Assessing the Impact of International Scholarly Journals on Learning Disabilities: An Analysis Using a Google-Based Journal Impact Factor

Yemina Frangenberg
Matthias Grünke
Janine Bracht
Alina Jochims
Anne Barwasser
Department of Special Education & Rehabilitation, University of Cologne

Casey Hord
Department of Special Education, University of Cincinnati

This study examined the impact of journals that focus on supporting individuals with learning disabilities (LDs). We analyzed the visibility of 360 articles that appeared in seven scholarly outlets (ILD, IJRLD, JLD, LDCJ, LDMJ, LDQ, and LDRP) over a one-year period (2022). Using a two-year Google-based Journal Impact Factor (two-year GJIF), the Journal of Learning Disabilities (JLD) was found to have the greatest impact as measured by the number of citations. JLD articles published in 2020-2021 were referenced an average of 9.24 times in 2022, compared to the remaining journals, which were referenced between 1.45 and 6.00 times. However, the variation in citations for different papers was enormous, even within specific journals (e.g., one JLD study reached 61 citations, while others were not even quoted once). It is essential that key findings about how to effectively support individuals with LDs are disseminated as widely as feasible. Only then will it be possible for them to reach their potential and find their place in the mainstream of society.

Keywords: **Scholarly journals, learning disabilities, citation analysis, empirical impact**

Introduction

In our knowledge-driven society, proficiency in the so-called Three Rs (Reading, wRiting, and aRithmetic) continue to be of paramount importance (Alghazo et al., 2022; Schibeci, 1990). These skills are prerequisites for high school graduation, completion of an apprenticeship, earning a college degree, and securing most types of employment. In addition, they are essential for successfully managing many everyday tasks.

Unfortunately, a significant portion of the population encounters for-

Insights into Learning Disabilities is published by Learning Disabilities Worldwide (LDW). For further information about learning disabilities, LDW's many other publications and membership, please visit our website: www.ldworldwide.org.

midable obstacles when attempting to acquire these fundamental proficiencies. Individuals who demonstrate persistent challenges and significant deficiencies in at least one of the Three Rs, despite possessing average intelligence, are typically described as having learning disabilities (LDs) (Bradley et al., 2002; Swanson et al., 2013). According to the National Health Interview Survey, this condition affects between 8.7% and 9.7% of the U.S. population (Li et al., 2023). These individuals not only experience challenges in the school setting but also face limited access to further educational opportunities through vocational training or higher education, often jeopardizing their integration into mainstream society (Bishop, 2018; Redley, 2009) and their chances of becoming well-functioning, productive members of their communities.

Fortunately, as a result of continuing efforts over the past 50 years, we now have access to a substantial body of empirical knowledge that helps us determine the best approaches to assist individuals with LDs in mitigating the adverse effects of their academic and other challenges (e.g. Mitchell, 2020, Prater, 2017; Vaughn & Bos, 2019). As our reservoir of evidence-supported interventions has expanded and provided us with valuable insights, we have become better prepared to empower those affected and guide them towards enhancing their skill levels, ultimately, enabling them to reach their full potential (Bradley et al., 2002; Fletcher et al., 2019).

However, for this empirical knowledge to be useful, it must be acknowledged and recognized – research needs to be translated into practice. Historically, empirical findings in the field of education sciences and related disciplines, such as research on LDs, have typically been disseminated through papers published in scholarly journals. However, it is very challenging, if not impossible, to assess and quantify the extent to which the recommendations derived from the findings published in such outlets are ultimately put into practice in applied settings.

However, in recent years, thanks to established databases and citation tracking systems, counting the number of citations has been found to be a reliable approach to gauging the impact and recognition of findings presented in a paper (Ebrahim et al., 2014; Xia et al., 2011). Of course, frequent citation of an article alone does not guarantee the practical application of the presented findings. Nonetheless, it stands to reason that receiving significant attention and incorporation into other researchers' work is a strong indication that a given paper is considered to have higher significance to the field than one that goes unnoticed. A manuscript that shares robust, empirically based results and presents effective interventions that could make a difference for individuals with LDs is highly likely to be embraced by the academic community and, ultimately, is very apt to result in the practical implementation of its findings.

In light of the widely discussed research-to-practice gap (e. g. Rycroft-Smith, 2022) and the concurrent loss of knowledge about empirically tested

interventions and other supports that could benefit individuals with LDs, the objective of this paper was to identify the visibility of journals primarily focused on LDs, gauging their significance or relevance through the number of citations garnered by their articles within a specific timeframe. We limited our search to scholarly periodicals whose titles incorporate the terms "learning disability" or "learning disabilities" and that address the core challenges of individuals with LDs, particularly severe difficulties in the three Rs despite average intelligence. This narrow approach was deemed most suitable for gathering preliminary information about the visibility of research on individuals with LDs.

Several methods have been proposed for assessing the degree to which empirical articles in a journal are cited elsewhere by fellow researchers, including the following:

- Impact factor: This metric, calculated by Clarivate Analytics, measures a journal's influence within its field by determining the average number of citations received by articles published in the journal over a specific time period (Daugherty et al., 2022; Okagbue & Teixeira da Silva, 2020).
- Scopus CiteScore: Offered by Elsevier, the Scopus CiteScore is analogous to the impact factor and calculates the average number of citations per article. However, it considers a broader range of source items (such as conference papers and book chapters), providing an alternative metric for evaluating journal impact (Atayero et al., 2018; Fang, 2021).
- SCImago Journal Rank (SJR): Developed by SCImago, SJR offers a more nuanced measure of a journal's influence within the scholarly community by taking into account both the number of citations a journal receives and the prestige of the citing journals (Mañana-Rodríguez, 2015; Roldan-Valadez et al., 2019).

Unfortunately, these or some other commonly used measures of visibility are not available for all journals, complicating comparisons between and across publications. However, even without these indexes, a method is widely accessible for calculating a meaningful journal metric: the Google-Based Journal Impact Factor (GJIF) (Harzing & Van der Wal, 2008; Van Aalst, 2016). Using GJIF, the title of a scholarly paper can be entered into www.scholar.google, which subsequently displays the number of citations it has garnered within a freely definable timeframe (Delgado & Repiso, 2013; Kousha et al., 2011). Relying on citations from Google Scholar, this index holds the same level of reliability as the Scopus CiteScore (Delgado & Repiso, 2013). GJIF is commonly used as a two-year GJIF (Caon, 2017). For instance, in the year 2022, the two-year GJIF for a specific journal can be determined by dividing the total number of citations in 2022 for articles published in 2020 and 2021 (A) by the total

number of articles published during those same years (B). The resulting ratio, A/B, acts as an indicator of the scholarly outlet's influence in 2022. In this study, we have opted to use the two-year GJIF for the journals in our analysis.

Method

Through an extensive search of the databases Academic Search Complete, ERIC, PsycINFO, PsychArticles, Medline, Social Sciences Citation Index, Science Direct, ProQuest Social Sciences, and Web of Science, we identified nine journals featuring the terms "learning disability" or "learning disabilities" in their titles: *British Journal of Learning Disabilities* (BJLD), *Insights into Learning Disabilities* (ILD), *International Journal for Research in Learning Disabilities* (IJRLD), *Journal of Learning Disabilities* (JLD), *Learning Disabilities: A Contemporary Journal* (LDCJ), *Learning Disabilities: A Multidisciplinary Journal* (LDMJ), *Journal of Learning Disabilities and Offending Behaviour* (JLDOB*), Learning Disability Quarterly* (LDQ), and *Learning Disabilities Research and Practice* (LDRP).

The BJLD was excluded from subsequent analysis due to a conceptual disparity with the definition of LDs adopted for the present study. That is, in the British context, LDs are typically defined as conditions marked by reduced cognitive capacity and difficulties in everyday activities. This aligns with the definition of intellectual disability in the United States, but not with that of LDs. Further, publication of the JLDOB was discontinued in 2012, and the journal was consequently also not included in our analysis.

All seven remaining journals employ a double-blind peer-review model, ensuring impartial evaluation of submitted manuscripts, and all of them are focused on publishing research about how to improve the lives of individuals with LDs. Table 1 provides an overview of essential details concerning the seven outlets.

Table 1. *Background Information on Journals Included in the Study*

Journal	Founded	Publisher	Issues per year
ILD	2003	Harvard Pinnacle Group	2
IJRLD	2012	New England Duplicator	1
JLD	1967	Sage Publications	6
LDCJ	2002	Harvard Pinnacle Group	2
LDMJ	1995	Sagamore-Venture Publishing	2
LDQ	1977	Sage Publications	4
LDRP	1985	John Wiley & Sons	4

In May 2023, the first author conducted a review of the table of contents of each selected journal for the period 2020–2021 on their respective websites. Subsequently, she compiled a list of all corresponding papers within each publication and determined the number of citations received by each article in 2022. That is, she divided the number of citations of articles published in 2020 and 2021 by the number of articles published in those respective years. In the final step, the two-year GJIF was calculated using the previously outlined formula.

Simultaneously, the second author independently examined the number of citations for a randomly selected 20% of the papers from the pool of titles. In all cases, the results exhibited a perfect match of 100% with the outcomes identified by the lead author. Furthermore, the second author verified the accuracy of the overall calculated two-year GJIF, finding a complete correspondence with the values determined by the lead author.

Results

Table 2 lists the number of articles published in 2020 and 2021 in the seven journals, as well as the number of their citations in 2022.

Table 2. ***Number of Articles Published in 2020 and 2021 and Corresponding Citations by Journal in 2022***

Journal	Articles in 2020	Citations in 2022	Articles in 2021	Citations in 2022	Total articles	Total citations
ILD	11	17	11	15	22	32
IJRLD	4	6	4	9	8	15
JLD	33	407	34	212	67	619
LDCJ	13	84	11	25	24	109
LDMJ	10	32	12	11	22	43
LDQ	19	149	22	97	41	246
LDRP	19	104	26	97	45	201

A total of 360 articles were included in the analysis. Among these, 10 articles (2.78%) did not receive any citations, 53 articles (14.72%) received between one and five citations, 56 articles (15.56%) received between six and 10 citations, 32 articles (8.89%) received between 11 and 20 citations, and 39 articles (10.83%) were cited more than 20 times. Within the five publications with the highest number of citations, four originated from articles in the JLD:

"The prevalence of dyslexia: A new approach to its estimation" (61 citations) by Wagner et al. (2020), "The critical role of instructional response for identifying dyslexia and other learning disabilities" (46 citations) by Miciak and Fletcher (2020), "A snapshot of RTI implementation a decade later" (36 citations) by Berkeley et al. (2020), and "Toward integrative reading science: The direct and indirect effects model of reading" (27 citations) by Kim (2020). The only exception among the five particularly widely received papers was "Opportunity in crisis: The role of universal design for learning in educational redesign" (33 citations) by Basham et al. (2020), which appeared in the LDCJ. (It is important to acknowledge that all of these papers are broader in focus than other, more targeted studies focused on teaching particular skills, such as fractions, reading fluency, etc., and, therefore, would be more likely to be cited due to their wider appeal.)

Table 3 shows the ranking of each of the seven journals based on a calculation of the two-year GJIF.

Table 3. ***Rankings of the Seven Journals Based on Two-Year GJIF***

Journal	Metric Score
JLD	9.24
LDQ	6.00
LDCJ	4.54
LDRP	4.47
LDMJ	1.95
IJRLD	1.88
ILD	1.45

Clearly, the JLD stands out as the publication with the highest frequency of cited papers within our specified timeframe. Its two-year GJIF for 2022 surpassed that of the other six journals by a range of 54.00% to 537.24%. However, it is important to acknowledge that the metrics provided above are representative of average values. Even the JLD had 18 articles with three or fewer citations within the defined limits, and some articles in the journal had not received any citations at all. Clearly, the four JLD papers with citation counts of 27, 33, 46, and 61, respectively, substantially elevate the overall impact of the journal.

In summary, a mere 8.89% of the articles within the seven journals garnered citations ranging from 11 to 20, and only 10.83% exceeded that level. This means that a substantial majority (80.28%) of studies published in 2020 and 2021 had received 10 citations or fewer in 2022, thereby attracting minimal to no attention.

Discussion

The objective of the current study was to explore the visibility and influence of scholarly journals focusing on research dedicated to enhancing the well-being of individuals with LDs. They tend to be particularly susceptible to educational, occupational, and social marginalization due to the core characteristics of their disorder, yet hold great promise for reaching their potential if empirical insights into supporting them are applied.

Over the years, the persistent gap in translating research into practice has received a great deal of attention. In an effort to assess the visibility of scholarly papers concerning LDs among researchers and, with hope, their eventual influence on the practice of working with individuals with this condition, we analyzed the contents of seven periodicals entirely devoted to LDs. The results of our analysis utilizing a two-year GJIF show that the JLD stands out as the journal exerting the most significant impact in this realm, as evidence by the fact that papers published in the journal in 2020 and 2021 garnered an average of 9.24 citations in 2022. Conversely, articles in the remaining six journals in our study were cited between 1.45 and 6.00 times.

It is important to note that there was considerable variation in citation numbers for papers within a specific journal: Some attracted substantial attention, with one study in the JLD receiving 61 citations within the designated timeframe, while others went largely unnoticed. Moreover, even scholarly journals ranked lower in our assessment have occasionally published studies that received substantial attention. This aspect, however, was not evident in our analysis due to the constraints of our relatively limited publication sample. For instance, ILD published an article by Pit-Ten Cate et al. (2018) that, according to the ERIC Publisher Report, had been accessed over 2,000 times on the Education Resources Information Centers platform by January 2023 and, therefore, according to that measure, was one of the most downloaded articles in special education in recent years (ERIC, personal email, January 23, 2023).

However, from any perspective, the number of citations reported here appears relatively modest. Even with slightly over 10% of the articles analyzed in this study receiving more than 20 citations, the highest being 61, this figure still seems rather limited. Nevertheless, it should be kept in mind that articles published in mainstream journals across various fields, such as education, psychology, or medicine (e.g., *Educational Researcher, American Psychologist,* or *The Lancet*), possess a broader relevance, thereby reaching a substantially larger readership than papers appearing in specialized publications on LDs. Consequently, the citation counts for the papers in the journals examined here are understandably significantly lower than those found in prominent generalist outlets spanning other humanities and sciences (Bornmann & Daniel, 2008;

Lancho-Barrantes et al., 2010).

Despite its valuable contributions to the literature, the present research is subject to certain limitations. First, the type of journal article was not reviewed. That is, while all papers met the inclusion criteria, we did not ascertain they were reporting on empirical studies. All the journals included stated in their aims and scopes that research was their focus, but we did not put this to the test.

An additional limitation pertains to the validity of the two-year GIJF. This index evaluates the frequency of article citations over a two-year period. But, in reality, sometimes a study is only "discovered" at a later date and subsequently mentioned in a sequence of publications, particularly when a specific topic suddenly garners heightened relevance. Consequently, the validity of the two-year GJIF is not completely beyond reproach.

Furthermore, restricting our analysis to scholarly publications explicitly including the terms "learning disability" or "learning disabilities" in their title has its limitations. While these journals undeniably prioritize the study of persistent difficulties in reading, writing, or mathematics, they are not the sole venues for such research. *Exceptional Children* (EC), *Intervention in School and Clinic* (ISC), and *Remedial and Special Education* (RSE) are merely a few notable examples among many. Numerous scholarly journals, both occasionally and regularly, publish research on LDs. However, the wide range of choices compelled us to narrow our selection to the aforementioned seven publications.

Finally, we began this paper by emphasizing the crucial role of research in developing interventions and other supports to assist individuals with LDs in better managing their challenges. However, even when a paper receives numerous citations, this does not mean that it has a strong impact on the desired goal of enhancing the lives of people with persistent difficulties in acquiring and using specific academic skills. We can quantify the number of articles dedicated to improving the well-being of individuals with LDs. Nevertheless, while this approach is reliable, it lacks validity, as it does not assess whether the suggested interventions genuinely lead to improved well-being for individuals with LDs.

In summary, despite its limitations, this paper offers a valuable reminder that despite major growth in recent years in the number of evidence-based practices for individuals with LDs, the recognition and acknowledgment of empirical findings concerning this population in scholarly publications are generally relatively limited, with a few exceptions. We hope that research-based insights presented here will attract increasing attention and enjoy wider distribution in the future. There is an urgent need for greater dissemination of well-established knowledge about individuals with LDs, as this demographic remains one of the most marginalized and disadvantaged segments of our society.

References

Alghazo, A. M., Abdelhamid, S., & Alghazo, R. (2022). Back to basics: A role of reading, writing and arithmetic teaching. *Frontiers in Education, 7*. Online publication. https://doi.org/10.3389/feduc.2022.913014

Atayro, A. A., Popoola, S. I., Egeonu, J., & Oludayo, O. (2018). Citation analytics: Data exploration and comparative analyses of **CiteScores** of open access and subscription-based publications indexed in **Scopus** (2014–2016). *Data in Brief, 19*, 198–213. https://doi.org/10.1016/j.dib.2018.05.005

Basham, J. D., Blackorby, J., & Mariona, M. T. (2020). Opportunity in crisis: The role of universal design for learning in educational redesign. *Learning Disabilities: A Contemporary Journal, 18*(1), 71–91.

Berkeley, S., Scanlon, D., Bailey, T. R., Sutton, J. C., & Sacco, D. M. (2020). A snapshot of RTI implementation a decade later: New picture, same story. *Journal of Learning Disabilities, 53*(5), 332–342. https://doi.org/10.1177/0022219420915867

Bishop, T. W. (2018). Mental disorders and learning disabilities in children and adolescents: Learning disabilities. *FP Essentials, 475,* 18–22.

Bornmann, L., & Daniel, H.-D. (2008). What do citation counts measure? A review of studies on citing behavior. *Journal of Documentation, 64*(1), 45–80. https://doi.org/10.1108/00220410810844150

Bradley, R., Danielson, L., & Hallahan, D. P. (Eds.). (2002). *Identification of learning disabilities: Research to practice.* Erlbaum.

Caon, M. (2017). Gaming he impact factor: Where who cites what, whom and when. *Australasian Physical & Engineering Sciences in Medicine, 40*, 273–276. https://doi.org/10.1007/s13246-017-0547-1

Daugherty, A., Hegele, R. A., Lu, H. S., Mackman, N., Rader, D. J. & Weber, C. (2022). Web of Science's citation median metrics overcome the major constraints of the journal impact factor. *Arteriosclerosis, Thrombosis, and Vascular Biology, 42*, 367–371. https://doi.org/10.1161/ATVBAHA.122.317426

Delgado, E., & Repiso, R. (2013). The impact of scientific journals of communication: Comparing Google Scholar Metrics, Web of Science, and Scopus. *Cominicar, 41*(21), 45–52.

Ebrahim, N. A., Salehi, H., Embi, M. A., Tanha, F. H., Gholizadeh, H., & Motahar, S. M. (2014). Visibility and citation impact. *International Education Studies, 7*(4), 120–125. http://dx.doi.org/10.5539/ies.v7n4p120

Fang, H. (2021). Analysis of the new scopus CiteScore. *Scientometrics, 126*, 5321–5331. https://doi.org/10.1007/s11192-021-03964-5

Fletcher, J. M., Lyon, G. R., Fuchs, L. S., & Barnes, M. A. (2019). *Learning disabilities. From identification to intervention.* Guilford Press.

Harzing, A., & Van der Wal, R. (2008). A Google Scholar h-index for journals: An alternative metric to measure journal impact in economics and business. *Journal of the American Society for Information Science Technology, 60*(1), 41–46. https://doi.org/10.1002/asi.20953

Kim, Y.-S. G. (2020). Toward integrative reading science: The direct and indirect effects model of reading. *Journal of Learning Disabilities, 53*(6), 469–491. https://doi.org/10.1177/0022219420908239

Kousha, K., Thelwall, M., & Rezaie, S. (2011). Assessing the citation impact of books: The role of Google Books, Google Scholar, and Scopus. *Journal of the American Society for Information Science Technology, 62*(11), 2147–2164. https://doi.org/10.1002/asi.21608

Lancho-Barrantes, B. S., Guerrero-Bote, V. P., & Moya-Anegón, F. (2010). What lies behind the averages and significance of citation indicators in different disciplines? *Journal of Information Science, 36*(3), 371–382. https://doi.org/10.1177/0165551510366077

Li, Y., Li, Q., Zheng, J., Zeng, X., Shen, T., Chen, Q., & Yang, W. (2023). Prevalence and trends in diagnosed learning disability among US children and adolescents from 1997 to 2021. *JAMA Pediatrics, 177*(9), 969–972.

Miciak, J., & Fletcher, J. M. (2020). The critical role of instructional response for identifying dyslexia and other learning disabilities. *Journal of Learning Disabilities, 53*(5), 343–353. https://doi.org/10.1177/0022219420906801

Mitchel, D. (2020). *What really works in special and inclusive education: Using evidence-based teaching strategies.* Routledge.

Mañana-Rodríguez, J. (2015). A critical review of SCImago Journal & Country rank. *Research Evaluation, 24*(4), 343–354. https://doi.org/10.1093/reseval/rvu008

Okagbue, H. I., & Teixeira da Silva, J. A. (2020). Correlation between the CiteScore and journal impact factor of top-ranked library and information science journals. *Scientometrics, 124*, 797–801. https://doi.org/10.1007/s11192-020-03457-x

Pit-Ten Cate, I. P., Markova, M., Krischler, M., & Krolak-Schwerdt, S. (2018). Promoting inclusive education: The role of teachers' competence and attitudes. *Insights into Learning Disabilities, 15*(1), 49–63.

Prater, M. A. (2017). *Teaching students with high-incidence disabilities: Strategies for diverse classrooms.* Sage.

Redley, M. (2009). Understanding the social exclusion and stalled welfare of citizens with learning disabilities. *Disability & Society, 24*(4), 489–501. https://doi.org/10.1080/09687590902879122

Roldan-Valadez, E., Salazar-Ruiz, S. Y., Ibarra-Contreras, R., & Rios, C. (2019). Current concepts on bibliometrics: A brief review about impact factor, Eigenfactor score, CiteScore, SCImago journal rank, source-normalised impact per paper, *H*-index, and alternative metrics. *Irish Journal of Medical Science, 188,* 939–951. https://doi.org/10.1007/s11845-018-1936-5

Rycroft-Smith, L. (2022). Knowledge brokering to bridge the research-practice gap in education: Where are we now? *Review in Education.* Advance online publication. https://doi.org/10.1002/rev3.3341

Schibeci, R. (1990). Reading, 'riting and 'rithmetic: Being literate in science and mathematics. *Research in Science Education, 20*(1), 324–325. https://doi.org/10.1007/BF02620509

Swanson, H. L., Harris, K. R., & Graham, S. (Eds.). (2013). *Handbook of learning disabilities.* Guilford Press.

Van Aalst, J. (2016). Using Google Scholar to estimate the impact of journal articles in education. *Educational Researcher, 39*(5), 387–400. https://doi.org/10.3102/0013189X10371120

Vaugh, S. R., & Bos, C. S. (2019). *Strategies for teaching students with learning and behavior problems.* Pearson.

Wagner, R. K., Zirps, F. A., Edwards, A. A., Wood, S. G., Joyner, R. E., Becker, B. J., Liu, G., & Beal, B. (2020). The prevalence of dyslexia: A new approach to its estimation. *Journal of Learning Disabilities, 53*(5), 354–365. https://doi.org/10.1177/0022219420920377

Xia, J., Myers, R. L., & Wilhoite, S. K. (2011). Multiple open access availability and citation impact. *Journal of Information Science, 37*(1), 19–28. https://doi.org/10.1177/0165551510389358

Authors' Note

Correspondence concerning this article should be addressed to Yemina Frangenberg, University of Cologne, Department of Special Education & Rehabilitation, Klosterstr. 79b, 50931 Cologne, Germany, Email: yfrangenberg@gmx.de