Bibliometric Analysis and Visual Mapping of the Articles Published in the ILEF Journal from the Beginning to the Present

Başlangıcından Bugüne İLEF Dergisinde Yayınlanan Makalelerin Bibliyometrik Analizi ve Görsel Haritalandırılması

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Abstract

Keywords:

The ILEF Journal, bibliometric analysis, author analysis, subject analysis, visual mapping

Bibliometric analyses reveal the intellectual, social, and conceptual structure of the publications. In bibliometric analysis, the trend of scientific publications in various disciplines in a certain period is revealed with the help of quantitative indicators. The primary purpose of this study is to create a bibliometric profile of the articles published in the Journal of Ankara University Faculty of Communication between 2014 and 2021. The research preferred the bibliometric method because it is convenient to examine any publication and categorize and report the data systematically. 105 articles written by 128 researchers were examined in the journal during the specified period. The research examined bibliometric indicators such as article and citation frequencies, most cited authors, co-citation analysis, common word analysis, and co-authorship networks. In addition, criteria determined by Price, Lotka, and Pareto were used in the research to reveal author productivity. The research results showed that the articles published in the Journal of Ankara University Faculty of Communication do not comply with Price, Lotka, and Pareto principles. Research findings show that empirical studies in communication have gained importance compared to theoretical studies in recent years.

Öz

Anahtar Kelimeler:

İLEF Dergisi, bibliyometrik analiz, yazar analizi, konu analizi, görsel haritalama

Bibliyometrik analizler yayınların entelektüel, sosyal ve kavramsal yapısını ortaya çıkarmak için yapılır. Bibliyometrik analizlerde nicel göstergeler yardımıyla çeşitli disiplinlerdeki bilimsel yayınların belirli bir süredeki eğilimi ortaya konur. Bu çalışmanın temel amacı Ankara Üniversitesi İletişim Fakültesi Dergisi'nde 2014 ve 2021 yılları arasında yayınlanan makalelerin bibliyometrik profilini çıkarmaktır. Araştırmada bibliyometrik yöntem, herhangi bir yayının sistematik bir şekilde incelenmesine ve verilerin kategorize edilerek raporlanmasına elverişli olduğu için tercih edilmiştir. Belirtilen süre içerisinde dergide 128 araştırmacı tarafından yazılan 105 makale incelenmiştir. Araştırmada makale ve atıf sıklıkları, en çok atıf alan yazarlar, ortak atıf analizi, ortak kelime analizi ve ortak yazarlık ağları gibi bibliyometrik göstergeler incelendi. Ayrıca yazar üretkenliğini ortaya koyabilmek için araştırmada Price, Lotka ve Pareto tarafından belirlenen kriterler kullanıldı. Araştırma sonuçları, Ankara Üniversitesi İletişim Fakültesi Dergisi'nde yayınlanan makalelerin Price, Lotka ve Pareto ilkelere uymadığı anlaşılmıştır. Araştırma bulguları son yıllarda İletişim alanındaki ampirik çalışmaların teorik çalışmalara göre önem kazandığını göstermektedir.

Introduction

The ILEF Journal is a major scientific or academic journal that publishes research and theory articles in communication. The ILEF journal publishes articles on communication research and media twice yearly. Published by the Faculty of Communication at Ankara University, ILEF Journal aims to reflect different intellectual traditions with an interdisciplinary approach. The journal is searched by important significant indexes such as the Emerging Sources Citation Index (ESCI) and (TR index)

Scientific journals are periodicals that mediate the dissemination of scientific data by addressing researchers in the relevant field. In this respect, they are virtual publication platforms that contribute to advancing science and its transmission to future generations. Scientific journals should have timely publications, an uninterrupted publication from the first issue, and editors and editorial boards composed of prominent scientists. In addition, objectivity in selecting reviewers, originality of published articles, and inclusion in national and international indexes and databases are other necessary standards (Kozak, 2003, p. 151; Asan, 2004, p. 8; Polat, 2020, p. 228). The study of the publication history of journals published based on these standards can be determined by the bibliometric method through various indicators. The bibliometric method is commonly used in the literature that provides a result by analyzing scientific journals' quantitative and qualitative criteria.

Bibliometric analysis of scientific publications is usually done by analyzing selected publications or a specific topic (Besel & Yardımcıoğlu, 2017, p. 134; Tutar & Erdem, 2020, p. 410). The first bibliometric study was done by Gross & Gross in 1927. Researchers reviewed the Journal of the American Chemical Society for citations and sources. The results contributed to a college library in the United States developing a journal subscription and purchase policy (Al & Tonta, 2004, p. 23). The first bibliometric study in journalism in the communication discipline was the Twenty Years of Journalism Research study by Schramm (1957). It has been followed by numerous bibliometric studies in communication in different languages and countries (Feeley, 2008).

Bibliometric studies allow the study of various bibliometric characteristics (subject, contributing institution, year, keywords, number of authors, number of references, number of citations, etc.) of scientific journals (Pritchard, 1969, p. 348; Yalçın, 2010, p. 206). The findings obtained from these indicators are of great importance when considering the publication history of the journal with various comparisons and determining the publication policy and strategy in the future. This study aims to determine the research productivity of the ILEF journal in the field of communication and to analyze the performance of scientific items.

In addition, another aim of the study is to show the intellectual, social, and conceptual structure and evolutionary development of the articles in the journal. To this end, an attempt was made to answer the following questions using the bibliometric method:

• *What is the annual distribution of articles published in the ILEF journal?*

• Does the author's productivity of the authors contributing to the journal comply with Pareto, Price, and Lotka Laws?

• How have the articles published in the ILEF journal evolved over the years?

• What is the citation frequency of the articles published in the journal over the years?

• Which articles are most cited in ILEF and who are the most influential authors?

• What are the common words and clustering status of the articles published in the ILEF Journal?

Conceptual Framework

Pritchard (1969) was the first to use the concept of bibliometrics, the application of mathematical and statistical methods to books and other media of communication. The bibliometric method enables the study of various bibliometric characteristics, subjects, contributing institutions, years, keywords, number of authors, references, citations, etc. of scientific journals (Pritchard, 1969, p. 348; Yalçın, 2010, p. 206). In bibliometric research, scientific publications are systematically studied and analyzed by categorizing them. Bibliometric methods use quantitative approaches to identify, evaluate, and monitor published research. These methods can provide a systematic, transparent, and repeatable review process to improve the quality of reviews. Bibliometric methods help the researcher to identify the trend in a particular field by guiding the researcher to the most compelling studies and enabling the mapping of the research field (Zupic & Čater, 2015, p. 429; Ulu & Akdağ, 2015, p. 78; Yılmaz, 2017, p. 65).

The history of the first study called a bibliometric study in Turkey, dates back to 1970. The study conducted by Özinönü (1970) attempted to measure "science" (astronomy, biology, physics, chemistry, mathematics, and earth sciences) by examining Turkey's situation in the basic sciences (Al, 2008, p. 10). Çakın (1980), in his study "The Evaluation of the Bulletin of the Turkish Librarians Association in Terms of Authorship and Content", examined the topics in the bulletin according to the style and order of the news. Berkman (1987) analyzed 503 articles published in the Journal of Public Administration between 1968 and 1987 according to their subjects, the types of data on which they were based, the managerial levels of the subjects they dealt with, their author titles, and their productivity. In this study, the bibliometric profile of the Journal of Public Administration was made, and assessments were made on the Turkish management approach. It is seen that similar studies have increased after 1990 (Durgut & Küçüksille, 2021; Tonta; 2002). A total of 238 articles on Turkish Librarianship were identified between 1987-2001.

Funkhouser (1996) analyzed the impact of not including scholarly communication journals in the Social Sciences Citation Index (SSCI) and the arts and Humanities Citation Index (AHCI) on the citation-based assessment of the communication literature. The most

striking finding at the end of the study is that 25% of the citations of articles in the journals studied were from journals indexed by SSCI and AHCI. Funkhouser (1996) also noted in his study that an accurate assessment of a scholar's articles based on the citations received will not be possible until SSCI and AHCI decide to include the omitted journals and that computer applications could be used to provide a convenient and inexpensive online citation index for communication literature. Reeves and Borgman (2006) examined nine journals published in the field of communication in terms of their citation characteristics. Most data came from the Social Science Citation Index Journal Citation Reports 1977–1979. In examining the data obtained, it was found that the rate of citation from one communication journal to another was 13%, and the rate of citation from the journal in which it was published was 44%.

Cushion (2008) analyzed 429 articles published in Journalism: Theory, Practice, and Criticism (JTPC) and Journalism Studies (JS) journals between 2000 and 2007 using the content analysis method. As a result of the study, it was found that most of the articles published in the journals were from the USA and European countries, and the authors from other regions were very few. When the articles were evaluated according to their subjects, it was found that the subjects were related to the USA and European countries and that the international literature targeted by the journals did not occur in the field of communication (Atabek & Atabek, 2019, pp. 712-713). Feeley (2008) evaluated communication journals regarding citation characteristics in his study "A Bibliometric Analysis of Communication Journals from 2002 to 2005". He listed journals in the field of communication by the number of citations, using data from the Social Sciences Citation Index.

Atabek and Atabek (2009) examined five journals in their study titled "Public Relations Literature: A Review of Articles Published Between 1999-2008". These journals were Akdeniz İletişim, Galatasaray İletişim, İletişim, and Selçuk Communication Journal. In this study, 194 articles were examined regarding their bibliometric characteristics. As a result of the study, it was found that the journal with the most publications in the field of Public Relations was Selçuk Communication Journal. In another study, Atabek and Atabek (2019) examined the field of Journalism. His article, Journalism Literature in Turkey: A Review of Articles Published Between 1992-2018, was published in the Journal of the Faculty of Communication of Akdeniz University. In this study, five journals published over a long period and indexed in the ULAKBİM database formed the review sample. The journals indicated were, in alphabetical order, Akdeniz İletişim (Akdeniz University Communication Faculty), Communication (Galatasaray University Communication Faculty), Communication: Theory and Research (Gazi University Communication Faculty), İstanbul Communication (İstanbul University Communication Faculty), and Selçuk Communication (Selçuk University Communications Faculty). Bibliometric analysis and content analysis were performed on the journals studied in terms of the number of articles, institutions, authors, topics, methods, number of pages, language, and source. At the end of the study, the most discussed topics in 558 articles were news and general journalism. It was found that content and discourse analysis were the main research methods of these journals.

Ulu and Akdağ (2015) examined the articles published in the Selçuk Communication Journal between 1999 and 2013 in the study titled "Bibliometric Profile of Peer-Reviewed Articles Published in Journals: Selçuk Communication Example." Three hundred fifty-three authors authored the 467 articles included in the study. It was found that there were an average of 1.32 articles per author in the journal. The articles were examined according to the 80/20 Pareto Law and the Price-Lotka Law to measure authors' productivity. It was concluded that this journal did not comply with these laws. The most striking finding in the conclusion part of the study is that 78% of the articles published in the Selçuk Communication Journal have a single author, and the authors prefer individual work. Çokisler (2019) divided the 14-year publication period of the Journal of International Relations into three intermediate periods of 4–5–5 years and analyzed 316 articles. Articles published in the journal include language, research method, author, institution, country, productivity, etc., assessed using bibliometric characteristics. The study aimed to give a significant sample of the discipline of International Relations in Turkey in the journal context (Çokişler, 2019, p. 29).

Method

Research Design

Although various methods have been developed to quantitatively identify scientific publications that have an essential role in the deelopment of science, one of the most widely used methods is the bibliometric analysis method (Mcburney & Novak, 2002; Zupic & Čater, 2015). The research is designed according to the bibliometric method. The bibliometric method is a method in which statistical and mathematical methods are used to measure and analyze scientific publications. The bibliometric method aims to examine academic publications with the help of numerical analysis and statistics (Rousseau, 2014, p. 218; Yang, 2015, p. 471; Zan, 2012, p. 19). Bibliometric analysis is often used to assess the impact of journals, authors, institutions, and countries (Cunill, Salvá, Gonzalez, & Mulet-Forteza, 2019; Tutar, 2023). This method provides an informative view of any research area and trends (Bonilla, Merigó, & Torres-Abad, 2015; Cancino, Merigó, Coronad, Dessouky, and Dessouky, 2017). It is a method used to evaluate the effects and trends in different disciplines. Bibliometric studies can be descriptive and evaluative (Cheng, 2016; Laengle, Merigó, Miranda, Słowinski, Bomze, Borgonovo, Teunter, 2017; Martínez-López, Merigó, Valenzuela-Fernández, Nicolás, 2018; Merigó & Yang, 2017; Tur-Porcar, Mas-Tur, Merigó, Roig- Tierno and Watt, 2018). The difference between the bibliometric method from the literature review is that it focuses on evaluating the structure of a particular research area and allows seeing how the publications show a trend in the period under review. The study prefers the bibliometric method as it allows the definition of the journal's scientific productivity, analyzes the performance of scientific items, and makes recommendations based on factual data.

Processing

This research aims to identify the academic studies published in the ILEF journal

since 2014 in communication research and media studies using bibliometric indicators. The bibliometric analysis, a particular form of systematic literature review, was carried out in two stages. The first is to identify the articles (the database used and the search terms/keywords), and the other is to scan the articles, that is, to determine the inclusion and exclusion criteria. The bibliometric analysis in the research is based on the results obtained from the Web of Science (WoS) database with bibliographic references. The data needed for bibliometric analysis were obtained from the WoS database. In this study, the WoS database was used because it contains sufficient data for the bibliometric analysis, is easily accessible due to its membership in a university, and provides datasets in file type for software. In the second stage, the scope of the research was defined by establishing the relevant criteria to narrow the scope of the analysis and determining which studies (articles, book reviews, editorial materials, etc.) should be included in the dataset. Research or review articles published in the journal were included in the research. Essays, books, book chapters, and reviews were excluded because they were not based on empirical findings. Also excluded were articles without titles, abstracts, or keywords. The inclusion and exclusion criteria listed in Table 1 were used to determine the scope of the analysis.

Table-1: Inclusion and exclusion criteria

Inclusion criteria	Exclusion criteria
Research and review articles	Book review, editorial material
Articles in the field of communication	

On July 4, 2022, the study assessed several bibliometric indicators, including the frequency of articles and citations, the most frequently cited and significant authors, co-citation analysis, formal word analysis, and co-authorship networks. An advanced search was conducted in the WoS database to obtain data on documents published in the ILEF journal during the specified period (2014-2022). It was found that the ILEF journal has published two issues per year since its inception in 2014, and 18 cases have been published in the journal until the first half of 2022. As a result of the search, 126 documents indexed in the WoS database were found. Databases often provide data that includes irrelevant studies not covered by the review. These unrelated studies affect the bibliometric analysis results and the analysis's validity. 105 articles (research or review articles) published in the journal were included in the study. Table 2 shows the document types and frequencies of publication in the ILEF journal.

Table-2: Types and frequency of documents published in the ILEF journal (2014-2022)

Document Type	Frequency	%
Manuscript	105	83
book review	8	6
Editorial material	13	11

Once the bibliographic data were extracted from WoS in plain text file format, software packages such as VoSviewer, bibliometrics, and Excel software were used to measure the frequency and trends of published articles and to record citations to identify highly cited papers, reports citing the ILEF journal articles, high-yield and influential authors, research institutions, and countries. Excel software was used to determine the distribution of the number of documents and citations by year and the r-square value of the distribution. Bibliometrix software determined the most prolific authors and analyzed co-citations over time. In addition, the Vosviewer software (Van Eck & Waltman, 2010) was used for the co-occurrence analysis of the keywords. The results of the study are visualized using tables and graphs sorted based on citations or published documents in three main aspects: scientific productivity, impact, and communication networks of different scientific actors (author, institution, and country) in the ILEF journal. Some bibliometric techniques, such as co-authorship, shared keywords, and co-citations, were used. These analyses provide a comprehensive overview of the leading research trends in the journal.

Results

Frequency of Articles Published and Citations Received

Figure 1 shows the frequency distribution of documents published in the ILEF journal (articles and documents of all genres). From 2014 to 2022, 105 articles were published in the journal. While there was an increase in the number of records between 2014 and 2016, there was a decrease in the number of articles between 2016 and 2020. Of note, the number of documents showed an increasing trend (. R^2 .0789) after 2020, with the highest number of articles in 2021. A quantitative growth trend is observed in articles and documents during this period. Of the 105 articles published in the journal and included in the analysis, 68 were research articles, and 37 were review articles. In examining bibliometric studies in this field, empirical studies in the social sciences have increased in recent years. When the distribution of practical and theoretical articles published in the Journal of Ankara University ILEF journal is analyzed over the years, it is found that empirical studies have gained importance in articles published in the journal after 2016.
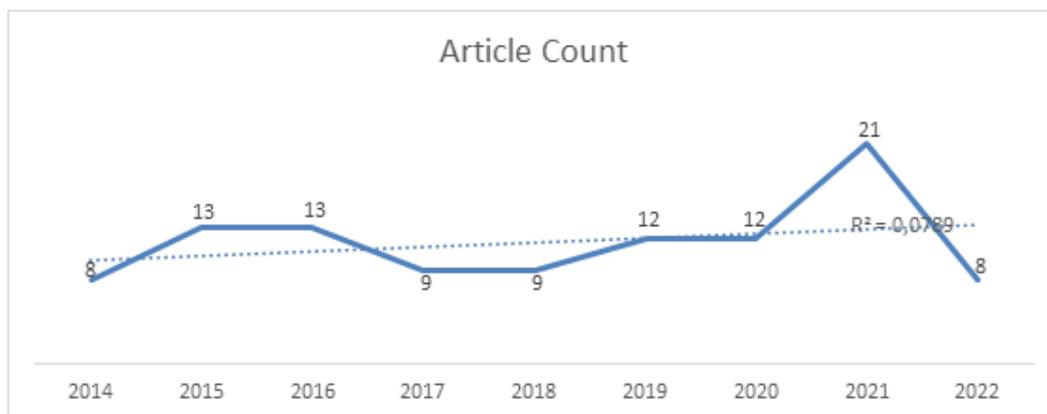

Figure-1: Distribution of the number of documents by year

Figure 2 shows the frequency distribution of citations received by the ILEF journal. The journal has received 22 citations since its last issue in 2022. Although no quotations were received between 2014-2017, all sources belong to 2018 and 2022. The most frequently cited area is communication, with five citations, while four are from sociology. Other prominent citation areas include film, radio and television, architecture, and economy. The number of sources is remarkable, with an increasing trend (R^2 .3353) after 2018. The average citation value per document is 0.1746.
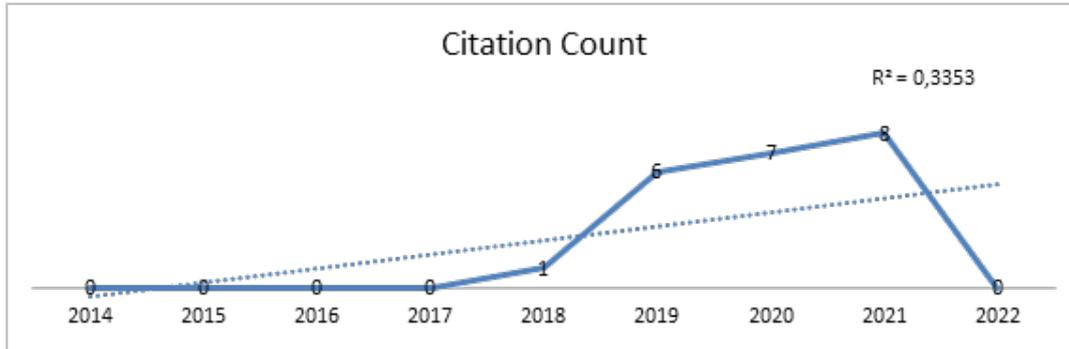

Figure-2: Distribution of citation numbers by year

Highly Cited Articles and Most Influential Authors

Table 3 shows the three most cited articles published in the ILEF Journal from 2014 to 2022. Author names, publication years, etc., of the first three articles, received half of the citations for all articles. Other information, such as that, is given in Table 3.

Table-3: Highly cited articles and authors

Rank no	Title	Author	Year	Number of citations	Annual Average
1	Representations of Syrian Refugees in Television News	Boztepe, V	2017	5	0,83
2	From Space of Memory to Memory of Space: A Conceptual Debate	Parmaksız, PMY	2019	3	0,5
3	Magnificent Motherhood Unaging Face of Advertisements The Sample of Mother's Day Advertisements	Bal, S	2014	2	0,22

Table 3 shows a review article by Boztepe, V. titled "Representations of Syrian Refugees in Television News," which is the most cited article in the ILEF journal. This article**,** published in 2017, examines the representations of refugees on television news and how these representations reproduce the dominant discourse in society. The report was cited five times, with an average annual citation of 0.83. Parmaksız's (2019) article "From Space of Memory to Memory of Space: A Conceptual Debate" ranked second.

This article identifies spatial references in conceptualizing memory within and beyond disciplinary boundaries throughout history. The article received two citations, with an average annual source of 0.5. In the third place, with the highest number of citations, is the article by Bal (2014). "Magnificent Motherhood Unaging Face of Advertisements The Sample of Mother's Day Advertisements". The article discusses how gender roles are reproduced and legitimized and how the representation of motherhood is emphasized in Mother's Day campaign advertisements. The average citation score for the article published in 2014 and received two citations is 0.22.

123 authors contributed to the 105 articles that were part of the analysis. While there is an average of 0.89 reports per author, the authors who contributed the most to the journal are Aksel S.C.Y., Boztepe V., Dikmen E. S., Karaman N, and Kubilay C., with two articles each. The main authors who contribute to the journal are listed in Table 4. When the articles published in the journal were examined, no study with three or more authors was found. At this point, it was found that authors preferred to post individually. This indicates a low tendency for collaboration between authors. The distribution of articles by the number of authors is shown in Table 4.

Table-4: The most productive and influential authors in the ILEF journal

Rank Number	Author name	Number of publications
1	Aksel SCY	2
2	Boztepe V	2
3	Dikmen ES	2
4	Kahraman N	2
5	Kubilay C	2
6	Erkılıç H	2
7	Gurbuz ONE	2
8	Dinner O	2
9	Barutcu A	2
10	Seyidov I	2

The number of publications and products of the five most productive authors in the journal over time is shown in Figure 3.
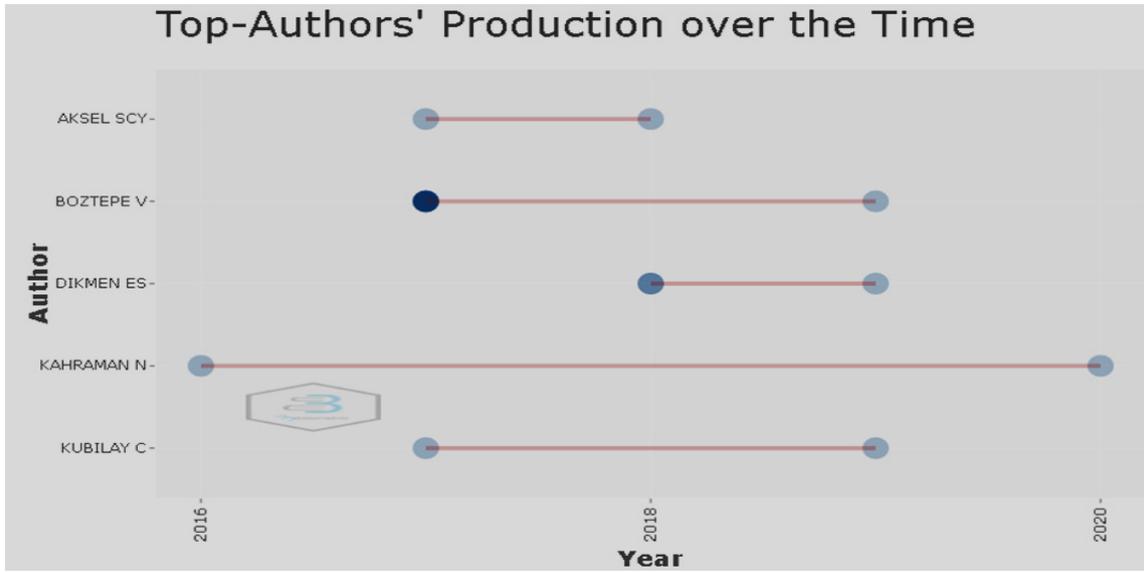
Figure-3: Production of the most productive authors over time

Some methods measure the productivity of authors who publish in a journal. The first of these methods is the Pareto Law, developed by Vilfredo Pareto. The Italian economist Vilfredo Pareto, 80% of the wealth in Italy, 20% of the population in Italy; found that 80% of the land in England was owned by 20% of the population in England. In his later studies of the distribution of wealth, Pareto found that these ratios were generally the same. Known as the 80/20 rule, Pareto discovered that a mathematical model of the significant minority and the minor majority could exist. The 80/20 rule, known as one of the power laws in the library and information science literature and based on the product-resource term relationship, was first introduced to the library field by Richard Trueswell in 1969 (Britten, 1990, p. 183). Trueswell stated that the 80/20 rule can be used to determine a core collection that will meet 80% of the circulation needs of a library facing space limitations (Yılmaz, 2005). While 95 of the authors with publications in the journal contribute to one article, 11 contribute to two articles, and one contributes to three. According to Pareto's Law, 80% (84 articles) of the total articles must be written by 20% (24) of the authors. However, it can be seen that 73 researchers authored 80% of the articles in the journal. The articles published after the analysis do not follow the Pareto Rule.

Another indicator used to measure the productivity of authors is Lotka's Law. Lotka's Law is a law that attempts to measure scientific productivity to determine the contributions of authors in a particular field and how their work is quantitatively distributed. According to Lotka's Law, the number of authors with two studies is approximately one-fourth of the number of authors with one study, and the number of authors with three studies is approximately one in nine. Accordingly, the number of authors in studies is approximately one in n^2 ($1/n^2$) of the number of authors with one study (Şimşir, 2022). As a result of the studies, the number of authors contributing to two articles should have been 19.2, but this number remained at 11. While the number of authors contributing to three articles should have been 8.94, this number is only one. This shows that the published

journal does not comply with Lotka's Law. Another rule of thumb for measuring scientific effectiveness is Price's Law. Price's Law estimates that the number of leading authors in a scientific field is considerably less than the total number of authors in that field. According to Price Law, half of the studies in a research field are authored by the author who takes the square root of the total number of authors in that field (Şimşir, 2022). The square root of the total number of authors (11.09) should have written half (52.5) of all articles. However, 41 authors contributed to the writing of half of the articles. In this case, it can be seen that the published articles do not comply with the Price Law.

The articles in the journal were published with the contributions of researchers from 57 different universities. Table 5 shows the most productive universities, contributing 66 (61%) of the 105 articles. Three institutions contributing to the journal with an article from abroad are the University of California, Tampere University, and Oxford Brookes University.

Table-5: Most productive institutions

Affiliations	Articles
Ankara University	25
İstanbul University	5
Başkent University	4
Marmara University	4
Mersin University	4
Yasar University	4
Cukurova University	3
Izmir Economy University	3
Amasya University	2
Ankara Sosyal Bilimler University	2
Fırat University	2
Hacettepe University	2
Okan University	2

Most of the universities that contributed most articles to the journal are the oldest universities in Turkey regarding the foundation date. Of the 105 published articles, 46 (44%) were written by Ankara University, Marmara University, İstanbul University, Başkent University, Mersin University, and Yaşar University. Ankara University, which is affiliated with Turkey's first communication faculty, is the university that contributes the most to the journal, with 25 articles. In addition to the influence of the communication faculties of three universities (Ankara University, İstanbul University, and Marmara University, with an average history of 50 years in the publication period studied, Yaşar University, which was founded 15 years ago, is one of the universities that contributed the most to the journal. Sixty-eight faculties from 46 universities contributed to the articles published in the journal. While 44 of the 68 institutions are communication faculties affiliated with their respective universities, 24 are institutions conducting studies in different disciplines (Faculty of Economics and Administrative Sciences, Faculty of Arts

and Sciences, Faculty of Fine Arts, etc.). This shows that interdisciplinary studies also contribute to the journal.

Co-Citation Map of Cited Sources

When analyzing co-citations, it is assumed that the more citations two publications share, the more likely the cited publications are related (Donthu, Kumar, Mukherjee, Pandey & Lim, 2021). A sample of 105 articles from the databases was analyzed to determine the relationship. The sources used in the articles were chosen as the unit of analysis for the co-citations in this study. An analysis of the co-citations revealed that 3377 sources were referenced in 105 articles in the sample. In the analysis, a minimum value of 10 was set as the citation. For a journal to be included in the analysis, it must be cited at least ten times. A total of 55 sources met this criterion. The analysis of co-citations at the journal level is shown in Figure 4.
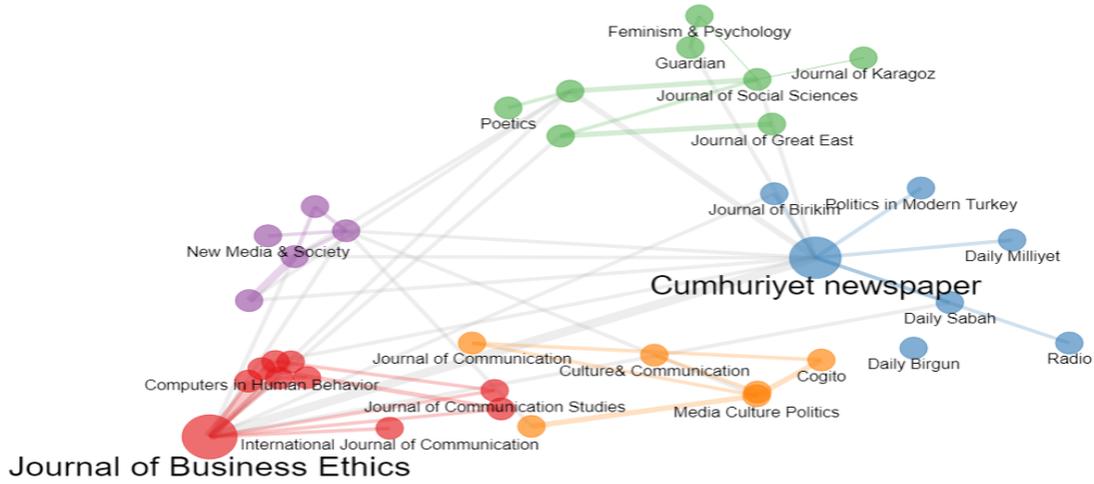

Figure-4: Co-citation network map of sources cited by the ILEF Journal

According to the analysis results, Cumhuriyet Newspaper is the most cited journal, with 38 co-citations. Other journals with more than ten co-citations include the Journal of the Great East (17 co-citations), Journal of Business Ethics (24 co-citations), Journal of Communication (14 co-citations), and Cogito (13 co-citations), Computers in Human Behavior (12 co-citations).

Co-word and cluster analysis of articles published in the ILEF Journal

Co-word analysis identifies the most frequently used (key) words, measures the relationship's strength, and reveals research patterns and trends (Zupic & Čater, 2015). In research, co-word analysis was conducted by selecting authors' keywords.

VOSviewer software was used to analyze the common words. It was found that a total of 458 keywords were used in 105 articles. Since the minimum threshold for the analysis phase is three views, a keyword must be repeated twice to be included in the

analysis. 39 of the 458 keywords in the dataset of 105 articles appear at least twice. In VoSViewer, 27 of 39 keywords meet the threshold since the minimum threshold for a keyword's "total link strength" is set to 10. The clustering resulting from the analysis of the keywords is shown in Figure 5. The 27 keywords that exceeded the threshold and were included in the cluster analysis were grouped into four clusters. The first set (in red), called "Discourse," contains 12 keywords, including "Critical Discourse Analysis", "Discourse Analysis," "Media, and New Media."
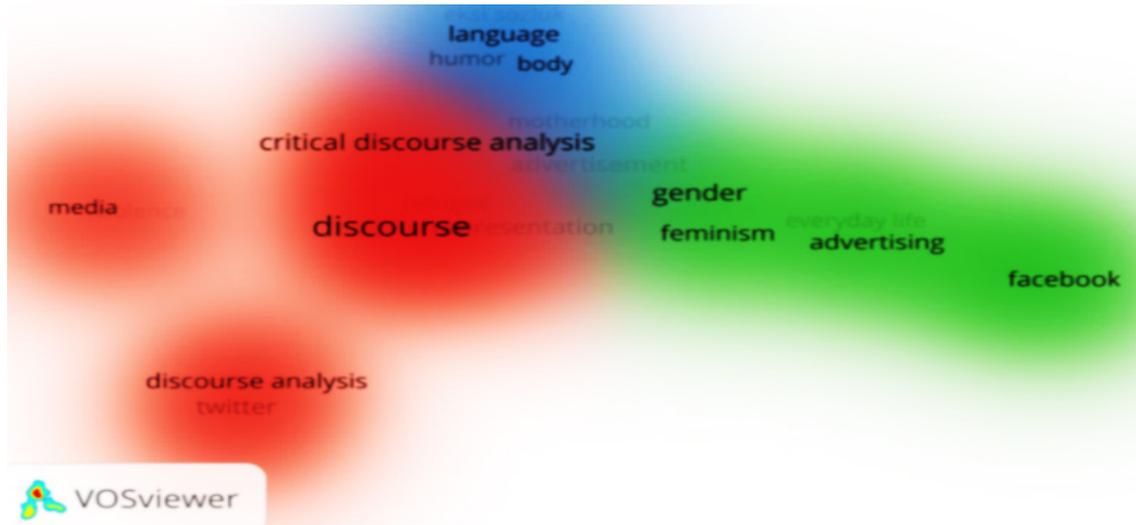

Figure-5: Map of keyword co-occurrence

The second cluster (in blue) contains nine keywords: social media, Instagram, Facebook, and social memory. They correspond in a cluster that can be called social media. The third cluster (in green) with the six most frequently used keywords can be called "symbolic communication." The main keywords in this duster cluster are body, advertising, minus dictionary, language, and motherhood. Figure 6 shows the time-based co-occurrence map of the most frequently used keywords. The colored bar at the bottom of the map shows which keywords are dominant and when.
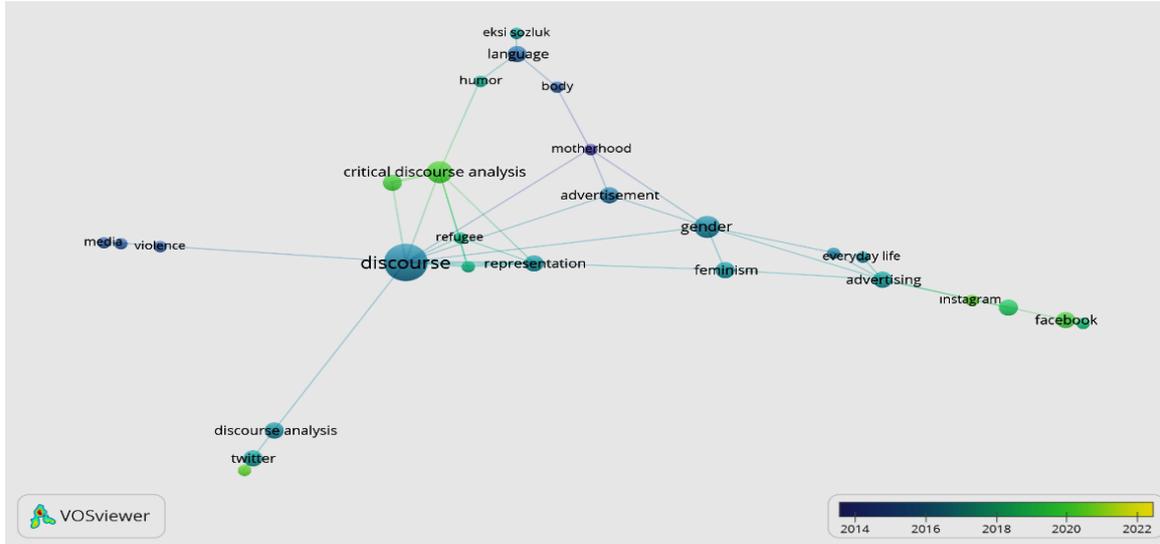
Figure-6: Time-based co-occurrence map of high-frequency keywords

The textual information in VoSviewer measures the publication time of the most frequently used keywords. The publication years of keywords and their occurrence in clusters are as follows.

The first cluster: "media" and "violence" from 2014, when the journal started publishing, to 2016, "discourse" and "discourse analysis" were used most frequently and had the most intense overall linkage strength between 2016 and 2018, and "discourse analysis" between 2018 and 2020. The keywords "critical discourse analysis" stand out.

Second cluster: The keywords "language," "body," and "motherhood" were frequently used between 2014 and 2016, and the keywords "ekşi sözlük" and "advertising" was frequently used between 2016 and 2018.

Third cluster: The keywords in this cluster, in which social media concepts such as "Facebook," "Instagram," "social media," and "social memory" occur intensively, coincide with the period after 2018.

Discussion and Conclusion

This study conducted a bibliometric analysis of the ILEF journal published by the Communication Faculty of Ankara University between 2014 and 2022. The bibliometric findings and articles published in the journal were analyzed chronologically, and the quantitative data were presented in tables and graphs. The distribution of articles by years, authors with high performance, co-authorship status, topics, citation analysis, subject analysis, and keywords are discussed. The journal found that it adheres to the publication policy it established at the beginning. The journal is also indexed in ULAKBİM TR Index and Emerging Sources Citation Index (ESCI). In the articles published in the journal, scientific forms of keywords, Turkish-English abstracts, and references were primarily

followed. When the studies in the journal are examined according to the preferred research approaches, the empirical research orientation has increased in Turkey since the 1990s and is now the preferred method (Erdoğan, 2013, p. 7). It was found that the Ankara ILEF journal follows the developments in the field in this aspect.

The authors whose articles are published in the journal are academics working at various universities. Although the Communication Faculty of Ankara University publishes the ILEF journal, most of the articles were written by researchers working at other universities. This is important regarding the ethical sensitivity of a journal that does not receive publications from its social environment. This is also an indication of the national recognition of the journal. Based on the clustering analysis related to the journal keywords, the articles published in the journal focus on media, journalism, cinema, discourse, and advertising. The study found that the ILEF journal did not comply with Pareto, Price, and Lotka Laws, which are criteria for author productivity (Ulu & Akdağ, 2015, p. 14; Polat, 2020, p. 289).

In the quantitative analysis, 18 issues were published from 2014, the year of publication of the journal, to July 4, 2022, and a total of 126 documents were published in these issues. After all the filtering processes, 105 articles from these publications were included in the analysis. Thus, the number of published articles decreased between 2016 and 2020. However, it was found that after 2020 there was a remarkable increase in the number of articles with an upward trend (R^2, 0789). At the end of this increase, the highest number of articles was reached in 2021. While 12 articles were published annually in 2019 and 2020, there were 21 articles published in the ILEF journal in 2021 due to this increase. By the time the final issue was published in 2022, the journal had received 22 citations. Although no citations were received between 2014 are 2017, the fact that all the citations were received between 2018 and 2022 is due to the effective management of the journal, especially during the epidemic, the increase in researchers and publications in the field of communication, and the increase in the awareness of the journal and its publication policy. According to the research findings, the most cited discipline is communication with five references, while four are related to the discipline of sociology. The main areas in which the journal is cited are cinema, radio, television, and architecture. Forty-four (44%) of the 105 articles published in the journal during the review are from Ankara University, Marmara University, İstanbul University, Başkent University, Mersin University, and Yaşar University.

Although the journal's publication languages are Turkish and English, the articles published are mostly Turkish. In order to increase the international recognition of the journal and the number of citations, the number of articles in English should be increased. Three foreign universities are involved in the journal. These universities are the University of California, the University of Tampere, and Oxford Brookes. This means the journal's awareness level in the international academic community is low. It was found that most researchers who published in the journal preferred to conduct individual studies. From the findings of the study and the literature review, it was found that there is a gap in the literature regarding the study of communication journals using the bibliometric analysis

method. It can be said that this study will make a practical contribution to filling the gap in question and will encourage editors of journals published in the field of communication. Researchers who will conduct bibliometric studies in communication can reveal the scientific trend in the field of communication by conducting analyses such as performance analysis, intellectual structure analysis, and social network analysis.

Etik Beyanı: Bibliometric Analysis and Visual Mapping of the Articles Published in the ILEF Journal From the Beginning to the Present, başlıklı çalışma, etik kurul izni gerektirmeyen araştırmalar arasındadır.

Yazar Katkı Oranı Beyanı: Araştırmacıların katkı oranları; Hasan Tutar, %40, Selçuk Nam, %30, Ceren Güler Çağıltay, %30 oranındadır.

Çıkar Çatışması Beyanı: Bibliometric Analysis and Visual Mapping of the Articles Published in the ILEF Journal From the Beginning to the Present, başlıklı çalışmada herhangi bir kişi veya kurumla çıkar çatışması bulunmamaktadır.

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