Profiling the Research Landscape on Genocide: A Bibliometric Analysis and Network Visualization

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Abstract

Purpose – This study aimed to profile the Genocide research landscape from 1960 to 2022.

Design/methodology/approach – The screening process used on June 1, 2022, in the foreground, for precise and comprehensive study, looked for all references to the "Genocide" in all Scopus topic areas and found 3644 scholarly contributions. As a result, the findings include a time frame for publications from 1960 to 2022.

Findings – The findings show increased academic interest in the research issue, particularly from the beginning of the year 1994 to now, emphasizing Genocide crimes in international criminal law. The United States leads the contributing countries in Genocide research. The most productive researcher was Jones, A., and Totten, S. with the highest number of publications. The collaborative index showed an increasing trend from 1994 onwards. Journal Of Genocide Research is the most prestigious journal in the field of Genocide research. Whereas the University of Rwanda is the most productive affiliation in Genocide research.

Originality/value – This paper contributes to the field by evaluating the current status of Genocide research, identifying gaps in the literature, and, most importantly, proposing a research agenda. For the next decades, the trending topics in Genocide research include reconciliation after the genocide, intractable conflict, understanding of the roots of violence, psychological recovery, political psychology, Sexual Violence, Prevention of Violence After Genocide, trauma exposure, and psychological reactions to genocide.

Keywords

Bibliometric analysis, Genocide, Co-occurrences, Co-words analysis, Conceptual structure map, Scopus database.

1.   Introduction

Genocide is a crime that is recognized globally and can be defined as the deliberate and systematic killing of a group of people based on their ethnicity, nationality, religion, or race (Vrdoljak, 2011). The Nurnberg Charter, adopted by the International Military Tribunal in 1945, lists genocide as one of the numerous crimes against humanity (Schabas, 2012). Due to the momentum created by the Nuremberg trials and the subsequent revelations of Nazi atrocities, the UN General Assembly passed Resolution 96-I (December 1946), which made genocide a crime punishable under international law, and Resolution 260-III (December 1948), which approved the text of the Convention on Preventing and Punishing Genocide, the first UN human rights treaty. Over 130 countries have signed the agreement, which came into effect in 1951 (Weiss-Wendt, 2018).

The genocide convention had no effective enforcement measures for the first 50 years after its acceptance, despite the fact that it had provisions to allow the United Nations to enforce it. Although the convention requires that anybody accused of genocide be brought before an international criminal court or a court in the country where the crime was committed, no international criminal court had been established until the beginning of the twenty-first century (Greenhill & Strausz, 2014). The Rome Statute of the International Criminal Court (ICC), which was adopted in 1998 in Rome by about 120 countries, went into effect on July 1, 2002. The crime of genocide is within the jurisdiction of the International Criminal Court (ICC), and the legislation that establishes the court uses the same definition of the crime as the genocide treaty. The establishment of the ICC was another indication of a growing international consensus in favor of vigorous and concerted efforts to suppress and punish the crime of genocide (Ifeakandu & Ochem, 2021).

In order to track trends or patterns in a particular area of research in terms of quantity and quality of published material, a bibliometric analysis is performed (Sweileh et al., 2017). Bibliometric analysis has become a popular strategy for reporting research effects and trends. For Ahmi and Mohammad, when conducting research on bibliometrics, the most frequently used indicators are authorship, publication classification, citations, impact, publication volume, and country of origin (Aidi Ahmi, 2019). Quantifiable studies concerning research publications are utilized quite frequently in the process of evaluating scientific research utilizing bibliometrics, as stated by Rehn et al. Bibliometric studies indicate that the vast majority of scientific observations and empirical results are eventually published in scientific journals, where they are accessible to other researchers who can read them

and quote them (Rehn et al., 2007). Pritchard is well-known for his contributions to bibliometrics, which refers to the use of statistical and mathematical methods in the analysis of books and other kinds of communication (Pritchard, 1969). Nevertheless, there are three categories of bibliometric indicators that can be utilized. These categories are quality indicators, quantity indicators, and structural indicators (Durieux & Gevenois, 2010). A single researcher's work is counted as quantity, while the consistency of that output is counted as quality (Durieux & Gevenois, 2010). On the other side, structural measurements are used to explain the connections that exist between different journals, authors, and research fields. In other words, the researcher evaluates the trends, growth, or publishing productivity of a certain field of study by analyzing the publications that are associated with that topic. For instance, the overall number of citations, as well as the frequency and quantity of citations each year, could be used to evaluate a publication's performance and influence, in addition to the total h index or g index, the citation score, and other matrices. Also, when it comes to analysing the effectiveness of papers, some researchers concentrate on the influence per publication (IPP) and the impact factor (IF) (Ahmi & Nasir, 2019). At the same time, the structural indexes of written pieces, also known as engagement, can be researched by employing techniques such as co-authorship, co-citation, and bibliographic source coupling. With specialist tools like the R STUDIO platform, the researcher could easily apply bibliometric techniques, including co-authorship analysis, citation-based research, and co-word analysis (Sérgio & Assis, 2019; Nyanney, 2021).

Considering the significance of genocide in today's modern nations and the focus that numerous experts, including lawmakers, legal professionals, and academics, have placed on the subject. There is an immediate and critical need to provide a thorough picture of Genocide. As a result, the purpose of this study is to give a variety of viewpoints by conducting a bibliometric analysis of the documents that have been published on the subject of Genocide. The following inquiries will be investigated as part of this study: What is the general pattern of the annual publication trends? Who exactly are the most significant contributors? Which articles have been cited the most times by other works? Which nations have the highest rates of productivity? Which educational institutions are the most effective? Which scientific publications currently have the greatest amount of readership? Which of the authors' keywords are used the most frequently? What do the most recent trends look like in terms of collaboration and co-citation?

The following is a breakdown of the research: Section 1 is about the current research. Section 2 introduces the research methodology applied to find and select relevant papers for analysis. Section 3 presents the bibliometric analysis results and discussion in tables, graphs, and networks. Finally, section 4 has the discussion, conclusion, and future research recommendations.

2.   Methods, process, and materials

2.1 Articles' identification

Conducting research necessitates devising a methodological strategy. Methods used to locate relevant papers are shown in Figure 1. The fundamental objective of the review, as well as its scope, is determined at the beginning of the systematic literature review (SLR). Following the formulation of the objectives, the research then decides upon a combination of search terms to be used in the construction of the search code. The publications that were considered for the analysis can be found with the use of this search code. The source from which the articles are obtained is also quite significant, and the literature search needs to be conducted using a source that is both credible and pertinent. Searching online databases like Scopus or WoS is a common method of discovering relevant papers (Denney & Tewksbury, 2013). After then, an initial search was carried out, which resulted in the production of a large number of articles. The next step to do is to sort through the results of the search.

Step 1	• Establishing the objectives of literature review
Step 2	• Fixing search terms and code for search
Step 3	• Fixing database for online search
Step 4	• Conducting the search
Step 5	• Preliminary screening and detailed screening
Step 6	• Arriving at final list of articles
Step 7	• Downloading the data in bibtex

Figure 1: Identification of articles

2.2 Methods

The bibliometric analysis method was employed to accomplish the objectives of this study. This method provides quantitative analysis for a literature review (Ding et al., 2001). The bibliometric analysis can be used to evaluate the performance and mapping of research trends in a particular research field to demonstrate the most current progress and the direction for future research gaps in that sector. The bibliometric analysis is useful to researchers since it points them in the direction of the most significant papers that pertain to their topic (Zupic & Čater, 2014). In bibliometric analysis, the method of literature selection is crucial for ensuring the validity and consistency of the subject under investigation. This paper's goals were met by using the strategy depicted in Figure 2. Researchers first determined the study's scope. They gave the topic, database, and time frame. After selecting the scope, we extracted bibliometric data for data screening. The processes and instruments utilized to collect data for this study are described in-depth in the next section (Obinne, Okon, & Chinelo, 2021).

2.3   Data Sources and Data Collection

This is a bibliometric study, which is a computer-assisted review procedure for identifying core research or authors, as well as their relationships by examining all publications related to a specific topic or field (De Bellis, 2009). The data for this study were retrieved and downloaded from the Scopus database on JUNE 1, 2022. From 1960 to 2022, the search term ''Genocide'' in the document title was utilized. We included all the documents from 1960 to 2022. The Scopus database was chosen for a comprehensive search because of its widespread renown among researchers and its high level of trustworthiness (Sharma, 2021). Finally, 3,664 documents were identified and downloaded for further analysis as shown in Figure 2.

2.4 Analysis and Tools

Because the volume of literature is developing exponentially, learning about a given topic or field has become a difficult task. As a result, bibliometric analysis has become an indispensable stage in preparing an SLR (Denney & Tewksbury, 2013). The bibliometric analysis of the collected contributions was carried out using "biblioshiny," a function in the R platform. First, a general performance study of the literature was generated using the "biblioshiny" program. This analysis revealed the growth pattern of the literature, the most prominent authors, citation structure, topic progression pattern, and analysis of topic trends. It was then utilized to perform descriptive and network analysis.
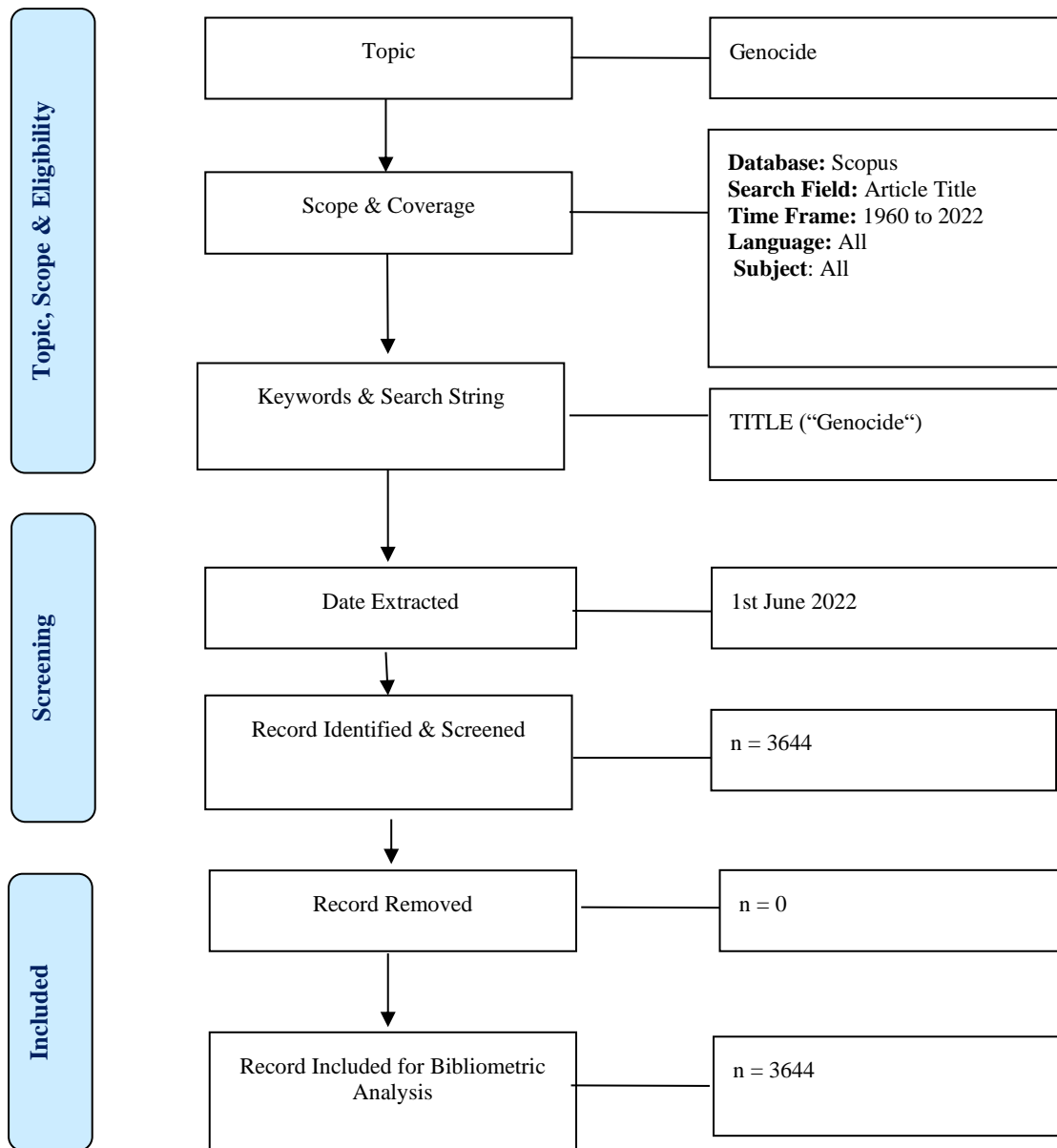
Figure 2: Research Protocol

3.   Results

3.1.   General Information

Table 1 shows some of the information that was collected with the "bibliometrics" tool. There are 3644 contributions from 1734 different sources. This shows that publications about Genocide are spread out across many sources and that there isn't a central place to store them. Furthermore, 3263 authors contributed to these writings, but a single author wrote only in 1952. Because of the breadth of this research topic and its interdisciplinary nature, the collaboration index is 1.86, which is a rate that is considered to be rather high. This is because it is difficult for a single author to fully grasp the concept of genocide in a variety of regulatory environments around the world. As a consequence of this, the participation of multiple authors in the production of a single study is justified.

Table 1: General Information

Description	Results
MAIN INFORMATION ABOUT DATA	
Timespan	1960:2022
Sources (Journals, Books, etc.)	1734
Documents	3644
Average years from publication	10.9
Average citations per document	8.972
Average citations per year per doc	0.6979
References	177168
DOCUMENT CONTENTS	
Keywords Plus (ID)	2016
Author's Keywords (DE)	3409
AUTHORS	
Authors	3263
Author Appearances	4914
Authors of single-authored documents	1952
Authors of multi-authored documents	1311
AUTHORS COLLABORATION	
Single-authored documents	2940
Documents per Author	1.12
Authors per Document	0.895
Co-Authors per Documents	1.35
Collaboration Index	1.86

3.2. Document and Source Type

In addition, we perform an analysis of the document that was obtained from the Scopus database by categorizing it according to the document type, the source type, and the source title. Journal articles, book chapters, reviews, books, editorials, notes, conference papers, letters, or erratum are the types of documents that can be used for Genocide publications. Table 2 presents the document type analyses from this study. Journal articles represent more than half (1922, 52.7%) of the contributions published in Genocide followed by book chapters (890, 24.4%). Short Survey accounts for 20 publications from the total and undefined was the lowest number by 1 document.

Table 2. Document Type

Document Type	Total Publications (TP)
Article	1922
Book Chapter	890
Review	347
Book	213
Editorial	81
Note	74
Conference Paper	34
Letter	32
Erratum	30
Short Survey	20
Undefined	1
Total	**3644**

3.3. Languages of Documents

From Table 3, it is obvious that English is widely used in this field (3434; 94.23 percent). French, Spanish, German, Italian, Portuguese, Russian, Croatian, Dutch, Slovenian, and Polish are among the other languages spoken. The languages of Arabic, Bosnian, Finnish, Moldavian, Moldovan, Moldovan, Romanian,

and Thai have the same number of publications which is one.

Table 3. Languages

Language	Total Publications (TP)	Percentage (%)
English	3434	93.29%
French	115	3.12%
Spanish	34	0.92%
German	23	0.62%
Italian	14	0.38%
Portuguese	11	0.30%
Russian	10	0.27%
Croatian	8	0.22%
Dutch	8	0.22%
Slovenian	6	0.16%
Polish	5	0.14%
Norwegian	3	0.08%
Turkish	3	0.08%
Arabic	1	0.03%
Bosnian	1	0.03%
Finnish	1	0.03%
Moldavian	1	0.03%
Moldovan	1	0.03%
Romanian	1	0.03%
Thai	1	0.03%

3.4.   Descriptive Bibliometric Analysis

Annual publication trends, most prolific authors, most cited papers, publishing activity by nation, publishing activity by affiliations, journal publishing activity, and most often used keywords are the seven areas of the descriptive bibliometric study.

3.4.1. Number of Annual Publications

Figure 3 shows the annual publishing patterns from 1960 to 2022. As can be seen from the trendline, a broad dispersion has grown rapidly in the last several years. The number of publications related to Genocide remained almost in the single digits every year until 1985. The publication has been steadily expanding since then. Over the previous three decades, a rapid increase in publications has been reported (1991–2000: 235 or 6.44 percent; 2001–2010: 1093 or 29.99 percent; 2011–2020: 1,969 or 54.03 percent). For the first time in history, the total number of annual publications exceeded 259 in 2017. The overall annual publishing trend is upward. The fact that attention is being paid to the subject of genocide by researchers, practitioners, and regulators is indicated by this
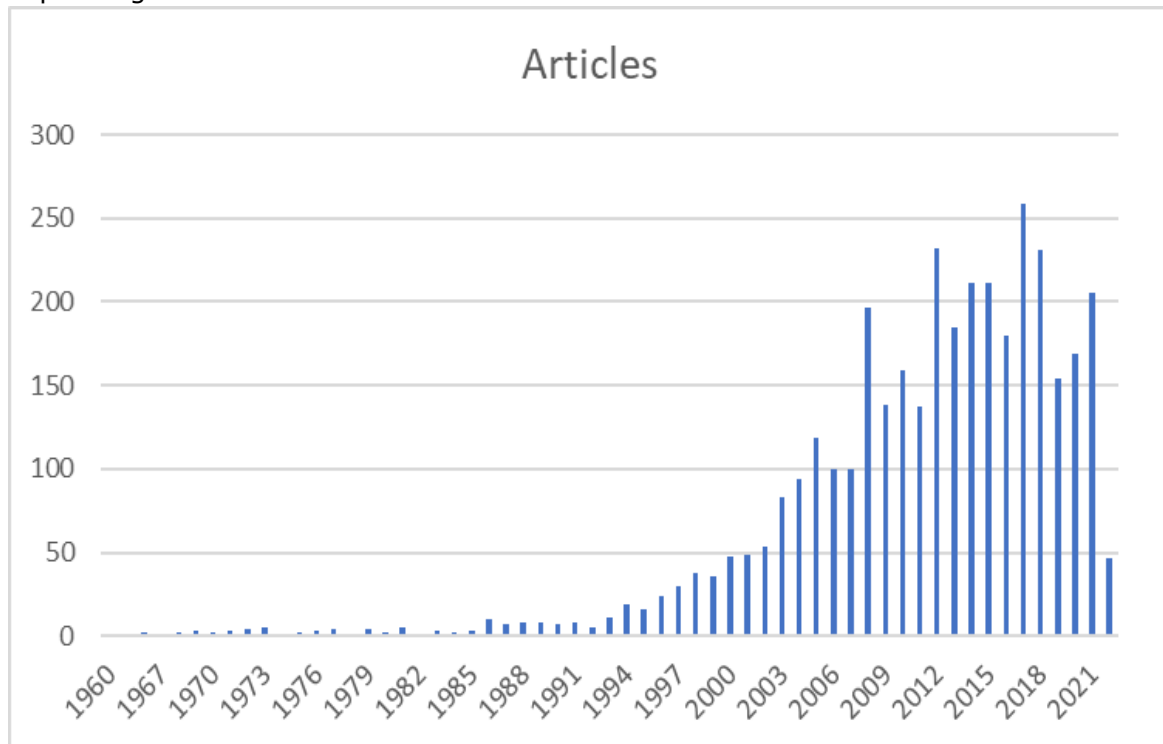
expanding trend.

Figure 1: Number of Publications Per Year

3.4.1. Authorship Analysis

This analysis also identifies the most prolific authors who contributed to the publication of papers regarding genocide. 3,263 different authors contributed to a total of 3644 contributions. Table 4 below contains a list of the 15 most productive authors in Genocide. With twenty-three publications, Jones, A. and Totten, S. are the authors who contribute the most. The following three contributors are "Bloxham, D.," "Schabas, Wa.," and "Kiernan, B.", with eighteen publications.

Table 4: Details of the Most 15 Productive Authors

Author's Name	Affiliation	Country	TP	TC	h	g
Jones, A.	University of British Columbia Okanagan	Canada	23	185	5	13
Totten, S.	University of Arkansas	United States	23	80	3	8
Bloxham, D.	The University of Edinburgh	United Kingdom	18	444	6	18
Schabas, Wa.	Middlesex University	United Kingdom	18	239	6	15
Staub, E.	University of Massachusetts Amherst	United States	18	775	9	18
Kiernan, B.	Yale University	United States	16	480	10	17
Shaw, M.	University of Sussex	United Kingdom	16	110	7	10
Elbert, T.	Universität Konstanz	Germany	14	836	12	14
Zimmerer, J.	Universität Hamburg	Germany	14	140	5	11
Dadrian, Vn.	Suny Geneseo	United States	13	209	8	14
Levene, M	University of Southampton	United Kingdom	13	209	7	13
Tyner, James A.	Kent State University	United States	13	121	6	11
Uzonyi, Gary	The University of Tennessee	United States	13	59	5	7
Moses, A. D	The University of North Carolina at Chapel Hill	United States	12	289	9	12
Adhikari, M.	University of Cape Town	South Africa	11	34	4	5

Notes: TP=total number of publications; NCP=number of cited publications; TC=total citations; h=h-index; and g=g-index

3.4.2. Most Cited Papers

Using the Scopus database, Table 5 reveals the top 15 most cited papers (based on the number of citations). Using global citations makes it easier to keep track of the annual citation frequency. The document entitled "When Victims Become Killers: Colonialism, Nativism, and the Genocide in Rwanda" by (Mamdani, 2014) has so far received the highest number of citations (947 citations or an average of 118.38 citations per year). This was followed by" No Lessons Learned from the Holocaust? Assessing Risks of Genocide and Political Mass Murder since 1955" (Harff, 2003) (417 or an average of 21.95 citations per year), and "Rwanda, ten years on: From genocide to dictatorship" by (Reyntjens, 2004) with the exact number of citations (254 or an average of 14.11 citations per year).

Table 5: The Most 15 Cited Documents

Document	Title	DOI	TC	TC per Year
(Mamdani, 2014)	When Victims Become Killers: Colonialism, Nativism, and the Genocide in Rwanda.	NA	947	118.38
(Harff, 2003)	No Lessons Learned from the Holocaust? Assessing Risks of Genocide and Political Mass Murder since 1955.	10.1017/S0003055403000522	417	21.95
(Reyntjens, 2004)	Rwanda, ten years on: From genocide to dictatorship	10.1093/afraf/adh045	254	14.11
(Weitz., 2007)	A Century of Genocide: Utopias of Race and Nation.	10.1086/ahr.112.1.168	250	19.32
(Hinton, 2004)	Why Did They Kill? Cambodia in the Shadow of Genocide.	NA	249	13.83
(Bloxham, 2005)	The great game of genocide: Imperialism, nationalism, and the destruction of the Ottoman Armenians.	10.1093/acprof:oso/9780199273560.001.0001	243	22.9
(Krain, 1997)	Mentally Ill Persons in the Criminal Justice System: Some Perspectives.	10.1177/0022002797041003001	232	9.28
(Staub, 2006)	Reconciliation after the genocide, mass killing, or intractable conflict: Understanding the roots of violence, psychological recovery, and steps toward a general theory. Political psychology.	10.1111/j.1467-9221.2006.00541.x	222	13.88
(Clark, 2010)	The Criminal Justice System's Response to Sexual Violence.	10.1017/CBO9780511761584	215	17.92
(Sternberg, 2003)	parental involvement in the criminal justice system and the development of youth theft, marijuana use, depression, and poor academic performance.	10.1037/1089-2680.7.3.299	199	10.47
(Staub & Laurie, n.d.)	Healing, Reconciliation, Forgiving and the Prevention of Violence After Genocide or Mass Killing: An Intervention and Its Experimental Evaluation in Rwanda.	10.1521/jscp.24.3.297.65617	198	11.65
(Dyregrov et al., 2000)	Trauma exposure and psychological reactions to genocide among Rwandan children.	10.1023/A:1007759112499	193	877
(Rummel, 1995)	Democracy, power, genocide, and mass murder. Journal of Conflict Resolution.	10.1177/0022002795039001001	180	6.67
(Hagan & Rymond-Richmond, 2008)	Darfur and the Crime of Genocide.	10.1017/CBO9780511804748	179	12.79
(Yanagizawa-Drott, 2014)	Propaganda and conflict: Evidence from the Rwandan genocide.	10.1093/qje/qju020	158	19.75

3.4.3. Most Cited Countries

Countries that have contributed the most to the genocide research are shown in Table 6. There are 8202 total citations in this domain from the United States, which may indicate that the United States' genocide studies are among the

most prominent in the world. With 1745 citations, the United Kingdom is the second. Genocide research is vital in the United States and Europe, since eight of the top 10 most productive nations are from the Western world, contributing to more than 66% of citations.

Table 6: The Most Cited 15 Countries

Country	No. of articles	Total Citations
USA	1201	8202
UNITED KINGDOM	472	1745
GERMANY	119	1237
BELGIUM	55	1153
CANADA	190	858
AUSTRALIA	168	694
NETHERLANDS	109	484
SWITZERLAND	39	446
ISRAEL	60	365
NORWAY	32	321
ITALY	39	278
FRANCE	93	271
SOUTH AFRICA	98	261
IRELAND	38	215
SERBIA	5	122

3.4.4. Countries Collaboration Analysis

Collaboration analyses were used to look into the inter-country relationships of cooperation. A maximum of 30 nodes might be displayed on a map of nations. Figure 4 depicts the international cooperation network. Using this network, countries are grouped into four distinct clusters. Among the countries in the red cluster are the United States, the United Kingdom, the Netherlands, South Africa, and Ireland. There is a large Australian-Italian-Argentine collaboration in the yellow cluster. A closer look into the blue cluster reveals that Genocide research has been carried out jointly by Germany, Switzerland, Iraq, and Turkey. Also depicted are Rwanda, France, and Belgium's cooperation in the form of the green cluster.
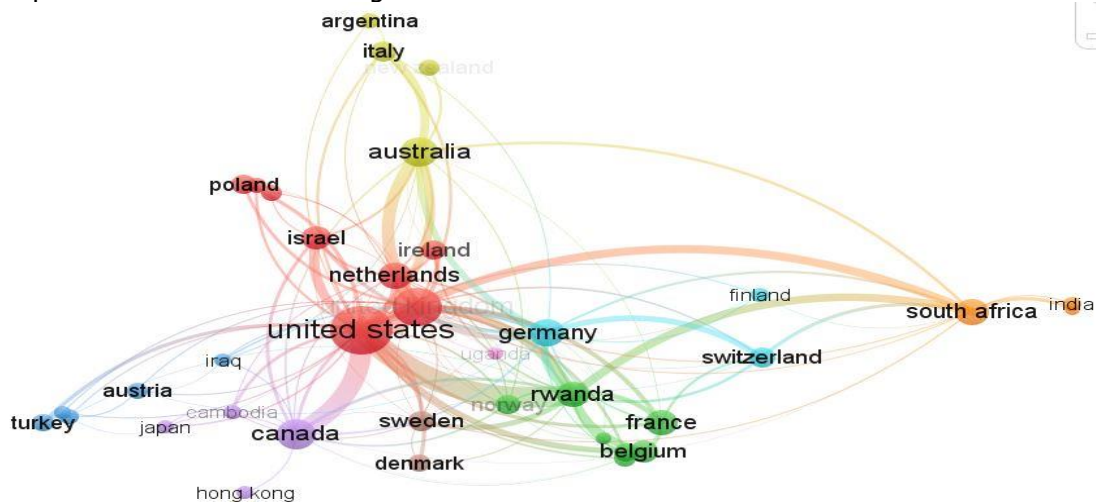

Figure 4: Country Collaboration Network

3.4.5. Most Productive Affiliations

Table 7 lists the Genocide field's fifteen most productive affiliations and the number of publications related to each of those associations. The University of Rwanda, The University of Sydney, Yale University, and The University of Edinburgh are among the major universities that published articles about Genocide. The second-place finishers are the City University of New York, and the University of Massachusetts Amherst, with twenty-six papers. with twenty-five papers, the University of Sussex is in third place.

Table 7: The Most Productive 15 Affiliations

Affiliations	No. of articles	Country	Percentage of articles
University of Rwanda	47	Rwanda	1.29%
The University of Sydney	44	Australia	1.21%
Yale University	38	United States	1.04%
The University of Edinburgh	29	United Kingdom	0.80%
City University of New York	26	United States	0.71%
University of Massachusetts Amherst	26	United States	0.71%
University of Sussex	25	United Kingdom	0.69%
Universiteit van Amsterdam	24	Netherlands	0.66%
University of California, Los Angeles	24	United States	0.66%
London School of Economics and Political Science	21	United Kingdom	0.58%
University of California, Berkeley	21	United States	0.58%
King's College London	19	United Kingdom	0.52%
Columbia University	19	United States	0.52%
Universiteit Utrecht	18	Netherlands	0.49%
University of Toronto	18	Canada	0.49%

3.4.6. Most Productive Journals

Notably, the 3644 publications selected were found in 1734 distinct publications. The fifteen most active journals for publications on Genocide are listed in Table 8. The Journal of Genocide Research appears to be the journal that gives the most attention to Genocide, with 273 contributions accounting for 7.49 percent of the total articles. After that, there were 56 publications devoted to Holocaust and Genocide Studies. The International Criminal Law Review and the Journal of International Criminal Justice come in third and fourth place, respectively, with 42 and 33 contributions.

Table 8: The 15 Most Productive Journals

Source	No of Publications	H_index	G_index	M_index	TC	PY start
Journal Of Genocide Research	273	27	40	1.125	2810	1999
Holocaust And Genocide Studies	56	15	25	0.405	667	1986
International Criminal Law Review	42	9	14	0.409	249	2001
Journal Of International Criminal Justice	33	15	23	0.833	576	2005
Genocide Convention the Legacy Of 60 Years	27	3	3	0.273	18	2012
Leiden Journal of International Law	26	9	16	0.346	285	1997
Human Rights Review	24	6	7	0.261	79	2000
Patterns Of Prejudice	23	10	16	0.182	281	1968
Oxford Handbook of Genocide Studies	22	2	6	0.182	43	2012
Historiography Of Genocide	19	8	13	0.533	192	2008
African Identities	18	5	6	0.385	56	2010
Criminal Law of Genocide International Comparative And Contextual Aspects	18	3	4	0.200	39	2008
Armenian Genocide Wartime Radicalization or Premeditated Continuum	17	3	4	0.273	26	2012
New Directions in Genocide Research	17	2	4	0.333	25	2017
Empire Colony Genocide Conquest Occupation and Subaltern Resistance in World History	16	9	16	0.600	345	2008

3.4.7. Most Frequent Keywords

The fifteen most common author keywords are shown in Table 9.

"Genocide," with over 474 instances, is the most often used keyword by authors. "Rwanda," with over 275 occurrences, comes second. As shown in Table 9, "human," "homicide," "female," and "history" are among the most often utilized keywords in genocide research.

Author keywords	Occurrences
genocide	474
Rwanda	276
human	261
homicide	238
female	200
humans	193
article	184
male	162
history	136
adult	131
violence	129
war	86
adolescent	79
crime	68
human rights	67

We then further analyze the author keywords for the co-occurrences of it using VOS viewer. VOS viewer is a software tool used for constructing and visualizing bibliometric networks. (van Eck & Waltman, 2017). Related keywords, as indicated by the same color, are commonly listed together. For example, community, Criminal responsibility, Law, perspective, and Conventions of war are closely related and usually co-occur together.
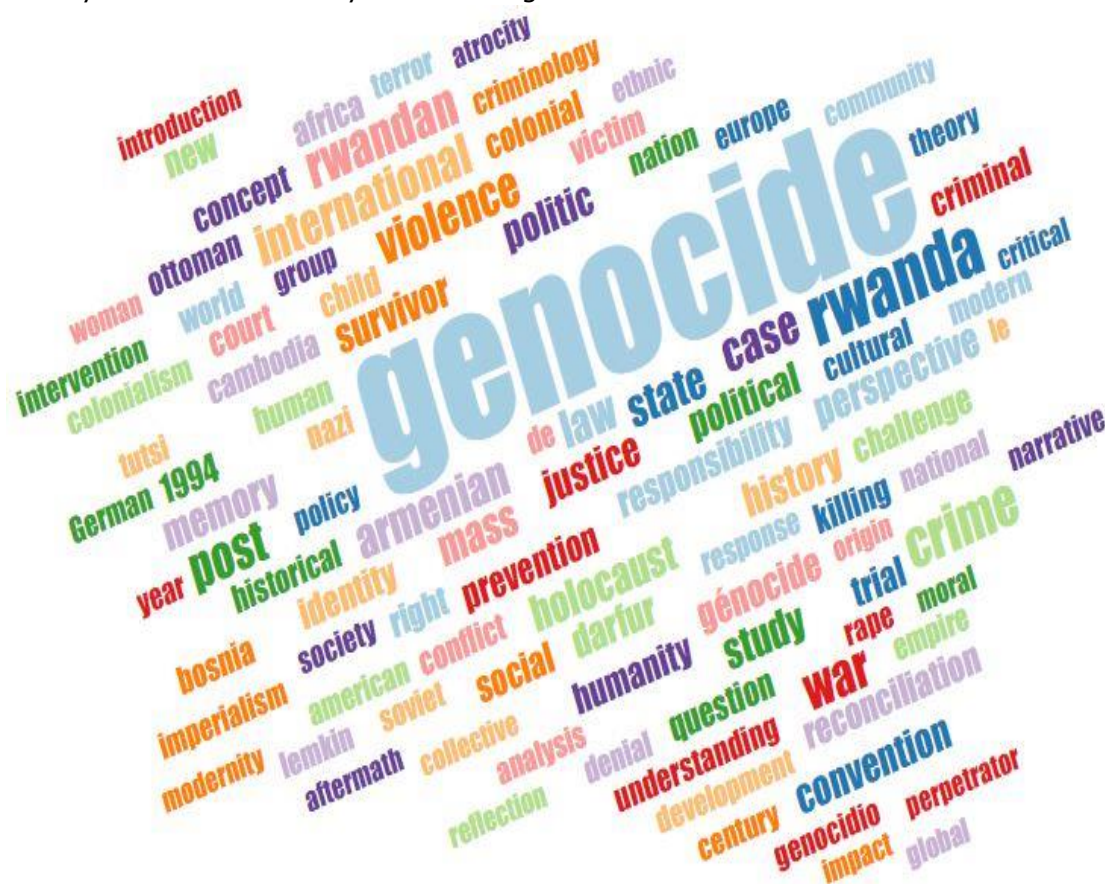

Figure 5. Word cloud of the author keywords.

4.　　DISCUSSION

The primary purpose of this study is to investigate the present state of research on genocide through the application of bibliometric analysis. This bibliometric analysis can assess the quality of research and publications on a certain topic (Van Leeuwen, 2006). Bibliometric data can be used to evaluate the effectiveness of a particular research field, hence assisting research-related organizations in the development of scientific input and output strategies. In addition, bibliometric analysis can be utilized to validate a study's contribution to a scientific field and assist researchers in producing pertinent work (Diem & Wolter, 2013).

Table 2 lists the fifteen most productive contributors regarding the number of papers published. "Jones, A." and "Totten, S." are the most prolific authors, with twenty-three publications, respectively. The following three contributors are "Bloxham, D.," "Schabas, Wa.," and "Kiernan, B.", with eighteen publications. It is worth noting that social sciences, arts, humanities, econometrics, psychology, finance, accounting, business, management, and medicine are all major contributors to the studies of Genocide. Nevertheless, engineering, earth, environmental science, planetary sciences, nursing, computer science, decision sciences, and mathematics are among the areas covered.

The piece of writing titled "When Victims Become Killers: Colonialism, Nativism, and the Genocide in Rwanda" by (Mamdani, 2014) has gotten the maximum number of citations up to this point. It is the most widely cited piece of work (947 citations). This was followed by "No Lessons Learned from the Holocaust? Assessing Risks of Genocide and Political Mass Murder since 1955" (Harff, 2003) (417 citations), and "Rwanda, ten years on: From genocide to dictatorship" by (Reyntjens, 2004) with the exact number of citations (254 citations).

The United States of America has the most contributors, followed by Germany, Belgium, Canada, Australia, the United Kingdom, and then the Netherlands. In addition, scientific research conducted in a wide variety of countries has made significant contributions to the research on genocide. These results should not come as a surprise given that the countries involved legally represent some of the most powerful nations on the planet and are members of the United Nations Human Rights Council, an organization that addresses issues about global criminal justice. These nations invest a substantial amount of time and effort into the study of legal issues and the creation of regulations, and the rest of the world blindly follows their pattern. The University of Rwanda in Rwanda has the most productive affiliation, with 47 contributions. With 44 articles, The University of Sydney comes in second. Yale University and The University of Edinburgh placed in the third level with 38, and 29 papers, respectively. The City University of New York and the University of Massachusetts Amherst tie for fourth place with 26 articles each. Even though the world's most productive countries are in the lead when it comes to genocide research, and the rest of the world follows in their

footsteps, more research by affiliations in developing countries is required to determine whether or not the various contexts (such as culture, education, traditions, religion, daily life, and so on) affect genocide.

Journal of Genocide Research, which has published 273 articles and received 2810 citations, has the most research publications on Genocide This was followed by "Holocaust and Genocide Studies" and "International Criminal Law Review" which had a total of 56 and 42 articles, respectively, with 667 and 249 citations. In the third place, there were 33 submissions to the "Journal of International Criminal Justice." Genocide, Rwanda, human, homicide, and female are all in the top fifteen Keywords that have been used in Genocide publications. "Genocide" is more frequently used in academics' and researchers' research because they are concerned with the development and implementation of accountability mechanisms for Genocide crimes.

5.   Conclusion

In this work, we conduct a review of the existing research on genocide by looking at the relevant literature. To accomplish this, a bibliometric study or technique was utilized. In this particular instance, a total of 3644 publications were gathered or discovered in two separate stages. A descriptive bibliometric analysis was performed first, and then we used a co-word analysis to identify the most important subjects in our data set. According to the results of the descriptive study, this research area has shown an increase in academic interest since 1994. This progression is confirmed by the gradual growth in publications throughout time. A review of the most frequently cited papers in our database can also turn up publications that tackle Genocide from various perspectives. For example, some researchers looked into topics such as post-genocide reconciliation, intractable conflict, the causes of violence, psychological recovery, political psychology, sexual violence, violence prevention after the genocide, trauma exposure, and the psychological effects of genocide on victims. It's worth noting that the vast majority of these pieces are empirical in nature. We looked at the most commonly used phrases by authors to better understand the substance and the core challenges in dealing with Genocide and its effects. Using "factorial maps of the text with the most significant contributions". In the course of the investigation, it was discovered that there were several omissions in studies on the prosecution of genocide criminals in Africa.

Numerous investigations have been carried out in an effort to identify and bring to justice those responsible for genocide in situations involving armed conflict. On the other hand, there have only been a limited amount of research done on both the prevention of violence after genocide and the investigation of the causes of violence. Future research should take into account this gap in the literature to better understand the relevance of rehabilitative efforts in genocide. The results of this inquiry are both theoretical and practical. " By presenting important theoretical insights into Genocide, it contributes to the current body of knowledge. In

particular, this study ought to act as a stepping stone for authors who want to go deeper into the subject matter of this research. At first, there is a presentation of a list of the papers that have been cited the most frequently, which identifies the foundational publications that can be used to research the topic. We use cluster analysis to indicate what problems have been previously established, how they have been evaluated, and as a result, what areas of research still need to be investigated, thereby identifying possible research pathways. We do this by indicating what problems have been previously established, how they have been assessed, and what areas of research still need to be investigated. In addition, by analyzing the correlations between keywords, journals, and cited journals, we can figure out which journals should be considered for publication and which approaches to the research topic and different points of view they adopt.

Readers should be aware of the many limitations of these studies, notwithstanding their usefulness. Initial research was classified by specific inquiry/keywords in the Scopus-indexed science publications. According to past bibliometric studies, this method was frequently employed. However, in the earlier bibliometric research, this approach was often used. In addition, while being one of the most comprehensive online indexes for indexing all scientific papers, Scopus does not cover all available sources. This is despite the fact that Scopus is one of the most extensive online indexes. As a direct consequence of this, some exceptions are predicted to emerge from this research. Moreover, no one-size-fits-all search query can encompass all scientific research in this field. As a result, it is still possible to get false positive and negative findings. Despite these limitations, the study gives a complete summary of the current state of the research on genocide. In addition, it would be fascinating to broaden the scope of the study to incorporate not only co-citation analysis but also cross-citation analysis to analyze the development of the community, how and if each author influences the others, as well as for which topics. Finally, the relationship between the unique research community's knowledge-generating process and author collaboration might be investigated.

6.　　Reference

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