

Research Excellence Versus Research Impact: Are We Measuring What Matters?

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doi: <https://doi.org/10.37745/gjahss.2013/vol14n55678>

Published August 10, 2026

Citation: Munyangayo T. (2026) Research Excellence Versus Research Impact: Are We Measuring What Matters? *Global Journal of Arts, Humanities and Social Sciences*, 14(5),56-78

Abstract: *The increasing complexity of global challenges, including climate change, public health crises, technological disruption, social inequality, and sustainable development, has intensified demands for research that delivers meaningful societal value beyond academic achievement. However, research performance in universities and research institutions continues to be assessed largely through traditional indicators such as publication outputs, citation counts, journal impact factors, research income, and institutional rankings. Although these metrics provide important evidence of scholarly productivity and influence, they inadequately capture research's broader contribution to society, including its capacity to inform policy, stimulate innovation, and address complex social challenges. This conceptual paper critically examines the relationship between research excellence and research impact, arguing that prevailing evaluation systems remain anchored in metric-driven conceptions of academic performance that privilege measurable outputs over transformative outcomes. Drawing on contemporary scholarship in research evaluation, responsible research assessment, decolonisation, Africanisation, epistemic justice, and research culture, the paper argues that research excellence should be reconceptualised as a multidimensional construct encompassing scientific rigour, societal relevance, ethical responsibility, epistemic diversity, interdisciplinary collaboration, and public value. Particular attention is given to the decolonisation of knowledge systems and the need to produce contextually relevant scholarship while maintaining internationally recognised standards of quality and integrity. The paper concludes by proposing a more holistic framework for evaluating research that integrates academic quality with societal impact, epistemic inclusivity, and sustainable development, encouraging a reconsideration of what research is for, whose interests it serves, and how it can contribute to more just, inclusive, and sustainable futures.*

Keywords: Africanisation, epistemic justice, research culture, research excellence, research impact, responsible metrics.

INTRODUCTION

Research has long occupied a central position in the advancement of knowledge. For many years, scientific inquiry has generated new knowledge, informed public policy, stimulated technological innovation, improved healthcare, strengthened economies, and expanded humanity's understanding of both natural and social phenomena (Bush and Holt, 2021; Merton and Storer, 1979). Universities and research institutions have consequently become pivotal actors in addressing increasingly complex

societal challenges that transcend disciplinary and national boundaries. In the twenty-first century, these challenges include climate change, global pandemics, biodiversity loss, energy insecurity, artificial intelligence, migration, widening socio-economic inequalities, and sustainable development. Addressing such interconnected problems requires not only scientific excellence but also and mainly research capable of producing meaningful societal transformation through collaboration across disciplines, sectors, and communities (Nowotny, Scott and Gibbons, 2001; UNESCO, 2021).

Nonetheless, the ways in which research quality is evaluated have become the subject of intense scholarly and policy debate. For decades, research excellence has been assessed primarily through quantitative indicators including publication counts, citation indices, journal impact factors, h-index scores, grant acquisition, doctoral completions, institutional rankings, and other bibliometric measures (Moed, 2006; Hicks et al., 2015). These indicators have undoubtedly contributed to greater transparency, accountability, and international comparability in research assessment. They have enabled governments, funding agencies, universities, and ranking organisations to allocate resources, benchmark institutional performance, and identify influential scholarly contributions with increasing precision (Wilsdon, 2015).

Nevertheless, the growing reliance on metric-based evaluation has attracted substantial criticism. Many scholars argue that excessive dependence on bibliometric indicators risks narrowing academic priorities, encouraging strategic publishing behaviour, reinforcing disciplinary inequalities, discouraging interdisciplinary research, and privileging research that is easily measurable rather than socially valuable (Muller, 2019; Biagioli and Lippman, 2020). Citation counts and journal rankings often reflect patterns of academic visibility rather than genuine societal significance. Similarly, publication productivity may reveal scholarly activity without necessarily demonstrating whether research contributes to solving real-world problems or improving human wellbeing (Bornmann, 2013; Hicks et al., 2015).

These concerns have become particularly salient as governments increasingly expect publicly funded research to demonstrate tangible economic, environmental, social, and cultural benefits. Consequently, research impact has emerged as an important complement, and, in some cases, an alternative, to conventional notions of research excellence (Thomas, 2028). Research impact encompasses the demonstrable contributions that research makes beyond academia, including influences on public policy, industrial innovation, healthcare, education, environmental sustainability, community development, and broader societal transformation (Penfield et al., 2014). Frameworks such as the United Kingdom's Research Excellence Framework (REF), Australia's Engagement and Impact Assessment, and various European responsible research assessment initiatives illustrate the growing international emphasis on evaluating how research benefits society rather than merely measuring academic outputs (Reed et al., 2021).

While the increasing emphasis on societal impact represents an important shift, important conceptual questions remain unresolved. One of the main ones is whether research excellence and research impact should be regarded as complementary dimensions of research quality or as competing priorities that require different forms of evaluation. Although excellent research often produces significant societal benefits, the relationship between academic quality and societal relevance is neither automatic nor linear. For illustration, one can argue that groundbreaking theoretical discoveries may not generate immediate practical applications, while locally focused research addressing pressing societal needs

may receive limited international citations despite producing profound community benefits (Bozeman and Sarewitz, 2011). Consequently, contemporary debates are increasingly questioning whether existing assessment systems adequately recognise the diverse purposes and contributions of research.

These debates are especially significant within the Global South, where universities confront the dual challenge of achieving international competitiveness while responding to pressing local development priorities. African higher education institutions, in particular, continue to operate within knowledge systems historically shaped by colonial legacies that privilege Eurocentric theories, methodologies, publication outlets, and languages of scholarly communication (Ndlovu-Gatsheni, 2018). Consequently, research excellence is frequently measured according to standards established predominantly in the Global North, sometimes at the expense of locally relevant scholarship capable of addressing African developmental challenges. This dynamic has stimulated growing calls for Africanisation, decolonisation of knowledge systems, and epistemic justice. Such an approach emphasises the importance of recognising diverse knowledge traditions and promoting contextually grounded research without compromising scientific rigour (Connell, 2007; Santos, 2018; UNESCO, 2021).

The growing discourse surrounding decolonisation extends beyond curriculum transformation to encompass broader questions concerning whose knowledge is valued, whose voices are represented, and whose priorities shape global research agendas. Scholars of epistemic justice argue that dominant systems of knowledge production continue to marginalise indigenous, local, and non-Western epistemologies through publication practices, funding priorities, language hierarchies, and institutional structures that privilege certain forms of knowledge while excluding others (Fricker, 2007; Santos, 2018; Munyangayo, 2026a, 2026b). These dynamics challenge traditional understandings of research excellence by highlighting that excellence itself is socially constructed and embedded within historical relations of power.

Closely related to these concerns is the growing recognition that research culture plays a fundamental role in shaping both excellence and impact. Healthy research cultures encourage openness, interdisciplinarity, collaboration, responsible innovation, diversity, inclusion, and public engagement, thereby enhancing both scientific quality and societal relevance. Conversely, highly competitive research environments driven predominantly by publication metrics may undermine creativity, integrity, collaboration, and long-term innovation (Moran, et al., 2020).

Recent international initiatives such as the San Francisco Declaration on Research Assessment (DORA), the Leiden Manifesto for Research Metrics, the Coalition for Advancing Research Assessment (CoARA), UNESCO's Recommendation on Open Science, and the Agreement on Reforming Research Assessment collectively signal a significant paradigm shift in the global research ecosystem. These initiatives advocate moving beyond simplistic quantitative metrics toward more responsible, inclusive, transparent, and context-sensitive approaches to evaluating research quality and impact (DORA, 2012; Allen et al., 2026; Hicks et al., 2015; UNESCO, 2021; CoARA, 2022). Rather than rejecting quantitative indicators altogether, they promote balanced evaluation frameworks that combine scientific excellence with broader contributions to society.

This paper contributes to these ongoing debates by critically examining the relationship between research excellence and research impact within the broader context of responsible research assessment, decolonisation of knowledge systems, epistemic justice, and research culture. It argues that excellence should no longer be understood solely as academic productivity measured through bibliometric indicators but as a multidimensional construct integrating scientific rigour, societal relevance, ethical responsibility, interdisciplinary collaboration, epistemic inclusivity, and sustainable development. In doing so, the paper seeks to advance a more comprehensive understanding of what constitutes valuable research in an increasingly interconnected and complex world.

Rationale and problem statement

The question of what constitutes research excellence has become one of the defining challenges of contemporary higher education and research policy. Across national research systems, governments, funding agencies, universities, and international ranking organisations increasingly rely on quantitative indicators to evaluate research performance, allocate funding, determine academic promotion, and establish institutional prestige. Publications in highly ranked journals, citation-based metrics, research income, and international collaborations have become widely accepted proxies for excellence because they offer apparent objectivity, comparability, and efficiency. While these indicators have strengthened accountability and facilitated global benchmarking, they have simultaneously narrowed prevailing conceptions of research quality by privileging what is readily measurable over what is substantively meaningful.

This emphasis on measurable outputs has generated growing concern that current systems of research assessment encourage performative academic behaviours rather than socially responsive knowledge production. Researchers often experience intense pressure to maximise publication outputs, target journals with high impact factors, increase citation visibility, and secure external funding, and sometimes at the expense of pursuing innovative, interdisciplinary, high-risk, or community-engaged research. Such incentive structures may inadvertently discourage scholarship addressing complex local problems whose significance is not easily reflected through conventional bibliometric indicators. Consequently, the dominant architecture of research evaluation risks conflating academic productivity with genuine research excellence.

The limitations of traditional metrics become particularly evident when considering contemporary societal challenges. Climate change, food insecurity, public health emergencies, digital transformation, educational inequality, conflict, and sustainable development require research capable of generating practical solutions, informing public policy, empowering communities, and supporting evidence-based decision-making. The value of such research cannot be adequately captured solely through citation counts or journal prestige. Instead, it demands broader conceptualisations of impact encompassing social, cultural, environmental, economic, and policy outcomes that often emerge over extended periods and through complex interactions among multiple stakeholders.

These concerns are very visible within African and other Global South contexts, where universities operate within research ecosystems shaped by historical inequalities in knowledge production, publication, funding, and global visibility. Despite increasing research capacity across many African institutions, scholarly excellence continues to be evaluated largely according to standards developed

within Northern academic traditions. Consequently, locally relevant research addressing indigenous knowledge, community development, public health, governance, or sustainable livelihoods may receive limited recognition within international assessment systems despite generating substantial societal benefit. This imbalance reinforces calls for decolonising research evaluation by recognising epistemic diversity and expanding understandings of scholarly quality beyond Eurocentric metrics.

At the same time, there is a growing international movement advocating responsible research assessment. Initiatives such as DORA, the Leiden Manifesto, CoARA, and UNESCO's Recommendation on Open Science collectively argue that research should be evaluated through balanced approaches recognising scientific quality, openness, collaboration, integrity, reproducibility, societal engagement, and public value. However, despite increasing policy support, considerable uncertainty remains regarding how these broader dimensions of excellence should be conceptualised, operationalised, and integrated into institutional evaluation systems.

This paper argues that contemporary research assessment requires a fundamental reconceptualisation that integrates scientific rigour with societal contribution, epistemic justice, ethical responsibility, interdisciplinarity, and sustainable development. Rather than viewing excellence and impact as competing objectives, the paper proposes that they should be understood as mutually reinforcing dimensions of responsible knowledge production. In doing so, it contributes to ongoing debates concerning the future of research evaluation and offers a conceptual framework through which universities, policymakers, funding agencies, and researchers may better align research assessment with the broader public purposes of scholarship.

LITERATURE REVIEW

Conceptualising research excellence

Research excellence has become one of the most influential and equally contested concepts within higher education policy, research governance, and academic evaluation. Traditionally, excellence has been associated with originality, methodological rigour, scientific significance, and the production of knowledge that advances disciplinary understanding (Merton and Storer, 1979). Universities have historically regarded excellence as the pursuit of intellectual discovery through rigorous inquiry, peer review, and scholarly debate. However, over the recent decades, the concept has increasingly been operationalised through measurable indicators that seek to quantify research performance, including publication outputs, citation counts, journal impact factors, research income, doctoral completions, patents, and institutional rankings (Moed, 2006; Hicks et al., 2015, Thomas, 2018).

The widespread adoption of bibliometric indicators reflects broader global trends towards accountability, performance management, and evidence-based governance in higher education. Governments and funding agencies require transparent mechanisms for assessing increasingly competitive research funding needs, while universities rely upon performance indicators to benchmark institutional competitiveness and international reputation. In this regard, bibliometric measures offer apparent objectivity, comparability, and efficiency, which allow institutions to evaluate research productivity across disciplines and countries. As a consequence, journal rankings, citation indices, and

university league tables have become deeply embedded within academic career progression, institutional strategy, and national research assessment exercises (Hazelkorn, 2015).

Despite these advantages, scholars increasingly argue that excellence cannot be reduced to quantitative measures alone. Bibliometric indicators frequently privilege visibility over quality, rewarding research published in internationally recognised journals while undervaluing scholarship addressing local or regional priorities (Bornmann and Marx, 2014). Citation counts may reflect disciplinary size, language dominance, collaboration networks, or publication age rather than intrinsic scientific merit. In the same way, journal impact factors evaluate journals rather than individual articles. However, they continue to influence recruitment, promotion, funding, and institutional prestige despite longstanding criticism regarding their misuse (Seglen, 1997; Vanclay, 2012; Hicks et al., 2015).

The consequences of metric-driven evaluation extend beyond methodological limitations. Excessive emphasis on publication counts has contributed to what Muller (2019) describes as the “tyranny of metrics”, where performance indicators become institutional objectives rather than proxies for scholarly quality. Researchers increasingly experience incentives to maximise publication outputs, pursue fashionable research topics, fragment findings into multiple publications, and prioritise short-term productivity over ambitious, interdisciplinary, or socially engaged research. Such behaviours risk distorting scientific priorities, and could undermine research integrity, and weaken the broader societal purposes of scholarship.

These concerns have stimulated a growing international movement advocating responsible research assessment. Landmark initiatives, including the San Francisco Declaration on Research Assessment (DORA), the Leiden Manifesto, UNESCO's Recommendation on Open Science, and the Coalition for Advancing Research Assessment (CoARA), argue that research quality should be assessed through balanced approaches combining expert peer review with the responsible use of quantitative indicators rather than relying upon simplistic metrics (Hicks et al., 2015; UNESCO, 2021). More recent work by CoARA further emphasises that research excellence should encompass diverse scholarly contributions, qualitative judgement, and demonstrable societal value, signalling an important shift from measuring academic productivity alone towards recognising the broader purposes of research.

Contemporary scholarship therefore increasingly conceptualises research excellence as a multidimensional construct integrating scientific rigour, originality, collaboration, openness, research integrity, societal relevance, and long-term public value. Rather than abandoning quantitative indicators, scholars advocate contextualised and pluralistic approaches capable of recognising the diversity of research contributions across disciplines, institutions, and geographical contexts. This broader understanding provides the conceptual foundation for reconsidering the relationship between research excellence and research impact, a relationship that has become central to contemporary debates concerning the future of research evaluation.

Conceptual framework

The contemporary discourse on research evaluation increasingly recognises that neither traditional bibliometric indicators nor narrowly defined measures of societal impact are individually sufficient for capturing the full value of research. While research excellence has historically been associated with

scientific rigour, originality, and scholarly influence, research impact has broadened expectations of universities to include meaningful contributions to society, public policy, innovation, environmental sustainability, and human wellbeing (Bornmann, 2013; Hicks et al., 2015). Rather than representing competing paradigms, these perspectives should be understood as complementary dimensions of responsible knowledge production. This paper therefore proposes a Multidimensional Research Excellence Framework (MREF) that reconceptualises research excellence as an integrated system of scientific quality, societal contribution, epistemic inclusivity, and sustainable knowledge production.

The proposed framework draws upon four complementary theoretical traditions. First, it builds on Mertonian norms of science, which position organised scepticism, communalism, universalism, and disinterestedness as the ethical foundations of credible scientific inquiry (Merton and Storer, 1979). These principles remain fundamental to scientific excellence because they reinforce methodological rigour, transparency, and integrity. However, contemporary scholarship increasingly argues that these norms alone are insufficient for evaluating research within complex and rapidly changing societies that demand greater public accountability and responsiveness (Wilsdon, 2015).

Second, the framework is informed by Mode 2 knowledge production, which conceptualises research as socially distributed, application-oriented, interdisciplinary, and produced through collaboration among universities, governments, industry, and civil society (Gibbons et al., 1994; Nowotny et al., 2001). Unlike traditional disciplinary models of knowledge production, Mode 2 emphasises that excellent research emerges through interaction with societal actors and real-world challenges. Excellence is therefore judged not solely by disciplinary recognition but also by the capacity of research to generate practical solutions and public value.

Third, the framework incorporates perspectives from Responsible Research and Innovation (RRI) and Open Science, both of which advocate more inclusive, transparent, participatory, and ethically responsive approaches to research (European Commission, 2021; UNESCO, 2021). These perspectives argue that scientific quality should be evaluated alongside openness, reproducibility, collaboration, diversity, stakeholder engagement, and societal responsibility. Recent international initiatives, including the Agreement on Reforming Research Assessment developed by the Coalition for Advancing Research Assessment (CoARA), reinforce this shift by encouraging assessment systems that recognise diverse research contributions and reduce overreliance on publication-based metrics (CoARA, 2022).

Fourth, the framework is grounded in decolonial theory and epistemic justice, which challenge the historical dominance of Eurocentric knowledge systems and call for greater recognition of diverse epistemologies, indigenous knowledge systems, and locally relevant scholarship (Fricker, 2007; Ndlovu-Gatsheni, 2018; Santos, 2018; Munyangayo, 2026a, 2026b). Within this perspective, research excellence cannot be understood independently of questions concerning whose knowledge is recognised, whose voices are represented, and whose priorities shape global research agendas. Consequently, excellence should encompass epistemic plurality alongside scientific rigour.

Integrating these theoretical traditions, the Multidimensional Research Excellence Framework conceptualises excellence as comprising six mutually reinforcing dimensions.

The first dimension, scientific rigour, represents the traditional foundations of excellent research. It encompasses methodological robustness, originality, analytical precision, ethical integrity, reproducibility, and theoretical contribution. Scientific rigour remains indispensable because credible societal impact depends upon reliable and trustworthy evidence. Research that lacks methodological quality cannot sustain long-term influence regardless of its apparent societal relevance.

The second dimension, scholarly influence, recognises the continued importance of academic dissemination through publications, citations, scholarly collaborations, research funding, postgraduate supervision, and disciplinary recognition. However, within the proposed framework these indicators are interpreted as evidence of scholarly communication rather than definitive measures of excellence. Bibliometric indicators therefore remain informative but should be employed responsibly and interpreted within disciplinary and contextual differences rather than as universal measures of quality (Hicks et al., 2015).

The third dimension, societal impact, extends evaluation beyond academia by considering how research informs policy, improves professional practice, stimulates technological innovation, contributes to economic development, enhances environmental sustainability, strengthens public health, and addresses community needs. This dimension reflects the growing international recognition that publicly funded research should generate demonstrable public value while acknowledging that impact pathways are often complex, nonlinear, and long-term (Reed, Bryce and Machen, 2018).

The fourth dimension, epistemic justice, constitutes one of the framework's principal innovations. It recognises that research excellence should include the capacity to produce contextually relevant knowledge while valuing diverse epistemological traditions. Particularly within African and other Global South contexts, excellent research should contribute to the decolonisation of knowledge systems by engaging indigenous knowledge, multilingual scholarship, community perspectives, and locally generated solutions without compromising scientific quality. Excellence therefore becomes both scientifically rigorous and epistemically inclusive.

The fifth dimension, research culture, acknowledges that excellence emerges within institutional environments that shape researcher behaviour, collaboration, innovation, integrity, and wellbeing. Healthy research cultures promote openness, interdisciplinarity, responsible leadership, mentoring, inclusion, and ethical conduct while discouraging excessive competition driven solely by publication metrics. Increasing international attention to research culture reflects recognition that institutional environments fundamentally influence both research quality and societal contribution (Moran, et al., 2020).

Finally, the framework positions sustainable knowledge futures as the ultimate purpose of research excellence. Research should contribute not merely to immediate academic outputs but also to long-term societal resilience, inclusive innovation, environmental sustainability, and equitable knowledge ecosystems. This perspective aligns research evaluation with the Sustainable Development Goals (United Nations, 2015). It recognises that universities increasingly serve as strategic partners in addressing global challenges through knowledge co-production.

Collectively, these six dimensions reposition research excellence as a multidimensional construct that integrates scientific rigour with societal responsibility, epistemic diversity, ethical research culture, and sustainable development. Rather than replacing existing indicators, the framework advocates their contextualisation within broader qualitative evaluations that better capture the diverse purposes of contemporary research. In doing so, it offers a conceptual lens through which universities, policymakers, funding agencies, and researchers may reconcile academic excellence with meaningful societal transformation.

METHODOLOGY

This study adopts a conceptual research methodology to critically examine the evolving relationship between research excellence and research impact and to develop a multidimensional framework for understanding research evaluation in contemporary higher education. Unlike empirical studies that seek to test hypotheses through primary data collection, conceptual research focusses on knowledge by synthesising, critiquing, integrating, and extending existing theoretical perspectives to generate new conceptual insights (Jaakkola, 2020). The approach is particularly appropriate for addressing complex and contested concepts, such as research excellence, whose meanings continue to evolve in response to changing societal expectations, policy priorities, and scholarly debates.

The methodological orientation of this paper is grounded in the premise that research excellence is not a static or universally agreed construct but rather a socially and historically situated concept shaped by institutional norms, political priorities, funding regimes, and broader epistemological assumptions. Therefore, understanding what constitutes excellence requires moving beyond descriptive reviews of the literature towards a critical analysis of how competing theoretical traditions conceptualise research quality, societal impact, and the purposes of knowledge production (Gilson & Goldberg, 2015). The objective is therefore not to measure research excellence empirically but to reconceptualise it through a systematic integration of diverse scholarly perspectives.

Following Jaakkola's (2020) framework for conceptual scholarship, the study proceeded through four iterative stages. The first stage involved problem identification, focusing on the growing disconnect between conventional research assessment systems and the expanding societal expectations placed upon universities and research institutions. Although publication outputs, citation metrics, journal rankings, and research income remain dominant indicators of academic performance, increasing criticism has highlighted their inability to capture broader contributions such as policy influence, community engagement, innovation, ethical responsibility, and sustainable development (Hicks et al., 2015; Wilsdon, 2015). This conceptual tension provided the central research problem underpinning the present study.

The second stage consisted of a critical synthesis of interdisciplinary literature. Rather than conducting a statistical meta-analysis or systematic review of empirical findings, the paper employed an integrative review strategy to examine the conceptual evolution of research excellence across multiple bodies of scholarship. These included research evaluation, scientometrics, higher education studies, science policy, responsible research assessment, research culture, decolonisation of knowledge, Africanisation, epistemic justice, responsible research and innovation (RRI), and Open Science.

Integrating these complementary perspectives enabled a broader understanding of research excellence than would have been possible through a single disciplinary lens.

The literature was selected purposively to ensure both historical depth and contemporary relevance. Seminal contributions, including Merton and Storer's (1979) sociology of science, Gibbons et al.'s (1994) theory of Mode 2 knowledge production, and Fricker's (2007) work on epistemic justice, provided the theoretical foundations for understanding changing conceptions of scientific quality and knowledge production. Particular attention was given to influential international policy frameworks, including the San Francisco Declaration on Research Assessment (DORA), the Leiden Manifesto, The Metric Tide, the UNESCO Recommendation on Open Science, and the Agreement on Reforming Research Assessment developed by the Coalition for Advancing Research Assessment (CoARA). Collectively, these initiatives illustrate the growing international consensus that research evaluation should extend beyond narrow bibliometric measures to recognise diverse scholarly contributions and societal value.

The third methodological stage involved critical analysis and theoretical integration. Rather than merely summarising existing literature, the study employed an interpretive analytical approach that compared competing conceptualisations of research excellence across different scholarly traditions. Areas of convergence, divergence, and conceptual tension were identified through iterative reading and thematic comparison. For example, while scientometric approaches emphasise measurable indicators of scholarly influence, responsible research assessment advocates broader evaluations incorporating qualitative judgement, research integrity, collaboration, openness, and societal contribution. Similarly, decolonial scholarship challenges the epistemic assumptions underpinning dominant research evaluation systems by highlighting structural inequalities in global knowledge production and the marginalisation of indigenous and contextually grounded scholarship (Ndlovu-Gatsheni, 2018; Santos, 2018). Synthesising these perspectives enabled the identification of common principles while exposing important limitations within existing approaches to research evaluation.

The fourth and final stage involved conceptual development, culminating in the formulation of the Multidimensional Research Excellence Framework (MREF) presented in the preceding section. Following recommendations for high-quality conceptual research (Jaakkola, 2020; Makadok, Burton and Barney, 2018), the framework was developed through abductive reasoning, whereby insights emerging from diverse theoretical traditions were iteratively refined into an integrated conceptual model. Rather than proposing an entirely new theory, the framework reconfigures existing knowledge by demonstrating how scientific rigour, scholarly influence, societal impact, epistemic justice, research culture, and sustainable knowledge futures operate as interconnected dimensions of research excellence. In doing so, it offers a coherent theoretical lens for understanding research quality within increasingly complex social, institutional, and global contexts.

To enhance the credibility and trustworthiness of the conceptual analysis, the study adopted several principles commonly associated with rigorous qualitative scholarship. First, theoretical triangulation was employed by integrating perspectives from higher education, science policy, sociology of science, decolonial studies, innovation studies, and research evaluation. Second, conceptual transparency was maintained by explicitly identifying the theoretical assumptions informing the proposed framework and by systematically linking each conceptual dimension to established scholarly literature. Third, the paper privileges critical interpretation over normative advocacy, acknowledging ongoing debates

surrounding the measurement of excellence while recognising that no single evaluation framework can adequately capture the full diversity of research contributions.

Although conceptual research offers significant opportunities for theoretical advancement, it also has limitations. Because the study does not involve primary empirical data, the proposed framework should not be interpreted as an empirically validated model. Rather, it constitutes a theoretically informed proposition requiring future empirical investigation across different institutional, disciplinary, and national contexts. Comparative studies could examine how universities operationalise multidimensional research excellence, while quantitative and qualitative investigations may explore relationships among scientific quality, societal impact, research culture, and epistemic inclusivity. Longitudinal research would also be valuable in assessing how reforms in responsible research assessment influence institutional practices and researcher behaviour over time.

Despite these limitations, conceptual research plays an essential role in advancing scholarly understanding by challenging established assumptions, integrating fragmented knowledge, and proposing new ways of interpreting complex phenomena (Gilson and Goldberg, 2015; Jaakkola, 2020). In the context of ongoing international reforms to research assessment, this methodology provides an appropriate and rigorous foundation for reconceptualising research excellence beyond traditional bibliometric measures. By integrating scientific rigour with societal impact, research culture, epistemic justice, and sustainable development, the study establishes a theoretical basis for more inclusive and responsible approaches to evaluating research in the twenty-first century.

DISCUSSION

Reconsidering research excellence beyond bibliometric performance

One of the central arguments advanced in this paper is that prevailing systems of research evaluation no longer adequately reflect the increasingly complex purposes of contemporary scholarship. Although bibliometric indicators, including publication outputs, citation counts, journal impact factors, h-index scores, and institutional rankings, have significantly enhanced accountability and comparability within global higher education, their dominance has simultaneously narrowed prevailing conceptions of research excellence. As demonstrated throughout the preceding sections, these indicators were developed primarily to quantify academic influence rather than to evaluate the broader social, ethical, and developmental contributions of research (Hicks et al., 2015; Wilsdon, 2015). Consequently, the widespread assumption that measurable academic productivity equates to research excellence warrants critical reconsideration.

The expansion of global university rankings has reinforced this metric-oriented culture by encouraging institutions to prioritise measurable outputs that enhance international competitiveness. While rankings have undoubtedly stimulated improvements in research productivity and international collaboration, they have also contributed to what Hazelkorn (2015) describes as a global competition for prestige, where institutional success is increasingly judged through numerical indicators rather than substantive intellectual or societal contributions. Such performance-driven environments often incentivise publication volume, citation optimisation, and grant acquisition while inadvertently

discouraging interdisciplinary inquiry, high-risk research, and long-term engagement with complex societal challenges.

This phenomenon reflects a broader shift towards the managerial governance of higher education, in which research is increasingly evaluated according to principles of efficiency, accountability, and measurable performance. Although accountability remains essential for public investment in research, excessive reliance on quantitative metrics risks transforming indicators from evaluative tools into institutional objectives, thereby reinforcing what Muller (2019) terms the "tyranny of metrics." Under such conditions, researchers may prioritise behaviours that maximise measurable performance rather than those that generate innovative, socially responsive, or intellectually transformative knowledge.

Recent international developments demonstrate growing recognition of the limitations of metric-driven approaches to research evaluation. The Agreement on Reforming Research Assessment (CoARA, 2022) argues that research assessment should recognise the diversity of scholarly contributions and rely primarily on qualitative judgement, supported by the responsible use of quantitative indicators. This movement reflects a broader shift towards responsible research assessment, which challenges narrow publication-based indicators and seeks to incorporate diverse forms of knowledge production, including interdisciplinary, collaborative, open, and socially engaged research practices (Allen et al., 2026; CoARA, 2022; European Commission, 2021). Recent analyses further suggest that research assessment reform requires sensitivity to disciplinary, institutional, and regional contexts because dominant evaluation frameworks may reproduce existing inequalities within global knowledge systems (Rushforth et al., 2026; OECD, 2026). From this perspective, excellence is increasingly understood not as a universal measurable property but as a contextual and multidimensional construct requiring expert interpretation, recognition of diverse epistemic contributions, and attention to the social purposes of research.

The Multidimensional Research Excellence Framework (MREF) proposed in this paper contributes to this evolving discourse by repositioning bibliometric indicators as one component rather than the defining criterion of research excellence. Scientific rigour and scholarly influence remain essential dimensions because they provide evidence of methodological quality, peer recognition, and intellectual contribution. However, these dimensions acquire greater significance when interpreted alongside societal impact, epistemic inclusivity, ethical responsibility, and research culture. Excellence therefore becomes a relational rather than purely quantitative construct, reflecting the interaction between scientific credibility and broader public value.

This reconceptualisation does not advocate abandoning bibliometrics. Citation analysis, publication records, and research funding remain valuable indicators of scholarly influence when interpreted appropriately within disciplinary and institutional contexts. Rather, the argument advanced here is that research evaluation should recognise the limitations of these measures and resist equating academic visibility with societal significance. Excellence should therefore be understood as evidence of knowledge that is both scientifically credible and socially meaningful.

Research impact as a core dimension of research excellence

The increasing prominence of research impact within higher education policy reflects changing societal expectations concerning the role of universities in addressing complex global challenges. Governments, funding agencies, and international organisations increasingly expect publicly funded research to demonstrate tangible contributions beyond academia, including informing public policy, stimulating technological innovation, improving healthcare, supporting environmental sustainability, strengthening educational systems, and promoting inclusive economic development (Bornmann, 2013; Penfield et al., 2014). These expectations have fundamentally altered understandings of research excellence by expanding evaluation beyond scholarly influence towards demonstrable public value.

However, conceptualising research impact solely as an additional assessment criterion risks reinforcing a false dichotomy between academic excellence and societal relevance. Historically, these concepts have frequently been portrayed as competing priorities, with concerns that greater emphasis on societal impact may undermine curiosity-driven or fundamental research. Such assumptions overlook the complex relationship between scientific discovery and social transformation. Many of the most significant scientific breakthroughs, including advances in medicine, computing, environmental science, and engineering, originated through basic research whose societal applications emerged only decades later. Conversely, locally grounded applied research addressing immediate community needs may generate profound societal benefits despite attracting relatively modest academic recognition.

The findings of this paper suggest that excellence and impact should instead be understood as complementary dimensions of responsible knowledge production. Within the proposed MREF, societal impact represents neither an optional outcome nor a replacement for scientific quality but an integral dimension through which the broader significance of research becomes evident. Scientific rigour provides the credibility necessary for meaningful impact, while societal engagement ensures that research addresses contemporary challenges and contributes to public wellbeing. Excellence without societal relevance risks becoming intellectually isolated, whereas impact without methodological rigour lacks scientific legitimacy.

This integrated understanding aligns with contemporary developments in responsible research and innovation (RRI), Open Science, and knowledge mobilisation. Increasing emphasis on co-production, stakeholder engagement, participatory research, and interdisciplinary collaboration reflects recognition that addressing contemporary challenges requires knowledge generated through interaction among researchers, policymakers, industry, and civil society (European Commission, 2021; UNESCO, 2021). Universities are therefore increasingly expected not just to produce knowledge but to facilitate its translation into socially beneficial outcomes.

Nevertheless, measuring societal impact remains significantly more challenging than measuring academic productivity. Unlike publication outputs or citation counts, societal impacts frequently emerge over extended periods, involve multiple interacting actors, and are shaped by political, economic, and cultural contexts that extend beyond researchers' direct control (Reed, Bryce and Machen, 2018). Attribution therefore becomes particularly problematic, as policy reforms, technological innovations, or community transformations seldom result from a single research project.

These complexities explain why simplistic quantitative indicators cannot adequately capture societal contribution.

The present study therefore argues that research impact should be evaluated through pluralistic approaches combining quantitative evidence with qualitative assessment, narrative case studies, stakeholder testimony, policy influence, knowledge exchange, and evidence of long-term societal change. Such approaches acknowledge that research generates value through diverse pathways rather than through a single measurable outcome. By incorporating societal impact as a core dimension rather than an external consequence of research excellence, the MREF provides a more balanced conceptual foundation for future research assessment systems.

Decolonising research excellence: Africanisation, epistemic justice, and knowledge diversity

Perhaps the most significant limitation of conventional research evaluation systems is their tendency to privilege particular forms of knowledge while marginalising others. Dominant models of research excellence have historically evolved within Euro-American academic traditions and consequently reflect assumptions regarding scientific authority, publication practices, disciplinary organisation, language, and scholarly legitimacy that are not universally shared (Connell, 2007; Ndlovu-Gatsheni, 2018). While these traditions have contributed enormously to global scientific progress, their dominance has also produced structural inequalities within international knowledge production that continue to shape contemporary research evaluation.

The persistence of English-language publication, high-impact international journals, and citation-based evaluation reinforces asymmetries in global scholarly visibility. Researchers working in Africa, Latin America, Asia, and other regions of the Global South (Arocena, Göransson and Sutz, 2018) frequently confront structural barriers including limited research funding, unequal access to publication networks, linguistic disadvantages, and reduced representation within international editorial boards. As a result, research addressing locally significant issues may receive limited international recognition despite producing substantial societal benefit. This imbalance illustrates that excellence is not merely an objective characteristic of research quality but also a socially constructed concept shaped by historical relations of power.

Within African higher education, these concerns have generated growing calls for Africanisation and the decolonisation of knowledge systems. Rather than rejecting international scholarship, decolonial perspectives advocate recognising multiple knowledge traditions and challenging epistemic hierarchies that privilege Northern theories, methodologies, and research agendas as universal standards (Santos, 2018; Munyangayo, 2026a, 2026b). Africanisation therefore seeks to strengthen locally relevant scholarship capable of addressing African developmental priorities while simultaneously contributing to global scientific debates. Excellence, from this perspective, is measured not only through international visibility but also through contextual relevance, intellectual autonomy, and responsiveness to societal needs.

The concept of epistemic justice provides an important theoretical foundation for this reconceptualisation. Fricker (2007) argues that injustice occurs when individuals or communities are systematically disadvantaged in their capacity to contribute to, participate in, or be recognised within

processes of knowledge production. Applied to research evaluation, epistemic justice requires institutions to acknowledge diverse ways of knowing, including indigenous knowledge systems, multilingual scholarship, community-based research, and locally generated innovation. Such recognition does not imply lowering scientific standards; rather, it broadens understandings of excellence by recognising that rigorous scholarship may emerge from multiple epistemological traditions.

The MREF incorporates epistemic justice as one of its defining dimensions precisely because contemporary research excellence cannot be divorced from questions concerning whose knowledge counts, whose voices are heard, and whose priorities shape research agendas. This perspective aligns with UNESCO's vision of Open Science, which emphasises inclusivity, diversity, equitable participation, and global collaboration as essential characteristics of responsible knowledge production (UNESCO, 2021). It also complements broader international movements advocating research systems that recognise diversity of outputs, languages, disciplines, and societal contexts.

Accordingly, the future of research excellence depends not on abandoning international standards of scientific quality but on expanding those standards to accommodate greater epistemic plurality. Universities should therefore cultivate research environments in which methodological rigour coexists with cultural relevance, global collaboration complements local responsiveness, and scientific excellence contributes to greater cognitive justice. Such an approach strengthens rather than weakens global science by expanding the diversity of perspectives available to address increasingly complex societal challenges.

Research culture as the foundation of sustainable excellence

A central proposition emerging from this paper is that research excellence is not solely the product of individual scholarly ability but is fundamentally shaped by the institutional cultures within which research is conceived, conducted, evaluated, and disseminated. While traditional research assessment has largely concentrated on measurable outputs, increasing international attention has shifted towards understanding how research environments influence the quality, integrity, creativity, and societal relevance of knowledge production (Moran, et al., 2020). Consequently, research culture has become an increasingly important dimension of responsible research assessment because it recognises that sustainable excellence depends upon the conditions under which research is undertaken rather than exclusively upon its measurable products.

Research culture encompasses the shared values, leadership practices, institutional norms, incentive structures, mentoring systems, collaborative relationships, and ethical standards that collectively shape researchers' behaviours and experiences (Royal Society, 2018). Healthy research cultures encourage openness, critical inquiry, interdisciplinarity, inclusivity, collegiality, and responsible conduct, thereby creating environments in which innovation can flourish. Conversely, institutional cultures characterised by excessive competition, short-term performance pressures, and narrow publication targets may inadvertently discourage creativity, increase stress, undermine collaboration, and contribute to questionable research practices. Many international studies have shown that hypercompetitive academic environments can adversely affect researcher wellbeing while at the same time the reduce opportunities for innovative and interdisciplinary inquiry (Moran, et al., 2020).

The increasing emphasis on responsible research assessment reflects growing recognition that institutional incentives strongly influence researcher behaviour. Academic promotion, research funding, and institutional prestige have traditionally been tied to publication productivity, citation performance, and journal rankings. While these incentives have encouraged scholarly productivity, they have also contributed to behaviours such as salami publication, excessive self-citation, strategic authorship, and prioritisation of low-risk research topics that promise rapid publication. Such practices may improve measurable performance without necessarily enhancing scientific quality or societal contribution (Muller, 2018). Consequently, international reform initiatives increasingly argue that assessment systems should reward collaboration, openness, mentoring, leadership, reproducibility, and public engagement alongside conventional academic outputs (CoARA, 2022).

Within the proposed Multidimensional Research Excellence Framework (MREF), research culture functions as the enabling environment through which all other dimensions of excellence are realised. Scientific rigour requires institutional commitment to research integrity and ethical practice. Societal impact depends upon cultures that encourage engagement with policymakers, industry, and communities. Epistemic justice requires inclusive research environments that value diverse perspectives, languages, methodologies, and knowledge traditions. Sustainable knowledge futures depend upon institutions capable of supporting long-term, interdisciplinary, and socially responsive research rather than rewarding only immediate bibliometric success.

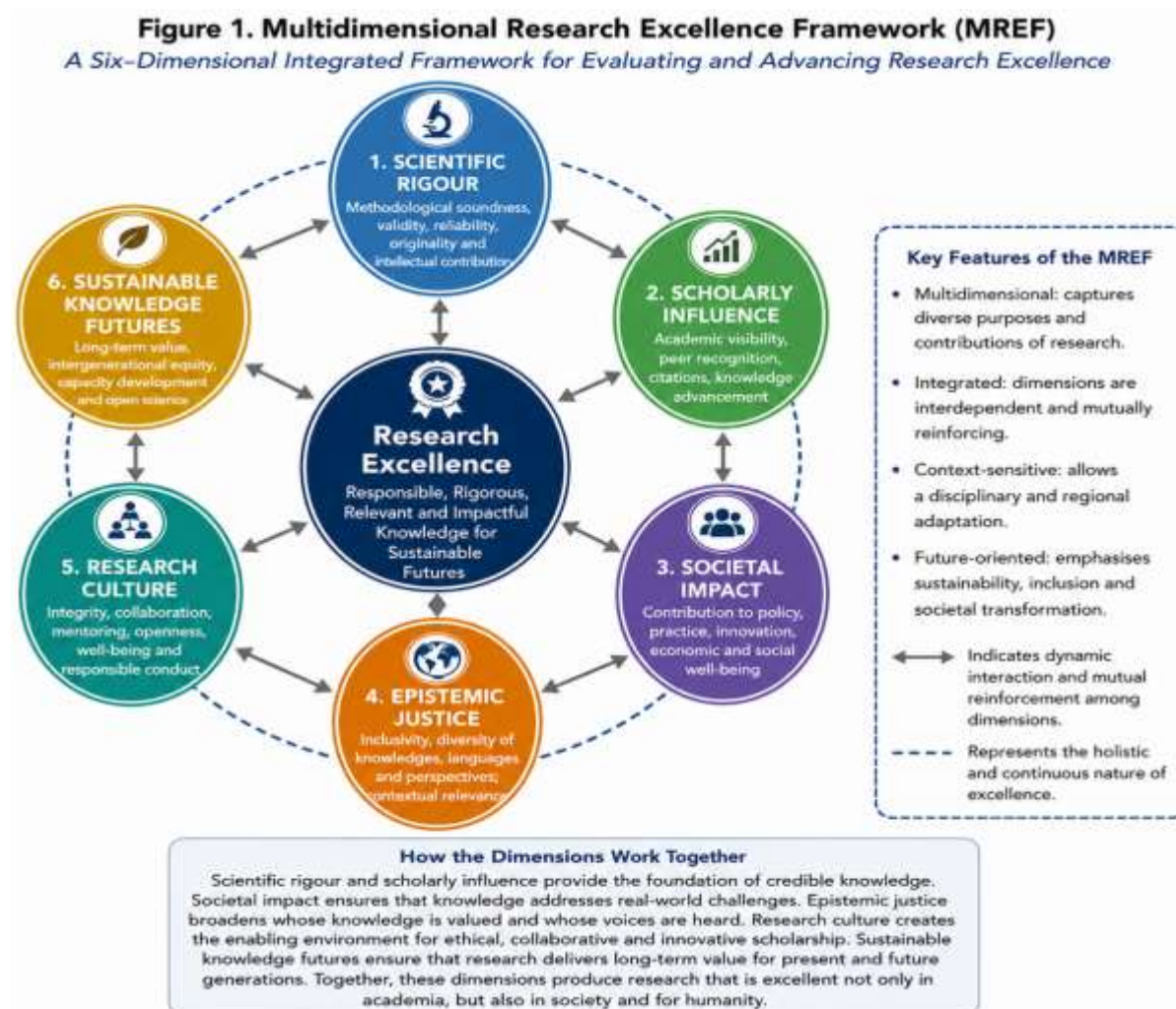
An important implication of this perspective is that responsibility for research excellence extends beyond individual researchers to encompass institutional leadership and governance. Universities increasingly recognise that creating healthy research cultures requires transparent promotion criteria, equitable workloads, effective mentoring, investment in early-career researchers, support for interdisciplinary collaboration, and recognition of diverse scholarly contributions. Recent frameworks developed by organisations such as the Wellcome Trust, UNESCO, and CoARA advocate precisely such systemic reforms, arguing that sustainable excellence emerges through institutional environments that promote integrity, openness, diversity, and collaboration rather than excessive competition (UNESCO, 2021; Moran, et al., 2020).

Accordingly, this paper argues that improving research assessment without transforming research culture is unlikely to achieve lasting change. Responsible metrics must therefore be accompanied by responsible institutions that cultivate environments in which researchers are encouraged not only to produce high-quality science but also to pursue innovative, collaborative, and socially meaningful scholarship.

Towards a multidimensional model of research excellence for the future

The preceding discussion demonstrates that contemporary research evaluation is undergoing a significant paradigmatic transformation. Increasing dissatisfaction with narrow bibliometric indicators has prompted governments, universities, funding agencies, and international organisations to reconsider the fundamental purposes of research assessment. Rather than rejecting quantitative metrics altogether, recent reforms advocate balanced systems that recognise scientific quality alongside broader contributions to society, research integrity, openness, collaboration, and inclusivity (Curry et al., 2020). The following Multidimensional Research Excellence Framework (MREF) proposed in this

paper as figure 1 contributes to this evolving landscape by offering an integrative conceptual model capable of reconciling these diverse expectations.



Note: The framework is heuristic and should be adapted to disciplinary, institutional and national contexts.

Unlike traditional assessment models that focus predominantly on scholarly outputs, the MREF conceptualises excellence as the interaction of six mutually reinforcing dimensions: scientific rigour, scholarly influence, societal impact, epistemic justice, research culture, and sustainable knowledge futures. These dimensions should not be interpreted as independent indicators but as interconnected components of a comprehensive research ecosystem. Weakness in one dimension may ultimately constrain the effectiveness of the others. For example, highly rigorous research that lacks societal engagement may fail to influence policy or practice, while socially relevant research lacking methodological robustness risks undermining public trust. Similarly, excellent institutional cultures create conditions that enable scientific quality, interdisciplinary collaboration, ethical conduct, and meaningful public engagement.

The proposed framework also responds directly to emerging international reforms advocating more responsible approaches to research assessment. Initiatives such as DORA, the Leiden Manifesto, CoARA, and UNESCO's Recommendation on Open Science consistently emphasise that research should be evaluated using multiple forms of evidence rather than relying upon simplistic numerical indicators. The MREF extends these principles by explicitly incorporating epistemic justice and research culture as essential components of excellence, thereby broadening evaluation beyond both traditional bibliometrics and conventional impact assessment.

Importantly, the framework does not propose a universal evaluation checklist applicable across all disciplines and institutional contexts. Instead, it provides a flexible conceptual architecture capable of accommodating disciplinary diversity while maintaining shared principles of scientific integrity, societal relevance, inclusivity, and responsible scholarship. Such flexibility is particularly important because expectations of research contribution vary considerably across disciplines. The pathways through which research influences society differ substantially between engineering, medicine, education, social sciences, humanities, and the arts. A multidimensional framework therefore offers greater conceptual adaptability than standardised metric-based systems.

For policymakers and funding agencies, the framework suggests that future research assessment should combine quantitative indicators with qualitative peer review, narrative impact case studies, evidence of collaboration, contributions to capacity development, leadership in research culture, and demonstrable engagement with societal stakeholders. Universities should similarly reconsider promotion and reward systems to ensure that researchers are recognised not only for publication productivity but also for mentoring, interdisciplinary collaboration, public engagement, open science practices, research integrity, and contributions to institutional development. Such reforms would better align research assessment with the broader missions of contemporary universities.

Integrative implications for global knowledge futures

The reconceptualisation of research excellence proposed in this paper has implications that extend beyond institutional research evaluation to broader questions concerning the future of global knowledge production. Universities increasingly operate within societies characterised by uncertainty, complexity, and rapid technological, environmental, and geopolitical change. Addressing these challenges requires research systems capable of generating scientifically credible knowledge while remaining responsive to diverse societal needs and values. Therefore, research excellence should no longer be viewed as an end in itself but as a means of advancing human wellbeing, democratic participation, sustainable development, and equitable knowledge societies.

The integration of epistemic justice within the proposed framework represents a particularly important contribution to contemporary debates concerning global science. Historically, dominant systems of research evaluation have privileged particular languages, publication venues, methodologies, and theoretical traditions, often marginalising knowledge generated within the Global South. Such asymmetries not only limit intellectual diversity but also reduce the capacity of global science to address context-specific problems requiring locally grounded expertise. By recognising multiple epistemological traditions while maintaining rigorous scientific standards, the MREF contributes to

more inclusive and globally representative knowledge systems capable of responding to complex societal challenges.

Equally significant is the framework's emphasis on sustainable knowledge futures. Contemporary universities are increasingly recognised as strategic actors within national innovation systems and global sustainable development agendas. Their contributions extend beyond producing academic publications to educating future researchers, informing evidence-based policymaking, fostering technological innovation, strengthening democratic governance, supporting environmental resilience, and improving quality of life. Research excellence should therefore be evaluated according to its capacity to contribute to these broader societal objectives over the long term rather than solely through short-term bibliometric performance.

The framework also has implications for international collaboration. Global challenges such as climate change, pandemics, food insecurity, artificial intelligence, biodiversity loss, and social inequality cannot be addressed through isolated disciplinary or national approaches. Effective responses require interdisciplinary collaboration, cross-sector partnerships, equitable international cooperation, and meaningful engagement with communities affected by these challenges. Universities therefore require assessment systems that encourage collaborative knowledge production rather than reinforcing individualistic competition. Such an orientation is consistent with the objectives of Open Science, Responsible Research and Innovation, and the United Nations Sustainable Development Goals, all of which emphasise cooperation, inclusivity, transparency, and shared responsibility for addressing global challenges (United Nations, 2015; UNESCO, 2021).

Ultimately, the future of research excellence depends upon moving beyond the simplistic question of *how research should be measured* towards the more fundamental question of *what research is intended to achieve*. This paper argues that the value of research cannot be fully understood through publication metrics or citation counts alone. Instead, excellence should be evaluated according to the extent to which research advances reliable knowledge, strengthens research cultures, promotes epistemic diversity, informs public policy, supports innovation, empowers communities, and contributes to more equitable and sustainable societies. The Multidimensional Research Excellence Framework offers one possible pathway for achieving this broader vision by integrating scientific rigour with societal purpose, thereby providing a conceptual foundation for more responsible and future-oriented approaches to research assessment.

CONCLUSION AND CONTRIBUTIONS

The increasing complexity of global societal challenges has fundamentally altered expectations concerning the role of universities and research institutions. Research is no longer expected to simply generate new scientific knowledge but also to contribute meaningfully to public policy, technological innovation, environmental sustainability, social inclusion, economic development, and human wellbeing. Nevertheless, despite these expanding expectations, research performance continues to be evaluated predominantly through traditional indicators such as publication outputs, citation counts, journal rankings, research income, and institutional prestige. While these measures provide valuable evidence of scholarly productivity and academic influence, they capture only a partial picture of what constitutes valuable research in contemporary society. This paper has therefore addressed a central

question confronting higher education and science policy: *Are we measuring what truly matters when evaluating research excellence?*

The analysis demonstrates that the conventional distinction between research excellence and research impact is increasingly untenable. Rather than representing competing priorities, scientific rigour and societal contribution are mutually reinforcing dimensions of responsible knowledge production. Excellent research should not only satisfy the highest standards of methodological quality, originality, and intellectual contribution but should also possess the capacity to address complex societal challenges, inform decision-making, foster innovation, and improve human wellbeing. Consequently, research evaluation must move beyond narrow bibliometric conceptions of excellence towards broader, more inclusive, and context-sensitive approaches capable of recognising the diverse purposes and contributions of contemporary scholarship.

A central argument developed throughout this paper is that excellence is inherently multidimensional. Scientific credibility remains indispensable because robust evidence forms the foundation of trustworthy knowledge. However, scientific quality alone is insufficient to capture the broader public value of research. Contemporary research systems increasingly require evaluation frameworks that recognise societal impact, ethical responsibility, interdisciplinarity, openness, research integrity, epistemic diversity, and institutional cultures that enable responsible knowledge production. The proposed Multidimensional Research Excellence Framework (MREF) responds to this need by integrating six interconnected dimensions, such as scientific rigour, scholarly influence, societal impact, epistemic justice, research culture, and sustainable knowledge futures, into a coherent conceptual model for understanding research excellence in the twenty-first century.

One of the paper's most significant contributions lies in explicitly incorporating epistemic justice into contemporary debates concerning research evaluation. Existing assessment systems have historically privileged particular publication practices, languages, theoretical traditions, and institutional contexts, frequently marginalising knowledge generated within Africa and other regions of the Global South. By integrating perspectives from Africanisation, decolonial scholarship, and epistemic justice, this paper argues that research excellence cannot be separated from questions concerning whose knowledge is recognised, whose voices are represented, and whose societal priorities shape research agendas. Reconceptualising excellence in this way does not imply abandoning internationally recognised standards of scientific quality; rather, it expands those standards to embrace greater epistemic plurality, contextual relevance, and cognitive diversity. Such an approach strengthens global scholarship by broadening the range of perspectives available to address increasingly complex local and global challenges.

The paper's emphasis on research culture as a foundational determinant of sustainable excellence is also very important. The analysis demonstrates that research quality emerges not only from individual scholarly achievement but also from institutional environments that encourage collaboration, openness, mentoring, interdisciplinary inquiry, ethical conduct, and researcher wellbeing. Reforming research assessment without simultaneously transforming research culture is therefore unlikely to produce lasting improvements. Universities, funding agencies, and governments must align reward systems with behaviours that promote responsible research practices, long-term innovation, and meaningful societal engagement rather than reinforcing narrow publication-based incentives.

The paper also makes a methodological contribution by demonstrating the value of conceptual scholarship in advancing debates on research evaluation. By critically synthesising literature from research policy, higher education, scientometrics, sociology of science, responsible research assessment, decolonial theory, and epistemic justice, the study develops an integrative framework that extends existing understandings of research excellence beyond traditional disciplinary boundaries. The MREF should therefore be understood as a conceptual heuristic rather than a prescriptive measurement instrument. Its primary value lies in providing a theoretical foundation for future empirical investigation and policy development.

From a policy perspective, the findings have significant implications for universities, funding agencies, national research councils, and international organisations responsible for research assessment. Institutions should adopt more balanced evaluation systems that combine responsible use of quantitative indicators with qualitative peer review, narrative evidence of societal impact, contributions to research culture, interdisciplinary collaboration, Open Science practices, capacity development, and engagement with communities and policymakers. Such multidimensional approaches are more likely to encourage innovative, ethical, inclusive, and socially responsive scholarship while preserving the scientific rigour upon which credible research depends.

Like all conceptual studies, this paper has limitations. The proposed framework has not been empirically tested across different institutional, disciplinary, or national contexts, and further research is required to examine its practical applicability. Future studies could operationalise the six dimensions of the MREF through mixed-methods research, comparative institutional analyses, or longitudinal investigations examining how changes in research assessment influence researcher behaviour, institutional cultures, and societal outcomes. Comparative studies involving universities across the Global North and Global South would be particularly valuable for assessing how multidimensional conceptions of excellence accommodate diverse research ecosystems while maintaining international standards of quality and integrity.

The future of research evaluation depends ultimately, upon asking more fundamental questions than how research should be measured. It requires asking what research is for, whose interests it serves, and how it contributes to the advancement of society. In an era characterised by profound environmental, technological, economic, and social transformation, research excellence should no longer be viewed simply as the production of highly cited publications or internationally ranked outputs. Instead, it should be understood as the capacity of research to generate trustworthy knowledge, strengthen research cultures, promote epistemic justice, stimulate innovation, inform policy, and improve the lives of individuals and communities. Measuring what truly matters therefore requires a fundamental shift from evaluating research primarily through its academic visibility towards recognising its broader contribution to human flourishing and sustainable development. By advancing the Multidimensional Research Excellence Framework, this paper offers a timely conceptual foundation for that transformation and contributes to the growing international movement towards more responsible, inclusive, and societally meaningful approaches to research excellence.

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