

Open Access Publishing: A Study of UC Berkeley Faculty Views and Practices

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Chan Li, Assessment Librarian, UC Berkeley

Mohamed Hamed, The Middle East Studies Librarian, UC Berkeley

Becky Miller, Natural Resources & Environmental Sciences Librarian,
UC Berkeley

Outline

- Background
- Faculty survey
- Methods
- Analysis/Findings
- Discussion/Implications
- Future research

Background

UC advocates for Open Access:

- In 2018 The University of California system announced a 'major UC initiative to transform the scholarly publishing industry'
- Numerous communications regarding moving toward Open Access (OA)

Open Access in the Faculty Survey:

- In October 2018 UC Berkeley Library conducted the Ithaka Faculty Survey
- 73% of the faculty respondents at UC Berkeley versus 64% nationwide indicated that they would be happy to see the traditional publication model replaced by an OA publication system

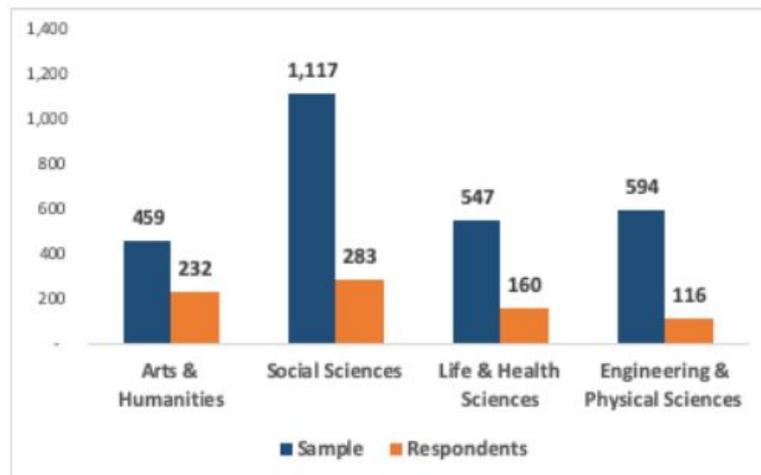
Faculty views on Open Access vs. actual publishing practices:

- Investigate the open access productivity of the UC Berkeley faculty
- Compare faculty views on OA and scholarly publishing, expressed in the survey, to their actual publishing practices.

Faculty Survey

- The survey was sent to 2,748 Berkeley faculty members.
- 811 faculty responded, which was a 30% response rate.
- Lecturers had the highest response rate (47%) among faculty members
- There were 41 questions, including a number of questions on research dissemination and publication

Responses by subject groups

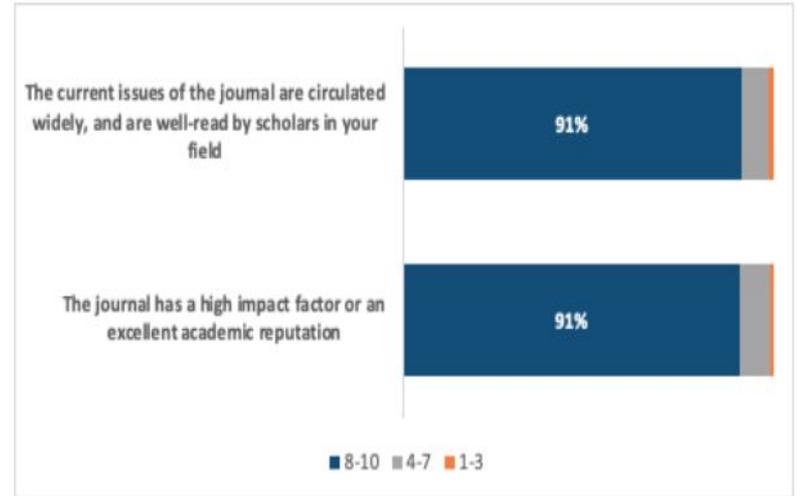


Faculty Survey Results:

Q10. Factors that influence faculty's decision about journals in which they publish their articles.

- 676 responses were analyzed for this question
- The top influencing factors were:
 - 91% for each, the journal is widely distributed, and the high impact factor or an excellent academic reputation
 - 84% The coverage area of the journal is close to the faculty's immediate area of research

Top factors:

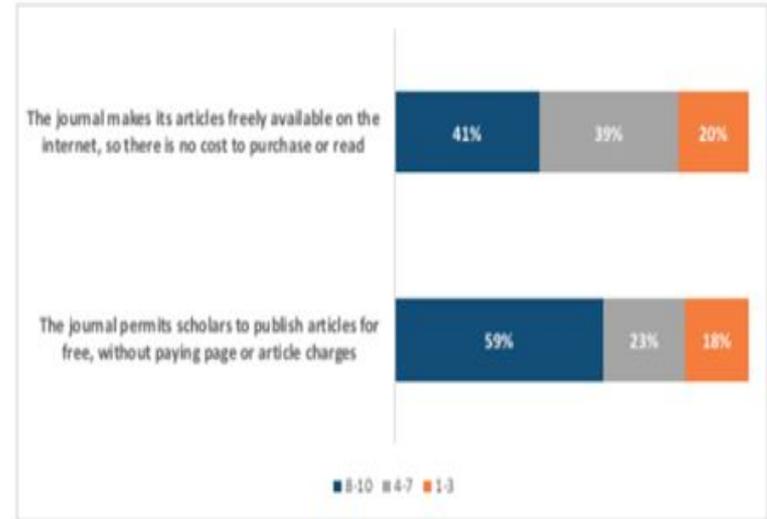


Faculty Survey Results:

Q10. Our study primarily focused on two major OA publishing motivations, a journal having no cost to read and having no cost to publish.

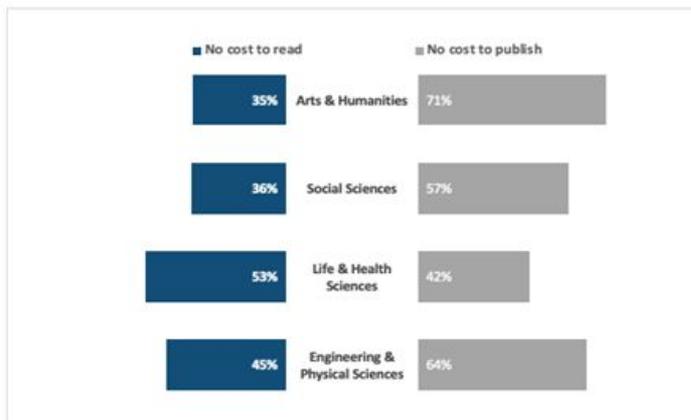
- 59% of the respondents indicated that no cost to publish was very important
- 41% indicated that no cost to read was very important
- Similar to other studies, OA factors were ranked lower among influencing factors

No cost to read vs. No cost to publish

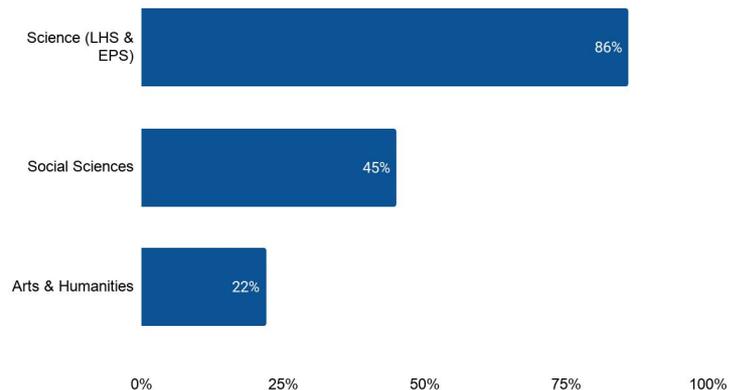


Faculty Survey Results:

- Higher percentage of the faculty in Arts & Humanities value no cost to publish
- A higher percentage of the faculty in Life & Health Sciences value no cost to read



Respondents reporting external funding in last 5 years:



Methods

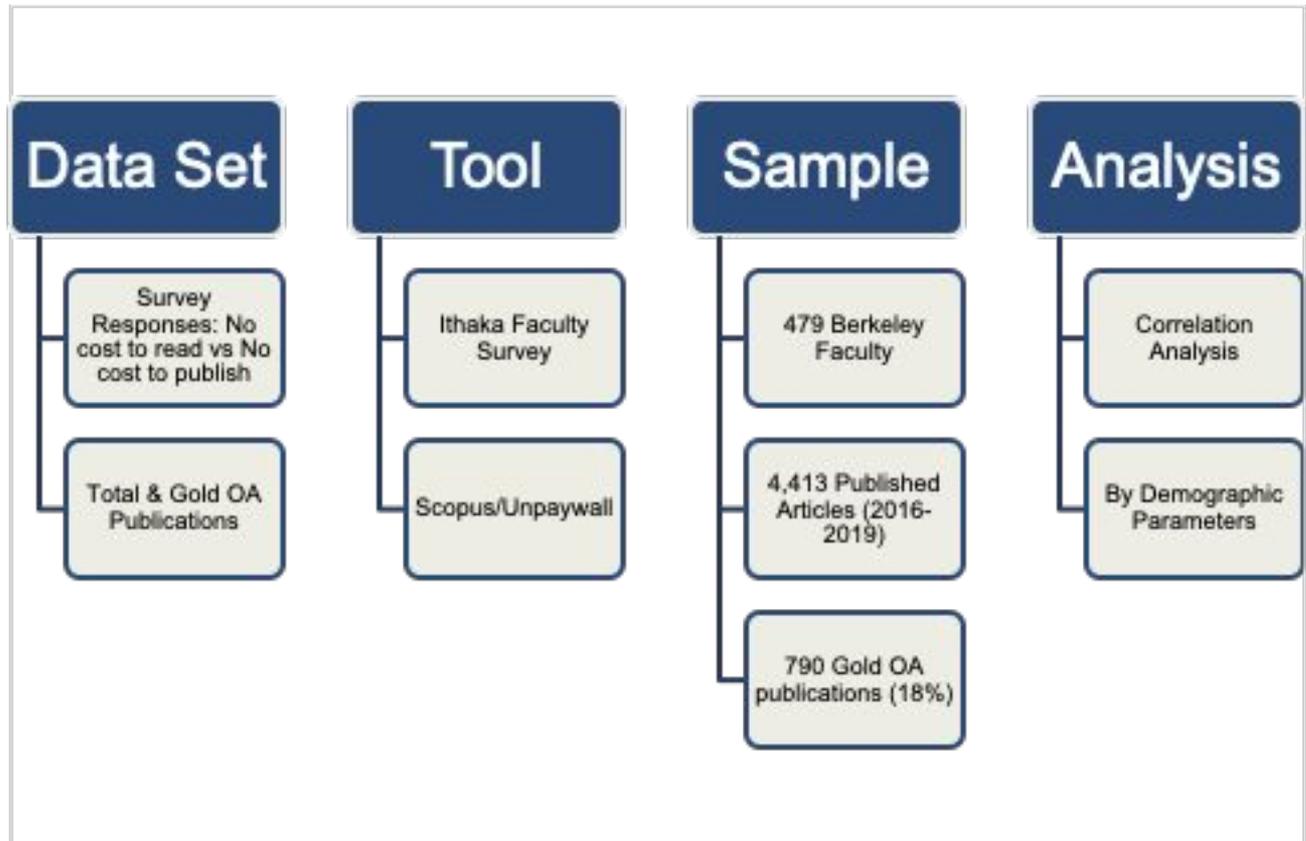
*OA Status Definition by Unpaywall:

Gold articles: published in fully OA journals; Closed: non-OA articles;

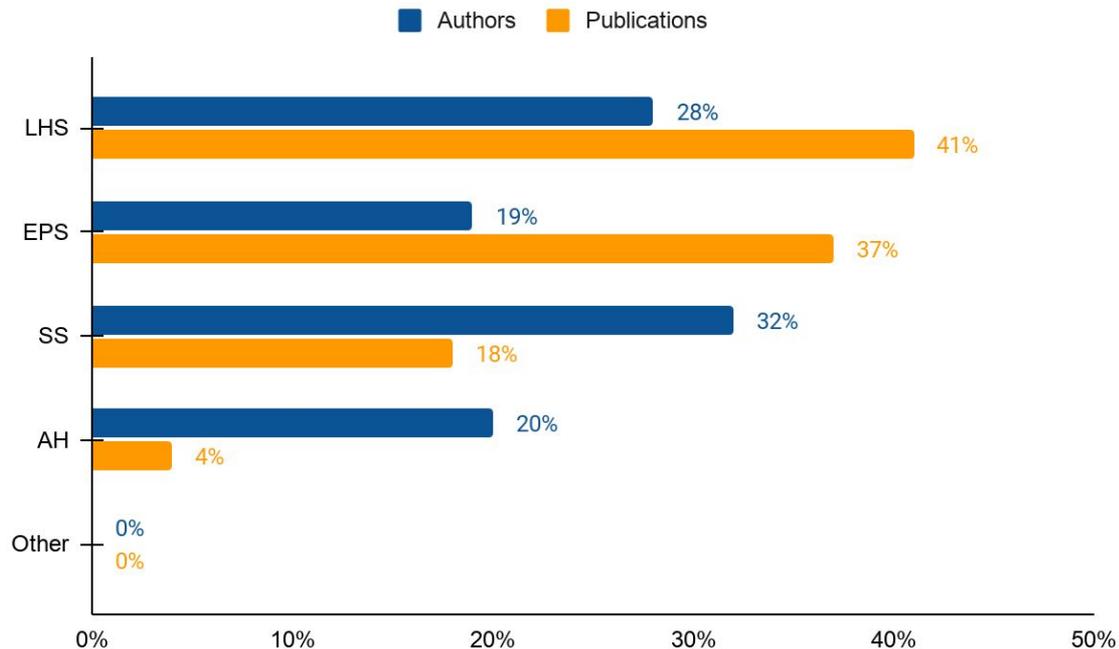
Green articles: OA in a repository but closed on the publisher website;

Hybrid articles: freely available in a non-OA journal on the publisher website under an open license;

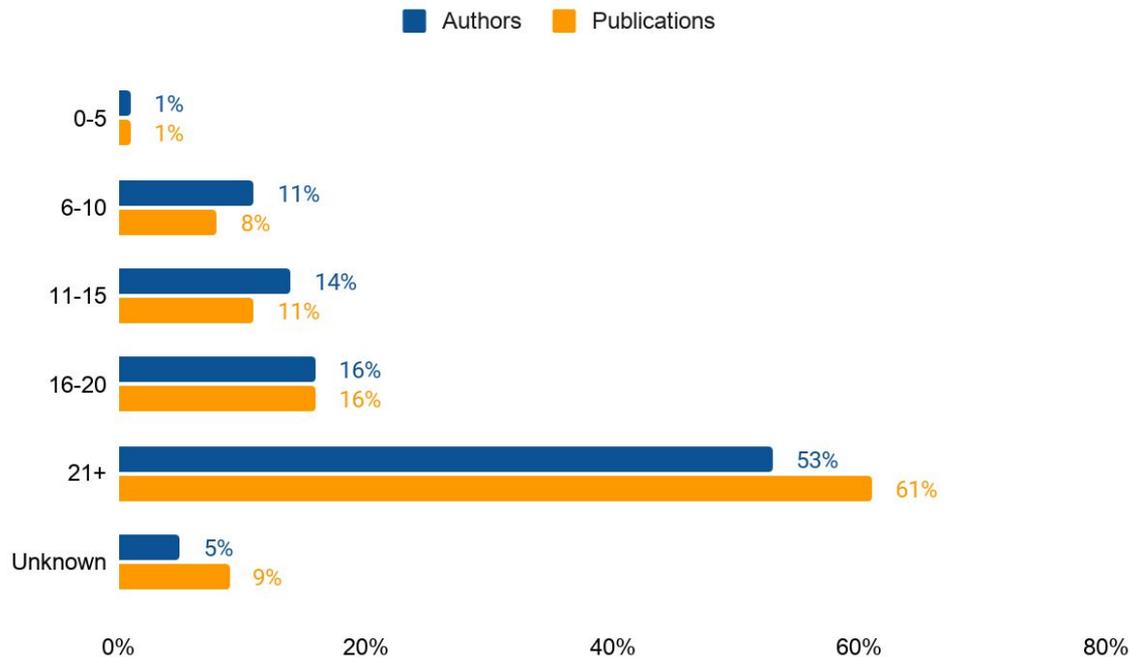
Bronze articles: freely available on publisher websites but no license was found.



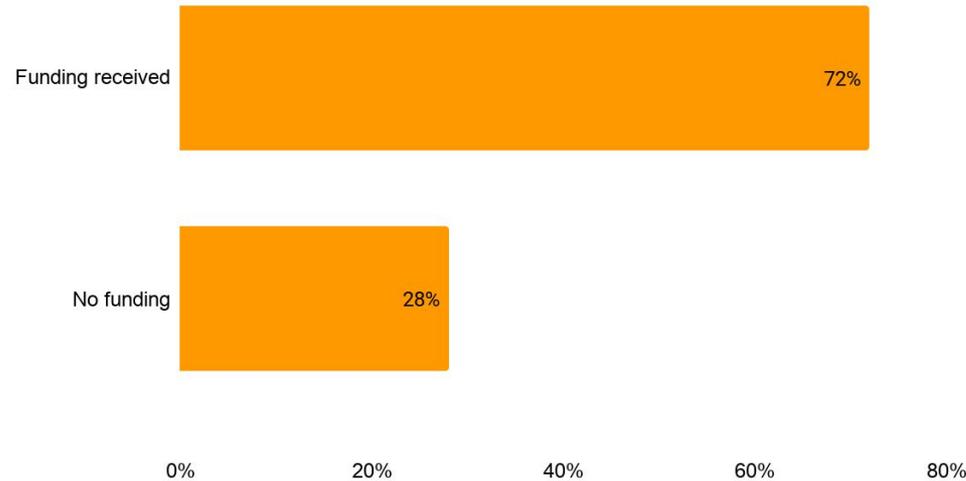
Sample Distribution by Subject Groups: Authors & Publications



Sample Distribution by Years of Experience: Authors & Publications



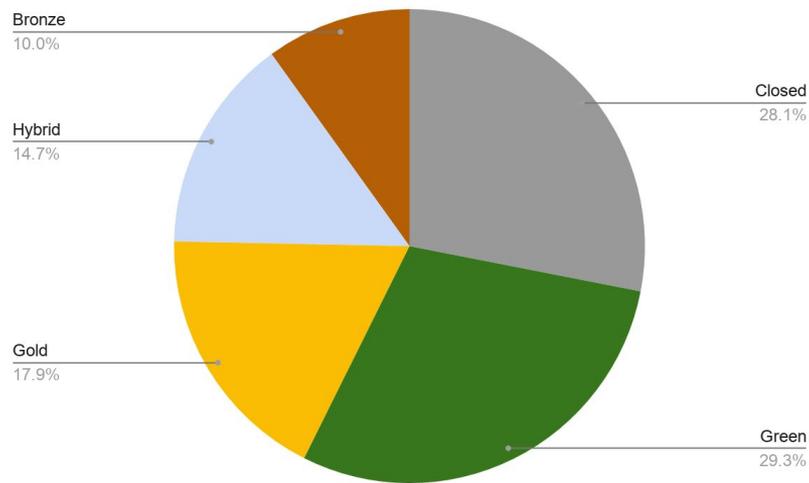
Sample Distribution by Reported Research Funding: Publications



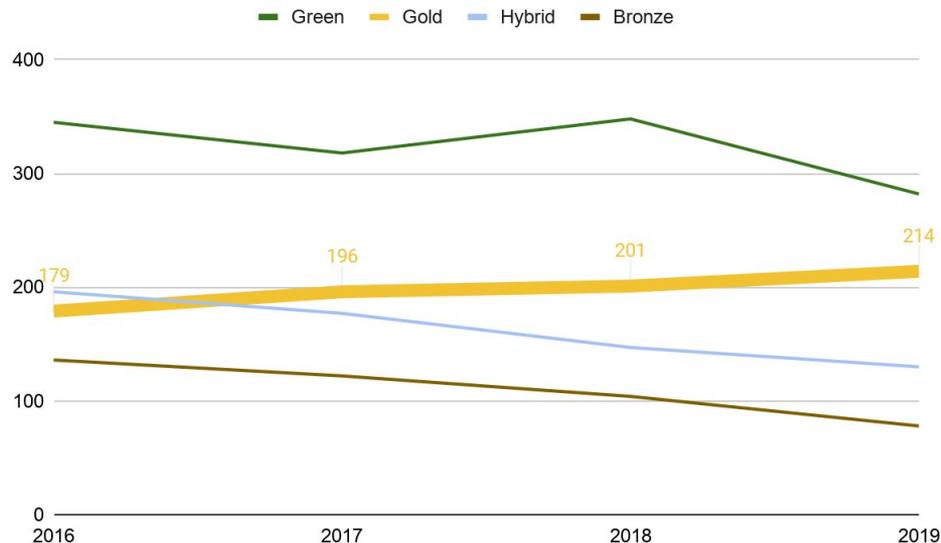
Note: In March 2021, Scopus informed us that their process to extract funding information from acknowledgments in publications was revised in early 2018 and it works best on documents added to Scopus beginning in 2018. Therefore, we limited the funding analysis to 2018 and 2019 publications only.

Large OA Output at Berkeley with Gold OA on the Rise

Berkeley Authors Publication Output by OA Category: 2016–2019

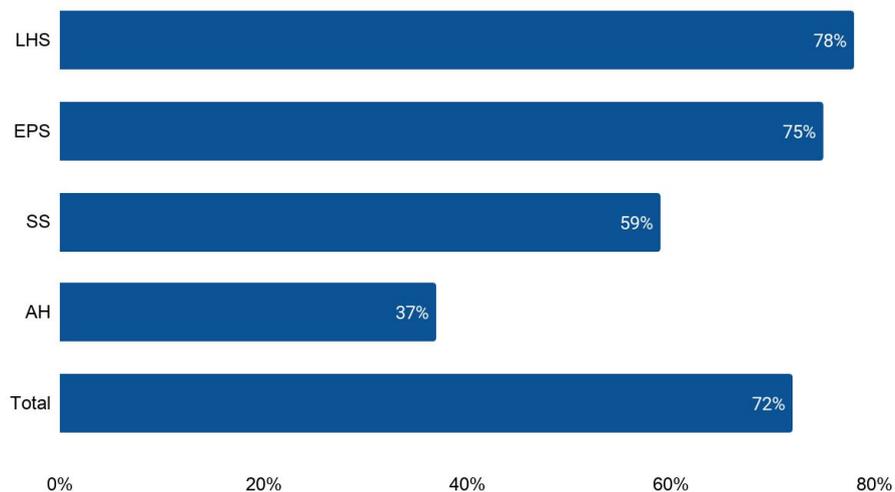


Gold OA Articles Published by Berkeley Authors: 2016–2019

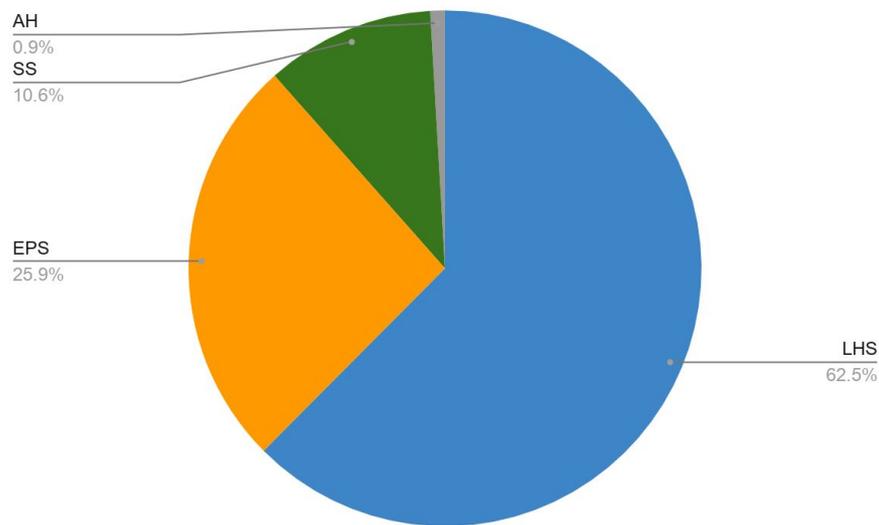


Science Disciplines: Major Drivers for Gold OA

Berkeley OA Article Percentages by Subject Groups: 2016–2019



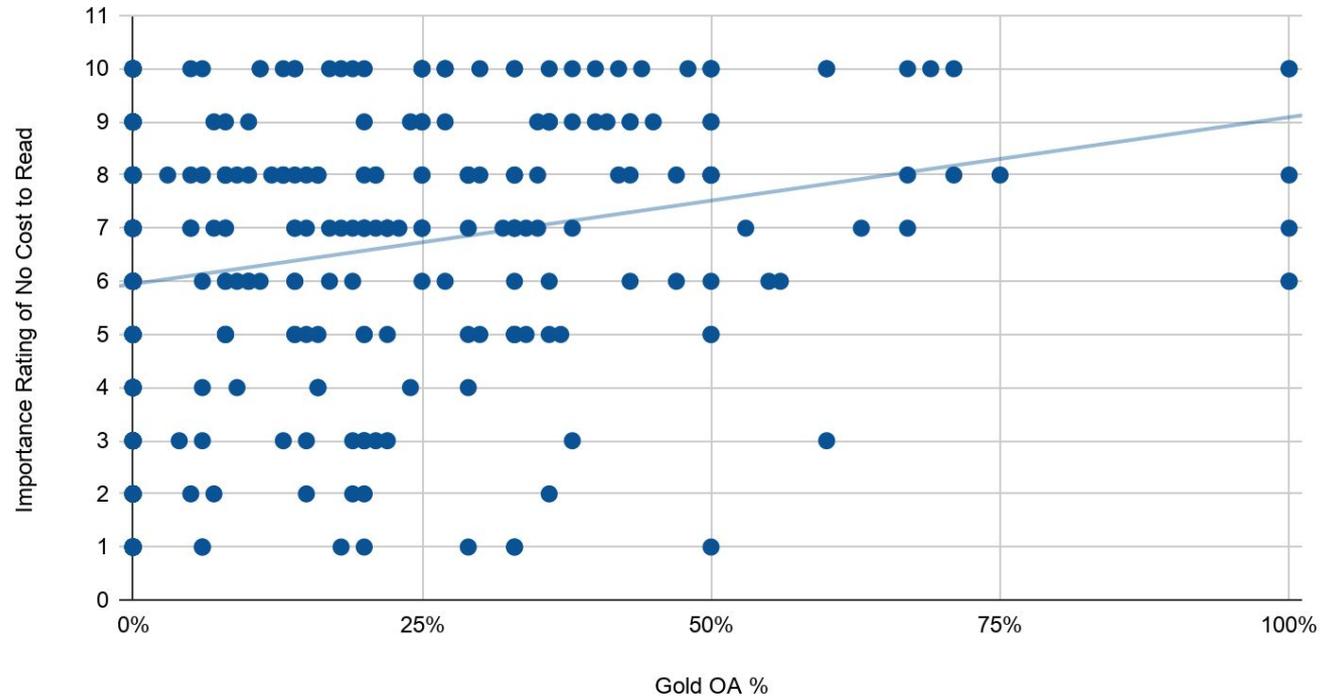
Berkeley Gold OA Article Distribution by Subject Groups



The More Gold OA Articles Published, the More Support for OA Publishing

Q: When selecting a journal to publish in, how important is that the journal makes its articles freely available on the internet so there is no cost to read?

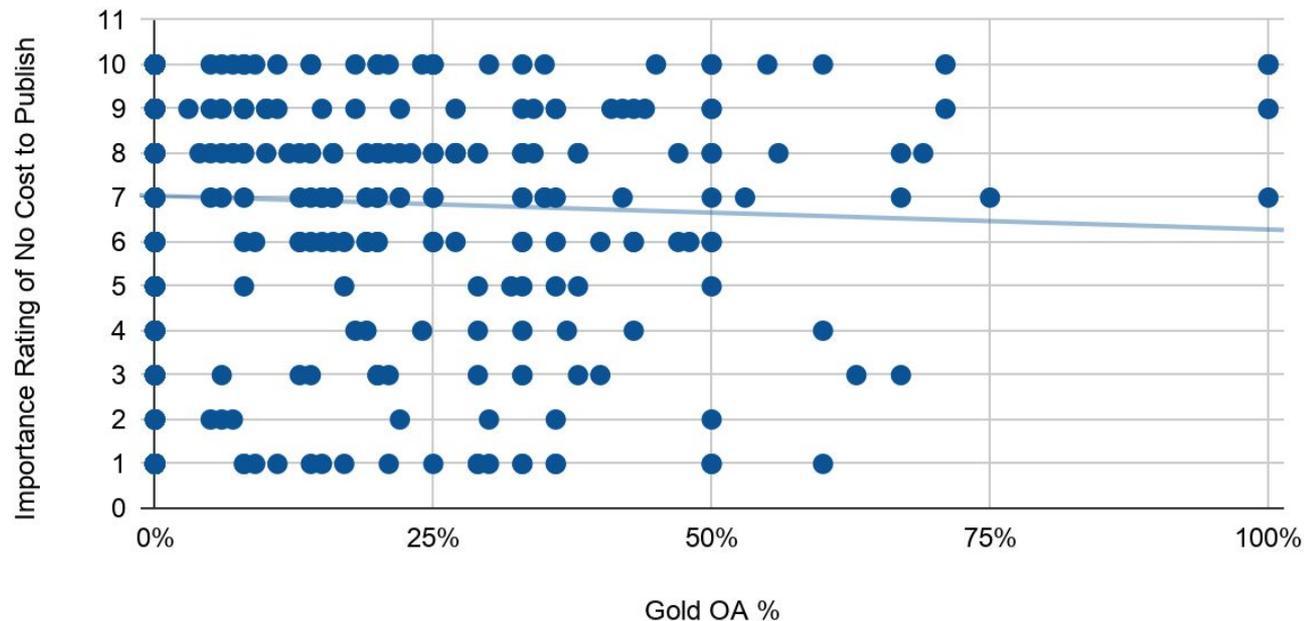
Correlation between Gold OA% and the Importance of No Cost to Read



Not Paying APCs is Important to UCB Authors

Q: When selecting a journal to publish in, how important is that the journal permits scholars to publish articles for free (without paying APCs)?

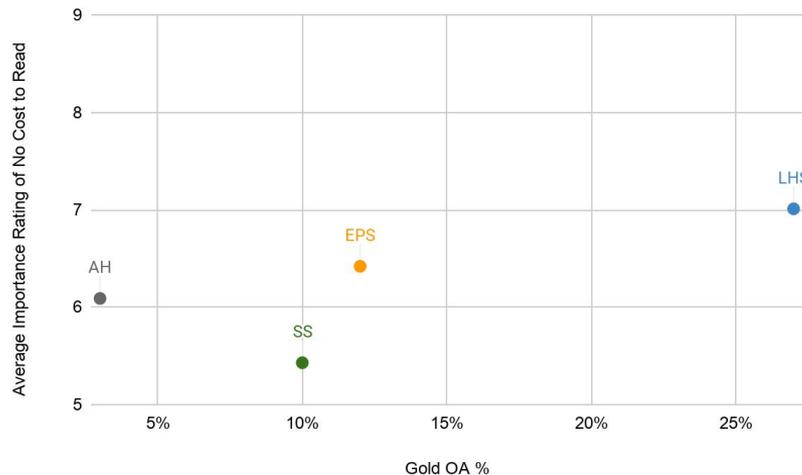
The Correlation between Gold OA % and the Importance of No Cost to Publish



Disciplinary Differences Impact Behavior & Perception

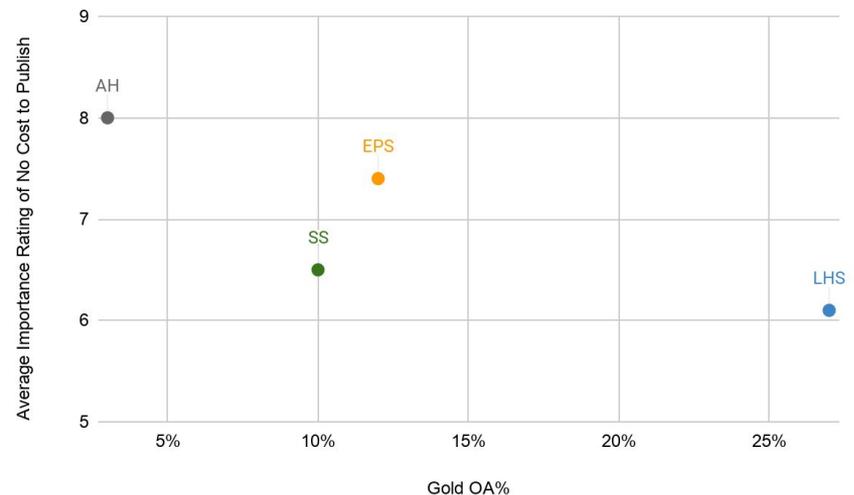
Subject Groups:

Average Ratings of the Importance of No Cost to Read vs. Gold OA Publishing



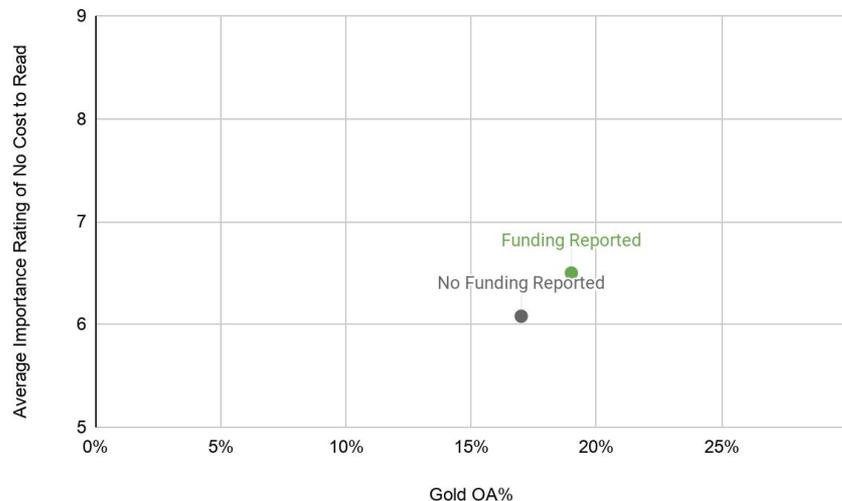
Subject Groups:

Average Ratings of the Importance of No Cost to Publish vs. Gold OA Publishing

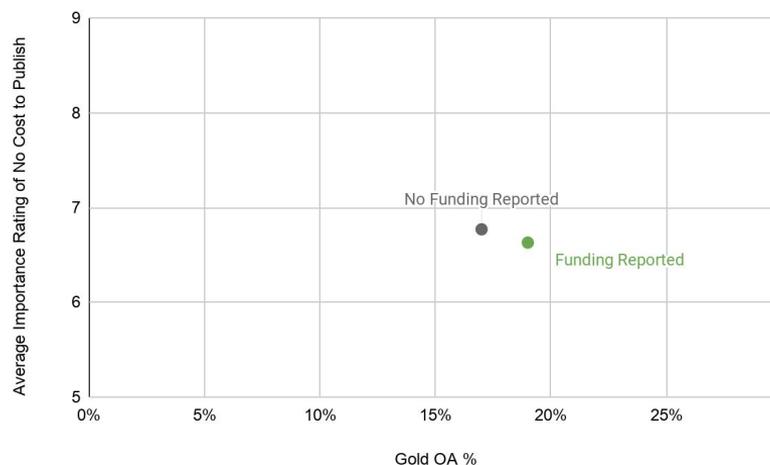


Funding Impact on Behavior & Perception

Reported Research Funding:
Average Ratings of the Importance of No Cost to Read vs. Gold OA Publishing



Reported Research Funding:
Average Ratings of the Importance of No Cost to Publish vs. Gold OA Publishing



Limitations

- UCB authors were not necessarily the first author and may or may not have made the journal selection. Also, their funds may or may not have gone to the article's APC.
- Our sample was biased toward the sciences as a result of using Scopus, since >70% of journals in Scopus are classified under science.
- Ideally we could have separated out Hybrid OA where authors pay APCs to make articles immediately available.
- Depositing articles in a repository at the time of publishing and making articles available through Academic Social Networks are good demonstrations of OA intent that are not captured in our study.

How our study fits in

- Our study was small compared to large samples used to study patterns of OA publishing, and large surveys asking about OA attitudes and publishing preferences.
- It was unique in how we linked attitudes and practices for individuals, and in our focus on one institution, UCB.
- Despite the smaller scale, our results generally concurred with other studies.

OA is growing

- Studies show support for OA and OA publishing are both growing.
- Our results suggest UCB above average in both, with Gold OA rising.
- 3 recent large studies¹ used Unpaywall data for articles from similar dates and found total levels of OA <50%; our study found 72%.
- UC's Open Access policy likely contributes to high Green OA and Gold OA, as does the high level of research funding with funder mandates, especially in STEM disciplines.

1. Olejniczak, A. J., & Wilson, M. J. (2020). Who's writing open access (OA) articles? Characteristics of OA authors at Ph.D.-granting institutions in the United States. *Quantitative Science Studies*, 1(4), 1429–1450.

Bosman, J., & Kramer, B. (2018). Open access levels: A quantitative exploration using Web of Science and oaDOI data. *PeerJ Preprints*.

Piowar, H., Priem, J., Larivière, V., Alperin, J. P., Matthias, L., Norlander, B., Farley, A., West, J., & Haustein, S. (2018). The state of OA: A large-scale analysis of the prevalence and impact of Open Access articles. *PeerJ*, 6.

OA is not a top priority for authors

“[a]uthor motivations are multifaceted and complex”¹

- Despite UCB faculty’s above-average support for an OA publishing system, whether or not a journal is OA still ranks below other characteristics like wide circulation, reputation, and fit.
- However, UCB researchers who publish more Gold OA feel more positive about OA – and likely the reverse.
- APCs may be a barrier – many authors are concerned about APCs, whether or not their research is funded. Libraries can help, both with dedicated APC funds and transformative publishing agreements.

1. Heaton, R., Burns, D., & Thoms, B. L. (2019). Altruism or self-interest? Exploring the motivations of open access authors. *College & Research Libraries*, 80(4), 485.

What's next?

- We'll pursue other methods to assess OA scholarly output for AH & SS faculty so that we can relate attitudes and practices for those groups.
- We could also use our Scopus data to look at disciplinary differences within the STEM subject groups.
- Authors of funded articles still request Library APC funds, so we could explore author practices around using their research funds for APCs.
- UC has recent transformative publishing agreements with 8 publishers, and is renegotiating its Elsevier contract. Going forward, we will monitor what impact this has on OA levels at UCB.