



Unequal Foundations: Publishing Challenges for Emerging Researchers in Sub-Saharan Africa

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ABSTRACT

Early-career researchers in Sub-Saharan Africa face persistent structural and historical inequities in academic publishing, including inadequate funding, limited mentorship, language barriers, and restricted access to scholarly resources. These systemic challenges compromise the visibility and impact of African scholarship globally. This study examines the extent of underrepresentation, identifies contributing factors, and proposes actionable interventions for fostering equity in scholarly publishing. A qualitative and quantitative approach was employed, combining regional analysis of journal indexing data with personal reflections and documented systemic disparities. Data on African journals indexed in major databases were extracted from recent literature. Descriptive statistics were applied to compare coverage across Web of Science (WoS), Scopus, and CrossRef, while additional insights were drawn from peer experiences and existing policy recommendations. The findings reveal significant disparities in journal representation. Of 2,229 African journals identified, only 7.4% (n = 166) appear in Web of Science and 7.8% (n = 174) in Scopus, compared to 45.6% (n = 1,017) in CrossRef. South Africa accounts for over 70% of journals indexed in WoS and Scopus, while Nigeria, despite publishing 44.5% of all African journals, remains underrepresented in these databases. These results underscore systemic bias in indexing and editorial practices. Addressing these inequities requires a multipronged approach, including increased investment in research infrastructure, inclusive editorial policies, and targeted mentorship programs. Such interventions are essential not only for ensuring justice but also for enriching global knowledge production with diverse perspectives and localized expertise.

KEYWORDS

Africa, Nigeria, publishing challenges, research and development

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INTRODUCTION

Recently, global conversations about equity in scholarly publishing have highlighted systemic disparities that hinder researchers from the Global South, particularly emerging scholars from Sub-Saharan Africa^{1,2}. These inequities are deeply rooted historically, infrastructurally, with linguistic legacies shaping how



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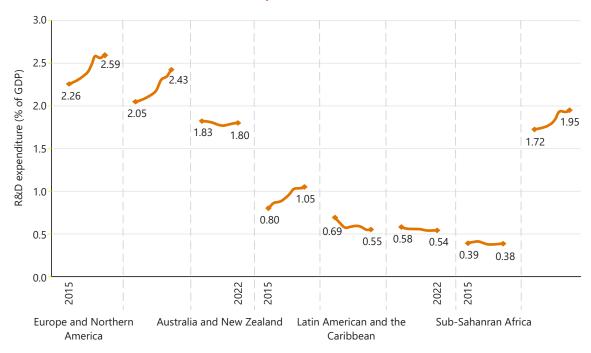


Fig. 1: Regional trends in research and development (R&D) expenditure as a percentage of gross domestic product (GDP) (% of GDP) from 2015 to 2022

knowledge is produced and disseminated. For early-career researchers in countries like Nigeria, the journey from research idea to published article is faced with challenges that go beyond individual capacity. Instead, these barriers reflect broader structural issues, including underfunded academic institutions, limited access to mentorship, inadequate exposure to academic writing norms, and underrepresentation in high-impact journals². This article unpacks these challenges through a regional lens, drawing from personal experiences, peer stories, and the persistent voices of African scholars advocating for more inclusive scholarly systems.

Structural inequalities in knowledge production: A recent UNESCO report: Scholarly publishing, which is ideally meritocratic, still, for many early-career researchers from Sub-Saharan Africa, systemic disparities continue to obstruct their equitable participation. Moreover, high-impact journals are dominated by scholars from North America and Europe; African researchers, particularly those lacking international collaborators, remain sidelined². Nigeria has over 274 Universities as of 2024, and more than 60,000 academic staff, graduating tens of thousands of graduates annually, exemplifies this paradox. Despite being a major academic hub on the continent, few Nigerian journals are indexed in Scopus or Web of Science, diminishing their global reach². Recently, R&D investment data underscores the structural nature of this exclusion. According to UNESCO's 2025 Survey of R&D Statistics, global R&D spending rose from 1.72% of GDP in 2015 to 1.95% in 2022. Regions such as Europe and East Asia significantly increased investment, while Sub-Saharan Africa remained stagnant at approximately 0.38% (Fig. 1). This persistent underinvestment, which is unchanged since UNESCO's past report in 2020, translates into limited research infrastructure, scarce mentorship, and inadequate access to digital publishing tools. These deficits contribute directly to low citation visibility; only 7.8% of African journals are indexed in Scopus, with South Africa accounting for the majority of them, followed by Egypt^{2,3}. Scholars from countries like Nigeria, though prolific, most of the times publish in poorly indexed outlets, rendering their work invisible in global discourse. The compounded effects of minimal funding and limited indexation perpetuate epistemic inequality. Without structural reform, investment in research systems, recognition of African epistemologies, and inclusive indexing policies, African scholarship will remain undervalued regardless of its intellectual merit.

Figure 1 illustrates regional trends in Research and Development (R&D) expenditure as a proportion of Gross Domestic Product (GDP) between 2015 and 2022. It reveals significant disparities in investment across global regions, with high-income countries demonstrating steady growth and low-income regions remaining largely stagnant. Europe and Northern America show the highest levels of R&D intensity, increasing from 2.26 in 2015 to 2.59% in 2022. Similarly, Australia and New Zealand experienced a rise from 2.05 to 2.43%, despite minor fluctuations. Northern Africa and Western Asia also recorded a notable increase, from 0.80 to 1.05%, suggesting a growing prioritization of research within national agendas. In contrast, Latin America and the Caribbean witnessed a consistent decline in R&D expenditure, falling from 0.69% in 2015 to 0.54% in 2022. Most notably, Sub-Saharan Africa recorded the lowest investment levels throughout the period, with R&D spending slightly decreasing from 0.39 to 0.38%. This trend highlights a persistent underinvestment in research infrastructure within the region. The lack of growth in R&D expenditure in Sub-Saharan Africa underscores the structural limitations that hinder scholarly productivity and global research visibility. In the context of academic publishing, this sustained underinvestment contributes to limited access to research resources, inadequate institutional support, and diminished capacity to meet the standards of high-impact journals, which reinforce the global knowledge gap.

CHALLENGES AND INSIGHTS

Lack of mentorship and research training: One of the most pressing challenges for emerging researchers in Nigeria and across the region is the scarcity of mentorship. Many universities are overburdened, with high student-to-faculty ratios and limited opportunities for early-career researchers to engage meaningfully with senior scholars. While some departments offer research methodology courses, these are often outdated, generic, or focused more on rote learning than on developing critical thinking or writing skills. For instance, a typical postgraduate student in a Nigerian public university may complete a thesis without receiving any structured training on how to turn that thesis into a publishable article. Even when efforts are made to publish, students often face rejection due to poor structuring, inadequate literature review, or unfamiliarity with journal expectations. These are not failings of the students themselves but symptoms of an educational system that has not evolved in tandem with global academic standards. Moreover, academic supervisors, on the other hand, are themselves under pressure to publish and may not have the time or resources to support young mentees adequately. A phenomenon referred to as publish or perish. In some unfortunate cases, power dynamics discourage students from asking questions or seeking clarity, leading to isolation and discouragement. The mentorship gap is particularly acute in rural or underserved institutions, where access to experienced researchers, international networks, and research infrastructure is very limited. In such contexts, students and earlycareer scholars frequently rely on peer-led learning or freely available online resources, many of which are either paywalled or not tailored to the African academic and cultural context⁴. While informal mentorship efforts provide some support, they are insufficient substitutes for structured, institutionally embedded capacity-building programs. Initiatives such as AuthorAID and the Training Centre in Communication (TCC Africa) have made commendable strides in bridging this gap. AuthorAID connects early-career researchers with volunteer mentors and offers online courses on research writing and publishing. Similarly, TCC Africa provides training in scientific communication and proposal development specifically targeted to African scholars⁴. However, these efforts, while impactful, remain limited in geographic and institutional reach. To foster a more equitable scholarly ecosystem, such programs must be scaled and integrated into national research strategies and higher education policies. Expanding their presence across diverse linguistic regions, offering hybrid (online/offline) delivery modes, and aligning with institutional mentorship frameworks can ensure broader and more sustainable impact. Without such structural support, many promising researchers, particularly in under-resourced settings, will remain disconnected from global academic discourse, further entrenching epistemic inequalities⁴.

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Language and academic writing barriers: English is the dominant language of scholarly publishing, and it is the official language in many African countries, including Nigeria. Because of this, many students and scholars speak English as a second or third language. Academic writing, with its technical tone, stylistic conventions, and citation standards, presents an even greater hurdle. Early-career researchers often struggle to articulate complex ideas in a way that resonates with international reviewers. Common feedback on rejected manuscripts includes phrases like lack of clarity, poor sentence structure, or unclear argumentation. These issues can easily be detected when journals do not offer editorial support for non-native speakers or when authors cannot afford professional language editing services⁵. In many Western institutions, PhD students are trained over several years in academic writing and are encouraged to publish with their supervisors⁵. Similarly, most African students complete degrees without a single publication, as it is the norm in most African Universities, and even when they do attempt to publish, their efforts are dismissed due to perceived language deficiencies⁶. The psychological toll of constant rejection on the basis of language cannot be underestimated. It creates a sense of inferiority and self-doubt, reinforcing the narrative that African scholars are less competent. Language should not be a barrier to the dissemination of knowledge, especially when the content itself is rigorous and insightful. To solve this, institutions could establish writing centers or engage with editors who are trained to support scholars without altering the integrity of their voice or message. Multilingual publishing initiatives, though still rare, could also help validate research written in African languages and elevate indigenous perspectives in the global academic dialogue.

Access to scientific resources and publication costs: Lack of access to recent scientific literature and publication support is another obstacle. Subscriptions to key databases like ScienceDirect, JSTOR, or Wiley Online Library cannot be afforded by most African Universities. Therefore, scholars have limited options in their ability to conduct robust literature reviews or to remain current in their fields. In the publishing phase, the barrier becomes financial. The rise of open-access journals, while commendable, has also introduced steep article processing charges (APCs), often ranging from \$1,000 to \$3,000. For Nigerian lecturers who are grossly underpaid, earning the equivalent of \$200–\$400 per month, this is prohibitive. While some journals offer waivers or discounts, these are inconsistent, non-transparent, and come with strict eligibility criteria. This situation leaves emerging scholars in a bind: Publish in low-visibility local journals with minimal academic impact or face repeated rejections from prestigious journals that require not only high-quality work but also financial and linguistic capital⁶.

Furthermore, reliance on external donors or collaborators for APC waivers often reinforces dependency, limiting African researchers' autonomy. True inclusivity means enabling scholars to publish without financial or institutional gatekeeping. Still, waiver policies are inconsistent. For example, PLOS ONE has denied requests from Nigerian authors, citing income classifications that ignore local funding realities⁶. Similarly, some publishers reject waivers for institutions classified as middle-income, despite severe resource gaps⁷. Such practices perpetuate inequities and marginalize African voices. Sustainable solutions must include regionally managed APC funds, transparent waiver policies, and greater investment in African-led open access platforms to support independent scholarly publishing.

Limited global visibility and citation bias: As African scholars succeed in publishing their work, it often receives limited visibility and citations. This is partly due to the indexing of journals, as many African journals are not included in Scopus or Web of Science, which reduces the global discoverability of their articles. Additionally, citation bias plays a role in this⁸. Moreover, citation inequities persist even within indexed domains. A recent health sciences study revealed that, when controlling for journal impact factor, publications from the Global South received fewer than half the citations of otherwise similar papers from the Global North⁸. Researchers from the Global North often overlook or ignore work published by African

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scholars, even when that work is relevant or groundbreaking. This contributes to a cycle of invisibility; African scholars are not cited, so they are not recognized, which makes future publishing even harder. The rise of development discourses and parachute research also creates imbalances⁹. Western scholars publish African-focused research without deeply involving local academics. This not only undermines the principle of collaborative knowledge-making but also sidelines emerging local voices who should be at the forefront of these narratives. Furthermore, some African researchers find themselves pressured into tokenistic collaborations, where their input is nominal, and credit is unequally distributed. This systemic imbalance disempowers local voices and perpetuates a skewed hierarchy of knowledge production.

Cultural and institutional pressures: Within their institutions, many early-career researchers in Nigeria face conflicting demands. Promotion criteria often prioritize publication quantity over quality, creating pressure to publish rapidly, sometimes at the expense of academic integrity (publish-or-perish syndrome). In such circumstances, desperation may drive scholars toward predatory or low-quality journals that offer quick turnaround with minimal peer review. Others face hierarchical pressures, resulting in coerced co-authorship or exclusion from publications altogether. Authors pay to be included in research they know nothing about. Bureaucratic hurdles, starting from delays in ethical approvals to restricted access to research infrastructure which further discourage innovation and independent inquiry. These challenges are compounded by rigid administrative cultures that resist reform and discourage dissent, labeling critical voices as insubordinate⁹. Addressing these issues requires a cultural shift within academic institutions; it should value transparency, support academic freedom, and foster equitable access to resources. Strengthening institutional mentorship, enforcing publication ethics, and revising promotion policies to emphasize research quality over quantity are critical steps toward rebuilding trust and improving scholarly standards.

CONCLUSION

Achieving equity in scholarly publishing requires a multipronged approach. Strengthening institutional capacity through government and university investments in research infrastructure, writing mentorship, and academic training is essential, complemented by regular workshops on peer review, grant writing, and scientific communication. Global publishing practices must also be reformed, emphasizing transparent APC waivers, editorial mentorship for non-dominant language researchers, and fair authorship guidelines in North-South collaborations. Additionally, sustainable support for regional and open-access platforms such as African Journals Online (AJOL), AfricArXiv, and the Transformative Scholarly Publishing (TSP) project is critical for enhancing the visibility, credibility, and accessibility of African research. Finally, fostering scholarly solidarity through regional conferences, pan-African collectives, writing groups, and digital platforms will strengthen collaborative networks and advocate for academic justice and shared visibility.

SIGNIFICANCE STATEMENT

This study identified structural barriers such as inadequate research funding, limited mentorship, linguistic constraints, and systemic biases in scholarly publishing, which could be beneficial for designing targeted interventions to promote equity in global research communication. This study will assist researchers in uncovering critical areas of academic publishing inequities that have remained unexplored by many. Consequently, a new theory on inclusive and context-sensitive scholarly communication may be developed.

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