Open Access to academic books creates larger, more diverse and more equitable readerships

Drawing on findings from one of the largest surveys of its kind to date, **Mithu Lucraft** demonstrates how Open Access to academic books has resulted in significantly larger and more diverse readerships for these books. As governments globally and in the UK reassess their commitments to OA monographs, she argues the findings make a compelling case for resolving the longstanding funding issues surrounding opening access to academic books.

One of the core tenets of making all research openly available is that it enables more people to benefit from the work. That means they can find the work, they can use, reuse, and build upon it. In looking for such evidence for books, we set out to better understand the geographic distribution of usage for scholarly monographs published immediately open access (OA); can we see that OA books are read more than non-OA titles, and where does that readership come from? Does opening access to books extend their reach and impact to those readers who would not otherwise have had access to scholarly monographs?

Why focus on readership? We knew from previous surveys that reaching beyond the standard research audiences for academic books is a high priority for authors. In our 2019 white paper, The Future of OA Books, we found that for authors who had previously published OA, reaching authors in low and lower-middle-income countries was also a particular concern. Similarly, we know that for funders who have supported OA books, there is a desire to see that research achieve global impact, and be read as widely as possible. It might seem intuitive that OA reaches more readers, but evidence – especially for books – has been limited, and to really strengthen our argument, we need to know *how* much OA benefits books? Not just that it achieves more downloads, but how many more? And not just reaching more countries, but how many more? Which ones?

In 2020, we partnered with Collaborative Open Access Research & Development (COARD), based at Curtin University, to explore the effects of OA on the geographic reach of scholarly books. The analysis is based on a dataset of almost 4,000 Springer Nature books, including 281 OA books. To our knowledge, this is the biggest study of its kind, made possible by the fact that Springer Nature has published more than 1,000 OA books over seven years, and as such we can make an extensive resource available to draw on for analysis. To ensure we're making this evidence widely available, we've released a joint white paper and a preprint presenting our findings, and a research article is currently being finalised by the Curtin team.



So what did we find? Given that we had some previous analysis of Springer Nature OA books from our 2017 white paper, The OA Effect, we had anticipated that there would be an uplift in usage and citations for our OA books, compared to the non-OA set. The COARD analysis not only supports our earlier findings, they showed an even more robust effect for downloads, the geographical diversity of these downloads, and for citations. Downloads of OA books in the study were on average 10 times higher than those of non-OA books, and citations of OA books were 2.4 times higher on average.

For every category of book in the sample, we saw a usage advantage. That is, the effect was seen for all disciplinary groupings, in HSS and STM, across all three years of publication in the study, and for all types of book (monographs, edited collections, and mid-length books). That effect is also seen for every month after publication. For all 40 months in the analysis, OA books recorded significantly more downloads than their non-OA counterparts, so not only do OA books have a higher number of downloads to begin with, this effect is persistent over time.

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Turning to the geographic diversity of usage, although both non-OA and OA books have international and global reach, again we found OA books in the study had a greater proportion of usage in a wider range of countries. For non-OA books, usage was seen in 125 countries, reflecting the availability of Springer Nature's eBook packages around the world. But, OA books were downloaded in 61% more countries than non-OA books. There is also evidence that OA books see higher usage in low-income and lower-middle-income countries, including a high number of countries in Africa. For both OA and non-OA, the highest levels of usage are seen in the USA, UK, Germany and mainland China. Usage of OA books was identified in a wide range of countries that recorded zero usage of the non-OA books in the data set. Of these countries where only OA books recorded usage, over twenty were from Africa.

We can provide a more quantitative measure of how OA books increase the geographic diversity of readership by examining disparity amongst country usage. A disparity index is a measure of the diversity of usage. That is, how much usage deviates from the situation where all countries show even usage. The Gini coefficient is a disparity index that is often used to define levels of income inequality. A lower Gini coefficient indicates more diverse usage; that is, lower inequality in usage. For the corpus as a whole and for every category, the median Gini coefficient of OA books is lower, meaning that the geographical usage of OA books is more diverse (i.e. less unequal).

Another interesting finding is that OA books which contained the names of countries and regions in their title generally showed enhanced usage in those regions, with the effect most apparent for Latin America and Africa. OA books that mentioned an African country or region in their title achieved five times more downloads. OA books that mentioned a Latin American country or region in the title achieved 100 times more downloads. So not only is OA enhancing usage in countries that are under-represented in global scholarship, it is also enhancing the global usage of scholarship about those countries.

These findings are compelling. COARD's analysis shows that OA is making a substantial difference to the reach of books and their authors. Being able to demonstrate the benefits of OA for books can be powerful in changing attitudes. For authors who are considering whether to publish their books OA, the possibility of reaching a broader and more diverse readership is an important factor. For funders, too, who are considering whether to expand OA policies and funding for books, evidence of the benefits of OA can be critical in determining what financial support they are prepared to give. In the UK, with the UKRI policy expected this year, and expectations that cOAlition S will release guidance for monographs by the end of 2021, we hope this research provides encouragement to funders in supporting pro-OA policies. We also hope that our findings encourage more authors to choose OA for their work.

This article summarises a presentation given at the <u>Researcher to Reader Conference</u> in February 2021. Slides can be found here.

Note: This article gives the views of the author, and not the position of the Impact of Social Science blog, nor of the London School of Economics. Please review our <u>Comments Policy</u> if you have any concerns on posting a comment below.

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