Advances in Consumer Research
https://acr-journal.com/

Volume-3 | Issue-2 | Feb 2026

Original Researcher Article

A Bibliomatric Analysis on the topic of Organisational Behaviour Towards Rainbow (LGBTQA+) Employees

Ayushi Kishanbhai Prajapati[1], Dr. Priyanka Hiteshbhai Mehta[2*]
[1]PG Research scholar, Human resource Management, Indus Institute of Management Studies, Indus University Rancharda , Ahmedabad Gujarat India, Email ID of author: ayushiprajapati1705@gmail.com ORCID ID :0009-0007-3824-5686
[2*]Assistant Professor, Human Resources Management, Indus Institute of Management Studies, Indus University, Rancharda, Ahmedabad Gujarat India, Email ID of author: priyankamehta2884@gmail.com ORCID ID: 0000-0003-4365-2343

ABSTRACT
This study examines global LGBTQ research from 2020 to 2026, analysing publishing patterns and collaborative networks worldwide. We used Scopus data and analysed it using VOSviewer to elucidate connections identifying prominent subjects, leading nations and institutions, and the clustering of keywords. A notable observation is the significant increase in published works post-2022, mostly originating from the US, UK, and Canada. These nations significantly foster international cooperation. The networks have robust links across the Atlantic, however there is also a burgeoning dynamism an increase in linkages emerging across Asia, Latin America, and Africa.
Upon delineating the principal themes, one observes a transformation. The domain has expanded beyond only concentrating on HIV or biological concerns. Currently, scholars are discussing minority stress, mental health, intersectionality, the well-being of youth, structural stigma, and health equality. That is a significant alteration. Despite an increased diversity of themes and collaborations, significant gaps remain, particularly with representation from the Global South. Certain areas and institutions continue to lack significant representation.
The data indicates that LGBTQ research is expanding and evolving, but unevenly distributed. These findings provide academics, policymakers, and funders with a greater understanding of the current state and necessary improvements for achieving research that is inclusive, multidisciplinary, and global.

Keywords: Bibliometric analysis, , Global collaborations, LGBTQ Research, Health equity, Minority stress

1. Introduction

Contemporary LGBTQ research encompasses a wide array of topics. It integrates health sciences, psychology, sociology, education, law, public policy, and gender studies (Fish, 2006; Savin-Williams, 2001). Initially, most of the research focused on medical subjects, particularly pathology and HIV/AIDS (Bayer, 1987; Epstein, 1996). However, circumstances changed. Researchers shifted their attention from sickness to identity, mental health, prejudice, social inclusion, and fundamental human rights (Meyer, 2003; Herek, 2009). With an increasing number of nations acknowledging the rights of sexual and gender minorities, such as same-sex marriage and regulations regarding transgender inclusion, experts have intensified their focus on LGBTQ issues (Kollman, 2013; Waaldijk, 2020). Numerous obstacles persist. Stigma, discrimination, and violence are pervasive reality for several LGBTQ individuals globally (Hatzenbuehler, 2016; ILGA World, 2023). Conditions are particularly challenging in low- and middle-income countries, where legislative safeguards and societal acceptability remain insufficient (Logie et al., 2012).

The last two decades have seen a surge in studies concerning LGBTQ problems. The current literature is fragmented and complex (Booth et al., 2020). Numerous studies have attempted to consolidate the primary topics; nonetheless, due to the plethora of recent papers, scholars want instruments to delineate the subject and comprehend its fast expansion. Bibliometric analysis is beneficial in this context. It enables the identification of main contributors, reveals collaborative efforts, and highlights significant themes (Donthu et al., 2021; Aria & Cuccurullo, 2017). Science mapping tools enable the

tracing of the field's development and its cohesive elements, making them ideal for examining the progress of LGBTQ studies.

1.1. Research Gap

Despite a significant increase in LGBTQ studies, the overall landscape remains fragmented. Most evaluations focus on topics such as mental health (Russell & Fish, 2016), HIV/AIDS (Baral et al., 2013), or stigma (Herek, 2009), although they seldom provide a comprehensive overview of how these elements interrelate. Consequently, we lack an understanding of the field's comprehensive framework and the collaborative dynamics among researchers.

Many current overviews adhere to qualitative or methodical methodologies, although often exclude quantitative data. We need a definitive, quantitative analysis of citation patterns, author collaborations, and the interconnections of ideas (Donthu et al., 2021). Few individuals have integrated performance analysis with scientific mapping to address significant inquiries: Who is influencing the field? Which ideas are grouped together? From whence is the research originating. A significant challenge arises from location. Most of the art originates from North America, Western Europe, and Australia. The Global South and lower- and middle-income nations get less attention (Logie et al., 2012; Poteat et al., 2016). This mismatch marginalizes certain voices and allows Western attitudes to prevail, obscuring local concerns and viewpoints. There has been much discussion on the evolution of the discipline.

Researchers have highlighted the transition from a limited biological or risk perspective to broader intersectional, rights-oriented frameworks (Hatzenbuehler, 2016; Bowleg, 2012). However, we currently lack a comprehensive graphic representation illustrating the temporal evolution of these motifs. This is an obvious need for a comprehensive bibliometric analysis that delineates the field's structure, identifies collaborative networks, and monitors the evolution of themes.

1.2. Objectives

This study aims to conduct a thorough bibliometric analysis of worldwide LGBTQ research to delineate how concepts, individuals, and partnerships are influencing the field.

The research has specifically:

- Monitor the evolution and dissemination of LGBTQ research across time.
- Identify the most significant writers, publications, organizations, and nations.
- Identify the primary topics and emerging trends using keyword analysis.
- Examine trends of global cooperation.
- Identify the places and subjects that need sufficient focus.

1.3. Research Questions

- ✓ How has LGBTQ research changed and developed over the years?
- ✓ Who stands out as the most influential authors and journals?
- ✓ What are the main topics and which new ideas are gaining ground?
- ✓ Which countries are leading the charge, and who's working together?
- ✓ Where are the big gaps what's missing from the current research?

2. Conceptual Background

2.1. Definition and Scope of LGBTQ Research

LGBTQ research examines the lived experiences, identities, health, rights, and social realities of sexual and gender minorities (Savin-Williams, 2001; Fish, 2006). It encompasses all aspects of mental and physical health, education, employment discrimination, legal rights, stigma, and the representation of LGBTQ individuals in culture.

The breadth of the discipline continues to expand. It now encompasses intersectional identity variables such as race, ethnicity, class, disability, and religion, all of which influence LGBTQ experiences (Bowleg, 2012). This transition acknowledges the diversity among LGBTQ groups and the influence of many societal issues on their health and wellbeing.

2.2. Theoretical Perspectives in LGBTQ Studies

❖ **Minority Stress Theory**

Minority stress theory posits that sexual and gender minorities experience persistent stress due to stigma, discrimination, and internalized bias. This stress adversely affects both mental and physical health, resulting in significant inequities (Meyer, 2003). Compelling data indicates a robust correlation between structural stigma and issues such as depression and suicidality (Hatzenbuehler, 2016).

❖ **Intersectionality**

Intersectionality, a concept introduced by Crenshaw (1989), examines the interconnection of social identities and systems of oppression. In LGBTQ research, intersectionality illustrates how individuals' experiences vary based on the combination of their identities—such as ethnicity, gender identity, and socioeconomic status (Bowleg, 2012).

❖ **Social Identity Theory**

Social identity theory (Tajfel & Turner, 1979) examines how group membership influences self-perception and mental well-being. In LGBTQ groups, a strong sense of belonging and collective identity may provide resilience and social support (Herek & Garnets, 2007).

2.3. What Is Bibliometric Analysis?

Bibliometric analysis examines academic literature using quantitative metrics and network mapping (Donthu et al., 2021). It typically encompasses two primary domains:

❖ **Performance Analysis**

- The volume of published research
- The frequency of citations
- h-index metrics
- The major journals, authors, and institutions in the subject

❖ **Science Mapping**

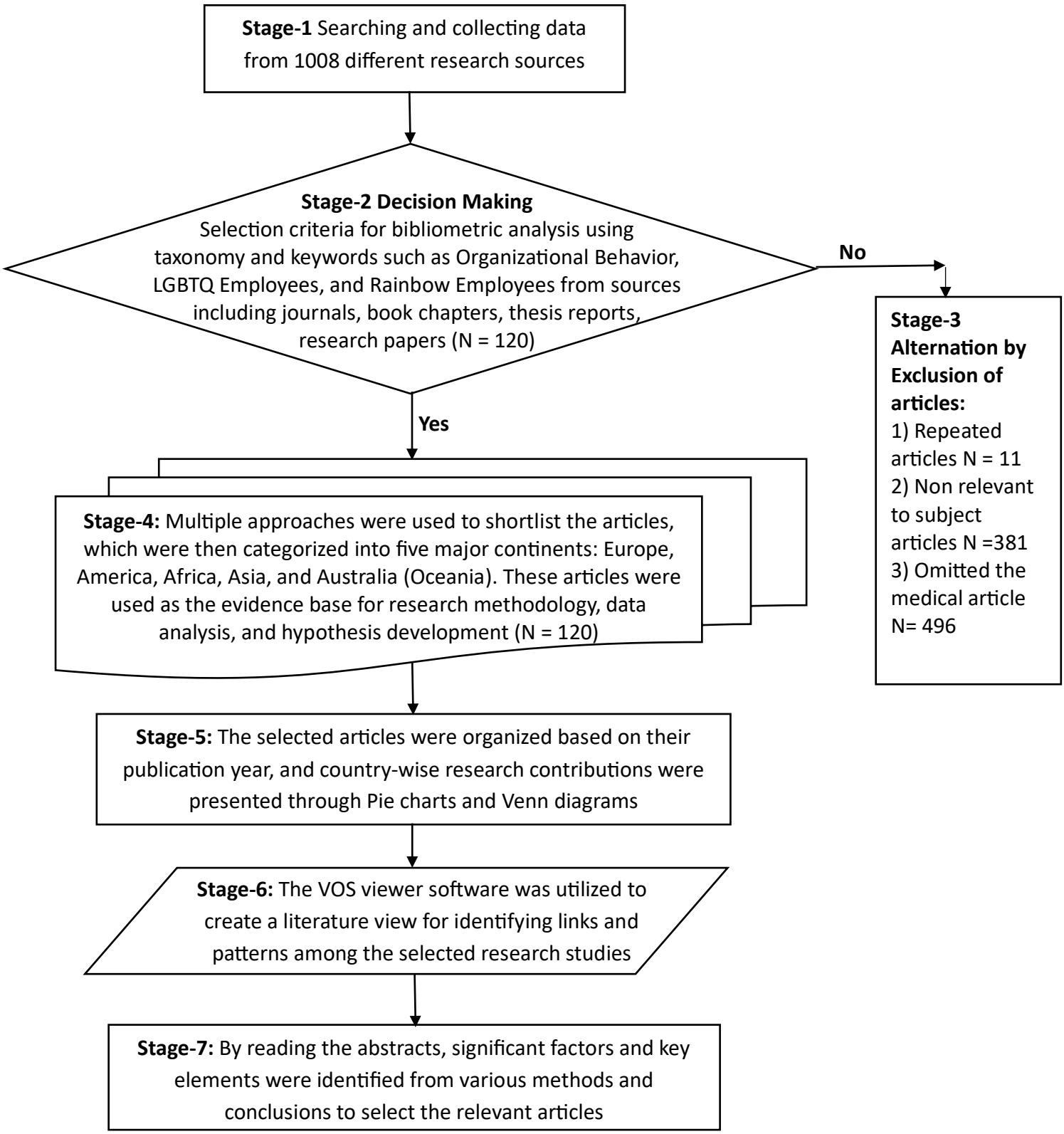
- Identification of collaborative partnerships (co-authorship networks)
- Analysis of articles that are often quoted in conjunction (co-citation analysis)

- Examination of the clustering and interconnection of keywords

Collectively, these methodologies elucidate the evolution of research within a discipline and identify the fundamental concepts (Aria & Cuccurullo, 2017; van Eck & Waltman, 2010).

2.4. Why Bibliometric Tools Matter

VOSviewer excels at constructing and displaying bibliometric networks. It employs clustering algorithms to identify main themes and groups in the study (van Eck & Waltman, 2010).



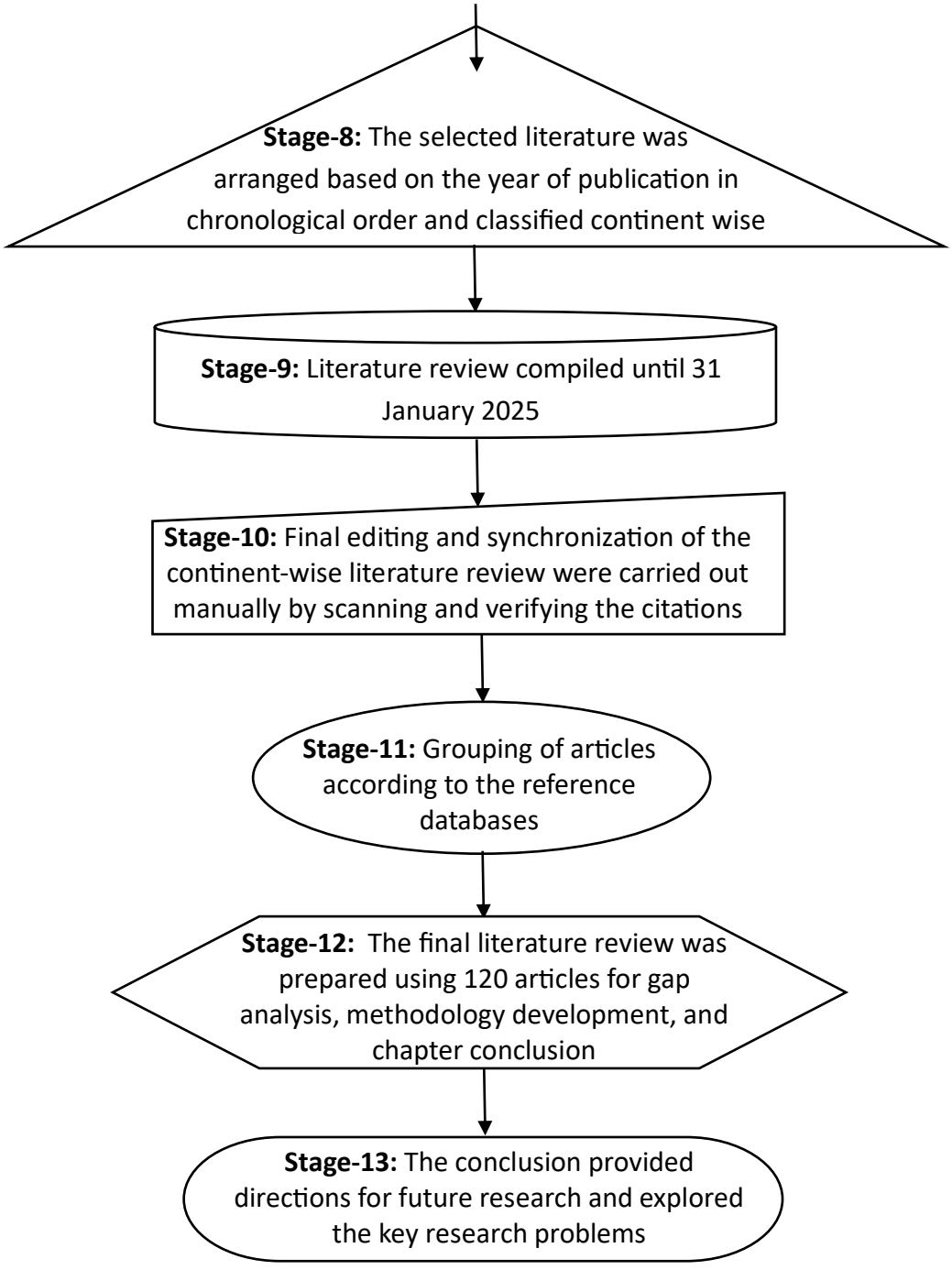


Figure 1. PRISMA 2020 flow diagram for Bibliometric analysis which included searches of databases

3. Methodology

3.1. Study Design

This study used a quantitative approach, employing bibliometric and scient metric methodologies to examine the structure, expansion, and interrelations within LGBTQ research. Bibliometric analysis enabled the scrutiny of publishing and citation trends using quantitative data, while scient metric methods assisted in delineating the interconnections among authors, keywords, and nations (Donthu et al., 2021; van Eck & Waltman, 2010).

The two primary tactics shown concurrently are as follows:

- **Performance Analysis:**

The investigation assessed research productivity and impact by analysing variables such as annual publication counts, identifying the most-cited authors, and establishing the leading contributing nations.

- **Science Mapping:**

This subject emphasizes the visualization of interconnections among research in the discipline. The individual delineated co-authorship patterns, keyword clustering, and collaborative tendencies across nations.

The combination of both methodologies offered a comprehensive assessment of the existing resources and

their integration within the context of LGBTQ research development.

3.2. Data Source

The data was extracted from Scopus, principally because of its comprehensive coverage of peer-reviewed publications in social sciences, health, psychology, public policy, and several multidisciplinary domains. Scopus functions as a principal resource for bibliometric research, distinguished by its comprehensive journal coverage, effective citation monitoring, and reliable metadata (Mongeon & Paul-Hus, 2016).

Researchers sometimes compare Scopus with Web of Science (WoS) to verify trends or enhance the robustness of results. They deliberated on it; but, for the sake of consistency and to prevent duplicate counting of the same article, they adhered to Scopus for the primary analysis.

The data was derived from a single extraction session, maintaining a consistent timeframe and averting complications associated with database upgrades.

3.3. Search Strategy

A keyword search was constructed to identify relevant articles including a spectrum of LGBTQ-related terminology. The person conducted a search inside titles, abstracts, and keywords, using a broad but targeted approach.

An example of the search string used in Scopus is shown.

TITLE-ABS-KEY (LGBTQ OR LGBT OR "sexual minorities" OR "gender minorities" OR transgender OR queer OR homosexuality) Boolean "OR" operators were used to guarantee the inclusion of all primary words and their variants. This approach allows for the collection of diverse terminology used across numerous academic disciplines. The time window was established from 2020 to 2024, including the era when LGBTQ research significantly expanded and maintaining relevance. After doing the search, the results were meticulously filtered to exclude any works that included similar terminology but lacked relevance.

3.4. Inclusion and Exclusion Criteria

To keep things rigorous and consistent, clear rules were set up about what to include and what to leave out.

❖ **Inclusion Criteria:**

- Peer-reviewed journal articles and review papers
- Composed in English
- Published from 2020 to 2026
- Complete bibliographic information (author, keywords, citations, affiliations)

The researcher focused on journal articles and reviews because they are peer-reviewed and best suited for this kind of mapping.

❖ **Criteria for Exclusion:**

- Conference papers, editorials, notes, letters, book chapters, and errata are included.
- Publications in languages other than English, ensuring consistency and reliable metadata.
- Duplicate records can be found across various databases.
- Papers that have been retracted or are incomplete

A step-by-step filtering process was followed to maintain transparency and reproducibility.

3.5. Data Extraction

Upon the application of those criteria, the final dataset was exported from Scopus in CSV and RIS formats, which are compatible with bibliometric analysis tools.

The following items were extracted:

- Names of authors
- Affiliations of the author
- Title of the document
- Year of publication
- Journal title
- Keywords of the author
- Indexed keywords
- Abstract
- Country of affiliation
- The count of citations
- References

Before doing the analysis, the data was purified. This indicated:

- Standardizing author names to guarantee consistency in initials and full names.
- Consolidating similar terms, such as “LGBT” and “LGBTQ”
- Standardizing nation names by recognizing “USA” and “United States” as equivalent.

A file for VOSviewer was compiled to assist in categorizing variants of keywords and authors. The mapping significantly improved in accuracy, therefore.

3.6. Data Analysis Tools

The cleaned dataset was analysed using VOSviewer (version 1.6.x). This software is designed for the construction and visualization of bibliometric networks (van Eck & Waltman, 2010).

Here is how the analysis was approached in VOSviewer:

❖ **Co-authorship Analysis (Authors)**

The focus was on authors to identify collaboration clusters and determine who the key contributors are.

❖ **Co-occurrence Analysis (Keywords)**

The author examined keywords to map out both the main themes and new trends in the research.

❖ **Analysis of Co-authorship by Countries**

The user analyzed countries to see how researchers collaborate internationally.

❖ **Parameter Settings**

Full counting was used as the counting method. For the thresholds, a minimum of 3 documents per author, 5 occurrences per keyword, and 5 documents per country were set. The clustering resolution ranged from 0.75 to 1.00, depending on the density of the network. To dig into the data, the user utilized network, overlay, and density visualization modes. These helped him see both the bigger picture and the finer details.

[

❖ **Methodological validity and reliability**

To keep things solid, the individual extracted all the data in one go so the database wouldn’t change underneath them. Standardized cleaning steps were followed, and all the threshold parameters were set clearly from the

start. The results were also checked across different visualization formats to ensure everything lined up.

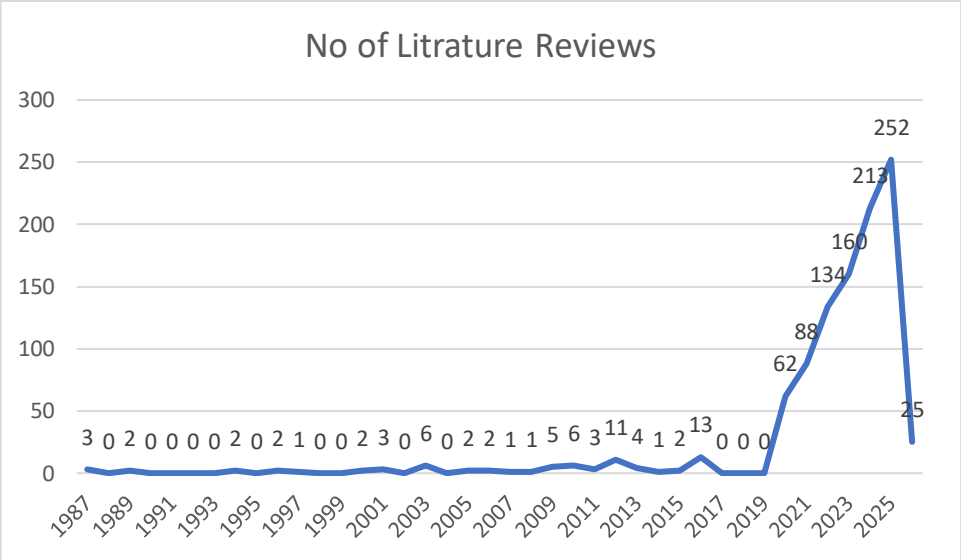
Because the search strategy, inclusion criteria, and software settings were clearly documented, anyone can replicate this bibliometric analysis.

4. Results and Analysis

✓ **Analysis by Year**

✓ **Table 1. Year-wise distribution of Publications showing the growth trend in research output from 1987 to 2026**

Year	No of LR
1987	3
1988	0
1989	2
1990	0
1991	0
1992	0
1993	0
1994	2
1995	0
1996	2
1997	1
1998	0
1999	0
2000	2
2001	3
2002	0
2003	6
2004	0
2005	2
2006	2
2007	1
2008	1
2009	5
2010	6
2011	3
2012	11
2013	4
2014	1
2015	2
2016	13
2017	0
2018	0
2019	0
2020	62
2021	88
2022	134
2023	160
2024	213
2025	252
2026	25



Graph 1. Annual growth trend of publication over the study period (2020-2026)

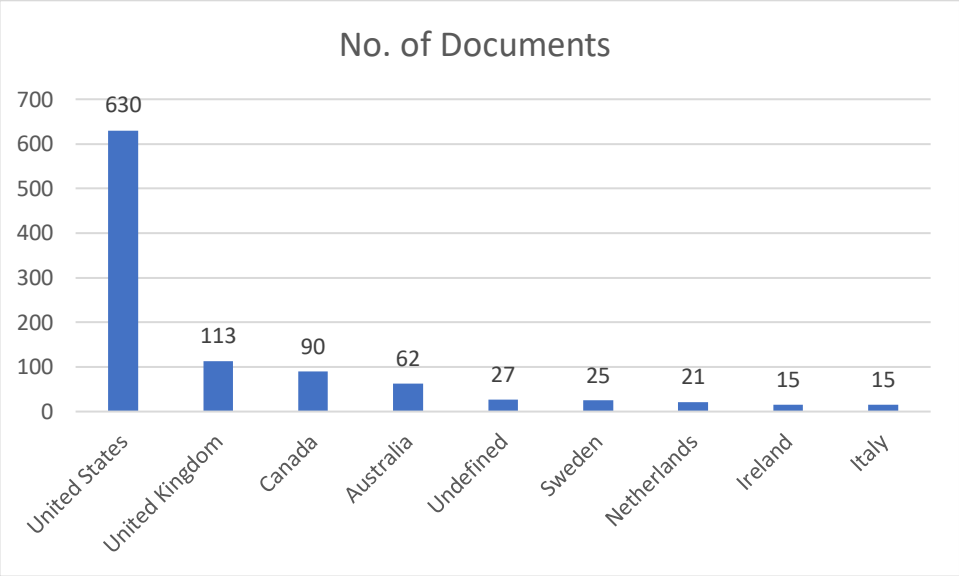
Table 1 and the Graph 1 indicated a significant increase in research production from 2020 to 2026. In 2020, just 62 publications were released. The figure increased to 88 in 2021 and then surged to 134 in 2022. There is evidently increased momentum. The total number of publications increased from 160 in 2023 to 213 in 2024. In 2025, there were 252 publications, marking the most active year to date.

The graph corroborates this assertion. Initially, the trail ascends gradually; but, post-2022, it becomes much steeper. Interest and engagement in this domain have significantly increased. The figure for 2026 is notably low merely 25 likely due to the year not being completed, rather than an indication of a deceleration in the field. In summary, both the table and graph convey the same message: research in this domain is rapidly expanding, and each year the topic gains significance and recognition.

✓ **Analysis by Countries**

Table 2. Countries distribution of Publications

Country/Territory	Documents
United States	630
United Kingdom	113
Canada	90
Australia	62
Undefined	27
Sweden	25
Netherlands	21
Ireland	15
Italy	15



Graph 2. Country-wise distribution of publications showing dominance of United state in research output

The country's equitable distribution of research publications has shown a significant concentration of research activity in a limited number of affluent Western nations. The United States leads with 630 publications, constituting a substantial majority compared to all other nations combined. This significant disparity underscores the crucial impact of U.S. institutions, funding bodies, and research networks in academia. The United Kingdom ranks second with 113 publications, followed by Canada with 90 and Australia with 62, which are significant although much lesser contributions than those of the United States.

Other European nations such as Sweden (25), the Netherlands (21), Ireland (15), and Italy (15) are relatively modest but significant contributors, perhaps indicating growing or specialized research hubs in these areas. The presence of 27 items classified as Undefined may indicate missing affiliation data or multinational cooperation that lacks unambiguous attribution.

The visual representation of the data corroborates this distribution trend by illustrating the United States' greater contribution relative to other nations. The prominent bar representing the United States in the graph signifies its pre-eminence in the subject, while the much shorter bars of other nations indicate a substantial disparity in publication output. In summary, both the table and the graph illustrate a highly skewed regional distribution of publishing output.

✓ **Co-authorship countries Network**

The image depicts a country-level co-authorship network created using VOSviewer that showcases the country-level patterns of cross-border collaboration of research in the chosen area. In the co-authorship network, each country is represented as a node, the size of the node represents research output, i.e. number of documents published, and the thickness of the connecting lines represents the collaborative strength measured by total link strength (TLS). The distance of a

country to another in the network shows the collaborative closeness, while the color of a node shows the cluster of countries that are highly collaborative among themselves and less so to countries outside the cluster. The position of a country in the co-authorship network shows the global research network dominance of the country. The closer to the center of the network, the more documents submitted, the more highly cited the documents, and the more intense the collaborations. For the network, the most centrally located country is the United States, with the most documents (653), the highest citation impact (9091 citations), and the highest collaboration intensity (TLS = 160), showing multiple international collaborations. The United Kingdom (116 documents; TLS = 106) and Canada (90 documents; TLS = 92) are also positioned closely to the United States illustrating strong collaboration with the United States forming the Anglo-American collaboration core.

The results of the cluster analysis described various regional and thematic groupings. In the first group, Germany, the Netherlands, Spain, Ireland, Mexico, and South Africa are included. This group highlights the strong collaboration around the European continent. In the second group, we can find Italy, Sweden, Brazil, Chile, Israel, and Portugal. This group shows the active linkages between Europe and South America. In the third group, we find the United States, Canada, India, and Kenya, as well as Thailand. This demonstrates collaboration across continents. We see smaller groups as well, where there are clusters with more focused collaborations. These include Austria, Belgium, Poland and Switzerland in Europe, as well as China, Japan and Singapore in East Asia. The most recent average years of publication (2023–2024) indicate that there is a lot of activity in research. In summary, the United States remains the most dominant global research structure in collaboration, while there is emerging collaboration across the Atlantic and the regions separated by the new and emerging research.

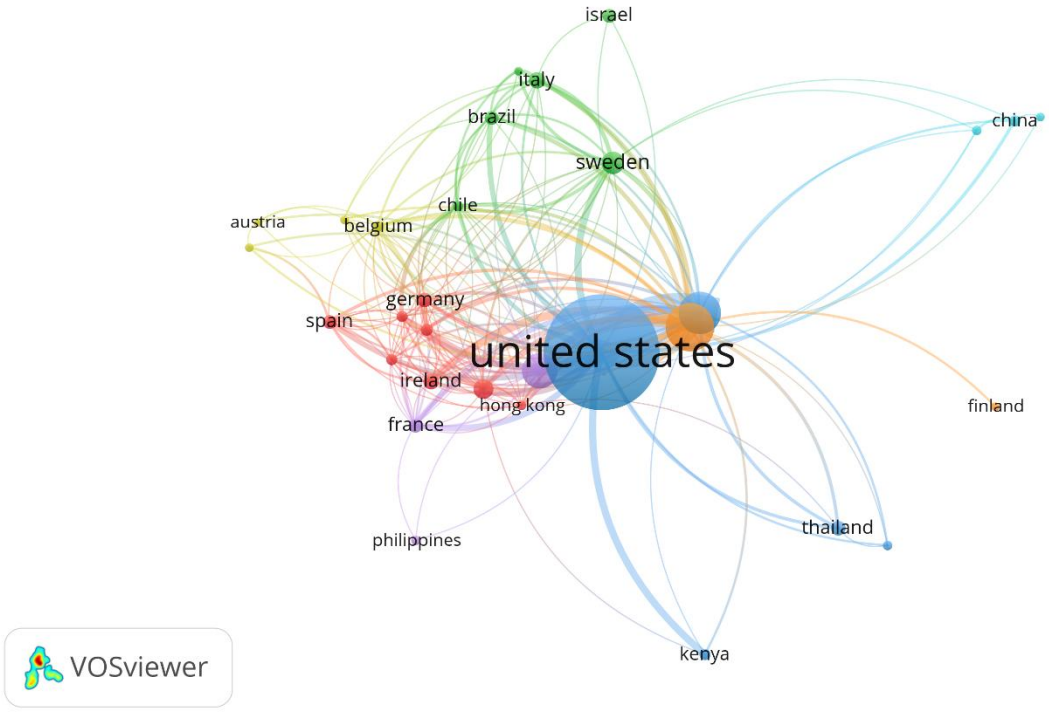
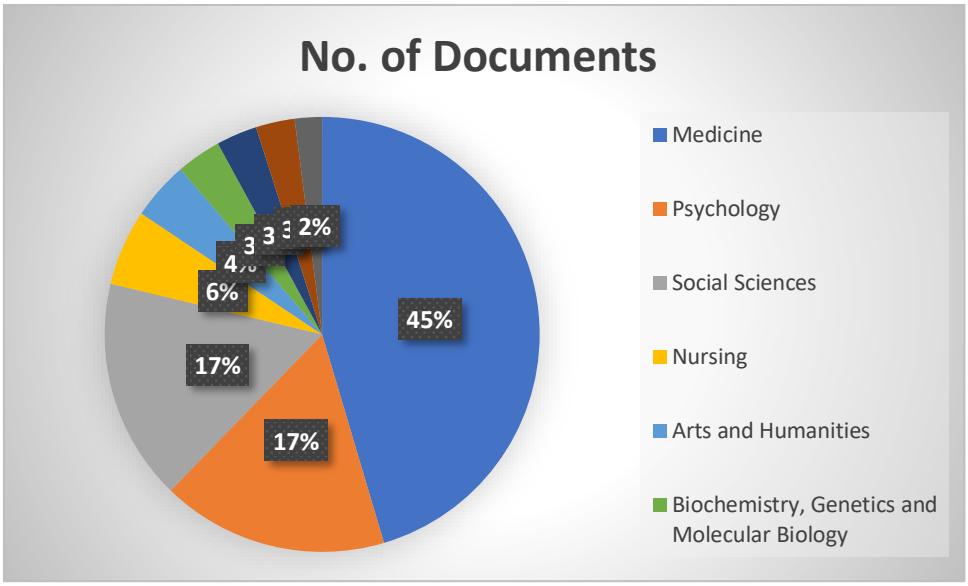


Figure 1. Co-authorship countries Network Mapping

✓ **Analysis by Subject Area**

Table 3. Subject area distribution of Publications

Subject area	Documents
Medicine	628
Psychology	233
Social Sciences	228
Nursing	78
Arts and Humanities	60
Biochemistry, Genetics and Molecular Biology	46
Multidisciplinary	42
Environmental Science	40
Neuroscience	28
TOTAL	1383



Graph 3. Subject area distribution of Publications highlighting the dominance medical and behavioral sciences

The topic area analysis indicates that most of the research output originates from health and behavioral sciences. Medicine is the predominant discipline, with 628 articles, much surpassing all other fields. This robust representation indicates that the research domain mostly centers on clinical, public health, and biological disciplines. Psychology (233 papers) and Social Sciences (228 documents) are the subsequent two most prevalent topic areas, indicating significant academic involvement with mental health, behavioral research, identity, stigma, and socio-cultural issues.

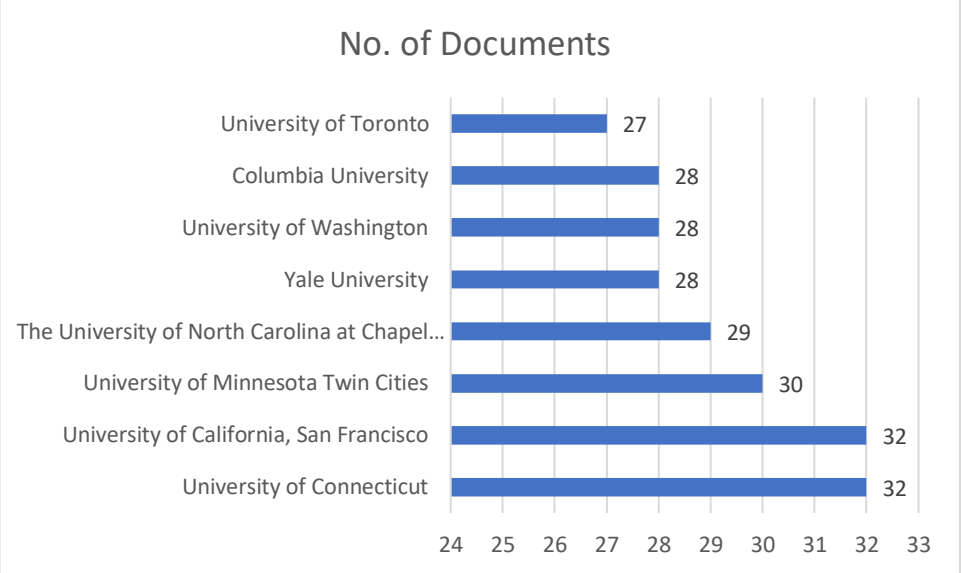
Nursing (78 articles) and Arts and Humanities (60 publications) contribute somewhat more, demonstrating an increasing interdisciplinary emphasis, particularly in patient care, lived experiences, ethics, and cultural discourse. Biochemistry, Genetics and Molecular Biology (46 documents) and Environmental Science (40 documents) exemplify more specialized or emerging intersections within the subject. The presence of multidisciplinary research (42 articles) indicates an increasing synergy across disciplines. Neuroscience, with 28 papers, is the lowest proportion among the enumerated disciplines, indicating that investigation from a neurological standpoint is relatively constrained but pertinent.

The graph clearly illustrates that the disciplinary pre-eminence of Medicine is visually accentuated, seeming far superior to all other subject areas. Psychology and Social Sciences are the secondary tier of significant contributions.

✓ **Analysis by Organizations**

Table 4. Institutional distribution of Publications

Affiliation	Documents
University of Connecticut	32
University of California, San Francisco	32
University of Minnesota Twin Cities	30
The University of North Carolina at Chapel Hill	29
Yale University	28
University of Washington	28
Columbia University	28
University of Toronto	27
TOTAL	234



Graph 4. Graphical Representation of top contributing organizations

The findings of the organizational study indicate that a limited number of world-class academic institutions, mostly located in North America, dominate research production. The University of Connecticut and the University of California, San Francisco are the leading research producers, with each school having produced 32 articles in the topic. The University of Minnesota Twin Cities (30 papers) and The University of North Carolina at Chapel Hill (29 documents) closely follow, indicating robust and consistent scholarly activity at these institutions.

Yale University, the University of Washington, and Columbia University have each conducted 28 studies, indicating similar research outputs and potentially well-developed research teams within these institutions. The University of Toronto, with 27 articles, is the only non-U.S. institution among the top contributors, highlighting Canada's robust participation at the institutional level.

The graph derived from the same data visually corroborates a very uniform distribution across the leading universities, with no university singularly prevailing in the field. The graph illustrates a cluster of many high-performing universities with minor variations in production, suggesting both collaborative and competitive academic cultures.

In summary, the table and graph collectively illustrate that research output is significantly concentrated among prestigious research-intensive universities, particularly in the USA, reflecting strong funding mechanisms, interdisciplinary collaboration, and established research centers.

✓ **Co-authorship Organization Network**

The provided co-authorship network demonstrates organizational level co-authorship structures. It has been generated through VOSviewer, showing the patterns of collaboration of the institutions of the selected research area. Each node on this network map represents an organization or an institutional affiliation. Node size represents publication output (number of documents), while the links between the nodes represent co-authorship. The varying thickness of the lines represents total link strength (TLS) or the level of collaboration of the institutions. The varying colors represent the different clusters according to the VOSviewer clustering algorithm, meaning institutions in the same cluster collaborate more with each other than with other institutions outside their cluster. Proximity in space in this case signifies stronger collaborative relationships.

The network illustrates a robustly interconnected North American research landscape with a dominance from the U.S. and Canadian universities. Notably, the turquoise cluster (Cluster 6) is anchored by the University of Toronto (20 documents, 513 citations, TLS = 32), a significant and impactful presence in the network. She is also well connected with The University of British Columbia (9 documents, 117 citations, TLS = 21), Simon Fraser University (8 documents, 150 citations), BC Centre for Disease Control (9 documents, 195 citations), and the Centre for Gender and Sexual Health Equity (7 documents, 155 citations). This cluster illustrates a primary Canadian collaboration hub, especially in the areas of public and gender/sexual health research.

The red and nearby clusters illustrate some of the major public health and medical institutions based in the United States. As an example, a strong West Coast collaboration hub has been established by the UCSF School of Medicine (13 documents, 212 citations, TLS = 27) and the Stanford University School of Medicine (9 documents, 29 citations, TLS = 42 at umbrella level). The Harvard Medical School, Harvard T.H. Chan School of Public Health, Brigham and Women's Hospital, and Fenway Community Health Center, similar to one another, have established a dense Boston based cluster (Cluster 4), which signifies a collaboration network that is geographically concentrated but extremely productive in terms of public health, epidemiology, and research on the health of the LGBTQ+ community.

The University of Maryland School of Public Health (15 documents, 954 citations), University of Michigan (15 documents, 289 citations), UNC Gillings School of Global Public Health (9 documents), and University of

Pennsylvania School of Nursing (7 documents, 163 citations) are all part of another significant cluster. The universities exhibit robust inter-institutional collaboration in the fields of epidemiology, behavioral sciences, and health disparities. The presence of departments such as Social and Behavioral Sciences (Yale University; 15 documents, 427 citations) and Human Development and Family Sciences (University of Connecticut; 24 documents, 362 citations) suggests that this field incorporates elements from both the social sciences and clinical psychology, as well as medicine.

The mapping network shows the research area is spatially focused on elite public health, medical, and social science universities in the U.S. and Canada. The clusters show research specialization and institutional proximity. For example, the cluster of Boston-based institutions and California-based institutions, and the Canadian institutions show research in epidemiology, sexual health equity, and social and behavioral sciences. The University of Toronto, Stanford University, Harvard-affiliated departments, and UCSF have high total link strength which shows them to be important knowledge production and collaboration hubs. The map shows best the spatial leadership in research, institutional research influence (citations and link strength), and the research collaboration framework in the area.

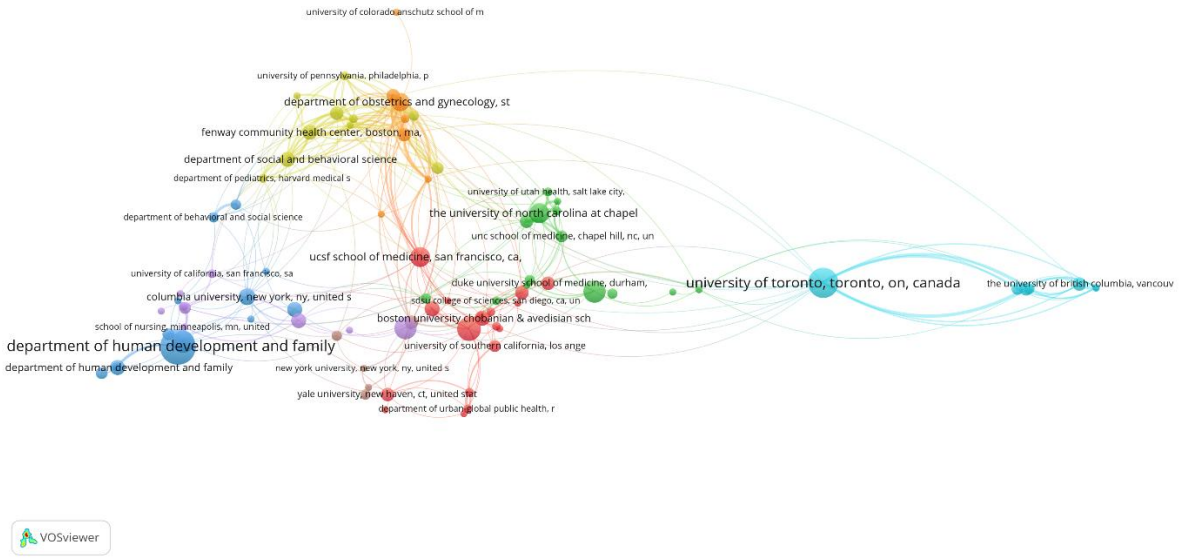
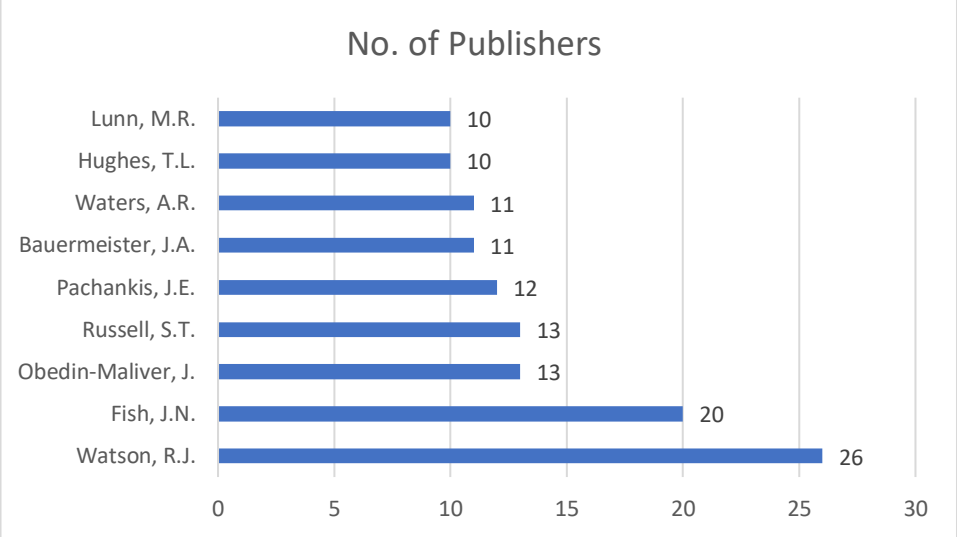


Figure 2. Co-authorship Organization Network Mapping

✓ **Analysis by Authors**

Table 5. Most Productive Authors based on number of publications

Author	No Of Publishers
Watson, R.J.	26
Fish, J.N.	20
Obedin-Maliver, J.	13
Russell, S.T.	13
Pachankis, J.E.	12
Bauermeister, J.A.	11
Waters, A.R.	11
Hughes, T.L.	10
Lunn, M.R.	10
TOTAL	126



Graph 5. Graphical Representation of Leading Authors

An examination of the author-level analysis reveals some scholars distinguished for their contributions to the discipline. Watson, R.J. dominates with 26 publications, undeniably a significant figure in this context. Immediately next is Fish, J.N., who has written 20 works, demonstrating significant impact as well.

A second group is having a consistent impact: Obedin-Maliver, J. and Russell, S.T. both have 13 publications. Pachankis, J.E. has 12, while Bauermeister, J.A. and Waters, A.R. each have 11. Hughes, T.L. and Lunn, M.R. own 10 each. All of them influence the trajectory of research in this domain.

The chart corroborates this assertion. Watson, R.J. ranks first, followed by a progressive decline in the numbers of other prominent writers. The disparity between them is minimal, indicating that the field does not solely center on one or two individuals. Instead, other researchers share the recognition. The chart and graph clearly indicate that although a select few researchers are very prolific, the discipline flourishes due to the contributions of several professionals. This pattern indicates a collaborative ethos and a multitude of topics throughout the investigation.

✓ **Co-authorship-authors mapping Network**

The illustration presents an author co-authorship network for the visualization tool VOSviewer, illustrating the extent of cooperation among leading researchers in LGBTQ studies. Each node represents the author, with the size of the node reflecting the individual's research output and/or overall connection strength (collaborative extent). Co-authorship links are represented by lines linking nodes, with line thickness indicating the level of cooperation. Various colors are used to differentiate clusters, which are groupings of authors exhibiting closer connections to one another than to those outside the group. The map illustrates the extent of cooperation among LGBTQ studies academics, indicating that scholars are clustered among a limited number of renowned research organizations rather than equitably distributing their efforts over the whole academic community.

The network reveals that certain authors function as pivotal hubs, notably Watson, R.J., Pachankis, J.E., Obedin-Maliver, J., Hughes, T.L., Bauermeister, J.A., Russell, S.T., and Fish, J.N. Among these, Watson, R.J. is distinguished as a particularly prominent and interconnected node, reflecting both a significant publication output and considerable collaborative engagement. The green cluster centered on Watson signifies a research team that is presumably homogenous, concentrating on the interconnections of mental health disparities among LGBTQ children, minority stress, and adolescent well-being. The high degree of dependency in this cluster indicates a close cooperation and targeted attention.

The second biggest cluster, shown in red and focused on Obedin-Maliver, J., underscores cooperation around LGBTQ health equality, medical education, and equity-inclusive clinical instruction. The robust interdependencies among authors in this cluster indicate a committed research community focused on health care systems, curriculum reform, and policy-related health services research. Similarly, the blue cluster centered on Hughes, T.L. aims to include LGBTQ health research, presumably addressing drug use, sexual health, and health disparities among underrepresented populations. The robust cooperation within scholarship in this domain indicates the presence of solid cooperative networks.

The orange clusters in the graph attributed to Bauermeister, J.A. seem more compact. This indicates that the writers have created a customized, but smaller, version. Collaborative organization potentially concentrating on HIV prevention, sexual health interventions, and the behavioral health of sexual minorities. Peripheral clusters and nodes indicate more specialized and perhaps nascent interactions, exemplifying the area's developing and dynamic character.

The links across clusters indicate that, despite a theme focus of research groups, some writers connect disparate fields, facilitating the integration of several disciplines. Pachankis, J.E. and Russell, S.T. seem to exemplify this phenomenon, since they occupy a position between two

clusters, demonstrating the potential integration of psychological, social, and health study domains.

This method of mapping co-authorship indicates that collaborative academic networks in LGBTQ research are well-established, with a select group of renowned writers at the forefront. The study indicates topic clustering in health, psychology, youth studies, and medical education, characterized by a semi-centralized structure in which major authors function as both intellectual and collaborative connections. The graphic indicates that the subject has grown, evolved, and become highly specialized, facilitating greater international and multidisciplinary cooperation.

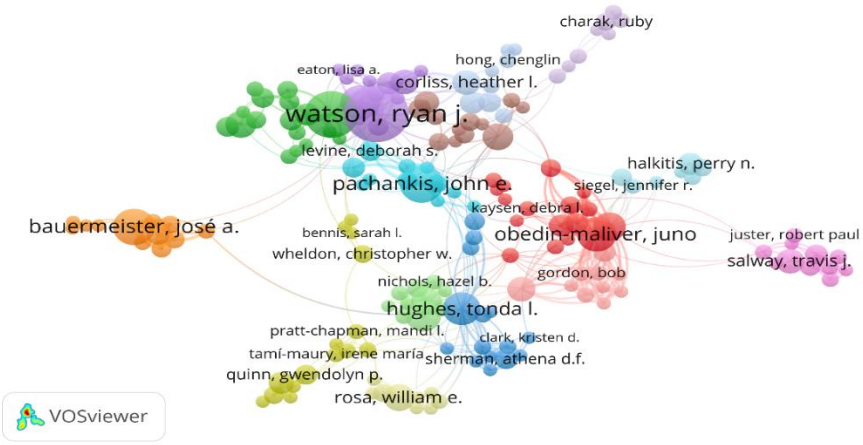


Figure 3. Co-authorship-authors mapping Network Mapping

✓ **Analysis by co-occurrence with all keywords**

The provided VOSviewer network visualization shows keyword co-occurrence in LGBTQ+ studies from the Scopus database. In this mapping technique, each node (circle) represents a keyword, the node size symbolizes the keyword occurrence frequency in the data set, the lines between the nodes depict co-occurrence relationships, and the link thickness represents the strength of the association. The various colors signify different clusters and represent thematic groupings of research topics that are frequently cited together in the literature. The closer the nodes are to each other, the stronger their conceptual relationship.

The most dominant and repeated term in the dataset is "sexual and gender minorities." Because of its central position, it acts as a core foundational point around which the rest of the data is organized. Surrounding the central node are various thematic clusters. In the red cluster, there is heavy concentration with the presence of the phrases "qualitative research", "procedures", "health equity", "leadership", "schools", "medical", and "nurse", showing a concentration on professional education, the health care system, and qualitative methodology within the LGBTQ+ research spectrum. Therefore, a considerable number of studies are directed towards the clinical training, institutional practices, attitudes, and access to healthcare of the sexual and gender minorities.

The blue cluster most significantly contains the phrases "depression", "suicidal ideation", "suicide attempt", "risk factor", "cannabis", "smoking", "tobacco use", and "alcohol", illustrating a substantial research flow focused on the behavioral risk factors aside from the mental health outcomes. In LGBTQ+ research, psychological distress and substance use are two themes that are particularly intertwined. Terms such as "middle aged", "United States", and "human" are adjacent and suggest an epidemiological and demographic focus, particularly on the U.S. based populations.

Another important cluster (green) contains keywords such as "student," "school," "interpersonal relations," "housing," "religion," and "child," and shows studies concentrated on the educational field, youth demographic, and social contexts. This cluster shows that research on the school climate, social relations, and structural factors is predominant, particularly involving adolescents and young adults who are sexual and gender minorities.

Most terms in the orange cluster represent health and disease. Such terms include "human immunodeficiency virus infection," "neoplasm," "early detection of cancer," and "HPV." This shows that biomedical and infectious disease research, particularly studies on HIV, continues to be a cornerstone of LGBTQ research. The location of the cluster in proximity to mental health and some demographic terms shows the potential inter-discipline of epidemiology, oncology, and behavioral health.

Nodes in the periphery of the cluster, such as "SARS-CoV-2," "prep," "diagnosis," and "health equity," indicate emerging and evolving research areas on the effects of COVID-19, HIV prevention, and the social determinants of health. The inclusion of geographic tags such as "United States," "Canada," and "Kenya" shows that although research output is concentrated in specific countries, it is becoming more transnational.

LGBTQ research has been mapped out in this network study and shows how interdisciplinary the field is, bringing together research in medicine, psychology, public health, pedagogy, and the social sciences. The health and mental health research terms strongly centralize on the network, whereas education and sociocultural terms are marginalized, suggesting complementarity. From the visualization, it seems that the available research is mostly qualitative, pointing to

a focus on lived experience and identity research. The network shows that the foci of contemporary LGBTQ research are mental health and behavioral risk, health care access and clinic services, and the social and educational milieu, with a notable ongoing focus on biomedical HIV-related research.

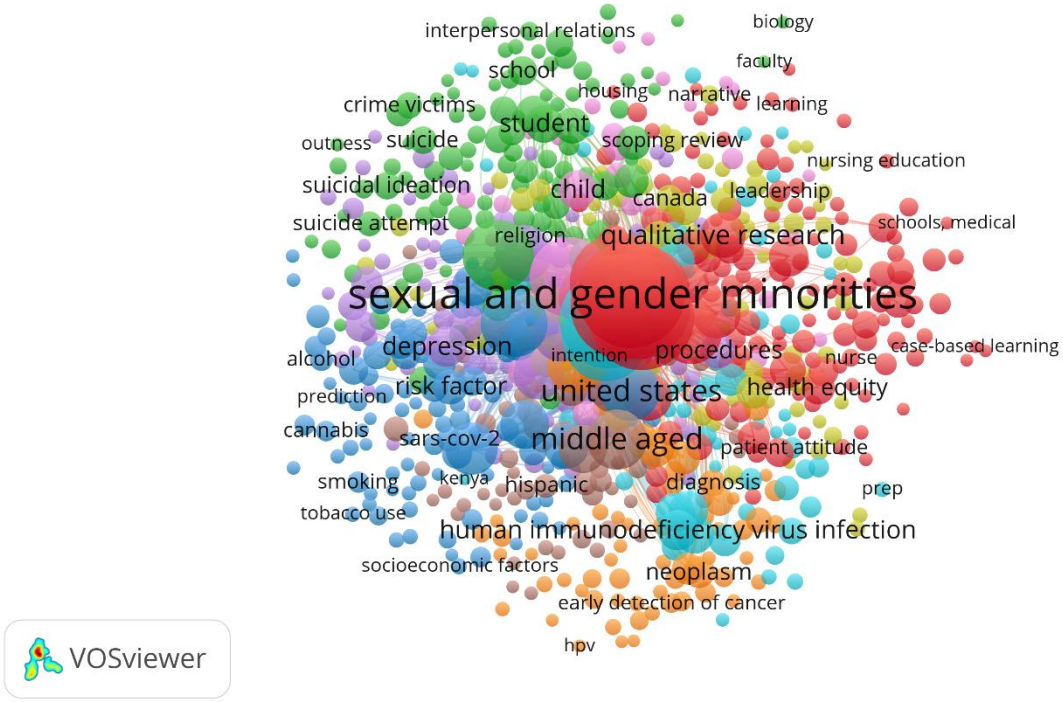


Figure 4. Analysis by co-occurrence with all keywords Network Mapping

✓ **Analysis by co-occurrence with author keywords**

The image provided shows author keywords co-occurrences in LGBTQ studies through Scopus, visualized through VOSviewer. Each node indicates an author keyword, and the size of the keyword reflects its frequency of occurrence. Lines indicate the co-occurrence of relationships among keywords in the same papers and the thickness of the line indicates total link strength (TLS), which determines how strong the relationships are conceptual. Each color shows a different cluster, and each cluster shows a specific theme of the domain. The bigger the nodes are, the more they are linked and the closer they are, the stronger the link associated with them.

In the center of the visualization, you will find the keywords biggest and most linked node. The keyword "LGBTQ" has 194 occurrences with a total link strength of 548. The other keyword "LGBTQ+" has 195 occurrences and a total link strength of 490. This illustrates the most central keywords in the research. Additionally, closely associated with these keywords are "sexual and gender minorities" (119, 329), "mental health" (94, 326), "transgender" (45, 190), and "sexual orientation" (53, 148), which shows that identity and mental health are among the most important central themes in the area.

The red cluster most often indicates research areas relating to HIV, stigma, and public health, featuring the descriptors "hiv," "men who have sex with men," "pre-exposure prophylaxis (PrEP)," "stigma," "public health," and "homophobia." These descriptors depict strong interlinkages and testify to both historical and current significance of research pertaining to HIV/AIDS and LGBTQ scholarship. Emerging descriptors like "mpox," "monkeypox," and "COVID-19" reflect the responsiveness of the field to evolving outbreaks of infectious diseases impacting sexual minority groups.

The green and blue clusters are predominantly mental health and psychosocial well-being, with the descriptors ("depression," "anxiety," "suicide," "suicidality," "substance use," "minority stress," "resilience," "social support," and "victimization") attesting to these. The strong total link strength of "mental health" and "minority stress" suggests that psychologic distress frameworks, especially Minority Stress Theory, are the most dominant theoretical background of contemporary research. The presence of "youth," "adolescents," "young adults," and "LGBTQ youth," with numerous occurrences and citation impact, indicates a mental health research focus on the adolescent and young adult age groups.

A major cluster (yellow/orange) focuses on healthcare disparities, equity, and systems, including "health disparities" (Occurrences = 30), "health equity" (Occurrences = 27), "healthcare," "primary care," "policy," and "medical education." The range of terms suggests various structural and systemic issues such as inclusive care, discrimination within health systems, and the integration of LGBTQ+ issues in medical education. The higher-than-average publication years (mostly 2023-2024) for "health equity," "nonbinary," and "gender diverse" indicate that structural equity and

gender diversity is an emerging area that is progressing quickly.

A separate, distinctly purple cluster considers the identity and socio-cultural aspects that comprise the terms "lesbian," "gay," "bisexual," "queer," "gender identity," "intersectionality," "race," and "family." The co-occurrence of "intersectionality" (Occurrences = 29, TLS = 94) is a testament to the increasing importance of the integration of frameworks of race, gender, and sexuality in the study of complex discrimination and the social determinants of health.

This mapping network shows the structure of LGBTQ studies as several interconnected, yet separate, thematic domains: (1) infectious diseases, including HIV, (2) mental health and minority stress, (3) youth and developmental studies, (4) health inequities and the health care system, and (5) identity, intersectionality, and sociocultural theory. The strong centrality of keywords relating to mental health, as well as the identity shift, suggests movement away from the traditionally dominant biomedical frameworks and toward more psych/social and structural frameworks. Furthermore, the average publication years (mostly 2022–2024) indicate that the area of study is highly contemporary and rapidly evolving.

This mapping network traces the structure of interconnected studies and reveals the thematic domains of LGBTQ studies. w from co-occurrence analysis.

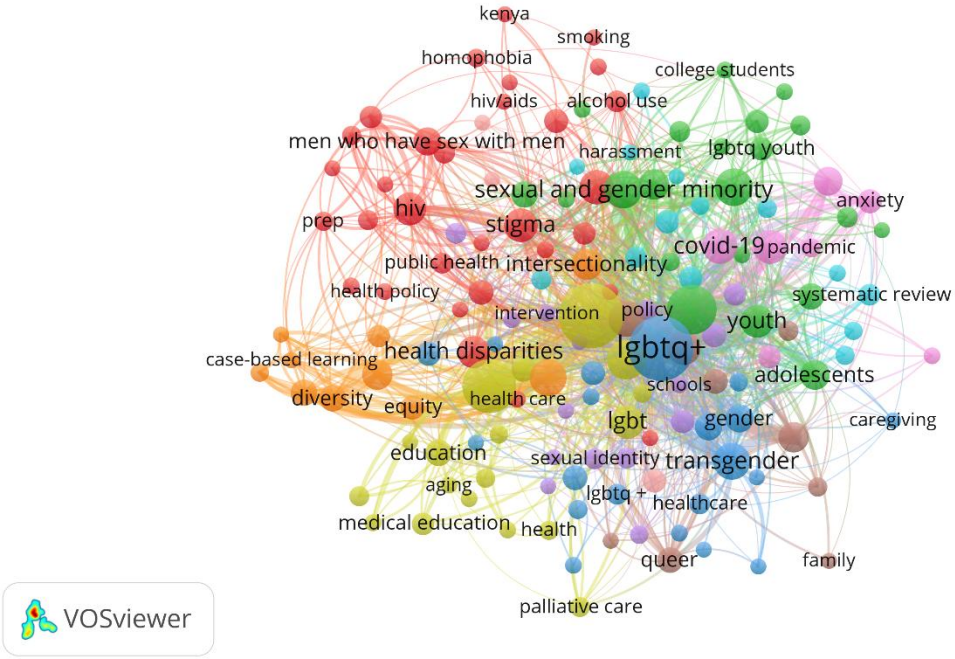


Figure 5. Analysis by co-occurrence with author keywords Network Mapping

✓ **Analysis by co-occurrence with index keywords**

This VOSviewer co-occurrence network diagram illustrates the system of relationships and the thematic growth of research within the chosen dataset based on indexed keywords. Each node in the diagram corresponds to a keyword, and the node size represents the number of times that keyword was recorded, while the connections that link the nodes represent co-occurrences in the same publications. The line connections depict the level of strength with which the nodes are associated, while the various colors represent the different groups of research themes that are associated with each other, as determined by VOSviewer's clustering algorithm. The thematic relationships of the nodes lie in proximity to each other, where keywords that are close together have been studied together more frequently, which specifies the conceptual and methodological frameworks contained within the body of literature.

The biggest and most notable nodes show "human," "psychology," "middle aged," "depression," "prevalence," and "human immunodeficiency virus infection." This means that the research area focuses on public and psychological health research that is human-centered. In the red cluster, the main topics are health, clinical practice, and education, with such terms as "medical student," "health care personnel," "sexual health," "clinical practice,"" and "prevention and control." This indicates that the educational health workforce and clinical research are applied. The green cluster covers the most mental health and behavioral risk factors via the terms "depression," "mental stress," "alcoholism," "cannabis use," "cigarette smoking," and "drinking behavior." This indicates a notable body of research around the psychosocial determinants of such behaviors and substance use. The blue cluster appears to cover the demographic and social aspects with such terms as "female," "homosexuality," "student," "school," "juvenile," and "crime victim." This points to research that covers gender identity, the youth population, and social vulnerability. The yellow and orange clusters cover the most epidemiology and disease-related topics via the terms "human immunodeficiency virus infection," "neoplasm," "early cancer diagnosis," "hospital," "covid-19," "socioeconomics," and "ethnic group." This indicates a

concentration of the intersections of chronic- and infectious disease, health deficits, and population-based health outcomes.

The central placement of both 'human' and 'psychology' illustrates that behavioral and psychological aspects are the core of the network connecting clinical health research, infectious diseases (especially HIV), mental health, and demographic variables. The strong relations between 'depression', 'HIV infection', 'sexual health', and 'prevalence' demonstrates that most studies focus on mental health and the epidemiological aspects of the most at risk populations. The proximity of the COVID-19 node to the socioeconomic and mental health nodes illustrates how research focus has changed about the psychosocial impact of the pandemic.

Mapping out this network demonstrates an interdisciplinary research amalgam of psychology, public health, infectious diseases, behavioral risk factors, and demographic determinants. It shows the the field is highly interconnected and not simply fragmented, with most of the research around mental health and HIV demonstrating that integration. The clustering in the network shows dominant trends, new intersections (such as COVID-19 and mental health), and research gaps where the connections are weak, to show where the integration could be. The network illustrates streams of research focus, cohesion intellectually, and where research focus is shifting in the field.

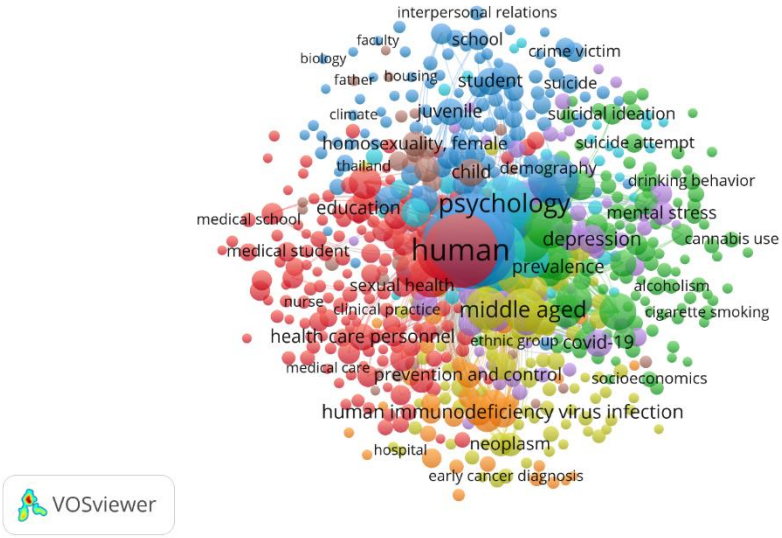


Figure 6. Analysis by co-occurrence with index keywords Network Mapping

5. Discussion

The present bibliometric study offers an overview of mapping the research of the global LGBTQ studies between the years 2020 and 2026 and shows a rapidly growing health-related and geographically concentrated academic landscape. Compared with previous bibliometric and systematic reviews, the results reinforce both the longstanding structural patterns and the significant thematic and geographical changes. Like other broader bibliometric assessments in health and social sciences (Donthu et al., 2021; Aria & Cuccurullo, 2017; van Eck & Waltman, 2010; Mongeon & Paul-Hus, 2016), the field shows exponential growth after 2022, as with international research on health equity, especially diversity and inclusion, driven by the socio-political issues and pandemic health research (Hatzenbuehler, 2016; Russell & Fish, 2016; Poteat et al., 2016), It shows increased research activity.

When looking at other publications in the field, the research focus of the United States falls within the same pattern as the studies conducted in the realm of global health and HIV/AIDS bibliometrics (Baral et al., 2013; Beyrer et al., 2012; Grépin & Haddad, 2009; Tran et al., 2019), whereby U.S.\-based institutions act as primary knowledge centers. The same Anglo-American concentration has also been observed in mental health (Patel et al., 2018), in stigma (Herek, 2009), and in studies of minority stress (Meyer, 2003). Although past overview articles on the LGBTQ community research demonstrated a nearly complete dominance of the West (Logie et al., 2012; Poteat et al., 2016), the current network is starting to show emerging and new connections across continents, specifically to, and including, Kenya, Thailand, India, Brazil, and Chile, indicating a developing decentralization. That said, representation from the Global South is still lacking, reflecting the persistent structural inequities analyzed in studies of global knowledge production (Connell, 2007; Alatas, 2003; Keim, 2008; Boshoff, 2009).

Thematic clustering illustrates the shift away from sole biomedical focus to integrated psychosocial and structural frameworks. LGBTQ+ scholarship has historically focused on pathology and the HIV/AIDS epidemic (Bayer, 1987; Epstein, 1996; Altman, 1994). Although HIV-related terms remain dominant, consistent with the global epidemiological literature (UNAIDS, 2023; Baral et al., 2013; Beyrer et al., 2012), this analysis shows mental health, minority stress, suicidality, and substance use to be equal or greater in prominence. This is consistent with psychosocial syntheses explaining the increased depression and suicidality in LGBTQ youth (Marshal et al., 2011; Russell & Fish, 2016; Johns et al., 2019), and the empirical consolidation of minority stress theory

(Meyer, 2003; Hatzenbuehler, 2016; Pachankis et al., 2015).

Compared with scholarship focused on intersectionality (Crenshaw, 1989; Bowleg, 2012; Collins, 2000; Hankivsky, 2014), the increased co-occurrence of the terms "race," "intersectionality," and "health equity," suggests greater theoretical integration than earlier reviews. Previous literature often criticized LGBTQ+ studies for inadequate consideration of racial and socio-economic diversity (Bowleg, 2012; Cohen, 1997; Collins, 2000). This analysis shows a tangible, albeit still developing, response to this criticism.

Multilevel absorption within elite American and Canadian universities corresponds to bibliometric studies on public health (Brownson et al. 2018), medical education (Obedin-Maliver et al. 2011), and research on health inequities (Braveman et al. 2011). The same clustering of pattern funding described in science policy (Geuna & Martin 2003; Stephan 2012) wraps around Harvard, UCSF, Toronto and UNC. On the other hand, Although the European research clusters collaborators networks, the degree of concentration is lesser than of the North American networks; this is consistent with the findings of the comparative scientometric studies of social science research in Europe (Glänzel & Schubert 2005; Wagner et al. 2015).

The comparison of co-occurring keywords illustrates the direction of change in the field. Previous decades concentrated on the categorization of homosexuality, and the HIV transmission and behavioral risks (Altman, 1994; Bayer, 1987). Currently dominant clusters include resilience, social support, school climate, policy, and structural stigma, all aligned with the ecological framework and the social determinants of health (Bronfenbrenner, 1979; Solar & Irwin, 2010; Marmot 2005). The scholarship on LGBTQ studies responding to COVID-19, and to the emerging global crises,

6. Conclusion

This study examines worldwide LGBTQ research from 2020 to 2026, delineating overarching trends and interconnections within the field. The team extracts data from Scopus and analyzes it using VOSviewer, monitoring publication frequency, citation patterns, collaborative efforts across nations and institutions, and recurring research subjects. A notable increase in new research has emerged post-2022, mostly occurring in the US, UK, and Canada. These nations occupy a pivotal position in global cooperation, fostering robust connections across the Atlantic and increasingly engaging with Asia, Latin America, and Africa.

The emphasis of LGBTQ research is also evolving. Previously, HIV and biological research were predominant; however, there is now increased focus on minority stress, mental health, intersectionality, adolescent well-being, structural stigma, and health equality. The discipline is expanding and becoming more interconnected; nonetheless, some disparities persist—particularly with scholars and institutions from the Global South, who remain underrepresented.

The research encompasses a domain that is establishing itself and expanding. The findings provide academics, policymakers, and funders with a framework for establishing a more inclusive, collaborative, and genuinely global LGBTQ research community.

References

1. Altman, D. (1999). Globalization, political economy, and HIV/AIDS. *Theory and Society*, *28*(4), 559-584.
2. Aria, M., & Cuccurullo, C. (2017). bibliometrix: An R-tool for comprehensive science mapping analysis. *Journal of informetrics*, *11*(4), 959-975.
3. Baral, S. D., Poteat, T., Strömdahl, S., Wirtz, A. L., Guadamuz, T. E., & Beyrer, C. (2013). Worldwide burden of HIV in transgender women: a systematic review and meta-analysis. *The Lancet infectious diseases*, *13*(3), 214-222.
4. Bayer, R. (1987). *Homosexuality and American psychiatry: The politics of diagnosis*. Princeton University Press.
5. Bayer, R. (2010). *Private acts, social consequences*. Simon and Schuster.
6. Beyrer, C., Baral, S. D., Van Griensven, F., Goodreau, S. M., Chariyalertsak, S., Wirtz, A. L., & Brookmeyer, R. (2012). Global epidemiology of HIV infection in men who have sex with men. *the Lancet*, *380*(9839), 367-377.
7. Booth, A., Mitchell, A. S., Mott, A., James, S., Cockayne, S., Gascoyne, S., & McDaid, C. (2020). An assessment of the extent to which the contents of PROSPERO records meet the systematic review protocol reporting items in PRISMA-P. *F1000Research*, *9*, 773.
8. Boshoff, N. (2009). Neo-colonialism and research collaboration in Central Africa. *Scientometrics*, *81*(2), 413-434.
9. Bowleg, L. (2012). The problem with the phrase women and minorities: intersectionality—an important theoretical framework for public health. *American journal of public health*, *102*(7), 1267-1273.
10. Braveman, P. (2006). Health disparities and health equity: concepts and measurement. *Annual review of public health*, *27*(1), 167-194.
11. Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design* (Vol. 352). Harvard university press.
12. Brotman, S., Ryan, B., & Cormier, R. (2003). The health and social service needs of gay and lesbian elders and their families in Canada. *The Gerontologist*, *43*(2), 192-202.
13. Brownson, R. C., Baker, E. A., Deshpande, A. D., & Gillespie, K. N. (2018). *Evidence-based public health*. Oxford university press.
14. Butler, J., & Trouble, G. (1990). Feminism and the Subversion of Identity. *Gender trouble*, *3*(1), 3-17.
15. Cohen, C. J. (2020). Punks, bulldaggers, and welfare queens: The radical potential of queer politics?. In *Feminist theory reader* (pp. 311-323). Routledge.
16. Collins, P. H. (2022). *Black feminist thought: Knowledge, consciousness, and the politics of empowerment*. routledge.
17. Connell, R. (2007). The northern theory of globalization. *Sociological theory*, *25*(4), 368-385.

18. Crenshaw, K. (1989). University of Chicago Legal Forum.
19. Crenshaw, K. W. (1989). Demarginalizing the intersection of race and sex: A black feminist critique of antidiscrimination doctrine (pp. 139–168). In *University of Chicago legal forum* (Vol. 1).
20. Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021). How to conduct a bibliometric analysis: An overview and guidelines. *Journal of business research*, *133*, 285-296.
21. Duflo, E., & Dupas, P. (2009). and Michael Kremer. *Additional Resources Versus Organizational Changes in Education: Experimental Evidence from Kenya*.
22. Epstein, S. (1996). *Impure science: AIDS, activism, and the politics of knowledge* (Vol. 7). Univ of California Press.
23. Fish, J. (2006). *Heterosexism in health and social care*. Springer.
24. Fredriksen-Goldsen, K. I., Kim, H. J., Barkan, S. E., Muraco, A., & Hoy-Ellis, C. P. (2013). Health disparities among lesbian, gay, and bisexual older adults: Results from a population-based study. *American journal of public health*, *103*(10), 1802-1809.
25. Geuna, A., & Martin, B. R. (2003). University research evaluation and funding: An international comparison. *Minerva*, *41*(4), 277-304.
26. Glänzel, W. (2005). CONFERENCE CALLS.
27. Haghani, M., Bliemer, M. C., Goerlandt, F., & Li, J. (2020). The scientific literature on Coronaviruses, COVID-19 and its associated safety-related research dimensions: A scientometric analysis and scoping review. *Safety science*, *129*, 104806.
28. Hankivsky, O. (2014). Intersectionality 101, 1–34. *Canada: The Institute for Intersectionality Research & Policy, SFU*.
29. Hatzenbuehler, M. L. (2017). Structural stigma and health. *The Oxford handbook of stigma, discrimination, and health*, *105*.
30. Hatzenbuehler, M. L. (2017). Structural stigma and health. *The Oxford handbook of stigma, discrimination, and health*, *105*.
31. Herek, G. M. (2009). Sexual stigma and sexual prejudice in the United States: A conceptual framework. In *Contemporary perspectives on lesbian, gay, and bisexual identities* (pp. 65-111). New York, NY: Springer New York.
32. Herek, G. M. (2018). Setting the record "straight": Communicating findings from social science research on sexual orientation to the courts. *The Oxford handbook of social psychology and social justice*, 405.
33. Jagose, A. (1996). *Queer theory: An introduction*. nyu Press.
34. King, M., Semlyen, J., Tai, S. S., Killaspy, H., Osborn, D., Popelyuk, D., & Nazareth, I. (2008). A systematic review of mental disorder, suicide, and deliberate self harm in lesbian, gay and bisexual people. *BMC psychiatry*, *8*(1), 70.
35. Kollman, K. (2013). The Same-Sex Unions Revolution and the Domestic Politics of International Learning.
36. Kollman, K. (2016). The same-sex unions revolution in Western democracies: International norms and domestic policy change. In *The same-sex unions revolution in western democracies*. Manchester University Press.
37. Kosciw, J. G., Clark, C. M., Truong, N. L., & Zongrone, A. D. (2020). *The 2019 National School Climate Survey: The Experiences of Lesbian, Gay, Bisexual, Transgender, and Queer Youth in Our Nation's Schools. A Report from GLSEN*. Gay, Lesbian and Straight Education Network (GLSEN). 121 West 27th Street Suite 804, New York, NY 10001.
38. Logie, C., & Logie. (2021). *Working with excluded populations in HIV*. Springer International Publishing.
39. Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: conceptual issues and research evidence. *Psychological bulletin*, *129*(5), 674.
40. Nyoni-Wood, Z. Sexual orientation and gender identity in Africa: Between progress and struggle. In *The Routledge Companion to Gender and Crime* (pp. 139-148). Routledge.
41. Reisner, S. L., Poteat, T., Keatley, J., Cabral, M., Mothopeng, T., Dunham, E., ... & Baral, S. D. (2016). Global health burden and needs of transgender populations: a review. *The Lancet*, *388*(10042), 412-436.
42. Russell, S. T., & Fish, J. N. (2016). Mental health in lesbian, gay, bisexual, and transgender (LGBT) youth. *Annual review of clinical psychology*, *12*(1), 465-487.
43. Turner, J. C., & Reynolds, K. J. (2003). The social identity perspective in intergroup relations: Theories, themes, and controversies. *Blackwell handbook of social psychology: Intergroup processes*, 133-152.
44. Van Eck, N., & Waltman, L. (2010). Software survey: VOSviewer, a computer program for bibliometric mapping. *scientometrics*, *84*(2), 523-538.
45. Waaldijk, K. (2020). What first, what later? Patterns in the legal recognition of same-sex partners in European countries. In *Same-sex families and legal recognition in Europe* (pp. 11-44). Cham: Springer International Publishing.