Progress Toward Gender Equality in Research & Innovation

Dashboard guidance

Link to the dashboard:
https://public.tableau.com/app/profile/ads.elsevier/viz/Progress_Toward_Gender_Equality_In_Research_And_Innovation/Overview
About the dashboard

• This dashboard tracks progress toward gender parity in scientific research worldwide and provides insights on how gender affects the researcher journey.

• Drawing on robust datasets from 18 countries and the EU-27 and World, this dashboard presents the latest status on gender-based representation by country, seniority cohorts and subject areas.

the dashboard is structured by two major views

Overview homepage: provides overview information

Trends over time tabs: Provides analytical view over time
Progress Toward Gender Equality in Research & Innovation

Overview

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Note:
Parity is 40-60%
Full parity = 50%

Click to view All disciplines or STEM only; for both share of author count and Average number of published papers

Geographical overview of author share in 2022

Static representation data per analyzed country/region.

Note:
Parity is 40-60%
Full parity = 50%

World breakdown by year

Share of author count | All subjects

- World (2000) Men Share of author count: 50.0%
- World (2022) Men Share of author count: 41.4%

Average number of published papers | All subjects

- World (2000) Men Average number of published papers: 1.63
- World (2022) Men Average number of published papers: 1.80
- World (2022) Women Average number of published papers: 1.40

From 2001-2022, the share of global researchers who are women steadily increased. In 2022, out of every 100 researchers, more than 40 are women.

From 2001-2022, the average number of published papers of both women and men researchers increased at about the same pace.

Note: The sum of men's and women's output does not equal the world total, because men and women researchers collaborate with each other.
1. Click tab to view indicators for each category

2. Explore trends for each indicator

3. More about the indicator definitions and underlying methodology

The extent to which research involving men or women authors is cited in policies or patents. It can take as many as 10 years for citations to accrue in policies and patents, which is why we normalized per year.
4. Filter for 1 or more analyzed regions/countries

5. Choose a discipline of interest. For health sciences disciplines, an additional filter to the right for Covid-19 will pop up.

6. Filter for a career cohort

7. For health sciences disciplines only; exclude or include COVID-19 related publications to view the effect of the pandemic on the respective indicators.
The definition of Health Science and its subdisciplines

We defined health science disciplines by grouping the appropriate subcategories based on the frequency that publications were categorized in overlapping subcategories. For example, we created the subdiscipline “Fertility & Birth” because a high percentage of publications in the subcategory “Obstetrics and Gynecology” were also classified in the subcategory “Reproductive Medicine.” The final selection of research subcategories in medicine is shown here.

<table>
<thead>
<tr>
<th>Health Science Discipline Name</th>
<th>Subcategories Included</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cancer</td>
<td>Cancer Research, Oncology</td>
</tr>
<tr>
<td>Cardiology &amp; Pulmonology</td>
<td>Cardiology and Cardiovascular Medicine, Pulmonary and Respiratory Medicine</td>
</tr>
<tr>
<td>Diabetes &amp; Endocrinology</td>
<td>Endocrinology, Diabetes and Metabolism</td>
</tr>
<tr>
<td>Emergency Medicine</td>
<td>Critical Care and Intensive Care Medicine, Emergency Medicine</td>
</tr>
<tr>
<td>Fertility &amp; Birth</td>
<td>Obstetrics and Gynecology, Reproductive Medicine</td>
</tr>
<tr>
<td>General Clinical Medicine</td>
<td>General Medicine, Family Practice, Internal Medicine</td>
</tr>
<tr>
<td>Infectious Diseases &amp; Allergy</td>
<td>Immunology and Allergy, Infectious Diseases, Microbiology (medical)</td>
</tr>
<tr>
<td>Pediatrics</td>
<td>Pediatrics, Perinatology and Child Health</td>
</tr>
<tr>
<td>Public Health</td>
<td>Epidemiology, Health Policy, Public Health, Environmental and Occupational Health</td>
</tr>
<tr>
<td>Radiology &amp; Imaging</td>
<td>Radiology, Nuclear Medicine and Imaging</td>
</tr>
<tr>
<td>Surgery</td>
<td>Surgery</td>
</tr>
</tbody>
</table>
Women receive more mentions in news and blogs compared to men. Men receive more mentions on Wikipedia. More citations in alternative media for men. Note: the Alternative metrics page is static because there are less citations in alternative media. Adding filters would make the results less robust.
Multidisciplinarity scores quantify collaboration among authors from diverse disciplines, reflecting their range and cognitive distance, while interdisciplinarity scores quantify the diversity and distribution of disciplines cited in research publications. Interest in both metrics is on the rise, as addressing global societal challenges necessitates collaboration and knowledge integration across various disciplines.
More women present in research activities

For countries falling in this area, above the diagonal axis, women make up x% of active authors, and a higher % of women receive grants.

For countries falling in this area, under the diagonal axis, women make up x% of active authors, but a lower % of women receive grants.

Note: the grants indicator page is static because not all countries have been included in this analysis. SciVal has additional information.
Open access has been at the heart of research dissemination for decades and has gained traction around the world. Researchers and publishers are adapting practices to align with open access policies at institutional and governmental levels.

**Note:** Like multidisciplinarity, interdisciplinarity, policy citations, patent citations, alternative metrics and alignment with the SDGs, OA is viewed as one of the metrics that indicate (readiness for) societal impact.

Data points are displayed only when there are more than 1,000 authors in the selected group.
The lighter the color, the younger the cohort.
Explore the dashboard at:

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