



Equity: The future of research

How data can support efforts towards
equity in research

June 9, 2020

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Evaluating Research

- How is my institution performing compared to other institutions?
 - Research publications
 - Other artifacts
 - Trainees
- What is the impact of my institution's research?
 - Academic impact -> citations, funding
 - Social awareness -> news mentions, social media mentions
 - Social impact -> ...



SUSTAINABLE DEVELOPMENT GOALS



14 LIFE BELOW WATER

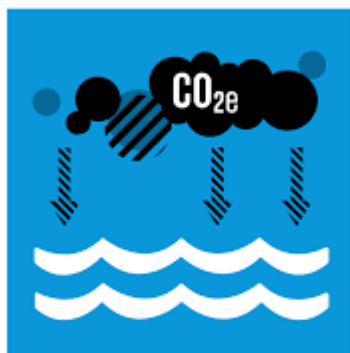


TARGET 14-1



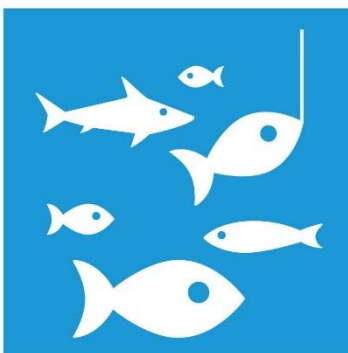
REDUCE MARINE POLLUTION

TARGET 14-3



REDUCE OCEAN ACIDIFICATION

TARGET 14-4



SUSTAINABLE FISHING

TARGET 14-5



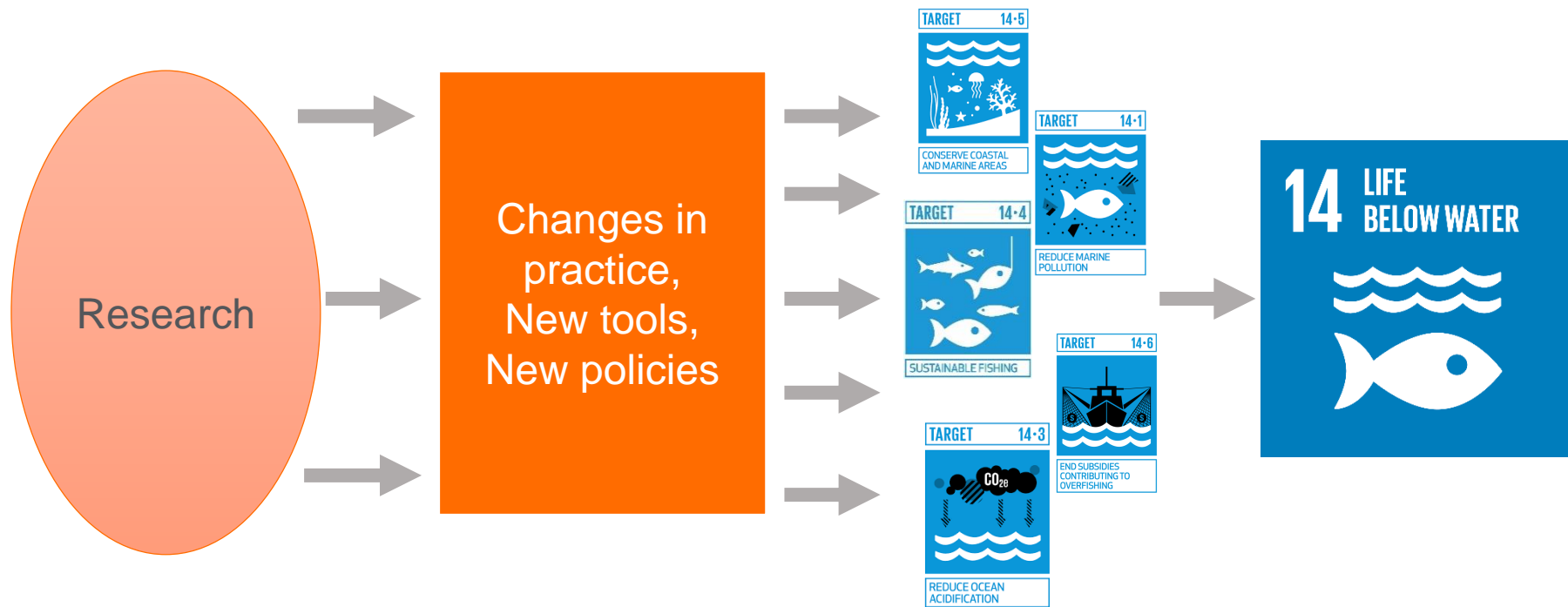
CONSERVE COASTAL AND MARINE AREAS

TARGET 14-6



END SUBSIDIES CONTRIBUTING TO OVERFISHING

Research is somewhat distant to the goals



How do we identify the research that counts?

- SDGs are BIG goals with targets and indicators that measure real world impact.
- Research lives very much upstream of these goals.
- Research literature often uses different language than implementation and policy.
- Identifying the research that can help move the needle on SDG targets and indicators requires subject matter expertise.

Identifying SDG research



TITLE-ABS-KEY (({extreme poverty} OR {poverty alleviation} OR {poverty eradication} OR {poverty reduction} OR {international poverty line} OR ({financial aid} AND {poverty}) OR ({financial aid} AND {poor}) OR ({financial aid} AND {north-south divide}) OR ({financial development} AND {poverty}) OR {financial empowerment} OR {distributional effect} OR {distributional effects} OR {child labor} OR {child labour} OR {development aid} OR {social protection} OR {social protection system} OR ({social protection} AND access) OR microfinanc* OR micro-financ* OR {resilience of the poor} OR ({safety net} AND {poor} OR {vulnerable}) OR ({economic resource} AND access) OR ({economic resources} AND access) OR {food bank} OR {food banks}))

Pro-Poor Microfinance

Rethinking Policies and Practices in Urban India

Amelia Maxwell and Krishna K. Shrestha

Impact of microfinance on sustainable entrepreneurship development

Farhana Ferdousi

Korea: Balancing Economic Growth and Social Protection for Older Adults

Hyun-Sook Yoon, PhD*

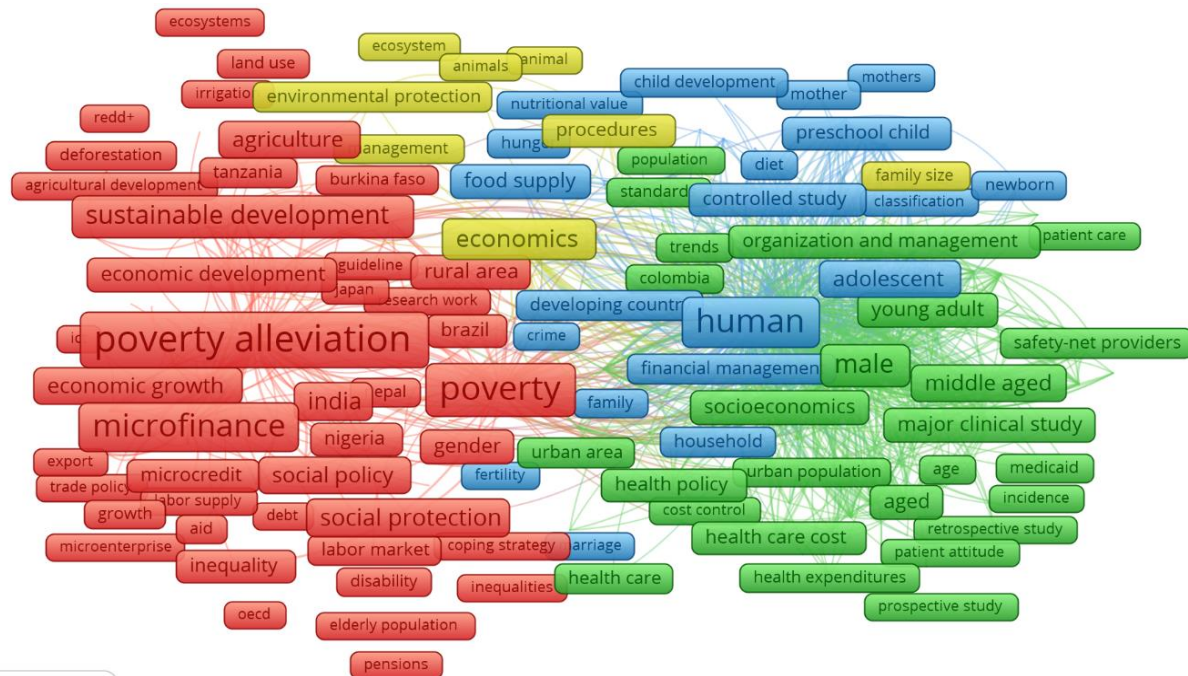
A multifaceted program causes lasting progress for the very poor: Evidence from six countries

Abhijit Banerjee^{1,2,3,4}, Esther Duflo^{1,2,3,4}, Nathanael Goldberg⁵, Dean Karlan^{2,3,4,5,6,*}, Robert Osei⁷, William Parienté^{4,8}, Jere...

Contribution of Fisheries and Aquaculture to Food Security and Poverty Reduction: Assessing the Current Evidence

Christophe Béné^a, Robert Arthur^b, Hannah Norbury^b, Edward H. Allison^c, Malcolm Beveridge^d, Simon Bush^e, Liam Campling^f, Will Leschen^d, David Little^d, Dale Squires^g, Shakuntala H. Thilsted^h, Max Troellⁱ, Meryl Williams^j

Identifying SDG research

 VOSviewer

<https://scival.com/sdg>



Matching research to SDGs

<https://sdgresources.relx.com/match-research-to-sdgs>


SDG Resource Centre



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Identifying research that supports the SDGs

Research institutions and funders of research are uniquely positioned to support advancement of the sustainable development goals (SDGs). Help us determine how research publications move the needle on achieving the sustainable development goals.

[Match Research to SDGs](#)



1 NO POVERTY



2 ZERO HUNGER



3 GOOD HEALTH AND WELL-BEING



4 QUALITY EDUCATION



5 GENDER EQUALITY



6 CLEAN WATER AND SANITATION



7 AFFORDABLE AND CLEAN ENERGY



8 DECENT WORK AND ECONOMIC GROWTH



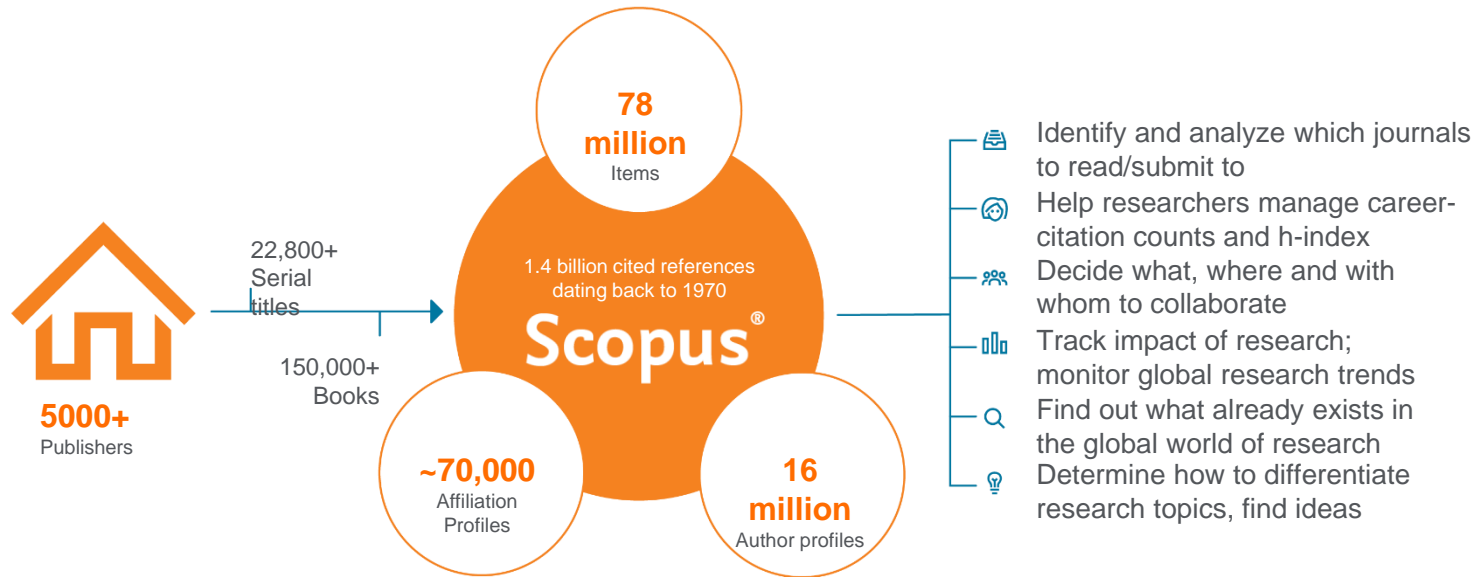
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



SDG: a framework for assessing research impact

- SDGs provide a globally recognized framework for assessing research impact
- Linking research to SDGs can be challenging
- Queries form a basis to start to understand the landscape
- Taking an iterative approach is essential
- Engages the research community

Scopus is the largest abstract and citation database of peer-reviewed literature
and features smart tools that allow you to track, analyze and visualize scholarly research.



Scopus delivers a comprehensive view on the world of research.
No packages, no add-ons. One all-inclusive subscription.

The Scopus data model

The **Scopus data model** is designed around the notion that **articles** are written by **authors** that are **affiliated** with institutions. Visually, this relational model is represented below.

Scopus Data Model Simplified



What is the value of this structured data? This relational data model means that Scopus can tell you **who is doing what** in global literature and **where they are doing it** with **higher accuracy** than anyone else

Global Representation means global discovery

Across all subjects and content types

Scopus includes content from more than 5,000 publishers and 105 different countries

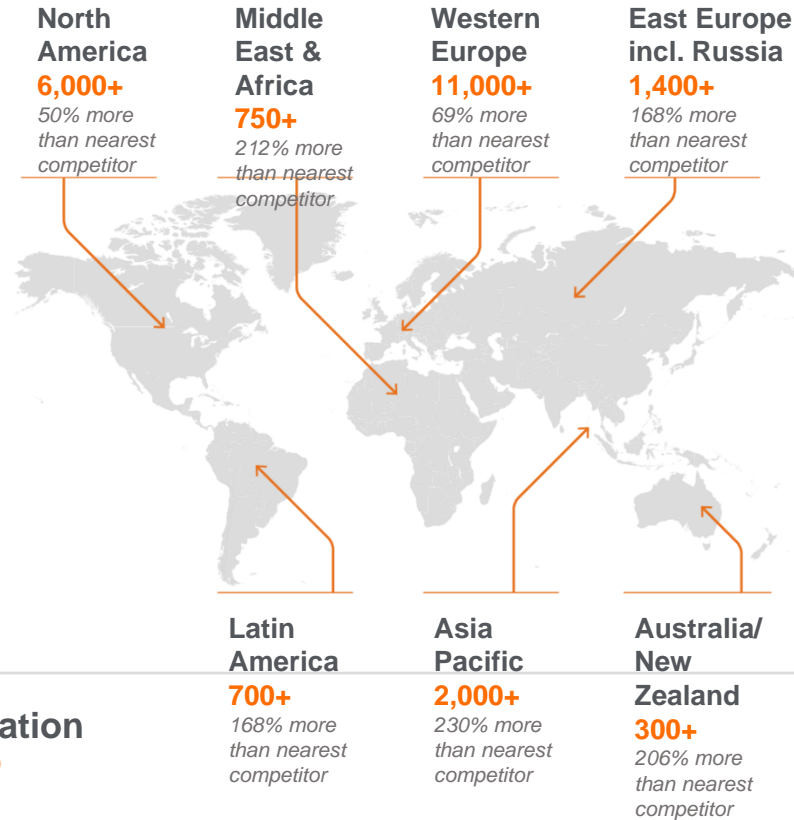
- 40 different languages covered
- Updated daily
- Multiple regional content types covered (journals, conferences, books, book series)

| Number of active Journals by subject area | Journal | Conferences | Books |
|---|--|--|---|
| Physical Sciences 8,102 | 23,578 Peer-reviewed journals 308 Trade journals 4,065 Active Gold Open Access journals >8,000 Articles in Press | 111K Conference events 8.8M Conference papers Mainly Engineering and Computer Sciences | 752 Book series 40K Volumes 1.6M Items 183,034 Stand-alone books |
| Health Sciences 7,468 | | | |
| Social Sciences 9,692 | Full metadata, abstracts. Cited references back to 1970. | | 1.5M Items Mainly Social Sci. and Arts & Humanities |
| Life Sciences 4,883 | | | |

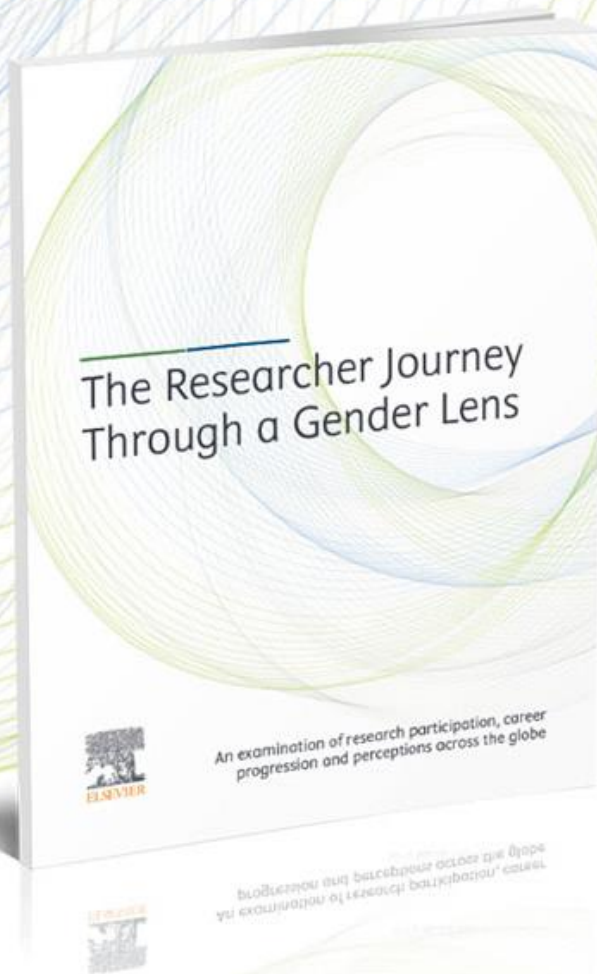


Global Representation means global discovery

Across all subjects and content types



Global Representation
(number of titles)



Aims of the report

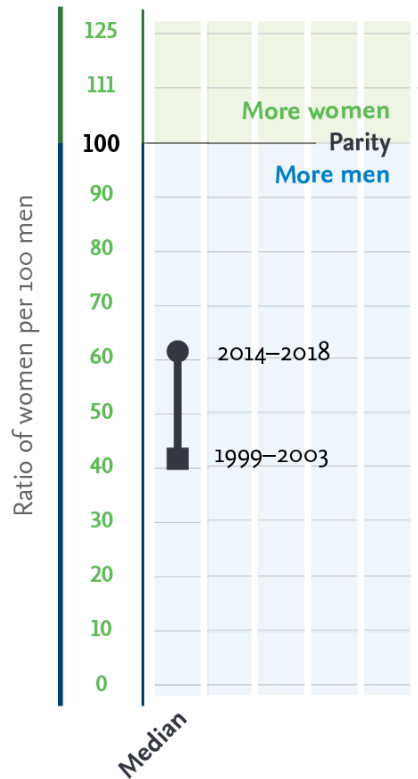
- **Quantitative analyses** focusing on researcher participation, contribution and career progression through a gender lens:
 - ✓ Research Participation
 - ✓ Research Footprint
 - ✓ Publishing Careers and Mobility
 - ✓ Collaboration Networks
 - **Survey research** component to understand 'why'
 - ✓ Perceptions about Gender
 - ✓ Findings from a survey of researchers
-

ELSEVIER SURVEY OF ACTIVE RESEARCHERS

61% of active researchers feel that there are more women in research now compared to 10 years ago

The proportion of women among researchers is increasing

Gender ratio among active authors is higher now than in the past.



Median is based on 15 countries in report

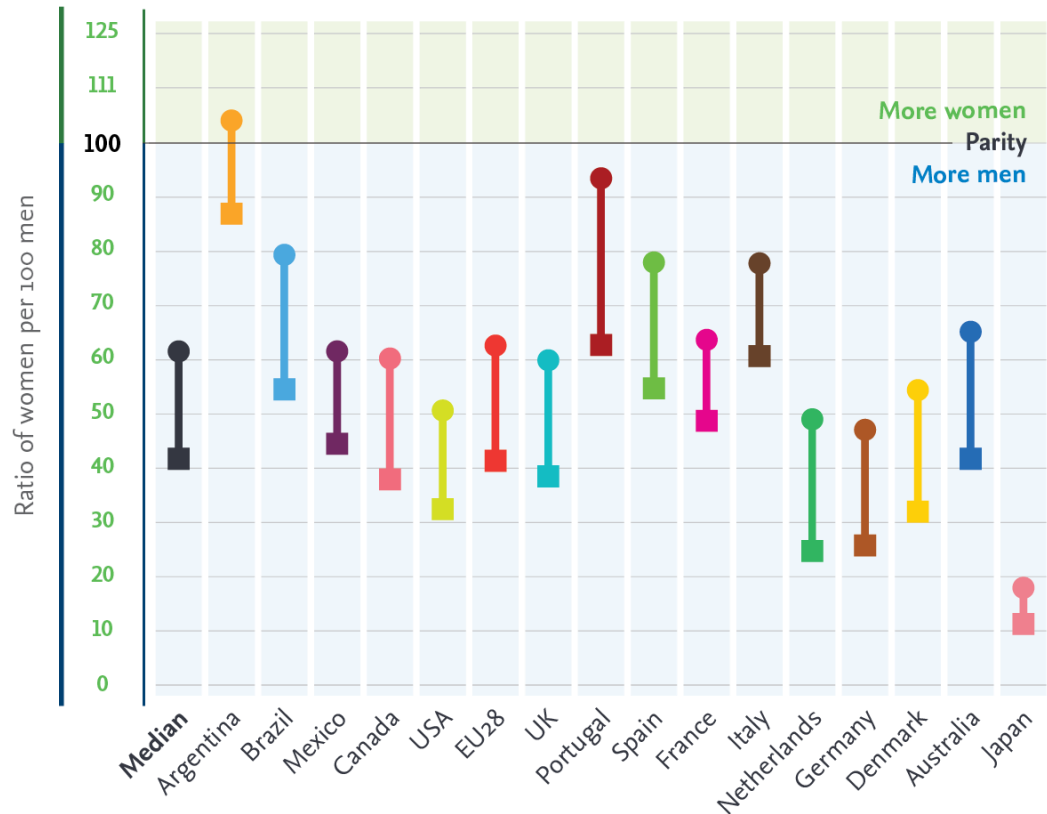
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Gender ratio among active authors is higher now than in the past.

KEY

■ 1999–2003

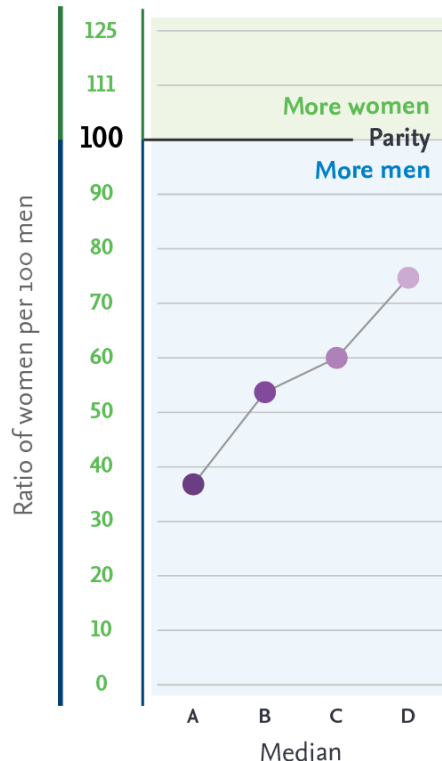
● 2014–2018



Women are highly represented in younger cohorts

Gender ratio among active authors, 2014–18, by cohort

| KEY | GROUP | YEAR OF FIRST PUBLICATION |
|-----|-------|---------------------------|
| ● | A | 2003 or prior |
| ● | B | 2004–2008 |
| ● | C | 2009–2013 |
| ● | D | 2014–2018 |

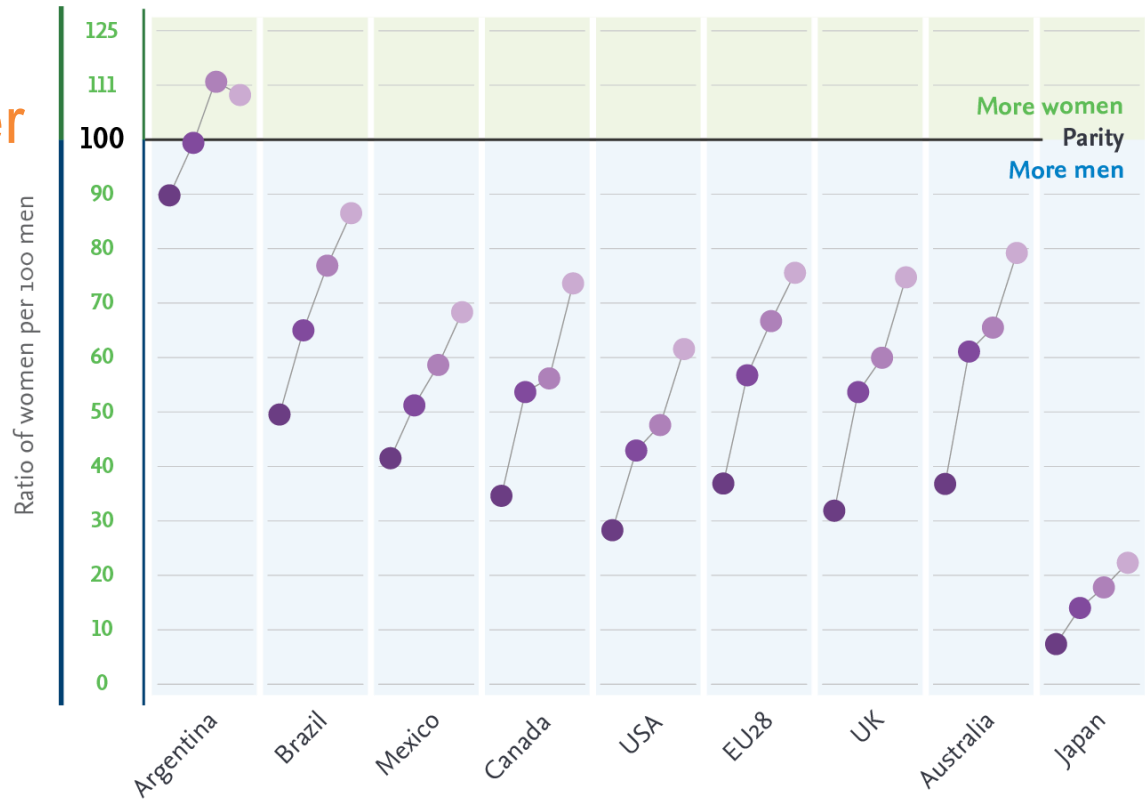


Median is based on 15 countries in report

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The physical sciences has had the slowest growth in participation

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Median is based on 15 countries in report

KEY

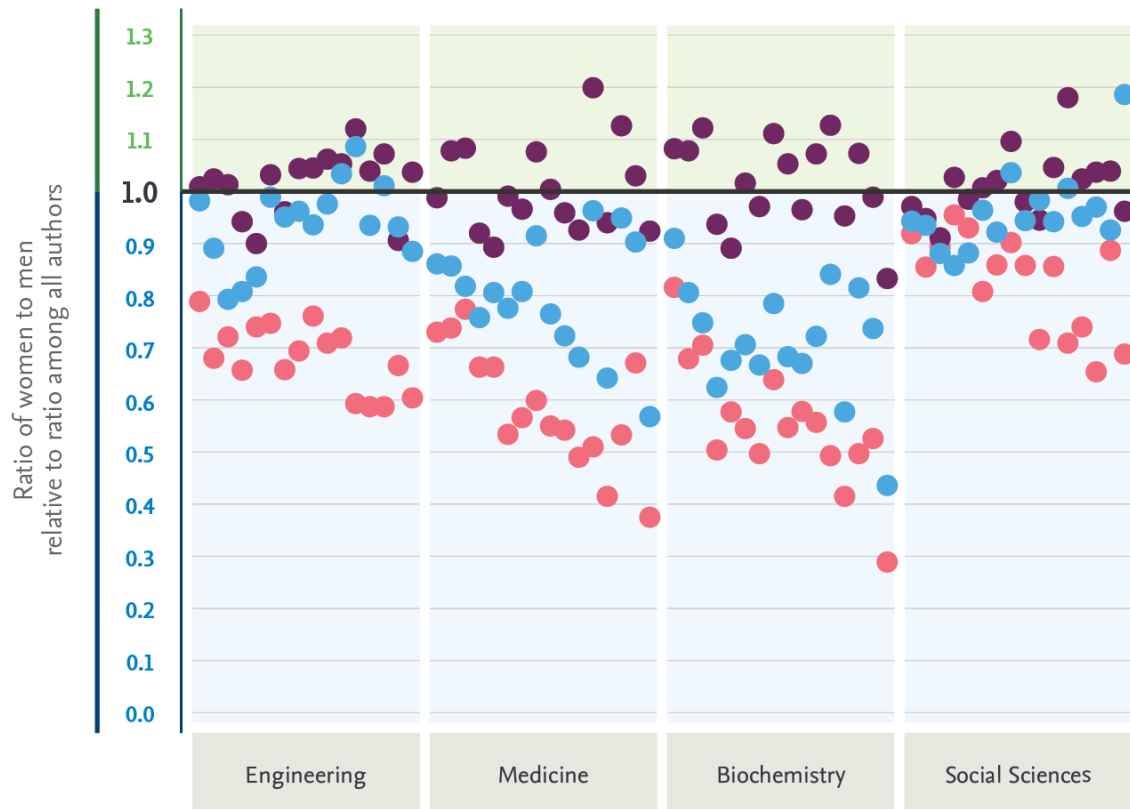
■ 1999–2003

● 2014–2018



Women are least represented as last authors

Gender ratio among active authors, 2014–2018, by author position



Assessing the research base to support equity efforts

- Set reasonable goals
- Understand the landscape within a particular group of authors:
 - Subject matter expertise
 - Seniority level
 - Authorship position
- Develop policies to support equity

Conclusions

There are number of frameworks for assessing equity within research and among researchers.

Data can provide some clues on where to set benchmarks.

An iterative approach is essential when looking at equity.

Data should not provide the boundary for how assessments are framed.



Thank you

