



# The Academic Impact Level of Ophthalmology Journals Published in Türkiye: A Comparative Scientometric Analysis

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## Abstract

**Objectives:** This study set out to comprehensively analyze and compare the scientific impact, productivity, and collaboration networks of seven ophthalmology journals published in Türkiye, using the Dimensions, Tübitak/Ulakbim and SCImago databases.

**Methods:** The study examined various bibliometric indicators, including publication count, citation count, percentage of cited publications, self-citation ratio, field citation ratio (FCR), and relative citation ratio (RCR). In addition, the collaboration networks for each journal were analyzed in terms of the number of authors, co-authorship links, total co-authorships, and the number of co-authorship clusters. The scientific impact and academic prestige of the journals were assessed using the SCImago Journal Rank Indicator, Q Journal Classification, and H-index.

**Results:** The Turkish Journal of Ophthalmology (TJO) outperformed the other journals across various metrics, including publication count, citation count, percentage of cited articles, and impact factors. The Beyoglu Eye Journal exhibited the second best performance. The TJO also exhibited the most extensive collaboration network and the highest FCR and RCR values, indicating its strong academic impact.

**Conclusion:** The TJO is the leading ophthalmology journal in Türkiye, while Beyoglu Eye Journal demonstrates the second-best performance, both exhibiting high publication counts, citation metrics, and field-normalized indicators. Other Turkish ophthalmology journals demonstrate lower levels of academic impact, indicating that coordinated efforts are required to enhance their quality, visibility, and global recognition.

**Keywords:** Bibliometrics, Dimensions database, Ophthalmology journals in Türkiye, SCImago Journal and Country Rank, Tübitak/Ulakbim

## Introduction

Recent studies have employed bibliometric and scientometric techniques to analyze impacts and trends within various academic disciplines (1-3). These have highlighted the usefulness of modern databases, such as Dimensions,

in providing a more nuanced understanding of research performance and collaboration patterns. As a prominent medical specialty, ophthalmology has attracted significant interest from the scientometric community. While Türkiye has emerged as a significant contributor to the global oph-

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thalmology literature, comprehensive examination of the academic impact of its domestic ophthalmology journals remains limited (4). Ophthalmology publications contribute significantly to the advancement of medical science and the development of innovative treatment methods for eye health (5). However, the extent to which these contributions reflect a journal or publication's potential impact has frequently been the subject of debate. Scientific journals play a crucial role in determining and evaluating the quality of research in the field (6). The Dimensions database is a modern bibliometric tool designed to comprehensively analyze the impact and connections of scientific research. Launched by Digital Science in 2018, Dimensions transcends traditional citation indices by offering a holistic approach that encompasses a broader spectrum of research outputs (7).

The Dimensions database contains a substantial and diverse collection of research articles, surpassing the document coverage of other prominent bibliometric databases. According to a comprehensive comparative study by Huang et al., Dimensions contains approximately 109 million documents, considerably more than the 74.9 million and 76.7 million documents in Web of Science and Scopus, respectively (8). Bornmann and Haunschild also highlighted Dimensions' comprehensive coverage of open access publications, noting that the proportion of open access content in Dimensions is 44.2%, far exceeding the figures of 30.9% in Web of Science and 28.0% in Scopus (9).

The Dimensions database provides two key metrics for evaluating a publication's impact, the field citation ratio (FCR) and the relative citation ratio (RCR). The FCR compares a publication's citations to others of similar age in the same field, allowing cross-disciplinary comparisons (10). The RCR measures a publication's citation performance compared to related works, assessing its impact within its specific research area (11).

The Dimensions database provides insights into academic collaboration networks by examining co-authorship links, total co-authorships, and research clusters. This permits a deeper understanding of scientific productivity and interaction. Co-authorship links indicate collaborative relationships among researchers who have worked together on publications. The total co-authorships metric reflects the level of connectedness and influence of researchers within the academic community. Clusters represent groups of researchers who frequently collaborate, typically around similar research topics or areas of interest (12).

The SCImago Journal and Country Rank database provides open-access bibliometric measures such as the H-index and SCImago Journal Rank (SJR) that evaluate the citation quality and international visibility of ophthalmology

journals (13). SCImago calculates the SJR metric using citation data from Scopus, which is owned by Elsevier. The SJR is a multidimensional indicator that assesses a journal's scientific impact by considering the number of citations received, the prestige of the citation sources, and the recency of those citations. The Q Journal Classification ranks journals within their fields based on SJR values, dividing them into four equal quartiles. The H-index is a metric that measures both the productivity and citation impact of a researcher or journal, based on the principle that N papers have received at least N citations each (14).

TR Dizin is a national academic database developed by Tübitak Ulakbim. It ensures the indexing of academic journals published in Turkey according to international standards. The platform aims to enhance the visibility and accessibility of Turkish academic publications. It encompasses journals in fields such as Natural Sciences, Social Sciences, Humanities, Engineering, Medicine, and Life Sciences.

This study set out to comprehensively analyze and compare the scientific impact, productivity, and collaboration networks of seven ophthalmology journals published in Türkiye using the Dimensions, Tübitak/Ulakbim and SCImago databases. The objective was to explore the positioning of these journals within the academic landscape through bibliometric and scientometric methods.

## Methods

This cross-sectional study, conducted in November 2024, employed publicly available resources from the Dimensions database (Digital Science, London, United Kingdom), Tübitak/Ulakbim database (Governmental Institutional Unit, Ankara, Türkiye), and SCImago Journal and Country Rank database (SCImago Research Group, Spain) (15-17). It systematically examined seven Turkish ophthalmology journals published in English, the Turkish Journal of Ophthalmology (TJO), the Journal of Retina-Vitreous, the Beyoglu Eye Journal, the Current Retina Journal the Journal of Glaucoma and Cataract, the Türkiye Klinikleri Journal of Ophthalmology, and European Eye Research. It covered various time periods for each journal (ranging from 1998 to 2024). The study focused on various bibliometric indicators, including publication count, citation count, citation averages, percentage of cited publications, self-citation rates, and the FCR and RCR. The collaboration networks for each journal were also analyzed, considering the number of authors, co-authorship links, total co-authorships, and the number of co-authorship clusters.

## Dimensions Platform Bibliometric Measures

The following bibliometric indicators were employed to assess the academic impact (18):

**Article Count**

Shows the total number of articles published in a journal or collection. Measures the productivity and publication volume of the journal.

**Citation Count**

Indicates the total number of citations received by published articles. Measures the overall impact of the research. Covers citations across all time periods.

**Publication with Citation (%)**

Shows the ratio of articles that received at least one citation to the total number of articles. Reflects the general visibility and impact of the journal. Formula: (Number of cited articles/Total number of articles)  $\times$  100.

**Cited Average**

Shows the average number of citations per article. Measures the average impact of the journal. Formula: Total number of citations/Total number of articles.

**FCR**

Indicates how many citations a publication has received compared to other publications in the same field.  $FCR = 1.0$ : Publication has received citations at the average level for its field.  $FCR > 1.0$ : Publication has received more citations than the field average.  $FCR < 1.0$ : Publication has received fewer citations than the field average.

**RCR**

Measures the impact of a publication compared to other publications on similar topics. Takes into account the citation network of the publication.  $RCR = 1.0$ : Indicates an average level of impact.  $RCR > 1.0$ : Indicates above-average impact.  $RCR < 1.0$ : Indicates below-average impact.

**Number of Authors**

Represents the total count of unique researchers who have contributed to publications within a specific dataset or journal. Indicates the size of the research community.

**Co-authorship Links**

Represents direct connections between two authors who have published together. Shows collaborative relationships between researchers.

**Total Co-authorships**

Represents the sum of all collaborative relationships in all publications. Measures the overall collaborative activity. Indicates the intensity of collaboration.

**Co-authorship Clusters**

Represents groups of authors who frequently collaborate together. Forms distinct research communities. Identifies research groups and networks.

The indexing status of ophthalmology journals published in Turkey in national and international academic databases has been comparatively analyzed. The indexing information of the journals was compiled from the official websites of the relevant databases and the information provided by the journal publishers.

The study was conducted in accordance with the ethical principles outlined in the Declaration of Helsinki and did not require formal ethical approval or the acquisition of informed consent from participants. To ensure data integrity and reliability, a comprehensive cross-validation protocol was implemented by two independent domain experts.

**Statistical Analysis**

Statistical analyses were performed using IBM Statistical Package for the Social Sciences Statistics Version 25.0; IBM Corp., Armonk, NY). Descriptive statistics, including frequencies, means, and standard deviations, were calculated.

**Results**

A total of 5,567 articles were indexed in the Tübitak/Ulakbim database, with the highest contribution of 1,684 articles from the TJO, while 2,976 articles were indexed in the Dimensions database, similarly led by TJO with 1,186 articles, from seven Turkish ophthalmology journals under evaluation. This discrepancy in article counts can be attributed to the distinct indexing scope of each database, as Tübitak/Ulakbim includes both Turkish and English language publications, whereas Dimensions database exclusively indexes English language articles.

All the journals are indexed in Tübitak/Ulakbim. Among these, the TJO is the only journal indexed in Web of Science. In addition, the TJO, Journal of Retina-Vitreous, and Beyoglu Eye Journal are indexed in Scopus, whereas PubMed/MEDLINE includes the TJO and Beyoglu Eye Journal. The detailed indexing information for these journals is presented in Table 1.

TJO has the highest cited average (1.12) and percentage of cited articles (48.8%), with a self-citation ratio of 24.28%. In contrast, the European Eye Research journal exhibits the lowest cited average (0.01) and percentage of cited articles (1.1%), with no self-citations. Other journals, such as the Journal of Retina-Vitreous and Beyoglu Eye Journal, show moderate cited averages (0.88 and 0.09, respectively) and higher self-citation ratios, reaching up to 48.3%. The detailed information for these journals is presented in Table 2.

Table 3 evaluates the bibliometric performance of seven Turkish ophthalmology journals based on dimensions database. TJO (2010–2024) achieved the highest performance with 62.7% cited articles, an FCR of 1.39, and an RCR of 0.72. The Beyoglu Eye Journal (2016–2024) demonstrated moderate performance with 56.2% cited articles, an FCR of 0.58, and an RCR of 0.49. The European Eye Research (2021–2024) showed emerging impact with 28.4% cited articles, an FCR of 0.31, and an RCR of 0. The Türkiye Klinikleri Journal of Ophthalmology (2015–2024) reported 19.5% cited articles, an FCR of 0.09, and an RCR of 0. The Journal of Retina-Vitreous (2020–2024) recorded 15.7% cited articles, an

**Table 1.** Indexing coverage of Turkish academic ophthalmology journals in international and national databases

	Turkish Journal of ophthalmology	Journal of Retina-vitreous	Beyoglu Eye Journal	Current Retina Journal	Journal of Glaucoma and cataract	Türkiye Klinikleri Journal of ophthal	European eye research
Web of Science	√						
PubMed/MEDLINE	√		√				
Scopus	√	√	√				
DOAJ	√		√				√
TÜBİTAK/ULAKBİM	√	√	√	√	√	√	√
EBSCO	√	√	√		√	√	√
Index Copernicus	√	√		√	√	√	
Türk Medline	√	√	√				
Turkish Citation Index	√	√	√				
Hinari	√		√				
Proquest	√		√				
J-Gate	√						
IdealOnline	√		√				√
British Library	√						
GOALI	√						
ARDI	√						
OARE	√						
AGORA	√						
CINAHL	√						
Scilit	√		√				√
Research4Life	√		√				
ASCI	√		√				√
WorldCat			√				√
EuroPub				√			
EBSCOhost				√			
Gale			√				√
Scope Database		√				√	
Sherpa Romeo							√
CNKI	√						

FCR of 0.04, and an RCR of 0. The Journal of Glaucoma and Cataract (2020–2024) achieved 7.2% cited articles, an FCR of 0.04, and an RCR of 0. Finally, the Current Retina Journal (2017–2024) had the lowest metrics with 3% cited articles, an FCR of 0.01, and an RCR of 0.

TJO demonstrated the highest citation performance, reaching peak rates of 96.92% in 2016, followed by Beyoglu Eye Journal with notable performance particularly in 2019 (86.05%). More recently established journals, including Journal of Retina-Vitreous and European Eye Research, show

emerging citation patterns, while Current Retina Journal and Journal of Glaucoma and Cataract maintain relatively modest citation rates below 15% (Fig. 1).

In terms of the co-authorship and collaboration networks of Turkish ophthalmology journals, the TJO (455 authors, 1559 co-authorships) and Beyoglu Eye Journal (263 authors, 930 co-authorships) exhibit the most extensive networks. These are followed by Türkiye Klinikleri Journal of Ophthalmology (232 authors and 641 co-authorships). European Eye Research (38 authors and 111 co-authorships) and the

**Table 2.** An analysis of the publication and citation performance of ophthalmology journals in Türkiye based on TÜBİTAK/ULAKBİM data

Rank	Title of the journal	Publication period*	Number of articles published (n)	Number of citations (n)	Number of cited articles (n)	Mean citation rate (n)	Publications with citations: Mean rate (%)	Self-citation: Mean rate (%)
1	Turkish Journal of ophthalmology	2003–2024	1684	1886	822	1.12	48.8	24.28
2	Journal of Retina-Vitreous	2000–2023	1496	1321	533	0.88	35.6	47.92
3	Beyoglu Eye Journal	2016–2024	334	31	25	0.09	7.5	48.3
4	Current Retina Journal	2017–2024	425	54	37	0.13	8.7	42.5
5	Journal of Glaucoma and Cataract	2026–2023	908	756	322	0.83	35.4	48.5
6	Türkiye Klinikleri Journal of Ophthalmology	1998–2024	633	346	166	0.55	26.2	7.8
7	European Eye Research	2022–2024	87	1	1	0.01	1.1	0

\*The evaluation of Turkish ophthalmology journals in the TÜBİTAK/ULAKBİM database automatically generates year ranges based on the availability of data for each journal. As a result, the analysis period varies across journals, and no filtering option is available to standardize these ranges.

**Table 3.** An analysis of the publication and citation performances of ophthalmology journals in Türkiye based on dimensions database

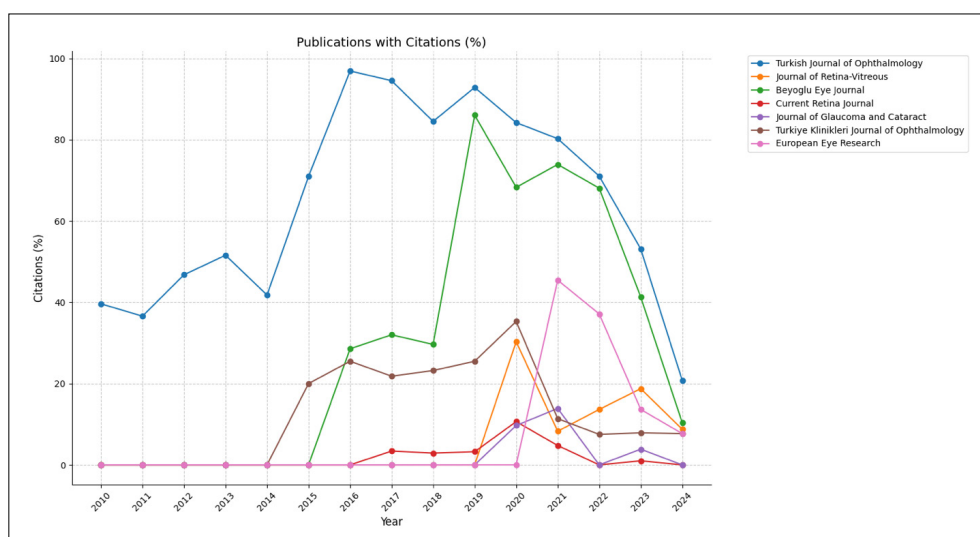
Rank	Title of the Journal	Publication period*	Number of articles published (n)	Number of citations (n)	Publications with citations: Mean rate (%)	Mean Citation rate (n)	Mean FCR (n)	Mean RCR (n)
1	Turkish Journal of Ophthalmology	2010–2024	1186	4657	62.7	3.93	1.39	0.72
2	Journal of Retina-Vitreous	2020–2024	242	48	15.7	0.2	0.04	0
3	Beyoglu Eye Journal	2016–2024	334	492	56.2	1.47	0.58	0.49
4	Current Retina Journal	2017–2024	493	22	3	0.04	0.01	0
5	Journal of Glaucoma and Cataract	2020–2024	125	11	7.2	0.09	0.04	0
6	Türkiye Klinikleri Journal of Ophthalmology	2015–2024	480	142	19.5	0.3	0.09	0
7	European Eye Research	2021–2024	116	55	28.4	0.47	0.31	0

\*A comprehensive temporal analysis was performed utilizing the maximum available date ranges within the dimensions database. FCR: Field citation ratio, RCR: Relative citation ratio.

Journal of Retina-Vitreous (48 authors, 88 co-authorships) exhibit moderate levels of collaboration, while the Current Retina Journal (six authors and six co-authorships) has the most limited network. These data, shown in Table 4, reflect the collaboration levels and potential impacts of Turkish ophthalmology journals. In addition, the collaborative network visualization of Turkish researchers' contributions to seven Turkish ophthalmology journals, generated through VOSviewer analysis of Dimensions database, is presented in Figure 2.

The TJO has an SJR value of 0.481, placing it in the Q3 category, and an H-index of 15, indicating a moder-

ate level of influence in its field. In contrast, the Journal of Retina-Vitreous has a lower SJR value, 0.108, ranking it in the Q4 category, and an H-index of 6, suggesting a relatively lower impact within its domain. The Beyoglu Eye Journal has an H-index of 1, indicating that its current impact is limited. The SCImago database does not provide SJR, Q classification, or H-index values for the other four journals, implying that these may not be adequately represented in international indices or that sufficient data are not available. These findings suggest that the TJO exhibits the highest bibliometric indicators among the journals analyzed in this research.



**Figure 1.** Comparative Analysis of Seven Turkish Ophthalmology Journals Indexed in the Dimensions Database Based on the Percentage of Publications with Citations. The analysis presents data that varies annually from 2010 to 2024, reflecting temporal changes in citation patterns and journal performance.

**Table 4.** Author networks and collaboration patterns of Turkish ophthalmology journals based on dimensions database

Rank		Publication period*	Number of Authors (n)	Co-authorship links (n)	Total co-authorships (n)	Clusters (n)
1	Turkish Journal of Ophthalmology	2010–2024	455	1559	2946	24
2	Journal of Retina-Vitreous	2020–2024	48	88	101	8
3	Beyoglu Eye Journal	2016–2024	263	930	1295	19
4	Current Retina Journal	2017–2024	6	6	8	3
5	Journal of Glaucoma and Cataract	2020–2024	25	56	75	6
6	Türkiye Klinikleri Journal of Ophthalmology	2015–2024	232	641	905	17
7	European Eye Research	2021–2024	38	111	136	7

\*A comprehensive temporal analysis was performed utilizing the maximum available date ranges within the dimensions database.

## Discussion

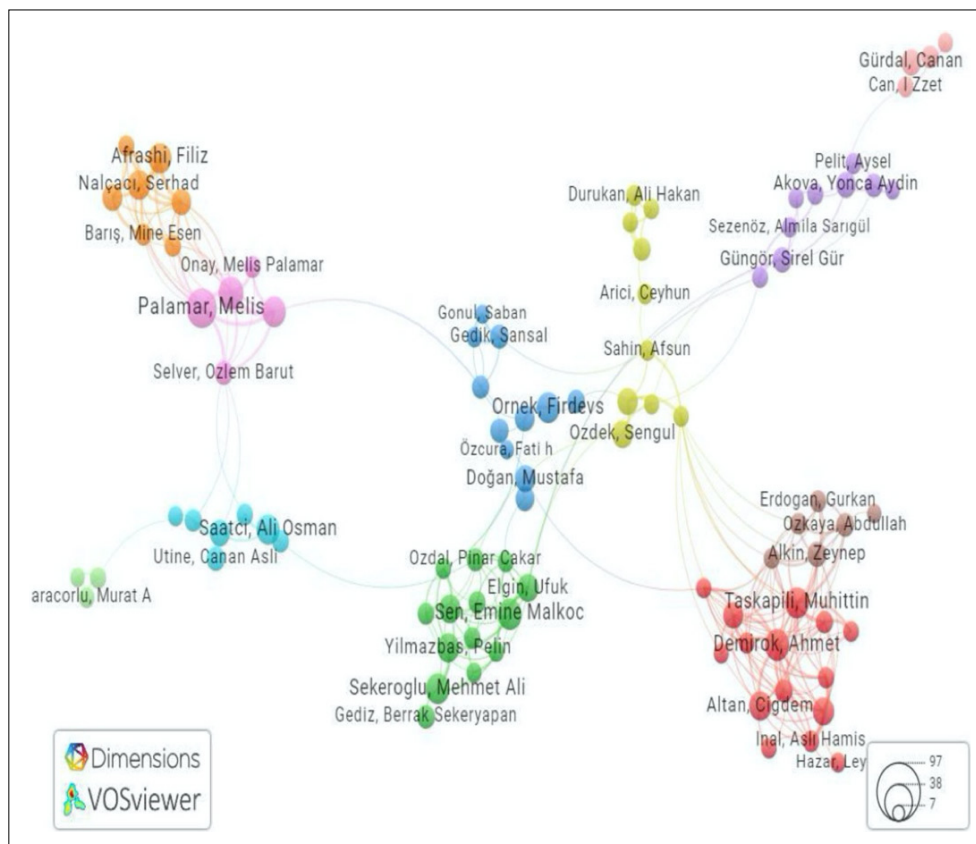
The findings of this study provide a comprehensive evaluation of the academic impact of ophthalmology journals published in Türkiye, using a range of bibliometric and scientometric indicators from the Dimensions, Tübitak/ULAKBİM and SCImago database.

The study findings align well with previous research emphasizing the importance of journal impact metrics in assessing the academic influence of scientific publications (19).

The TJO consistently demonstrated the highest levels of academic impact across various metrics, including citation count, cited average, and percentage of cited articles in this research.

In a similar study, Canleblebici and Çitırık conducted a bibliometric analysis of ophthalmology journals in Türkiye. Their study, which differs from our current research by

examining eight ophthalmology journals, revealed through analyses based on Tübitak/ULAKBİM data that the TJO had the highest citation average among the journals in terms of citation metrics (20). TJO may be attributed to its established reputation, broad scope, rigorous editorial procedures, and active promotion efforts. These factors have contributed to its high visibility, citation rates, and ability to attract quality submissions from both domestic and international researchers. One possible reason for TJO's high impact factor could be its emphasis on review articles and its selective acceptance of a smaller number of articles. Nichols et al.'s bibliometric analysis of ophthalmic journals revealed that Progress in Retinal and Eye Research, a journal dedicated solely to review articles, achieved the highest impact factor in the ophthalmology field (21).



**Figure 2.** Collaborative Network Analysis of Turkish Researchers in Ophthalmology Using VOSviewer from Dimensions Database: Analysis of Seven Turkish Ophthalmology Journals (November 23, 2024). Node sizes represent the number of publications, while the thickness of connections indicates the strength of collaboration. Distinct color-coded clusters identify research groups or institutions with frequent collaborations.

The journal's commitment to publishing cutting-edge research and fostering collaboration among researchers are other probable factors behind its impressive impact metrics.

The Beyoglu Eye Journal exhibited the second best performance, which may be related to its focus on publishing high-quality, impactful research and its efforts to promote international collaboration, as evidenced by its rising FCR and RCR values. Despite entering publication much later than the TJO, Beyoglu Eye Journal demonstrated remarkable citation performance, achieving a peak citation rate of 86.05% in 2019. The journal's citation trajectory showed significant growth, particularly between 2018 and 2020, where it maintained citation rates above 70%. This performance positioned it as the second most influential journal in terms of citations among Turkish ophthalmology journals, following only the TJO.

In contrast, the other Turkish ophthalmology journals generally exhibited lower impact metrics, indicating a need for these to strengthen their publication strategies to enhance their visibility and influence within the field. Journals such as the Current Retina Journal and Journal of Glaucoma

and Cataract, which exhibited poorer performances, can improve their academic impact by enhancing their online presence, optimizing indexing, and encouraging international collaboration (22,23). This highlights the need for a comprehensive strategy to improve the quality, visibility, and global recognition of Turkish ophthalmology journals, areas which may be influenced by factors such as internationalization, editorial policies, peer review, and author collaboration networks.

A significant disparity in collaboration networks was observed across the ophthalmology journals examined in this study. The TJO and Beyoglu Eye Journal demonstrated extensive collaboration networks, suggesting prominent roles in facilitating research collaborations. In contrast, smaller journals such as the Current Retina Journal exhibit more limited collaboration, indicating either a niche focus or the need for strategies to enhance collaborative efforts. This disparity points to a clear correlation between journal size and collaboration intensity. Larger, more established journals with broader scopes appear to attract more authors and to foster more co-authorships. This increased international exposure



could contribute to enhanced visibility and impact of the research published in these journals, as suggested by studies demonstrating a positive correlation between international collaboration and citation rates (24). This trend aligns well with previous research indicating that journal prestige can significantly influence collaboration patterns in academic publishing (25).

The analysis of FCR and RCR values is crucial for evaluating journals' academic impact, as these metrics provide normalized measures of citation performance that account for differences across disciplines (26). Past research has emphasized the significance of RCR and FCR values as alternative metrics in the assessment of scholarly impact, in contrast to the traditional Journal Impact Factor (27). These field-independent citation metrics permit a more accurate and equitable comparison of citation influence across diverse research areas (13). A previous study of obstetrics and gynecology articles found that articles highly ranked by RCR were not considered "citation classics" based on traditional metrics, suggesting that RCR offers a distinct assessment (28). The findings indicate that the TJO's strong performance in various impact metrics, including FCR and RCR, sets it apart from other ophthalmology journals published in the country.

The use of the SJR indicator makes it possible to estimate a journal's impact without the influence of self-citations, since prestige can be transferred to one journal by all other journals, but not by itself (29). The analysis of journal impact metrics from the SCImago database highlights substantial disparities among ophthalmology journals published in Türkiye. The TJO stands out with moderate international visibility and a notable impact within its field. In contrast, the Journal of Retina-Vitreous exhibits lower international recognition, suggesting potential scope for improvement. Despite its recent entry into publication, Beyoglu Eye Journal is modestly listed in the SJR database the limited data available for other journals, which indicates that these may not be adequately represented in international indices, highlighting the need to enhance the international visibility of the Turkish ophthalmology literature as a whole. These findings underscore the importance for researchers, journal editors, and policy scientists of enhancing the visibility and contributions of Turkish ophthalmology publications within the global scientific community.

Our research highlights a noticeable decline in several academic metrics in recent years, as depicted in Figure 1. One contributing factor is the limited time that has passed for recent publications to accumulate citations, which hinders a thorough assessment of their scientific impact. In addition, the substantial growth in the global volume of academic publications has diluted the visibility and citation rates of individual studies. This trend reflects the increasingly com-

petitive nature of the academic publishing landscape, driven by the rapid expansion of scientific literature.

The international visibility of Turkish ophthalmology literature is significantly influenced by the indexing status of journals in prestigious bibliometric databases. According to 2023 data, a total of 141 ophthalmology journals are indexed in the SJR database, including three from Türkiye. Among these journals, 44 are from the United States, which holds the leading position. The United Kingdom ranks second with 27 journals. The TJO is ranked 71<sup>st</sup> in this database (17). In the Web of Science database, only one Turkish ophthalmology journal, TJO is indexed under the ESCI (Emerging Sources Citation Index) category out of 100 ophthalmology journals (30). In this context, strengthening editorial processes in alignment with COPE (Committee on Publication Ethics) standards and conducting regular reviews are essential to enhance the inclusion of additional Turkish journals in international indexing databases.

Schulz et al., in their 5-year bibliometric analysis of international ophthalmology journals, highlighted the dominance of the United States, United Kingdom, and Europe, which collectively accounted for approximately 60% of all published articles. The study further emphasized the significant rise in research output from Asian countries, particularly China, Korea, and India, marking a transformative shift in global research dynamics. Within this context, Turkey's contribution of 248 publications positioned it 16th among contributing nations, offering valuable insights into its current standing within the global ophthalmology research landscape. The findings of this investigation underscore the critical significance of multinational, multi-institutional collaborative research endeavors (31). Therefore, enhancing the international visibility of ophthalmology journals originating from Turkey can significantly contribute to the global impact of Turkish authors' articles, fostering greater international collaboration and recognition in the field.

While this study provides a comprehensive evaluation of the academic impact of ophthalmology journals published in Türkiye, it is limited by the available data in the Dimensions, Tübitak/Ulakbim and SCImago databases. Due to the varying initiation periods of publication for the journals analyzed, a direct comparison within a common time frame could not be conducted. The analysis may not have captured the full scope of ophthalmology research publications in the country. In addition, the research does not investigate factors that might affect the journals' performance, such as editorial policies and review processes. Furthermore, the study lacks complete data for the FCR and RCR metrics in 2023, potentially resulting in an incomplete assessment of journal impact for that year.



## Conclusion

The findings of this study indicate that the TJO is the leading ophthalmology journal in Türkiye, while Beyoglu Eye Journal demonstrates the second-best performance, both exhibiting high publication counts, citation metrics, and field-normalized indicators. Other Turkish ophthalmology journals demonstrate lower levels of academic impact, suggesting the need for concerted efforts to enhance their quality, visibility, and global recognition. Finally, this bibliometric analysis provides a quantitative framework for evaluating the publication and citation performance of ophthalmology journals, providing a basis for tracking trends over time and facilitating comparisons with other disciplines. These insights can guide journal stakeholders in making strategic decisions to increase the international visibility and impact of Turkish ophthalmology research.

## Disclosures

**Ethics Committee Approval:** The study was conducted in accordance with the ethical principles outlined in the Declaration of Helsinki and did not require formal ethical approval or the acquisition of informed consent from participants.

**Peer-review:** External peer-reviewed.

**Conflict of Interest:** None declared.

**Use of AI for Writing Assistance:** Not declared.

**Author Contributions:** Concept – A.H.R., C.M., I.E.Y., M.B., A.S.; Design – A.H.R., C.M., I.E.Y., M.B., A.S.; Supervision – A.H.R., C.M., I.E.Y., M.B., A.S.; Data Collection and/or Processing – A.H.R., I.E.Y., M.B.; Analysis and/or Interpretation – I.E.Y., M.B., A.S.; Literature Search – A.H.R., C.M.; Writing – A.H.R.; Critical Reviews – A.H.R., C.M., I.E.Y., M.B., A.S.

## References

1. Cao X, Tian Y, Chen H, Li S, Zhou J. The global research trends on intrinsic capacity of older adults: A Bibliometric and visual analysis of papers published during 2015-2023. *J Multidiscip Healthc* 2024;17:3323–39. [CrossRef]
2. Azevedo A, Azevedo JM. Learning analytics: A bibliometric analysis of the literature over the last decade. *Int J Educ Res Open* 2021;2:100084. [CrossRef]
3. Yan L, Zhiping W. Mapping the literature on academic publishing: A bibliometric analysis on WOS. *Sage Open* 2023;13:21582440231158562. [CrossRef]
4. Erdem B, Obut A, Kay M, Gok M, Bostan S. Evaluating scientific research barriers by gender and other characteristics from the perspective of ophthalmologists in Turkey: A multicenter survey study. *PLoS One* 2023;18:e0273181. [CrossRef]
5. Güven S, Kılıç D. Bibliometric analysis of the articles published in the Ophthalmic Epidemiology journal between 2002 and 2019. *Turk Klin J Ophthalmol* 2020;29:324–32. [CrossRef]
6. Ioannidis JPA, Thoms BD. A user's guide to inflated and manipulated impact factors. *Eur J Clin Invest* 2019;49:e13151. [CrossRef]
7. Herzog C, Hook D, Konkiel S. Dimensions: Bringing down barriers between scientometricians and data. *Quant Sci Stud* 2020;1:387–95. [CrossRef]
8. Huang CK, Neylon C, Brookes-Kenworthy C, Hosking R, Montgomery L, Wilson K, et al. Comparison of bibliographic data sources: Implications for the robustness of university rankings. *Quant Sci Stud* 2020;1:445–78. [CrossRef]
9. Bornmann L, Haunschild R, Mutz R. Growth rates of modern science: A latent piecewise growth curve approach to model publication numbers from established and new literature databases. *Humanit Soc Sci Commun* 2021;8:15. [CrossRef]
10. Maurya RK, Datana S, Verma S, Kumar Bhandari S. Correlation between scientometrics and altmetrics score of scholarly literature of Medical Journal Armed Forces India. *Med J Armed Forces India* 2022;78:S123–32. [CrossRef]
11. Surkis A, Spore S. The relative citation ratio: What is it and why should medical librarians care? *J Med Libr Assoc* 2018;106:508–13. [CrossRef]
12. Ioannidis JP. Measuring co-authorship and networking-adjusted scientific impact. *PLoS One* 2008;3:e2778. [CrossRef]
13. Mansour AM, Mollayess GE, Habib R, Arabi A, Medawar WA. Bibliometric trends in ophthalmology 1997-2009. *Indian J Ophthalmol* 2015;63:54–8. [CrossRef]
14. Castro WRA, Cárdenas JEU, Suárez AAG. Comparative analysis of Latin American countries in the SCImago Journal & Country Rank Top 5 for 2009–2019. *J Lang Linguist Stud* 2022;18:385–91.
15. Dimensions. Available from: <https://www.dimensions.ai/> Accessed May 26, 2025.
16. Tübitak Tr Dizin. Available from: <https://trdizin.gov.tr/> Accessed May 26, 2025.
17. Scimagojr. Available from: <https://www.scimagojr.com/> Accessed May 26, 2025.
18. Dimensions. Fresh Desk. Available from: <https://dimensions.freshdesk.com/support/home> Accessed May 26, 2025.
19. Huang W, Wang W, Zhan J, Zhou M, Chen S, Zhang X. Scientific publications in ophthalmic journals from China and other top-ranking countries: A 12-year review of the literature. *BMC Ophthalmol* 2013;13:25. [CrossRef]
20. Canleblebici M, Çıtırık M. Göz hastalıkları alanında Türkiye kaynaklı dergilerin ulusal ve uluslararası bilimsel dergi indekslerindeki güncel durumları. *MIN Oftalmol [Article in Turkish]* 2024;31:41–8.
21. Nichols JJ, Morgan PB, Jones LW, Efron N. Bibliometric analysis of ophthalmic journals. *JAMA Ophthalmol* 2023;141:651–7. [CrossRef]
22. Ale Ebrahim N, Salehi H, Embi MA, Habibi F, Gholizadeh H, Motahar SM, et al. Effective strategies for increasing citation frequency. *Int Educ Stud* 2013;6:93–9. [CrossRef]
23. Rodriguez RM, Chan V, Wong AHK, Montoy JCC. A review of journal impact metrics and characteristics to assist emergency medicine investigators with manuscript submission decisions. *West J Emerg Med* 2020;21:877–82. [CrossRef]

24. Tang X, Li X, Ma F. Internationalizing AI: Evolution and impact of distance factors. *Scientometrics* 2022;127:181–205. [\[CrossRef\]](#)
25. Thelwall M, Maflahi N. Academic collaboration rates and citation associations vary substantially between countries and fields. *J Assoc Inf Sci Technol* 2020;71:968–78. [\[CrossRef\]](#)
26. Purkayastha A, Palmaro E, Falk-Krzesinski HJ, Baas J. Comparison of two article-level, field-independent citation metrics: Field-Weighted Citation Impact (FWCI) and Relative Citation Ratio (RCR). *J Informetr* 2019;13:635–42. [\[CrossRef\]](#)
27. Hutchins BI, Yuan X, Anderson JM, Santangelo GM. Relative Citation Ratio (RCR): A new metric that uses citation rates to measure influence at the article level. *PLoS Biol* 2016;14:e1002541. [\[CrossRef\]](#)
28. Mitra AN, Aurora N, Grover S, Ananth CV, Brandt JS. A bibliometric analysis of obstetrics and gynecology articles with highest relative citation ratios, 1980 to 2019. *Am J Obstet Gynecol MFM* 2021;3:100293. [\[CrossRef\]](#)
29. Falagas ME, Kouranos VD, Arencibia-Jorge R, Karageorgopoulos DE. Comparison of SCImago journal rank indicator with journal impact factor. *FASEB J* 2008;22:2623–8. [\[CrossRef\]](#)
30. Clarivate. Master Journal List. Available from: <https://mjl.clarivate.com/home> Accessed May 26, 2025.
31. Schulz CB, Kennedy A, Rymer BC. Trends in ophthalmology journals: A five-year bibliometric analysis (2009-2013). *Int J Ophthalmol* 2016;9:1669–75.