|  |  |
| --- | --- |
| **Topic** | **Count** |
| Engineering | 98,101 |
| Humanities and Arts | 47,934 |
| Life Sciences | 147,988 |
| Mathematics and Computer Sciences | 35,271 |
| Physical and Earth Sciences | 106,808 |
| Psychology and Social Sciences | 39,977 |

The table illustrates the distribution of unique titles across various academic disciplines. The "Life Sciences" category stands out with the highest number, nearing 140,000 titles. Both "Engineering" and "Physical and Earth Sciences" follow closely, each contributing over 100,000 titles. "Humanities and Arts" has roughly half the count of "Engineering", while "Mathematics and Computer Sciences" and "Psychology and Social Sciences" exhibit comparable figures, both slightly below 100,000. This visualization emphasizes the robust research activity in "Life Sciences", with "Engineering" and "Physical and Earth Sciences" also demonstrating substantial academic contributions.

|  |  |  |
| --- | --- | --- |
| **Gender** | **Count** | **Percentage** |
| Male | 5,322,905 | 34.28% |
| Female | 2,987,054 | 19.24% |
| Unknown | 7,218,833 | 46.49% |

The table above provides a breakdown of the demographic composition based on gender, inferred from a dataset of names. Specifically, the data reveals the count and corresponding percentage for each gender category, including "Male", "Female", and "Unknown".

A graph showing the number of people in the same age

Description automatically generated  
The chart offers a detailed perspective on the gender distribution in article publications from 2017 through 2023, categorized into Pre-Covid, Covid, and Post-Covid eras.

From 2017 to 2019, the years leading up to the Covid era, male-authored articles consistently made up around 65.8%, 65.2%, and 64.7% of the total, respectively. Conversely, female-authored articles comprised 34.2%, 34.8%, and 35.3% in those same years. The data from 2020, falling within the Covid era, reveals a slight decrease in male representation at 64.4%, while female-authored articles rose marginally to 35.6%.

The Covid-impacted year of 2021 witnessed a pronounced dip in male-authored articles to 64.1%. This decline might be attributed to the significant effects of the global pandemic, influencing the ability of various industries to maintain regular operations. During this year, female-authored articles represented 35.9% of the total.

Post-Covid, in 2022, male representation in published articles was 63.7%, with female-authored articles increasing slightly to 36.3%. By 2023, these figures adjusted to 63.3% for male authors and 36.7% for female authors.

However, the increase in the percentage of articles in 2022 suggests a potential compensatory effect, indicating that articles initially scheduled for publication in 2021 might have been postponed to 2022. This surge could be indicative of a backlog of research output finding its way into publication, potentially reflecting adjustments, and adaptations within the academic and research communities.

A graph of different colored columns

Description automatically generated with medium confidence

The chart presents a clear gender distribution across several academic topics, illustrating the representation of males and females in fields like Engineering, Humanities and Arts, Life Sciences, Mathematics and Computer Sciences, Physical and Earth Sciences, and Psychology and Social Sciences. In Engineering, male-authored articles seem to exceed 70% while female-authored articles might be near 10%. This points to a notable gender gap in STEM fields. Humanities and Arts offer a bit more balance with males around 60% and females at 40%. Life Sciences, Mathematics, and Computer Sciences, and Physical and Earth Sciences also show a similar male-dominant trend, with males generally above 60%. Interestingly, in Psychology and Social Sciences, the gap is smaller with males just above 50%, indicating a nearly equal representation with females. Overall, while variations exist across subjects, there's a consistent trend of male dominance in article authorship. Some disciplines like Engineering have larger disparities, but fields like Psychology hint at a move towards more balanced gender representation.

A graph with numbers and lines

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From 2017 to 2019, there was a relatively stable trend in male-authored publications, hovering just below the 30,000 mark. In contrast, publications by female authors remained consistent but at a lower count, close to the 25,000 range. However, in 2020, both genders experienced a decline in publications, with males seeing a steeper drop. The following year, in 2021, female-authored publications saw a significant increase, approaching 27,000, while male publications continued their decline. Interestingly, 2022 marked a sharp upturn for both genders, with male publications rebounding over 30,000 and female publications showing a notable rise as well.

While male-authored publications consistently outnumber those by females, both genders have experienced fluctuations in publication counts over the years.

The data indicates a shared challenge in 2020, which can be attributed to disruptions caused by the COVID-19 pandemic, as numerous research activities were halted and many academic conferences postponed. This global health crisis impacted the research community, leading to a reduction in publications. However, the chart points towards a collective recovery and a significant increase in publications by both genders in 2022, potentially reflecting adjustments and adaptations within the academic and research communities, as well as the resumption of previously delayed research projects and collaborations.