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# Inequities in the diffusion and visibility of knowledge: Why should we care?<sup>1</sup>

Inequidades en la difusión y visibilidad del conocimiento: ¿por qué deberían importarnos?

Inequidades na difusão e visibilidade do conhecimento: por que devemos nos importar?

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In the last two decades, the dissemination<sup>5</sup> of knowledge has undergone an intense process of commodification centered on publishing activity. In this process, the scientific article could be considered its principal commodity, and journals have become a condition that increases or reduces its value (Collyer, 2016; Kiesslich et al., 2021; Salatino and López, 2021).

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<sup>5</sup> According to Estrada (2002), knowledge diffusion refers to the mechanism used for its dissemination inside the academic and investigators' communities (i.e., congresses, conferences, journals, and scientific articles). Therefore, it is a concept that is distinguishable from divulgation (related to strategies aimed at a general audience), and from communication (related to the exchange of knowledge and experience).

Scientific journals were created as a form of communication and validation of knowledge within scientific communities. Therefore, it is still common that they are edited by a scientific or professional association (as is the case with most Occupational Therapy journals around the world) or by universities. In this context, peer review is an indispensable feature of a scientific journal and is central for the community to validate the knowledge built therein (Kharasch et al., 2021). This is important because in this process of commodification, the function of scientific communities—to give value to knowledge—is taken over by other actors, and in turn, ceded by those communities. We will try to delve into the way this happens succinctly.

**Figure 1.** Dominant circuits of knowledge



Source: Own elaboration

As is shown in figure 1, databases (or indexes) are containers and organizers of journals and articles. They are helpful for researchers in dealing with the amount of scientific information currently produced and circulated in the world. There are thematic bases, by fields of knowledge or by regions, covering particular production niches<sup>6</sup>. For a journal to be included in a scientific database, it must generally meet technical criteria related to editorial quality. So far, the system seems to make sense and be useful.

However, there are databases with an international and multidisciplinary

<sup>6</sup> For example, Lilacs, in the case of Health sciences in Latin America and the Caribbean, is an open, non-commercial database managed by Pan American Health Organization.

scope created by multinational for-profit publishing corporations. Among these databases are the Web of Science (WoS) and Scopus. The first belongs to Clarivate Analytics, and the latter to the Dutch publishing house Elsevier. These companies are part of the six dominant publishers in the global publishing market, which manage about 60% of journals included in those indexes (Larivière et al., 2015; Shapiro, 2013).

In addition to meeting editorial quality criteria, to be indexed in Web of Science or Scopus, a journal must demonstrate that it is competitive in that field; this is, that its articles are cited in journals already included in that same database. It is, therefore, a system made to measure the journals it produces.

As part of their strategy to consolidate the knowledge market, these companies have created rankings to classify journals (Clarivate/WoS has Journal Citation Report-JCR and Elsevier/Scopus the Scimago Journal Rank-SJR). Through these rankings, they offer their clients (universities, researchers, students, and academic communities in general) a criterion based on which to evaluate them. At the same time, they create an object of desire for their competing products (journals): a position on the ranking (quartiles). This assessment—which becomes assimilated with quality of knowledge—is based on the citations that the articles received and is translated into indicators, the most known of which is the impact factor: an indicator that has well-documented limitations as a tool for research evaluation (Kiesslich et al., 2021; Nature, 2005; Rozemblum et al., 2021; Salatino and López, 2021; Seglen, 1997; The Plos Medicine Editors, 2006; Vanclay, 2012).

Several studies have shown that, although the number of Latin American journals has increased in recent years, their participation in Web of Science and Scopus has been minimal (Repiso et al., 2019; Salatino, 2017; Salatino and López, 2021; Sobrido-Prieto et al., 2021). This refers to both the number of indexed journals and the number of citations they received. For 2017, only 2.3% was indexed on the Web of Science and 8% on Scopus (Salatino, 2017). Most countries of Central America and the Caribbean have no participation in these databases (Salatino and López, 2021). Meanwhile, as a reference, the study of Repiso et al. (2019) shows that 97% of journals edited by universities, included in the Q1 quartile of Web of Science, corresponded to British and US universities.

At the same time, open and free regional databases such as Latindex, Scielo, Redalyc, and DOAJ collect a significant part of Latin American scientific literature (Salatino and López, 2021). These were created to foster regional dialogue, exchange, and collaboration and to promote open access to knowledge. Even so, they are poorly appreciated in national science evaluation systems and underestimated in literature reviews.

Thus, as in other sectors in the globalized world, the publishing industry has been able to consolidate the knowledge market, achieving enormous influence over the entire system: researchers; publications; research groups; universities; systems for assigning scholarships, and public and private resources for research; systems for hiring, promoting and assigning teaching salaries; national science, technology and innovation policies, among others. At all these levels, membership and placement in Web of Science and Scopus have an important influence, deepening gaps, inequalities, and exclusions, shaping and transforming scientific practices (Salatino and López, 2021) and generating distortions in the knowledge production system.

One distortion is that the value attributed to the articles—and not the research's social impact—determines the researcher's prestige and recognition. Those who do not reach these indices are pushed to increase the production of certain types of research and publications, which not only run the risk of being rushed or making little contribution to knowledge but also of being disconnected from reality and local needs (Kharasch et al., 2021). This, in turn, creates a culture of knowledge production and consumption that gives more value to that which is published in scientific journals with a high impact factor; journals that, for the most part, are produced in the global north, in English and with the participation of for-profit publishing companies.

Such is the case with Occupational Therapy. As shown in Table 1, only 11 disciplinary journals were included in the Scimago Journal Rank of Scopus for the year 2020, ten originating from the global North. The United States and England control production with eight. There is only one Latin American journal in this group, the *Cadernos Brasileiros de Terapia Ocupacional*, which ranks 11th and is located in the Q4 quartile among the high-impact journals in the discipline with a marked difference in the citation-based indicators concerning those in the first places. All of these journals publish their articles in English, nine of them exclusively in English. Nine of them are fully or partially managed by the dominant publishing houses in the market: Wiley, SAGE, or Taylor & Francis.

What does this imply? On the one hand, it sends a clear message of an Anglo-Eurocentric hegemony of knowledge in Occupational Therapy. On the other hand, although our professionals can publish in these journals, they must adhere to rules that do not necessarily reflect the type of practices and ways of knowing of occupational therapists in Latin America. In addition, the role and autonomy of professional or scientific communities to coordinate, build and define the way they value knowledge within themselves is left in the background, leaving a large part of these decisions in the hands of databases and publishers.

**Table 1.** Occupational therapy journals in Scimago Journal Rank (SJR) 2020

Position	Country	Journal	Quartile SJR	Index H	Total citations (3 years)	Language	Responsible entity	APC <sup>6</sup>	Open access
1	USA	American Journal of Occupational Therapy	Q1	82	650	English	American Occupational therapy association	No	No
2	UK	Australian Occupational Therapy Journal	Q1	44	340	English	Wile-Blackwell Publishing Ltd/ Occupational Therapy Australia	Hybrid	Hybrid
3	Canada	Canadian Journal of Occupational Therapy	Q1	55	180	English/French	SAGE Publications Inc./ Canadian Occupational Therapy Association	Yes	No
4	UK	Occupational Therapy International	Q2	37	133	English	Hindawi Limited	Yes	Yes
5	USA	OTJR Occupation, Participation and Health	Q2	40	140	English	SAGE Publications Inc./ The American Occupational Therapy Foundation	Hybrid	Hybrid
6	UK	British Journal of Occupational Therapy	Q2	46	300	English	SAGE Publications Inc./ Royal College of Occupational Therapists	Hybrid	Hybrid
7	UK	Journal of Occupational Therapy, Schools, and Early Intervention	Q3	10	75	English	Taylor & Francis	Yes	No
8	Hong Kong	Hong Kong Journal of Occupational Therapy	Q3	13	44	English	SAGE Publications/ Hong Kong Occupational Therapy association.	Yes	Yes
9	USA	Occupational Therapy in Health Care	Q3	24	105	English	Taylor & Francis	Yes	No
10	UK	Irish Journal of Occupational Therapy	Q3	2	12	English	Emerald Group Publishing Ltd./ Association of Occupational Therapists of Ireland	Hybrid	Hybrid
11	Brazil	Brazilian Journal of Occupational Therapy/ Cadernos Brasileiros de Terapia Ocupacional	Q4	4	65	English/Portuguese/ Spanish	Universidade Federal de Sao Paulo	Yes	Yes

Source: Adapted from the report generated by Scimago Journal & Country Rank (Scimago, 2021).

<sup>7</sup> The acronym APC stands for Article Processing Charges. That is, the payments that authors must make to publish an article in a scientific journal, including those charged in hybrid systems to make the text available for open access consultation.

However, a fundamental linguistic element in the disparity in the dissemination of knowledge is that English is privileged as the lingua franca, even more so when publishing houses and knowledge evaluation systems encourage publication in journals with high impact factors. When science communicates exclusively in English, it risks its primary mission of informing the public (Cespedes, 2021; Federation of Finnish Learned Societies, 2019). But fundamentally, it erodes the local practices of key linguistic elements for understanding and working in the social context. The data on Occupational Therapy journals in the Scimago Journal Rank presented above show that there are not enough incentives for researchers to publish in their native language nor to recognize and study the knowledge produced in the global South. This limits the dissemination and impact of Latin American scientific journals and how we think, teach, and implement knowledge.

Another element that we cannot overlook is that Latin American countries, except for Brazil and Mexico, are on the periphery of investments in science, technology, and innovation (UNESCO Institute for Statistics, 2021). Even so, in a country like Colombia, where the budget for education, research, and development is limited, some universities invest large amounts in databases every year (Bases de datos: ¿una pérdida de plata para las universidades?, 2017). In addition, when this occurs, they spend money on publication fees and translation services so that their researchers can publish in English in journals indexed on the Web of Science and Scopus. Often, a university—and a state, in the case of public universities—not only funds the research but ends up paying to publish it and then to access it.

This has led to the dominant circuits of knowledge being questioned by actors from the global South and North, seeking to consolidate alternative methods for producing, disseminating, and socially appropriating knowledge. Open science initiatives make sense there, as well as the practices of co-creation and co-production of knowledge that encourage encounters of *know-hows* within the social context and integrate praxis as an element of origin, writing, and result of knowledge. Also, the creation of South-South and North-South research cooperation networks and projects of global reach with local applications.

Collective proposals that seek to generate a critical mass for the transformation of practices in knowledge circuits include, among others, the Latin American Forum for Research Assessment (FOLEC) (Consejo Latinoamericano de Ciencias Sociales [CLACSO], 2021); the Helsinki Initiative on Multilingualism in Scientific Communication (Federation of Finnish Learned Societies et al., 2019); AmeliCA, Open Knowledge not-for-profit owned by academia (Becerril-García and Aguado-López, 2019); and, the San Francisco Declaration on Research Assessment [DORA] (DORA and Pardal-Peláez, 2018), to which the Revista Ocupación Humana is a signatory. The

main recommendation of this statement is that journal-based metrics —such as the impact factor— should not be used as a proxy measure for the quality of research articles; to evaluate a scientist's contributions; or in hiring, promotion, or funding decisions.

The mobilization of knowledge implies not only its transfer but also a dynamic process of reflection and feedback that values collective relations, the well-being of others, and, why not, a dynamic social process of resistance if looked at from the point of view of social mobilization aimed at dialogue, negotiation, and consensus (Cardinalli and Silva, 2021). As Naidorf and Alonso (2018) explain, this is a three-step process that includes the definition of research agendas; establishing research evaluation parameters in line with national and regional needs; and, using knowledge for decision-making of different kinds.

So, it is worth asking ourselves, who and how do they define the impact of knowledge? In Occupational Therapy, our knowledge not only impacts our professional foundations but has an effect on someone's life somewhere, especially people and social groups who, because of their differences, are alienated unless they contribute to the system of production and consumption. For this reason, the value of local knowledge is essential.

Defining the impact of knowledge has to do with who directly affects or benefits from what is being researched. Knowledge processes are linked to the context; therefore, they should be considered a public common good. Ultimately, who we read, and quote has repercussions on how we disseminate knowledge in the Latin American region and how we think, educate, and practice Occupational Therapy in our countries. Disparities in the production, dissemination, and mobilization of knowledge and global inequality because of disparities between and within countries affect our presence in databases and the metrics by which researchers receive funding and recognition. They have a direct impact on the health, well-being, and lives of the people and communities with whom each occupational therapist works daily.

## Referencias

- Bases de datos: ¿una pérdida de plata para las universidades? (2017, 9 de mayo). Universidades. *Semana*.  
<https://www.semana.com/educacion/articulo/bases-de-datos-universitarias-presupuesto-para-investigacion-en-colombia/524572/>
- Becerril-García, A. y Aguado-López, E. (2019). *Redalyc – AmeliCA. Un modelo de publicación sin fines de lucro para conservar la naturaleza académica y abierta de la comunicación científica*. UNESCO, CLACSO y Redalyc.
- Cardinalli, I. y Silva, C. R. (2021). Trajetórias singulares e plurais na produção de conhecimento de terapia ocupacional no Brasil. *Cadernos Brasileiros de Terapia Ocupacional*, 29.  
<https://doi.org/10.1590/2526-8910.ctoAO2040>
- Céspedes, L. (2021). Revistas latinoamericanas e línguas hegemónicas para publicação acadêmica no Scopus e Web of Science. *Trabalhos em Linguística Aplicada*, 60(1), 141-154.  
<https://doi.org/10.1590/01010318138901311520201214>
- Collyer, F. M. (2016). Global patterns in the publishing of academic knowledge: Global North, global South. *Current Sociology*, 66(1), 56-73.  
<https://doi.org/10.1177/0011392116680020>
- Consejo Latinoamericano de Ciencias Sociales [CLACSO] (2021). *Foro Latinoamericano sobre Evaluación Científica (FOLEC)*. CLACSO. <https://www.clacso.org/folec/>
- Declaration on Research Assessment [DORA] y Pardal-Peláez, B. (2018). Declaración de San Francisco sobre la evaluación de la investigación. *Revista ORL*, 9(4), 295–299.  
<https://doi.org/10.14201/orl.17845>
- Estrada L. (2002). La divulgación de la ciencia. En J. Tonda, A. M. Sánchez y N. Chávez (coords.), *Antología de la divulgación de la ciencia en México* (pp. 138-151). Dirección General de Divulgación de la Ciencia, Universidad Nacional Autónoma de México.
- Federation of Finnish Learned Societies; The Committee for Public Information; Publishing, The Finnish Association for Scholarly; Universities Norway; European Network for Research Evaluation in the Social Sciences and the Humanities (2019). *Helsinki initiative on multilingualism in scholarly communication*. Figshare. Journal contribution. <https://doi.org/10.6084/m9.figshare.7887059.v1>
- Instituto de Estadística de la Unesco [UIS] (2021). Gasto en I+D por país. Unesco.  
<http://uis.unesco.org/apps/visualisations/research-and-development-spending/#!lang=es>
- Kharasch, E. D., Avram, M. J., Clark, J. D., Davidson, A. J., Houle, T. T., Levy, J. H., ... y Vutskits, L. (2021). Peer review matters: research quality and the public trust. *Anesthesiology*, 134(1), 1-6.  
<https://doi.org/10.1097/ALN.0000000000003608>
- Kiesslich, T., Beyreis, M., Zimmermann, G. y Traweger, A. (2021). Citation inequality and the Journal Impact Factor: median, mean (does it) matter? *Scientometrics*, 126(2), 1249-1269.  
<https://doi.org/10.1007/s11192-020-03812-y>
- Larivière, V., Haustein, S. y Mongeon, P. (2015). The oligopoly of academic publishers in the digital era. *PloS one*, 10(6), e0127502.  
<https://doi.org/10.1371/journal.pone.0127502>
- Naidorf, J. y Alonso, M. (2018). La movilización del conocimiento en tres tiempos. *Revista Lusófona de Educação*, 39(39).  
<https://doi.org/10.24140/issn.1645-7250.rle39.06>



- Nature (2005). Not-so-deep impact. *Nature*, 435,1003-1004. <https://doi.org/10.1038/4351003b>
- Repiso, R., Orduña-Malea, E. y Aguaded, I. (2019). Revistas científicas editadas por universidades en Web of Science: características y contribución a la marca universidad. *Profesional de la Información*, 28(4), e280405. <https://doi.org/10.3145/epi.2019.jul.05>
- Rozemblum, C., Alperin, J. P. y Unzurrunzaga, C. (2021). Las limitaciones de Scopus como fuente de indicadores: buscando una visibilidad integral para revistas argentinas en ciencias sociales. *e-Ciencias de la Información*, 11(2). <https://doi.org/10.15517/eci.v11i2.44300>
- Salatino, M. (2017). *La estructura del espacio latinoamericano de revistas científicas* [Tesis de doctorado, Universidad Nacional de Cuyo]. Biblioteca Digital UNCUIYO. <https://bdigital.uncu.edu.ar/10720>
- Salatino, M. y López, O. (2021). El fetichismo de la indexación. Una crítica latinoamericana a los regímenes de evaluación de la ciencia mundial. *Revista Iberoamericana de Ciencia, Tecnología y Sociedad-CTS*, 16(46).
- Scimago (2021). Journal rankings. SJR Scimago Journal & Country Rank. <https://www.scimagojr.com/journalrank.php?category=3609&area=3600&wos=true&-type=i>
- Seglen, P.O. (1997). Why the impact factor of journals should not be used for evaluating research. *The BMJ*, (314), 498-502. <https://doi.org/10.1136/bmj.314.7079.497>
- Shapiro, S. (2013). JSTOR, university presses, and the serials crisis. *Journal of Electronic Resources Librarianship*, 25(3), 240-242. <https://doi.org/10.1080/1941126X.2013.813319>
- Sobrido-Prieto, M., Talavera-Valverde, M. Á. y Souto-Gómez, A. I. (2021). Un estudio descriptivo de la presencia, visibilidad y calidad de las revistas de terapia ocupacional. *Cadernos Brasileiros de Terapia Ocupacional*, 29. <https://doi.org/10.1590/2526-8910.ctoAO2205>
- The PLoS Medicine Editors (2006). The impact factor game. *PLoS Medicine*, 3(6), e291. <https://doi.org/10.1371/journal.pmed.0030291>
- Vanclay, J.K. (2012). Impact factor: outdated artefact or stepping-stone to journal certification. *Scientometric*, (92), 211-238. <https://doi.org/10.1007/s11192-011-0561-0>