Indexing in crisis: contradictory, unethical and questionable attitudes adopted by scientific journals

Indización en crisis: actitudes contradictorias, poco éticas y cuestionables asumidas por las revistas científicas

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Resumen

La presión por la indización compromete las políticas editoriales de las revistas. Esto ha dado lugar a revistas depredadoras y prácticas poco éticas, por lo que se han transformado algunas publicaciones en entidades comerciales. Los investigadores, presionados por indizarse, pueden comprometer la integridad de su trabajo, lo que afecta la confianza en la literatura científica y la calidad de la investigación. En este sentido planteó como objetivo del estudio identificar actitudes poco éticas asumidas por las revistas científicas y que han sido influenciadas por la necesidad de indización. De esta manera se empleó el análisis documental clásico como método principal, correspondiéndose a un estudio documental cono aporte teórico. Se obtienen como resultados la sistematización de prácticas poco éticas realizadas en el marco de las revistas científicas para aumentar su posicionamiento en bases de datos y otras fuentes de evaluación. Se concluyó que el posicionamiento de las revistas científicas es un fenómeno complejo que involucra calidad editorial, métricas de impacto y estrategias de comunicación. La obsesión por la indización puede comprometer la integridad de la investigación y desviar el enfoque de la misión científica. Es esencial que editores e investigadores reflexionen sobre sus prácticas, priorizando la calidad y la ética para contribuir al avance del conocimiento y al bienestar social.

Palabras clave: indización; ética de la investigación; revistas científicas; evaluación de la ciencia.

Abstract

The pressure for indexing compromises the editorial policies of journals. This has led to predatory journals and unethical practices, consequently transforming some publications into commercial entities. Researchers, pressured to be indexed, may compromise the integrity of their work, which affects trust in scientific literature and the quality of research. In this regard, the objective of this study was to identify unethical attitudes assumed by scientific journals that have been influenced by the need for indexing. In this way, classic documentary analysis was used as the main method, corresponding to a documentary study with a theoretical contribution. The results obtained include the systematization of unethical practices carried out within the framework of scientific journals to increase their positioning in databases and other evaluation sources. It was concluded that the positioning of scientific journals is a complex phenomenon that involves editorial quality, impact metrics, and communication strategies. The obsession with indexing can compromise the integrity of research and divert the focus from the scientific mission. It is essential that editors and researchers reflect on their practices, prioritizing quality and ethics to contribute to the advancement of knowledge and social well-being.

Keywords: indexing; research ethics; scientific journals; science evaluation.

Introduction

The triad of positioning, visibility, and impact is a determining factor in evaluating the quality of scholarly journals. Enhanced positioning (within databases) correlates with greater visibility among the scientific community, consequently leading to increased impact (measured by citations) and potentially improving or sustaining its positioning. However, positioning does not guarantee citations, although a high probability exists. Regarding positioning, journals indexed in the upper quartiles tend to attract greater attention from the scientific community and concentrate submissions in specific knowledge domains.

One of the primary criteria employed to assess the positioning of a scholarly journal is the impact factor. This metric quantifies the frequency with which a journal's articles are cited within a defined period. This indicator has been critiqued for its potential to distort research quality and encourage practices such as publishing articles in high-impact journals at the expense of scientific rigor. Despite these criticisms, the impact factor remains a dominant criterion in the evaluation of academic output, prompting many journals to adopt strategies aimed at enhancing this index. This is often achieved at the cost of diversity and innovation in research (Chávez, 2022).

The rise of open access publishing has transformed the scholarly journal ecosystem (Woolston, 2021). This model enables researchers to publish their work without reader fees, thereby promoting broader dissemination of knowledge. However, it has also led to a proliferation of predatory journals seeking financial gain at the expense of content quality. Consequently, the positioning of journals in this evolving context depends not only on their editorial rigor but also on their capacity to remain relevant and trustworthy for researchers and the general public.

Positioning is predicated on quantitative metrics and the quality of editorial processes. Transparency in peer review, ethics in publication, and accountability in managing conflicts of interest are increasingly influential aspects in researchers' perceptions of a publication (Puentes-Cala, 2019). Journals demonstrating a serious commitment to these principles enhance their reputation and attract researchers who value academic integrity.

Social media platforms have emerged as key channels for the dissemination of scientific knowledge (Marín & Arriojas, 2021) and as a means of generating citations. Journals utilize these tools to interact with their audience, facilitating more immediate feedback. The effective communication of research findings through posters, videos, and other forms of digital content can augment the visibility and impact of published articles. This establishes a positive feedback loop that benefits both authors and journals.

Indexation or Indexing: an artificial terminological problem in document analysis and journal positioning

In Spanish, authors and editors face a terminological problem related to the term indexing. The terms *indización* (indexation) and indexing are frequently used interchangeably within the fields of information and documentation. However, upon analyzing their meaning and context, a distinction in their usage emerges that warrants examination. *Indización* originates from the Spanish term índice (index), which refers to an organized list of elements (Cirio, 2021). In the context of information science, *indización*

denotes the process of assigning descriptors or keywords to a document, thereby facilitating its search and retrieval.

Conversely, there exists the erroneous notion that indexing is considered a broader process oriented towards organizing and classifying information within a data management system (Salatino & Ruiz, 2021). Both categories, however, refer to a technical documentary process encompassing, among other aspects: the assignment of key terms, the classification of content within metadata schemes, the creation of indexes, and inclusion in controlled vocabularies. Furthermore, confusion arises from the origin and provenance of the terms, leading to the association of *indización* with índice (Spanish) and indexing with the English term.

The reason why *indización* and indexing are often used synonymously lies in the fact that both processes share the same fundamental objective: to enhance the accessibility of information (Gil *et al*., 2022). In both indexation and indexing, the ultimate goal is to facilitate the location of documents within an information system, whether through catalogs, databases, or digital archives. In this regard, many information and documentation professionals do not perceive a necessity to differentiate between the two terms, leading to their interchangeable use in daily practice.

Despite their common usage as synonyms, it is important to note subtle nuances in their contextual meanings. *Indización* tends to be more prevalent in traditional information processing workflows, specifically in assigning terms from a controlled vocabulary to a document within environments such as libraries and archives.

"Indexing," on the other hand, is a term that has proliferated in recent decades, becoming associated with a broader spectrum of (contemporary) activities, including the creation of indexes in databases, the organization of metadata, and the classification of documents according to diverse criteria. An example of this can be observed in bibliographic databases, where the prevailing view is that *indización* focuses on assigning descriptors that represent the thematic content of an article. Within the same sources, there is a belief that "indexing" has greater specificity, encompassing the organization of all records within a system that allows users to search in various ways, not only by subject but also by author, publication year, or document type. In both instances, *indización* is the more appropriate term, particularly within Spanish-speaking contexts.

In the last decade, indexation in prestigious databases and indexes has become an almost obsessive objective for many scholarly journals (Crisci & Katinas, 2020). This phenomenon, which could be termed "indexation fever" or "indexation crisis," has led to a focus on seeking visibility and recognition at any cost, both economic and ethical. The pressure to be included in recognized indexes such as Scopus and Web of Science has transformed the behavior of academic publishing, generating concerns about quality, integrity, and ethics in research.

Indexation in prestigious databases has become a key parameter for evaluating the quality and impact of scholarly journals (Orozco, 2023). This pressure affects editors, journals, and researchers who often find their academic productivity measured by the number of publications in indexed journals. According to Paz *et al*. (2022), "this dynamic has created a vicious cycle in which the success of a journal is measured more by its ability to be indexed than by the quality of the content it publishes" (p. 72).

The costs associated with indexation are significant. Some journals feel compelled to pay high fees to certain experts who support the process aimed at meeting the requirements of the indexes, which can lead to editorial decisions that compromise academic integrity. In some journals, to meet indexation criteria, the volume of publications is prioritized over the quality of the articles. This results in a decrease in peer review standards and publications of questionable quality.

The unbridled pursuit of indexation often conflicts with the editorial policies of journals. Journals should prioritize the publication of research that significantly contributes to the body of knowledge and undergoes rigorous peer review (Córdoba, 2019; Khan *et al*., 2024). However, the pressure to meet indexation criteria can lead journals to compromise their ethical standards. This is evident in the emergence of predatory journals, which operate with fraudulent editorial practices and, despite their lack of rigor, manage to be included in less stringent evaluation sources.

The obsession with indexation can distort the mission of many journals. Instead of serving as platforms for the exchange of knowledge and the promotion of high-quality research, some publications transform into mere commercial entities seeking to maximize revenue through publication fees, subscriptions, and influences such as citation cartels. This transformation limits access to quality research and contributes to a publication culture that prioritizes quantity over quality.

The "indexation fever" affects journals, editors, and has repercussions for the scientific community (Chávez & Nez, 2022; Nakajima & Uno, 2025). Researchers, under pressure to publish in indexed journals, are tempted to seek shortcuts or compromise the integrity of their own research. This can lead to the publication of biased results, a lack of replicability, and ultimately an erosion of trust in the scientific literature. These problematic issues underscore the objective of the present study: to identify unethical attitudes adopted by scientific journals that have been influenced by the necessity of indexation.

Materials and Methods

The present study is classified as descriptive and documentary, contributing a theoretical perspective. To obtain the results, methods at both theoretical and empirical levels were employed. The theoretical methods utilized were analytical-synthetic and systemic-structural approaches. The empirical method employed in this study was classical documentary analysis. The development of this method followed a series of structured steps to ensure rigor and coherence in the research process, consistent with established guidelines (Corona *et al*., 2023; Rosales *et al*., 2023).

Firstly, the study objective was defined as identifying, from the published scientific literature, unethical attitudes assumed by academic journals. This focus arises from the potential influence of the need for increased visibility and improved positioning through indexation in relevant databases on these attitudes.

Subsequently, relevant keywords were selected to facilitate the search for pertinent documents. The chosen terms were "indización" (indexation), "revista científica" (scientific journal), and "base de datos bibliográfica" (bibliographic database). Using these criteria, a systematic search was conducted across various bibliographic databases and academic repositories, specifically Scopus, SciELO, and Google Scholar. The search encompassed journal articles, books, reports, and conference proceedings to obtain a representative and diverse sample of the available literature.

To define which documents would be included in the analysis, inclusion and exclusion criteria were established. Publications within the last five years were considered, prioritizing current and thematically relevant material. Sources such as websites and documents with low-quality metadata were excluded to maintain the reliability and relevance of the collected information. The retrieved documents were then reviewed to discard those that did not provide relevant data to the study objective.

A detailed reading of the selected documents allowed for the identification of unethical attitudes related to the indexation of scientific journals. This process involved locating specific examples, testimonies, case studies, and quantitative data supporting the claims. The collected information was organized into thematic categories through the creation of a schema or matrix, thereby facilitating the visualization and analysis of the identified unethical attitudes and their relationship with the indexation process.

Subsequently, an interpretation of the results was conducted, analyzing patterns, trends, and relationships among the ethically questionable behaviors associated with the indexation process. This analysis facilitated reflection on the ethical and practical implications of these attitudes within the realm of scientific publication, highlighting the potential consequences for the academic community. Finally, a report was prepared integrating the introduction, methodology, findings, discussion, and conclusions of the study. This document included citations and references to the analyzed documents to support the arguments presented.

The report underwent several revisions by the authors, who conducted a critical evaluation and validated the obtained results. This multiple review process strengthened the credibility of the study and facilitated an in-depth discussion of the

Table 1
Stages for the development of the documentary analysis

Database	Search strategies	Exclusion criteria	Documents retrieved	Relevant documents retrieved
Scopus	1. (*indexing) AND (scientific journals) 2. (*bibliographic database) AND (journal)	Orientation of studies outside the field of information processing. Failure to address scientific journals as the object of study.	Articles: 62	Articles: 17
Google Académico	1. Bibliographic database AND indexing 2. Indexing OR information processing AND scientific journals	Failure to address technical documentary processes. Presence of duplicates due to overlap.	Articles: 22 Books: 6	Articles: 10 Books: 1
Scielo	1. Bibliographic database AND journals 2. Indexing AND scientific journals	Failure to address criteria related to technical documentary processing and lack of contextualization within the domain of scientific journals.	Articles: 18	Articles: 6
Total	---	---	110	36

identified unethical attitudes, as well as their potential impacts on the scientific community, thus contributing to a rigorous and well-founded analysis of the topic addressed. The technique used was document review. The results of the application of the employed technique are presented in Table 1.

Results and discussion

Indexing a scientific journal in a database is a fundamental process that guarantees the visibility, accessibility and credibility of published research. This process facilitates the search for relevant information and contributes to the advancement of knowledge in various disciplines. Figure 1 shows the main selection criteria for indexing.

Once a journal has met the initial criteria, an evaluation process begins. The phases of the process are shown in Figure 2.

If the journal meets all criteria and passes the evaluation, the process of indexation proceeds. This step involves the inclusion of the articles in the database, where descriptors and metadata are assigned to them to facilitate retrieval. The metadata include information such as the title, authors, abstracts, keywords, and references, enabling researchers to quickly locate the information they require.

Indexation is not a static process and necessitates continuous maintenance to retain inclusion. Databases conduct periodic reviews to ensure that journals continue to meet the established standards. If a journal fails to maintain quality or publication frequency, it may be removed from the database. This process enhances the visibility of research and contributes to the advancement of knowledge across various disciplines, ensuring that scientific findings are shared and utilized effectively.

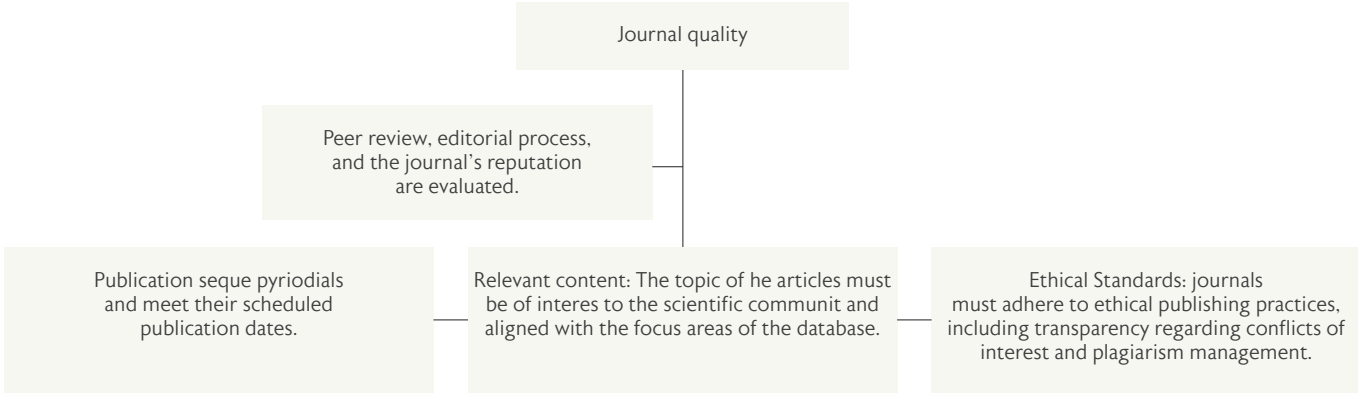

Figure 1
Fundamental selection criteria for indexing

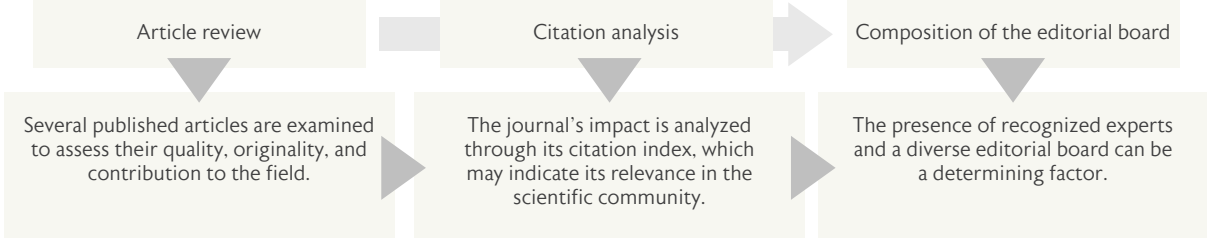

Figure 2
Phases of the evaluation process

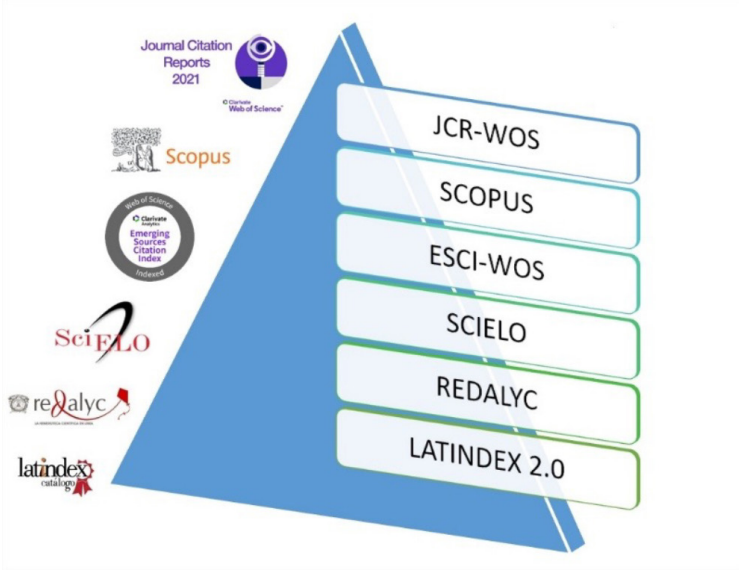

Figure 3
Most Relevant Sources of Indexation and Evaluation.

Source: the authors, based on Alonso-Gamboa (2010).

Sources of Indexation and Scientific Evaluation: Databases, Catalogs, Directories, Search Engines, and Repositories

Databases are organized systems that store information in a structured manner, facilitating its retrieval and analysis. In the scientific domain, databases can be open access or subscription-based and cover a wide range of disciplines (Barrios, 2022; Wu & Tong, 2024). Figure 3 illustrates the most relevant sources of indexation and evaluation.

Thus, notable examples include PubMed, Web of Science, and Scopus. These databases offer indexation tools that evaluate the quality and impact of publications through metrics such as the impact factor. Indexation in databases is essential as it determines which research is recognized and cited within the scientific community.

Catalogs, on the other hand, are tools that enable the organization and location of resources in libraries and archives. They may include not only journals but also books, theses, and other documents. Of particular relevance are the Collective Catalogue of Spanish Universities (REBIUN) and the Regional System of Online Information for Scientific Journals of Latin America, the Caribbean, Spain, and Portugal (Latindex); in the case of Latindex, it also functions as a directory. Both aggregate the bibliographic resources of various academic institutions (Alonso & Reyna, 2022). Catalogs are fundamental for scientific evaluation as they allow researchers to access a variety of sources. Furthermore, they provide a broader context regarding scientific production across different disciplines, aiding academics in situating their work within the overall research landscape. Directories are organized lists of resources, institutions, and experts in specific fields. A well-known directory is the Directory of Open Access Journals (DOAJ), which provides access to open access journals across various disciplines. These are valuable tools for collaboration among researchers and in the identification of expertise.

Scientific search engines have revolutionized access to scientific information by enabling rapid and efficient searches of academic literature (Garteiz, 2022; Guaglianone *et al*., 2024). These search engines not only index journal articles but also theses, books, and conference proceedings, providing a more comprehensive view of scientific output. Evaluation through search engines is an interesting aspect, as many researchers utilize citation metrics and the h-index, available on platforms such as Google Scholar, to assess their academic impact. However, the quality of results can vary, and researchers must exercise critical judgment when using these resources.

Repositories are platforms where research documents, such as preprints, articles, and theses, are stored and disseminated. Examples of repositories include arXiv, PubMed Central, and institutional repositories of universities. These spaces are crucial for the dissemination of research, especially for work that has not yet undergone peer review or editorial processes. Scientific evaluation in repositories is based on the principle of open access, promoting transpar-

ency and the exchange of knowledge. This is particularly relevant in fields where the rapid dissemination of results is essential, such as public health and applied sciences.

Unethical attitudes and behaviors driven by the need for indexation

Consistency between a journal's editorial policy and the indexation sources to which it applies is a crucial aspect for ensuring its relevance and sustainability. This coherence becomes even more necessary when considering Creative Commons policies and open access pathways that are transforming the way research is produced and shared. Alignment between a journal's policies and indexation sources is essential for establishing its credibility and prestige within the academic sphere. Journals seeking indexation in recognized databases must adhere to rigorous standards that include article quality and editorial transparency. If a journal applies for these indexations without modifying its policies and practices, it may face negative consequences such as exclusion from the databases.

Creative Commons licenses enable authors to share their work more flexibly, fostering the dissemination of knowledge without the restrictions of traditional copyright (Robinson, 2021; Rahman & Tesic, 2024; Van der Sluis *et al*., 2024). Adopting open access policies aligns with the requirements of various institutions and funders mandating public accessibility of research. Despite this, not all open access pathways are equivalent, and collaboration and the exchange of ideas are promoted in diverse ways. For these policies to be effective, they must be aligned with indexation practices.

For a journal to maintain coherence in its editorial policy, it is fundamental to clearly establish its objectives regarding open access and Creative Commons licenses. This includes defining the type of licenses for articles, how copyright will be managed, and what measures will be implemented to ensure accessibility. Furthermore, journals must communicate these policies transparently to authors and readers to ensure that all stakeholders understand the implications of publishing under an open access model.

An example highlighting the necessity of coherent policies is the relationship between diamond open access journals and the Redalyc database (Network of Scientific Journals of Latin America and the Caribbean, Spain, and Portugal). This indexation source is entirely exclusionary in its evaluation of journals that charge any type of APC (Article Processing Charges) (Bojo *et al*., 2021). Diamond open access journals do not charge authors for the processing of their manuscripts, allowing for greater inclusion and equity in the dissemination of knowledge. This does not imply that the editorial work is performed pro bono, but rather that it is covered by the institutions to which these journals are affiliated. This has been the fundamental debate surrounding APC charges, which are often necessary but have become abusive for authors in recent years (Tosar, 2022).

Redalyc is one of the primary indexation databases for open access scientific journals in Spanish. Its indexation policy is clearly oriented towards supporting and promoting open access without costs for authors. Therefore, journals that opt to charge APCs do not meet the inclusion criteria for this platform. Journals applying for indexation in Redalyc must align their editorial practices with the principles of diamond open access. This implies the elimination of publication fees and the implementation of transparent practices in terms of peer review, copyright, and content dissemination.

Faced with increasing competition for the attention of researchers, academics, and professionals, some journals have begun to modify their thematic classification in databases such as Scopus. The aim of this is to improve their positioning in the Scimago Journal & Country Rank (SJR). This strategy reflects a pursuit of prestige in response to the changing dynamics of the academic field, where disciplines with less competition may offer a more accessible route to achieving higher quartiles in rankings.

Scopus and SJR are two of the most influential tools in the evaluation of research and publications. Scopus is one of the most comprehensive databases of scientific literature in terms of geographical and linguistic diversity. This source provides a classification of journals based on citation metrics, visibility, and quality. On the other hand, SJR utilizes a broader approach by considering not only the quantity but also the quality of citations. This resource has become a benchmark for measuring the impact of journals across various disciplines.

Positioning in these rankings can influence authors' decisions on where to submit their work. Similarly, it affects the perception of quality by institutions and funders. These aspects have led many journals to seek strategies to improve their classification. One of the methods employed is changing their thematic classification, which allows them to access areas with less competition.

The classification of journals into specific thematic areas is not a fixed process and can be subject to strategic adjustments. For example, journals that have traditionally focused on highly competitive fields such as biomedicine may choose to reorient their focus towards emerging or less saturated areas, such as cultural studies or communication. These disciplines, while relevant and of great academic interest, typically have a smaller number of publications and consequently less competition in terms of citations.

This change can facilitate inclusion in higher quartiles within rankings. It can also attract a new set of authors seeking to publish in journals that offer greater potential for visibility. The choice of thematic areas with less competition thus becomes an attractive strategy for those journals seeking to increase their impact and attract more contributions.

Journals that have adopted this strategy have shown mixed results. On the one hand, some have successfully positioned themselves in higher quartiles in the SJR by shifting their thematic focus (Kovalcsik *et al*., 2021; Koya *et al*., 2024). For example, journals that have begun to include content on cultural studies have seen an increase in the number of submissions, as well as in the citation of their articles. This is partly because cultural studies is an expanding field that attracts researchers from various disciplines and generates a network effect that benefits publications in this area.

On the other hand, this type of strategy can also generate criticism. Some academics argue that changing the thematic classification can dilute the quality and specialization of the journal, leading to a more superficial approach instead of delving deeper into relevant topics (Mao *et al*., 2023; Musa *et al*., 2023). However, it is important to note that adaptability is an essential characteristic of the contemporary academic environment, and journals must evolve to remain of interest to the scientific community.

In recent years, open access to research has gained significant relevance, driving a shift towards models that allow for greater dissemination of scientific knowledge. Within this context, diamond open access journals have emerged as a valuable alternative. However, the growing trend of selling these journals to entities that subsequently transform them into journals requiring APCs raises questions about the sustainability of open access and ethics.

With the increasing pressure to fund research and publication, some entities have begun to acquire diamond open access journals and transform them into models that require the payment of APCs. This change is motivated by the need to generate sustainable income to maintain the journal's management, although many consider it a betrayal of the principles of open access.

The transition of diamond open access journals to APC models can have several negative implications. Firstly, it limits access to research for those who cannot afford to pay the fees, perpetuating inequalities in access to knowledge. Secondly, it can affect the quality of the research published, as there is a risk of prioritizing revenue generation over rigorous review and academic integrity. Furthermore, this transformation can disincentivize researchers from publishing in journals they once considered accessible and of high quality. In the field of information science and documentation, the most well-known case is that of the journal *Profesional de la Información* (formerly known as *EI Profesional de la Información: EPI*). This journal went from not charging APCs to currently requesting 2,100 GBP (British pounds) for the editorial process of a manuscript.

In the last decade, the landscape of scientific publishing has changed dramatically, largely due to the proliferation of open access journals charging APCs. The practice of prioritizing payment over scientific quality has given rise to a set of negative consequences that threaten the integrity of research and the advancement of knowledge. One of the most pressing problems is the possibility of publishing research without rigorous peer review, which can result in the acceptance of articles that lack methodological soundness or present unfounded conclusions. This is because some journals may prioritize the economic income derived from APCs over the review process. This is supported by a culture where the quantity of publications prevails over quality.

The proliferation of journals that prioritize payment has begun to erode the reputation of the academic system as a whole. Researchers may be tempted to choose journals that accept articles in exchange for a high APC, even if these journals do not have a solid track record or recognition in their field. This creates a distorted hierarchy in scientific publishing (López & Martín, 2024a). The quality and impact of research are compromised by economic interests. As more academics choose to publish in these journals, the scientific community as a whole risk losing credibility. The APC model also creates an economic barrier that can exclude researchers from institutions with fewer resources, especially in developing countries.

A regrettable example is the journal *Comunicar*. This publication initially positioned itself as one of the most relevant in the field of Social Sciences, particularly excelling in the areas of Education and Communication. With a rigorous evaluation process and a focus on the quality of its content, it earned the respect and preference of academics and professionals. However, the recent change in its editorial management model has raised a series of questions about its future and its reputation within the scientific community.

For years, *Comunicar* established itself as a benchmark in the dissemination of academic research, being recognized as the tenth-ranked journal in Communication and the thirteenth in Education globally (Alsharif *et al*., 2022). This success was due to a committed editorial team that selected relevant topics and fostered the dissemination of high-quality research in multiple languages. Open access and free publication were key factors that allowed for broad participation from authors across the globe, thus ensuring a diversity of perspectives and approaches in the research presented.

In 2023, the journal was sold to Oxbridge, a multinational corporation based in the United Kingdom, marking a turn-

ing point in its trajectory. This change in ownership brought with it the implementation of an APC model, where authors were required to pay a fee of 1,000 pounds to publish their work. This decision generated a domino effect that affected not only the quality of the published articles but also the perception of the journal within the academic community.

The transition to an APC model, which did not previously exist in *Comunicar*, has been perceived as a strategy oriented towards profit rather than the promotion of knowledge. As the journal began to accept a larger number of articles, many of them from Chinese authors, a decline in the quality of the published research was observed. This phenomenon is not exclusive to *Comunicar*; other Spanish journals such as *Profesional de la Información* acquired by multinational groups have experienced similar changes, being expelled from key databases such as Web of Science and Scopus (López & Martín, 2024b).

The exclusion of *Comunicar* from Web of Science was announced in January 2025. This reflects the new dynamics where the quality of publications is increasingly evaluated based on ethical and rigor criteria. Non-transparent practices and a lack of control in the editorial process can lead to once-prestigious journals losing their relevance and credibility. Researchers, who depend on publishing in indexed journals to advance their academic careers, are forced to reconsider their options and be more selective in their publication choices.

The change in *Comunicar* highlights a critical dilemma in the field of research: the pursuit of funding versus the mission of promoting accessible and high-quality knowledge. The pressure to publish in high-impact journals can lead academics to opt for options that compromise research integrity. The growing trend towards the monetization of scientific journals raises questions about the future of open access and ethics in academic publishing. As the scientific community progresses, it is fundamental that researchers remain informed about the editorial practices of journals and the impact these practices can have on the quality of scientific output.

The buying and selling of journals also occurs to exert influence (Huang *et al*., 2023). Several editors engage in questionable practices concerning scientific integrity and research ethics. Upon acquiring a journal, the new owner not only benefits from increased APC costs but also negotiates citations (for individual researchers, institutions, and other journals) to improve positioning in specific rankings and indexes. Furthermore, the editorial policy (regarding topics, origin of authors, and institutions) is flexible according to the journal's interests.

The above has led to a proliferation of ghost citations. References are included without the authors' consent, and citations are exchanged with allied journals that engage in unethical practices (Kobayashi *et al*., 2022; Kodua-Ntim, 2023). Similarly, editors and the journal team (editorial board or council with decision-making power) leverage their influence to ensure their own work is cited. This shows a considerable increase in researchers' citations from one year to the next or over short periods. The concentration of citations is in specific journals or institutions, the jump from one year to the next is notable, and generally, recent contributions are cited. This aspect is contradictory, as an article typically begins to receive its first citations after two years of publication (Singla *et al*., 2024).

Finally, there are unsubstantiated beliefs in the scientific literature and productivity studies related to the number of citations a scientific article must have to favor journal indexation (Coskun, 2024; Rodrigues *et al*., 2021). This aspect has been raised in several editorial policies where a set number of references must be presented, preferably in English and from Scopus or Web of Science. This serves a positioning function for the publications, as the citing study will appear within the related articles of the cited study. This results in greater visibility but involves assuming unethical issues such as ghost citations and coerced citations.

Conclusions

The positioning of scientific journals is a complex phenomenon reflecting an intersection of editorial quality, impact metrics, and communication strategies. It is essential that journals adopt strategies that prioritize quality and ethics over superficial metrics, thereby contributing meaningfully to the advancement of scientific knowledge. The future of scientific journal positioning will depend on their ability to balance accessibility with academic rigor, ensuring that science remains a valuable and reliable resource for society.

"Indización" (indexation) and "indexing" are terms often and erroneously used interchangeably. "Indización" (the appropriate term in Spanish) is the more specific technical documentary process related to the assignment of descriptors to documents, the organization and identification of content to facilitate its retrieval. The artificial problem of terminological usage sometimes limits the scope of this perspective, especially in the positioning of scientific journals.

The (forced) need for indexation in scientific journals poses ethical dilemmas and challenges to research integrity. The obsession with being part of prestigious indexes and databases at any cost can compromise the fundamental mission of science: to contribute to the advancement of knowledge and the well-being of society. It is imperative that both editors and researchers reflect on their practices and prioritize quality and ethics in publication.

The movement towards citizen science, participatory science, and open science constitutes an alternative model

to counteract the prioritization of positioning and impact. Despite this, journals do not renounce seeking better positioning, as a greater number of indexes leads to wider dissemination of their message. The construction and socialization of scientific knowledge should be motivated more by the contribution of the study than by the medium in which it will be published.

Among the limitations related to identifying fraudulent and unethical practices is the lack of specific tools. Researchers must resort to procedures designed for other purposes as a complement, triangulating with various sources and data. The comparative and bibliometric methods offer a useful solution in this regard, but without proper direction, they can further distort the understanding of these behaviors. This study identifies as a limitation the presentation of few examples of the described practices. This is because these behaviors are rarely reported or officially documented with reference to institutions and responsible parties. Consequently, their detection and evaluation are difficult, which may be a topic for future research.

Authors contributions

Luis Ernesto Paz Enrique: conceptualization, analysis, curation, initial writing, final writing.

Esteban Rodríguez Torres: methodology, curation, supervision, validation, final writing.

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