

Bibliometric Analysis of Studies on Family Health and Empathy in Family Counseling

Alperen GÜLBİLGE¹

Gülay DEMİR²

Canan ÇİTİL AKYOL³

Abstract

The family plays a vital role as the cornerstone of society by addressing the physical, emotional, and social needs of individuals. Research on family health and empathy has received increasing attention in recent years. This study aims to conduct a bibliometric analysis of international academic publications on family health and empathy between 2014 and 2024, to provide insights into research trends, and to identify significant contributors to the field. A dataset of 199 articles focusing on academic studies conducted globally in the context of family health and empathy was retrieved from the Scopus database. R Studio (Biblioshiny) and VOSviewer software were used for bibliometric analysis in the study. The analysis examined publication trends, key topics, influential journals, and significant contributors. Keywords such as “family health” and “empathy” were used to identify relevant articles. The findings revealed that the United States is the most productive country in this field. The most frequently used keywords included “empathy,” “mental health,” and “family.” Child Abuse & Neglect has emerged as one of the most productive journals, highlighting the importance of research addressing family health and empathy. Concurrent network analysis revealed a strong thematic focus on mental health and family dynamics. The study highlights the increasing importance of family health and empathy in the literature over the past decade. These findings provide valuable guidance for future research by identifying key trends, influential resources, and opportunities for collaboration in this area.

Keywords: Family health, empathy, bibliometric analysis, VOSviewer

Introduction

The family has been the cornerstone of social life throughout human history and has been a subject of study in many disciplines. A healthy family structure allows individuals to meet their physical, emotional, and social needs while contributing to the overall well-being of society. Research has shown that a healthy family environment fosters essential skills such as problem-solving, communication, and empathy (Avşaroğlu, 2022). Therefore, family health is critically important on both individual and societal levels.

Studies indicate that a healthy family environment develops fundamental skills such as problem-solving, communication, and empathy in individuals. In this context, it is evident that family health directly impacts not only individuals but also society. Since the family is the smallest structural unit of society, its significance is undeniable. For example, a study by Avcı and Güçray (2010) observed that adolescents exhibiting violent tendencies often came from families with unhealthy dynamics in areas such as family roles and expressions of anger, whereas adolescents without violent tendencies had a healthy family

¹Yüksek Lisans Öğrencisi, Sivas Cumhuriyet Üniversitesi Sağlık Bilimleri Enstitüsü Aile Danışmanlığı Ana Bilim Dalı,

20249181006@cumhuriyet.edu.tr , <https://orcid.org/0009-0007-7309-2363>

²Doç. Dr., Sivas Cumhuriyet Üniversitesi, Sağlık Hizmetleri Meslek Yüksekokulu, Sivas, Türkiye,

gulaydemir@cumhuriyet.edu.tr, <https://orcid.org/0000-0002-3916-7639>

³Dr Öğretim Üyesi, Sivas Cumhuriyet Üniversitesi, Edebiyat Fakültesi Psikoloji Bölümü, Sivas, Türkiye, canancitilakyol@cumhuriyet.edu.tr (<https://orcid.org/0000-0002-1596-5097>)

environment. The literature emphasizes that the family is the starting point for societal change and development.

It is unrealistic to expect problems not to exist in healthy families; however, healthy families can resolve emerging issues with constructive approaches. In such families, it is observed that family members strive to understand each other and focus on problem-solving (Bayer, 2018). In this regard, the ability to empathize emerges as a fundamental element of a healthy family structure. Brems (1989) defines empathy as the ability of an individual to place themselves in another's position and attempt to understand their emotions, thoughts, and behaviors. A lack of empathy leads to conflicts in social relationships, while a high level of empathy plays a crucial role in achieving individual and societal harmony (Bozdağ & Bozdağ, 2021).

Empathy is a skill developed through different motivations. According to Dovidio (2000), empathy can be explained through two main approaches: the first is an egoistic approach, where the individual seeks to relieve their own discomfort by empathizing. In this approach, helping behavior reflects the individual's effort to improve their emotional state rather than considering the other person. The second approach is altruistic empathy, where the individual develops a sincere attitude aimed at understanding and assisting the other person.

The literature shows that researchers like Hogan (1969) conceptualize empathy as consisting of two dimensions: cognitive and emotional. While the cognitive dimension involves understanding thoughts and providing appropriate responses, the emotional dimension involves understanding feelings and reacting accordingly. Even today, empathy is generally accepted in terms of these two dimensions (Eklund & Meranius, 2021).

Debates exist regarding the age at which empathy develops. Social learning theory suggests that individuals begin to develop empathy in infancy by imitating the facial expressions of caregivers and shaping emotional responses accordingly. Katz (1963) found that individuals have more difficulty empathizing with strangers than with people they know, highlighting the need for empathy skills to be nurtured within the family from an early age. Family members approaching each other with empathy can positively influence the empathy levels of both children and parents (cited in Karagüven, 2015).

Empathy involves understanding another person's feelings, thoughts, and needs. For this, individuals must first be aware of their own emotions, thoughts, and needs. Those who cannot fully understand their own situation are unlikely to perceive others effectively (Altınbaş et al., 2010).

In families, empathy is fostered by both parents. Interaction-based approaches play a crucial role in internalizing empathy. Temur (2006) highlights those young children, who often express themselves through actions and attitudes rather than words, require empathetic approaches for better understanding. Research also supports the notion that empathy is cultivated through interaction. For example, children with both parents present are observed to develop empathy more easily compared to children of separated parents (Arslan, 2016). This underscores the importance of both parents for a child's healthy development. The level of empathy within a family varies according to the quality of interactions. A study found that families who spend more time with their children exhibit higher empathy levels compared to families with limited interaction (Şirin et al., 2018). The relationship between family health and empathy levels is considered a critical factor in individuals' emotional and social harmony.

Bibliometric analyses that address both empathy and family health concepts together are rare in the literature. Existing studies generally focus on these concepts individually. For example, a bibliometric analysis on empathy reviewed 1,135 articles indexed in Web of Science between 2013 and 2023, finding that most of the studies focused on health, psychology, and education (Bekiroğlu & Güllühan, 2024). Similarly, an analysis in China on nurses' empathy abilities examined 108 articles and observed that most studies were hospital-based and non-experimental in nature (Huang et al., 2018). Another bibliometric study on family health and nursing examined 594 articles published between 1957 and 2016 across 42 countries, identifying the University of São Paulo as the most productive institution in this field (Lago et al., 2017). Additionally, a study analyzing over 13,000 publications on empathy written in various languages between 1996 and 2015 noted a shift in focus from personality traits to social cognition (Jiang & Su, 2017). Another analysis using the keyword "empathy for pain" reviewed 479 publications and found that studies in this field often focused on themes like perception, empathy, and emotion (Yang et al., 2024). These findings underscore the importance of studies that integrate empathy and family health in contributing to the literature.

Present Study

This research presents a bibliometric analysis of studies conducted between 2014 and 2024 using the keywords "family health" and "empathy." The aim is to identify the total number of studies in this field, the most contributing authors, citation trends, and leading countries. To the best of the authors' knowledge, this bibliometric analysis is the first of its kind to examine empathy and family health together in the literature. The study contributes to the academic field by compiling existing data on family health and empathy and exploring their presence in scholarly literature. It aims to serve as a significant resource not only in psychology and sociology but also in education, healthcare services, and family policy development processes. The findings of the bibliometric analysis can help understand studies conducted in different countries and highlight key trends in this area. Additionally, it can foster international collaboration and contribute to the development of new interdisciplinary projects. Overall, this study has the potential to create a broad impact in both academic and practical fields.

This study aims to present research on the concepts of "family health" and "empathy" in the literature. Since these concepts are often examined independently in the literature, analyzing them together and showcasing related studies could be beneficial for researchers interested in this field. This study aims to understand the academic significance of family health and empathy concepts and shed light on gaps in the field.

Considering this information, the following research questions (RQ) were developed:

RQ-1: What are the current growth and citation trends of articles in the field of family health and empathy?

RQ-2: Who are the most cited authors in this field?

RQ-3: Which publications, journals, organizations, and countries receive the most citations?

RQ-4: What are the key topics and points of studies related to family health and empathy?

Method

Research Design

This study adopts a bibliometric analysis method, which is descriptive in nature. Knowledge, which forms the foundation of scientific studies, has served humanity's needs throughout history. With advancements in science, accessing knowledge has become much easier compared to the past. However, ensuring that the obtained knowledge is reliable, relevant, and up to date is crucial. Instead of working with collective information, working with classified data increases usability. At this point, bibliometric analysis becomes useful. Bibliometric analysis quantitatively presents bibliographic data. It uses an internet-based approach to reveal trends and developments in a particular field, analyze citations, identify countries' research intensities, and examine the ratio of articles, books, and journals, as well as related keywords within a specified time frame. Furthermore, bibliometric analysis identifies unexplored areas of a topic and highlights potential avenues for future research (Ellegaard & Wallin, 2015; Passas, 2024). Since it included bibliometric analysis, an ethics committee decision was not required.

Data Collection

The data collection process was carried out following these steps:

Database: The first step in bibliometric analysis is selecting an appropriate database. For this study, Scopus was chosen due to its extensive coverage. Scopus provides researchers with a wide range of journals, books, articles, and other academic publications classified by parameters such as year, language, and type of publication (Demir et al., 2024). Additionally, Scopus is considered the most powerful search engine in the social sciences field (Martín-Martín et al., 2018).

Keywords: The keywords "family health" and "empathy" were used to identify the academic presence of these concepts in the literature. In the second step, the filtered data were retrieved from the database. The core dataset consisted of 3,158 articles. After filtering for the years 2014–2024, the dataset was narrowed to 1,750 articles. Filtering for the psychology field reduced the dataset to 264 articles, and further filtering for only articles resulted in 217 entries. After selecting English as the language, the dataset was refined to 207 articles. After applying additional filters for source type and publication stage, only 194 articles were accessible when the dataset, originally consisting of 199 articles, was downloaded for analysis.

Selection Criteria: Once the key concepts were identified, selection criteria were clarified.

Language of publication: English

Publication types: Articles published in peer-reviewed journals

Subject areas: Studies focusing on empathy and family health in the fields of psychology, sociology, education, and health

Publication years: 2014–2024

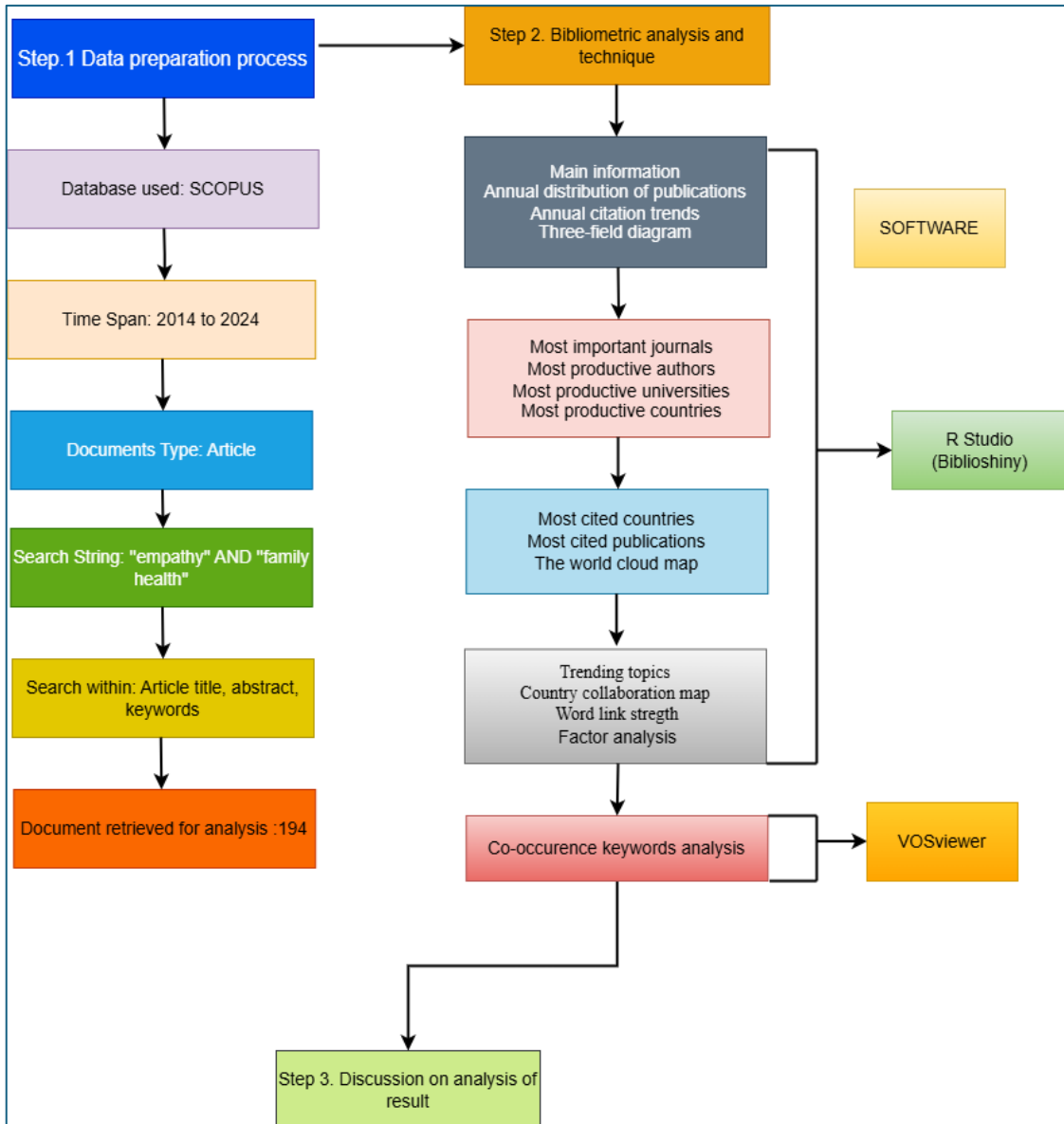
Data Analysis

To analyze the collected data, **R Studio** and **VOSviewer** were chosen. Using R Studio (Biblioshiny), data analysis begins by entering the commands library (bibliometrix) and biblioshiny() to access the Biblioshiny interface. The data, downloaded in Excel format, are then uploaded to the interface. The

bibliometric analysis was performed using these tools to generate metrics such as main information, annual publication and citation trends, three-field plots, journals, authors, universities, countries, keywords, trending topics, thematic maps, and factor analysis. Figure 1 illustrates the bibliometric analysis process.

Figure 1

Bibliometric Analysis Flowchart



Results

The information of the dataset created with the keywords "family health" and "empathy" in the Scopus database between 2014–2024 is presented in Table 1.

Table 1

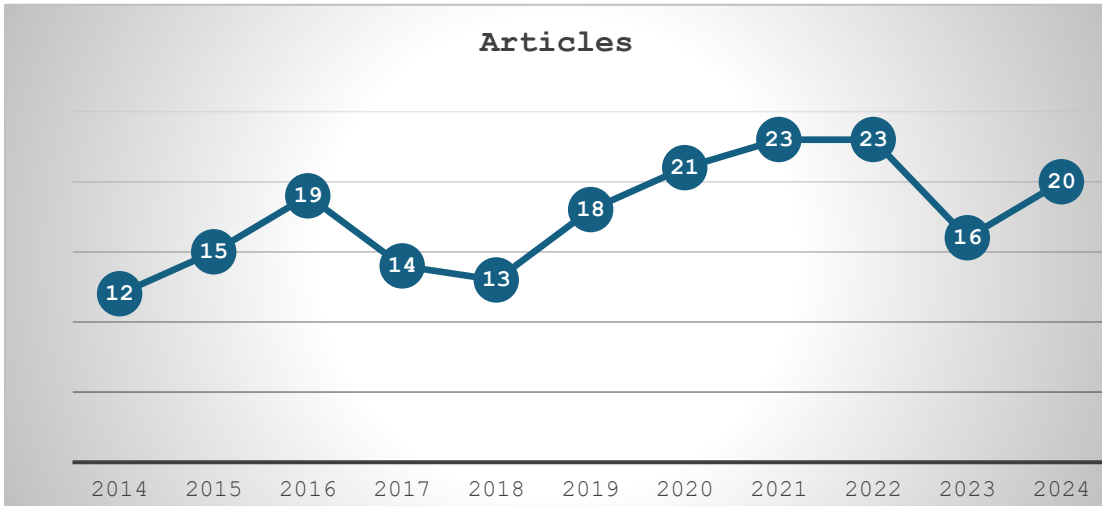
Main Information About Data

Description	Results
Timespan	2014:2024
Sources (Journals, Books, etc)	117
Article	194
Annual Growth Rate %	5.24
Document Average Age	4.58
Average citations per doc	16.27
References	9915
Author's Keywords (DE)	721
Authors	829
Authors of single-authored docs	14
Co-Authors per Doc	4.35
International co-authorships %	22.16

According to Table 1, a total of 194 articles from 117 sources were included in the analysis. The annual growth rate of publications is 5.24%. Among the 829 authors, only 14 have published single-authored works. The international collaboration rate among countries is 22.16%. The annual publication trends are shown in Figure 2.

Figure 2

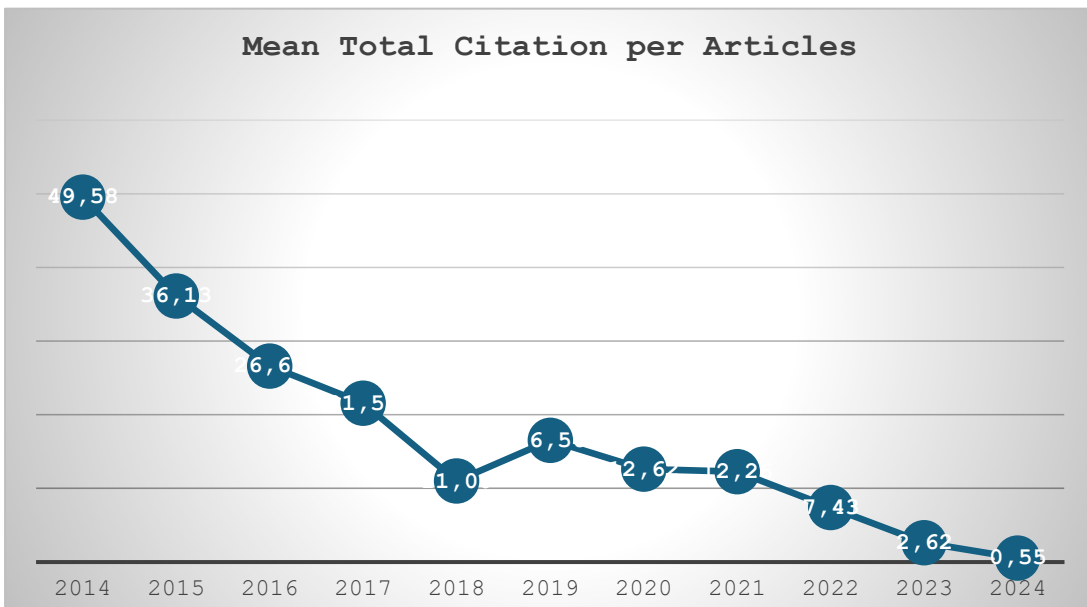
Annual Distribution of Publications



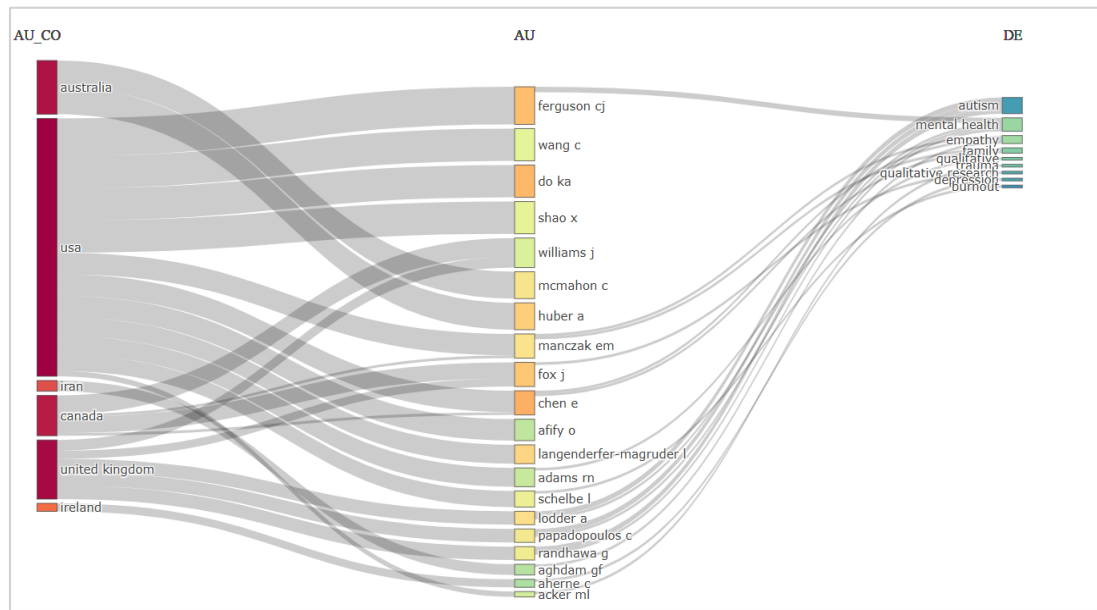
According to Figure 2, the annual distribution of studies related to the concepts of "family health" and "empathy" shows that 20 studies were conducted in 2024, 16 in 2023, and 23 in 2022. Figure 3 presents the annual average citations of the publications.

Figure 3

Annual Citation Trends



In Figure 3, the annual trends of citations related to the key concepts are observed. A decrease in citations is noted as the number of publications increases. Figure 4 presents a three-field diagram analysis consisting of country, author, and keyword parameters.

Figure 4*Three-Field Diagram*

According to Figure 4, the most significant parameters are interpreted based on the size of the rectangles. The three-field diagram, also known as the Sankey diagram, examines three parameters: country, author, and keyword. In the diagram, the most significant country is the United States, the most significant author is Ferguson CJ, and the most significant keyword is *autism*. Table 2 lists the most productive journals.

Table 2

The Most Productive Journals

Sources	Articles
Journal of EMDR Practice and Research	31
European Journal of Psychotraumatology	11
European Journal of Trauma and Dissociation	6
Counselling and Psychotherapy Research	5
Frontiers in Psychology	4
Clinical Case Studies	3
Clinical Child Psychology and Psychiatry	3

According to Table 2, in the analysis conducted between 2014 and 2024 with the keywords "family health" and "empathy," the Child Abuse and Neglect journal ranks first with 31 articles, Frontiers in Psychology ranks second with 11 articles, and Health Psychology, Journal of Interpersonal Violence, and Psycho-Oncology share the third position with 6 articles each.

Table 3

The Most Productive Authors

Authors	Number of Documents
Chen E	2
Do Ka	2
Ferguson Cj	2
Fox j	2
Huber A	2
Langenderfer- Magruder L	2
Lodder A	2

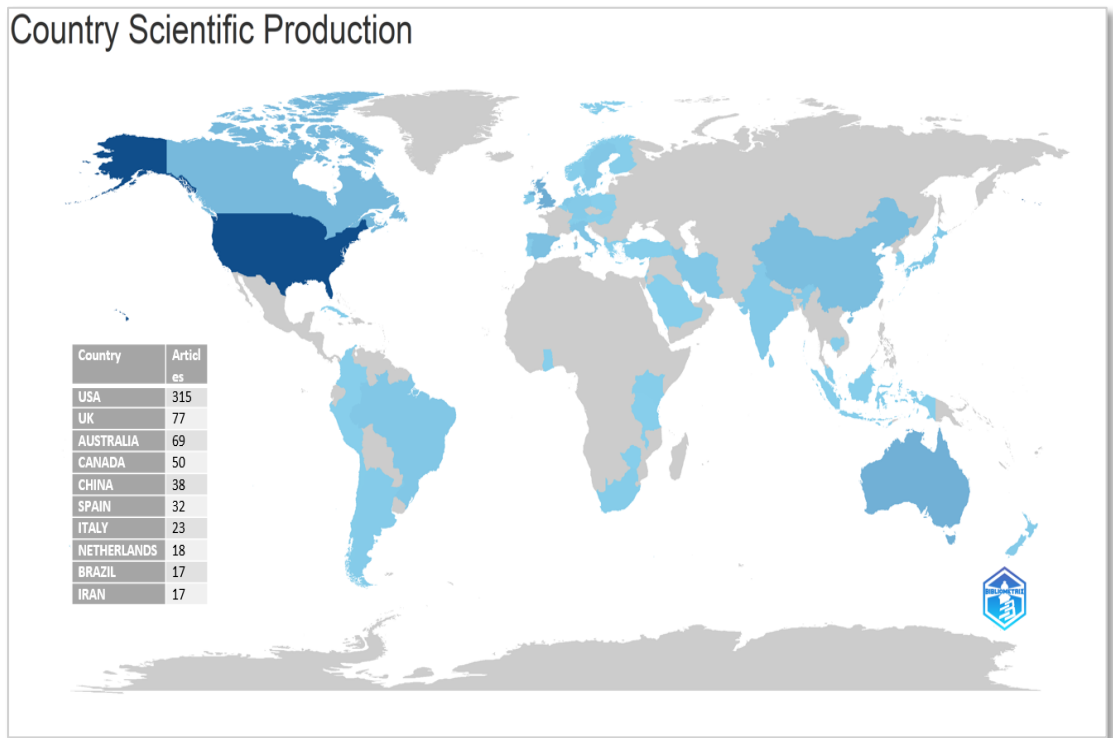
Table 3 highlights the most productive authors working on the key concepts. Some of these authors include Chen E, Do KA the most productive universities.

Table 4

The Most Productive Universities

Affiliation	Articles
University of California	12
University of New South Wales	10
University of Toronto	10
University of Maryland	9
Florida State University	8
Shiraz University of Medical Sciences	8

According to Table 4, the University of California ranks first in productivity with 12 articles, followed by the University of New South Wales and the University of Toronto with 10 articles each, and the University of Maryland in third place with 9 articles. Figure 5 shows the most productive countries on the world map.

Figure 5*The Most Productive Countries*

In Figure 5, the analysis of studies conducted with the keywords "family health" and "empathy" highlights the most productive countries. On the map, dark colors (navy blue) indicate the countries with the highest number of studies, shades of blue represent countries with fewer studies, and gray indicates countries with no studies (Demir et al., 2024a). The United States ranks first with 315 articles, followed by the United Kingdom with 77 articles, and Australia with 69 articles.

Table 5*The Countries Receiving the Highest Number of Citations*

Country	Total Citations
Usa	1079
Australia	317
United Kingdom	229
Netherlands	218
China	201
Spain	146
Canada	138

Portugal	71
Sweden	64
Malaysia	52

According to Table 5, the United States ranks first with 1,079 citations related to the keywords, followed by Australia with 317 citations and the United Kingdom with 229 citations.

Table 6

The Most Cited Publications

Paper	DOI	Total Citations
Timmons Ac, 2015, Journal of Family Psychology	10.1037/fam0000115	194
Hoefman R, 2014, Journal of Autism and Developmental Disorders	10.1007/s10803-014-2066-1	120
Bois K, 2016, Health Psychology	10.1037/hea0000289	79
Jiang Y, 2016, Journal of Adolescence	10.1016/j.adolescence.2016.09.005	77
Papadopoulos C, 2019, Journal of Autism and Developmental Disorders	10.1007/s10803-018-3835-z	74
Del Rey R, 2016, Aggressive Behavior	10.1002/ab.21608	73
Manczak Em, 2016, Health Psychology official journal of the Division of Health Psychology, American Psychological	10.1037/hea0000281	71
Lehmann V, 2014, Psycho-Oncology	10.1002/pon.3549	68
Hostinar Ce, 2014, Development and Psychopathology	10.1017/S0954579414000066	68

According to Table 6, the article titled “Physiological Linkage in Couples and Its Implications for Individual and Interpersonal Functioning: A Literature Review” by Timmons et al. (2015), published in the Journal of Family Psychology, ranks first with 194 citations. The article “Caring for a Child with Autism Spectrum Disorder and Parents' Quality of Life: Application of the CarerQol” by Hoefman et al. (2014), published in the Journal of Autism and Developmental Disorders, ranks third with 120 citations.

The word "male" appears 180 times, making it the second most frequently mentioned word during the first quarter of 2016, the second quarter of 2019, and the third quarter of 2021. The word "child" is repeated 103 times, making it the third most popular word mentioned during the first quarter of 2017, the second quarter of 2020, and the third quarter of 2022. Figure 8 presents the collaboration map of countries.

Figure 8

Country Collaboration Map

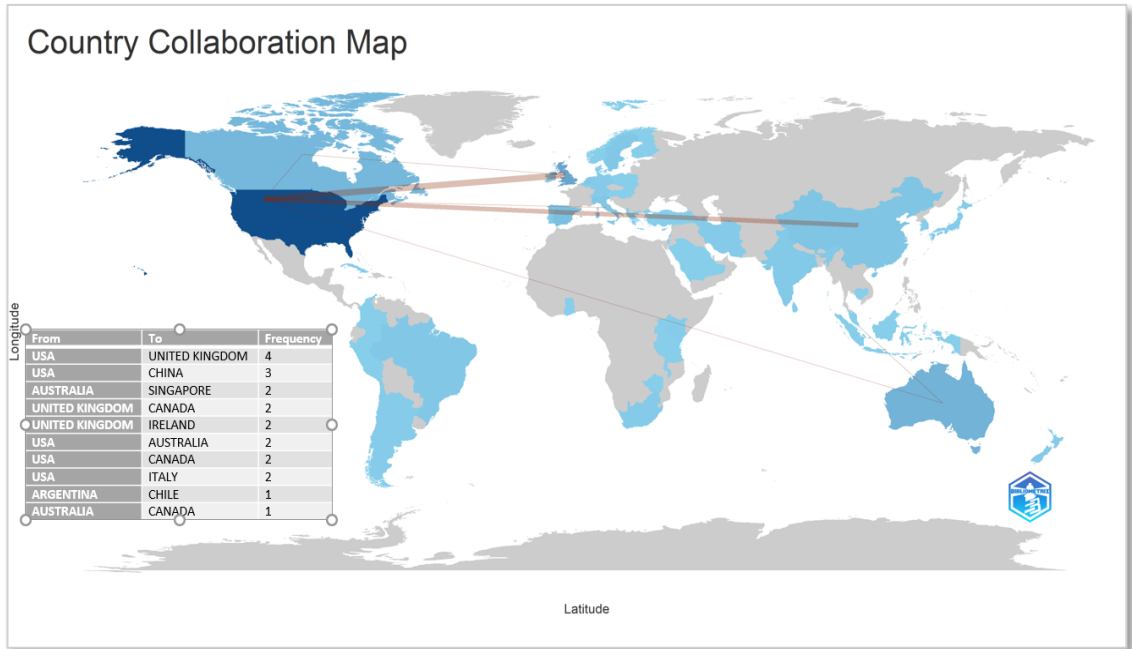


Figure 8 illustrates the collaboration map of countries. According to the map, thick brown lines represent strong collaboration between countries, while thin brown lines indicate a lower frequency of collaboration. The United States and the United Kingdom collaborated 4 times; the United States and China, 3 times; Australia and Singapore, 2 times; the United Kingdom and Canada, 2 times; the United Kingdom and Ireland, 2 times; the United States and Australia, 2 times; the United States and Canada, 2 times; and the United States and Italy, 2 times. The United States stands out as the global leader in international collaboration. Table 8 presents the word link strength analysis related to concepts.

Table 8

The Word Link Strength

Keywords	Occurrences	Total link strenght
empathy	28	23
parents	5	10
mental health	11	9
family	8	8
mindfulness	5	8

qualitative	8	8
qualitative research	7	8
self-compassion	5	8
cancer	4	7
parenting	9	7

According to Table 8, the three words with the highest link strength are empathy, parents, and mental health. Figure 9 presents the factor analysis.

Figure 9

The Factor Analysis

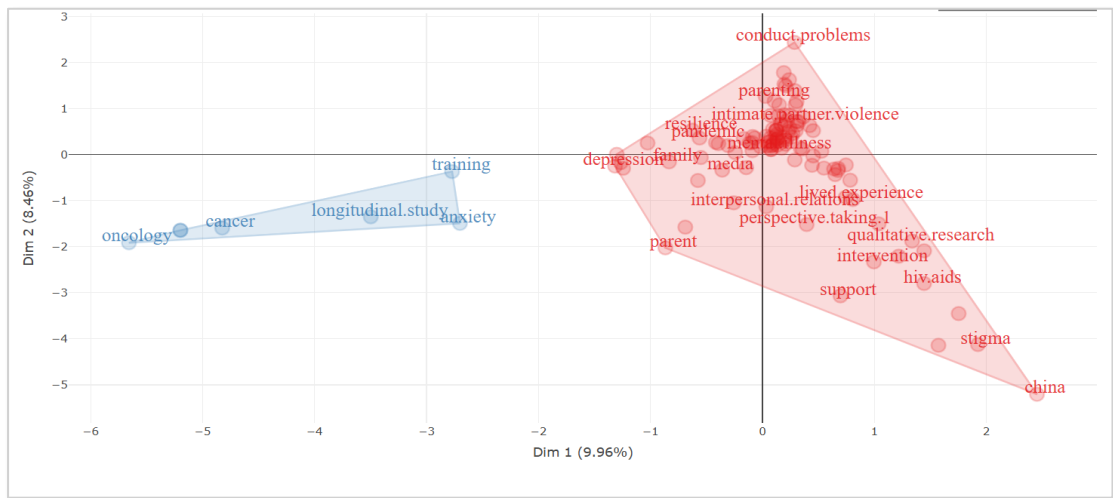


Figure 9 illustrates the factor analysis. Upon examining the factor analysis, the red cluster is characterized by words such as experience, stigma, parent, depression, support, intervention, interpersonal, media, partner violence, and lived experience based on factor loadings. The blue cluster, on the other hand, is defined by words such as cancer, oncology, training, anxiety, and longitudinal study. Figure 10 presents the keyword network map analysis.

The Keyword Network Map Analysis

The Timeline Analysis of Keywords

In Figure 11, the keywords timeline analysis indicates that dark blue colors represent keywords that have been studied and completed in the literature. For instance, family, parents, and mindfulness were studied between 2018 and 2019, while empathy, adolescents, and children were studied between 2019 and 2020. In Figure 11, the yellow colors on the timeline represent keywords that are currently active in the literature. These include PTSD, family therapy, burnout, well-being, COVID-19, and medical education.

Discussion

This study presents a bibliometric analysis of international academic publications published between 2014 and 2024 using the keywords "family health" and "empathy." The findings provide a comprehensive perspective on evolving trends, global collaborations, citation patterns, and thematic focuses in these fields. Below, the findings are synthesized and discussed alongside recommendations for future research.

Growth, Citation Trends and Emerging Focus Areas

The annual number of publications on family health and empathy has shown a consistent increase, reflecting growing academic interest. However, the decline in average citation rates per article suggests challenges posed by information overload and the increasing number of publications, which can reduce the visibility of individual works (Martín-Martín et al., 2018). The surge in publications during and after the COVID-19 pandemic highlights how global crises increase focus on family dynamics and empathy-based interventions. These studies have been linked to keywords such as "mental health" and "family therapy," exploring how heightened stress levels and reduced empathetic communication negatively impacted family health during the pandemic (He et al., 2024; Timmons et al., 2020). Future research should extend beyond the 2014–2024 timeframe to include earlier or more recent publications, capturing long-term trends and the historical development of these topics. Additionally, incorporating multilingual publications, such as works in Spanish, Mandarin, or Arabic, could provide insights into unique cultural and societal dynamics influencing family health and empathy.

Influential Authors, Publications and Institutions

Authors like Ferguson CJ have significantly contributed to emphasizing empathy as a tool for improving family health outcomes through psychoeducational programs (Ferguson, 2015). Other studies, such as those by Papadopoulos et al. (2021), demonstrated that empathy-based interventions reduce family conflicts and enhance psychological resilience. Journals such as the *Child Abuse & Neglect* and institutions like the University of California have played a pivotal role in advancing research in this domain. The United States and the United Kingdom lead in global collaborations (Bekiroğlu & Güllühan, 2024). Expanding bibliometric datasets to include other databases, such as Web of Science, PubMed, and gray literature (e.g., dissertations and conference proceedings), could provide a more comprehensive understanding. Tools like Gephi, Pajek, and Tableau, in addition to Biblioshiny and VOSviewer, could offer deeper insights into co-authorship networks, thematic clusters, and citation patterns.

Thematic Analysis and Research Gaps

Key themes in the literature include psychosocial issues such as "depression," "stigma," and "intervention" (red cluster), as well as specific health concerns like "cancer" and "anxiety" (blue cluster). For instance,

empathy has been shown to mitigate the effects of depression on family relationships and enhance adherence to treatment during chronic illness therapies (Lago et al., 2017; Timmons et al., 2020). Emerging topics like "PTSD," "burnout," and "COVID-19" offer fertile grounds for further exploration, while previously prominent topics like "mindfulness" and "parents" could be revisited in post-pandemic contexts. Future research should prioritize interdisciplinary approaches by integrating psychology, sociology, public health, education, and artificial intelligence. AI-driven empathy training programs and digital health tools could offer innovative solutions for improving family outcomes. Furthermore, underexplored areas such as empathy in non-traditional family structures and longitudinal studies warrant more attention.

Practical Applications and Global Collaborations

Theoretical advancements must translate into real-world applications. For example, developing empathy-based training modules for educators and healthcare professionals, implementing community-based interventions, and designing family-centered healthcare policies could significantly improve family dynamics and individual well-being. Expanding collaborations to include developing countries and underrepresented regions and addressing global issues such as migration and economic hardships would further enhance the relevance and inclusivity of research. Promoting open science practices, such as publishing datasets and analyses on open-access platforms, could increase transparency and accelerate knowledge dissemination. Strengthening partnerships, particularly with developing countries, would diversify research perspectives and address pressing global challenges.

By addressing these recommendations, future studies can broaden the scope of family health and empathy research, enhance its inclusivity, and contribute to innovative applications and policies that improve family dynamics and individual well-being worldwide.

Limitations of the Study

While this study provides valuable insights into family health and empathy, it does have some limitations. The analysis is limited to the 2014–2024 timeframe, excluding earlier publications that could provide a more comprehensive view of the historical development in these fields. Additionally, focusing solely on English-language publications may overlook important contributions in other languages, which could reflect diverse cultural and societal dynamics. The reliance on Scopus as the primary database also excluded gray literature (e.g., theses and conference proceedings), potentially missing insights from less formal sources.

The use of "family health" and "empathy" as keywords provided a solid framework, but incorporating broader or related terms could have enriched the scope of the study. While Biblioshiny and VOSviewer were effective tools for analysis, integrating additional tools could have yielded deeper insights. The focus on quantitative trends limited the exploration of qualitative aspects, such as the content and impact of the studies. Furthermore, regional and cultural differences, which play a significant role in family health and empathy, were not thoroughly addressed. Lastly, while emerging topics like artificial intelligence and its role in family health interventions were noted, they were not explored in depth.

Addressing these limitations in future research could help provide a more comprehensive and diverse perspective, enhancing the overall understanding of family health and empathy.

Conclusion

This study provides a comprehensive bibliometric analysis of family health and empathy research between 2014 and 2024, highlighting significant trends, influential contributions, and emerging themes in these fields. The consistent growth in publications underscores the increasing importance of understanding family dynamics and empathy, particularly in the context of global challenges like the COVID-19 pandemic. While influential authors, journals, and institutions have contributed to advancing research, the findings also reveal underexplored areas, such as empathy in non-traditional family structures and regional or cultural dynamics.

The study emphasizes the need for interdisciplinary approaches that integrate psychology, sociology, public health, education, and artificial intelligence to address complex family health issues. Practical applications, including empathy-based training modules, community interventions, and family-centered policies, can bridge the gap between theory and practice. Expanding collaborative research, especially with underrepresented regions, and embracing open science practices could further enrich the research landscape and promote inclusivity.

Future research should address limitations such as the restricted timeframe, language bias, and limited database coverage to provide a more comprehensive understanding of global trends. By integrating broader perspectives and leveraging innovative analytical tools, future studies can contribute to the development of inclusive, culturally sensitive, and impactful interventions that improve family dynamics and individual well-being worldwide.

References

- Altınbaş, K., Gülöksüz, S., Özçetinkaya, S., & Oral, E. T. (2010). Biological correlates of empathy. *Current Approaches in Psychiatry*, 2(1), 15-25.
- Arslan, Y. (2016). Who shows better empathy?-A micro sociological research over the empathy. *Batman University Journal of Life Sciences*, 6(2/1), 51-64.
- Avcı, R., & Güçray, S. S. (2010). An Investigation of Violent and Nonviolent Adolescents' Family Functioning, Problems Concerning Family Members, Anger and Anger Expression. *Educational Sciences: Theory and Practice*, 10(1), 65-76.
- Avşaroğlu, S., & Akbulut, Ö. F. (2022). A risk factor in terms of healthy family structure: Internet addiction. *Social Sciences Studies Journal*, 6(65), 2879-2902. <https://doi.org/10.26449/sssj.2456>
- Bayer, A. (2018). Conflicts in family and proposals for its resolution. *ANTAKIYAT Journal of Social and Theological Studies*, 1(2), 215-234.
- Bekiroğlu, D., & Güllühan, N. Ü. (2024). Bibliometric analysis of studies on empathy and empathic thinking skills. *Mimbar Sekolah Dasar*, 11(1), 103-120. <https://doi.org/10.53400/mimbar-sd.v11i1.68880>
- Bozdağ, F., & Bozdağ, S. (2021). Development of social sensitivity scale. *Journal of Hasan Ali Yücel Faculty of Education*, 18(1), 84-101. DOI: 10.5152/hayef.2021.20033
- Brems, C. (1989). Dimensionality of empathy and its correlates. *The Journal of Psychology*, 123(4), 329-337. <https://doi.org/10.1080/00223980.1989.10542989>

- Demir, G., Chatterjee, P., Zakeri, S., & Pamucar, D. (2024). Mapping the evolution of multi-attributive border approximation area comparison method: a bibliometric analysis. *Decision Making: Applications in Management and Engineering*, 7(1), 290-314. <https://doi.org/10.31181/dmame7120241037>
- Demir, G., Chatterjee, P., & Pamucar, D. (2024a). Sensitivity analysis in multi-criteria decision making: A state-of-the-art research perspective using bibliometric analysis. *Expert Systems with Applications*, 237, 121660. <https://doi.org/10.1016/j.eswa.2023.121660>
- Ellegaard, O., & Wallin, J. A. (2015). The bibliometric analysis of scholarly production: How great is the impact?. *Scientometrics*, 105, 1809-1831. DOI 10.1007/s11192-015-1645-z
- Eklund, J. H., & Meranius, M. S. (2021). Toward a consensus on the nature of empathy: A review of reviews. *Patient Education and Counseling*, 104(2), 300-307. <https://doi.org/10.1016/j.pec.2020.08.022>
- Ferguson, C. J. (2015). Empathy-based psychoeducation for families: Intervention efficacy and applications. *Journal of Family Psychology*, 29(3), 456-469. <https://doi.org/10.1037/fam0000115>
- He, T., Yang, S., Zhu, C., Zhang, B., Zhang, Q., Ji, Y., & Jiang, R. (2024). A bibliometric analysis of research on empathy for pain. *Neuropharmacology*. <https://doi.org/10.1016/j.neuropharm.2024.110193>
- Huang, Y. Q., Wang, H. P., Xiong, S. Q., Sang, M., & Jin, C. D. (2018). Bibliometric analysis of nurses' empathy ability in China. *Medical Data Mining*, 1(2), 38-45. <https://doi.org/10.53388/mdm20180005>
- Jiang, Y., & Su, P. (2023). Evolution in research topics on empathy: Evidence from bibliometrics. *Journal of Psychological Science*, 40(3), 699-720. <https://doi.org/10.16719/j.cnki.1671-6981.20170329>
- Karagüven, M. H. Ü., & Hülya, M. (2015). Empathy and social intelligence. *International Journal of Social Science*, 34, 187-197. Doi number:<http://dx.doi.org/10.9761/JASSS2813>
- Lago, E. C., da Silva Oliveira, A. D., Almeida, C. A. P. L., Ramos, C. V., Ribeiro, I. P., de Moura Neiva, L. B., & Feitosa, L. G. G. C. (2017). Family health medical practices and nursing care: A bibliometric approach. *International Archives of Medicine*, 10, 1-10. DOI: 10.3823/2409
- Martín-Martín, A., Orduna-Malea, E., Thelwall, M., & López-Cózar, E. D. (2018). Google Scholar, Web of Science, and Scopus: A systematic comparison of citations in 252 subject categories. *Journal of Informetrics*, 12(4), 1160-1177. <https://doi.org/10.1016/j.joi.2018.09.002>
- Özmen, M., & Hanimoglu, B. (2023). The effect of empathy on workplace happiness in interpersonal communication. *Adıyaman Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, (44), 469-494. <https://doi.org/10.14520/adyusbd.1182112>
- Papadopoulos, C., Lodge, A., & Timmons, A. C. (2021). Empathy-based interventions in family therapy: A review of evidence. *Family Systems and Health*, 39(4), 278-290. <https://doi.org/10.1037/fsh0000358>
- Passas, I. (2024). Bibliometric analysis: the main steps. *Encyclopedia*, 4(2). <https://doi.org/10.3390/encyclopedia4020065>
- Şirin, A., Özgen, G., Akca-Erol, F., & Akça-Koca, D. (2018). Effect of empathic tendencies on family relationships of primary school 4th grade students. *Journal of Educational Sciences*, 48(48). DOI: 10.15285/maruaebd.363290

- Timmons, A. C., & Arbel, R. (2020). Physiological linkage in couples and its implications for family functioning: A literature review. *Journal of Family Psychology*, 34(6), 682–692. <https://doi.org/10.1037/fam0000534>
- Zeren, D., & Kaya, N. (2020). Dijital pazarlama: Ulusal yazının bibliyometrik analizi. *Çağ Üniversitesi Sosyal Bilimler Dergisi*, 17(1), 35-52.
- Zhi-Jiang, Y. A. N., & Pan-Cha, S. U. (2017). Evolution in research topics on empathy: Evidence from Bibliometrics. *Journal of Psychological Science*, 40(3), 699. <https://doi.org/10.16719/j.cnki.1671-6981.20170329>