researchers, so they endeavor to craft policies in the best interest of the individual researchers they serve (as well as students, administrators, and others). However, in any large scale and representative sense, researchers are not now nor have they ever been directly involved in the global OA policymaking process. As a group, they are not driving the conversations about need, or creating OA tools and processes. Researchers are also likely to be working on open solutions on a parallel path separate from official open access policy efforts. For example, they may primarily rely on a wide array of open data tools and processes (such as data sharing networks) which are not typically included in open data policy conversations and are also well outside the realm of library and funder expertise and involvement.

METHODOLOGY

Two separate surveys were conducted as part of this effort. The first—the OSI Research Communication Survey—was circulated by OSI and four other organizations (Emerald Publishing, SciELO, Figshare, and the Research Data Alliance) between March and August of 2022. Each organization provided unique survey links for their audiences (all forms were identical except for a version identifier number). Surveys were closed at the end of August and tabulated in October. Approximately 200 responses were received in all, of which 110 responses were valid after accounting for spam replies and duplicates. Additional procedural notes are included in the dataset linked to this publication.

The second survey—the OSI2022 Global Researcher Congress—consisted of four separate surveys. The first of these surveys was administered the first week of July, followed by a second survey in the second week, another in the third, and a final survey in the fourth week of July. The OSI2022 Global Researcher Congress included 130 participants, of whom 99 had also taken the OSI Research Communication Survey earlier in the year and volunteered to be part of this next survey group. Nineteen additional participants were added from Clarivate's list of Highly Cited Researchers (following email invitations to around 250 researchers on this list during April), and 12 participants came from OSI.

All surveys were conducted in English only and using Google Forms. Results were tabulated in Excel. Participants were contacted using MailChimp and a Google listserv. Due to the small sample sizes, no advanced analysis was conducted on these datasets (p values, demographic breakdowns, etc.)—just totals and percentage distributions.

SURVEY RESULTS

INTRODUCTION

The raw data and full, unedited questions from these surveys are in Annex section of this report and also in the linked data file. The profile of a typical respondent in these surveys is a university-based researcher and/or professor with significant experience. Several dozen countries are represented. Detailed demographics are in the Annex tables.

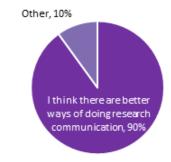
As noted in the Methodology section, the Research Communication Survey was administered to 110 participants between March and August 2022. The four surveys of the Global Research Congress were administered during July 2022. For the Global Research Congress surveys, n=130 for the full group eligible to take each survey, but in terms of participation, week 1 n=41, week 2 n=34, week 3 n=25, and week 4 n=25. We didn't track which participants from the full group completed each survey, so the demographic profile only applies to the full group and not to each survey group.

Because several of the questions asked in these surveys are closely related by design, the survey results in this summary report are not presented in chronological order. That is, our insight into certain subjects was gathered from several different surveys and questions, so rather than simply report the answers from each question in the order asked, the answers to these questions are grouped by subject instead.

SATISFACTION WITH OA POLICIES

In question 1 of the Research Communication Survey, researchers were asked to select statements about scholarly communication that best aligned with their experience. Researchers could choose as many statements as they liked.

FIGURE 1: PERCENT OF RESEARCHERS WHO THINK THERE ARE BETTER WAYS OF DOING RESEARCH COMMUNICATION



Source: OSI Research Communication Survey, question 1



About 75% of respondents said there were better ways of doing research communication and wanted to hear about and explore new ideas and policies. Only 13% said they were comfortable with the ways things are currently. Seven percent said there were better ways of doing research communication, but were fine with whatever reforms governments, funders and/ or universities make. Overall, 90% of respondents (99 of 110) selected some version of the "I think there are better ways" answer, and 83% of this group (82 of 99) picked the "and I'd like to hear about and explore new ideas and policies" suffix.

TABLE 1: PERCENT OF RESEARCHERS WHO THINK THESE STATEMENTS ABOUT RESEARCH COMMUNICATION BEST MATCH THEIR EXPERIENCE

Statement	%
I think there are better ways of doing research communication, and I'd like to hear about and explore new ideas and policies	75%
I think there are better ways of doing research communication, but I'm not particularly thrilled with some of the reforms that have been happening	20%
I am comfortable with the way things are in research communication—at least in my field at my institution	13%
I think there are better ways of doing research communication, but I'm fine with whatever reforms governments, funders and/or universities make	7%
I don't know enough about this issue to have an informed opinion	2%
I don't particularly care about this issue	1%

Source: OSI Research Communication Survey, question 1

OALITERACY

Researcher awareness of the scholarly communication landscape may be better than in years past. From the Research Communication Survey, question 2, key terms in scholarly communication were recognized by the majority of respondents ("familiar" or higher). This marks a significant increase from the awareness noted in researcher surveys from even a few years ago (for example, see Taylor & Francis 2019). From question 3 however, we note that most researchers have either never heard of are only sort of familiar with major global OA policies like Plan S.

TABLE 2: PERCENT OF RESEARCHERS FAMILIAR, VERY FAMILIAR, OR EXPERT WITH OA TERMS AND EFFORTS

OA term	%	OA reform effort	%
Journal Impact Factor	94%	Some other global effort	35%
Open access	91%	The Open Scholarship Initiative (OSI)	34%
Preprint	91%	UNESCO Open Science plan	32%
Publish or perish	89%	Plan S	25%
Open data	85%	Open Research Funders Group (ORFG) effort	17%
Predatory or deceptive publishing	83%		
Open science	79%		
SciELO	77%		
APC (article publishing charge)	75%		
SciHub	74%		
PubMedCentral	63%		
Paywall	59%		
CC-BY	58%		
Embargo	56%		
arXiv	46%		
Green open	44%		
FAIR	40%		
Fair Use or Fair Dealing	37%		
Transformative agreements	29%		

Source: OSI Research Communication Survey, questions 2 and 3





RESEARCH COMMUNICATION PRIORITIES

In question 4 of the Researcher Communication Survey, respondents noted that their highest priority needs in scholarly communication were to lower costs and ensure equity between researchers in the Global North and Global South. Many other needs were also highly ranked, such as increasing the impact of research, which aligns with the findings from previous surveys (see References section). Indeed, the first 11 priorities were supported by at least 70% of respondents. Notably, the only sentiments not ranking highly were the ones central to current global OA policies—namely, reinventing the wheel, and creating one-size-fits-all communication policies for the global research community.

TABLE 3: PERCENT OF RESEARCHERS WHO SAY THIS COMMUNICATION PRIORITY IS EITHER HIGH OR A "MUST DO"

Research communication priority	%
Lower the costs to authors of publishing	84%
Narrow the equity gap between researchers in the Global North and Global South	82%
Lower the costs to institutions of publishing	82%
Improve the impact of research on developing better public policy	81%
Develop infrastructure solutions that make data repositories easier to maintain and access, and that possibly help level the playing field on access to computing resources	75%
Improve peer review systems	75%
Improve connections between research and the general public (for example, by making sure that all research publications include abstracts written in plain language)	74%
Improve connections between research (especially within each field)	72%
Reform the culture of communication in academia	71%
Improve the impact of research on advancing knowledge	71%
Improve the reusability of research (is the work properly licensed, is dataset complete and usable, etc.?)	71%
Improve the visibility of non-English work	67%
Improve safeguards (like gatekeeping) to ensure that published work isn't fake or plagiarized (to ensure that bad work doesn't pollute the knowledge stream)	63%
Improve the speed of publishing	59%
Develop turnkey systems that make it faster and easier to comply with publishing requirements (regarding data deposits, etc.)	55%
Reduce the influence of the Journal Impact Factor	55%
Improve the visibility of non-journal research work (industry white papers, government studies, etc.)	55%
Create new and better ways to officially record discovery (instead of relying on preprints or journal articles for this)	52%
Improve the indexing of research work	51%
Reduce the importance of publishing in promotion and tenure evaluations	50%
Fix what's broken	42%
Create one-size-fits-all communication policies for the global research community	37%
Reinvent the wheel, even if this means some things end up being worse than before (or will take years to stabilize)	18%

Source: OSI Research Communication Survey, question 4

RESEARCH PRIORITIES

More broadly, in the context of how communication fits in with their other priorities, researchers answering question 5 of the Researcher Communication Survey ranked their research-related priorities as follows, with the first 15 priorities supported by at least 70% of respondents (see Table 4A). Note that generic communication priorities like "publish in a journal" and "find the right research papers to





read" are highly important, and that almost all of these general research priorities are communications related. This is an important point, highlighting how research communication isn't a niche concern for researchers. It is, in fact, a central concern, meaning that our understanding of research communication needs to be robust, and the policy reforms we invent must be well planned and effective. Note as well that the specific solution at the centerpiece of all current global OA policies—the CC-BY license allowing users to "Copy and paste large chunks of text from other research papers or otherwise reuse these works"—is very unimportant. Other surveys have consistently identified the CC-BY license as being less popular with researchers than licensing options like CC-BY-NC-ND that protect their work from misuse and commercial exploitation (except in venues like arXiv, SciELO and PLOS which apply the CC-BY license by default). In other words, while CC-BY helps promote access to research publications (not data, which is covered by CC-0), most researchers don't need to reuse these publications in the way envisioned by CC-BY promoters, as will become more apparent later in this analysis.

TABLE 4A: PERCENT OF RESEARCHERS WHO SAY THIS OVERALL RESEARCH PRIORITY (NOT JUST COMMUNICATION) IS EITHER MOST OFTEN OR ALWAYS IMPORTANT

Research priority	%
Effectively communicate my findings to fellow researchers	82%
Advance in my field	81%
Get funding for my research work	80%
Get proper credit and recognition for my work	79%
Publish in a journal	78%
Find the right research papers to read	76%
Make an impact on society	76%
Freely and rapidly share my research work with other researchers around the world	74%
Publish in a prestigious journal	71%
Read research papers for free	70%
Figure out what to read—there's so much information out there	70%
Effectively communicate my findings to the general public	69%
Effectively communicate my findings to policymakers	67%
Publish affordably	66%
Job security	65%
IMMEDIATELY (without waiting for embargo periods) read what other researchers have published in a subscription journal	55%
See the data generated by other researchers	55%
Make my data available in a format that others can see and use	50%
Publish quickly	49%
Reuse the data generated by other researchers	48%
"Register" my discovery (publish quickly so the world will recognize I was the first to discover something)	45%
Protect my research from getting "scooped" before I can publish it	45%
Copy and paste large chunks of text from other research papers or otherwise reuse these works (beyond what is already permitted by copyright under Fair Use and Fair Dealing)	14%

Source: OSI Research Communication Survey, question ${\bf 5}$

In week 3 of the Global Researcher Congress, question 1, researchers were asked this same general question but in an open-ended format—to explain what they needed (not necessarily communication-related) to improve their research. These responses were led by desires like improving teamwork, improving access to information, reducing the amount of administrative work, and improving the stability of funding.





TABLE 5: WHAT RESEARCHER NEED TO IMPROVE THEIR RESEARCH WORK

Responses

better communication and work across pharma

A more collaborative environment would be beneficial to the research enterprise aiming at advancing knowledge and solving urging societal problems. Therefore, open data, open code, open research facilities, and sharing all sorts of relevant information would be beneficial.

Less administrative work

More time and freedom to research what I want to research

I would like to have a better scientific publishing system, moving away from traditional journals and organizing scholarly communication as a genuine exchange of ideas between researchers and the societal stakeholders they serve.

To improve my research, at this point in time, I believe that it would mainly be necessary: free access to databases, articles and books; less bureaucratic workload of the university -- which could be done by its own employees, if there were a satisfactory number; better remuneration in scholarship

To improve my research I would need to be part of an interdisciplinary and international research team able to work together in different fronts to think about urgent needs that might be result in policy change. For doing so, we would need funding and less pressure to produce hasty papers, conferences, books... for the sake of quantitative metrics

Not be dependent from external funding for everything.

More time (less time spent on administrative and other tasks)

I think ways to get timely feedback on my research process, that can help me to offer better outcomes timely (publishing data, sharing protocols, opening software or publishing on journals that value transparency)

The perfect search environment for me should look like this:

- open data and open access to publications;
- enough time for research (half the working day), achieved by reducing the time spent on academic and scientific management;
- public funding for research and research infrastructure, made available through standardized competition through blind peer-reviewed processes;
- scholarships for students of the research team;
- evaluation of research results measured by "social impact" and not by the metric based on the number of citations of articles.

The number one resource I would need to improve my research is more time to focus on it! I don't mean this to sound as a complaint, and I love my job, but as a full-time academic administrator (associate dean), i have to carve out time in my schedule each week for research. Often this means that Saturday and Sunday are the only days I have significant amounts of time to focus on research and writing. A more ideal research environment would be one in which I have scheduled times throughout the week that are dedicated exclusively to research and writing.

Apart from unlimited funding, nothing really comes to mind.

One of the hardest aspects of my research is to be able to find, hire, and guide very good and brilliant researchers as team members. The best researchers aim to be completely independent and they usually prefer to take e.g. their postdocs or positions in the most prestigious institutions in the world. Another aspect that feels suboptimal is the fact that e.g. in my institution, but also in many I know of, there is the tendency to hire one faculty/staff member per subsector of the field, i.e. to avoid "duplicates" within the same department of people addressing very similar science questions. Instead, I think that multiple faculty members and research groups working coherently in similar scientific directions would make them more effective and would make the institution scientifically more powerful and identifiable.

Less bureaucracy, alternative metrics of performance, direct financing

Source: OSI2022 Global Researcher Congress, week 3, question 1

Diving deeper into these answers, question 2 from week 3 of the Global Researcher Congress asked researchers to rank concerns about their research. Were these concerns never important, rarely important, sometimes important, or always important? Here again, communication ranked high, along with concerns about funding, institutional support, staffing, research design, and making an impact. In this broader context, though, certain OA-related concerns ranked far down the "always important" list (at least relative to other choices), and were instead only sometimes important. For example, reusability ranked ninth overall among always important concerns (28%) but first among concerns that were sometimes important (44%) and third overall (72%) among concerns that were either always





or sometimes important. A similar pattern is seen for recognition (up 36 percentage points from 48% always to 84% sometimes plus always), publishing in the right journals (up 32 percentage points from 32% to 64%), collaborating with other researchers (56% to 88%), and competition (4% to 36%). One might conclude from this that there are different tiers of research concerns, with many concerns being important but only a handful being always important.

TABLE 6: PERCENT OF RESEARCHERS WHO THINK THESE RESEARCH RELATED CONCERNS ARE SOMETIMES AND/OR ALWAYS IMPORTANT (RANKED BY ALWAYS IMPORTANT)

Concern	% who say this is SOMETIMES important	% who say this is ALWAYS important	SOMETIMES + ALWAYS %
Staying up-to-date on all the latest research in my field	8%	76%	84%
Getting funding (searching for grants, writing grant proposals, etc.)	8%	76%	84%
Infrastructure support from my institution (good facilities, etc.)	8%	64%	72%
Finding, hiring and keeping good staff	8%	60%	68%
Designing good research studies	28%	60%	88%
Making an impact in my field	28%	60%	88%
Collaborating with other researchers	32%	56%	88%
Job security	8%	52%	60%
Making an impact on society	8%	52%	60%
Getting recognized for my work (at my institution, in my field, etc.)	36%	48%	84%
Advancement—-promotion and tenure	24%	44%	68%
Publishing in the right journals	32%	32%	64%
Making my research usable by others (findable, accessible)	44%	28%	72%
Publishing enough—the pressure to "publish or perish"	16%	28%	44%
Pay	40%	24%	64%
Protecting my research from misuse	12%	16%	28%
Regulation	16%	16%	32%
Protecting my research from theft	16%	8%	24%
Competition	32%	4%	36%
Other	0%	4%	4%

Source: OSI2022 Global Researcher Congress, week 3, question 2 $\,$

This tier of concerns may be evident in other answers as well. Going back to guestion 5 from the Researcher Communication Survey (Table 4A), we can see how these concerns are divided. When researchers are simply asked if certain concerns are sometimes or always important, we get the aggregate answers noted. But dividing this data into different levels of importance, it becomes clearer which concerns are most important to researchers all the time. From this breakdown, we can see, for example, that while reading research papers for free is only the tenth highest concern in aggregate—when combining the "always" and "most often" percentages—it is the fifth most important concern in terms of concerns that are always important for researchers (see Table 4B). Similarly, while survey respondents noted that freely and rapidly sharing their data with other researchers was the second highest concern in terms of what is most often important, it ranked thirteenth in terms of what is always important. The takeaway message here is that determining which priorities are the most important for researchers depends on context and on how the question is asked. Simply asking whether something is important isn't sufficient to assess priorities. On the surface, it appears that effective communication is vital for researchers, but OA policy requirements like rapid sharing and widespread reuse may be focusing on a lower tier of communication priorities for researchers than more urgent (and more general) priorities like effectively communicating findings and finding the right papers to read.





TABLE 4B: PERCENT OF RESEARCHERS WHO SAY THIS OVERALL (NOT JUST COMMUNICATION) RESEARCH PRIORITY IS EITHER MOST OFTEN OR ALWAYS IMPORTANT (RANKED BY MOST OFTEN+ALWAYS %)

Concern	% MOST OFTEN important	% ALWAYS important	MOST OFTEN + ALWAYS %
Effectively communicate my findings to fellow researchers	32%	50%	82%
Advance in my field	30%	51%	81%
Get proper credit and recognition for my work	25%	55%	80%
Get funding for my research work	25%	55%	80%
Publish in a journal	21%	57%	78%
Make an impact on society	34%	43%	77%
Find the right research papers to read	17%	59%	76%
Freely and rapidly share my research work with other researchers around the world	33%	41%	74%
Publish in a prestigious journal	23%	48%	71%
Read research papers for free	16%	54%	70%
Figure out what to read—there's so much information out there	23%	47%	70%
Effectively communicate my findings to the general public	28%	41%	69%
Effectively communicate my findings to policymakers	26%	41%	67%
Job security	24%	42%	66%
Publish affordably	19%	47%	66%
IMMEDIATELY (without waiting for embargo periods) read what other researchers have published in a subscription journal	24%	32%	56%
See the data generated by other researchers	29%	25%	54%
Make my data available in a format that others can see and use	23%	27%	50%
Publish quickly	29%	20%	49%
Reuse the data generated by other researchers	30%	18%	48%
Protect my research from getting "scooped" before I can publish it	21%	24%	45%
"Register" my discovery (publish quickly so the world will recognize I was the first to discover something)	21%	24%	45%
Copy and paste large chunks of text from other research papers or otherwise reuse these works (beyond what is already permitted by copyright under Fair Use and Fair Dealing)	7%	6%	13%

Source: OSI Research Communication Survey, question 5

Finally, from Tables 6 and 4B—two similar survey questions asking about research and research communication priorities but from two different angles (one communication-centric and the other research-centric)—we can construct a rough model of which communication related concerns are most important to most researchers, and how these concerns rank overall in terms of all research priorities. In this model (see Table 7), it's clear that communication related concerns figure prominently throughout the spectrum of researcher concerns, but more general communication concerns like staying current on the latest research, finding the right papers to read, and reading these papers for free, might be much more important to most researchers than comparatively granular communication concerns like licensing format. This distinction is key because, as noted, all the current major global OA policies focus on (and are built mostly around) these lower tier, more granular communication concerns, not on addressing big picture communication concerns researchers feel are always important.





TABLE 7: ESTIMATING THE TIERS OF ALL RESEARCHER CONCERNS FROM TABLES 4B AND 6

Concern	Table 4B ALWAYS important	Table 6 ALWAYS important	Average of 4B and 6	Communi- cations related?
Tier I concerns (66%+ of researchers say this is ALWAYS important)	important	important	and 0	relateu:
Stay up-to-date on all the latest research in my field		76%	76%	×
Get funding for my research work	55%	76%	66%	^
Tier 2 concerns (33-65% of researchers say this is ALWAYS important)	3370	7 0 70	0070	
Infrastructure support from my institution (good facilities, etc.)		64%	64%	
Find, hire and keep good staff		60%	60%	
Design good research studies		60%	60%	
Make an impact in my field		60%	60%	
Find the right research papers to read	59%		59%	×
Publish in a journal	57%		57%	×
Collaborate with other researchers		56%	56%	
Read research papers for free	54%		54%	×
Get proper credit and recognition for my work	55%	48%	52%	×
Effectively communicate my findings to fellow researchers	50%		50%	×
Publish in a prestigious journal	48%		48%	×
Advance in my field	51%	44%	48%	
Make an impact on society	43%	52%	48%	
Figure out what to read—there's so much information out there	47%		47%	×
Job security	42%	52%	47%	
Publish affordably	47%		47%	×
Freely and rapidly share my research work with other researchers around the world	41%		41%	×
Effectively communicate my findings to the general public	41%		41%	×
Effectively communicate my findings to policymakers	41%		41%	×
Tier 3 concerns (0-32% of researchers say this is ALWAYS important)				
IMMEDIATELY (without waiting for embargo periods) read what other researchers have published in a subscription journal	32%		32%	×
Publish in the right journals		32%	32%	×
Publish enough—the pressure to "publish or perish"		28%	28%	×
Make my data available in a format that others can see and use	27%	28%	28%	×
See the data generated by other researchers	25%		25%	×
Protect my research from getting "scooped" before I can publish it	24%		24%	×
"Register" my discovery (publish quickly so the world will recognize I was the first to discover something)	24%		24%	×
Pay		24%	24%	
Publish quickly	20%		20%	×
Reuse the data generated by other researchers	18%		18%	×
Protect my research from misuse		16%	16%	×
Regulation		16%	16%	
Protect my research from theft		8%	8%	×
Copy and paste large chunks of text from other research papers or otherwise reuse these works (beyond what is already permitted by copyright under Fair Use and Fair	CO /		CO /	
Dealing)	6%	404	6%	X
Competition		4%	4%	
Other		4%	4%	

 $Source: OSI\ Research\ Communication\ Survey,\ question\ 5\ and\ OSI2022\ Global\ Researcher\ Congress,\ week\ 3,\ question\ 2$





CC-BY AND DEFINING OPEN

The questions we asked in these surveys also allowed us to zero in on one particular component of OA policy: licensing format. This component is important to understand better because CC-BY licensing is a key requirement of all global OA policies. Why? Because most policymakers believe "open" requires CC-BY since this is how open is defined in the 2002 BOAI statement, and because this is how influential groups in the open advocacy community also define open. OSI has long recognized, though, that in practice, open has different meanings in different communities. Therefore, we have adopted a spectrum approach to the meaning of open. On this spectrum, open can be defined in a variety of ways with attributes related to an information artifact's discoverability, accessibility, reusability, transparency, and sustainability (DARTS). From the Global Research Congress Survey, week 2 questions 8 and 9, we learn that most researchers may feel the same way. To many, the common denominators of openness are the D, A, T and S components: the information artifact is free to read, easy to find, complete, accurate and reliable. Other require-

ments stipulated by Plan S and other major global policies don't matter to the majority of researchers, such as publisher profit margins, journal type, and particularly the R (reusability) component, with only 27% seeing CC-BY licensing as a necessary condition of openness.

Our survey reveals there may also be confusion around why CC-BY is needed. From guestion 5 of week 2 of the Global Researcher Congress, we learned that researchers want open code and open data, as well as free classroom use. However, CC-BY isn't needed to allow these types of use and reuse. Data is regulated by CC-0, while work held under other types of copyright can be reused in classroom settings (it doesn't need to be CC-BY licensed to share).

In week 2, question 6, researchers described what these publishing licenses need to look

TABLE 8: WHICH OF THESE CONDITIONS ARE NECESSARY FOR RESEARCH INFORMATION TO BE CONSIDERED "OPEN"?

Condition	% saying this is OFTEN or ALWAYS important
The work is published according to best practices (e.g., such that it is properly reviewed, indexed and archived)	88%
The information must be free to read	83%
The work is transparent as necessary for all good research (e.g., with regard to methods, sources, funders, and potential conflicts of interest)	80%
Data is included	73%
The information must be available to read immediately without any delay (e.g., subscription journals often impose a 12-month embargo for non-subscribers)	73%
Publishing costs are paid by authors (or their funders or institutions), not by subscribers	44%
The publisher discloses their profit margins to the public	44%
The protocol (if there is one) is pre-registered	44%
The publisher avoids mixing free to read content with subscription content (as is currently the case with the journals published by most scholarly societies)	34%
The information can be re-used in any way without your permission (including copying and pasting everything and selling it commercially)	27%

Source: OSI2022 Global Researcher Congress, week 2, questions 8 and 9 $\,$

like from their perspectives. The common themes seem to be free classroom use, no commercial exploitation, and no misrepresentation of their research work. These non-commercial and no-derivatives conditions (NC and ND) are why the CC-BY-NC-ND license is the most popular, but CC-BY is what's required by Plan S and other global policies. CC-BY-NC-ND is an exception to OA policy, not the rule, but in this case the exception is preferred over the rule.





TABLE 9: WHAT DO YOU NEED FROM A COPYRIGHT LICENSE?

Responses

Free sharing for all non-profit settings, no sharing for commercial purposes, no derivatives. CC-BY-NC-ND is perfect for me.

Do not want to lose control over the work, particularly to have it published in part which can be significantly misleading.

Must of all free classroom use

Of course I do not want to lose control over my data but to share with others

Fair Use in the classroom (explicitly stated) would be ideal. I just don't want anyone to make \$ off of my open access article.

As soon as I publish my work I might lose control over it. People can use, misrepresent, copy, modify, etc. I would not be happy if parts of my work were misused to have a negative impact in society. Or that a modified version of my work is attributed to me. Ideally, there would be not "my" work, as collaborative research grows and we - as single persons - cannot think alone.

Copyright is only the right to publish, not the right to the ideas and research itself, so am OK with copyright in a subscription journal if it helps preserve my work (with OA version in a repository to enable access)

Other than plagiarism I am okay with all free uses.

Want: free classroom use; Not want: misrepresenting my work

Researchers always own their own copy of their final manuscript, even if the copyright is held by the journal. This allows free sharing in sites like Researchgate. I want readers to be able to find the citation to the published version, even if they read it on a preprint or extra-print site.

When I have a choice, I always choose to have the Publisher hold the copyright. My intention is always to make it easier for my publications to be widely and freely disseminated in my field of activity. But I'm always afraid of plagiarism.

From my experience in industry, an industry colleague cannot grant copyright license - it must come from legal on our behalf

I want: free sharing between researchers, and free classroom use. I would like to maintain the property of my work

I want my work to be published under a CC-BY license. I don't see any need for transferring copyright to a publisher, so I want to keep the copyright myself.

I've never thought about it, but I usually leave the publisher with the copyrights. I wouldn't mind if my work was used for academic purposes, in the classroom for example. But not for commercial purposes

I want to be able to reuse and share my research completely free.

Want free sharing between researchers, or free classroom use. NOT want to be forgotten in the references.

Want free sharing between colleagues and students

I want free sharing between researchers and free classroom use. I have no idea what "losing control over one's work" means, maybe apart from getting a share of the benefits if the work is used commercially.

I would be afraid of someone misusing my work and causing prejudice to my reputations.

I like a lot CC-BY, but I don't know how to get the copyright from many journals.

Not be given the credit for the work

I haven't really ever got to grips with this and it hasn't had any impact on my outputs/work apart from trying to tick the correct boxes on submission.

What I want: free sharing among researchers BUT with crystal clear acknowledgments credits, and references to any piece of text, plot, figure, snapshot of movie these other researchers use from third parties. This is the case for seminars as well as teaching material, even if the content is slightly modified or annotated.

I wouldn't want that someone else used my work for profit or steal my credit or involvement on it

Source: OSI2022 Global Researcher Congress, week 2, question 6

IMMEDIACY

Another specific concern we looked at is how quickly information can be accessed. Most researchers want to access new research information reasonably quickly, but we learned from the week 2 survey, question 7, that there may be some conflation occurring between how long it takes to publish articles, how long it takes new articles to be made publicly available after publishing (embargoes), and how long it takes to get reading materials through sharing channels like interlibrary loans. While there does seem to be a desire to see publishing times reduced, and to read research papers as quickly as possible





after publication (although not necessarily immediately), a number of respondents were also simply concerned about how long it took to gain access to these publications through their library or other available channels. The common denominator here is speed, but these concerns may be pointing at different bottlenecks in the process.

UPTAKE AND ADOPTION

Aside from possibly focusing on the wrong tier of communication concerns, and forcing the adoption of solutions that are unpopular with researchers (like CC-BY and APCs), what other factors might be impeding the rapid global uptake and adoption of open solutions? The OSI surveys highlighted at least five such factors: a lack of viable publishing options, academic freedom, doubts about the effectiveness of OA policies, quality concerns, and high costs.

With regard to the lack of viable options, from week 1 of the Global Research Congress, question 3, half the researchers surveyed said there were several high quality open journals in their field, and an

additional quarter said there were many or at least one such journal. In a universe of tens of thousands of scholarly journals, where researchers seek to publish in the highest quality journals, is this sufficient choice? There is also wide variation by field (which we know from previous research). Is having "several" journals to choose from adequate? In this survey, 17% reported of researchers that no journals in their field fit this description.

Simply having viable publishing options isn't enough, however. Researchers also want to be free to choose where they publish their work (from week 1, question 5). To the extent that good OA publishing options are available, this decision may become easier, but it is not guaranteed. The journal also needs to be affordable, and affordability is also a leading concern (see tables 11 and 12). Various scholars have described the academic freedom issue as being something of a red herring—that if researchers receive government funding, their work should be accessible to the public. However, this isn't the case with all government funded work, and not all research is government funded. In addition, this argument supposes that the benefits of openness outTABLE 10: ARE THERE ANY PURELY OPEN JOURNALS IN YOUR FIELD THAT ARE CONSIDERED TO BE HIGH QUALITY AND PRESTIGIOUS—ENOUGH SO THAT THESE JOURNALS WOULD BE YOUR FIRST CHOICE FOR PUBLISHING YOUR WORK?

Response	%
There are several open access journals in my field that fit this description	49%
No. None of the open access journals in my field fit this description	17%
There is at least one open access journal in my field that fits this description	15%
There are many high quality open access journals in my field that fit this description	12%
I'm not sure	5%

Source: OSI2022 Global Researcher Congress, week 1, question 3

TABLE 11: HOW IMPORTANT ARE THESE FACTORS TO YOUR RESEARCH WORK?

Factor	% of researchers saying this is OFTEN or AL- WAYS important
You have the freedom to publish your work where you want to publish	73%
The journal you publish in is high quality	71%
Your publishing costs are affordable	68%
The research information you need is free to access	68%
It is affordable for other researchers to publish	68%
The research you publish is free to access	63%
The scholarly societies to which you belong are free to publish the types of journals they think are best	59%

Source: OSI2022 Global Researcher Congress, week 1, question 5



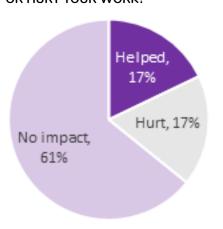


weigh the benefits of having researchers share their work in the venues they think are best. Either way, many assumptions are being made in policy proposals and decisions which may need research and evidence to justify.

Responses to question 6 from week 2 elaborated on this question of academic freedom. Some researchers expressed the opinion that it was not an infringement at all to publish where they were told to publish by their funders. Others disagreed and felt that researchers needed to disseminate their work how they saw fit. One researcher summed up their ethical concerns as follows: "Nudging researchers to publish in certain journals (e.g. OA), sometimes associated with 'threats' in case of non-conformity (e.g. uncertainty about receiving future funding), certainly reduces academic freedom. For various reasons, publishing in these journals might not be the optimal choice. For example, as long as employment depends on 'where' one has published, I cannot recommend to my students to publish in OA journals to fulfill the funding body's demands, but to choose the outlet with the best reputation. This is even more important at early career stages (after PhD or postdoc) when the true value of one's publications has not yet become apparent and citations have not accumulated, so the only quality criterion used by evaluation committees is often the reputation of the journal (the quality of the work itself is rarely evaluated, even though committees generally pretend to do so)."

This juxtaposition of wanting more OA options but not enthusiastically embracing OA policies is reflected in the perceived effectiveness of these policies to date. Only 17% report that OA policies have helped their research, while an equal number report these policies have hurt their research. Thirty-nine percent report they "have noticed these changes but they haven't affected my research," while 22% report they "haven't noticed any changes so far" (week 1, question 6). Given an opportunity to elaborate on their answers (week 1 question 7, and week 2 question 3), researchers mentioned a variety of concerns. Perhaps the most salient comments centered around cost and quality—how high APCs have made publishing unaffordable, and how too much published work was of low quality. As one researcher noted, "I think open access is a good concept but the implications simply have not fully worked through."

FIGURE 2: HAVE OA POLICIES HELPED OR HURT YOUR WORK?



Source: OSI2022 Global Researcher Congress, week 1, question 6

In week 2 of the Global Researcher Congress, question 1, participants noted a variety of other concerns they had about OA solu-

tions (there may be other concerns that were not asked about). All of these concerns have been noted by previous researcher surveys.

Other factors that may be limiting the use of OA journals were explored in question 2 from week 2 of the Global Researcher Congress. In this long-form response, researchers explained in more detail why they were leery of OA options (if in fact they were). Some of the reasons listed were the unaffordability of APC costs, and perceptions that subscription journals are still considered to be more rigorous and relevant, have higher impact factors, and be more "traditional" (familiar) and prestigious. These answers align with the answers given to other questions in the OSI surveys and in other surveys.

Without developing a better understanding of the many factors limiting OA uptake, building a new world of open information resources is like throwing darts blindfolded. Building this future depends on first gathering more information, as well as developing better and perhaps more diverse business models. More broadly, this reform effort is important because journals may be the most important source of information for many researchers (from week 1, question 1).





TABLE 12: WHAT ARE YOUR CONCERNS ABOUT OA SOLUTIONS?

Concerns	% saying OFTEN or ALWAYS a concern
Publishing in open access journals has become too expensive for me	65%
I need to publish in high impact journals in order to get recognition from my peers and tenure committees. These journals are usually "closed" (subscription-based).	53%
If I publish my data before I've thoroughly analyzed it, I might get "scooped" (someone else will make a discovery with my data)	53%
I worry about someone misrepresenting or misusing my data	47%
My institution doesn't recognize, reward or incentivize data sharing when evaluating researchers for tenure or grants, so why should I bother?	47%
I'm confused by all the different requirements—which license to apply, which repository to use, which embargo period to respect, etc.	44%
I worry about the ethics of open sharing—about making data open that shouldn't be open (due to confidentiality agreements, patient privacy, etc.)	41%
I worry about someone reusing my writing without permission	41%
It takes too much time to comply with open access requirements (data deposits, repository, formatting, etc.)	35%

Source: OSI2022 Global Researcher Congress, week 2, question 1

TABLE 13: HOW IMPORTANT ARE THESE INFORMATION SOURCES FOR YOUR RESEARCH WORK?

Response	% saying OFTEN or ALWAYS important
Specialty journals (international and selective, conduct peer review, high quality, widely read)	85%
Other researchers in my field (not at my institution)	71%
Prestige journals (highly selective and multi-disciplinary, like Nature and Science)	63%
Conferences	59%
Academic indexes like Scopus and Web of Science	59%
Google Scholar	59%
Other researchers at my institution	46%
Government reports	44%
Preprints (most often research posted quickly in order to generate feedback prior to publishing—e.g., bioRxiv)	39%
Other internet resources	39%
Books from my institution's library	32%
Other resources from my institution's library	32%
Regional journals (generally small and affordable, focusing on issues of regional importance and published in local languages)	29%
Private industry reports	15%
Predatory journals (will publish anything quickly and for a fee)	7%
Family and friends	5%
Other	0%

Source: OSI2022 Global Researcher Congress, week 1, question 1





The factors discussed thus far in this report are those limiting OA uptake. What factors may be encouraging uptake? The OSI surveys didn't ask why researchers used OA resources. In hindsight, we should have. We can see from the data that researchers want and need to share their information more effectively, but we didn't ask in these surveys whether researchers were motivated by the prospect of getting more visibility through OA, or higher citations, or by funder requirements. Other surveys have

explored these questions, however (see References section). We did discover that transforming to a more open world for research journals may be important because many researchers have experienced problems accessing information in the current journal environment (from week 1 question 4).

OPEN DATA

Questions 4 and 5 of week 3 addressed the question of open data and showed that only 40% of researchers were aware of data sharing networks in their fields. However, while data sharing was

TABLE 14: ESTIMATING CURRENT INFORMATION ACCESS ISSUES

In my PERSONAL experience in research, I have been	
unable to:	% of replies
download a journal article I need because it cost too much	68%
publish as quickly as I would have liked (the review and publishing process took too long)	68%
find the dataset for a published study	49%
publish in my first choice of journal because of high APC costs	46%
download a journal article I need because it was embargoed (the article was only available to subscribers for the first 6-12 months)	39%
get an article from an author, even though I requested it by email	29%

Source: OSI2022 Global Researcher Congress, week 1, question 4

done by 8 of 10 researchers who said sharing networks were available, these same researchers (in question 6) defined sharing networks as ResearchGate and Figshare, or other common repositories.

The state of data sharing in research has been closely explored in other studies (see, for example, Davies 2019); it's frequency is not that common and the field (especially curation) is not widely developed outside pockets of real intensity, like cancer research. OA policies often encourage or require open data deposits, but in reality, freely accessible research data without adequate scaffolding—curation, standardization, usage notes, and so on—is mostly useless for researchers.⁴

Finally, if researchers could design a new research communication system from scratch, what would it look like? This was asked in week 2, question 8, and the ideas were mostly general in nature, with broadly stated goals like free and immediate access, and lower costs.

This same question was also asked in two different ways in week 4. In question 2, researchers were asked whether the following solutions were horrible, not so great, okay, or great. Antipathy toward APCs is clear here, with only 28% seeing this idea as the way forward. Topping the list of ideas—which tracks with the sentiments measured earlier—is to adopt solutions that make sure the world doesn't further divide into those with means and those without. Improving infrastructure and reforming licensing to prevent commercial reuse were also popular. Some of the ideas championed by some in OSI also ranked highly, like creating a global repository, and increasing efforts to do something with open instead of just pursuing open as a goal unto itself.

^{4.} The new US government OA policies (the OSTP's Nelson Memo) seek to address this concern.





TABLE 15: WHAT WOULD A NEW RESEARCH COMMUNICATION SYSTEM LOOK LIKE IF DESIGNED FROM SCRATCH?

Reform idea	% supporting
Make sure the research world doesn't divide into those with means, and those without means.	80%
Focus on improving research infrastructure globally (high speed computing facilities, new global journal index, improved journal monitoring and support, etc.)	80%
Create and promote clearer licensing options for research that will allow free sharing within education but restrict commercial reuse	72%
Eliminate embargo periods for all research work (both in STM and HSS)*	68%
Create one global repository—an All-Scholarship Repository—instead of hundreds of disconnected information silos	64%
Replace the Journal Impact Factor with something else	64%
Increase efforts to do something with open instead of just making more information open	60%
Increase the use of preprints as a tool for getting research information out freely and quickly	60%
Adopt more policies designed by funders that REQUIRE open access publishing (as per their terms definitions)	60%
Create open strategies that are goal-specific (e.g., cancer, climate change) instead of "generic"	56%
Implement a single, global policy for what "open science" means for everyone everywhere	40%
Encourage more large research universities to negotiate separate agreements with publishers	40%
Increase reliance on impact evaluations	40%
Increase consolidation in research publishing and data management (shift reliance from society and university publishers to major commercial publishers)	32%
Flip more journals from subscription-based to APC-funded	32%
Replace grant funding with funding by lottery	28%

Source: OSI2022 Global Researcher Congress, week 4, question 2

Week 4 question 1 asked this same question but in an even more general way, looking for whether researchers agreed or disagreed with how OSI participants have defined the broad philosophical contours of the scholarly communication reform space. Virtually all of the researchers surveyed agree with OSI that there are no one-size-fits-all solutions in scholarly communication; 96% agree that successful solutions will require broad collaboration with all stakeholder groups, 92% agree that researchers are a key stakeholder in this conversation (something that simply has not been recognized yet in any meaningful way for any of the global OA policies currently being enacted), 88% agree that publishing is a critical part of the research process, 88% agree that science and society will benefit from open done right, and 88% agree that open exists along a spectrum of outcomes. All of OSI's recommendations were ratified by this group, but most notably the broad and overarching idea that open is a complex construct that needs to be addressed in a more thoughtful, inclusive, complete, respectful and flexible way by global policymakers than at present.

FIGURE 3: ARE THERE ONE-SIZE-FITS-ALL SOLUTIONS IN SCHOLARLY COMMUNICATION?



Source: OSI2022 Global Researcher Congress, week 4, question ${\bf 1}$





^{*}As noted elsewhere in this report, concerns other than embargoes may also be reflected here, including publishing delays and library access delays. Future surveys will try to understand this concern more precisely.

TABLE 16: RESEARCHER AGREEMENT WITH OSI POSITIONS

OSI position	% of researchers who sort of or strongly agree
There are no one-size fits-all solutions in scholarly communication.	100%
Successful open solutions will require broad collaboration. It is important to hear from and work with all stakeholder groups in our efforts to reform the scholarly communication system.	96%
Researchers are a key stakeholder in this conversation. Reforms need to be made in collaboration with researchers so we don't end up damaging research in the process and/or making access issues worse.	92%
Publishing is a critical part of the research process.	88%
Science and society will benefit from open done right.	88%
"Open" exists along a spectrum of outcomes. There are many different kinds of "open."	88%
The incentives for making more information open are not aligned—i.e., the rewards and benefits aren't currently commensurate with the effort.	80%
Connected issues need to be addressed. There are many parts of the scholarly communication system that need improving, not just making things more "open."	76%
There is much common ground in the research communication reform space, and we should build on this common ground	76%
The culture of communication in academia needs to be reformed. There is too much attention paid to things like impact factors and publishing record.	72%
Making information more open is just a means to an end. It is not the end goal itself.	72%
It might be worth thinking in terms of "open solutions" that are integrated instead of open access plus open data, open code, etc.	68%
We need to learn more about the issues here before making global changes.	64%

Source: OSI2022 Global Researcher Congress, week 4, question 1

DISCUSSION

The original goal of this work was to hear from thousands of researchers around the world, and to better calibrate OSI's OA-related policy recommendations based on this feedback. Participation in our surveys fell far short of our goals, however. Therefore, these findings, while interesting and illustrative, aren't robust enough to draw any statistically significant conclusions about how researchers feel. More research is needed. This said:

- 1. The major global OA policies being implemented at present, such as Plan S, were created with no meaningful input at all from researchers. Therefore, even limited data like this may provide helpful feedback for policymakers. And,
- 2. The findings from these surveys align with findings from larger surveys. Taken together, these data support the observation that current OA policies may not accurately reflect and incorporate researcher needs and perspectives.

Aside from the survey power issue, the two other main methodological problems with these surveys are:

Self-selection bias. Only researchers who have strong opinions about OA policies may have
participated in these surveys. In reality, because recruiting researchers for this survey was so
difficult, it may be the case that most researchers don't have strong opinions about these policies. And.





2. Diversity. Researchers are not a monolithic group. We know from previous surveys that researcher needs and perspective vary widely by field, region, institution, and career stage. Therefore, just as one-size-fits-all solutions don't work for OA policy, it is also the case that one-sizefits-all opinion surveys aren't sufficiently granular to inform meaningful communication reform solutions. Researchers in physics and astronomy, for example, have long used the arXiv repository to share preprints of their work, over a decade before OA became common. All this talk about OA is largely old hat in these fields. At the same time, many EU scholars embrace Plan S and have adequate budgets to comply with Plan S requirements, whereas in much of Africa, current APC costs are utterly unaffordable. Similarly, most of our journal reforms are STM-oriented but in many fields in the humanities and social sciences, solutions like CC-BY licensing with no embargo are simply non-starters (since these fields use long form manuscripts that take years to write and publish in book form). Therefore, on balance, there may be huge enthusiasm for current OA policies in some fields and regions, and huge opposition to these policies in other fields and regions, as well as indifference in others. A larger and more diverse survey audience would garner more insight, but at the same time we can simply recognize that given this diversity of needs and perspectives, solutions for specific research communities need to be tailored to their circumstances, and our global policies need to be broad and flexible to accommodate a wide range of research needs and practices.

Given all these concerns and caveats, is it still possible to learn anything from these surveys? Possibly. When we look at a larger constellation of researcher surveys (see Box 1 for a summary of key findings from some of these surveys; see the Annex for a list of these and other researcher surveys), including small surveys like OSI's, we can see a consistent portrait of researcher perspectives and concerns across many fields, institutions and countries—namely, a strong dislike of APCs, and a sense that however flawed, the publishing system we have provides a framework for quality and recognition. Researchers aren't entirely happy with the current publishing system, and would like to improve it, but at the same time they aren't entirely happy with the policies and solutions for reforming this system.

Furthermore, researchers are ready to embrace solutions that address their key needs. Most urgently, these needs are to lower the costs of journals for authors and institutions, and at the same time improve research infrastructure, narrow the global access equity gap, make more journal articles (plus accompanying data) free to read and quickly accessible, find the right research papers to read and stay up-to-date on the latest research, ensure free classroom use while limiting misuse and commercial reuse, ensure the continuation of a high quality publishing environment, retain the freedom to decide where to publish, avoid single all-encompassing solutions, ensure proper credit and recognition (especially as it relates to advancement), make more of an impact on society, improve collaboration and communication with colleagues in the same field, and reduce administrative workload and improve funding sustainability.

Overall, this group recognizes that developing successful OA policies will require broad collaboration with researchers as a key participant in this conversation. They also believe science and society will benefit from new policies that are flexible, evidence-based, and involve researcher input. However, these policies cannot be single approaches anchored in a limited acknowledgment of the broad spectrum of global research communication requirements and perspectives, or in the idea that "open" is a single prescribed construct since there are in fact many different kinds of open.

This is a powerful profile that affirms the information OSI has gathered over the last six years.

OSI's next policy paper (number 6) goes into more detail about the possible implications of this survey data with regard to designing new and more effective OA policies. There are many possible implications, but three overarching themes stand out in particular:





BOX 1: SUMMARY OF KEY FINDINGS FROM OTHER RESEARCHER SURVEYS

Researcher attitudes about communication practices have been measured through a number of quality surveys in recent years. An overview of these surveys reveals a pattern consistent with findings from the OSI surveys:

- Most researchers believe there is value in anyone being able to access their research (Taylor & Francis 2019, Wiley 2019a).
- Most who publish in open format are motivated by the desire to increase the impact of their work. Only about a third are motivated by the desire to increase transparency and reuse (Wiley 2019a). In open data, the reuse motivation is higher—maybe around a half (Wiley 2019b).
- Most researchers know relatively little about the details of ongoing research communication reform efforts and policies (Taylor & Francis 2019).
- Only a fraction (maybe as low as 1 in 5) believe funders have a right to control where to publish. For 84% of researchers, the single most important factor in research communication is allowing scholars the freedom to publish where they choose (Taylor & Francis 2019)
- There are a host of concerns about data sharing and reuse. The most commonly cited problems are a lack of suitable infrastructure for data sharing, and a lack of incentives. There are also concerns about misuse and scooping, concerns about copyright and licensing, and the time and effort needed to make research data openly available (Perrier 2020, Davies 2019, Stuart 2018). Other concerns also include fairness (where better resourced researchers with superior computing facilities mine open data), science deniers (where "requests for information are motivated by the desire to discredit their work and professional reputations"), a lack of oversight regarding compliance, and difficulty adapting FAIR requirements to datasets that are also constrained by sensitivity and privacy considerations (Hrynaszkiewicz 2021).
- Designing new data sharing philosophies and systems that allow data and research to make more of an impact
 is preferable to doubling down on our current approach that simply enables more sharing and reuse. Our current
 systems which are filled with bad and incomplete data and fraught with peril—relying on bad datasets, getting
 scooped, an imbalance between risk and reward, etc. (Hrynaszkiewicz 2021, NASEM 2020, Faniel 2020).
- The top priorities for researchers when picking a journal are roughly as follows (with response percentages starting at around 90% and dropping to 65%): the journal has a good reputation in field, it is well read, it focuses on the researcher's specific area of research, it has high impact factor, it is free to publish in, it belongs to a scholarly society in the researcher's field, and it has short turnaround times. Whether the journal is fully open access ranks dead last at 30 percent (Taylor & Francis 2019).
- CC-BY has historically been the least preferred type of license. About a third of researchers dislike this type of license the most, while only 10% like it the most. Conversely, CC-BY-NC-ND has been the most preferred type (Taylor & Francis 2019).
- Opinions about APC vary by wealth, region, career stage and field of study (Segado-Boj 2022). Time period is also
 a factor since the negative affects of APCs are only now coming to light. In 2019, most researchers (particularly
 in the Global South) reported not having the funds to publish in open access (Wiley 2019a, Scaria 2018). Also in
 2019, most researchers reported that if everything was published in APC format it would have a large negative
 effect on their ability to publish, with AAAS survey respondents reporting the need to make tradeoffs between
 research and publishing (Taylor & Francis 2019, AAAS 2022).
- Overall, the top problems in academic publishing may rank something like this for many researchers: Pressure to
 publish in high-impact journals, publication delays, paywalls, lack of accurate measures of journal/paper quality,
 insufficient publishing-related resource, inadequate benefit of peer review in improving quality, irreproducibility,
 tedious journal processes (Editage 2018)
- 1. GIVE RESEARCHERS THE SOLUTIONS THEY WANT AND NEED. Researchers are looking for ways to lower costs, improve collaboration, improve impact, ensure quality, and generally make their research lives better. These needs are not the focus of our current global OA policies, though. At best, these policies focus primarily on much lower priority concerns like embargoes, reusability, and license types. At worst, these policies have been sold as a magic elixir that will cure all that ails research, but they can't and won't. Some researchers will benefit from these





BOX 2: SUMMARY OF KEY FINDINGS FROM OSI RESEARCHER SURVEYS

OSI's 2022 researcher surveys returned findings that are consistent with the other major surveys of researchers conducted over the last several years. The main conclusions from OSI's surveys are as follows:

- The overwhelming majority of researchers think there are better ways of doing research communication, and would like to hear about and explore new ideas and policies. Indeed, most say there is an urgent need for many reforms in scholarly communication, led by lowering costs. However, only a few think these reforms should involve reinventing the wheel or creating one-size-fits-all policies for all researchers everywhere. In addition, most researchers want to retain the freedom to publish wherever they see fit.
- Communication plays a significant role in research, particularly journals. However, the communication priorities of
 researchers are general in nature when it comes to OA (like being able to access research for free and being able
 to communicate effectively with colleagues). More granular communication concepts like reusability are a much
 lower priority.
- The overwhelming majority of researchers recommend creating a system that makes sure the research world
 doesn't divide into those with means and those without. Top reform ideas include improving repositories, simplifying licensing, and building new infrastructure capabilities.
- Relatively few researchers say that current OA policies have helped their research. Others haven't noticed any
 changes so far, or have noticed changes but to these haven't mattered, or these changes have hurt their work.
- · Most researchers are familiar with key OA concepts but are not aware of OA agencies and their policies
- Most researchers define open as being free to read material that is high quality and transparent and has data included. Most do not believe that copyright license or the format of journals (hybrid, gold, etc.) are important components of open.
- When it comes to licensing, most researchers are interested in free classroom use and are wary about poor quality reuse and commercialization
- Most researchers dislike APCs, and say that publishing has become too expensive for them
- Adoption and uptake issues include a mismatch between needs and solutions, and a lack of viable options, quality concerns, academic freedom, doubts about the effectiveness of OA policies, and high costs
- There is near unanimous support amongst researchers for OSI's conclusions: There are no one-size-fits-all solutions in OA, OA exists on a spectrum of outcomes, researchers are a key stakeholder in scholcomm, real solutions will require broad consultation and cooperation, and more.

policies, others will not; some issues will be addressed, the highest priority issues will not; some regions of the world will be able to adopt these solutions, most will not. As we consider designing new research communication policies, we should keep researcher needs and priorities squarely in mind. Rather than merely creating policies that satisfy the definition of BOAI, researchers and the research world would be better served if we focus on the communication solutions researchers actually want and need.⁵

5. Consider the CC-BY license, for example. All major global OA policies specify a CC-BY license for publishing because this is what aligns best with the BOAI definition of OA on which these policies are based. There are three problems with this approach. The first is that there are many different needs, motives, and methods for creating open information. As a result, there are many different outcomes for open, all of which have merit. The second problem is popularity. We know from previous researcher surveys that CC-BY is one of the least popular copyright licenses made available to researchers, as mentioned earlier (this said, Pollock 2022 shows that CC-BY accounts for about 55% of all open licenses as counted in Crossref). CC-BY-NC-ND is the most popular, allowing unlimited reuse with attribution but also preventing commercial and derivative use. We know from these surveys that researchers are concerned about commercial and derivative use, so the fact they prefer a CC-BY-NC-ND license is not surprising. The third problem is utility. Is CC-BY even the right tool for the job? Researchers want to be able to cite and excerpt work and use papers for classroom instruction. CC-BY grants these rights, but so do existing Fair Use and Fair Dealing copyright laws (in the US and UK respectively). CC-BY also provides an easy path to free access, but it isn't the only path (as noted, more restrictive variations of CC-BY also work, as does regular copyright). The unique benefit of CC-BY envisioned by BOAI is a world where researchers can reuse and remix journal articles at will, but do they even need or want this capability? We learned from our surveys that very few researchers are looking for the ability to copy and paste





Before we can take this more considered approach to OA policy reform, it will first be necessary to better understand exactly what these needs are—and these needs will differ greatly by region, discipline and field. In time, research will greatly benefit from solutions that are centered on meeting these specific objectives and that truly involve researchers in creating the best solutions. This strategy will also help improve the discourse around research communication reform from one where we merely prescribe blanket solutions to challenging issues to one where we search for best practices and fact-based solutions that researchers actually want and need.

2. DO SOMETHING ABOUT APCS. The cost of publishing figures prominently in researcher concerns. It may even be accurate to say that cost is the number one concern of researchers. APCs have been touted for years as the best possible solution for publishing, even though many groups (including OSI) have warned that the widespread use of APCs will widen the gap between the haves and have nots in research, and substitute one equity imbalance with another—the inability to pay for access (paywalls) with the inability to publish (playwalls). Indeed, as costs have shifted (in different ways for authors in different fields and institutions, with some authors relying on support from grants, foundations, or libraries to pay for APCs, others less so, and still others not at all), the cost burden for many authors in an APC-based world is now much heavier than it was in the subscription world it is trying to supplant.⁶

All this said, it's entirely possible the disruption we're witnessing today will be completely resolved over the next five to ten years as adjustments take hold: APC waivers for some regions, such as those recently announced by Springer-Nature (Makoni 2023), the increased willingness of funders and governments to cover APC costs as part of grant funding, and the eventual emergence of APC price caps and/or competition. For now, however, the subscription-to-APC transition in scholarly publishing is not being greeted by many (maybe even most) researchers with open arms.

3. RESPECT THE FACT THAT RESEARCH IS A PROFESSION. Many individuals choose occupations where making an impact is more important than earning a large salary. Research is one such profession. Nevertheless, these occupations are susceptible to the same challenges as all others, including recognition, retention, and promotion. In our 2022 surveys, as well as surveys undertaken by other organizations (see References section), researchers place a limited amount of value on open research. They want to be able to connect effectively with their peers, read the work of others that has been published, publish economically, and have an influence. We can score a victory for open access inasmuch as these research communication goals align with open policies, but the vast majority of researchers (globally and across disciplines) are not mainly motivated primarily by the desire to make their work accessible. This is what we should anticipate.

large chunks of text (others may be interested in this ability but not researchers). Indeed, most simply seem interested in the free to read nature of open (apart from open data and code, which are governed by CC-0 and not CC-BY). Added to this, the prospect of having work misused is an outcome no one wants but is very real using CC-BY. Given all this, what compelling reason exists for sticking with CC-BY as the default license type for OA? Coming at this question from a different angle, what features do researchers actually want and need in a copyright license for their work? Such a license should, at minimum (based on what we learned in our surveys) include rights like free classroom use, and the right to immediately share finished products within a peer community. It might also include a prohibition on commercial and derivative reuse without permission from the author. Maybe this new kind of license (let's call it CC-EDU) should be the new standard? Taking this approach would show respect for researcher concerns and might also open the floodgates to a much broader, faster, and productive transition to open content.

6. To the extent this burden even existed before, since subscription costs were covered by libraries and publishing costs were mainly limited to page and color surcharges. Comparing overall system costs is more difficult. A proxy for this determination might be the profit margin of major publishers, and these margins have not decreased during the shift to APCs, so the system costs have probably not come down overall. Indeed, DeltaThink estimates that the OA market is currently much more financially robust than the subscription market (Pollock 2021).





However, this incentive dichotomy researchers perceive is rarely respected in the world of policymaking. In this environment, researchers are told the quest for knowledge belongs to all humanity and that they should be entirely motivated by participating in this pursuit, disregarding incentives which better align with their career demands and objectives. The essential premise of our present OA policy environment is that open outcomes are the highest priority, more important than quality, reputation, and cost. In the meantime, the majority of academics face the career-driven reality that quality, prestige, and cost are more important than open. The challenge of our future OA policymaking efforts is that we must achieve both goals, collaborating with researchers to develop solutions that align with their career incentives while also meeting the requirements of a more open research environment.

CONCLUSION

OSI has long maintained that researchers are key stakeholders in the OA policymaking process, or at least that they should be. Over the years, our group has closely tracked survey research in this subject to gain a deeper understanding of researcher viewpoints on open access. Numerous researchers who have participated in OSI's conferences and online discussions have also provided us with guidance, information, and perspectives. We are grateful for this assistance as well as for the participation of researchers in our OSI2022 surveys. Even though participation in these surveys was lower than anticipated, it is still beneficial for our policy recommendation process, as outlined in OSI Policy Perspective 6 (see Hampson 2023), that the responses from these surveys confirm what we have learned from other surveys and our own internal deliberations.

We cannot say for certain, of course, what all researchers everywhere think about OA policies, but we can say for certain that policymakers must do a better job of engaging with and listening to the global research community. A policymaking strategy that does a better job of listening to researchers and addressing their top priority demands is necessary because there is a great deal of unmet need and misaligned incentives, as well as a great deal of benefit to be gained.

We must also be open to the possibility that our existing global OA policies are misguided, centered around relatively minor issues instead of the demands that are most important to researchers. This does not suggest that all researchers oppose OA policies such as APCs and CC-BY licensing. Rather, just as there are no universal definitions of OA, there are also no universal solutions. Along these same lines, policymakers must also be more aware that some of our universal OA solutions like APCs, designed to work well for some groups of researchers, are having harmful impacts on other groups of researchers.

Finally, our global research communication reform efforts need to respect the fact that research has always been both immensely diversified and globally interconnected. Communication, sharing, and building on the work of others are now and always have been fundamental to the advancement and growth of research. Open access and open science aren't inventing this dynamic, just trying to improve it.

More survey work is required to better understand the needs of researchers, and based on this improved understanding, initial drafts of more responsive, flexible, evidence-based OA policies should be developed. This challenge is elaborated on in OSI Policy Perspective 6: Considering evidence-based open access policy (Hampson 2023).





FUNDING & CONFLICTS OF INTEREST

This work was supported in 2022 by the Science Communication Institute (SCI), a 501c3 nonprofit public charity which also manages OSI. SCI received no funding support in 2022; OSI received US\$1,000 in 2022 from the American Geophysical Union. To-date, between 2015 and end-2022, OSI has received about \$US350,000 in funding support from the Sloan Foundation, UNESCO major publishers, and many other organizations, with roughly 25% of funding coming from foundations, 25% from UNESCO, 25% from the publishing industry, and 25% from OSI participants (by way of conference fees). See the OSI website for full details at osiglobal.org. OSI's work is solution agnostic. We function as an observatory of the open solutions world and are committed to developing a better understanding of this space with an eye toward developing policy solutions that will work for all researchers everywhere.

REFERENCES

RESEARCHER SURVEYS CITED IN BOX 1

AAAS. 2022. Exploring the Hidden Impacts of Open Access Financing Mechanisms: AAAS Survey on Scholarly Publication Experiences & Perspectives. American Association for the Advancement of Science. https://www.aaas.org/sites/default/files/2022-10/OpenAccessSurveyReport_Oct2022_FINAL.pdf

Davies, T, SB Walker, M Rubinstein, and F Perini (eds). 2019. The State of Open Data: Histories and Horizons. African Minds, IDRC. ISBN 9781928331957. Book pdf from https://www.idrc.ca/en/book/state-open-data-histories-and-horizons. HTML version at https://www.stateofopendata.od4d.net

Editage. 2018. Author Perspectives on Academic Publishing: Global Survey Report 2018

Faniel, I. 2020. What researchers need when deciding to reuse data: Experiences from three disciplines. NIH Workshop, Session 3: Enabling Data Reuse. https://bit.ly/3mendwQ

Graf, Chris. 2019 (Nov 4). "Open Research and Data Sharing: Are We Hearing What Researchers Are Telling Us?" Wiley website. https://www.wiley.com/en-us/network/publishing/research-publishing/open-access/open-research-and-data-sharing-are-we-hearing-what-researchers-are-telling-us

Hrynaszkiewicz, I, J Harney and L Cadwallader. 2021. A Survey of Researchers' Needs and Priorities for Data Sharing. Data Science Journal, 20(1), 31. DOI: http://doi.org/10.5334/dsj-2021-031

National Academies of Sciences, Engineering, and Medicine (NASEM). 2020. Reflections on Sharing Clinical Trial Data: Challenges and a Way Forward. Workshop proceedings. Washington, DC: The National Academies Press

Perrier L, E Blondal, H MacDonald, 2020. The views, perspectives, and experiences of academic researchers with data sharing and reuse: A meta-synthesis. PLOS ONE 15(2): e0229182. doi: 10.1371/journal.pone.0229182

Scaria, AG, and R Shreyashi. 2018. Open Science India Report. OSF Preprints. doi:10.31219/osf.io/aj9gw

Segado-Boj, F, JJ Prieto-Gutierrez, and J Martin-Quevedo. 2022. Attitudes, willingness, and resources to cover article publishing charges: The influence of age, position, income level country, discipline and open access habits. Association of Learned and Professional Society Publishers. doi: 10.1002/leap.1455





Stuart, D, G Baynes, I Hrynaszkiewicz, K Allin, D Penny, M Lucraft, et al. 2018. Whitepaper: Practical challenges for researchers in data sharing. figshare. Journal contribution. https://doi.org/10.6084/m9.figshare.5975011.v1

Taylor & Francis. 2019. Taylor & Francis Researcher Survey. https://bit.ly/3koHgrX

Wiley. 2019a. Wiley Open Research Survey. https://www.wiley.com/en-us/network/publishing/research-publishing/open-access/researchers-on-open-access

Wiley. 2019b. Wiley Open Data Survey. https://www.wiley.com/network/researchers/licensing-and-open-access/what-do-researchers-think-about-op

OTHER RESEARCHER SURVEYS

Digital Science. 2019. The State of Open Data. doi: 10.6084/m9.figshare.9980783

Funk, C, and M Hefferon. 2018. "As the need for highly trained scientists grows, a look at why people choose these careers" (blog post). Pew Research Center. https://www.pewresearch.org/fact-tank/2016/10/24/as-the-need-for-highly-trained-scientists-grows-a-look-at-why-people-choose-these-careers

Graf, C, D Flanagan, L Wylie, et al. 2019. The open data challenge: An analysis of 124,000 data availability statements, and an ironic lesson about data management plans. Authorea. October 31, 2019. doi: 10.22541/au.157253515.58528497

Nature editorial. 2021. "Industry scores higher than academia for job satisfaction" (news item). Nature. doi: 10.1038/d41586-021-03567-3

Taylor & Francis Open Access Survey. June 2014. Oxford

Tenopir, C, E Dalton, L Christian, M Jones, M McCabe, M Smith, and A Fish. 2017. Scenarios among Authors of Academic Scholarship College & Research Libraries, 78(6), 824. doi: 10.5860/crl.78.6.82

WAME Survey for OSI2017 conference—selected results. 2017. World Association of Medical Editors. As used in Barret, K, P Baskin, S Murray, A Packer and M Winker. 2017. OSI Journal Editors Stakeholder Report. OSI2017 conference. doi: 10.13021/G8osi.1.2017.1908

OTHER REFERENCES

BOAI. 2002. Budapest Open Access Initiative. https://www.budapestopenaccessinitiative.org

Clarivate. 2021. Highly Cited Researchers 2021. https://bit.ly/39XI99U

Hampson, G, and J Steinhauer. 2023 (April). OSI Policy Perspective 6: Considering evidence-based open access policies. Open Scholarship Initiative. doi: 10.13021/osi2023.3553

Makoni, M and W Sawahel. 2023 (Jan). Open access publishing deal for low-, middle-income countries. University World News. https://www.universityworldnews.com/post.php?story=20230118190925833

Pollock, D and A Michael. 2021 (Oct). Open Access Market Sizing Update 2021. DeltaThink. https://deltathink.com/news-views-open-access-market-sizing-update-2021

Pollock, D and A Michael. 2022 (Jan). Breaking Out Open Access License Types. DeltaThink. https://deltathink.com/news-views-breaking-out-open-access-license-types-2





ANNEX: RAW SURVEY DATA

Global Researcher Communication Survey Administered February 25-July 26, 2022 N=110

DEMOGRAPHIC + OTHER DATA

Please describe how much or little you would like to be involved in a new researcher-led (and OSI-managed) effort to create a new and improved global policy framework for research communication. A reasonable contribution (e.g., reading emails and answering survey questions) will take about one hour per week of your time for 3-4 months. You can also choose to get more involved if you're interested. (Check all that apply)

Response	Count
I am willing to help this group assess the research communication needs, challenges and barriers in my field and/or institution	55
I am willing to consider using new research communication solutions once they are officially deployed (with all the requisite caveats—e.g., provided they are comparably priced, easy to use, and more effective, than current solutions)	45
I am willing to help debate the most effective, beneficial and sustainable research communication reforms for my field and/or institution	39
I am willing to help identify and compare existing best practice models for research communication in my field	39
I am willing to help pilot/populate/beta test new research communication solutions	38
Thank you for asking but I'm not interested in helping with this effort or simply won't have time	22

Job title	Count
Professor, Assistant/Associate Professor	62
Researcher	56
Principal investigator	26
Other: Journal editor, editorial assistant, fellow, consultant, retired, director of research, senior scientist, analyst, postdoc researcher, librarian, grant writer	13
Research administrator	10
Project/program manager	8
Research support	6
What kind of recearch institution do you work for? (Check all that apply)	
What kind of research institution do you work for? (Check all that apply)	Count
Institution type	Count
Institution type University	90
Institution type University Non-university research institution	90
Institution type University Non-university research institution Government	90 12 12
Institution type University Non-university research institution Government Other: Scientific society, nonprofit	90 12 12 3
Institution type University Non-university research institution Government	90 12 12





Response	Count
Established researcher	42
Mid career researcher	27
Early career researcher	23
Leading researcher	16
What general field do you work in? (Check all that apply)	
Field	Count
Social sciences (including psychology)	39
Medicine & health (including clinical trials)	25
Arts & humanities	22
Life sciences (biology, genetics, biochemistry, etc.)	21
Computer science	11
Engineering & applied research	9
Other: Education, urban planning, library & information science, environmental & forest science, interdisciplinary, public policy	7
Professional fields (law, accounting, policy development, etc.)	6
Physical sciences (physics, astronomy, chemistry, earth sciences)	6
Mathematics & quantitative research	
In what country do you conduct your research work?	2
	Count
In what country do you conduct your research work?	
In what country do you conduct your research work? Country Brazil	Count
In what country do you conduct your research work?	Count 58
In what country do you conduct your research work? Country Brazil US India	Count 58 14
In what country do you conduct your research work? Country Brazil US India Colombia	Count 58 14 6
In what country do you conduct your research work? Country Brazil US	Count 58 14 6 4
In what country do you conduct your research work? Country Brazil US India Colombia Portugal	Count 58 14 6 4 3
In what country do you conduct your research work? Country Brazil US India Colombia Portugal Spain	Count 58 14 6 4 3 3
In what country do you conduct your research work? Country Brazil US India Colombia Portugal Spain Nigeria Germany	Count 58 14 6 4 3 3 3
In what country do you conduct your research work? Country Brazil US India Colombia Portugal Spain Nigeria Germany UK	Count 58 14 6 4 3 3 3 2
In what country do you conduct your research work? Country Brazil US India Colombia Portugal Spain Nigeria	Count 58 14 6 4 3 3 3 2 2
n what country do you conduct your research work? Country Brazil US India Colombia Portugal Spain Nigeria Germany UK Chile	Count 58 14 6 4 3 3 3 2 2 2
n what country do you conduct your research work? Country Brazil US India Colombia Portugal Spain Nigeria Germany UK Chile Mexico Solivia	Count 58 14 6 4 3 3 3 2 2 2 2
n what country do you conduct your research work? Country Brazil US India Colombia Portugal Spain Nigeria Germany UK Chile Mexico Bolivia Australia	Count 58 14 6 4 3 3 2 2 2 2 1
n what country do you conduct your research work? Country Brazil US India Colombia Portugal Spain Sigeria Sermany UK Chile Mexico Solivia Australia Panama	Count 58 14 6 4 3 3 3 2 2 2 2 1 1
n what country do you conduct your research work? Country Brazil JS India Colombia Portugal Spain Nigeria Germany JK Chile Mexico Bolivia Australia Panama Morocco	Count 58 14 6 4 3 3 3 2 2 2 2 1 1 1
n what country do you conduct your research work? Country Grazil JS India Colombia Colombia Colombia Colombia Cortugal Spain Nigeria Germany JK Chile Mexico Bolivia Australia Panama Morocco Embabwe	Count 58 14 6 4 3 3 2 2 2 2 1 1 1 1
n what country do you conduct your research work? Country Brazil US India Colombia Portugal Spain Nigeria Germany UK Chile Mexico	Count 58 14 6 4 3 3 3 2 2 2 2 1 1 1 1 1 1
Country Brazil US In what country do you conduct your research work? Country Brazil US India Colombia Portugal Spain Nigeria Germany UK Chile Mexico Bolivia Australia Panama Morocco Zimbabwe Furkey	Count 58 14 6 4 3 3 3 2 2 2 2 1 1 1 1 1 1
n what country do you conduct your research work? Country Brazil US India Colombia Portugal Spain Nigeria Germany UK Chile Mexico Bolivia Australia Panama Morocco Zimbabwe Furkey Switzerland	Count 58 14 6 4 3 3 3 2 2 2 2 1 1 1 1 1 1 1 1





RESEARCH COMMUNICATIONS QUESTIONS

1. Which of the following statements about research communication best match your interest and experience? (Check all that apply)

Statement	Best match
think there are better ways of doing research communication, and I'd like to hear about and explore new ideas and policies	82
I think there are better ways of doing research communication, but I'm not particularly thrilled with some of the reforms that have been happening	22
I am comfortable with the way things are in research communication—at least in my field at my institution	14
I think there are better ways of doing research communication, but I'm fine with whatever reforms governments, funders and/or universities make	8
I don't know enough about this issue to have an informed opinion	2
l don't particularly care about this issue	1
l don't particularly care about this issue	1

2. Research communication reform advocates use a wide variety of terms. How many of these terms are you familiar with?

Term	Never heard of it	Kind of familiar	Familiar	Very familiar	Expert
APC (article publishing charge)	12	14	21	42	20
arXiv	44	10	13	23	15
CC-BY	31	12	20	29	15
Embargo	30	13	19	28	15
FAIR	39	22	13	21	10
Fair Use or Fair Dealing	37	30	17	18	6
Green open	39	18	17	18	13
Journal Impact Factor	1	5	15	43	45
Open access	2	5	14	52	34
Open data	2	11	26	52	15
Open science	5	14	33	37	17
Paywall	28	14	16	27	22
Predatory or deceptive publishing	8	9	20	45	26
Preprint	2	4	16	47	37
Publish or perish	5	5	19	44	35
PubMedCentral	18	19	22	28	19
SciELO	11	11	11	40	34
SciHub	7	19	32	30	19
Transformative agreements	57	19	19	7	6





3. Several reform efforts are underway in research communication that are trying to create wide-spread change (e.g., Plan S, the UNESCO Open Science plan, the ORFG effort, etc.). How familiar are you with these?

Reform effort	Never heard of it	Kind of familiar	Familiar	Very familiar	Expert
Plan S	65	16	13	9	5
UNESCO Open Science plan	36	37	23	8	4
Some other global effort to reform research communication practices	35	35	30	5	3
The Open Scholarship Initiative (OSI)	33	39	22	12	3
Open Research Funders Group (ORFG) effort	0	29	14	3	2

4. What priorities do you think researchers should focus on when designing a new policies for research communication that work for everyone everywhere? (Skipping questions will be interpreted as "no opinion")

Priority	Don't do this	Low priority	Medium priority	High priority	Must do this
Lower the costs to authors of publishing	1	0	14	22	70
Narrow the equity gap between researchers in the Global North and Global South	0	4	12	34	56
Lower the costs to institutions of publishing	2	4	10	35	55
Improve the impact of research on developing better public policy	1	6	11	44	45
Reform the culture of communication in academia	1	11	14	35	43
Improve the visibility of non-English work	3	18	11	32	42
Improve connections between research and the general public (for example, by making sure that all research publications include abstracts written in plain language)	3	5	18	42	39
Improve safeguards (like gatekeeping) to ensure that published work isn't fake or plagiarized (to ensure that bad work doesn't pollute the knowledge stream)	3	5	29	30	39
Improve peer review systems	1	5	19	43	39
Develop infrastructure solutions that make data repositories easier to maintain and access, and that possibly help level the playing field on access to computing resources	0	9	13	49	34
Reduce the influence of the Journal Impact Factor	6	14	25	29	31
Improve the speed of publishing	2	12	28	36	29
Improve the impact of research on advancing knowledge	1	5	18	50	28
Reduce the importance of publishing in promotion and tenure evaluations	11	16	24	29	26
Improve connections between research (especially within each field)	0	5	23	53	26
Develop turnkey systems that make it faster and easier to comply with publishing requirements (regarding data deposits, etc.)	2	8	33	38	23
Create new and better ways to officially record discovery (instead of relying on preprints or journal articles for this)	7	15	23	35	22
Improve the reusability of research (is the work properly licensed, is dataset complete and usable, etc.?)	1	2	25	56	22
Improve the visibility of non-journal research work (industry white papers, government studies, etc.)	2	16	28	39	21
Fix what's broken	9	8	23	26	20
Improve the indexing of research work	1	14	35	42	14
Create one-size-fits-all communication policies for the global research community	17	21	21	28	13
Reinvent the wheel, even if this means some things end up being worse than before (or will take years to stabilize)	37	20	21	16	4





5. How important are the following items for your research work? (Skipping questions will be interpreted as "no opinion")

ltem	Never important	Occasionally important	Important	Most often important	Always important
Find the right research papers to read	0	5	19	19	65
Publish in a journal	2	7	14	23	63
Get funding for my research work	0	3	16	28	60
Get proper credit and recognition for my work	1	2	18	27	60
Read research papers for free	4	10	18	18	59
Advance in my field	0	2	14	33	56
Effectively communicate my findings to fellow researchers	0	1	17	35	55
Publish in a prestigious journal	2	5	23	25	53
Publish affordably	4	13	15	21	52
Figure out what to read—there's so much information out there	2	7	21	25	52
Make an impact on society	0	4	18	37	47
Job security	6	8	20	26	46
Effectively communicate my findings to policymakers	0	14	19	29	45
Effectively communicate my findings to the general public	0	8	23	31	45
Freely and rapidly share my research work with other researchers around the world	0	4	22	36	45
IMMEDIATELY (without waiting for embargo periods) read what other researchers have published in a subscription journal	4	20	23	26	35
Make my data available in a format that others can see and use	5	12	35	25	30
See the data generated by other researchers	3	10	35	32	28
"Register" my discovery (publish quickly so the world will recognize I was the first to discover something)	13	19	24	23	26
Protect my research from getting "scooped" before I can publish it	8	20	28	23	26
Publish quickly	2	18	34	32	22
Reuse the data generated by other researchers	3	14	37	33	20
Copy and paste large chunks of text from other research papers or otherwise reuse these works (beyond what is already permitted by copyright under Fair Use and Fair Dealing)	59	14	12	8	7





OSI2022 Global Research Congress, Weeks 1-4 Administered July 1-31, 2022 N=130

DEMOGRAPHIC DATA (FOR ALL WEEKS)

Title (23 different research-related titles reported)

Job title	Count
Professor, Assistant/Associate Professor	54
Researcher	51
Principal investigator	20
Other: Journal editor, editorial assistant, fellow, senior research fellow, consultant, retired, director of research, senior scientist, analyst, postdoc researcher, librarian, grant writer, research group leader, director, national program leader, executive director, Nobel laureate	19
Research administrator	9
Project/program manager	7
Research support	6

Institution type

Institution type	Count
University	103
Non-university research institution	12
Government	15
Other: Scientific society, nonprofit, hospital, NGO	4
Private industry	4
Not sure	0

Career stage

Response	Count
Established researcher	42
Leading researcher	36
Mid career researcher	28
Early career researcher	21





Field

Response	Count
Social sciences (including psychology)	37
Medicine & health (including clinical trials)	22
Arts & humanities	22
Life sciences (biology, genetics, biochemistry, etc.)	20
Computer science	11
Physical sciences (physics, astronomy, chemistry, earth sciences)	11
Other: Cross-field, education, urban planning, library & information science, environmental & forest science, interdisciplinary, public policy, agricultural sciences, information science)	10
Engineering & applied research	9
Professional fields (law, accounting, policy development, etc.)	6
Mathematics & quantitative research	3

Country (29 represented)

	_			
Response	Count			
Brazil	58			
US	26			
India	7			
Colombia	4			
Germany	3			
Portugal	3			
Spain	3			
UK	3			
Chile	2			
Italy	2			
Mexico	2			
Netherlands	2			
Australia	1			
Belgium	1			
Bolivia	1			
Canada	1			
China	1			
Finland	1			
Kenya	1			
Morocco	1			
Nigeria	1			
Panama	1			
South Korea	1			
Sweden	1			
Switzerland	1			
Turkey	1			
Zimbabwe	1			





Week 1: What does "open" mean to you? Administered July 1-8, 2022 N=41

Please answer the following questions to the best of your ability. Additional space is provided at the end if you would like to elaborate.

1. Researchers rely on a wide variety of information sources. In your experience, how important are these sources for your research work?

Response	Not import- ant	Sometimes important	Important	Often im- portant	Always important	Not sure
Specialty journals (international and selective, conduct peer review, high quality, widely read)	0	1	2	9	26	2
Other researchers in my field (not at my institution)	0	3	7	9	20	0
Prestige journals (highly selective and multi-disciplinary, like Nature and Science)	1	0	13	5	21	0
Conferences	1	8	7	14	10	0
Academic indexes like Scopus and Web of Science	1	3	8	11	13	3
Google Scholar	1	1	12	11	13	1
Other researchers at my institution	1	11	8	12	7	0
Government reports	3	9	10	7	11	0
Preprints (most often research posted quickly in order to generate feedback prior to publishing—e.g., bioRxiv)	0	17	6	9	7	0
Other internet resources	0	5	14	7	9	4
Books from my institution's library	4	8	13	9	4	1
Other resources from my institution's library	3	6	15	7	6	2
Regional journals (generally small and affordable, focusing on issues of regional importance and published in local languages)	9	9	9	9	3	0
Private industry reports	9	14	11	6	0	0
Predatory journals (will publish anything quickly and for a fee)	29	7	0	0	3	1
Family and friends	9	16	9	2	0	2
Other	1	3	1	0	0	10

2. If you answered "other" in the above question, please describe

Response
I have not replied other but I want to highlight for question #2: arxiv, in particular astro-ph, which is a fundamental resource in my field
archival research is another category that has occasionally been important in my research
Charities and think tank reports
Networked spaces, such as social media and platforms (e.g. Research Gate).
My historical collection of materials; Library of Congress; past government documents





3. Governments and funders are increasingly requiring researchers to publish their work in purely "open" journals. Still, at least for now, most of the world's highly cited research is published in so-called "closed" journals (subscription-based) or "hybrid" journals (with a mix of open and subscription content). In your field of research, are there any purely open journals that are considered to be high quality and prestigious—enough so that these journals would be your first choice for publishing your work?

Response	Total
There are several open access journals in my field that fit this description	20
No. None of the open access journals in my field fit this description	7
There is at least one open access journal in my field that fits this description	6
There are many high quality open access journals in my field that fit this description	5
I'm not sure	2

4. Check every statement that is true. In my PERSONAL experience in research, I have been unable to:

Response	Total
download a journal article I need because it cost too much	28
publish as quickly as I would have liked (the review and publishing process took too long)	28
find the dataset for a published study	20
publish in my first choice of journal because of high APC costs	19
download a journal article I need because it was embargoed (the article was only available to subscribers for the first 6-12 months)	16
get an article from an author, even though I requested it by email	12

5. How important is it to your research work that:

Response	Not important	Sometimes important	Important	Often im- portant	Always important
You have the freedom to publish your work where you want to publish	2	2	6	5	25
The journal you publish in is high quality	0	1	9	7	22
Your publishing costs are affordable	0	5	7	4	24
The research information you need is free to access	0	3	9	7	21
It is affordable for other researchers to publish	2	1	9	8	20
The research you publish is free to access	1	4	8	10	16
The scholarly societies to which you belong are free to publish the types of journals they think are best	1	4	9	10	14

6. Most research institutions today have some sort of open access policy that encourages researchers to consider publishing in an open format. At the publisher and funder level, aggressive reforms are being implemented that require more open access publishing. Have these changes affected your research positively or negatively?

Response	Total
I have noticed these changes but they haven't affected my research	16
I haven't noticed any changes so far	9
I have noticed these changes and they are hurting my research	7
I have noticed these changes and they are helping my research	7
Other	1
I don't know—I haven't been paying much attention to this	0





7. Please elaborate on your answer to the above question.

Responses

There hasn't been a commensurate increase in funding for APC, PAR Agreements are rare outside Europe, and quality journals are either new/Gold or transitioning to Gold with high APC, it's making it very hard to publish.

We don't have an OA mandate at our university.

Open access Publishing costs have become unaffordable

Thinking about publications, in my field, only the ultimate, peer-reviewed, final versions of the scientific articles are published in journals that may not be open access. However, the majority of my peers post their work (prior and after peer review) on astro-ph, so the scientific articles are typically openly accessible.

The problem is that ideally I want to publish in high quality journals but most of them are, currently, not open access or they charge extraordinary amount of money to publish it. Moreover, to publish in high quality journals demand time, what I believe it's okay to my area of study, because it guarantees an extra time to reflect, modify and improve the stated argument. However, I have notice that some researchers, departments and funding agencies might not be okay if your paper takes longer to be published. Some scholars prefer submit the paper in different journals instead of taking the burden to address the peer review comments.

There are several alternatives

Publishing open access will hopefully lead to greater citation and download rates by making my published research more widely accessible to global audiences

My research group was funded by NSF, and thus were encouraged to publish open access (our project was about the ethical concerns OA and predatory journals have introduced to the publishing scene). As a junior scholar, this "forced" me to look at OA journals in a new (more positive) light, but also with a healthy dose of critical thinking to really sus out which journals are OA and legitimate, and which are OA and predatory.

No impact thus far.

My funders have made no demands.

In my country (Brazil), these changes have not yet been noticed. Little information circulates about the effort to stimulate publications in open access journals.

I like to contribute to open science

The most prestigious journals in my field are not OA. Most open-access journals in my field don't have a particularly high reputation, and I cannot recommend my students to publish at the beginning of their career in second tier journals.

My institution doesn't have an open access policy, but, I realize these changes in others institutions

Unthinking enforcement is not the way to go. There is a ton of bad science out there

So far, it is difficult to assess the impact of these ongoing reforms on my own research.

The question is not clear to me.

My funding and research haven't been subject of those reforms. Nevertheless, on my own interest I try to publish open and implement practices of sharing and transparency on my projects

I am an early-career research and I do not receive my own research funding. The projects with which I collaborate have not been impacted by these changes yet. Anyhow, I have to date been based in Brazil, and I work in the area of Education. Brazilian research in Education is mostly published in national journals. Fully open journals (supported by HEIs) are the standard in the Brazilian scientific field.

My university now pays PLoS fees.

I have become more aware of the importance of making sure my research articles can be accessed by others, and I have seen increasing interest in my work as a result of this

The funding agency does not strictly oblige me to respect its open policy yet. Sometimes I would like to make the "open choice" in subscription journals, but do not do it because it is too expensive.

Our publications have always been oriented to open access, therefore these policies have not affected it.





8. "Open" means different things to different people. To some, it means information that is made available to the public through specific licenses like CC-BY. To others, it means information that is "free to read," regardless of the type of copyright. The following choices are some of the many conditions that some people put on "true openness." In your opinion, which of these are necessary in order for you to consider research information to be "open"?

Response	Not im- portant	Sometimes important	Important	Often im- portant	Always important	Not sure
The work is published according to best practices (e.g., such that it is properly reviewed, indexed and archived)	1	0	2	3	33	1
The information must be free to read	0	1	5	3	31	1
The work is transparent as necessary for all good research (e.g., with regard to methods, sources, funders, and potential conflicts of interest)	0	0	6	3	30	2
Data is included	0	4	4	11	19	3
The information must be available to read immediately without any delay (e.g., subscription journals often impose a 12-month embargo for non-subscribers)	1	2	6	10	20	1
Publishing costs are paid by authors (or their funders or institutions), not by subscribers	6	6	5	10	8	6
The publisher discloses their profit margins to the public	7	4	6	5	13	6
The protocol (if there is one) is pre-registered		5	5	7	11	9
The publisher avoids mixing free to read content with subscription content (as is currently the case with the journals published by most scholarly societies)	6	6	5	5	9	10
The information can be re-used in any way without your permission (including copying and pasting everything and selling it commercially)	17	3	6	5	6	4

9. We often use the word "open" in research to describe things like open access journals or open data, but it also applies to many other parts of research like computer code, clinical trials protocols, and experimental methods. In a closely related sense, we use these open fragments to create "open science," open educational resources, to power open government, and generally speaking, to make science work. In this closing question for this week, please describe how you view "open" in your own research. There is no right or wrong answer here. For many researchers, "openness" is just how research has always been done. For other researchers, sharing their data by using new collaboration tools is vitally important. And for others still, publishing in open access formats is essential for reaching their audiences. How do you see "openness" in your research, and how do you use it?

Responses

Open in my field of studies would concern the clarity of the methodology, accurate attribution of sources and references, open access of the research after its development (since it is mostly conducted with public resources)

Sharing code, data, results, protocols, freely and without restrictions.

I use the term broadly to refer to "open data," "open access," and "transparent research practices." Open science seems too limited by discipline as a useful heuristic to understanding the broad scope of open. Openness is, in fact, just being a good academic citizen (regardless of discipline). When I work with undergraduates I talk about the broad scope of scholarly communication and how you are always listening in on, entering into, or extending a conversation that has been ongoing for hundreds of years when you conduct research. To keep that conversation to new ideas, insights, voices, and perspectives, we need to ensure that conversation is open and accessible to a broad community.

Incudes protocol registration, free access to publications and availability of data access

Openess is about how research is done and shared. Timely sharing of information allows to develop new research based on the true existing knowledge and not just the knowledge I can afford

openness in my research means: a) freely available literature; b) openly-available data, e.g. from observations and simulations, especially if produced thanks to tax payers and possibly after a short period (~1 year?) of exclusivity; c) eventually, openly-available codes

To me, openness means being able to provide someone all of the information necessary to reproduce the analysis done in published work. This doesn't require that everything be non-proprietary, but it does require a willingness to share data and sometimes analysis tools.

Open research means transparent methodology and experimentation, clarity around funding and support, and completed article being free to read and be re-used.





Ideally, in a world where truly collaborative work is possible, 'open' should be seen as having access to every step of my research results. This would include the collected data (that are not sensitive), or datasets which allowed reuse of data, codes and packages (if using machine learning algorithms, also include - when possible - their interpretability for a given decision-making process), the published paper in its final revised form. I would like to stress that - again ideally - the peer review process should also be open, reviewers should be able to receive some form of gratification to make this task more attractive and editor's decisions should also be openly justified. However, as an ERC I would feel threaten to give criticism if the peer review process were not anonymous.

Open access for me means that every information is important for best science ,but if it has any economic interest, must be protect by laws.

Openness means available to all researchers at no cost

To be able to access data and information in a quick, easy and cheap way

published research is accessible for free to global audiences, data is published in a repository so it can be accessed by anyone who reads the article, methods are transparently and clearly reported. It would be great if open peer review could also be practiced (i.e., peer review reports published alongside the article)

I have recently begun searching for OA journals when wanting to publish, so that was my initial foray into "open science." However, since becoming part of the OSI group and conducting more research on what OS really is, I have also begun sharing datasets. This is relatively unique in my field--I am a qualitative communication researcher. Open qualitative datasets are tricky to navigate (ethically speaking), so there is lots of learning still to be done to see how qualitative research fits into the OS paradigm.

Open - free of charge and allows better access to other researchers around the world.

I just use open to mean free to read. I am not involved with other aspects so would not use the word.

Our data is mainly qualitative so cannot be made public

I think that the word "open" should be understood in the broadest sense of the term, that is, it should indicate free access and without any payment for readers to scientific products (for example: scientific articles) and at no cost to researchers. publish the results of their research. In addition, the word "open" should also indicate the possibility for researchers to have free and no-pay access to methods, protocols and data.

free to access, free to reuse under open licences,

To me, "open" in scientific publishing means free and immediately accessible, including data and a transparent description of the methodology. Also, data should be re-usable for re- or meta-analyses by others (but not necessarily commercial use).

I try to collaborate as much as possible within eventual confidentiality restrictions, but always aiming to be as transparent as possible.

Open for me is freely available publications to everyone without costs for subscribers and limited (if any for authors). High quality review is essential. Predator journals are a risk. Open data only after a period of time. This is an issue for research with academic cohorts, which cost a lot. Should not be forced to be made freely available.

I think that "openness" imply all the research phases; and no articles proccesing charges in specific cases: research funding by goverments, and research funding by universities (without external alliances).

I think "openness" in research is to maximize access to design, methods, and biases related to the proposal, conduct, and review steps of the work available to peers and to the public

For me open means the document is freely accessible.

Openness is important in the scientific world as many minds can participate in the processs therefore contributing and improving with new ideas

Open is how it has always been done; some areas require proprietary protocols for a number of reasons (privacy, vulnerability of populations etc) that must be maintained and those should be disclosed but not violated if they are conditions of conducting the research

I use open as synonym of transparent, available and accesible. In that way, there are degrees of openness, from making a manuscript available without cost for the reader (and ideally for the authors, with institutions like funders or universities paying support to journals), protocols, instruments and data available to download for validation and replicability (depending on the sensibility of the data and information, as well their uses and potential cost involved for the funders), and the resources for continuing research, conversations or applications, depending on the subject. In that way, open is a new set of infrastructures that information technologies make possible for research systems, due to new ways of communication, data collection and analysis and publication.

"Open" for me is linked to the idea of "public". This is related to my alignment to a Latin American tradition of defending science and higher education (to which it is closely tied in the continent) as public goods. Therefore, our scholarly institutions strive to enable free access to the knowledge we produce, for instance, publishing dissertations, master's and even undergraduate theses online ("openly"). This is common-practice in Brazil, and even required by governmental bodies which fund and regulate postgraduate education. As a researcher who deals with primary/raw data, I would like to enable access to the data I produce (e.g. interviews) and to access other researchers' as well. I know there are resources that are freely available in the web to do so. However, I never received the training to do that, nor did I have the time to learn how to do that by myself. In terms of open science powering government, I understand we nowadays already have enough information technology to make it happen. However, we do not have the social practices and, above all, the political culture to fully enable and strengthen it. This is linked to a low level of accountability of authorities, but also to the scarce prestige of science, especially in a post-truth epoch. Therefore, it is hard to make scientific results influence institutional management, let alone public policy.

Openness for me is relatively easy access to literature and associated data. It can also mean getting access to data as an input to research.

For me openness is about everyone having equal access to scientific information, which is important to facilitate a democratic debate about the implications of this information

Free access to publications is of key importance for institutions that cannot afford subscription. In Brazil, for the time being, a Federal agency pays for access to most subscription journals, otherwise this would be a big issue. I would like to have access to experimental data used in papers in my field. They would be very useful to my research and save laboratory expenses and time. I would like to see more openly shared computer codes also.

The concept of "open" for scientific publication is based on the social value of science, and that for ethical reasons there should be no access barriers for those who can appropriate studies for the advancement of science, it will improve knowledge and put the findings into practice. The only restrictions are those related to plagiarism and the undue exploitation of the results.

Openness = making data (and scripts) available





10. Is there anything else you would like to add?

sponse
u are all doing a great job + I am thankful to be part of this group.
ank you
anks. It is a put off using Google Sheets as it insists on ignoring my regular email and insists on keeping my gmail address which I do not use
!
I believed I affirmed in the first survey, the possibility of open science is tied to the social condition of scientists. In my context, there is scarce oport for research from the private sector, and this is always biased by commercial interests (which I understand to be a legitimate thing). My int is that science requires strong support from the state, and this must be a non-partisan commitment held up by the whole national society, inforced through intergovernmental and civil-society international networking.
, thanks.

Thank you!

That's all for this week. Next week we'll go over some of the common concerns that researchers have about sharing their information, and ask for your opinions about these concerns.

Week 2: What are your concerns about "open"? Administered July 8-15, 2022 N=34

Please answer the following questions to the best of your ability. Additional space is provided at the end if you would like to elaborate.

1. Researcher attitudes toward "open" have been measured by a number of surveys over the years. Some of the concerns expressed in these surveys are listed below. Please indicate whether you agree or disagree with these (in your experience):

Response	I strongly disagree. This is never a concern for me.	l disagree. This is rarely a concern for me.	l'm neutral on this.	I agree. This is often a concern.	I strongly agree. This is almost always a concern.	Not sure
Publishing in open access journals has become too expensive for me	2	6	4	8	14	0
I need to publish in high impact journals in order to get recognition from my peers and tenure committees. These journals are usually "closed" (subscription-based).	4	4	8	6	12	0
I worry about someone misrepresenting or misusing my data	3	9	6	8	8	0
I worry about the ethics of open sharing—about making data open that shouldn't be open (due to confidentiality agreements, patient privacy, etc.)	6	7	6	7	7	0
My institution doesn't recognize, reward or incentivize data sharing when evaluating researchers for tenure or grants, so why should I bother?	6	2	6	10	6	2
I'm confused by all the different requirements—which license to apply, which repository to use, which embargo period to respect, etc.	2	5	9	9	6	1
If I publish my data before I've thoroughly analyzed it, I might get "scooped" (someone else will make a discovery with my data)	2	10	4	14	4	0
I worry about someone reusing my writing without permission	5	10	5	11	3	0
It takes too much time to comply with open access requirements (data deposits, repository, formatting, etc.)	0	14	7	10	2	0





2. In last week's survey, most of you answered that there is at least one open access journal in your field that is well respected and that you would publish in. Indeed, slightly more than half of all journal articles today are published in some kind of open format (including "green" articles, "gold" open, preprints, hybrid, etc.). However, the vast majority of the highest impact journals are still subscription based. That is, "open" is growing but research still mainly values "closed" work. Why is this? For example, are you more likely to cite papers from subscription journals (maybe because these journals contain more rigorous or relevant research)? Are you less likely to read open journals? Do your tenure committees give more weight to articles published in subscription journals? There are no wrong answers here. We need your insight.

Response

In my field this is changing, there are equally "prestigious" options both subscription and Open Access, but the prestigious OA options have APC that scale with prestige, and the APC is out of reach of most of us.

Subscription journals are still largely considered to be more rigorously peer reviewed and fact - checked as needed.

the relavance of the Journals (fame in the field and impact factor) drive the evaluation process of tenure committees

I think that the open process is going to be the future however most of these still need to improve the reviewer process in order to be as good as the subscription based journals

Whether journals are open or subscription-based, the main aggregator of access is a university library. Faculty still primarily "find" journals through the library's discover layer and also exist with mental models that tell them that if it's accessible through the library website that it is of higher quality. Open Access journals may or may not be aggregated in a libraries journal list. Tenure committees also default to "available through the library website" as a marker (rightly or wrongly).

This is quite confusing, as you are putting several questions together.

Lately, IÂ'm more inclined to read - and thus cite - open access journals or papers. I also noticed that researchers who has funding and can afford publishing open access allow them to be read and recognized as 'authority' in their field. I do not mind to read open access or pre-print, as my research is about research and methodologies, reading what an author is trying to publish might give me insights (although I worry about the threatens of pre-prints in science and for society - such as using bad results to confirm biases).

Reliability of full open access journal is questionable: if I should choose, I prefer to cite a reliable journal

Self-fulfilling prophecy - while the tope journals remain subscription, more people will want to publish them, read them and cite them (and librarians buy access to them), thus making it harder for those journals to flip to OA which is less lucrative

Few publish in top journals so the issue is small.

I am more likely to cite papers from subscription journals because of tradition (I already know them).

My tenure committee gives much more weight to subscription-based journals. I tend to cite journals that are likely to have a JIF.

I don't know why researchers still favor the subscription journal more. In my field of activity, in my country, the valuation of open journals is as good as that of subscription journals. By the way, in particular, I'm more likely to read open journal articles.

Institutional comittees give more weight to articles in high impact journals

Being in industry, this is not an issue - we cite that papers that most relevant to our work independent whether they are open or closed journals.

I don't think that open or not access journals have a different quality. Journal are recognized because of their reputation (IF, citations...). I find the information I need in both types. Clearly, when they are open access, it is easy. Moreover, publishing in an open access journal enable your research to have a greater visibility. However, to pay for this option, become unsustainable.

Unfortunately many researchers still choose to publish their most interesting work in closed high-impact journals.

I think it most depends on the area. Most journals are closed because that's the way the publishing market works, and not all countries provide adequate funding for journals to be able to function openly. In any case, what dictates the interest to read or citation of an article is its relevance. Living in a developing country, not all closed journals are accessible, which limits access to the general academic public, even in the best universities

In general, your status is more highly viewed when you publish (often) in high impact journal. This is by your institute, by your peers and also by pharmaceutical companies. And even if this is not of importance for one personally (e.g. end of career) this is still of importance for co-authors. Moreover, when reviewing, reviewers are more strict depending on the IF of the journal. So, indeed more rigorous or more innovative research is found in high IF journals. This reflects back on your research when you publish there.

I usually read and cite open access journals although articles published in top subscription journals are often considered more relevant by tenure committees.

my area of work is bibliometrics/scientometrics. In India three journals are published in this area. I publish my aticles in these journals besides publishing in subscription based journals. Some open access journals also have good impact.

This is not an issue for me, since my country's government provides access to most highest impact journals

OA journals are often newer and did not establish a good reputation (yet). Many OA journals create the impression that they either do not care about the impact of the articles published (e.g. PlosOne) or that they are more about the money (so-called predatory journals and those that are close to them in their practices).

Many fully open journals have questionable practices. They are not entirely "predatory", but are commercially aggressive and ready to sacrifice quality for profit. It is like tourist restaurants that invite people in the street to eat there - they are never good restaurants. Many of these journals are achieving high impact factors, and this is worrying me. Younger colleagues seeking for fast recognition are tempted to choose these journals instead of the more traditional en higher quality journals.





I think there is a lot of confusion (and evolution) surrounding what "open" is. Furthermore, the stature of individual journals is largely legacy-based, so new journals take time to become viable places to submit papers. As existing high-impact journals give open access options, then people may start using them more, but I think there's a lot of inertia based on where people are used to publishing.

IÂ'm more likely to cite research in open journals (I start my work in there, and then look through the cracks of the literature, like a snowball), sometimes, that literature came in closed old journals.

Nevertheless, prestige is still guided towards closed-suscription journals.

I think committees (tenure, hiring, project evaluations) still give more weight to papers from high impact journals which are subscription journals

I'm likely to read open articles and try to pay for open access for all articles but there isn't the finance available for this easily, with the exception of some papers from funding that does cover it. This means that I have to subsidise open access from the savings over the years in a personal fund that should really be used for other research.

I cite and read papers irrespectively of whether they are published on open journals or not. However, I do pay attention as to whether papers are accepted and ultimately published by by journals that I considered serious and with a serious review attitude. I am not aware of tenure or funding committees giving priority to subscription journals per se. In fact, in most of my recent funding applications, open-access publications (and sometimes data) seemed to be encouraged, if not, required.

Many suscription journals have also many citations and good citation indicators, and although many Open access journals have great indicators too, they have si many submissions that is difficult achieving publication

3. Last week, most of you noted that open access has had no impact on your work; many of you even noted that there was a negative impact. Please elaborate. For example, please describe how open access has made your better or research worse.

Response

Open Access hasn't impacted my work in either direction because I preprint, the only negative has been the runaway publication costs that create a serious barrier to publishing now.

as for me better form a quantitative approach/evaluation

Open journals are easier to be accessed and our research efforts therefore are improving our research in some way

The positive is impact (citation, visibility). The negative is having to defend your work to the uninitiated (100000 citations is still < 1 article in Nature).

It is too early to assess impact, but as open access gives wide exposure of results, feedback cab be quicker, to say the least. However, being open does not offset biases toward journal, country, field etc... Assessing impact in this case is far from trivial.

The problem I face is that I want to publish in an prestigious journal and I want my work to be freely available - for now the solution is to wait for embargo periods and send the paper under request.

It forces me to spend money which is alway a limited resources which I prefer to dedicate to research rather than to enrich some open access editorial

OA enables me as a private researcher to access more content (so is better), but deprives me of more publishing opportunities as I can't afford a \$2,000 APC (so is worse)

Much better because I have no institutional access.

Time-consuming

Open access journals are often designed for broad readership (e.g., PLoS One) and therefore are not as widely read in my field. OR, the journal is OA (e.g., Frontiers) but it is not considered a quality journal in my field.

In my field of work (educational research), in my country (Brazil), the valuation of open journals is as good as that of subscription journals. There is a qualification list of journals in Brazil (QUALIS), which is prepared by CAPES (Coordination of Superior Level Staff Improvement), linked to the federal government, and there is no distinction between open journal and subscription journal.

In institutional terms, open access does not matter it all

Open access has allowed more important manuscripts to be published. Now there is a mandate to publish all industry clinical studies and thus, more options are needed.

Difficult to say..

As I said before, living in a developing country, open journals help researchers to have easier access to research. Accessing closed journals would have to be done mostly with own resources, since the library of the best universities cannot afford to pay for each publisher. Moreover, publishing in open journals, with all the requirements of data publicity, usually has a positive effect in the sense that one can know exactly how the research was developed. This can be good, particularly because the responses and feedback from other researchers will be better informed, which may yield better studies later

I published many papers in an open access journal (the second journal of our society) to help this grow. And now this journal is well recognised and has a decent IF and 'everyone' is happy to publish there. As the IF was less important for me (established researcher) I could do this, but this is different for younger researchers. The big issue though, was the high cost for publishing in this open journal. I would have been less inclined if this journal would not have been linked to our society.

Open access has made my research better since all scholarly scientific work is available for everybody to build their knowledge upon.

not related to me.

Publication fees became too expensive for investigators from low and middle income countries

OA didn't change my work

It has not impacted my research yet, but could favorably impact it through sharing of data and codes.

It hasn't made a negative impact, but I think that there is the potential for this. For example, I work in large numerical simulations, and providing universal access to terabytes of data is essentially an impossible unfunded mandate if that's what open access truly means.





IÂ'm confused with procedures, layers of information and disencouraged by incentives.

The impact of open access depends on the credibility of journal, the organization managing the data repository. The relevant question is: does the information come from a reliable source?

I think open access is a good concept but the implications simply have not fully worked through.

Open access in terms of freely and widely available publications and data have been so far for me and my team only positive: for example, with open access to other teams' simulation data is allowing us to make direct comparison across numerical models, with the possibility of employing the same analysis tools on different data, without the risk of inconsistent analyses in the comparisons.

Has made my research better because I get more reads, and my work can be easilly finded

4. In last week's survey, and also in the OSI communications survey, some of you said that it's important to be able to copy and paste (or otherwise reuse) large amounts of reports. Please describe what you mean by this. For example, are you talking about copying reports for classroom use? Reusing code? Reusing data sets? This is important to understand because the CC-BY open license that allows for unrestricted reuse is the LEAST popular type of open license. Most researchers opt for something more restrictive, like CC-BY-NC-ND (which prohibits commercial reuse or derivatives).

Response

This is not relevant to me.

Commercial use was the time that triggered my response that this is not needed. For classroom use etc that is important.

not involved

I did not approve the copying and pasting of literature data what I think its an unethical behavior but I suggested that the principle and ideas could be shared into the scientific comity

N/A

Again - this is quite confusing, as you are putting several questions together.

I don't know how to answer this. But I guess, as I've been thinking, that reusing whatever part of other's work would be fine if the gratification forms for authorship were different. In other words, if research was focused on the benefit of the general public, and the quality and reward for good research were not 'product-based'. Of course this is ideal, because in this world, private research data (codes, etc...) also should be open.

In my case, only to quote extensive passages and not have to worry about fair use etc

Not an issue for me.

N/A

I usually make use of data and excerpts from articles to produce my research and my publications. In addition, using excerpts from articles in class is always very helpful. So, it is always important that the content of articles published in open journals is available for copying and pasting.

I think that it is important to reuse code and data sets

I did not indicate this so not sure what this means.

Using for classroom

No interest in copying larg amounts of reports

I mean taking about copying reports for classroom use, reusing code and reusing data sets under a CC-BY open license.

not related to me.

No answer to this question

It's important to reuse reports for education and in scientific studies. Commercial use is probably controversial, but not important in my field (ecology).

I favor CC-BY-NC-ND

N/A

Reusing datasets, fair use in student's research, etc.

Reusing data sets and code

approved use of datasets seems fine, including code that is relevant across outputs.

I do not think that, in the most general terms, copy and paste other people's work is ethically correct and the right way ahead, irrespective of license agreements. I can see that it is useful at times to copy and paste by quoting with "..." parts of documents and papers to convey ideas of others, e..g in talks or even reviews, teaching material and such. However, again, in my view, this should be done by always quoting with "..." and by specifying the source.

Reusing code is useful to further advance in certain developments, and reusing data sets could allow to propose new analysis based on existing info. So, I think that having certain information allows to improve research in certain topics because we are building on a basis and not from scratch.





5. On a related note, what is it that YOU need from a copyright license? Most researchers choose CC-BY-NC-ND but many also just choose a traditional copyright or let the publisher hold the copyright. When you publish your research work, you want it to be discovered, read, cited, and to make an impact in your field—that much is a given. But what else do you want (for example—free sharing between researchers, or free classroom use)? What do you NOT want (for example, to lose control over your work)?

Response

Free sharing for all non-profit settings, no sharing for commercial purposes, no derivatives. CC-BY-NC-ND is perfect for me.

Do not want to lose control over the work, particularly to have it published in part which can be significantly misleading.

Must of all free classroom use

Of course I d o not want to lose control over my data but to share with others

Fair Use in the classroom (explicitly stated) would be ideal. I just don't want anyone to make \$ off of my open access article.

Again - this is quite confusing, as you are putting several questions together.

As soon as I publish my work I might lose control over it. People can use, misrepresent, copy, modify, etc. I would not be happy if parts of my work were misused to have a negative impact in society. Or that a modified version of my work is attributed to me. Ideally, there would be not "my" work, as collaborative research grows and we - as single persons - cannot think alone.

Copyright is only the right to publish, not the right to the ideas and research itself, so am OK with copyright in a subscription journal if it helps preserve my work (with OA version in a repository to enable access)

Other than plagiarism I am okay with all free uses.

Want: free classroom use; Not want: misrepresenting my work

Researchers always own their own copy of their final manuscript, even if the copyright is held by the journal. This allows free sharing in sites like Researchgate. I want readers to be able to find the citation to the published version, even if they read it on a preprint or extra-print site.

When I have a choice, I always choose to have the Publisher hold the copyright. My intention is always to make it easier for my publications to be widely and freely disseminated in my field of activity. But I'm always afraid of plagiarism.

From my experience in industry, an industry colleague cannot grant copyright license - it must come from legal on our behalf.

I want: free sharing between researchers, and free classroom use. I would like to mantain the property of my work

I want my work to be published under a CC-BY license. I don't see any need for transferring copyright to a publisher, so I want to keep the copyright myself.

I've never thought about it, but I usually leave the publisher with the copyrights. I wouldn't mind if my work was used for academic purposes, in the class-room for example. But not for commercial purposes

I want to be able to reuse and share my research completely free.

Want free sharing between researchers, or free classroom use. NOT want to be forgotten in the references.

not related to me.

Want free sharing between colleagues and students

I want free sharing between researchers and free classroom use. I have no idea what "losing control over one's work" means, maybe apart from getting a share of the benefits if the work is used commercially.

I would be afraid of someone misusing my work and causing prejudice to my reputations.

N/A

I like a lot CC-BY, but I donÂ't know how to get the copyright from many journals.

Not be given the credit for the work

I haven't really ever got to grips with this and it hasn't had any impact on my outputs/work apart from trying to tick the correct boxes on submission.

What I want: free sharing among researchers BUT with crystal clear acknowledgements, credits, and references to any piece of text, plot, figure, snapshot of movie these other researchers use from third parties. This is the case for seminars as well as teaching material, even if the content is slightly modified or annotated.

I wouldn't want that someone else used my work for profit or steal my credit or involment on it





6. Last week, many of you said that you think it's important to be able to publish where you want. Do you feel like publishing policies that tell you where you can publish are reducing your academic freedom? Please explain.

Response

Yes, both by limiting our ability to publish in subscription journals and also by pushing us into a publishing landscape that is increasingly expensive and out of reach.

Yes; being able to publish where one likes is a tenet of academic freedom.

not

No I don't think so Publishing policies can help but you are not obligated to follow the directions

I don't see it as "academic freedom" as much as the restrictive nature of tenure committees. This will change generationally, so I don't think it's that big of a deal. Also, the rise and value of public scholarship will broaden what is considered "acceptable research" at the university level.

I don't think this a matter of academic freedom, as, at least in my reality, academic freedom is not an issue that can be compromised by journal choices.

If I weren't engaged in open science I would say an easy yes. But restricting our options for a democratic and responsible science development - by following a regulation or recommendation - should not be seen as reducing *my* freedom, if I'm paid by the public I want to contribute to a better society.

Yes, but it is not a freedom like freedom of speech; it is a freedom to publish, but not a right, just a welcome lack of restriction and enabler to define an academic career by publications in good journals

Each journal is unique and I want to be able to publish in the right one.

No

I would like to publish my works wherever I want, but the qualifications of journals, which follow quantitative metrics (number of citations) prevent me from doing so.

Yes, because there a pool of journal options because of the APC fees

Agree that it is important to publish where you want. From my experience in industry, this has not been issue. It has been more important to be able to get the information in the public domain.

not pertinent for me

No, not at all. If someone gives money to you to do research, it's completely reasonable that they expect you to meet some very basic requirements on how you disseminate the results of the research. I would actually feel uneasy if funders do not have such requirements.

Yes

No. I think we should have all information about all different policies and, then, be able to choose.

not related to me.

Do not feel affected by this problem

Nudging researchers to publish in certain journals (e.g. OA), sometimes associated with "threats" in case of non-conformity (e.g. uncertainty about receiving future funding), certainly reduces academic freedom. For various reasons, publishing in these journals might not be the optimal choice. For example, as long as employment depends on "where" one has published, I cannot recommend to my students to publish in OA journals to fulfill the funding body's demands, but to choose the outlet with the best reputation. This is even more important at early career stages (after PhD or postdoc) when the true value of ones publications has not yet become apparent and citations have not accumulated, so the only quality criterion used by evaluation committees is often the reputation of the journal (the quality of the work itself is rarely evaluated, even though committees generally pretend to do so).

Funding agencies should be fair and give us the means to finance the compliance to their open policy.

yes: the decision to (try to) publish in certain journals should be up to the authors, though I support a "critical mass" type approach where once enough options for OA are available, one can require open access.

yes, in particular funding bodies have a lot of power in the evaluation of scholarly merit as well, with the selection of journals. Those metrics reproduce specific publications cultures, even in the more critical fields.

Yes. Researchers should be free to choose the best vehicle to disseminate their work

The diktat of publishing in open journals is not necessarily that helpful.

In my field, it seems to me that there are no restrictions about where to publish and in terms of publishing policies. Publishing policies aimed at increasing open access of the science output to other researchers and to the public should be welcomed, I think.

Yes, big research groups with generous founding can publish wherever they want and however they want, and smaller groups or independent groups have reduced chances and have to settle with what they can afford





7. Last week, some of you noted in your definition of "open" that it was always or often important to get access to published research articles quickly. Please define "quickly" and give an example. For example, in your research, assuming that you (or your institution) don't pay for immediate access through a subscription or some other sort of fee, is waiting 30 days to read the free version okay? 90 days? Six months? Twelve months? Longer? Does this happen often or just occasionally? As a reference, most of the articles in PubMedCentral have been made free to read following a 12 month embargo period (where journal subscribers get immediate access, and everyone else needs to wait 12 months before they can see a free version). There are broad differences in need by field, of course, but we're trying to assess how important these embargo periods are to your own research work (and why).

Response

As soon as possible. Preprint ok.

It so depends on the circumstances that this question is not meaningful.

not at all. There're so many journal covering almost all the fields and topics.

I think that the shorter the period the better not only for science but some relevant observation in my feed(medicine) may save lives

Article quickly = I'm keyword searching a topic and hit a link that doesn't instantly give me access to the .pdf. I want full-text at the point of discovery.

Again - this is quite confusing, as you are putting several questions together.

Quickly, in this context, would mean 'immediately'. Because if open science is about democratizing knowledge, everyone should have access in the same time, not depending on funding opportunities.

In my field (social sciences), it should be immediate - embargoes are an anathema. If it's OA, it should be immediately OA

I do research on research so quickly means immediately, with no embargo.

30 days, otherwise I forget about and read other research articles

I rarely have trouble getting an article I want to read. My university library either has the articles or can acquire them. If an article is unobtainable through the journal interface, I write to the author to get a copy or I search on Researchgate or arXiv. I don't really understand people who say that cannot get access to an article when they are almost always available in one way or another.

Publishing quickly, for me, means publishing within a maximum period of 4 months. This same period could be adopted for subscription journals that have an embargo on open access.

Quickly is immediately, at least in a repository or personal perfil

Fortunately, from my experience in industry, my company has subscriptions to most journals and this is not an issue. We do need access to publications at the time they are published, in most cases, e-published.

Quickly means for me in 1 day time. I cannot wait 30 days to have the info.

All research should be preprinted prior to publication in a journal, so research should already be openly accessible before it appears in a journal. Embargoes make no sense at all.

I believe that twelve months is too long. Three to six months would be more reasonable. This is because in my field of research I believe that quick access (less than three months) is not a determinant for satisfactory work.

For most research in my field 90 days would be okay.

The embargo periods have an impact in my research work since public health is a multi-faceted, interdisciplinary field.

in my opinion 30 days are okay.

Ideal is access as quickly as possible

In my line of work, immediate access to publications is critical. If I don't get access through my institution, I ask the authors for a copy (Researchgate is very useful) or a colleague whose institution has access. Usually, I receive any newly published paper within 1-2 days; this is independent of the publishing scheme (OA or paywall). Waiting longer than a few days is unacceptable as all interesting papers will be discussed immediately in the global scientific community. Thus, in my opinion, embargo periods of publishers of more than 1 week are obsolete and ignore today's scientific practice. Nobody I know is waiting for 6 months to read a newly published paper.

In my field, interface between physics and engineering, preprints are becoming popular and this mechanism is sufficient for fast awareness of important new results. I wish they would become more common in engineering.

I believe it is important to have access immediately, perhaps even on submission (as the arXiv does).

quickly: As soon as is available online. I like a lot how pub-pub works. Immediate publication, with possibilities to see real-time feedback, and final versions that remain with the improvements.

Quickly means 2-3 days, which is possible only through preprint servers.

I don't have a specific response to this

As ~30 days is typically the time for the refereeing process, 30 additional days before accessing the free version seems a good time: more than this would only slow down progress. On the other hand, in my field, we have established the community-wide attitude of posting at submission or at acceptance all papers on the arxiv.org.

I think it depends. If we think on Covid or Zika pandemics, we needed all possible information as soon as possible, so in cases of emergency, or in topics that could improve or worsen sustainability or survival of groups or people, is only ethical that articles should be available as soon as their scientific quality is assured. In other cases, perhaps a maximum of 30 days could be fine





8. And finally, suppose you were asked to reinvent the "open" wheel. What would this new open policy look like? Forget about what you've already heard about open licenses and such. What kind of open policies would help YOUR research the most?

Response

Preprint mandate with preprint updates up until AAM, after that leave it up to researchers how they publish.

A well-vetted system for reuse (beyond classroom reprints) that would protect the author's integrity while making the research available

reduce the price of "open" publishing especially when, based on your published article, you recieve an invitation to contribute to an issue of a journal covering similar/tangent topic

I will increase the speed of publishing process (every author should inform how important he thinks his manuscript is for science and its priority) and of course I will reduce the publishing costs: greater priority low cost low priority higher cost

I'm not even sure where to begin with this question.

If we rely in research integrity and good analysis among our peers, once publish all data, metadata, codes, peer review process and research results should be open (disregarding personal data): "as open as possible, as closed as needed".

UK policy is about right

Free to read is all I need.

Free and immediate access after publication

- 1. "Open" for me would be a low-cost APC for any journal (\$300) to allow or enable access (subscription or not)... PLoS is too expensive, while subscription journals are too restrictive. 2. Data for articles would be linked to the article itself instead of having to go search on figshare or some other auxiliary
- 3. Reviews would be available through a link, if the reader wants to read them.
- 4. A discussion box would be available to allow feedback to author(s) (like Researchgate) and/or funding agencies. 5. I would be able to plop an article into "connected papers.com" to see the relationship of a paper to other papers.

Allowing access to journal articles as soon as they are e-published - no waiting period. However, there will need to be a carrot for the publishers for them to make some sort of profit. It can't be all from the authors of the manuscript since without the manuscripts, there will be nothing for the publishers to

not to pay to publish / read researches

Open to me means any policy that facilitates access to and circulation of scholarly material, in any language. And if it is paid for, it should be as reasonable as possible. The value of open research can also be seen in the accessibility of research data, which facilitates transparency and enables better response and debate in the academic community. My research is hampered by lack of access to certain databases or publishers, when my university does not have the resources to pay for different kinds of subscriptions. Also, it is hampered when my publications cannot circulate because of a paywall

High quality review for open access journals without payment.

The open policies that would help my research the most would be based in transparent, accessible and collaborative knowledge.

i can't offer my comments.

No answer

A truly "open" publishing scheme would allow anyone to immediately access all publications. What we need is an intelligent scheme to pay for such access, without burdening the authors or readers differentially, i.e. not to prevent anyone from being able to publish or access their work (maybe publicly funded?). However, in today's world, too many papers are published so that researchers cannot keep up reading everything. Different journal reputations already provide a first filter on what to read first. Thus, there should be an incentive in the publishing scheme for some journals to have very rigid acceptance rules (groundbreaking papers), while others focus on scientific rigor only. Of course this would need more thought ...

The funding agencies in each country finance access to publications and/or APCs so that every researcher has access to journal papers, thesis, and books and access to publishing in the best scientific journals. I would like to see more sharing of data and codes, and even lab facilities, in a responsible and feasible (less burden on the researcher) way.

Wow! This question in overwhelming, and I don't think the survey format allows me to elaborate a proper answer. Can we submit some diagram or MIRO space for this one?

There should be no restriction at all to use scientific information

All can read outputs from my research without having to pay.

A centralized repository or list that is updated live and presents new articles per topic and where could their be consulted

9. Is there anything else you would like to add?

Response

The publishing landscape in my field is rapidly shifting towards Gold pay-to-publish, and especially in the US where PAR agreements are rare and costs fall on the researcher, this is becoming a serious financial burden that hampers our ability to share our work.

Make clear conflict of interest of reviewers/editors. Sometimes they can reject your work because they are working in the same field of research and they want to protect their future publication. It happened to me recently with an International Journal.

no





N/A
Open access journals are not a solution for "open." They are actually quite out-of-reach for most researchers because APCs are high. APCs present just another barrier: the opposite side of the coin to subscriptions. It is clear that "someone has to pay" so why not have an "all pay" approach with a smaller up-front amount that people or universities can afford?
No!
No.
no
No
No, thanks.
requirement of access to the data is clearly valuable in some areas, but in ours where we have no infrastructure, not even a data manager at present it presents difficulties.
Thanks for doing this.
No thanks

Thank you!

That's all for this week. Next week we'll focus on finding out what you need to improve your research.

Week 3 Administered July 15-22, 2022 N = 25

Please answer the following questions to the best of your ability. Additional space is provided at the end if you would like to elaborate.

1. The most important question for this week's survey is the following: What do YOU need to improve your research? Don't feel pressured to focus on communication here—this may be a relatively low priority for you. Put another way, if you imagined the perfect research environment for you, what would this environment look like and how would it be different than now?

Response

better communication and work across pharma

A more collaborative environment would be beneficial to the research enterprise aiming at advancing knowledge and solving urging societal problems. Therefore, open data, open code, open research facilities, and sharing all sorts of relevant information would be beneficial.

Less administrative work

More time and freedom to research what I want to research

I would like to have a better scientific publishing system, moving away from traditional journals and organizing scholarly communication as a genuine exchange of ideas between researchers and the societal stakeholders they serve.

To improve my research, at this point in time. I believe that it would mainly be necessary: free access to databases, articles and books: less bureaucratic workload of the university -- which could be done by its own employees, if there were a satisfactory number; better remuneration in scholarship

To improve my research I would need to be part of an interdisciplinary and international research team able to work together in different fronts to think about urgent needs that might be result in policy change. For doing so, we would need funding and less pressure to produce hasty papers, conferences, books... for the sake of quantitative metrics

Not be dependent from external funding for everything.

More time (less time spent on administrative and other tasks)

I think ways to get timely feedback on my research process, that can help me to offer better outcomes timely (publishing data, sharing protocols, opening software or publishing on journals that value transparency)





The perfect search environment for me should look like this:

- open data and open access to publications; enough time for research (half the working day), achieved by reducing the time spent on academic and scientific management;
- public funding for research and research infrastructure, made available through standardized competition through blind peer-reviewed processes;
- scholarships for students of the research team;
- evaluation of research results measured by "social impact" and not by the metric based on the number of citations of articles.

The number one resource I would need to improve my research is more time to focus on it! I don't mean this to sound as a complaint, and I love my job, but as a full-time academic administrator (associate dean), i have to carve out time in my schedule each week for research. Often this means that Saturday and Sunday are the only days I have significant amounts of time to focus on research and writing. A more ideal research environment would be one in which I have scheduled times throughout the week that are dedicated exclusively to research and writing.

Apart from unlimited funding, nothing really comes to mind.

One of the hardest aspects of my research is to be able to find, hire, and guide very good and brilliant researchers as team members. The best researchers aim to be completely independent and they usually prefer to take e.g. their postdocs or positions in the most prestigious institutions in the world. Another aspect that feels suboptimal is the fact that e.g. in my institution, but also in many I know of, there is the tendency to hire one faculty/staff member per subsector of the field, i.e. to avoid "duplicates" within the same department of people addressing very similar science questions. Instead, I think that multiple faculty members and research groups working coherently in similar scientific directions would make them more effective and would make the institution scientifically more powerful and identifiable.

Less bureaucracy, alternative metrics of performance, direct financing

2. Indicate whether you think these following concerns are always important for your research, never important, or somewhere in between.

Response	This is NEVER an important concern	This is RARELY an important concern	This concern is somewhere in the middle	This is SOME- TIMES an important concern	This is AL- WAYS an important concern	Not sure or not appli- cable
Staying up-to-date on all the latest research in my field	1	1	2	2	19	0
Getting funding (searching for grants, writing grant proposals, etc.)	1	0	2	2	19	1
Infrastructure support from my institution (good facilities, etc.)	2	2	3	2	16	0
Finding, hiring and keeping good staff	3	3	1	2	15	1
Designing good research studies	1	1	1	7	15	0
Making an impact in my field	1	0	1	7	15	1
Collaborating with other researchers	1	1	1	8	14	0
Job security	3	3	3	2	13	1
Making an impact on society	1	0	5	2	13	2
Getting recognized for my work (at my institution, in my field, etc.)	0	1	3	9	12	0
Advancement—-promotion and tenure	1	2	4	6	11	0
Publishing in the right journals	0	3	5	8	8	1
Making my research usable by others (findable, accessible)	1	2	2	11	7	1
Publishing enough—the pressure to "publish or perish"	4	1	7	4	7	1
Pay	2	1	6	10	6	0
Protecting my research from misuse	3	10	5	3	4	0
Regulation	1	7	6	4	4	3
Protecting my research from theft	4	11	4	4	2	0
Competition	1	8	6	8	1	0
Other	1	0	1	0	1	6

3. If you checked the "other" box in the above question, please describe

Response

Open data and open access to publications.

I wish that my work and research had a more direct impact on society, but it simply does not. This is a sad component of my job (the field is astronomy).





4. Are there data sharing networks in your field of study?

Response	Total
Yes	10
Not sure	8
No	7

5. If you answered yes to the above question, do you share your data in any of these networks?

Response	Yes, I share my data in these networks	No, I don't share my data in these networks
Yes there are data sharing networks in my field	8	2
No there are not data sharing networks in my field	0	2
Not sure	0	2

6. Please elaborate on your answer above, if applicable. Why do you share or NOT share your data? What are your favorite networks and how important are these to your work?

Are there networks?	Do you use?	Elaboration
No	No	qualitative
Yes	Yes	Researchgate, figshare, arXiv are most commonly used
No		I am not aware of any data sharing network in my field. Even within a large research project in which I participate it is difficult to have colleagues share their experimental data or computer codes. I think that competition is the reason for that behavior. I am not very concerned about that, but this may be because I can retire whenever I want (past 68 years old).
Yes	Yes	I constantly use blogs and email groups. I receive important data tweets but do not send same, not knowing how.
Yes	Yes	partly it's expected. I have spent SO much time as have colleagues filling in forms for networks describing our data. I would say more has been spent on these harmonising activities than on the primary data collection itself. We have had our infrastructure starved of resource, and it has felt like vampires coming in to suck the blood of the primary data. There is no incentive really to generate good primary data anymore, it is better to set up a harmonisation network well fundedthis sounds like a carp. I do recognise the importance of the harmonised/collective efforts but they are nothing without high quality contemporary and well described primary studies.
Yes	Yes	Always use Figshare to share data openly
No	No	No hay redes en mi campo de investigación [There are no networks in my field]
No		In my field, we do not really produce "data" other than papers or book, book chapter, etc. However, there is a growing effort to start sharing the little we can, even if it is lists, table, of diagrams from our interpretable work. So I am considering to open an account on an open repository to start sharing more. I do have a personal website where I gather information about my research (instead of uploading in academia.edu, research gate and so on. I also share some youtube videos of recorded talks). However, I select what I post, as not all our reflections are worth sharing:)
Yes	No	Not applicable
Yes	Yes	Share to collaborate with research that bring relevant contributions to knowledge and healthier societies.
Not sure		I´m concern on ethics of the kind of datasets. On the ways in which my field does analysis and interpretation of evidences, and how that data is also interpretable by other fields (work in a contentious transdisciplinary field)
Yes	Yes	For my recent NSF grant we are making our qualitative data available through the Texas Data Respository. This is for reasons of transparency and accessibility. We believe our published research is more credible this way, and we also believe that since we are receiving public funds, we should make the data publicly accessible.
Not sure	No	We share our data in the sense that we regularly make all our simulated data public. However, we do not rely on "networks". The ones I am aware of always try to be too general and too broadly applicable, and in the end this makes them overcomplicated or not optimal for the data we care mostly about.
Yes	Yes	Data sharing is important for scientific advancement. Among others, I do synthesis work, for which data availability is crucial.
Yes	No	There are not an institutional policy about data

Thank you!

That's all for this week. Next week we'll go over some of the common concerns that researchers have about sharing their information, and ask for your opinions about these concerns.





Week 4 Administered July 22-29, 2022 N=25

This will be your final set of questions. Thank you again for your participation. Please answer these to the best of your ability. Additional space is provided at the end if you would like to elaborate.

1. OSI is a large and diverse group of experts who have been meeting working together since 2015 to improve our common ground understanding of the scholarly communication system. Listed below are a few of this group's recommendations about what this future should look like. Please indicate whether you agree or disagree with these recommendations (based on your needs and experience):

Response		l dis- agree	l'm neutral on this	I sort of agree	l strong- ly agree	Not sure or not ap- plicable
Researchers are a key stakeholder in this conversation. Reforms need to be made in collaboration with researchers so we don't end up damaging research in the process and/or making access issues worse.		0	0	2	21	0
Successful open solutions will require broad collaboration. It is important to hear from and work with all stakeholder groups in our efforts to reform the scholarly communication system.		0	0	6	18	0
Publishing is a critical part of the research process.		0	1	4	18	0
There are no one-size fits-all solutions in scholarly communication.		0	0	8	17	0
Science and society will benefit from open done right.		0	1	5	17	0
"Open" exists along a spectrum of outcomes. There are many different kinds of "open."		1	1	6	16	0
Connected issues need to be addressed. There are many parts of the scholarly communication system that need improving, not just making things more "open."		2	2	6	13	0
The culture of communication in academia needs to be reformed. There is too much attention paid to things like impact factors and publishing record.		3	2	5	13	0
There is much common ground in the research communication reform space, and we should build on this common ground		1	0	9	10	0
We need to learn more about the issues here before making global changes.		3	1	6	10	1
The incentives for making more information open are not aligned—i.e., the rewards and benefits aren't currently commensurate with the effort.		0	3	11	9	0
Making information more open is just a means to an end. It is not the end goal itself.		4	3	9	9	0
It might be worth thinking in terms of "open solutions" that are integrated instead of open access plus open data, open code, etc.		2	2	8	9	0

2. There are many ideas out there about scholarly communication reform. Here are a few—-some that are being enacted now, others that aren't even part of the policy debate. Indicate whether you think these ideas are good, bad, or somewhere in between.

Response	Hor- rible idea	Not a big fan	Neutral	Okay idea	Great idea	I don't understand this well enough to have an informed opinion
Make sure the research world doesn't divide into those with means, and those without means.		2	0	4	16	3
Focus on improving research infrastructure globally (high speed computing facilities, new global journal index, improved journal monitoring and support, etc.)		1	1	8	12	1
Create one global repository—an All-Scholarship Repository—instead of hundreds of disconnected information silos		4	4	4	12	1





Create and promote clearer licensing options for research that will allow free sharing within education but restrict commercial reuse		1	1	7	11	5
Replace the Journal Impact Factor with something else		2	5	5	11	1
Increase efforts to do something with open instead of just making more information open		3	2	4	11	4
Create open strategies that are goal-specific (e.g., cancer, climate change) instead of "generic"		2	7	4	10	1
Increase the use on preprints as a tool for getting research information out freely and quickly		5	2	6	9	0
Eliminate embargo periods for all research work (both in STM and HSS)		3	2	9	8	2
Adopt more policies designed by funders that REQUIRE open access publishing (as per their terms definitions)		3	4	8	7	1
Implement a single, global policy for what "open science" means for everyone every- where		4	6	3	7	3
Increase consolidation in research publishing and data management (shift reliance from society and university publishers to major commercial publishers)		6	3	3	5	5
Encourage more large research universities to negotiate separate agreements with publishers		5	6	6	4	3
Flip more journals from subscription-based to APC-funded		4	7	5	3	4
Increase reliance on impact evaluations		7	3	8	2	2
Replace grant funding with funding by lottery		5	1	5	2	0

3. Is there anything else you'd like to add?

D	es	n	'n	~~

Thanks for asking!

Make clear the existence of conflict of interest of editors and reviewers. Sometimes they research or work (exactely) in the same field of research of you paper. They can stop you to protect their self and/or they can beneficiate from your text to improve their work.

An APC-based model would be terrible, and worse than the current model, as it would prevent researchers from publishing.

Again, thanks for your work with this! All the best!

These recommendations are important. I want to have access to papers that support them

Thank you!

That's it! Thank you for your time and input. Your responses over the last four weeks will be analyzed and incorporated into OSI's final policy recommendation, due to be published later this year. You will be contacted again when the first draft of this recommendation is available. Your feedback on this version would be most welcome. Thank you again from all of us in OSI!





























RM











Consulting





OPEN SCHOLARSHIP INITIATIVE