MAPS Medical® Affairs Professional Society

Welcome!

MAPS Digital Science Webinar: How Do Publications Find Their Audience?

Presenters

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Digital Science

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- The following faculty members do disclose the noted financial relationship – Mike Taylor, Digital Science

Educational Objectives

This session will provide a learning opportunity for our audience by:

Understanding the limitations of current publication and journal metrics; the future of impact metrics and how these can be used in journal selection

The history and current state of journal metrics

The purpose of journal metrics

- The original journal metric was designed by Eugene Garfield in the early 1960s
- The purpose of the impact factor was to measure the impact of a journal – not to say whether the articles within were good, or whether the researchers were successful
- It's a lagging, retrospective metric, not one that describes the current performance of a journal
- Neither can it be used to predict performance of individual papers
- Several other journal metrics exist: SNIP (calculated by CWTS in Leiden, NL); SJR (Scimago); CiteScore (Elsevier, but open)
- Generally, the maths behind these three is better, and SNIP/SJR are easier to use (thanks to normalisation)

- Current scientometric standards would also say that journal metrics can't be used as a proxy for other forms of impact: a high metric value doesn't necessarily translate to social reach, or clinical translation via CDGs

- **How is the JIF now being used, and who is in the driving seat?**

The origin of journal metrics

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Journal metrics, design decision

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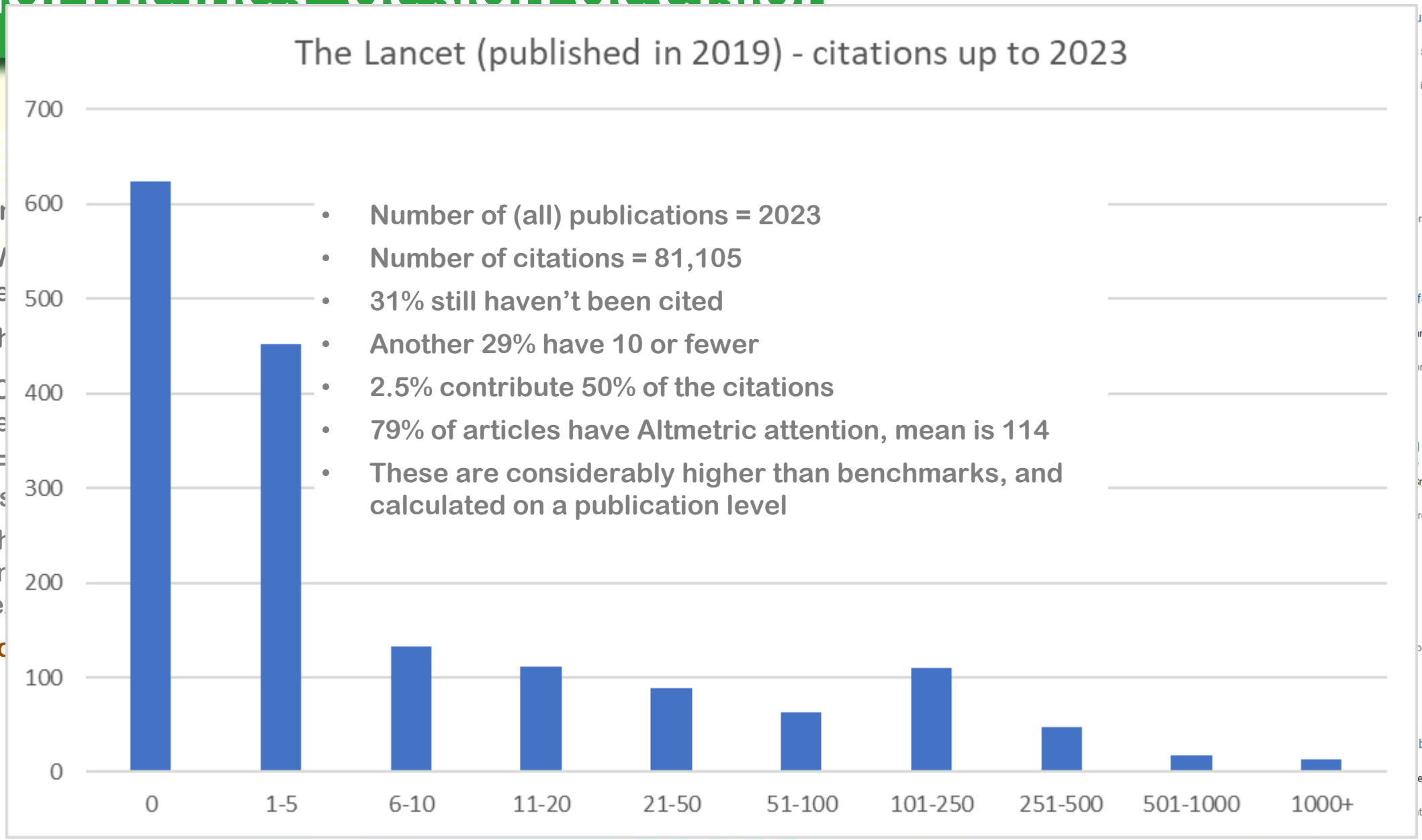
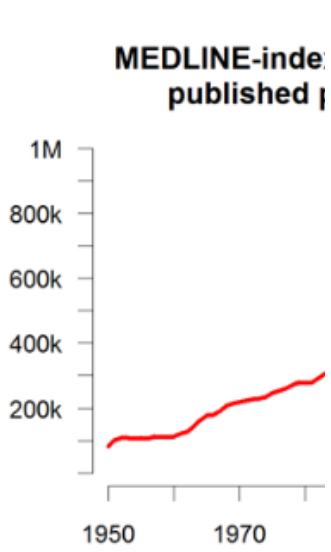


altmetrics: a manifesto

NO ONE CAN READ EVERYTHING. We rely on filters to make sense of the scholarly literature, but the narrow, traditional filters are being swamped. However, the growth of new, online scholarly tools allows us to make new filters; these altmetrics reflect the broad, rapid impact of sc burgeoning ecosystem. We call for more tools and research altmetrics.

As the volume of academic literature explodes, scholars rel the most relevant and significant sources from the rest. Un scholarship's three main filters for importance are failing:

- Peer-review has served scholarship well, but is beginning to show its age. It is slow, encourages conventionality, and fails to hold reviewers accountable. Moreover, given that most papers are eventually published somewhere, peer-review fails to limit the volume of research.
- Citation counting measures are useful, but not sufficient. Metrics like the h-index are even sl review: a work's first citation can take years. Citation narrow; influential work may remain uncited. These narrow; they neglect impact outside the academy, and context and reasons for citation.
- The JIF, which measures journals' average citations p incorrectly used to assess the impact of individual art that the exact details of the JIF are a trade secret, and gaming is relatively easy.



at alternative metrics

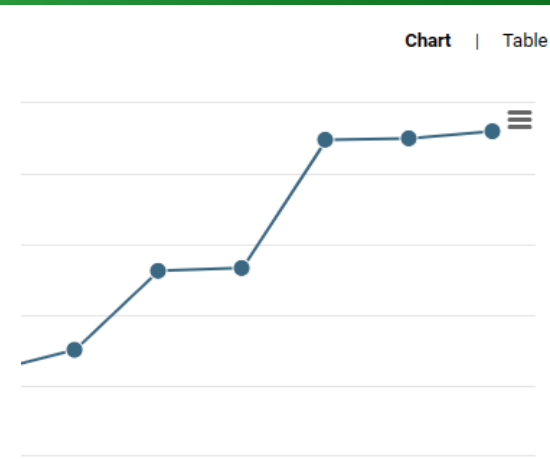
Road map for altmetrics

Speculation regarding altmetrics (Taraborelli, 2008; Neylon and Wu, 2009; Priem and Hemminger, 2010) is beginning to yield to empirical investigation and working tools. Priem and Costello (2010) and Groth and Gurney (2010) find citation on Twitter and blogs respectively. ReaderMeter computes impact indicators from readership in reference management systems. Datacite promotes metrics for datasets. Future work must continue along these lines.

Researchers must ask if alt
Work should correlate betw
citations from altmetrics, a
Application designers shou
develop methods to detect
and reuse of data. Ultimate
from altmetrics to ask "hov

Altmetrics are in their early
given the crisis facing exist
communication, the speed,
worth investing in.

Jason Priem, University of N
Dario Taraborelli, Wikimedi
Paul Groth, VU University A
Cameron Neylon, Science and Technology Facilities Council



'Altmetrics' can consist of:

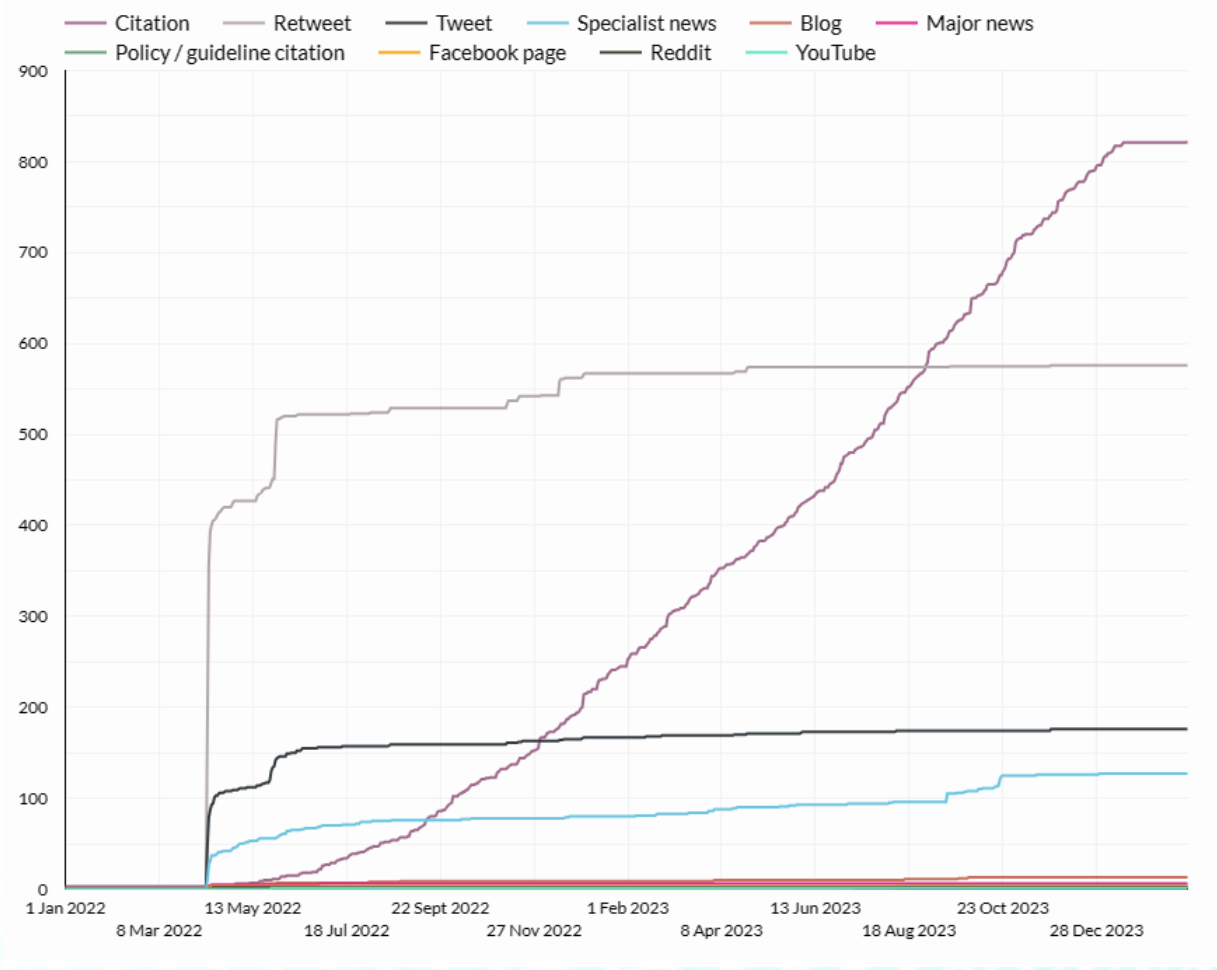
- News / blog coverage, video mentions
- Social network conversations
- Non-scholarly / grey citations: typically including Clinical Guidelines, Policies, Working papers, Conference Abstracts, Patents, Wikipedia (but some are treated as academic sources)
- Reading / sharing platforms, e.g. Mendeley
- Peer-review applications
- Sometimes includes page views / downloads
- They are heterog

Do you use alternative metrics? Which ones matter?

Why do we publish, and how do we choose journals?

Discussion points

- What did the audience say?
- Many organisations don't measure impact (let alone have KPIs)



How can we know if we're finding our audience

What is ‘success’ – as a publisher?

- 10-15 years ago, working in a publisher, we had:
  - Submission volume
  - Rejection rate
  - Good relationship with Editor in Chief / happy editorial board
  - Journal Impact Factor
  - Download / pageviews (just about)
  - When we did have other metrics, editorial boards didn’t really care
- Over the last ten years publishing has become squeezed, and publishers have many more journals to handle – fewer assistants and much lower travel rates: so other metrics have become hugely important – altmetrics and derived metrics
- And Open Access happened
- Statements on journal websites are probably not evidence-based

What is ‘success’ – as a data scientist (Mike)

But what is a ‘good journal’? Indicators I look for include:

- The journal is Open Access (it’s a rough rule of thumb that OA – on average – does twice as well as non-OA, like-for-like)
- That the editorial board are relevant, and publish in their own journal
- That the webpage is clear, easy to use, and you can find it in search engines
- That the journal produces good impact within the research area I’m working on

(Personally, I avoid journals that don’t make their abstracts available, whose websites you can’t navigate easily, that make vague claims on their websites, that clearly haven’t updated their editorial board – or have a large editorial board that don’t publish in it)

What is ‘success’ – as a KOL, an agency, a planner, a pharma?

- Acceptance?
- *Fast* acceptance ?
- Fast acceptance in a *good* journal ?
- Invitations to present the findings ?
- Enhanced reputation ?

- These are mostly ‘soft’ metrics, and often authors look for reputable brands – but as we’ve seen, a good brand doesn’t necessarily lead to hard impact: two thirds of articles in *The Lancet* (2019) have either no citations or less than 10 (although the altmetrics – news coverage, social media, ‘grey citations’ are good)

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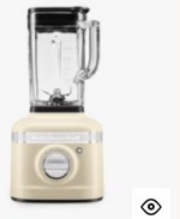

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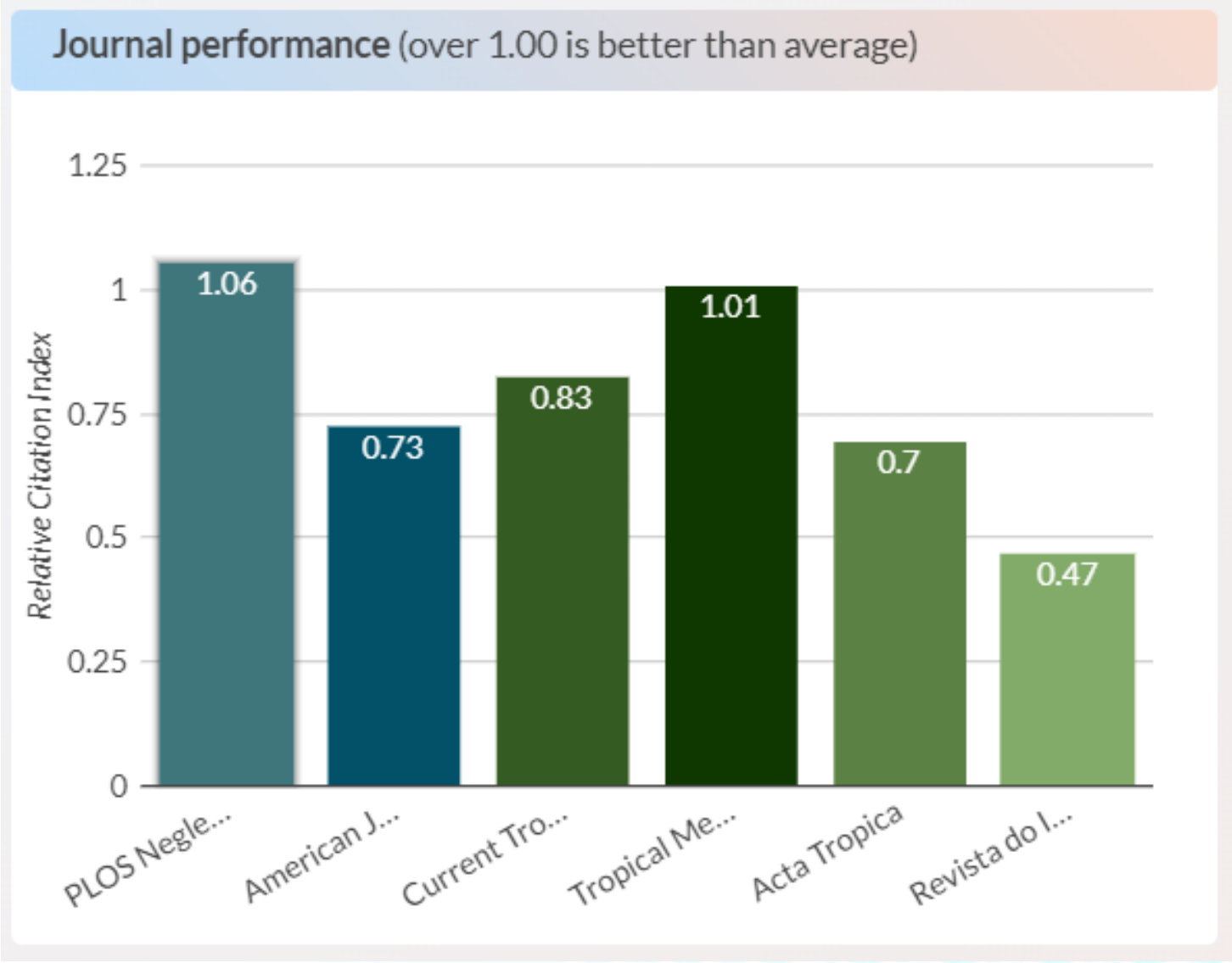
Blender Power 4
£165.00 – £170.00
42
3 year guarantee + 30 year motor guarantee

What data do we care about?

Data is mean citations within a TA per journal : mean for all articles in that TA



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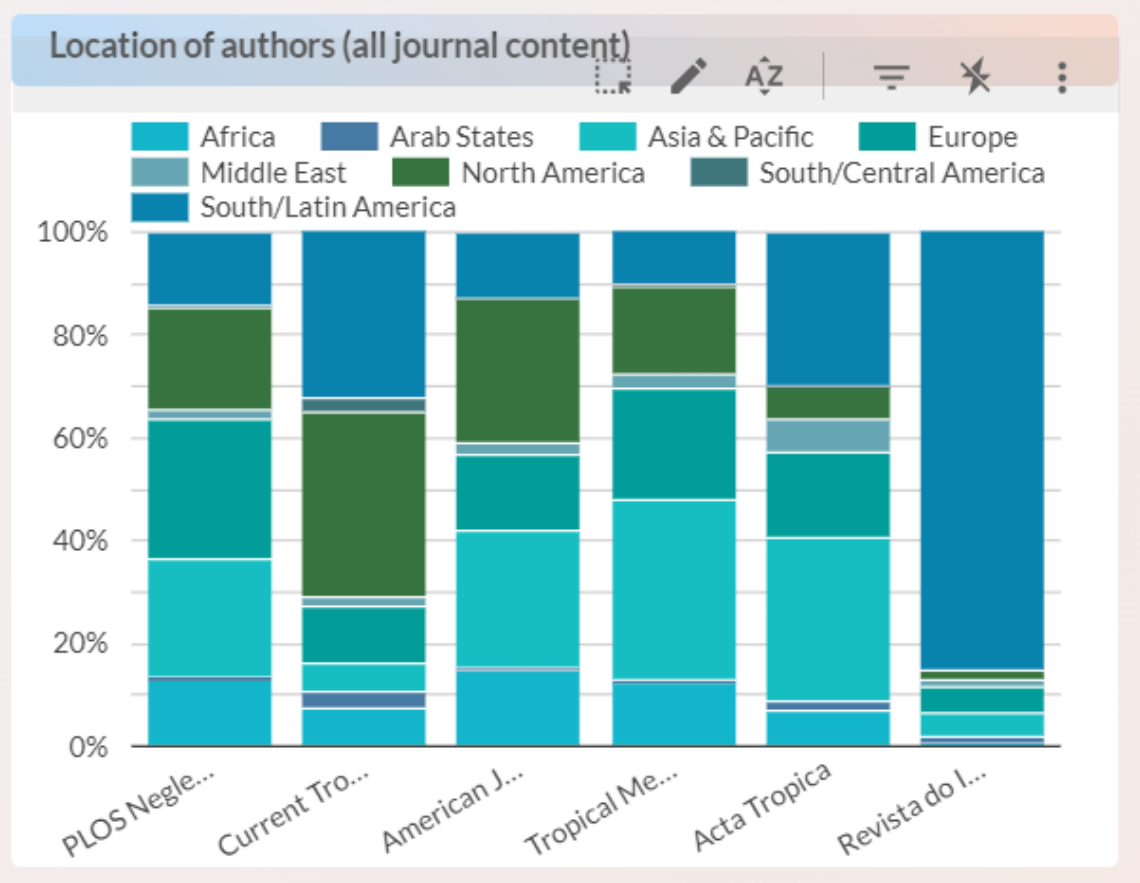
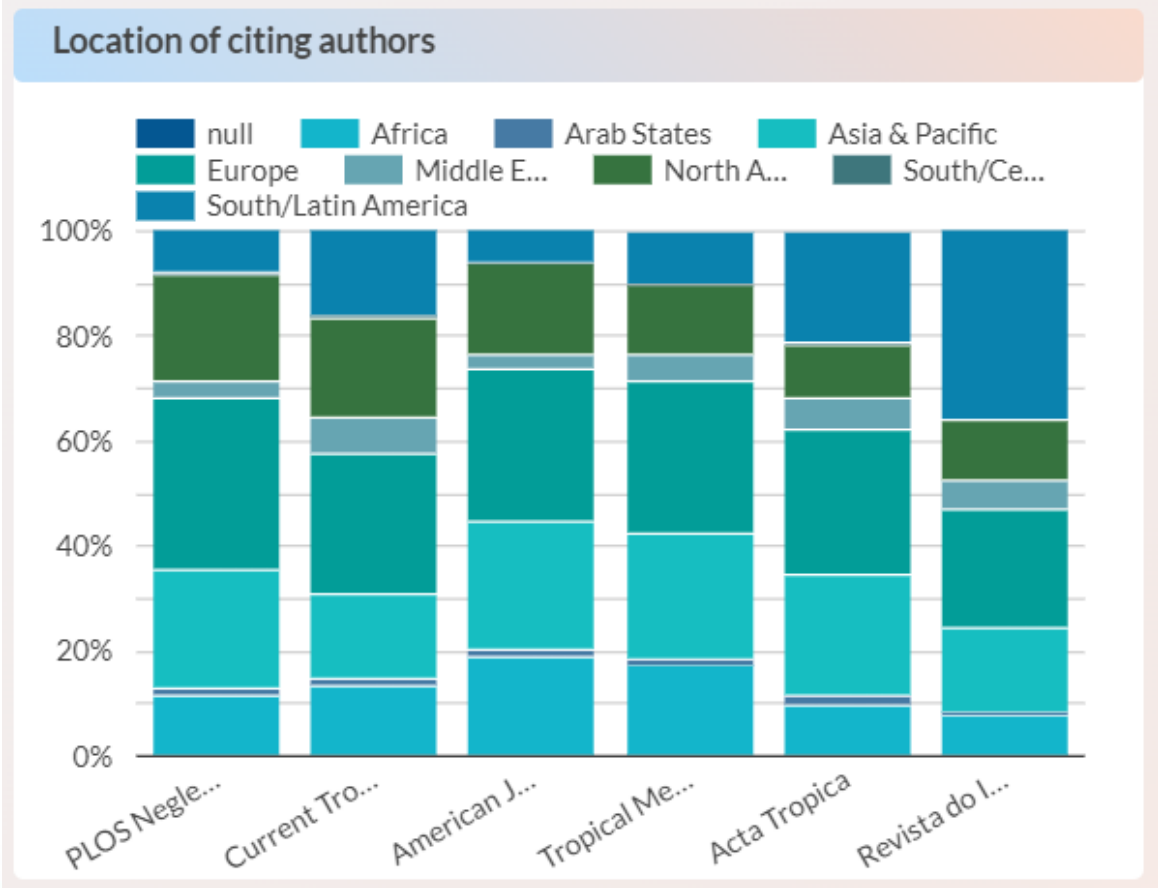
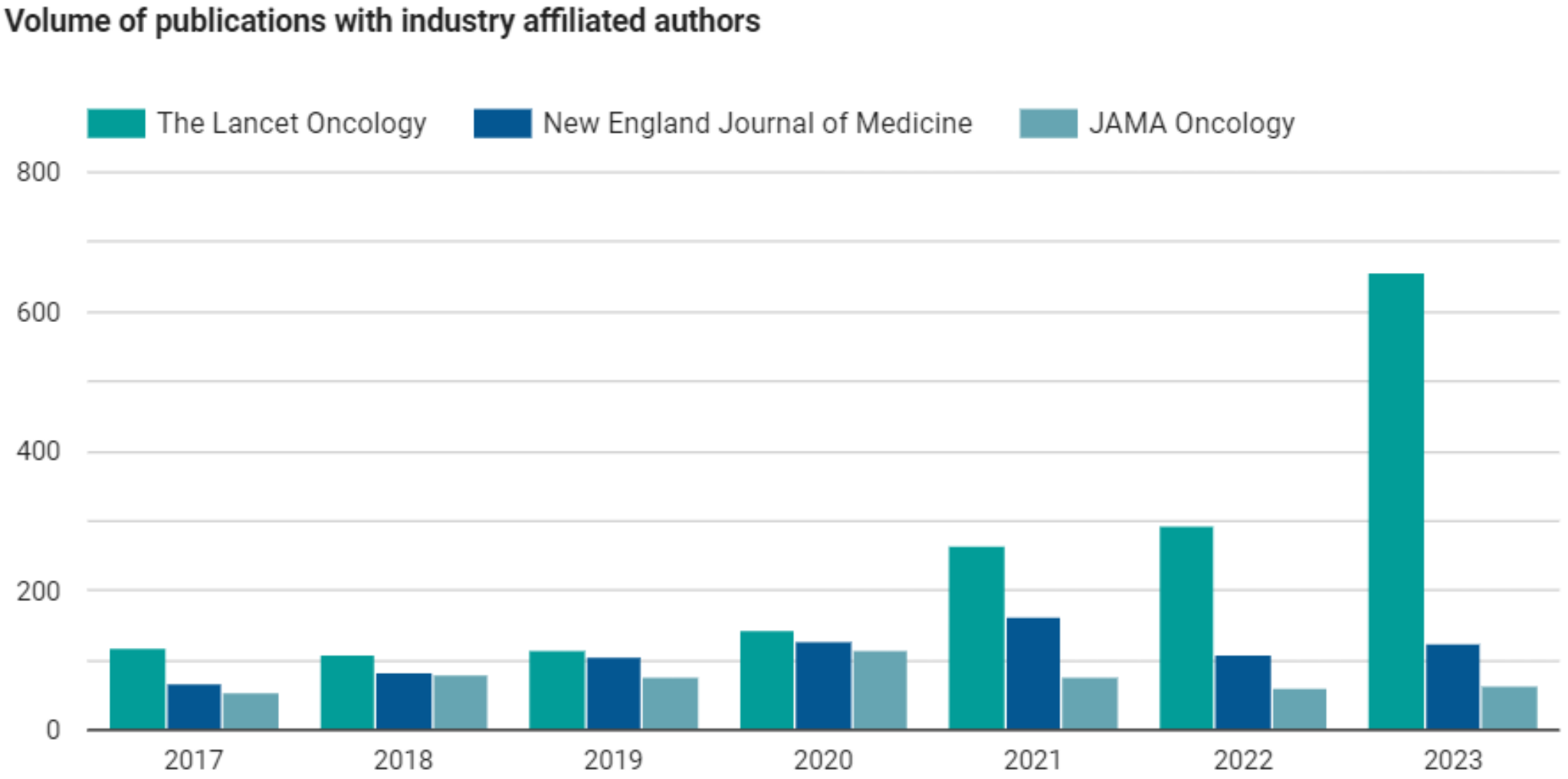




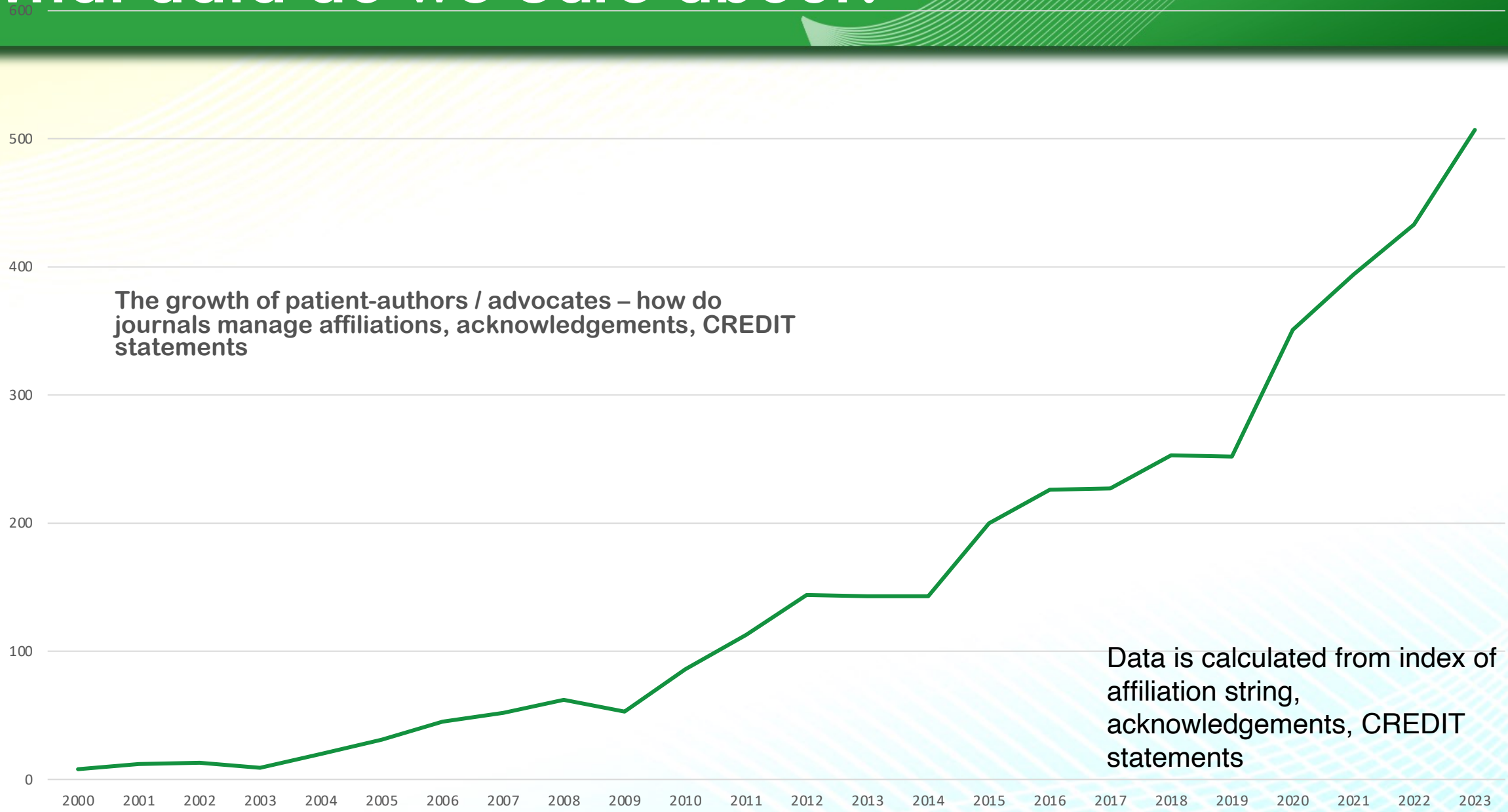
Data is drawn from the country of authors' institutions

What data do we care about?



Data is drawn from the authors' affiliation, mapped onto a taxonomy of organisations, e.g. ROR

What data do we care about?



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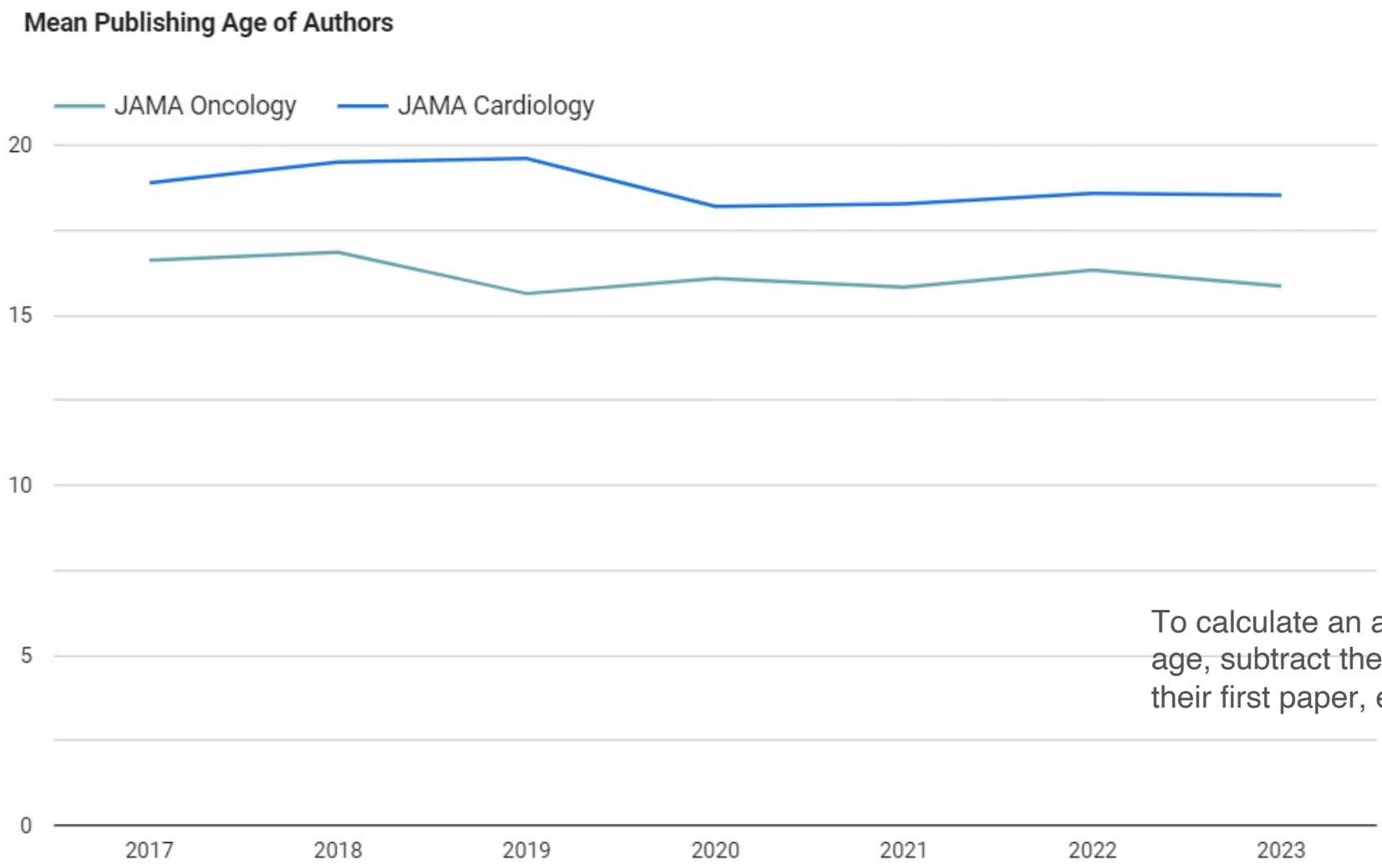
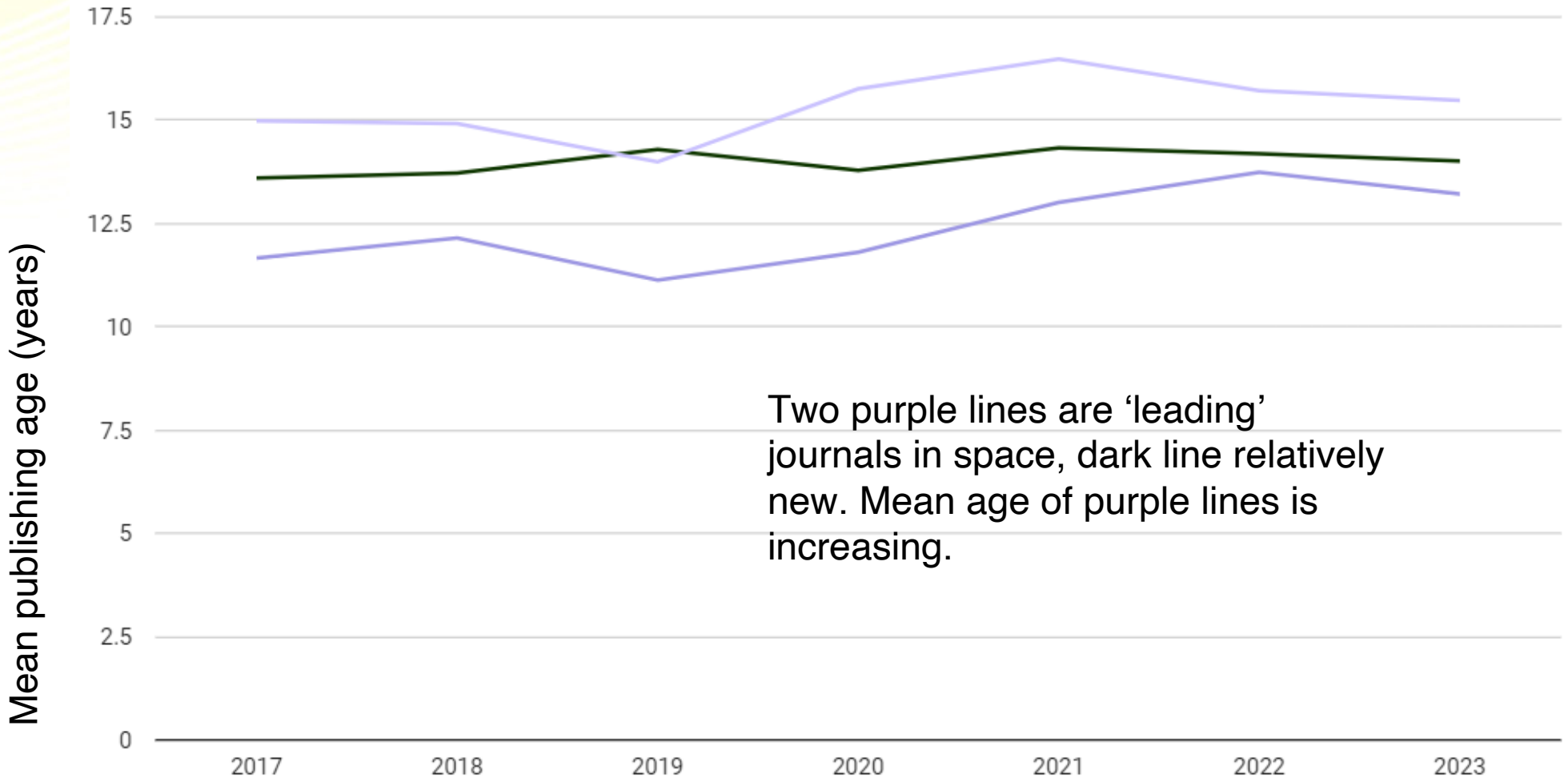


To calculate an authors' publishing age, subtract the current paper from their first paper, e.g. 2022 – 2001 = 21

What data do we care about?



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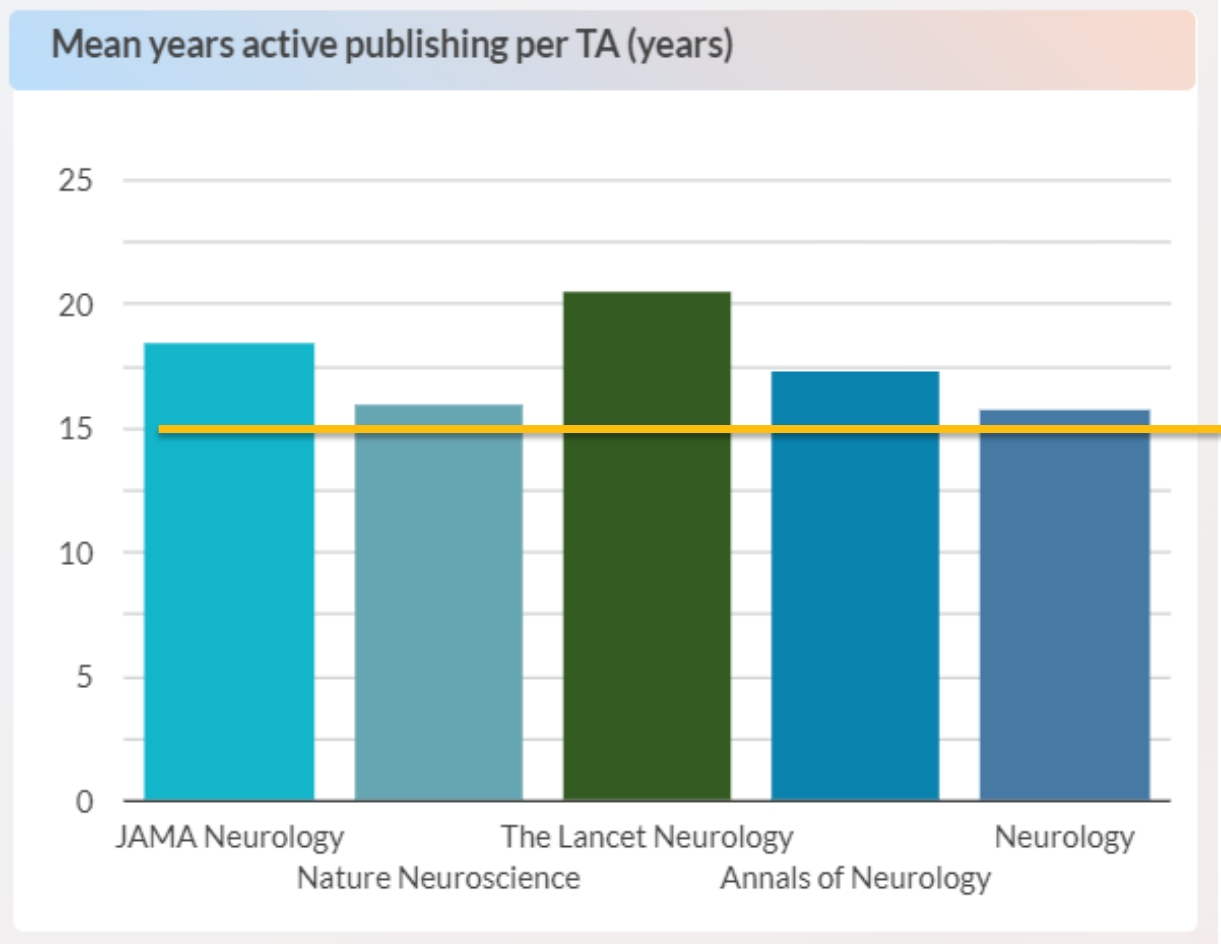

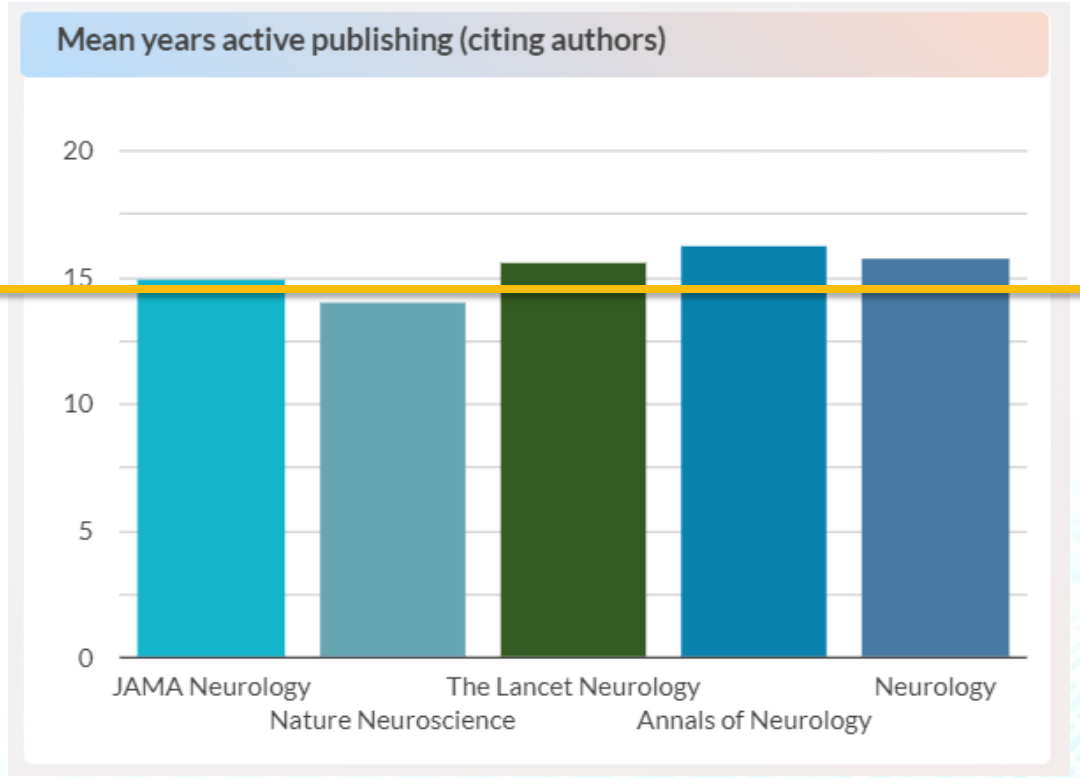

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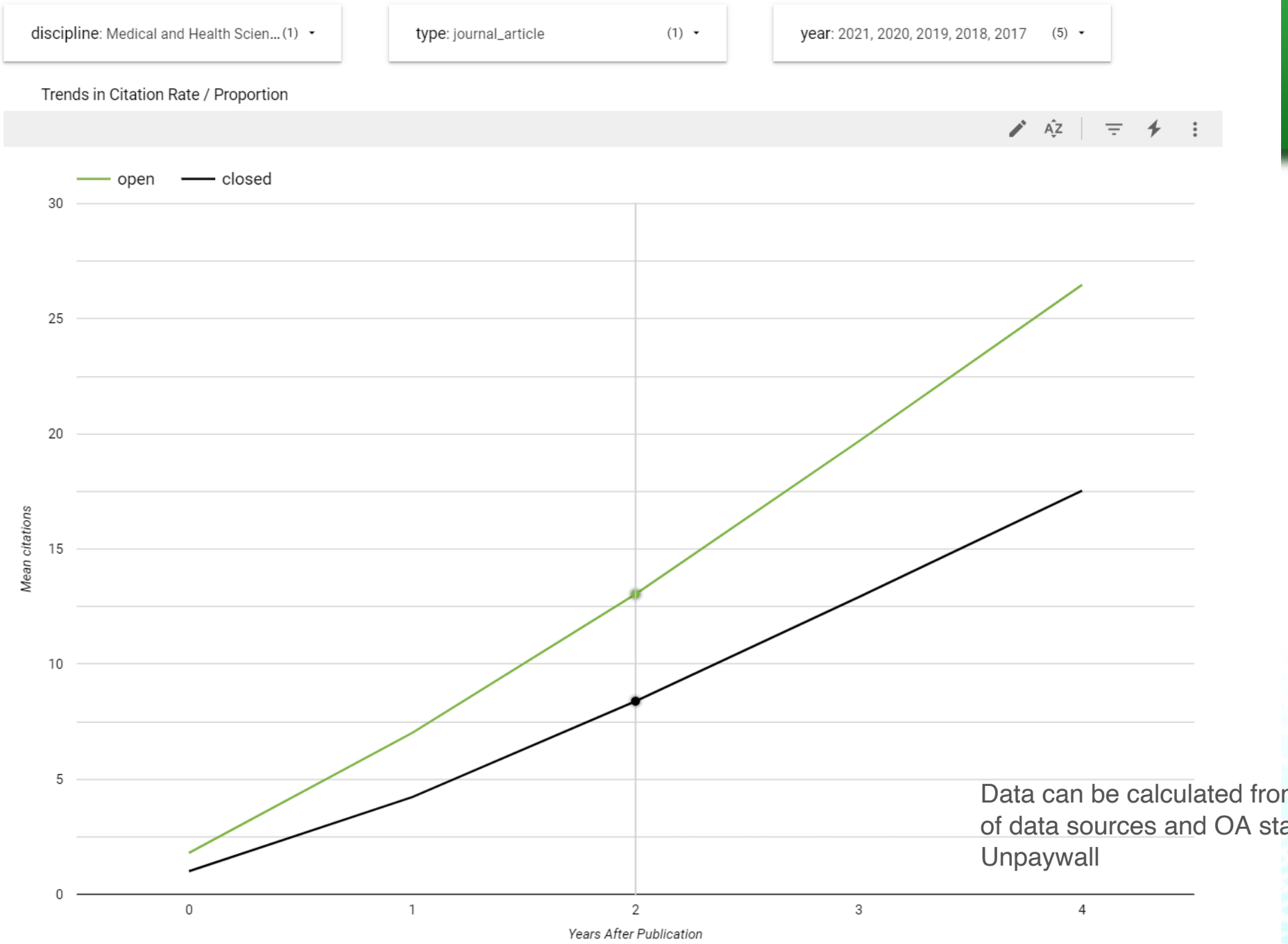


Data can be calculated from a variety of data sources and OA status from Unpaywall

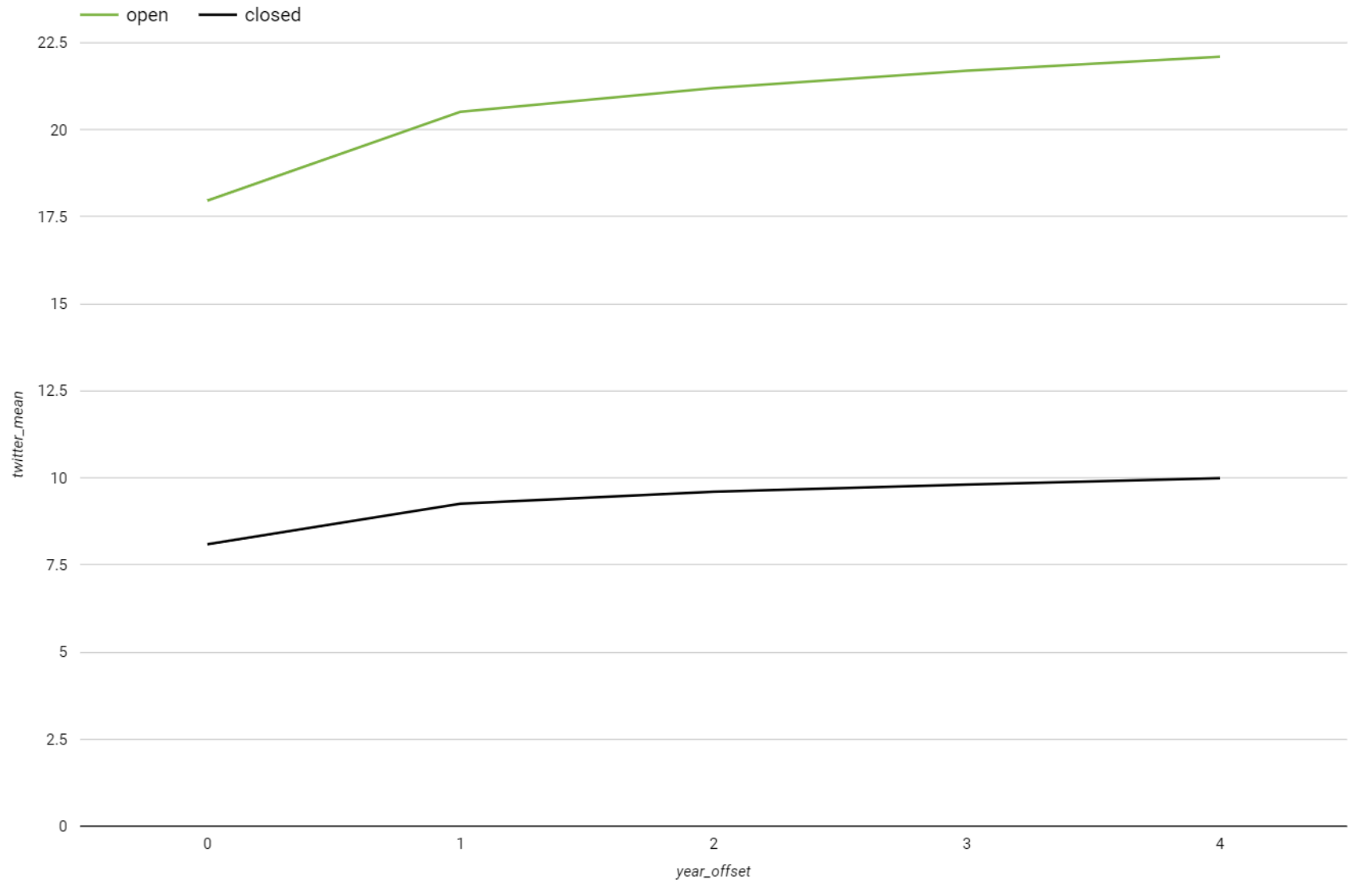
What

discipline: Medical and Health Scien... (1)

type: journal_article (1)

year: 2021, 2020, 2019, 2018, 2017 (5)

Trends in Twitter Mean / Proportion



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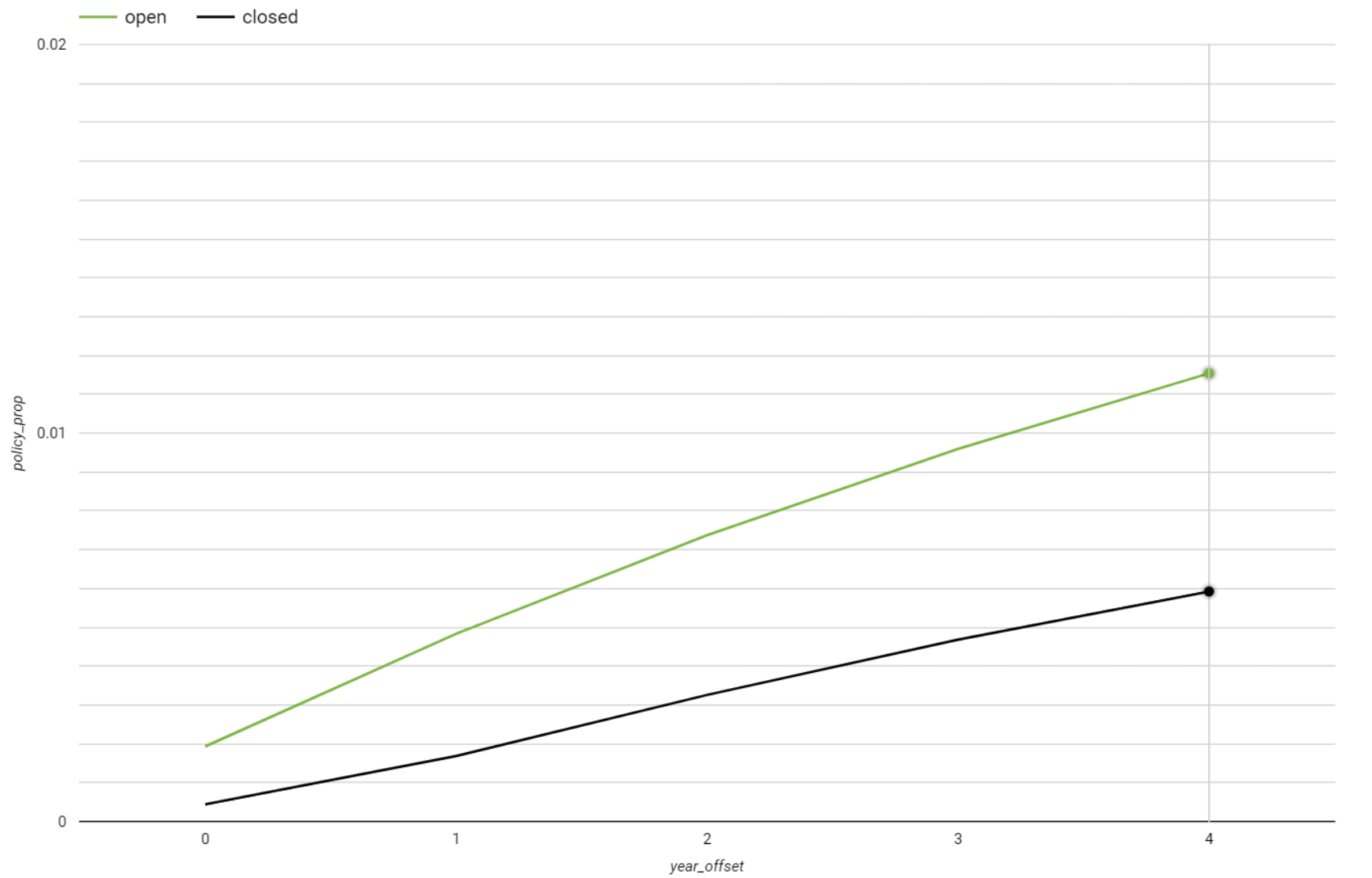
Trends in Policy Mean / Proportion



Conclusion, Q&As

Discussion

What will people be looking for in the future?

How do we push the dialog forward?