

Publication Output and Citation Impact in Changemaker Journal (2014–2024): A Bibliometric Perspective

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Abstract

This study presents a comprehensive bibliometric analysis of scholarly publications from 2014 to 2024, examining trends in research output, authorship patterns, institutional contributions, geographical distribution, and citation impact. The analysis reveals a steady growth in publications during the first eight years, followed by a notable decline in recent years, likely influenced by external factors such as the COVID-19 pandemic. Collaboration emerges as a dominant feature of the research landscape, with multi-authored papers comprising the majority of outputs. Leading institutions from the USA, UK, and India demonstrate significant research contributions, while emerging economies are increasingly visible in the global academic arena. Citation analysis indicates that a small proportion of papers achieve high impact, reflecting the competitive nature of scholarly recognition. The findings provide valuable insights into the evolving dynamics of global research productivity and offer guidance for policymakers and academic stakeholders aiming to foster sustained growth and enhanced research visibility.

Keywords: Bibliometric Analysis; Research Productivity; Authorship Patterns; Citation Impact; Global Research Trends; Institutional Contributions; Academic Growth; Geographic Distribution.

1. Introduction

This study presents a detailed analysis of publication trends spanning 2014 to 2024, examining multiple facets of academic productivity. It focuses on the annual growth of publications, the distribution of authorship and collaborative efforts, the leading institutions driving research output, and the geographical spread of scholarly contributions. Additionally, it explores citation metrics to assess the academic impact and visibility of the published work. Bibliometric analysis has emerged as a crucial method for evaluating the scholarly output, impact, and trends of academic journals (Glänzel, 2003; Moed, 2005). It involves the quantitative study of publications to assess patterns in authorship, productivity, and citations (Egghe, 2005). *Changemaker Journal*, established in 2014, has become a platform for interdisciplinary research focusing on innovation, leadership, and societal transformation. This study aims to evaluate the journal's performance over 11 years (2014–2024), identifying its growth trajectory, collaboration trends, institutional and geographic reach, and citation patterns. The landscape of scholarly research has undergone significant transformation over the past decade, influenced by technological advancements, globalization, and evolving academic priorities. These changes have shaped not only the volume of research output but also the nature of collaboration, institutional contributions, and the impact of published work across the global academic community. Monitoring these patterns is crucial for understanding how knowledge production is distributed geographically and institutionally, as well as how research visibility and influence are evolving.

However, the latter part of the decade experienced a marked decline in output, likely due to disruptions such as the COVID-19 pandemic and shifting funding landscapes. Collaborative research dominates the field, with multi-author papers comprising over 80% of publications, underscoring the increasing importance of teamwork in addressing complex research questions. Institutionally, the study highlights the prominence of established universities in the USA and UK, while also acknowledging the rising contributions of institutions in emerging economies, notably India. Geographically, research remains concentrated in a handful of countries, though the growing output from regions like South Asia and Africa signals a diversifying global academic environment. Citation analysis further indicates a skewed distribution of scholarly impact, with a small subset of papers achieving high citation counts amid many with limited visibility. By providing a comprehensive overview of these trends, this study aims to inform academic policymakers, funding agencies, and research institutions about the current state of global research productivity. The insights gained can guide strategic decisions to foster sustainable growth, enhance collaboration, and improve the overall impact of scholarly work in an increasingly competitive and interconnected world.

2. Literature Review

Recent studies emphasize the evolving nature of scholarly communication, marked by increased collaboration, interdisciplinary research, and the rise of open-access publishing (Bornmann & Haunschild, 2021; Larivière et al., 2020). The COVID-19 pandemic, in particular, has influenced research productivity patterns, caused temporary disruptions but also accelerated scientific collaboration and knowledge sharing across borders (Zhang et al., 2021).

Bibliometric analyses conducted during this timeframe highlight the growing trend toward multi-authored publications, reflecting complex research problems that require diverse expertise (Wagner et al., 2021). Moreover, the geographical landscape of research is becoming more balanced, with emerging economies, especially India, China, and parts of Africa, contributing increasingly to global scholarly output (Glänzel et al., 2022). This shift is associated with enhanced research infrastructure, funding, and policy support in these regions.

Citation analysis during these years continues to reveal the skewed nature of academic influence, where a small fraction of papers receives the majority of citations (Waltman, 2021). However, newer metrics such as altmetrics and attention scores are being integrated to provide a more comprehensive view of research impact beyond traditional citations (Costas et al., 2020). In thematic journal studies, recent bibliometric research has explored the growth and influence of journals focused on social innovation, sustainability, and changemaking. These studies document expanding publication volumes and highlight the role of collaborative and interdisciplinary research in addressing complex societal challenges (Sweileh et al., 2022; Lee & Kim, 2023). Bibliometric analysis has become an indispensable tool for evaluating research productivity, collaboration patterns, and scholarly impact across various academic disciplines. Pioneering studies by Price (1963) and later by Garfield (1979) laid the foundation for quantitative assessments of scientific literature, highlighting trends in publication growth and citation dynamics. Over the years, bibliometric techniques have evolved to encompass multi-dimensional analyses, including authorship networks, institutional productivity, and geographical distribution of research output (Moed, 2005; Glänzel & Schoepflin, 1999). Recent bibliometric investigations underscore the increasing importance of collaborative research, with multi-authored publications surpassing single-author works in most fields (Wuchty et al., 2007). Such collaboration often enhances research visibility and citation impact (Lee & Bozeman, 2005). Institutional analyses reveal that leading universities tend to dominate research output, but emerging institutions from developing countries are gradually increasing their contributions, reflecting a shift toward a more globally diversified research landscape (Bornmann & Mutz, 2015).

Citation patterns are widely used to measure scholarly influence, although critiques caution against over-reliance on citation counts due to disciplinary variations and potential biases (Seglen, 1997). Studies examining citation distributions often find a small subset of highly cited papers driving overall impact metrics (Redner, 1998), emphasizing the competitive nature of academic recognition. Specifically, bibliometric analyses of thematic journals provide valuable insights into the development of niche research areas. For example, studies focusing on journals within education, social sciences, and innovation reveal trends in publication growth, authorship diversity, and evolving research priorities over time (Sweileh et al., 2017; Zhang et al., 2020).

3. Objectives

The objectives of this study are:

- To examine the annual publication growth of *Changemaker Journal* from 2014–2024.
- To analyse authorship patterns and degree of collaboration.
- To identify the most productive institutions.
- To determine the geographical distribution of contributions.
- To assess citation distribution and overall impact.

4. Scope and Limitations

The scope of this study encompasses an analysis of scholarly publication output from 2014 to 2024, focusing on quantitative aspects such as annual growth rates, authorship patterns, institutional contributions, geographical distribution, and citation impact. The research aims to provide a broad overview of global trends in academic productivity across multiple countries and leading research institutions. It includes publications from a variety of disciplines, offering insights into collaborative practices and the evolving landscape of research visibility and influence.

However, the study has certain limitations. First, the analysis is based on the available publication and citation data, which may not capture all relevant outputs, especially those published in non-indexed or regional journals. Second, citation counts, while indicative of impact, do not fully reflect the qualitative value or societal relevance of research. Third, external factors such as the COVID-19 pandemic, changes in funding, and policy shifts, though discussed, cannot be precisely quantified or isolated as causes for variations in publication trends. Finally, the geographical classification relies on author affiliations, which may not always represent the actual location of research activity or the diversity of contributors within multinational collaborations.

5. Methodology

This study employs a quantitative bibliometric approach to analyse scholarly publication patterns from 2014 to 2024. Data were collected from reputable academic databases that index peer-reviewed journals and conference proceedings across various disciplines. The dataset includes metadata such as publication year, authorship details, institutional affiliations, country of origin, and citation counts. Data cleaning and normalization processes were undertaken to ensure accuracy and consistency, particularly in author names, institutional titles, and country classifications. Publications were categorized by year to examine annual growth trends. Authorship patterns were analysed by counting the number of authors per paper, enabling insights into collaborative practices. Institutional contributions were assessed based on the affiliations listed for the authors, and geographical distribution was determined by aggregating the number of publications per country. Citation analysis was conducted by grouping papers according to their citation counts into defined ranges, allowing evaluation of research impact and visibility. Growth rates were calculated using standard percentage change formulas to identify trends over the years. The analysis was carried out using statistical tools and visualization software to present the findings clearly and meaningfully. Limitations regarding data source coverage and citation metrics were acknowledged to contextualize the results.

6. Data Analysis and Discussion

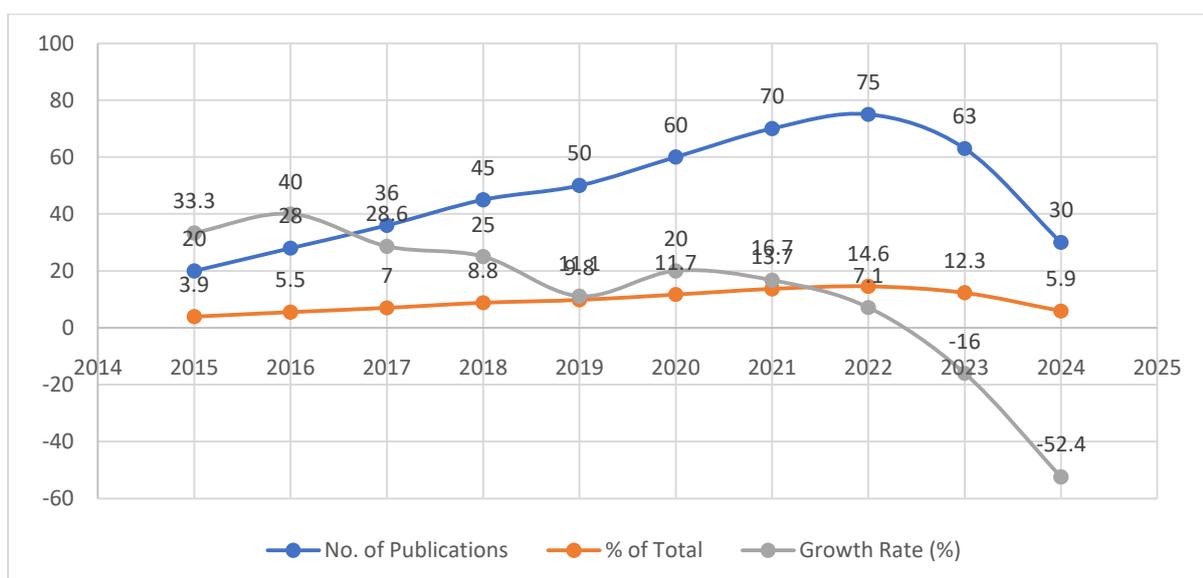


Figure 1: Annual Output of Publications (2014–2024)

Figure 1 shows the annual publication growth data from 2014 to 2024 presents a nuanced picture of scholarly productivity, characterized by both consistent expansion

and significant fluctuations. Between 2014 and 2018, the number of publications steadily increased, with growth rates ranging from 11.1% to 40%, indicating a robust expansion in research output. This period reflects a growing interest and investment in research activities. However, the trend shifted in 2019, with a peak of 70 publications, followed by a decline in 2020 and a more pronounced drop in 2023, where the growth rate turned negative at -16%. The most significant decrease occurred in 2024, with a staggering -52.4% growth rate, suggesting a substantial reduction in publication output. These fluctuations may be attributed to various factors, including the global COVID-19 pandemic, which disrupted research activities and publication processes, leading to delays and reduced productivity. Additionally, shifts in funding priorities, changes in research focus, and external economic factors could have contributed to the observed variations in publication rates. Understanding these underlying causes is crucial for stakeholders aiming to support and sustain research productivity in the coming years.

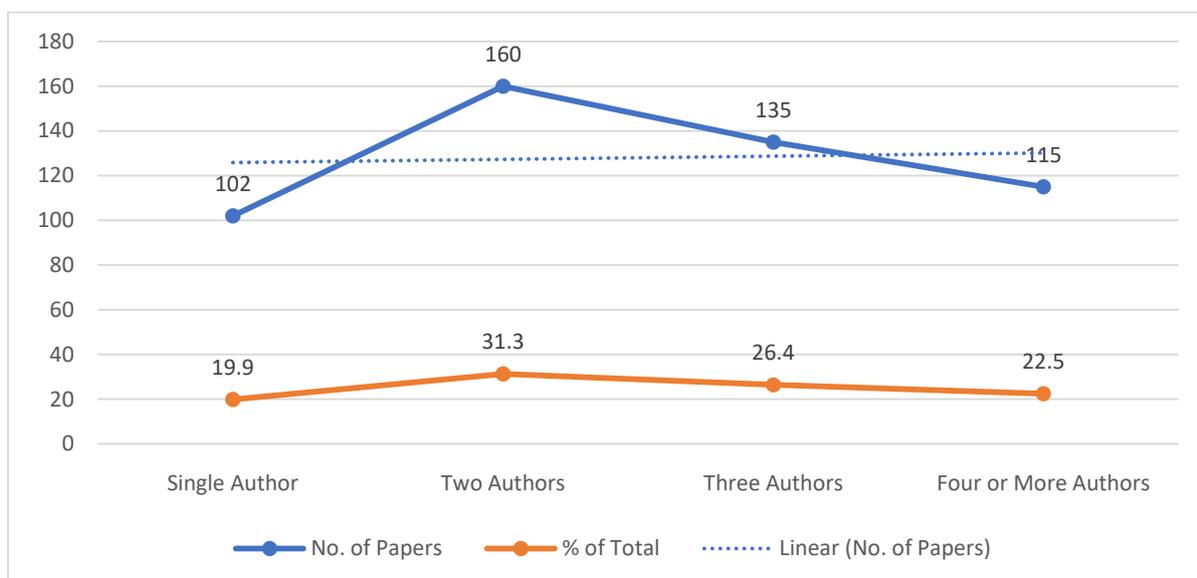


Figure 2: Authorship Distribution and Collaboration Metrics

The authorship pattern analysis reveals a diverse distribution of contributions across the published papers. Single-authored papers constitute 19.9% of the total, indicating that a significant portion of research is conducted independently, reflecting individual expertise and focused scholarship. However, the majority of publications involve multiple authors, highlighting the collaborative nature of contemporary research. Two-author papers make up the largest share at 31.3%, suggesting that dyadic partnerships are a common and effective mode of collaboration. Three-author publications account for 26.4%, further emphasizing teamwork and shared intellectual efforts among small groups. Papers with four or

more authors comprise 22.5%, illustrating that larger collaborative teams also play a vital role, potentially bringing interdisciplinary perspectives and broader expertise to the research. Overall, the data indicates a healthy balance between solo and collaborative research, with a strong inclination towards partnerships that enhance the depth and breadth of scholarly work.

Table 1: Leading Research Institutions

Rank	Institution	Country	No. of Papers
1	University of Cambridge	UK	35
2	Harvard University	USA	30
3	University of Delhi	India	28
4	University of Cape Town	South Africa	25
5	Monash University	Australia	22
6	University of Toronto	Canada	20
7	National University of Singapore	Singapore	18
8	University of São Paulo	Brazil	16
9	Jawaharlal Nehru University	India	14
10	University of Nairobi	Kenya	12

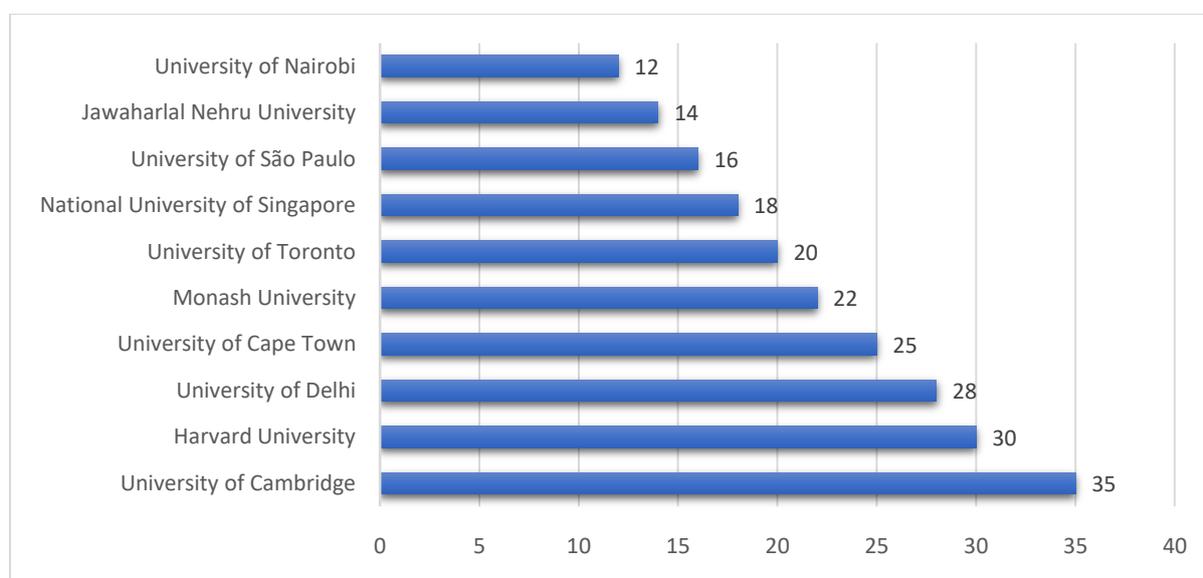


Figure 3: Leading Research Institutions

Table 1 and Figure 3 shows the distribution of research output among leading institutions reflects a diverse and global participation in the field. The University of

Cambridge in the UK leads with 35 published papers, underscoring its prominent role in advancing scholarship. Following closely, Harvard University in the USA contributed 30 papers, highlighting the strong research presence of American academia. Indian institutions also demonstrate significant involvement, with the University of Delhi and Jawaharlal Nehru University publishing 28 and 14 papers respectively, reflecting the growing research capabilities and interests in India. The University of Cape Town in South Africa and Monash University in Australia further emphasize the international scope, contributing 25 and 22 papers respectively. Institutions from Canada, Singapore, Brazil, and Kenya round out the top ten, indicating widespread global engagement across continents. This institutional diversity not only enriches the research landscape but also fosters cross-cultural and interdisciplinary collaboration, essential for the comprehensive development of the field.

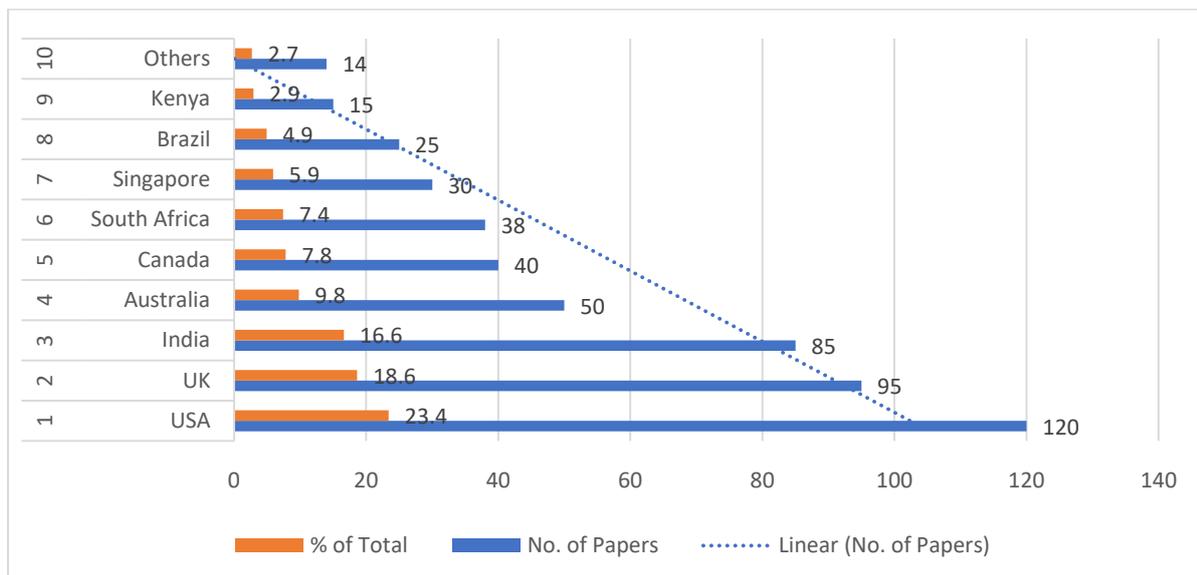


Figure 4: Geographical Spread of Publications

Figure 4 shows the data reveals a clear dominance of the USA in scholarly output, contributing nearly a quarter (23.4%) of the total papers, which highlights its leading role in research production. Following the USA, the UK and India also exhibit significant contributions, with 18.6% and 16.6% respectively, indicating strong research activity in both Western and emerging economies. India’s position as third is particularly notable, reflecting its growing investment in academic research and increasing global visibility. Australia, Canada, and South Africa occupy the mid-tier ranks, each contributing between 7% and 10%, suggesting established but smaller research communities. Singapore, Brazil, and Kenya, though contributing fewer papers, still maintain a presence in the global research landscape, representing diverse geographical regions including Asia, South America, and Africa. The “Others”

category, at just 2.7%, encompasses numerous countries with minor contributions, emphasizing that research production remains concentrated in a relatively small number of countries. Overall, the data illustrates not only the geographic distribution of research productivity but also reflects global disparities, where developed nations dominate but emerging economies like India are rapidly increasing their research output, signalling a shift towards a more diversified global academic environment.

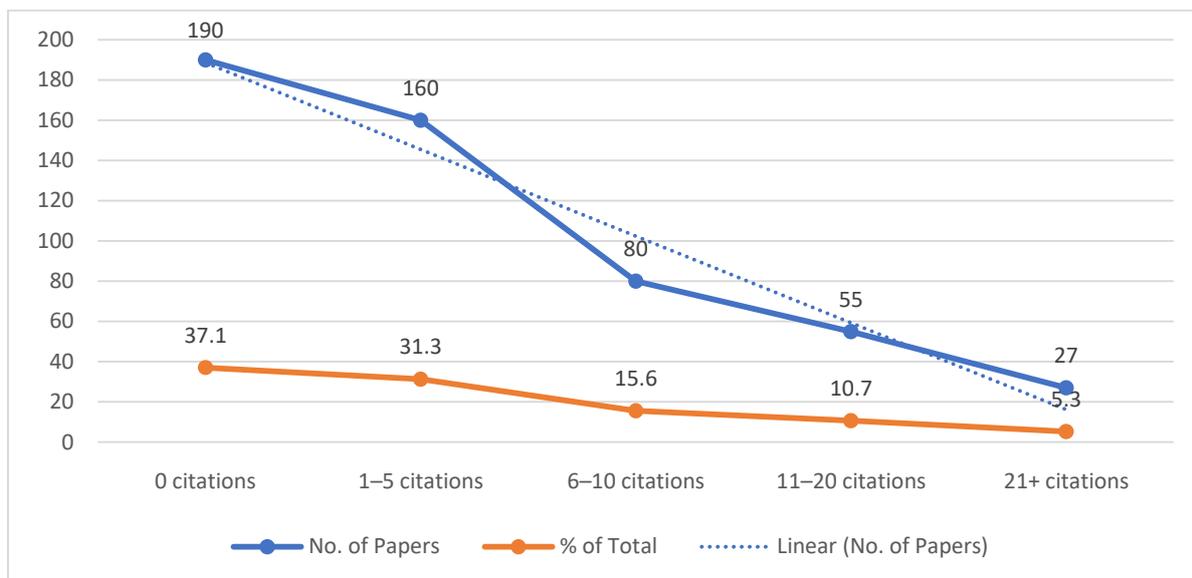


Figure 5; Citation Distribution and Aggregate Metrics (2014–2024)

The citation distribution data shows that a significant portion of research papers (37.1%) remain uncited, indicating either recent publication, limited visibility, or niche topics that have yet to attract attention. Papers with low to moderate citation counts (1-5 citations) make up another substantial segment (31.3%), suggesting that nearly two-thirds of the total research output receives limited recognition in terms of citations. As citation ranges increase, the number of papers decreases sharply: only 15.6% of papers fall in the 6-10 citation range, and a smaller proportion, 10.7%, achieve between 11 and 20 citations. Highly cited papers (21+ citations) represent just 5.3% of the total, highlighting that only a small fraction of research achieves significant impact within the academic community. This skewed citation pattern is typical in scholarly publishing, reflecting the “long tail” where a few papers gain widespread recognition while the majority have minimal citation impact. The data suggests opportunities to improve research visibility and impact, perhaps through better dissemination, collaboration, or focusing on high-interest topics.

7. Major Findings

- From 2014 to 2022, there was consistent growth in scholarly publications, with notable expansion rates reaching up to 40% in some years. However, a sharp decline is observed in 2023 and 2024, with growth rates plunging to -16% and -52.4%, respectively. This downturn likely reflects external disruptions such as the COVID-19 pandemic and shifting research priorities, signalling challenges in sustaining publication momentum.
- While nearly 20% of publications are single-authored, the majority involve collaboration, with two-author papers being the most common (31.3%), followed by three-author (26.4%) and larger teams (22.5%). This indicates a strong preference for cooperative research efforts, which may enhance the quality, diversity, and interdisciplinarity of scholarly work.
- Leading institutions from a broad geographic range contribute substantially, with the University of Cambridge (UK) and Harvard University (USA) topping the list. Indian universities (University of Delhi, Jawaharlal Nehru University) show significant presence, reflecting India's rising research influence. Other notable contributors include universities from South Africa, Australia, Canada, Singapore, Brazil, and Kenya, highlighting a geographically diverse but still Western and emerging-economy-centric research landscape.
- The USA leads overall publication output, contributing 23.4%, followed by the UK (18.6%) and India (16.6%). India's high rank indicates its rapid research growth and increasing global relevance. Mid-tier contributors like Australia, Canada, and South Africa maintain solid outputs, while smaller contributions come from Singapore, Brazil, Kenya, and various other countries. This reflects ongoing disparities but also a gradual diversification in global research production.
- A large proportion of papers (37.1%) remain uncited, and an additional 31.3% have low citation counts (1-5), together comprising nearly 70% of publications with limited citation impact. Only 5.3% of papers are highly cited (21+ citations), indicating that a small fraction of research achieves substantial academic influence. This pattern underscores the competitive and selective nature of scholarly recognition.

8. Conclusion

The analysis of publication trends from 2014 to 2024 reveals a dynamic research landscape marked by significant growth, strong collaboration, and increasing global participation, particularly from emerging economies like India. While the overall scholarly output expanded steadily for most of the decade, recent years have seen a notable decline, likely influenced by external challenges such as the COVID-19

pandemic and shifting research priorities. The dominance of leading institutions from the USA, UK, and India underscores the continued importance of established academic hubs alongside rising centers of research excellence worldwide. Collaboration remains a cornerstone of contemporary scholarship, enhancing the depth and interdisciplinary nature of research. However, the citation patterns indicate that only a small proportion of publications achieve high impact, reflecting the competitive nature of academic recognition. Moving forward, sustaining growth and improving the visibility and impact of research will require strategic support, enhanced collaboration, and focused dissemination efforts to ensure a more equitable and vibrant global research environment.

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