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# Caught in the crossfire? A comparative study of the researchers' choice in scholarly publishing and the effects of national evaluation regimes with reference to Articles Processing Charges (APCs)

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## **Caught in the crossfire? A comparative study of the researchers' choice in scholarly publishing and the effects of national evaluation regimes with reference to Articles Processing Charges (APCs)**

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### **ABSTRACT**

Researchers face a complex decision milieu when it comes to disseminating their research in the sense that they are required to weigh up the rewards (and costs) of publishing in relation to their professional reputations as well as against the rewards in their respective national evaluation systems. This comparative study describes and analyzes the perceptions and practices of researchers' publication strategies and seeks to understand how they disseminate their work, whether systems of evaluation influence their publishing practices and how they define the prestige of a journal. To achieve this, we surveyed established researchers in four countries in the Global South, namely, Argentina, Brazil, Mexico and South Africa. The results indicate a broad convergence among respondents from the four countries, with almost all researchers indicating that publication in scientific journals is the most important means for disseminating their research. A high journal impact factor and inclusion in international indexes were cited as the main indicators of journal prestige. However, a journal's value in the national evaluation system was also highlighted by most Argentine and Brazilian researchers as an important consideration when selecting a journal. On the contrary, Mexican and South African researchers did not place such high value on journals in their respective evaluation systems. These results revealed that the role played by publication in national assessment differs in countries where full-time positions for researchers are evaluated, while in other countries publishing-linked incentives play a central role. Nevertheless, this paper concludes that evaluation and reputation regimes are highly influenced by impact metrics and indexing, which in turn has led to a monochromatic picture of scholarly publishing, and has favored the concentration of the notion of prestige in journals that are systematically increasing APC prices.

**Keywords:** Scholarly publishing, Journal classifications, Research assessment, value regimes, Articles Processing Charges (APC).

## INTRODUCTION

The classification and indexing of scientific journals emerged in the 1960s in the United States with the first bibliographic index, the Science Citation Index (SCI), created by Eugene Garfield as a product of the Institute for Scientific Information (ISI), followed in 1973 by the Social Sciences Citation Index (SSCI), and in 1975 by the Arts & Humanities Citation Index (AHCI). These indexes became what is today the Clarivate Web of Science (WoS) Core Collection. Since then, libraries have acquired subscriptions to these journal collections based on a widespread conviction on the part of researchers that high-quality articles were to be found in these indexes (Guédon, 2011). From the perspective of research institutions and governments, publishing in indexed journals provided the path to global excellence and internationalization (Kraemer-Mbula et al., 2020; Arocena, Göransson & Sutz, 2018).

Although in its initial conception the Journal Impact Factor (JIF) did not set out to compare journals or create rankings, the JIF became a type of currency for guaranteeing academic positions and funding, further raising the interest of researchers from all over the world in publishing in these WoS-indexed journals (Biagioli & Lippman, 2020). Journals that fell outside of this “mainstream circuit”<sup>1</sup> (eventually comprising the WoS Core Collection, Scopus and its SCImago Journal Ranking) were of relatively low quality and were not included in world science indicators (Beigel, 2014; Collyer, 2018, Keim et al., 2023). WoS and Scopus ranked journals have consequently acquired a superior position for acquiring recognition compared with regional indexes such as SciELO, Latindex or Redalyc (Vessuri et al., 2014; Vasen & Lujano, 2017).

At the level of individual researcher, this demarcation of quality manifests through several means, including publication-linked salary incentives and requirements for promotion which, in turn, drive researchers to publish in “high-impact journals” to secure tenure or permanent employment. However, it is not only material incentives

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<sup>1</sup> The idea of scholarly publishing circuits was born along with the focus on the circulation of knowledge to refer to the diverse performance of the journals in the value regimes at stake in the academic field. It was defined as a network of journals defined by global, regional or local indexing featured by a segmented capacity to confer academic recognition in research assessment (Beigel, 2014). For a recent discussion on publishing circuits, see Keim et al. (2023).

that motivate scholars worldwide to select these journals. Many believe that articles published in these journals represent their “best-career publications”. This measure of excellence is, in fact, the way peers frequently evaluate the quality of research and serve as the basis for symbolic promotion in the “reputation economy” (Taubert & Weingart, 2017).

However, the devaluation of journals outside the mainstream circuit is not absolute nor imposed in a colonial manner. In countries where there are national classification systems for researchers, there are also local classifications of journals, and many national journals are highly ranked for academic promotion or funding competitions (Beigel & Bekerman, 2019; Vasen & Sarthou, 2021).

The debate around excellence, academic quality and indexing is now more vivid than ever due to the growing commercialization of academic publishing (Butler et al., 2023). As a dynamic and profitable industry, scholarly publishing has changed significantly to broaden its potential clients. The emergence of mega-journals along with the acquisition of hundreds of learned societies’ journals has standardized manuscript selection and peer review, diminishing the role of the academic editors.

Open access scholarly publishing has also brought issues of quality and commercialization into sharper focus. Open access was initially concerned with democratizing access to scientific knowledge but has not fully met expectations given that it has been co-opted by commercial publishers (Butler et al., 2023). The concomitant phenomenon of fraudulent or “predatory” journals adds further vibrancy. Several authors point to a direct relationship between the increase in open access journals with Article Processing Charges (APC) and the proliferation of spurious journals (Pölonen & Sivertsen, 2021; Koerber et al., 2023). It therefore makes sense to study the impact of the advance of open access on researchers’ publishing strategies and the relationship with the national and global value classifications of journals.

This was the focus of the *Survey on Publishing Practices and APC Costs*<sup>2</sup>, a project funded by the Global Research Institute of Paris (GRIP) and conducted in the second half of 2023 in Argentina, Brazil, Mexico and South Africa<sup>3</sup>. The target population for this survey was researchers who are subject to similar categorization processes: in Argentina CONICET, in Brazil CNPQ, in Mexico the National System of Researchers, and in South Africa the National Research Foundation.

In this paper we analyze the perceptions and practices of researchers from these four countries to determine how they disseminate their work (including publishing in open access journals), to what extent national evaluation systems influence their publishing strategies and how they define a prestigious journal. The findings should provide some insight as to whether researchers in Argentina, Brazil, Mexico and South Africa feel caught up in a tension (whether real or perceived) between publishing to enhance their reputations and publishing to meet the requirements of the evaluation systems that they are subjected to.

Before setting out the methodology, and presenting and discussing the results from the survey, we provide some context which we believe to be important for situating this study. As context we describe the classification of scholarly journals in the global, regional and the national systems of reward and evaluation included in the study as well as the national classification of researchers in Argentina, Brazil, Mexico and South Africa.

## The literature on the classifications of scholarly journals

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<sup>2</sup> The APC-GRIP survey was developed and performed by an international team directed by Fernanda Beigel (CONICET, CECIC-UNCuyo, Argentina), and composed by Rigas Arvanitis (Ceped, IRD & UPCité, France), Francois Van Schalkwyk (CREST, Stellenbosch U, South Africa), Osvaldo Gallardo (CONICET, CECIC-UNCuyo, Argentina), André Appel (IBICT, Brazil), Matías Milia (Notre Dame University, United States), Sarita Albagli (IBICT, Brazil), Marianne Noël (LISIS, CNRS, France), Tatiane Pacanaro Trinca (IBICT, Brazil), Victor Montoya (CECIC-UNTREF, Argentina), Manuel Bruccoleri Ochoa (CECIC-UNCuyo, Argentina), Leandro Rodriguez Medina (UAM-Azcapotzalco, México), Ariadna Nebot Giralt (UPCité, France), Gabriela Isuani (CECIC-UNCuyo, Argentina), Larissa Araújo (IBICT, Brazil), Nathaly Cristine Leite Rocha (IBICT, Brazil), Jean-Alain Goudiaby (Assan Seck U, Ziguinchor, Senegal).

<sup>3</sup> See Gallardo *et al.* (2024). Note also that Senegal was originally included as the fifth country and, more important, as a second country in Africa, to create a better intercontinental balance. Unfortunately, due to political instability in the country and other logistical challenges, it was not possible to conduct the survey in Senegal.

Several studies have observed how the JIF became a measurable indicator of excellence and how its increasing use for research assessment created a symbolic border to separate the marginal (local) production from the scientific articles considered “mainstream” and, by implication, global (Guédon, 2011; Hicks et al., 2015; Ràfols et al., 2015). In so-called “semi-peripheral countries”, the performative effect of these rankings was the segmentation of the existing publishing circuits and the emergence of scientific elites oriented by an aspiration to publish in high-impact journals (Vessuri et al., 2014). While publication in a highly ranked journal increased chances of tenure or promotion, publishing in a national journal or in local languages became less valued or openly devalued, depending on the institution.

The cumulative effects of recognition being linked to publication in highly ranked journals affected the visibility of, for example, the African and Latin American journals indexed in SciELO, Latindex, AJOL and Redalyc. Ironically, many Brazilian editors claim that it is more difficult to be indexed in SciELO than in WoS, because SciELO follows international indexing standards based on policies and criteria that are public and applied by a scientific committee (SciELO, 2020). Similar evaluation procedures can be found in Redalyc and Latindex. Therefore, the established associations of excellence and quality that rests on researchers’ belief that prestige is conferred by the mainstream circuit seems misplaced and is still subject to the metrification of scientific publishing which remains in the hands of the publishing industry.

The tensions between the general prestige attributed to the top ranked mainstream collections and the local value conferred to an individual or an institution through research assessment are delegated to the national journal classifications. In some countries, there are indexes for national journals, in others there are also indexes of international journals, assessed by national committees.

In the case of the countries included in the *Survey on Publishing Practices and APC Costs*, the exemplary case is Brazil’s *Qualis Periódicos* (or Qualis)<sup>4</sup>. It was created

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<sup>4</sup> There are also Qualis Books, Qualis Artistic/Classification of Events and Qualis Technical/Technological. Available at: <https://www.gov.br/capes/pt-br/acesso-a-informacao/acoes-e-programas/avaliacao/relatorios-tecnicos-dav-e-grupos-de-trabalho/relatorios-de-grupos-de-trabalho-tematicos>. Accessed on May 23, 2025.

by CAPES in 1998 to classify journals reported by postgraduate programs in the Coleta CAPES system and to analyze the intellectual production of the programs evaluation conducted by the agency every four years. Therefore, Qualis is not an exhaustive list of national or international journals, but a list limited to those journals in which professor-researchers and postgraduate students affiliated in Brazil have published (Barata, 2016; Brasil, 2023a).

Throughout its history, Qualis has undergone several changes. The most recent redesign began in 2015, prompted by the academic community's questioning and identification of various inconsistencies in the classification. The methodology for the current *Qualis Periódicos* (finally approved by the Technical-Scientific Council for Higher Education (CTC-ES) in September 2020) is based on five criteria: 1) a unique classification for each journal; 2) classification established by parent areas; 3) strata obtained from the combination of bibliometric indicators and a mathematical model prepared by CAPES; and 4) bibliometric indicators that consider the number of citations of a journal from Scopus (CiteScore), Web of Science (Impact Factor) and Google Scholar (h-index, both h5 and h10) (CAPES, 2020a; CAPES, 2020b; CAPES, 2023). Based on these five criteria, the classification is divided into eight strata, with each journal falling in a single stratum: A1, the highest, followed by A2, A3, A4, B1, B2, B3, B4, and C, indicating zero weight in the evaluation. Stratum C corresponds to journals that do not have any of the indicators used in the methodology and/or that do not meet the good editorial practices defined by the *Committee on Publication Ethics* (COPE) and the international databases used in *Qualis Referência* (CAPES, 2020c).

Despite numerous criticisms and several studies showing that there is no intrinsic connection between the quality of an article and the number of citations a given journal receives (Moed & van Leeuwen, 1996; Seglen, 1997; Larivière & Sugimoto, 2019), in this architecture approved in 2020, *Qualis Periódicos* is now based more broadly on citation indicators from three major indexes: CiteScore and percentiles from Scopus (Elsevier), percentiles calculated based on the JIF from the Journal

Citation Reports (Clarivate Analytics), and h5 and h10 indexes from Google Scholar (Alphabet/Google)<sup>5</sup>.

The inclusion of Google Scholar could be seen as an expansion of traditional mainstream sources, given that a large proportion of the journals in which Brazilian researchers publish their work are not indexed in WoS or Scopus (Mugnaini *et al.*, 2019; Melo *et al.*, 2021). However, the inclusion of Google Scholar's h-index reinforces the dominant criterion of this national classification system based on journal citation indicators. The rating scale has thus maintained a hierarchy that is directly proportional to the internationalization of the journals, so that journals published in Brazil, especially those that publish in Portuguese, tend to fall in the middle or lower strata. As Brasil (2023b) points out, the selection of bibliometric indicators used as the basis for the *Qualis Referência* goes against the principles of responsible evaluation as stated in the San Francisco Declaration on Research Evaluation (DORA) and the Latin American Forum on Scientific Evaluation (FOLEC)<sup>6</sup>.

Argentina has two national journal classification systems. One of them only evaluates journals published in the country, including those that voluntarily apply to the Argentine Center for Scientific and Technological Information (CAICYT). This list of approved journals is part of the Basic Nucleus of Argentine Scientific Journals (NBRCA) created in 1999. Evaluation is carried out by a scientific committee that analyzes each journal. Committees typically include those journals in the Latindex Catalog or SciELO-Ar without further interrogation. Those journals not in Latindex Catalog or SciELO-Ar are assessed by the committee and may be included in the NBRCA list. The NBRCA list is therefore a combination of rigidly applied selection with reference to two non-hegemonic journal lists and a subjective process of including journals that are not listed. Currently, the NBRCA contains 373 national

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<sup>5</sup> Although *Qualis Referência* considers the h-index (h5 or h10) to define the percentile, several areas within the College of Humanities have opted to merge the indicators used in the current and previous version. See Final Report Working Group - Qualis Periodicals of the College of Humanities. Available at:

[https://www.gov.br/capes/pt-br/centrais-de-conteudo/18012023Relatorio\\_Qualis\\_Humanidades.pdf](https://www.gov.br/capes/pt-br/centrais-de-conteudo/18012023Relatorio_Qualis_Humanidades.pdf). Accessed on May 23, 2025.

<sup>6</sup> FOLEC was established in 2019 by CLACSO to discuss and share knowledge, and to create a collective proposal for reforming the research evaluation system in Latin America and the Caribbean. Available at: <https://www.clacso.org/folec/>. Accessed on May 23, 2025.

journals<sup>7</sup>, a relatively high number, considering that there are 1,250 active journals in Argentina (Beigel et al., 2023). CONICET relies on a second, more comprehensive national journal classification system (i.e., one that includes all journals in which Argentine researchers publish). The classification of journals is carried out within the SIGEVA system through the body's evaluation committees when tenure applications are assessed. There are specific criteria for each scientific discipline and the classification is organized into three levels: Group 1, Group 2 and Group 3. SIVEGA therefore has a direct impact on the entry and/or promotion of an Argentine researcher's career.

Each committee autonomously decides on the classification given to each journal. Classifications can change annually because the committees are renewed every year. In the exact, natural and agricultural sciences, there is a noticeable relationship between Group 1 and Scopus Quartile 1 (and some Quartile 2) journals while journals in Quartiles 3 and 4 fall in Groups 2 or 3, which have few, if any, points. For the social sciences and humanities there is a special resolution<sup>8</sup> which classifies being indexed in SciELO, along with Scopus and WoS, in Group 1. Many advisory committees also include Latindex Catalog 2.0 in Group 1. In this sense, this resolution represents an important attempt to standardize regional scientific production in Spanish. However, it places Redalyc and the National Index (Basic Core) in Group 2, and the description of Group 3 is rather ambiguous. Given that this resolution is only a recommendation, its application is inconsistent as each committee is at liberty to use it as face value or to use it as a reference to create its own classification.

In the case of Mexico, the first Index of Mexican Journals (1993) was replaced in 2016 by a new system of Classification of Mexican Research Journals (CRMICYT<sup>9</sup>) in which the initial qualitative criterion of the index (included/not included) was eliminated and journals were classified into eight strata. Vasen and Lujano (2017)

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<sup>7</sup> See:

<http://www.caicyt-conicet.gov.ar/sitio/comunicacion-cientifica/nucleo-basico/revistas-integrantes/>.

Accessed on May 23, 2025.

<sup>8</sup> Resolution No. 2249/2014. See:

<https://www.conicet.gov.ar/bases-para-la-categorizacion-de-publicaciones-periodicas-en-ciencias-sociales-y-humanidades>. Accessed on May 23, 2025.

<sup>9</sup> See: <https://www.revistascytconacyt.mx/>. Accessed on May 23, 2025.

analyze the structure of this classification and show that stratification by bibliometric impact is adopted. Therefore, the top four levels include journals indexed by Scopus and WoS and their placement depends directly on the quartile they occupy within these indexes. For those journals not indexed in Scopus or WoS, a differential segmentation is generated, to create four additional levels: journals of international competence (RCI), of national competence (RCN), journals in consolidation (REC), and journals in development (RED). Only 100 journals, those with the highest score in each annual evaluation round, are admitted to this second segmentation of the stratification. The eight strata are ordered from highest to lowest score, as follows: Q1, Q2, Q3, Q4, RCI, RCN, REC, RED.

Unlike the Argentine case, the CRMICYT generates a selective ranking in the sense that the main incentive for inclusion in CRMICYT is that it allows the journal to access funding offered by the National Council for Humanities, Sciences and Technologies (CONAHCYT). Similar to the Argentine case, it is in the National System of Researchers that the valuation of scientific journals is defined, with a direct impact on promotion in Mexico's salary-incentive system.

In the case of South Africa, through a system of state-funded subsidization, the country's public universities are rewarded for the number of publications authored by staff affiliated with a South African university. The 2015 Research Outputs Policy of the Department of Higher Education and Training (DHET) – a government rather than a scientific entity – constitutes the current framework for the submission and award of publication subsidy claims whose beneficiaries are the universities and not individual authors of scientific publications. The overarching aim of the 2015 Publication Policy is to incentivize public universities to produce increased numbers of (high) quality scientific publications.

An emphasis on quality is articulated in Clause 2.2 of the policy. This emphasis is further re-affirmed when quality is linked to the necessity of 'proper' peer review of all publications that qualify for subsidy.

DHET publishes each year a list of approved journals. Any article published in one of the journals in the approved list automatically qualifies for subsidy. DHET recognizes

several international indexes including Web of Science, Scopus, SciELO-SA, DOAJ, NSD and IBSS. Scopus and DOAJ are more recent additions to the DHET-list to make the list more representative of research published in African journals and by researchers across all scientific fields. In addition, since many South African journals do not necessarily appear in any of these indexes or lists (e.g., in locally-applicable fields such as law, linguistics, cultural studies and the like), DHET conducts its own accreditation process for all for local and other journals to be added to the list of approved journals. Unlike the Latin American countries described above, South Africa maintains a binary system of inclusion and exclusion that relies exclusively on predetermined lists. In other words, there is no ranking of journals or of articles that qualify for the financial subsidy even though all articles that qualify for subsidy will count heavily towards both personal financial incentives for researchers as well as opportunities for employment and promotion at the country's public universities. At the same time, South African researchers publishing on topics of local relevance, that may be exclusively of interest to researchers in South Africa or in languages other than English, benefit from the inclusion of local journals in a list curated by DHET.

### **The role played by the national systems for the categorization of researchers**

Argentina, Brazil, Mexico and South Africa share similar paths of integration into the global science system, along with the prevalence of national publication classification systems and the morphology of their researchers' universes. These four countries can all be considered semi-peripheral in relation to the traditional "centers of excellence" because their academic communities embody the structural inequalities typical of the Global South, technological and digital gaps, institutional imbalances, language asymmetries and relatively low performance levels in mainstream journal indexes (Beigel et al., 2023; Sandoval-Romero & Larivière, 2020). Despite their similar national contexts, geographical proximity and comparable histories, the four countries show differences in their classification of researchers for the purposes of evaluation.

In the case of Argentina, the target population of the survey was the researchers of the CONICET, a public research institution established in 1958. Its Scientific and Technological Researcher Career (CIC) program is based on annual competitions that ensure a permanent position where researchers are subject to periodical evaluation of their research achievements and publishing performance<sup>10</sup>. The CIC's research positions are arranged in five hierarchical categories (in ascending order): Assistant, Adjunct, Independent, Principal, and Superior. These tenured research positions are independent from teaching posts that can only be acquired at a university. It is typical for CONICET researchers to hold a part-time teaching position at a university. Progress along the CONICET career trajectory has different requirements for each category, covering aspects such as internationalization, leading roles in publications, teaching positions held, supervision of doctoral candidates, participation in and/or direction of research projects, and technology transfer. In most disciplines, promotion is highly linked to publishing productivity and impact. CONICET therefore relies on a highly internationalized evaluative culture but without any direct monetary incentives for mainstream publishing.

In Brazil, the national researcher classification system is the *Bolsa de Produtividade em Pesquisa* (PQ), created in 1976 by the National Council for Scientific and Technological Development (CNPq), a public research-funding agency established in 1951. The CNPq provides research funding in the form of a salary supplement to incentivize university research (Leite & Rocha Neto, 2017). The amounts of the salary supplement vary between USD 220-300<sup>11</sup>, and depend on a CNPq fellow's classification or rank. CNPq fellows are classified hierarchically into three categories: 1) Senior (PQ-Sr); 2) PQ-1 (sub-divided into levels 1A, 1B, 1C and 1D); and 3) PQ-2<sup>12</sup> (Albagli *et al.*, 2024). The curriculum vitae of fellows has become a decisive

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<sup>10</sup> Argentina has a particular feature that distinguishes it from other Latin American countries because two national classifications systems co-exist: the CONICET and the National Research Incentive Program (PROINCE) created in 1996. The latter's last call was in 2014 and there is no current statistical-curricular data to study the group of researchers-professors that are not in CONICET but have been accredited in PROINCE. Hence, in Argentina, the survey leaves aside the group of researchers who are mostly nationally oriented.

<sup>11</sup> Table of CNPq scholarship amounts updated on 09/14/2023. Available at: [https://www.gov.br/cnpq/pt-br/acao-a-informacao/bolsas-e-auxilios/copy\\_of\\_modalidades/tabela-de-valores-no-pais](https://www.gov.br/cnpq/pt-br/acao-a-informacao/bolsas-e-auxilios/copy_of_modalidades/tabela-de-valores-no-pais). Accessed on May 23, 2025.

<sup>12</sup> This classification was changed in August 2024. The PQ researcher is now classified into three different levels: PQ Level A, PQ Level B, and PQ Level C. See: [http://memoria2.cnpq.br/web/quest/view/-/journal\\_content/56\\_INSTANCE\\_0oED/10157/21801223](http://memoria2.cnpq.br/web/quest/view/-/journal_content/56_INSTANCE_0oED/10157/21801223). Accessed on May 23, 2025.

factor in the selection process, increasingly based on quantitative aspects of the applicant's bibliographic production (Beigel et al., 2023).

The scientific output of Brazilian researchers is also evaluated by the Coordination for the Improvement of Higher Education Personnel (CAPES), a federal agency responsible for funding and evaluating graduate programs in Brazil<sup>13</sup>. To assess the quality of graduate programs, CAPES uses, among other instruments, the *Qualis* classification for journals<sup>14</sup>, which also has an impact on decisions about funding for teaching and research institutions.

In Mexico, the evaluation of researchers is carried out by the National Researchers System (SNI) which is part of the National Science and Technology Council (CONACYT), established in 1984 to promote research, especially in the natural sciences. As in the case of Brazil, researchers receive supplementary income from CONACYT depending on their level or rank. The levels that make up the SNI, in ascending order, are as follows: Candidate, Level I, Level II, Level III, and National Emeritus Researcher. The SNI has traditionally promoted internationalization (e.g. by recognizing the impact of journals automatically when reporting publications for periodic evaluations) but since 2018 it has revised this criterion and has focused more on science dissemination and academic community-building. The relatively meagre income of academics in many institutions makes the SNI a vital source of income for researchers in Mexico.

Sandoval-Romero and Larivière (2020) show that the CONACYT supplement can represent 50% of a researcher's salary depending on their rank. Membership (being evaluated and ranked) also confers prestige on researchers, especially at the

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<sup>13</sup> Other funders, such as the Research Support Foundations (FAPs) belonging to each state of the federation, as well as the Financier of Studies and Projects (FINEP), also make up the evaluation system for CT&I research in Brazil.

<sup>14</sup> In October 2024, CAPES announced the end of *Qualis Periódicos* as the instrument for evaluating publication venues in Brazilian graduate programs. For the upcoming four-year evaluation cycle (2025–2028), a new system was introduced that centers the classification on individual articles rather than on the journals in which they appear. While this shift signals a reorientation — emphasizing the content and impact of scholarly work — *Procedure 1*, as outlined in the preliminary guidelines, retains a classificatory logic based on journal-level bibliometric indicators, but the classification will be applied to the articles. As such, this methodological approach remains closely aligned with the practices of the previous *Qualis* system. See: <https://www.gov.br/capes/pt-br/assuntos/noticias/capes-adotara-classificacao-de-artigos-na-avaliacao-quadrinial>. Accessed on May 23, 2025.

highest levels which evaluates academic credentials, publishing record and international leadership.

In South Africa researchers voluntarily elect to be rated by the National Research Foundation (NRF), an agency established in 1999 as an autonomous statutory body. The NRF is the research funding implementing agency of the government of South Africa and serves its national science system comprising mainly of 26 public universities and a few specialist science facilities. Researchers may choose to be rated for the purposes of peer recognition and/or to improve their chances of promotion at their respective universities.

The ratings that are awarded by the NRF consist of the following five categories: A (with sub-designations A1 and A2): Leading international researcher; B (with sub-designations B1, B2 and B3): Internationally acclaimed researcher; C (with sub-designations C1, C2 and C3): Established researchers P: Prestigious award; and Y (with sub-designations Y1 and Y2): Promising young researcher. The first three (A to C) apply to established researchers and the last two categories (P and Y) apply only to young and emerging researchers. Those seeking a rating from the NRF have their applications considered based on a structured self-evaluation of their research performance which is, in turn, evaluated by their peers. Publications constitute an important part of the evaluation, particularly the extent to which peers deem that an applicant's publications have contributed to the applicant's field of expertise. Also taking into consideration are academic service and leadership. Review panels are convened by discipline, and panel members are invited from the research community to evaluate applicant's peer reports. Peers are selected by the NRF based on the applicant's area of research. Evaluations take place annually and a rating is conferred on an applicant for a period of five years.

As is evident from the above, there is no link between the NRF's national rating system and the national publications incentive system of DHET. The rating system relies only on peer review to assess applications and does not take into consideration the publication subsidy units earned by the applicant. Reviewers and panels may consider the journals in which applicants have published but do not consider whether a journal is included in the DHET's list of approved journals.

## METHODS<sup>15</sup>

The survey design was common for the four countries<sup>16</sup>. A link to the online questionnaire hosted on the LimeSurvey platform was sent via email to established researchers in the four countries (i.e. those researchers evaluated and ranked as per the national classification systems described above). The online questionnaires were identical except for language and the questions at the beginning of the questionnaire related to the membership and award-level which are specific to each country. The English master version of the questionnaire was translated into Spanish and Portuguese. The email was accompanied by a consent form, which included ethical and privacy considerations.

The questionnaire was organized into five sections. The first section included questions relating to general information such as research area, level and category of researcher, type and region of institutional affiliation, gender, year of birth, year of obtaining doctorate, and sources of funding received. The second section dealt with questions related to publication strategies and journal evaluation, mainly focusing on the reasons for selecting specific journals for publication. The third section consisted of questions about awareness and knowledge of the various models of open access publications. The fourth section addressed questions about the frequency of publication, payment amounts, and sources of funding for publication fees. Finally, the fifth section dealt with the perception and challenges related to the payment of publication fees, including open questions for comments and suggestions for alternatives to the payment of these fees.

Data was collected between August 2023 and February 2024. Table 1 shows the research universe, the respondents and the respective percentages per country.

### Table 1

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<sup>15</sup> For a detailed report of the complete survey and methodology, see Gallardo et al. (2024).

<sup>16</sup> Nevertheless, each country was able to make small adjustments to the questionnaire considering local specifics.

**Target audience, survey universe, number of respondents, percentage by country and date the survey was sent.**

	Population	Population size (n)	Sample size (n)	Completed questionnaires	Dates between which questionnaires were sent
<b>Argentina</b>	CONICET researchers	12,176	3,313	27.2%	27/09/2023–24/11/2023
<b>Brazil</b>	CNPq PQ researchers	15,426	6,288	40.8%	30/08/2023–30/09/2023
<b>Mexico</b>	SNI researchers	41,367	3,441	8.3%	11/10/2023–29/12/2023
<b>South Africa</b>	NRF-rated researchers	4,391	535	12.2%	13/11/2023– 16/02/2024

Source: Gallardo et al., 2024, p. 12.

This article focuses on the data relating to section 2 of the questionnaire<sup>17</sup>. The data obtained from the respondents was cross-referenced with the categories of researchers to compare and analyze the publication strategies and journal selection of researchers from Argentina, Brazil, Mexico and South Africa. Of the researchers invited to participate, a total of 13,153 completed the online survey.

## RESULTS AND DISCUSSION

The first survey question of relevance to this article is Question 9 which asks, “How important are the following means for disseminating your work?”. Respondents were offered a choice between Very important, Relatively important, Not very important and Does not apply to my field of study. This question addresses directly the interest of this article in how researchers disseminate their work.

<sup>17</sup> Section 2 of the survey is made up of the following questions: 9) How important are the following means for disseminating your work?; 10) What factors do you consider when selecting a scientific journal to publish in?; 11) You indicated that the value of a journal in the evaluation system is an important consideration when selecting a journal to publish in. Could you be more specific about which evaluation system?; and 12) In your opinion, what are the main indicators of a prestigious journal in your field? See: Gallardo et al. (2024).

As shown in Table 2, the data indicates a broad convergence of respondents in selecting “publication in scientific journals” as the most important means of disseminating their scientific work with between 96.8% and 97.8% of researchers in all four countries indicating that they regard publishing in scientific journals as a “Very important” means of disseminating their research.

These results can be interpreted in the light of numerous studies that have analyzed the performative effects of evaluation regimes, pointing out how research evaluation systems are increasingly valuing the journal article as the main vehicle of communication to the detriment of other formats, while simultaneously stimulating the overproduction of journal articles (Méndez & Sánchez-Núñez, 2023; Noël, 2024). For example, this trend towards the “articlisation” of publication formats almost doubled in all 36 disciplines analyzed in the British system between 1992 and 2014 — the proportion of items submitted for assessment in article format rose from 48% to 81% over three decades (Paye & Renisio, 2017).

The second-most valued means for disseminating research is “Presenting at academic conferences”. Presenting at conferences does not always require publication (although it can provide an avenue towards publication) and could point to the value placed by researchers on being evaluated by their peers. Also valued is “Publication of scholarly books”, selected as “Very important” by 37,6% to 56,7% of researchers, despite books being more valued in a relatively small number of scientific disciplines. What is of particular note is that while 36,8% of researchers surveyed in South Africa were in the social sciences and humanities, only 37,6% valued books as very important for disseminating their work, lower than all three the Latin American countries where representation in the social sciences and humanities was lower (21,8% in Argentina, 23,2% in Mexico and 24,0% in Brazil) (Gallardo et al., 2024). This appears to provide further evidence of articlisation in scientific fields where books were held in relative high regard.

None of the other means for dissemination research compare with publication in scientific journals or conference presentations. Read together, the responses suggest a relatively low value placed on dissemination channels where academics or peers are not the primary or target audience.

**Table 2**  
**Importance of different means for disseminating work for Argentina (ARG), Brazil (BR), Mexico (MX) and South Africa (SA) — only “very important” answers.**

How important are the following means for disseminating your work? (Very important)								
Answer	ARG (N=3,313)		BR (N=6,288)		MX (N=3,440)		SA (N=535)	
	n	%	n	%	n	%	n	%
Community engagement activities	942	28,43%	1191	18,94%	1258	36,57%	142	26,54%
Creative works	201	6,07%	370	5,88%	512	14,88%	51	9,53%
Presenting at academic conferences	2326	70,21%	3336	53,05%	2266	65,87%	378	70,65%
Technology transfer	1302	39,30%	2092	33,27%	1231	35,78%	109	20,37%
Reports, briefs, occasional papers	1179	35,59%	984	15,65%	1454	42,27%	125	23,36%
Publication of scholarly books	1724	52,04%	2760	43,89%	1952	56,74%	201	37,57%
Publication in conference proceedings	1091	32,93%	1502	23,89%	740	21,51%	143	26,73%
Publication in scientific journals	3207	96,80%	6147	97,76%	3345	97,24%	521	97,38%
Patent registration	942	28,43%	2040	32,44%	1152	33,49%	49	9,16%
Publication of book chapters	1824	55,06%	2300	36,58%	2024	58,84%	221	41,31%
Publication in professional periodicals	1133	34,20%	973	15,47%	1779	51,72%	112	20,93%
Publication in popular media	953	28,77%	1535	24,41%	1120	32,56%	104	19,44%

This finding is further confirmed when considering the same question but looking at the means of dissemination considered as “Not important” by respondents. Brazil’s results<sup>18</sup> stand out among the other three countries. In the case of Brazil, the results show that a proportion of PQ researchers consider “Reports, briefs, occasional papers” (41,5%), “Community engagement activities” (33,4%) and “Publication in conference proceedings” (31,1%), “Publication in professional periodicals” (29,3%) and “Publication in popular media” (26,4%) as the five least important means of disseminating their scientific work. Bearing in mind that university extension activities (university service or third mission) are highly developed in Brazil, the high percentage of Brazilian PQ researchers who rate these means as the least important may derive from the closer link that university extension has with undergraduate courses (bachelor's and licentiate degrees). Graduate programs prioritize research. Thus, although teacher-researchers generally work at both undergraduate and postgraduate levels, and can carry out university extension activities, the emphasis in the evaluation of PQ researchers and postgraduate programs has been more on research. However, recently there has been a growing debate about the need to take

<sup>18</sup> For the descriptive report regarding data from Brazil, see Albagli et al. (2024).

a broader view of social impact and direct interaction between the university and the external community in the evaluation criteria for postgraduate courses.

Researchers in South Africa are expected by the national government and by their universities to include community engagement in their work. Most universities have accepted community engagement as their third mission and this function is often found in university mission and vision statements. In addition to national policy, it also features as a key performance indicator in the evaluation of promotions. However, 21,5% South Africa-based researchers indicated that community is “not important” as a means of disseminating their work; more than double the percentage of researchers in Argentina and Mexico (see Table 3). This may suggest that researchers in South Africa regard publications as the real drivers of reputation and carry more value in their performance assessment even though community engagement also features in their work-based assessment. The means of dissemination chosen as “not important” for Mexico, Argentina and South Africa are creative works, publication in conference proceedings, publication in professional journals and publication in the popular media.

**Table 3**  
**Importance of different means for disseminating of work for Argentina (ARG), Brazil (BR), Mexico (MX) and South Africa (SA) — only “not important” answers**

How important are the following means for disseminating your work?								
Answer	ARG (N=3,313)		BR (N=6,288)		MX (N=3,440)		SA (N=535)	
	n	%	n	%	n	%	n	%
Community engagement activities	331	9,99%	2102	33,43%	262	7,62%	115	21,50%
Creative works	571	17,24%	1523	24,22%	499	14,51%	137	25,61%
Presenting at academic conferences	42	1,27%	530	8,43%	76	2,21%	10	1,87%
Technology transfer	200	6,04%	852	13,55%	247	7,18%	101	18,88%
Reports, briefs, occasional papers	386	11,65%	2611	41,52%	434	12,62%	126	23,55%
Publication of scholarly books	156	4,71%	961	15,28%	137	3,98%	109	20,37%
Publication in conference proceedings	452	13,64%	1958	31,14%	742	21,57%	145	27,10%
Publication in scientific journals	11	0,33%	17	0,27%	4	0,12%	4	0,75%
Patent registration	325	9,81%	937	14,90%	332	9,65%	124	23,18%
Publication of book chapters	105	3,17%	1206	19,18%	101	2,94%	68	12,71%
Publication in professional periodicals	508	15,33%	1843	29,31%	289	8,40%	161	30,09%
Publication in popular media	460	13,88%	1662	26,43%	416	12,09%	126	23,55%

Question #10 (Table 4) focused on researchers' decision-making when publishing: "What factors do you consider when selecting a scientific journal to publish in?". This question provides additional insights into how researchers disseminate their work but also about the value placed on national valuation systems as a determining factor in the publishing strategies of researchers. One of the ten options was whether their publishing decisions were influenced by their respective evaluation systems. Of the ten options offered, researchers could select up to four answers.

As can be seen in Table 4, there is a similarity between Argentinian and Brazilian researchers in terms of the main criteria considered when selecting a scientific journal to publish in. The "value of the journal in the evaluation system" was highlighted by 55,1% and 60,9% of the respondents in Argentina and Brazil, respectively. On the other hand, the importance of this option was much lower for Mexican and South African researchers (29,3% and 16,3%, respectively).

**Table 4**  
**Important factors when choosing a scientific journal for publication**

What factors do you consider when selecting a scientific journal to publish in?								
Answer	ARG (N=3,313)		BR (N=6,288)		MX (N=3,440)		SA (N=535)	
	n	%	n	%	n	%	n	%
The ease with which I will be able to publish in the journal	301	9,09%	389	6,19%	248	7,21%	41	7,66%
The scientific domain of the journal and its relevance to my field of study	2259	68,19%	4930	78,40%	2296	66,74%	387	72,34%
The database in which it is indexed (e.g. Scopus, Web of Science, Scielo)	1494	45,10%	3127	49,73%	2050	59,59%	234	43,74%
The number of citations or impact factor of the journal	1818	54,87%	3826	60,85%	1994	57,97%	298	55,70%
The immediate open access publication of the article in the journal	193	5,83%	495	7,87%	347	10,09%	62	11,59%
The cost of publication (e.g., APCs, colour charges, etc.)	1850	55,84%	2771	44,07%	1341	38,98%	217	40,56%
Value of the journal in the evaluation system	1925	58,10%	3829	60,89%	1008	29,30%	87	16,26%
Relevance to the local agenda (pressing problems in my region or country)	279	8,42%	229	3,64%	337	9,80%	44	8,22%
Peer review (type, e.g. double blind vs single blind vs open)	410	12,38%	1080	17,18%	862	25,06%	130	24,30%
Time taken to publish (including peer review time)	803	24,24%	1133	18,02%	1238	35,99%	100	18,69%
Recommendations by peers and/or mentors	297	8,96%	167	2,66%	190	5,52%	53	9,91%
The publisher of the journal	78	2,35%	398	6,33%	89	2,59%	100	18,69%
The readership of the journal	276	8,33%	846	13,45%	304	8,84%	150	28,04%
Rejection rate of the journal	27	0,81%	25	0,40%	69	2,01%	7	1,31%
The language of the journal	220	6,64%	224	3,56%	275	7,99%	44	8,22%
The members of journal's the editorial board	138	4,17%	188	2,99%	136	3,95%	51	9,53%

Other	60	1,81%	40	0,64%	40	1,16%	9	1,68%
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In the answers from Brazil, the importance given to CAPES' Qualis Periódico system<sup>19</sup> stands out, as does the importance given to international indexes. Possibly this equivalence is associated with the fact that Qualis has increasingly relied on the “impact” indicators of the major indexes as a benchmark for calculating the higher strata. The new Qualis Referência, as we have seen, is based entirely on citation indicators — Impact Factor, CiteScore, h-index. Moreover, the list of Qualis journals is widely used by the Brazilian academic community as a reliable reference to guide researchers when selecting journals to submit their work to. Furthermore, the Qualis classification is extensively adopted by Brazilian universities as a criterion for faculty hiring, accreditation of researchers in graduate programs, career progression, as well as in university calls for research grants and publication support (Kern & Cardoso, 2023). Even if it was not created for this purpose, the Qualis Periodicals classification is used by Brazilian universities and funding agencies also as a criterion to measure the quality of journals. Likewise, the classification is adopted by various CNPq Advisory Committees to assign scores to the publications of candidates for research productivity grants. Therefore, the importance attributed to the Qualis Periodicals system in the survey reflects its role as a ranking instrument widely used in Brazilian scientific and university policies to assess both the quality of academic production and the performance of individual researchers (Martínez-Ávila *et al.*, 2020).

The responses by researchers based in Argentina suggest a high degree of value being placed on international prestige alongside national career-building. “The scientific domain of the journal and its relevance in my field of study” (68,2%) is an option that stands out as a proxy indicator for international prestige, and is followed by “The value of the journal in the evaluation system” (58,1%) and “The number of citations or impact factor of the journal” (54,9%), both proxy indicators for value being conferred on a journal's perceived impact on researchers' national careers. As in Brazil, the journal classification system adopted by CONICET is decisive in the evaluations for tenure and promotion in this agency. The large number of candidates

<sup>19</sup> In the Brazilian questionnaire, this option included a reference to Qualis in parenthesis, as follows: “The position of the journal in evaluation systems (Qualis or other classification systems)”.

in the evaluation at CONICET favours the use of these quantitative indicators reinforcing the assumed link between the quality of an article and its indexing. In an organization that offers prestigious full-time positions at the national level, the performative power of these national classification systems has been observed in previous studies (Beigel, 2014).

Similar elements can be observed in Mexico: researchers selected “The scientific dominance of the journal and its relevance to my field of study” (66,7%) as most important, followed by “The database in which it is indexed (e.g. Scopus, Web of Science, SciELO)” (59,6%) and “The number of citations or impact factor of the journal” (58,0%). The “Value of the journal in the evaluation system” was not highly valued (29,3%), which may reflect the limited role played by the national CRMICYT index. The value placed on the index and the Impact Factor is most likely attributable to the fact that the SNI committees assess the quality of journal articles according to the impact of the journal, the preference is given to international journals, and to the prestige associated with the indexing services (WoS and Scopus) (Sandoval-Romero & Larivière, 2020).

The case of South Africa shows an even higher predominance of “The scientific domain of the journal and its relevance to my field of study” (72,3%), followed by “The number of citations or impact factor of the journal” (55,7%), and “The database in which it is indexed (e.g. Scopus, Web of Science, SciELO)” (43,7%). Only 16,3% indicated that a journal’s value in the valuation system is important. The responses by researchers based in South Africa suggest a high degree of value being placed on quality and relevance. At first glance, the findings for South Africa may be a surprise given that researchers have the option to unlock additional research funding from the national publication subsidy scheme if they publish in indexed journals. In other words, given that researchers qualify for financial subsidy only if their publications appear in prescribed journal indexes (and approved lists), one might expect that this option would have received more positive responses compared with scientific domain or the JIF of a journal. This may be because the financial reward for publications is paid to the university and not to individual researchers. Moreover, the distribution of the reward at university level varies greatly and is lowest for those universities at which researchers publish most (Van Schalkwyk, 2024). Another

explanation is that NRF-rated scientists, that is, those more experienced researchers who constitute our population, are less interested in financial incentives and more interested in the reputational gains to be had from publishing their work.

In summary, we note that both the South African and Mexican cases do not place such high importance on the value of a journal in the evaluation system while Argentinian and Brazilian researchers do consider it relevant. To test whether researchers understood “evaluation system” as being national or international, the survey asked further questions of those researchers who in Question 10 (see Table 5) selected the option of “the value of a journal in the evaluation system as an important consideration when selecting a journal to publish in”. The data from Brazil confirms the centrality that researchers give to Qualis within the Brazilian scientific system, since 76,2% of the 3,829 respondents to this dependent question indicated that, when highlighting the importance of a journal's position in the evaluation system, they are referring to the Qualis system. Similarly, in Argentina, almost all researchers (92,2%) prioritize the national evaluation system. In the case of Mexico, 46,5% prioritized the national system; not as highly as in Argentina and Brazil but more highly than South Africa where international evaluation was most highly prized (41,4%). However, some caution should be exercised in the case of South Africa, since only 87 (or 16,3%) of researchers made up the subgroup who indicated that the evaluation system plays an important role when choosing a journal for publication.

**Table 5**  
**Consideration of evaluation systems when selecting journals for publication**

You indicated that the value of a journal in the evaluation system is an important consideration when selecting a journal to publish in. Could you be more specific about which evaluation system?

Answer	ARG (N=1,925 - 58,1%)		BR (N=3,829 - 60,9%)		MX (N=1,008 - 29,3%)		SA (N=87- 16,3%)	
	n	%	n	%	n	%	n	%
Institutional evaluation (e.g. the evaluation system of your university for promotion or tenure)	12	0,62%	87	2,27%	207	20,54%	18	20,69%
National evaluation (e.g. national funding ratings or categorizations by science councils)	1,775	92,21%	2917	76,18%	469	46,53%	32	36,78%
International evaluation (e.g. the evaluation for international funds or international rankings)	93	4,83%	785	20,51%	307	30,46%	36	41,38%

Other	45	2,34%	40	1,04%	25	2,48%	1	1,15%
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A final observation from Question 10 relates to open access and the payment of Article Processing Charges (APCs) as a factor considered by the researchers in their journal selection. The payment of APCs was among the top five factors considered (Table 4) when selecting a journal for publication. This may be indicative of several factors, including the financial constraints that researchers in these countries face to pay the APCs required by hybrid and gold open access journals. Having to take APCs into account and, presumably, opt for subscription journals that do not charge APCs, restricts the valorization of open access and has adverse effects on the accessibility of the scholarly communication ecosystem. As the publishing system increasingly shifts to APC-based open access models, it also creates tensions for researchers trying to survive in an ecosystem based on the "articlisation" of research.

Finally, the last question in Section 2 (Question 12) of the questionnaire focused on researchers' perceptions of a journal's prestige: "In your opinion, what are the main indicators of a prestigious journal in your field?". The data in Table 6 show that a "high Impact Factor" is considered the most important indicator of the prestige of a scientific journal for researchers in Argentina (69,9%), Brazil (80,4%) and South Africa (75,7%). In Mexico, "indexing in international databases" is slightly higher (75,9%) than "high Impact Factor" (72,3%).

**Table 6**  
**Main indicators of prestige in journals according to field of study**

In your opinion, what are the main indicators of a prestigious journal in your field?								
Answer	ARG (N=3.313)		BR (N=6.288)		MX (N=3.440)		SA (N=535)	
	n	%	n	%	n	%	n	%
Indexing in international databases	2,116	63,87%	3,937	62,61%	2611	75,90%	332	62,06%
High impact factor	2,315	69,88%	5,055	80,39%	2487	72,30%	405	75,70%
Publication of articles with novel results	1,262	38,09%	2,168	34,48%	1373	39,91%	217	40,56%
Frequent citation among colleagues	1,085	32,75%	1,951	31,03%	740	21,51%	240	44,86%
International status	1,902	57,41%	2,311	36,75%	1872	54,42%	314	58,69%
Publication of articles by recognised or preeminent scholars in the field	1,101	33,23%	2,403	38,22%	943	27,41%	274	51,21%
Reputation of the publisher, scientific society or university	427	12,89%	1,806	28,72%	433	12,59%	271	50,65%
Rigorous peer review	1,370	41,35%	2,985	47,47%	1745	50,73%	379	70,84%

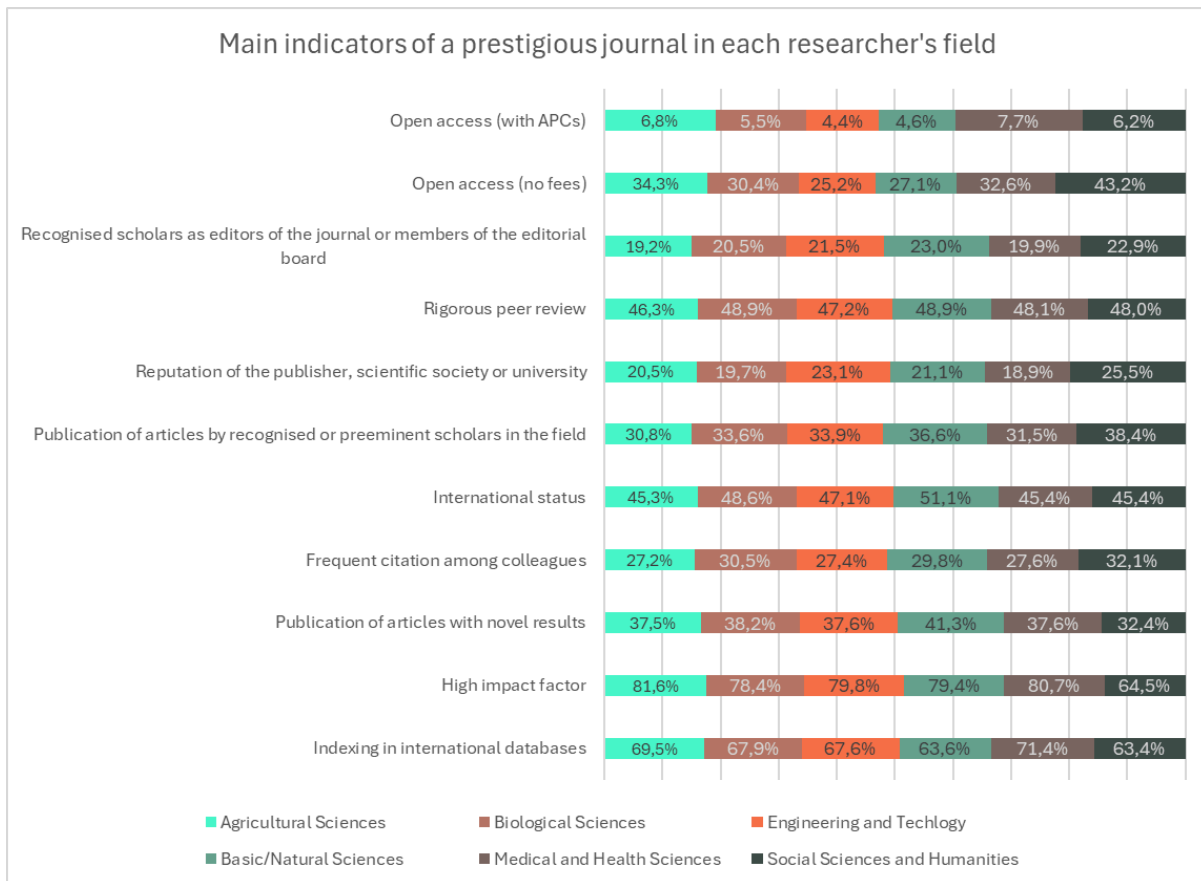
Recognised scholars as editors of the journal or members of the editorial board	366	11,05%	1,894	30,12%	450	13,08%	208	38,88%
Open access (no fees)	910	27,47%	2,411	38,34%	990	28,78%	141	26,36%
Open access (with APCs)	70	2,11%	465	7,40%	221	6,42%	29	5,42%
Other	28	0,85%	29	0,46%	22	0,64%	5	0,93%
Estratos mais altos no sistema Qualis Periódicos	-	-	3,652	58,08%	-	-	-	-

For all three Latin American countries the combination of “high Impact Factor” and “indexing in international databases” appears in the top two positions. South Africa stands out given that respondents rated “rigorous peer review” as the second-most important indicator of journal prestige. This could be explained by the fact that peer review is a minimum requirement and an indicator of quality for publications such as books and conference papers in the national publication incentive system. However, it could equally be that researchers in South Africa regard peer review as a strong indicator of peer approval and, consequently, publication in peer reviewed journals confers reputational gains.

In all four countries, the survey shows that established researchers seek to publish articles in journals that guarantee quality and internationalization. The perceptions of the researchers that identify quality with indexing, combined with the dominance of global standards in these countries, reinforces the pressure to publish in a restricted nucleus of international journals, offering fewer options in local journals. Strikingly, in at least three of the four countries, the importance conferred to national research evaluation systems is high, evidence that the dominant notion of excellence is not merely imposed from the outside but reinforced from within the national research culture. South African researchers deviate by placing less value on performance (in the evaluation system) and more on reputation. Nevertheless, reputation remains strongly linked to publication and especially in the form of journal articles in indexed journals with high impact factors.

Examining the same data presented in Table 6, but now focusing on the differences observed throughout the six major scientific fields included in the study, a certain convergence emerges toward valuing the Impact Factor and indexing in international databases. However, this pattern is distributed somewhat unevenly across

disciplines: Social Sciences and Humanities (63,41%) and Basic/Natural Sciences (63,62%) assign comparatively less weight to indexing in international databases, whereas Engineering and Technology (67,62%), Biological Sciences (67,92%), Agricultural Sciences (69,46%), and especially Medical and Health Sciences (71,44%) attribute progressively greater importance to international indexing.



**Figure 1.** Main indicators of a prestigious journal, by scientific field.

**Source:** Authors' elaboration based on responses to the survey question "In your opinion, what are the main indicators of a prestigious journal in your field?" (APC Surveys 2023, GRIP Project). Also available in:

[https://public.tableau.com/app/profile/manuel.bruccoleri.ochoa/viz/GRIPAPCSurvey2\\_03/Dashboard1?publish=yes](https://public.tableau.com/app/profile/manuel.bruccoleri.ochoa/viz/GRIPAPCSurvey2_03/Dashboard1?publish=yes).

As can be seen in Figure 1, "high Impact Factor" is the principal indicator of journal prestige and surpasses the percentage attributed to "indexing in international databases" across all fields, with this perception being strongest among researchers in Medical and Health Sciences (80,73%) and Agricultural Sciences (81,60%). In absolute terms, Agricultural Sciences researchers assign approximately 17 percentage points more importance to a "high Impact Factor" than the Social

Sciences and Humanities community (64,50%). The latter is, in turn, the only scientific area where more than 40% of researchers consider “open access (no fees)” as one of the main indicators of journal prestige, reflecting the traditional association of this field — particularly in Latin American countries — with the non-commercial open access model.

Although not sharply contrasted, the gradient across fields — both regarding the weight given to international database indexing and to the Impact Factor — appears to reflect disciplines that are heavily pressured by the increase of APC prices. This situation places researchers in a “crossfire” as they attempt to navigate between the demands to publish in recognized venues that are favored by evaluation systems and their own disciplinary cultures.

## **CONCLUSIONS**

The scholarly publishing system which sustains the formal communication of science is critical for its effectiveness (Merton, 1968; Taubert & Weingart, 2017). The role played by national categorization systems and other forms of evaluation (of researchers, departments, graduate programs, and institutions) — as well as journal classification systems (such as Qualis in Brazil and the System of Classification of Mexican Research Journals in Mexico) — have progressively relied on two interconnected axes: indexing in commercial international databases and citation indicators. Thus, publishing in indexed journals with a high Impact Factor (which is also measured in quartiles and percentiles normalized by field) increases the likelihood of securing project funding, entering and advancing in academic careers, and even expanding opportunities for establishing international collaborations. The strong influence of these bibliometric indicators in the national classification systems for researchers and funding incentives stresses the corset of the choices available for the researchers to publish.

The survey results revealed that the role played by journal indexing differs among the four countries analysed. Where full-time positions for researchers are at stake, the classification of the journals by the national systems is highly considered in the

choices of the researchers; while in other countries the value regime behind publishing-linking incentives play a central role. Nevertheless, impact metrics and indexing mold to a great extent the perceptions of journal reputation, which, in turn, has led to a monochromatic picture of scholarly publishing, concentrating symbolic capital in journals that are systematically increasing their APC prices.

The centrality of commercial publishers in the communication of science is thus assured because, as the findings of the survey described in this paper show, both the reputation of the journals and performance in national evaluation systems are intertwined. Researchers in all four countries surveyed have little choice but to navigate between the forces of reputation and evaluation, albeit to varying degrees depending on the extent to which their respective evaluation systems impact on their careers. Their attempts to strategize the inherent tensions that take place in a segmented scholarly communication system has become institutionalised through several means. To foster knowledge, rewards and valorization of diamond journals is a relevant option to change this state of affairs, although deep changes must occur in national and institutional research assessment.

## **CREDIT - AUTHOR'S CONTRIBUTION STATEMENT**

1. Beigel, Fernanda: Conceptualization (Lead); Methodology (Lead); Data curation (Equal); Formal analysis (Lead); Writing – original draft (Lead); Discussion of results (Lead); Writing – review & editing (Lead).
2. Ochoa, Manuel Bruccoleri: Methodology (Equal); Data curation (Lead); Formal analysis (Equal); Writing – review & editing (Equal).
3. Isuani, Gabriela: Formal analysis (Equal); Discussion of results (Equal).
4. Trinca, Tatiane Pacanaro: Formal analysis (Equal); Writing – original draft (Equal); Discussion of results (Equal); Writing – review & editing (Equal).
5. van Schalkwyk, François: Formal analysis (Equal); Writing – original draft (Equal); Discussion of results (Lead); Writing – review & editing (Equal).

## **CONFLICT OF INTEREST**

The authors declare that there is no conflict of interest.

## **RESEARCH DATA AVAILABILITY STATEMENT**

The dataset supporting the results of this study has been deposited in Zenodo and is accessible at:

<https://zenodo.org/communities/grip-apc/records?q=&l=list&p=1&s=10&sort=newest>  
and

[https://zenodo.org/communities/grip-apc/records?q=&f=resource\\_type%3Adataset&l=list&p=1&s=10&sort=newest](https://zenodo.org/communities/grip-apc/records?q=&f=resource_type%3Adataset&l=list&p=1&s=10&sort=newest)

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## ETHICS COMMITTEE APPROVAL STATEMENT

### CONFIRMATION OF RESEARCH ETHICS APPROVAL

REC: Social, Behavioural and Education Research (SBER) - Initial Application Form

**Date:** 28 February 2024

**Project number:** 29324

**Project Title:** *A COMPARATIVE ANALYSIS OF OPEN SCIENCE, KNOWLEDGE PRODUCTION AND ACCESS IN LATIN AMERICA AND AFRICA*

**Dear Dr FB Van Schalkwyk**

**Identified supervisor(s) and/or co-investigator(s):**

Your REC: Social, Behavioural and Education Research (SBER) - Initial Application Form, submitted on 07/11/2023 at 10:15, was reviewed and approved by the Social, Behavioural and Education Research Ethics Committee (REC: SBE).

This approval is only valid until the end of the protocol approval period:

**Protocol approval date  
(Humanities)**

28 February 2024

**Protocol expiration date  
(Humanities)**

27 February 2027

## GENERAL COMMENTS PERTAINING TO THIS PROJECT

## INVESTIGATOR RESPONSIBILITIES

1. Please take note of the General Investigator Responsibilities attached to this letter.
2. Always use your project ID number (29324) in all correspondence with the REC: SBE concerning your project.
3. Please note that the REC has the prerogative to ask further questions, seek additional information, and monitor the conduct of your research and the consent process, where required.

### List of documents approved by the REC: SBE

Document Type	File Name	Date	Version
Data collection tool	GRIP APC Survey - South Africa	03/11/2023	1
DTA/MTA Term sheet	CREST datasharing agreement_EXTERNALLMK	04/11/2023	1
Research Protocol/Proposal	1_GRIP Proposal	07/11/2023	2
Recruitment material	2_South Africa - Recruitment email	07/11/2023	2
Informed Consent Form	3_Informed consent_online survey	07/11/2023	2
Default	4_Cover letter	07/11/2023	2
Default	Letter with responses as comments	07/11/2023	1

If you have any questions or need further help, please contact the REC administrative officer, **Mr Aden Williams** at [aden@sun.ac.za](mailto:aden@sun.ac.za).

**Sincerely,**

Mrs Clarissa Robertson (cgraham@sun.ac.za)

Secretariat: Social, Behavioral and Education Research Ethics Committee (REC: SBE)

**National Health Research Ethics Committee (NHREC) registration number:  
REC-050411-032**

## **Compliance Statement**

The Social, Behavioural and Education Research Ethics Committee complies with the SA National Health Act No.61 2003 as it pertains to health research. In addition, this committee abides by the ethical norms and principles for research established by the *Declaration of Helsinki (2013)* and the *Department of Health Guidelines for Ethical Research: Principles, Structures and Processes (2nd Ed.) 2015*.

Annually a number of projects may be selected randomly for an external audit.

## **Principal Investigator Responsibilities**

### **Protection of Human Research Participants**

Once Research Ethics Committee approval is confirmed, you are responsible for the following:

- **Conducting the Research:** Ensure that the research is conducted according to the REC-approved research plan. You are jointly responsible for the conduct of all co-investigators and staff. Research must follow recognised standards of your discipline and the principles of ethical and responsible research conduct.
- **Informed Consent:** Obtain and document affirmative informed consent using REC-approved processes. Store signed forms securely for at least five (5) years after project completion.
- **Extension of Approval:** Submit a progress report at least two (2) months before approval lapses. No grace period is permitted. Once approval lapses,

all research must cease until REC renewal.

- **Amendments:** Planned changes to research design, consent documents, data instruments, surveys, or recruitment must be submitted for approval prior to implementation. Exceptions are only allowed to mitigate immediate participant hazards (inform REC immediately).
- **Adverse or Unanticipated Events:** Report serious adverse events, participant complaints, or risks to participants/team members within five (5) days. Non-compliance or continuing problems must also be reported.
- **Research Record Keeping:** Maintain research-related records (approved proposal, amendments, consent forms, recruitment materials, reports, event logs, REC correspondence) in secure locations.
- **Counselling/Emergency Support:** Counselling by professionals not pre-approved by REC will not be recognised as research. Such cases must be indicated in progress or final reports.
- **Final Reports:** Submit a Final Report when research is completed.
- **On-Site Evaluations:** Notify REC immediately if informed of audits or evaluations by sponsors, external agencies, or internal groups.

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