

## *Assessing the Internationalization of Algerian B-Ranked Scientific Journals*

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### *Abstract*

The internationalization of scientific journals is assessed through a range of structural and scientific indicators that reflect their integration into international research networks. Among the most important are the internationalization of editorial boards, international authorship, and publication language. This study examines 27 Algerian scientific journals classified as "B", analyzing a total of 7101 articles published between 2021 and 2025. The findings reveal considerable disparities among the three indicators within the same journal, indicating that strong performance in one dimension of internationalization does not necessarily translate into comparable performance in the others. Overall, the average level of editorial board internationalization reached 56.13%, while the International Authorship Index (IAI) averaged 20.91%, and the International Collaboration Index (ICI) remained limited at 1.93%. Regarding publication language, the results highlight varying degrees of policy shifts toward the increased use of English, reflecting different levels of commitment to internationalization across Algerian journals

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## 1. *Introduction*

Characteristics of the changes currently taking place in the world system of scientific publishing are growing dynamism associated with the globalization of knowledge, as well as new opportunities provided by scientific and technological development for communication between authors, reviewers, and publishers. The quality of scientific journals is no longer measured by publication frequency or the rigor of peer review alone, but rather by their level of participation in international scientific research and by achieving the so-called "internationalization of scientific journals" (Borgman, 2007). This process is regarded as one of many strategic indicators that academic institutions and global ranking organizations use to measure the effectiveness of scientific journals because it affords greater potential for knowledge exchange and fosters cross-border research cooperation (Moed, 2005).

In this regard, Algeria has made an effort, in recent years, to regulate and improve the university scientific publishing system by instituting regulation mechanisms and evaluation criteria aimed at enhancing the national scientific journals quality criteria and international integration capacities. This is evidenced by implementing a classification system for scientific journals into categories (A, B, C) according to indicators related to the quality of the peer review process, regularity of publications, and scientific openness level. (Ministry of Higher Education and Scientific Research, 2022). Category "B" journals thus constitute a large and important segment of

Algerian university journals and represent a key stakeholder in the development of the national scientific editorial scene. At the same time, they provide an important space to highlight structural challenges facing the internationalization of scientific journals from emerging academic fields.

Despite the work done in this area, the international aspect of Algerian journals classified as "B" still raises many academic questions. This is especially true regarding their ability to attract contributions from international research, diversify their editorial boards, use international publication languages, and ensure their presence in well-known international databases and indexes. Another concern may be how well the editorial and publication policies of these journals match accepted global standards in open scientific communication and the quality of academic publishing.

This article aims to examine the international aspect of Algerian scientific journals classified as "B" by evaluating a range of indicators that reflect their degree of internationalization. These indicators include the variety of institutional affiliations among editorial board members, the percentage of contributions from foreign researchers, the language of publication, and the extent of indexing in global databases. Additionally, the article seeks to identify the primary challenges that hinder these journals from being more accessible to the worldwide scientific community. It also intends to suggest a series of strategies and mechanisms to enhance their international visibility and improve their status within the scientific publishing landscape.

The significance of this subject arises from its direct correlation to enhancing the quality of scientific research within Algerian universities, as well as enabling national journals to evolve from local publication outlets into scientific platforms that can meaningfully contribute to the global production and dissemination of knowledge. Additionally, examining this topic acquires a strategic relevance considering the ongoing emphasis on enhancing university rankings and bolstering research performance metrics, with international scientific publications being one of the most critical elements.

## ***2. Theoretical and Conceptual Framework***

### ***2.1 Scientific Journals and Scientific Communication***

Peer-reviewed scientific journals serve as the foundation of the scientific communication framework, as they are the main method for sharing and distributing scientific knowledge while also validating its quality within the academic community. The idea of scientific communication encompasses the various processes and methods through which knowledge is created, assessed, shared, and applied, thereby facilitating the growth of knowledge in the scientific domain (Tenopir et al., 2015).

Historically, scientific communication has evolved from individual correspondence and printed works to an institutional system based on peer-reviewed journals, which, since the seventeenth century, have become a central tool for documenting scientific discoveries and preserving

researchers' priority (Mabe, 2003). These journals are characterized by peer review, a mechanism designed to ensure the quality and reliability of research (Ware, 2016). Scientific journals perform essential functions in scientific communication, the most notable of which are (Borgman, 2007; Ware, 2016):

- **Publication and Documentation :** Providing an official platform for publishing research findings and preserving them for future generations.
- **Peer review and evaluation:** Evaluating research by specialized experts to improve scientific quality
- **Scientific dissemination:** Expanding access to knowledge among researchers within the scientific community
- **Building scientific reputation:** Enhancing researchers' standing (individual reputation) through publication in internationally recognized journals (journal and institutional reputation) (Björk, 2017).

With the digital transformation, electronic publishing and open-access models have emerged, aiming to make scientific knowledge available without financial or technical barriers; digital platforms have also helped improve the speed of publication and the visibility of scientific journals (Piwowar et al., 2018). On the other hand, the evaluation of scientific journals has become linked to indicators such as the impact factor, citation counts, and indexing in international databases, reflecting the importance of journals as key actors in the global scientific system (Mabe, 2003).

Within Algeria, university journals and those issued by research centers play a

crucial role in advancing and sharing scientific research. This is especially true with the implementation of national electronic journal management platforms, although issues remain regarding quality, accessibility, and global integration (Ministry of Higher Education and Scientific Research, 2022). As a result, examining scientific journals is essential for grasping the current situation of scientific publishing in Algeria and evaluating their participation in the global sceneal scientific community.

## ***2.2 The Concept of the Internationalization of Scientific Journals***

The internationalization of scientific journals is a key concept in contemporary scientific communication studies, reflecting how academic journals engage in the global scientific community and transcend national borders in the production and circulation of knowledge. It refers to practices and policies adopted by journals to enhance their international presence, whether by attracting foreign research contributions, adopting global publication languages, or participating in international databases and indexes (Garcia-Carpintero et al., 2010).

Internationalization goes beyond just the formal features of a journal. It is a complex process that involves organizational, scientific, and technical aspects. These are mainly about how well the journal meets international standards for academic publishing. In this regard, Salager-Meyer (2008) points out that the internationalization of journals is closely tied to scientific language. English plays a

crucial role in improving the visibility of research and boosting its chances of being cited internationally. While some studies look at format, most focus on peer-review elements, the nationalities of editorial board members and authors, and other factors.

While the literature points to a significant number of indicators, the most important and influential ones regarding the internationalization of journals can be summarized as follows:

- Diversity of the editorial board: achieved by including members from different institutions and nationalities, thereby reflecting the journal's academic openness (Garcia-Carpintero et al., 2010).
- International authorship: that is, the proportion of articles published by foreign researchers or as part of international collaborations (Wagner, 2015)
- Language of publication: particularly the adoption of English as the dominant scientific language in international publishing
- International indexing: The journal's inclusion in databases such as Scopus and Web of Science, which enhances its visibility and impact (Falagaas et al., 2008)
- Digital visibility and open access: Electronic publication contributes to increasing the dissemination and accessibility of research (Piwowar et al., 2018).

The internationalization of scientific journals has become a key goal for academic institutions. This goal is directly linked to improving university rankings and increasing their scientific output. However, this trend brings specific challenges in developing countries. Journals there encounter issues with language and digital infrastructure, which restrict their ability to gain visibility on the

global scientific stage (Lillis and Curry, 2010).

In Algeria, the internationalization of scientific journals, especially those marked as “B,” is seen as a step toward meeting global publication standards. However, achieving this goal still demands significant work in editorial policies, scientific governance, and technical infrastructure. These elements are crucial for successfully integrating into the worldwide scientific communication system. Therefore, studying internationalization involves more than just identifying its indicators. It also includes looking at its structural and contextual aspects, particularly in growing academic settings, where local factors influence international standards in shaping scientific publishing.

### ***2.3. Editorial Board Composition as an Indicator of Internationalization***

The editorial board is considered one of the most important indicators used in assessing the degree of internationalization of scientific journals, given the pivotal role it plays in guiding the journal’s scientific policy, ensuring the quality of published content, and enhancing its credibility within the academic community; It determines publication directions and sets acceptance criteria, making it one of the key determinants of the journal’s standing and international visibility (Garcia-Carpintero et al., 2010).

With regard to internationalization, the diversity of the editorial board in terms of geographic and institutional affiliation is viewed as a key factor in promoting the journal’s academic openness and its

integration into the international scientific publishing system. The presence of members from different countries and academic institutions helps expand the journal’s network of scientific relationships, attract international research contributions, improve the quality of peer review through diverse expertise, and enhance trust and credibility among international researchers, all of which will contribute to increasing the journal’s appeal. Numerous studies have shown that journals with international editorial boards tend to achieve a higher level of scientific impact and circulation compared to local journals.

On the other hand, international representation on the editorial board serves as an indicator of the journal’s integration into global research networks, as the involvement of international experts is an effective means of disseminating international publishing standards, improving peer-review practices, and enhancing the quality of published articles. This diversity also reflects the journal’s ability to transcend local isolation and engage with the international academic community. However, achieving genuine internationalization of the editorial board goes beyond merely including the names of foreign researchers on a list for form’s sake; it requires their active participation in the peer-review process and in shaping the journal’s scientific policies. Lillis and Curry (2010) note that some journals in developing countries engage in what is known as “nominal internationalization,” in which international names are included without playing an actual role, which limits

the impact of this indicator on improving the quality of the journal.

#### **2.4. International Authorship in Scientific Publishing**

International authorship is really important when it comes to measuring how international a scientific journal is. This is because international authorship shows that a journal can get researchers from countries to contribute to it. International authorship is also a sign that a journal's part of a bigger global scientific research network.

International authorship means that researchers from countries work together on scientific articles. They can do this on their own as an author or they can work together with other authors from different countries.

Studies have found that articles written by authors get cited more often than articles written by authors from the same country. This is because these articles are read by people and are used in different contexts.

International authorship is also good for research because it brings together people with different areas of expertise. This helps to make research better by sharing knowledge and ideas.

International authorship in journals is measured in a few ways. These include:

- The number of articles written by researchers
- The number of articles written by both international researchers
- How many different countries the authors are from and where they work

If a journal has high numbers in these areas it is a good sign that the journal is part of a global scientific network. This is important for indexing and classification.

However to have a lot of authors a journal needs to do a few things. These include using a language that everyone can

understand, like English. The journal also needs to have an editorial board and a fair peer review process. The journal should also be listed in databases.

All of these things are important on their own when they are all used together they create a complete framework for international authorship in scientific journals. International authorship is really important. These indicators are all part of what makes international authorship work. International authorship is what helps to make research better by bringing together researchers from all, over the world to work on international authorship projects.

#### **3. Methodology**

The study employs a bibliometric approach by surveying articles published in Algerian journals classified according to the previously mentioned indicators that contribute to the journals' international dimension. The study focused specifically on analyzing the composition of editorial boards, the nationalities of authors, and the languages of publication.

As of the time this study was prepared (March–April 2026), there are 27 Algerian B-ranked journals (according to the ASJP platform), covering various fields and disciplines : humanities and social sciences, languages and literature, as well as the exact, experimental, agricultural, and biological sciences. If we classify these journals by major disciplines, we can distinguish between:

- Humanities and Social Sciences (HSS) : 24 journals
- Technology and Natural Sciences (TNS) : 3 journals

This vast disparity in the number of journals in favor of the Humanities and Social Sciences may be attributed to the policy of the relevant ministry, which requires researchers in the exact and

natural sciences to publish in journals indexed in international databases, particularly for the purposes of qualification or promotion. This is clearly evident in the results of Hadjab's (2025) study, which focused on international collaboration among researchers; the study noted a significant presence of Algerian researchers in the experimental sciences compared to the humanities and social sciences.

The number of articles analyzed was 7101; this represents the total number of articles published in these journals between 2021 and 2025 and available on the Algerian Scientific Journals Platform (ASJP) at the following link: <https://asjp.cerist.dz>.

#### 4. Study Results

##### 4.1. Editorial Boards of Algerian Journals

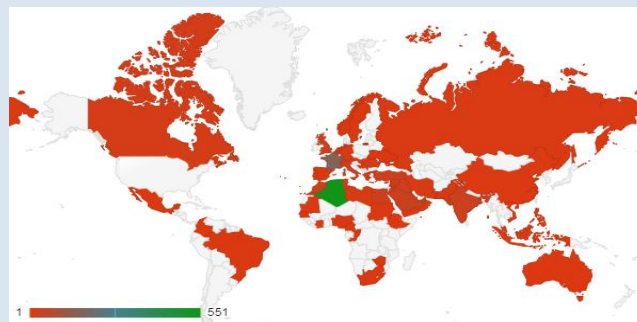
The international composition of editorial boards is widely recognized as one of the principal indicators of a journal's degree of internationalization. Accordingly, this study examined the editorial boards of Algerian Category B scientific journals, with particular attention to the representation and geographical distribution of foreign members.

A total of 1,256 editorial board members were identified, including both Algerian and foreign scholars, representing 68 countries. The wide geographical distribution of foreign members constitutes an initial indicator of the international orientation of these journals.

**Table 1: Distribution of Editorial Board Members by Country**

| Countr  | Nbre | Country   | Nbr | Countr   | Nbre | Country   | Nbr | Country  | Nbre | Country    | Nbre |
|---------|------|-----------|-----|----------|------|-----------|-----|----------|------|------------|------|
| Algeria | 551  | U.K       | 21  | Libano   | 9    | Greece    | 4   | Mexico   | 2    | Arminia    | 1    |
| France  | 158  | Malaysia  | 18  | Syria    | 8    | Indonesia | 4   | Yemen    | 2    | Azerbaija  | 1    |
| Italia  | 34   | USA       | 18  | Pakista  | 7    | Cyprus    | 4   | Ukrania  | 2    | Australia  | 1    |
| S.A.K   | 33   | Oman      | 17  | Palestin | 7    | Qatar     | 4   | Belgium  | 2    | Bahrain    | 1    |
| India   | 30   | U.A.E     | 16  | Lybia    | 7    | Netherlan | 4   | South    | 2    | hungary    | 1    |
| Morocc  | 28   | Canada    | 15  | Portuga  | 6    | China     | 3   | Sengapo  | 2    | Norway     | 1    |
| Iraq    | 27   | Jordan    | 14  | German   | 5    | Benin     | 3   | Senegal  | 2    | Austria    | 1    |
| Türkey  | 25   | Romania   | 12  | Russia   | 5    | Vietnam   | 3   | Serbia   | 2    | Bosnia     | 1    |
| Spain   | 23   | Iran      | 11  | Cape     | 5    | Mauritani | 3   | Colombi  | 2    | Rowanda    | 1    |
| Egypt   | 23   | Switzerla | 11  | Koweit   | 5    | Brasilia  | 2   | Nigeria  | 2    | Zimbabwe   | 1    |
| Tunisia | 22   | Cameroun  | 11  | Sudan    | 4    | Sweden    | 2   | Ethiopia | 1    | Philippine | 1    |
|         |      |           |     |          |      |           |     |          |      | Congo      | 1    |

**Fig. 1 : Distribution of Editorial Board Members by Country**



As expected, Algeria accounted for the largest number of editorial board members (551), reflecting its role as the host country of these journals. Among foreign members, France ranked first with 158 members, which can largely be explained by the long-standing historical, linguistic, and academic ties between the two countries.

Italy ranked third overall with 34 members. Within the Arab region, Saudi Arabia recorded the highest representation, with 33 members, followed by Morocco with 28 members.

While the geographical distribution of editorial board members provides an overview of international representation, a more meaningful indicator is the proportion of foreign members within each journal's editorial board, as presented in Table 2.

Overall, foreign scholars accounted for 56.13% of all editorial board members, representing 705 out of 1,256 members. Foreign representation exceeded 50% in 19 journals, while four additional journals

reported proportions ranging between 35% and 49%.

At the individual journal level, Aleph recorded the highest proportion of foreign editorial board members (89.47%), followed by Traduction et Langues (83.56%) and the Journal of Translation and Translation (82.86%). These figures suggest that these journals have deliberately pursued editorial internationalization by recruiting experts from foreign academic institutions, thereby strengthening their international visibility and increasing their potential to attract submissions and reviewers from outside Algeria.

Conversely, journals such as the Journal of Sciences and Horizons of Knowledge displayed considerably lower levels of international representation, with foreign members accounting for less than 15% of their editorial boards.

**Table 2 : Proportions of External Members on Editorial Boards**

| Journal                                                | Percentage of External Members (%) | Journal                                                            | Percentage of External Members (%) |
|--------------------------------------------------------|------------------------------------|--------------------------------------------------------------------|------------------------------------|
| Journal of Science and Knowledge Horizons              | 14,29                              | <i>Algerian Journal of letters</i>                                 | 55,56                              |
| Journal of Islamic Sciences and Civilization           | 62,86                              | <i>Passerelles</i>                                                 | 36,96                              |
| Journal of Contemporary Business and Economics Studies | 67,65                              | <i>Paradigms</i>                                                   | 58,54                              |
| Journal of Mediterranean History                       | 21,43                              | <i>Multilinguales</i>                                              | 56,76                              |
| Economic Researcher Review                             | 76,27                              | <i>LARHYSS Journal</i>                                             | 66,67                              |
| El-bahith review = mağallaï al-bāhīt                   | 68,97                              | <i>Langues &amp; Cultures Review</i>                               | 64,52                              |
| International Journal of Economic Performance (IJEP)   | 63,24                              | <i>Journal of Studies in Language, Culture and Society (JSLCS)</i> | 60,00                              |

|                                                             |              |                                             |              |
|-------------------------------------------------------------|--------------|---------------------------------------------|--------------|
| Journal of Translation and Languages<br>TRANSLANG           | <b>83,56</b> | <i>Journal of Languages and Translation</i> | <b>82,86</b> |
| The North African Journal of Food<br>and Nutrition Research | <b>32,26</b> | <i>Insaniyat</i>                            | <b>36,36</b> |
| SOCLES                                                      | <b>62,86</b> | <i>Annals of the university of Algiers</i>  | <b>48,89</b> |
| Journal of Renewable Energies                               | <b>66,67</b> | <i>ALTRALANG Journal</i>                    | <b>35,85</b> |
| Journal of Human Sciences                                   | <b>29,41</b> | <i>Aleph</i>                                | <b>89,47</b> |
| The Algerian Journal of Legal and<br>Political sciences     | <b>66,67</b> | <i>Didactic Action</i>                      | <b>56,45</b> |
| Algerian Journal of Language<br>Sciences RASDL              | <b>71.88</b> |                                             |              |

These findings highlight an important paradox. On the one hand, many Algerian journals have made significant efforts to internationalize their editorial boards, with foreign representation exceeding 60% in several cases. This trend is consistent with international recommendations promoting geographical diversity in editorial governance. On the other hand, these high levels of editorial internationalization are not necessarily reflected in the other internationalization indicators examined in this study, particularly the International Collaboration Index (ICI), discussed in the following section.

Furthermore, the numerical presence of foreign editorial board members does not necessarily reflect their actual involvement in editorial decision-making or the peer-review process. Consequently, a high proportion of foreign members should not automatically be interpreted as evidence of genuine editorial internationalization. Effective internationalization depends not only on representation but also on the active participation of international scholars in shaping editorial policies and maintaining publication quality.

#### ***4.2. Assessing the International Dimension of Algerian Journals through Authorship Patterns***

The internationalization of scientific journals cannot be assessed solely through editorial board composition or inclusion in international databases. Authorship patterns constitute another fundamental indicator, as they reflect both a journal's capacity to attract foreign contributors and its integration into international research networks. The presence of authors affiliated with foreign institutions, together with patterns of international co-authorship, is widely recognized as a reliable measure of journal internationalization (Borgman, 2007).

Despite the extensive literature on journal internationalization, most bibliometric studies report the proportion of foreign authors or internationally co-authored publications only as descriptive statistics, without proposing a standardized quantitative measure for comparing journals. To address this limitation, the present study introduces the International Authorship Index (IAI) as an operational indicator for assessing the international openness of Algerian Category B journals.

The International Authorship Index (IAI) measures the proportion of published articles that include foreign contributions, whether authored exclusively by foreign

researchers or produced through collaboration between Algerian and foreign authors. Rather than evaluating the scientific quality or impact of publications, the index measures a journal's ability to attract contributions from outside the national academic community, which represents one of the essential dimensions of journal internationalization.

The findings presented in Table 3 indicate that domestic authorship remains predominant. Articles written exclusively by Algerian researchers accounted for 3,592 publications (50.6%), while 2,024 articles (28.5%) resulted from collaboration among Algerian researchers. Together, these categories represent 79.1% of the total sample.

In contrast, articles authored exclusively by foreign researchers totaled 892 (12.6%), whereas publications resulting from collaboration exclusively among foreign researchers numbered 456 (6.4%).

Assessing journal internationalization through authorship patterns requires distinguishing between two complementary dimensions. The first is international openness, which reflects a journal's ability to attract foreign authors. The second is international collaboration, which reflects the extent to which the journal facilitates collaborative research between domestic and international scholars. To capture these two dimensions, this study employs two complementary bibliometric indicators: the International Authorship Index (IAI) and the International Collaboration Index (ICI).

#### 4.2.1. International Authorship Index (International Openness – IAI)

The International Authorship Index (IAI) for Algerian scientific journals was calculated using the following formula:

$$IAI = \frac{AF + AC + IC}{T} \times 100$$

Where:

- AF = Articles authored exclusively by foreign researchers.
- AC = Articles co-authored exclusively by foreign researchers.
- IC = Articles co-authored by Algerian and foreign researchers.

The application of the International Authorship Index (IAI) to the study sample reveals substantial differences in the level of international openness among Algerian Category B journals. The overall average IAI was 20.91%, indicating that only about one-fifth of the published articles involved foreign authors, either through exclusively foreign authorship or collaboration between Algerian and foreign researchers. These findings suggest that the international reach of these journals remains relatively limited, as their author base is still predominantly national.

The disparity becomes even more evident when individual journals are compared. The IAI ranges from 1.07% for *Aleph* to 80.81% for *Traduction et Langues*, representing a gap of nearly 80 percentage points. This considerable variation reflects substantial differences in editorial policies and strategies aimed at attracting international authors.

the journals can be classified into four categories according to their level of international openness:

- High international openness: IAI  $\geq$  75%
- Moderate international openness: IAI between 50% and 75%
- Low international openness: IAI between 25% and 50%
- Predominantly national journals: IAI below 25%

In addition to *Traduction et Langues*, the category of highly internationalized journals includes *The North African Journal of Food and Nutrition Research*, which recorded an IAI of 75.31%. The second category, representing journals with moderate international openness, includes *Action Didactique* (57.72%) and *LARHYSS Journal* (52.10%). These results indicate that foreign researchers contribute a substantial proportion of published articles in these journals compared with many regionally oriented Arab journals. This finding suggests that publication language, together with indexing status, editorial board composition, and editorial policies, plays a crucial role in enhancing a journal's international attractiveness.

The third category comprises 11 journals, representing approximately half of the study sample. Their IAI values range between 25% and 50% and include journals such as *Energie* (44.83%), the *Journal of Studies in Language, Culture and Society* (42.79%), and the *Journal of Science and Horizons of Knowledge* (38.18%).

The fourth category includes 12 journals with IAI values below 25%. Given the considerable variation within this group, it can be further divided into two subcategories. The first includes journals with very low international openness, with IAI values ranging from 1.07% to 5.21%, while the second includes journals with limited international openness, with values between 10.14% and 23.56%.

These findings indicate that the participation of foreign researchers in these journals remains extremely limited. Their publications rely overwhelmingly on the national research community, both in terms of authorship and publication networks. However, this should not be interpreted as evidence of poor scientific quality. Rather, it reflects the limited international visibility of these journals and their relatively weak ability to attract contributions from researchers outside Algeria.

Although the International Authorship Index (IAI) provides valuable insight into a journal's degree of international openness, it has important limitations. Specifically, it assigns equal weight to all forms of foreign contribution, whether articles are written exclusively by foreign researchers or produced through collaboration between Algerian and international authors. Consequently, the IAI measures a journal's capacity to attract foreign submissions rather than its integration into international research networks.

For this reason, the IAI should be complemented by the International Collaboration Index (ICI), which focuses exclusively on publications resulting from

collaboration between Algerian and foreign researchers. Unlike the IAI, the ICI provides a more accurate measure of a journal's participation in international scientific partnerships and distinguishes journals that simply attract foreign authors from those that actively foster sustained international research collaboration.

#### 4.2.2. Measuring the International Dimension Using the International Collaboration Index (ICI)

A journal's ability to foster international research collaboration is another important indicator of its degree of internationalization and has been widely examined in bibliometric research. International collaboration is commonly assessed through co-authorship indicators, which measure the proportion of internationally co-authored publications relative to a journal's total scientific output. In this study, an international article is defined as a publication co-authored by at least two researchers affiliated with institutions located in two different countries.

Based on this definition, three categories of publications can be distinguished: local articles, authored exclusively by researchers affiliated with institutions in the journal's host country; foreign articles, authored exclusively by researchers from a single foreign country; and internationally collaborative articles, produced through collaboration between researchers affiliated with institutions in different countries.

The International Collaboration Index (ICI) measures the proportion of articles

co-authored by Algerian and foreign researchers relative to the total number of published articles. Unlike the International Authorship Index (IAI), which reflects a journal's ability to attract foreign authors, the ICI specifically evaluates its integration into international research networks through collaborative scientific production. Consequently, the ICI provides a more direct measure of the journal's participation in international scientific cooperation.

The International Collaboration Index (ICI) is calculated using the following formula:

$$ICI = \frac{IC}{T} \times 100$$

Where:

- ICI = International Collaboration Index.
- IC = Number of articles co-authored by Algerian and foreign researchers.
- T = Total number of published articles.

The results presented in Table 3 indicate that the average International Collaboration Index for Algerian Category B journals is 1.93%, highlighting a very limited level of international research collaboration. In practical terms, fewer than two out of every one hundred published articles result from collaboration between Algerian and foreign researchers.

The ICI reveals a substantially different picture from that provided by the International Authorship Index. Although the IAI demonstrates that several journals successfully attract foreign authors, the ICI shows that this international openness does

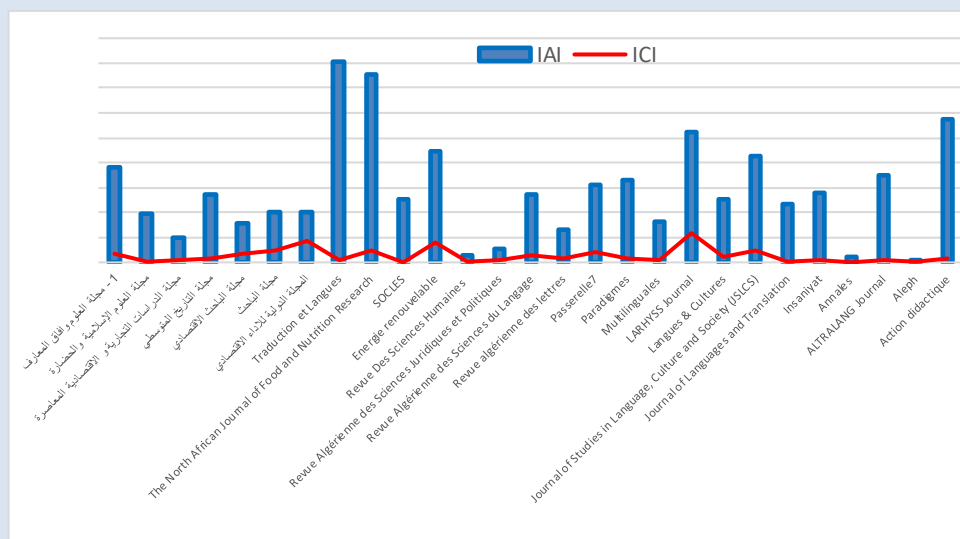
not necessarily translate into genuine research partnerships. These findings suggest that the international dimension of a journal should not be evaluated solely by the presence of foreign contributions but also by the extent to which it promotes collaborative research between domestic and international scholars.

For most journals included in the study, ICI values remain consistently low. Even the highest-performing journals recorded an international collaboration rate of only 11.76%, indicating that publications resulting from collaboration between

Algerian and foreign researchers account for only a small proportion of their overall scientific output.

The comparison presented in Figure 2 demonstrates that the International Authorship Index (IAI) and the International Collaboration Index (ICI) are not necessarily correlated.

**Fig. 2 : Comparaison of the IAI and ICI index values**



A high level of international openness does not automatically imply a high level of international research collaboration, and vice versa. For example, *Traduction et Langues* recorded the highest IAI, reflecting its strong ability to attract foreign authors, yet its ICI remained relatively low (1.16%). In contrast, the *International Journal of Economic Performance* exhibited a different pattern, with a

relatively modest IAI (19.93%) but a comparatively high ICI (8.33%), ranking second only to the *LARHYSS Journal* in terms of international research collaboration.

These findings suggest that attracting foreign authors and fostering international research partnerships are two distinct dimensions of journal internationalization.

While some journals succeed in attracting submissions from foreign researchers, they do not necessarily promote collaborative research involving both Algerian and international scholars. Conversely, journals with relatively modest levels of international authorship may nevertheless demonstrate stronger integration into international research networks through collaborative publications.

Overall, the results indicate that the authorship profile of Algerian Category B journals remains predominantly national, with most publications authored either by Algerian researchers individually or through collaboration among domestic institutions. Although this reflects the vitality of the national research community and its capacity to sustain scientific publishing, it also highlights the limited integration of these journals into international research collaboration networks and, consequently, their relatively low level of internationalization.

#### 4.3. Language of Publication in Algerian Journals

The language of publication constitutes one of the key indicators of the internationalization of scientific journals, as it directly influences their visibility, the size of their potential readership, and their ability to attract authors and readers from diverse academic and geographical backgrounds. As illustrated in Figure 3, Algerian Category B journals exhibit considerable variation in their language policies, ranging from monolingual to multilingual publishing practices. These

differences reflect varying editorial strategies and levels of commitment to internationalization.

The results show that Arabic, French, and English are the three dominant publication languages, while other languages—including Spanish, German, Italian, Russian, Turkish, and Amazigh—appear only occasionally.

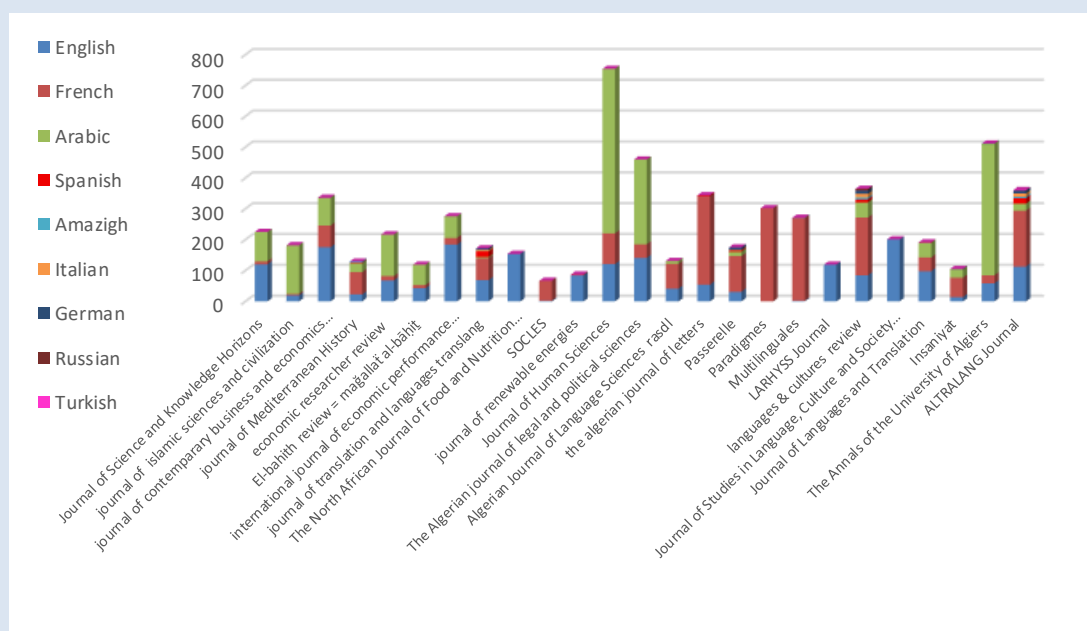
This linguistic distribution reflects the distinctive characteristics of the Algerian higher education system, which combines a strong Francophone legacy, an Arab linguistic

identity, and a growing shift toward English as the dominant language of international scientific communication.

It is evident that Arabic remains the dominant language of publication, particularly in journals specializing in the humanities and social sciences, where it accounts for the majority of published articles.

For example, *La Revue Algérienne des Sciences Humaines* published 533 articles in Arabic between 2021 and 2025, compared with 100 in French and 121 in English. A similar pattern can be observed in *Les Annales de l'Université d'Alger*, which published 426 articles in Arabic during the same period, compared with 59 in English and 26 in French. Likewise, the *Algerian Journal of Legal and Political Sciences* published 403 articles in Arabic, 139 in English, and 59 in French.

Despite the predominance of Arabic, the data reveal a noticeable shift in the language policies of these journals.

**Fig. 3 : Languages of publishing in Algerian B-ranked scientific journals**

Beginning in 2023, the number of articles published in English increased considerably, reflecting a gradual transition toward greater use of English in scientific publishing. This evolution is largely attributable to the policies adopted by the Ministry of Higher Education and Scientific Research, which actively encourages publication in English through academic promotion and accreditation requirements. Such policies are expected to enhance the international visibility of scientific research while strengthening the visibility and competitiveness of Algerian journals and universities. Similar trends can also be observed in many of the other journals included in the study, which have progressively expanded the proportion of articles published in English.

Conversely, several journals continue to publish predominantly in French, with English remaining almost absent. This is particularly the case for *Paradigmes*, *Multilinguales*, *Action Didactique*,

*SOCLES*, and, to a lesser extent, *Revue Algérienne des Lettres*. Despite the broader institutional shift toward English-language publishing, these journals have largely maintained their traditional language policies. This continuity is likely explained by their disciplinary focus on languages, literature, and the humanities, fields that continue to be strongly influenced by the Francophone academic tradition.

The findings reveal not only the linguistic distribution of published articles but also three distinct language policy models adopted by Algerian Category B journals:

- The National Model: Journals that publish predominantly in Arabic and primarily target the Algerian and broader Arabic academic communities.
- The Francophone Model: Journals that rely mainly on French and maintain strong links with the Francophone scientific community.

- The International Model: Journals that publish primarily in English or adopt multilingual publishing policies in order to strengthen their integration into the international scientific communication system.

These findings become particularly meaningful when considered alongside the International Authorship Index (IAI) and the International Collaboration Index (ICI). Journals that publish in English or adopt multilingual publication policies generally achieve higher levels of international openness and stronger international research collaboration than journals that publish exclusively in a single language. Nevertheless, publication language alone cannot ensure successful internationalization. Its effectiveness depends on complementary factors, including international indexing, editorial policies, the international composition of editorial boards, and the journal's capacity to establish and sustain international research collaborations.

### **5. Discussion of the Results**

The findings of this study demonstrate that the internationalization of Algerian Category B scientific journals is a multidimensional process that cannot be adequately assessed using a single indicator or by focusing on only one aspect of editorial practice. The analysis shows considerable variation across the different dimensions of internationalization. While several journals achieved high levels of editorial board internationalization, reflecting a growing commitment to institutional openness and compliance with international publishing standards,

international research collaboration remained consistently limited. These findings suggest that the internationalization of Algerian scientific journals is still evolving, with some dimensions progressing more rapidly than others.

The results indicate that several journals have successfully diversified their editorial boards by increasing the participation of foreign scholars and have adopted more internationally oriented language policies through the use of English or multilingual publishing. These strategies have likely contributed to improving their international visibility and attractiveness to foreign researchers, as reflected in the relatively high International Authorship Index (IAI) values recorded by several journals.

However, these institutional achievements have not been accompanied by a comparable increase in international research collaboration. The International Collaboration Index (ICI) shows that the overwhelming majority of published articles continue to be authored exclusively by Algerian researchers, while publications resulting from collaboration between Algerian and foreign researchers represent only a very small proportion of the total scientific output.

The findings further demonstrate that, although publication language plays an important role in journal internationalization, it is not the determining factor. Journals that publish in English generally exhibit higher levels of international openness; however, adopting English alone does not guarantee the development of sustainable international

research partnerships. A similar observation applies to editorial board internationalization. The results reveal no direct relationship between the proportion of foreign editorial board members and the level of international research collaboration. This suggests that the effectiveness of an international editorial board depends not only on its geographical diversity but also on its capacity to mobilize academic networks, attract collaborative research projects, and strengthen the journal's integration into the international scientific community.

Overall, the findings indicate that Algerian Category B journals have made meaningful progress toward internationalization. Nevertheless, this process remains largely focused on structural and institutional dimensions—such as publication language, editorial board composition, and the recruitment of foreign authors—while the most significant challenge lies in promoting functional internationalization through sustained international research collaboration and joint knowledge production.

## 6. Conclusion

This study examined the internationalization of Algerian Category B scientific journals by analyzing a set of bibliometric and institutional indicators reflecting different dimensions of journal internationalization, including editorial board composition, authorship patterns, international research collaboration, and publication language policies. The findings reveal substantial differences among

journals in their degree of international openness, their ability to attract foreign authors, their integration into international research networks, and their adoption of editorial practices consistent with international publishing standards.

The results demonstrate that journal internationalization is a multidimensional phenomenon involving the interaction of institutional, editorial, and scientific factors. The institutional dimension is reflected in editorial board composition, the editorial dimension in language policy, and the scientific dimension in international authorship and research collaboration. Consequently, the internationalization of scientific journals cannot be adequately evaluated using a single indicator. Instead, this study proposes an analytical framework based on four complementary and interrelated dimensions: editorial board internationalization, publication language policy, international authorship, and international research collaboration.

The findings also suggest that strengthening the international profile of Algerian scientific journals requires more than compliance with national classification criteria. Sustainable internationalization should be supported by comprehensive editorial policies and institutional strategies that encourage active participation in international research networks, promote international co-authorship, and strengthen academic partnerships. Such efforts would enhance the global visibility, scientific impact, and competitiveness of Algerian journals

within the international scholarly publishing system.

Finally, this study may provide a useful analytical framework for Category C journals seeking to improve their performance and progress toward Category B classification, particularly in light of the limited transparency surrounding the national evaluation criteria and indicators currently used for journal classification.

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