

Research Trends of Drama Therapy in Mental Health : A Comprehensive Bibliometric analysis

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Abstract

Background: Drama therapy is an expressive art–based therapeutic approach grounded in theatrical processes that has evolved as a mental health intervention over the past eight decades. Although its application has expanded across clinical and educational context, a systematic mapping of its scholarly development and knowledge structure remains limited. This study aimed to examine global research trends of drama therapy literature.

Methods: The current study employed a bibliometric and scientometric research design to examine global research trends in drama therapy literature indexed in Scopus database from 1949 to 2025. A total of 785 documents were retrieved. Data were analyzed using Microsoft Excel, VOSviewer (version 1.6.20), and Biblioshiny (Bibliometrix R package, version 4.2). Bibliometric indicators, co-authorship patterns, keyword co-occurrence, and author productivity (Lotka’s Law) were examined.

The dataset comprised 785 documents published across 368 sources, with an annual growth rate of 5.88%. Publications from the 2020s account for 49.4% of the total output. The University of Haifa led institutional contributions with 41 publications. Bradford’s Law analysis confirmed strong concentration in three core journals. A logistic growth model projected a saturation point of approximately 4,929 publications around the year 2039. Keyword co-occurrence identified mental health, psychodrama, dementia, trauma, and digital interventions as the principal thematic clusters.

Conclusion: Drama therapy is in an accelerated growth phase, with substantial scholarly expansion expected over the next two decades. Research output is concentrated among a small number of prolific investigators and institutions, predominantly in high-income countries, highlighting persistent geographic disparities. Emerging themes include tele-drama therapy, virtual reality-based applications, and interventions across diverse clinical populations. Future research should prioritize large-scale randomized controlled trials, standardized outcome measurement, and meaningful inclusion of researchers and participants from low- and middle-income countries.

1. Introduction

The word drama is originated from the ancient Greek word “Dran” meaning “to do” or “to act.” Historically, it was performed to celebrate rituals (Kraus). It is not only a medium for ceremony or entertainment, but has also evolved as an educational tool and healing process. The healing aspects of drama have been recognized since time immemorial. Aristotle used the tragedy form to do “Catharsis.” Ancient literature also suggests that although the word drama is from the Greek word, its form of drama is as old as mankind. Phil Jones (2007) has the opinion that the root of drama therapy is not single but originates at different times and in different places.[1] Drama therapy as a discipline and a profession emerged in the 20th century. The recognition of the healing aspect of drama made drama and therapy a communion. [2]. Irwin (1984) conceptualises drama therapy as a kind of marriage between drama and therapy. According to, this mixture has the responsibility to contribute equally, although sometimes one might seem to dominate the other. However, their communion aims at personality change in the individual [2]. The

literature suggests that there are many notable figures in this newer field among them the following are the few important contributors of the newer disciplines in the west are Elenor Irwin, Sue Jennings, Marian “Billy” Lindkvist, Gertrud Schattner, Richard Courtney, David Read Johnson and Renee Emunah. On the other hand, in the east, drama therapy is evolving into a discipline, and the notable contributors in the field are as follows: Gang Shu, Eddie Yu, Adeline chan, Ravindra Ranasinha, Dorothy dwong, Karima anbar, and sara sakhi.

The literature also suggests that therapeutic interventions encompass many different disciplines, although roots and inspiration are common, and scholars distinguish psychodrama and drama therapy [3]. based on the theory, philosophy, practice, and target population. According to the literature, theaters have a therapeutic nature. It increases empathy. It helps to recognize destructive attitudes and actions, understand their effects, and facilitate appropriate and necessary changes. It also helps in releasing the “stuck positions” and enhances spontaneity [2]. and helps in understanding the Body, Voice, and touch, as expressed by Schattner, in a book edited by Johnson et al. [4]. These theatrical therapies can be performed at the micro-, mezzo-, and macro-levels. Although theatre-based interventions have many research papers across various databases, there are very limited studies that apply library sciences and scientific bibliometric indicators. Hence, this study aimed to map the existing literature using the Scopus Database, which can serve as an indicator for future research in this area. In addition, the current study included drama therapy-related studies indexed in the Scopus database to obtain a wider picture of the subject matter.

2. Aim and Objectives

Aim:

To comprehensively analyze global research trends, patterns, and knowledge structures in drama therapy literature using bibliometric and scientometric approaches based on the Scopus database.

Objectives:

1. To examine the annual scientific production and growth trends in drama therapy research from 1949 to 2025.
2. To identify the most influential authors, journals, institutions, and countries contributing to the field of drama therapy.
3. To analyze authorship patterns and collaboration networks, including the application of bibliometric laws such as Lotka’s Law.
4. To explore the thematic structure and research focus areas through keyword co-occurrence.
5. To assess the geographical distribution of research output.
6. To map the evolution of research themes and emerging trends.

3. Methods and Materials

Research design: This study employed a bibliometric and scientometric research design to analyze global research trends in drama therapy literature. A structured four-step analytical framework was adopted: (1) bibliometric performance analysis, (2) scientometric mapping, (3) data cleaning and validation, and (4) interpretive synthesis.

Data Source and Search Strategy: The Scopus database (Elsevier) was selected due to its extensive multidisciplinary coverage and broader journal indexing. A systematic search strategy was developed to capture literature specifically related to drama therapy and theatre-based therapeutic interventions. Multiple preliminary searches were conducted using relevant terms such as “drama therapy,” “therapeutic drama,” “theatre-based interventions,” and “role-play therapy” to refine the search syntax. The final search string used for data retrieval was: **TITLE-ABS-KEY (("Drama therapy" OR "Role play therapy" OR "Role therapy" OR "Therapeutic drama" OR "Therapeutic theatre" OR "Theatre based Interventions")) AND PUBYEAR > 1948 AND PUBYEAR < 2026**

Eligibility Criteria: The inclusion criteria were as follows: Publications indexed in the Scopus database, Publications in the English language, Documents containing relevant keywords in the TITLE-ABS-KEY fields, Publications within the time span from 1949 to 2025.

Data Screening and Selection: All retrieved records were screened for relevance to drama therapy and theatre-based therapeutic interventions. After applying the eligibility criteria, all 785 documents were included in the final analysis. The selection process is illustrated in Figure (1).

Data Extraction and Cleaning

The dataset of 785 records was exported in CSV format for analysis. Data cleaning procedures included removal of duplicate entries during data export, standardization of author names to address variations in initials and spelling, harmonization of institutional affiliations and keyword normalization to ensure consistency in analysis. These procedures enhanced the reliability and accuracy of bibliometric mapping.

Data Analysis Tools: The cleaned dataset was analyzed using the following tools: Microsoft Excel (Version 2021) for descriptive statistics and tabulation, VOSviewer (Version 1.6.20) for network visualization and keyword co-occurrence analysis, Biblioshiny (Bibliometrix R package, Version 4.2) for advanced bibliometric indicators.

4. Results

Table 1- Main information of the study

Description	Results
Time span	1949:2025
Sources (Journals, Books, etc)	368
Documents	785
Annual Growth Rate %	5.88
Document Average Age	11.3
Average citations per doc	11.05
Keywords Plus (ID)	2647
Author's Keywords (DE)	1761
AUTHORS	
Authors	1596
Authors of single-authored docs	259
AUTHORS COLLABORATION	
Single-authored docs	343
Co-Authors per Doc	2.65
International co-authorships %	11.85

The table 1 represents the main information of the study. The current study covers 76 years of scholarly output, from 1949 to 2025, encompassing 785 documents published across 368 distinct sources. The annual growth rate of 5.88% reflects a steady and sustained accumulation of research. The average document age of 11.3 years indicates that the literature contains a balance of recent and moderately older contributions. Each document has received an average of 11.05 citations, suggesting moderate but meaningful scholarly engagement. A total of 1,596 authors are represented, of whom 259 contributed to single-authored works. Of the 785 publications, 343 are single-authored documents, demonstrating that independent scholarly work remains a notable feature of the field. The mean co-authorship ratio of 2.65 indicates that collaborative publications predominate, while international co-authorship accounts for 11.85% of the total output, reflecting limited but growing cross-border research activity.

Decadal Scientific Production

Table 2 - Decadal Scientific Production

Decade	Total Articles	Percentage
1940s	1	0.1%
1950s	2	0.2%
1960s	1	0.1%
1970s	10	1.27%
1980s	35	4.45%
1990s	49	6.24%
2000s	67	8.53%
2010s	234	29.8%
2020s*	388	49.4%

* Data inclusive to 2025.

Table 2 presents the distribution of publications by decade, illustrating the marked temporal shift in drama therapy research productivity over the period of study. Publication activity was negligible during the 1940s, 1950s, and 1960s, with each decade contributing fewer than three documents and less than 0.3% of total output. Output expanded gradually during the 1970s (1.27%), with more discernible growth recorded in the 1980s (4.46%) and 1990s (6.24%), reflecting a period of early professional consolidation. The 2000s contributed 8.54% of total publications, signaling a transition toward more sustained research activity. A marked acceleration occurred during the 2010s, which produced nearly one-third of all publications (29.81%). The most striking increase is observed in the 2020s, which account for 49.43% of the cumulative output through 2025, representing nearly half of the entire body of literature within a single decade.

Life Cycle of Publications

The figure 2 and 3 life cycle of annual publications and cumulative growth curve related to drama therapy. The logistic growth model characterizes the publication trajectory and its projected evolution overtime. The estimated saturation level (K) is 4,929 publications, representing the projected upper limit of cumulative research output in this domain. The model identifies the peak year (t_m) as approximately 2039, when annual output is expected to reach around 166 publications. The growth duration (D_t) is estimated at 32.6 years, covering the transition from early growth to maturity. The model demonstrated a strong fit to the observed data ($R^2 = 0.941$), with a root mean square error (RMSE) of 4.88, an Akaike Information Criterion (AIC) of 177.3, and a Bayesian Information Criterion (BIC) of 183.2. As of 2025, the field has produced 785 cumulative publications, representing approximately 15.9% of the projected saturation level. The 10% saturation milestone was reached around 2022, the midpoint (50% of K) is projected for approximately 2038.5, with 90% saturation anticipated by 2054.8 and near-complete

saturation (99%) by 2072.6. The field is therefore currently situated in the steep upward phase of its growth curve, between the 10% and 50% saturation thresholds.

Authors Productivity

Figure 5 presents the ten most prolific authors in the field, ranked by total publications and Fractionalized authorship contribution. N. Sajnani leads in both total publications (23 articles) and fractionalized authorship contribution (14.28), indicating the greatest proportional share of authorship across co-authored works. S. Keisari ranks second with 22 publications and a fractionalized value of 8.45, followed by H. Orkibi with 19 publications and a fractionalized score of 8.97. D. R. Johnson and S. Pendzik each produced 17 publications, with fractionalized contributions of 11.99 and 9.21, respectively. Johnson and Landy are distinguished by publication activity commencing in the early 1980s, reflecting sustained multi-decade engagement with the field. More recent entrants, including Sajnani, Keisari, and Orkibi, demonstrate concentrated and rapidly growing output from the 2010s onward, signaling a generational renewal in the field’s scholarly leadership.

Application of Lotka’s Law

Table 3 – Author productivity through Lotka’s law

Documents written	N. of Authors	Proportion of Authors	Theoretical
1	1391	0.87	0.64
2	126	0.08	0.16
3	34	0.02	0.07
4	18	0.01	0.04
5	6	0.00	0.03
6	4	0.00	0.02
7	4	0.00	0.01
8	2	0.00	0.01
9	2	0.00	0.01
10	2	0.00	0.01
11	1	0.00	0.01
12	2	0.00	0.00
17	2	0.00	0.00
19	1	0.00	0.00
22	1	0.00	0.00
23	1	0.00	0.00

Table 3 and figure 6 presents the distribution of authors by number of documents produced, with observed Proportions compared to theoretical values derived from Lotka's Law. The authorship distribution shows that 1,391 authors (87%) contributed a single document, representing the dominant pattern within this dataset. The proportion of two-document contributors stands at 8% (n = 126), decreasing progressively to 2% (n = 34) for three documents. Beyond this threshold, the number of authors at each productivity level diminishes sharply, with isolated cases of authors contributing 17, 19, 22, and 23 documents. The observed single-document proportion (0.87) substantially exceeds the Lotka theoretical prediction (0.64), indicating that the field has attracted a disproportionately high number of one-time contributors relative to what bibliometric law would anticipate. This pattern is consistent with a discipline in the early stages of professionalization, where the volume of peripheral scholarly interest has grown faster than the formation of a stable, career-long research community.

Source analysis

Table 4 lists the ten most prolific sources in the drama therapy literature.

Table 4- Top 10 most prolific sources in the publications

Rank	Source	Articles
1	Arts in Psychotherapy	143
2	Drama Therapy Review	110
3	Routledge International Handbook of Dramatherapy	15
4	The Self in Performance: Autobiographical, Self-Revelatory, and Autoethnographic Forms of Therapeutic Theatre	14
5	Frontiers in Psychology	13
6	Clinical Applications of Drama Therapy in Child and Adolescent Treatment	10
7	Arts Therapies in Psychiatric Rehabilitation	7
8	International Journal of Environmental Research and Public Health	7
9	Children	6
10	Journal of Humanistic Psychology	6

Application of Bradford law

Table 5 – Bradford law analysis

Zone	Articles	Sources	Description
Zone 1	268	3	Core journals
Zone 2	256	30	Moderate productivity
Zone 3	261	500+	Scattered sources

Table 5 represents the Bradford's Law analysis. The findings shows that the publications are skewed distributed across the journals. Three core journals accounted for approximately one-third of the total output (n = 268), while approximately 30 sources in the second zone contributed a broadly comparable share. The third zone comprised more than 500 sources, each contributing one or two articles, underscoring the discipline's reliance on a narrow cluster of specialist outlets alongside wide dispersal across generalist and interdisciplinary venues. This distribution is consistent with Bradford's classical model and characteristic of specialized emerging fields in which knowledge production remains concentrated before broader disciplinary integration occurs.

Keyword Analysis

Table 6 presents the 25 most frequently occurring author keywords in the drama therapy literature indexed in Scopus.

Table 6 - 25 most prominent keywords related to drama therapy

Words	Occurrences
Drama Therapy	269
Art Therapy	40
Music Therapy	33
Mental Health	29
Psychodrama	25
Psychotherapy	20
Drama	18
Older Adults	17
Creative Arts Therapies	16
Dementia	16
Dramatherapy	16
Adolescents	15
Children	14
Creative Arts Therapy	14
Developmental Transformations	14
Systematic Review	14
Performance	13
Trauma	13
Virtual Reality	13
Embodiment	12
Play	12
Role Theory	12
Theater	12
Theatre	12
Dance Therapy	11

Country analysis

Table 7 represents top 25 most prolific countries in the drama therapy related publications

S.No	Country	Documents (N)	Citations (TC)	Total Link Strength (TLS)
1	United States	307	3914	83
2	United Kingdom	87	1271	39
3	Israel	77	1454	30
4	Canada	56	804	26
5	Germany	35	785	24
6	Netherlands	25	623	12
7	Australia	19	704	21
8	China	18	145	11
9	France	15	36	9
10	Italy	14	241	6
11	South Africa	12	34	4
12	Spain	12	98	6
13	India	11	22	8
14	Czech Republic	11	54	3
15	Greece	10	30	0
16	Japan	8	3	3
17	Poland	8	33	4
18	Hong Kong	6	268	8
19	Iran	6	62	0
20	South Korea	6	32	1
21	New Zealand	5	170	3
22	Taiwan	5	37	2
23	Lebanon	4	16	5
24	Russian Federation	4	5	2
25	Switzerland	4	35	5

5. Discussion

This bibliometric study provides a systematic account of drama therapy's scholarly development from 1949 to 2025. The findings reveal a field in rapid intellectual transformation, shaped by a combination of

growing professional recognition, expanding clinical applications, and the catalytic effects of the COVID-19 pandemic. The discussion that follows situates each major finding within the broader empirical literature, drawing on peer-reviewed evidence to contextualize, interpret, and extend the bibliometric results. The exponential growth in drama therapy publications observed across the 2010s and 2020s is consistent with broader patterns of accelerating output documented in bibliometric analyses of mental health research.[5] The 2020s alone account for nearly half of all publications in the dataset, a trajectory that aligns with the documented surge in creative arts therapies research in the wake of the COVID-19 pandemic. The pandemic simultaneously created unprecedented demand for accessible mental health interventions and generated strong research interest in tele-health modalities, producing a substantial volume of new empirical inquiry within a compressed period. [6] The logistic growth model projects a saturation point of approximately 4,929 publications around 2039, placing the current field at the steepest phase of its growth curve and positioning it alongside other emerging clinical disciplines in terms of developmental trajectory. [7]

The concentration of scholarly output among a small cohort of prolific investigators reflects a pattern characteristic of specialized clinical disciplines in early development. The five most productive authors in this dataset, namely N. Sajnani, S. Keisari, H. Orkibi, D. R. Johnson, and S. Pendzik, have collectively shaped the field's theoretical frameworks, clinical methodologies, and research agenda. The observed authorship distribution, in which 87% of contributors produced only a single document, substantially exceeds the theoretical Lotka prediction of 64%, indicating a higher-than-expected proportion of one-time contributors.^[9] This pattern suggests that drama therapy continues to attract broad scholarly curiosity while its core investigative community remains relatively small, a condition that may constrain the field's capacity for cumulative knowledge building.

The temporal analysis of author productivity offers an instructive perspective on the field's intellectual genealogy. Foundational scholars such as Johnson and Landy maintained active publication records spanning four decades, providing conceptual continuity across periods of significant change. More recently established investigators, including Keisari, Orkibi, and Sajnani, have rapidly built internationally recognized research programs from the 2010s onward. The convergence of these generational cohorts, situated within the institutional environments of the University of Haifa and Lesley University, reflects a period of sustained professionalization and academic consolidation that is reshaping the discipline's global scholarly identity.

Keyword co-occurrence analysis identifies several dominant thematic clusters in the drama therapy literature: mental health broadly defined, psychodrama, dementia, trauma, older adults, and child and adolescent populations. The prominence of these clusters is not incidental; each corresponds to a substantive and growing empirical evidence base that developed in parallel with the bibliometric patterns documented in this study. Research examining drama therapy for older adults has produced a growing body of clinical evidence. A 2025 systematic review by Qtait and colleagues, encompassing 41 studies including 14 randomized controlled trials, found that drama therapy was associated with moderate to significant reductions in mental health symptom severity in 28 of the included studies, with

improvements in social engagement and emotional expression recorded in over 70% of cases. [8] Keisari and colleagues' life-review drama therapy study demonstrated significant within-group gains across multiple indices of psychological wellbeing in older adults, including self-acceptance, meaning in life, relational functioning, and sense of successful aging, alongside reductions in depressive symptoms. [9] The randomized controlled trial by Elkarif and colleagues subsequently demonstrated that a structured 12-week tele-drama therapy program produced significant improvements in social connectedness, personal growth, and general wellbeing while reducing depressive symptoms in older adults with restricted life-space mobility. [10] These findings provide clinical grounding for the bibliometric observation that 'older adults' constitutes one of the field's most consistently indexed thematic categories.

The Bradford's Law analysis identified three core publication venues, namely *Arts in Psychotherapy*, *Drama Therapy Review*, and the *Routledge International Handbook of Dramatherapy*, which together account for approximately one-third of all indexed publications. This concentration within discipline-specific outlets is an expected feature of a specialized emerging field; however, it also raises important questions about the broader visibility of drama therapy research to clinicians and policymakers operating outside the creative arts therapies community. The inclusion of *Frontiers in Psychology* and *Behavioral Sciences* among the ten most productive sources suggests some cross-disciplinary reach, but the predominantly specialized publication landscape may inhibit integration of drama therapy evidence into mainstream clinical guidelines and mental health policy frameworks.

The appearance of 'virtual reality' among the 25 most frequently occurring keywords ($n = 13$), alongside documented growth in tele-drama therapy practice, signals a meaningful shift in the field's delivery infrastructure. The COVID-19 pandemic precipitated an unprecedented and rapid migration to online clinical practice across the creative arts therapies. Feniger-Schaal and colleagues found that creative self-efficacy served as a significant protective factor in practitioners' adaptation to online delivery, with those demonstrating higher confidence in their creative capacities reporting smaller perceived differences between in-person and remote clinical practice. [11]. Atsmon and colleagues' qualitative analysis of practitioner experience during this transition identified four distinct positions of response to the online setting and proposed that a genuinely distinct form of online drama therapy may be emerging rather than a simple transposition of face-to-face practice to a digital medium. [12]

The concentration of drama therapy research output in a small number of high-income countries, principally the United States and Israel, is among the most consequential structural findings of the present analysis. All ten most prolific author affiliations are located in North America or Western Europe, and international co-authorship accounts for only 11.85% of publications. This limited cross-border collaboration is notable given the global nature of mental health burden and the long tradition of community healing arts in many non-Western cultural contexts. Comparable bibliometric analyses in adjacent mental health fields have consistently identified the underrepresentation of low- and middle-income country (LMIC) research in major databases, despite LMICs shouldering a disproportionate share of the global mental health burden. The near-complete absence of drama therapy research from

South Asia, sub-Saharan Africa, and Latin America represents both a significant gap in the generalizability of current evidence and a compelling case for targeted investment in South-South and North-South collaborative research. Cultural adaptation of drama therapy approaches for non-Western sociocultural contexts may yield important insights into differential mechanisms, contextually appropriate delivery formats, and population-specific outcome trajectories.

This study has some important limitations. This study was conducted using a single database. This may not have mapped articles related to drama therapy. The studies included only the English language; therefore, other languages that produce drama therapy may not be recorded.

6. Conclusion

This bibliometric analysis of drama therapy research (1949–2025) shows that the field has entered a phase of rapid and sustained growth, with nearly half of all publications produced in the current decade. A logistic growth projection suggests continued expansion, potentially reaching saturation around 2039, indicating maturation of the discipline. The field's knowledge structure reflects early-stage development, with research concentrated in a few core journals in line with Bradford's Law. Authorship patterns follow a modified Lotka distribution, with many one-time contributors alongside a small group of highly productive scholars. Institutional and intellectual leadership is centered around key universities and researchers, highlighting both strong expertise hubs and the need for broader collaboration.

Thematic analysis identifies mental health, psychodrama, trauma, dementia, and older adult care as dominant areas, with emerging interest in tele-drama therapy and virtual applications. Despite promising clinical evidence across multiple populations, methodological limitations and geographic concentration in high-income countries restrict the generalizability of findings. Future progress will depend on improving research rigor, expanding global participation especially in LMICs and leveraging digital platforms to enhance accessibility and impact.

References

1. Jones P (2007 Sep) Drama as therapy volume 1: Theory, practice and research. Routledge, p 12
2. Irwin EC (1984) The role of the arts in mental health. *Des Arts Educ* 86(1):43–47
3. Kedem-Tahar E, Felix-Kellermann P (1996) Psychodrama and drama therapy: A comparison. *Arts Psychother* 23(1):27–36
4. Johnson DR, Johnson DR, Emunah R (eds) Current approaches in drama therapy
5. Maghfiroh NH, Sukmawati B (2024) Bibliometric analysis: Mental health problems in a decade. *West Sci Soc Humanit Stud* 2(5):706–715
6. Jiang L et al (2023) Effectiveness of drama-based intervention in improving mental health and wellbeing: a systematic review and meta-analysis during the COVID-19 pandemic and post-pandemic period. *Healthcare* 11(14):2010

7. Tiwari S, Srivastava R (2025) Performance analysis of sustainable metaverse: a bibliometric analysis. *Benchmarking Int J* 32(6):2276–2300
8. Qtait M et al (2025) The effect of drama therapy in mental illness and quality of life among older adults: a systematic review. *Int J Body Mind Cult*
9. Keisari S et al (2017) Life-crossroads on stage: integrating life review and drama therapy for older adults. *Aging Ment Health* 21(12):1295–1306
10. Elkarif T et al (2024) Tele-drama therapy for community-dwelling older adults with constricted life-space mobility: a randomized controlled trial. *J Posit Psychol.* ;19(4)
11. Feniger-Schaal R et al (2022) Shifting to tele-creative arts therapies during the COVID-19 pandemic: an international study on helpful and challenging factors. *Arts Psychother* 80:101941
12. Atsmon A et al (2022) Migrated onto the screen': the impact of the COVID-19 pandemic on the clinical practice of drama therapy. *Arts Psychother* 80:101942

Figures

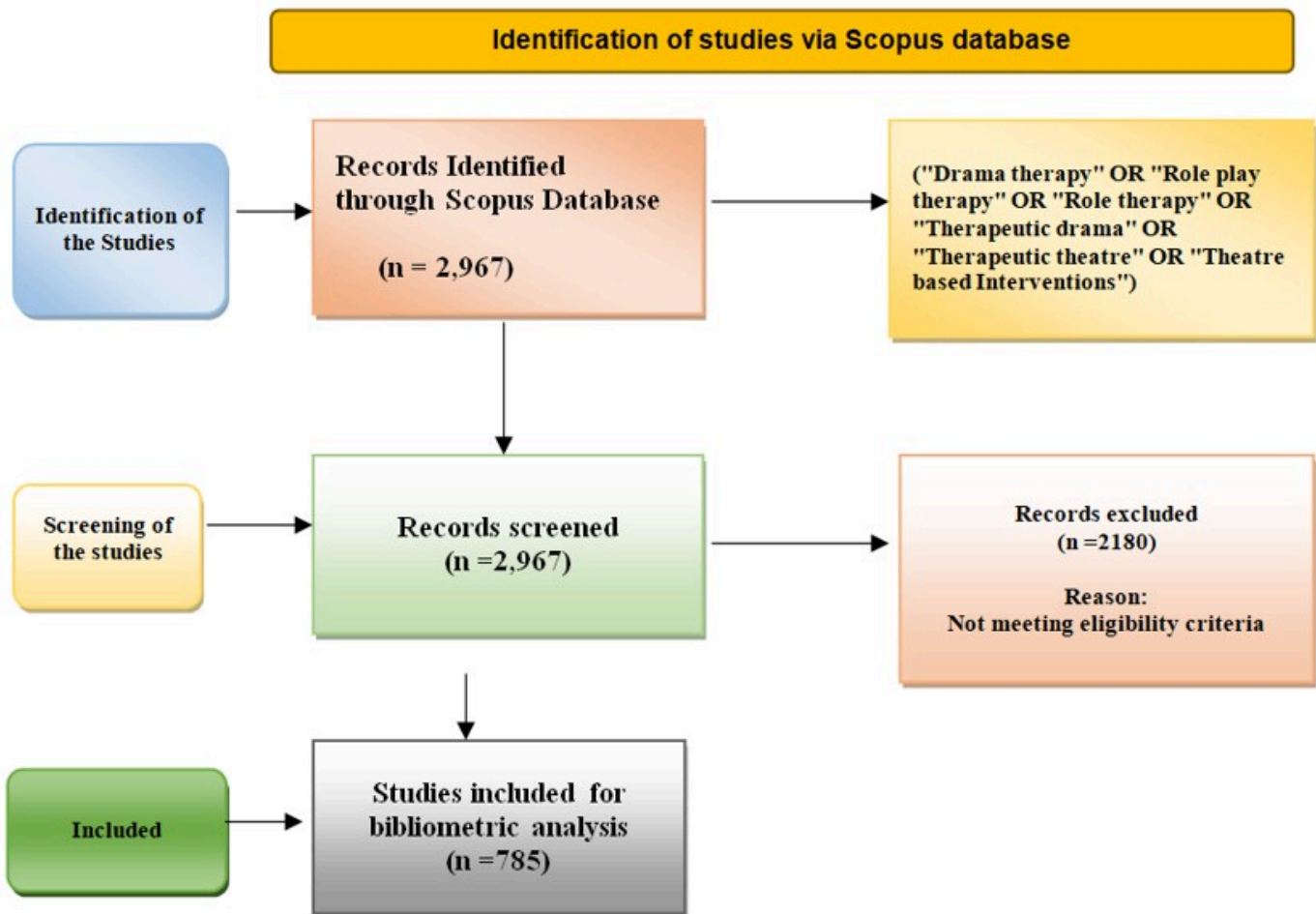


Figure 1

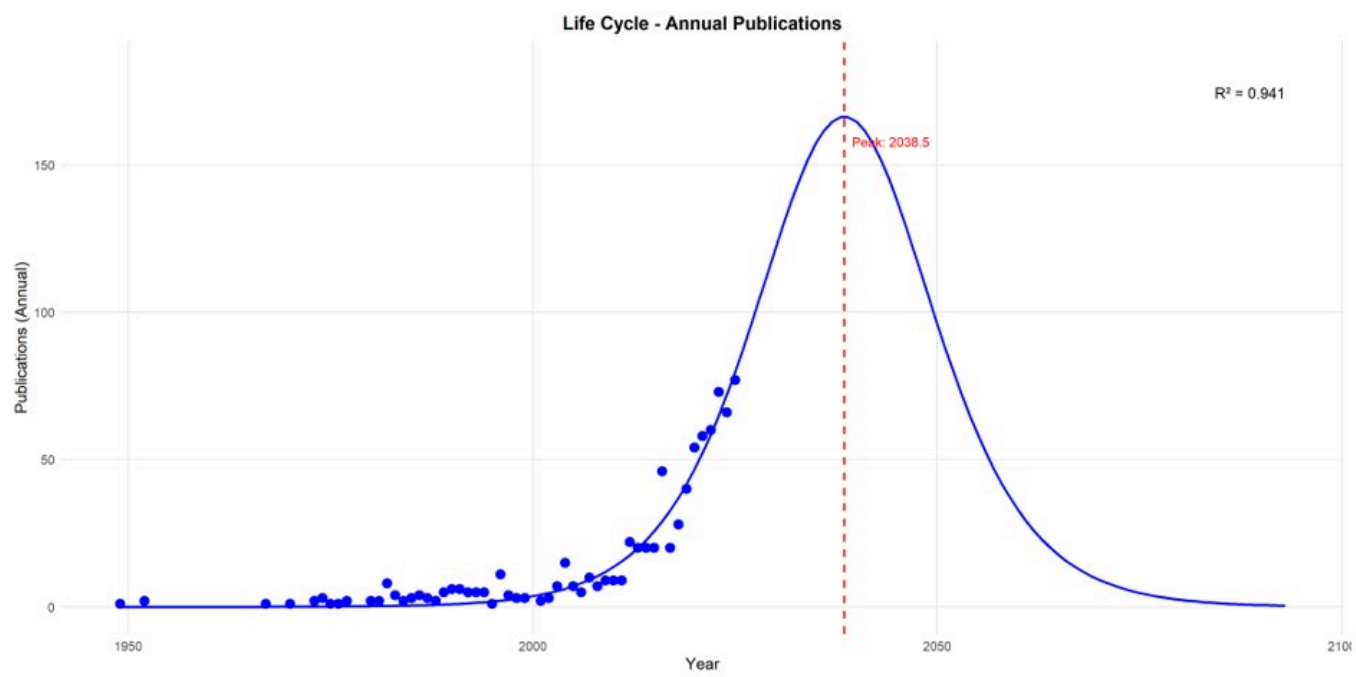


Figure 2

Figure 3- life cycle of annual publications

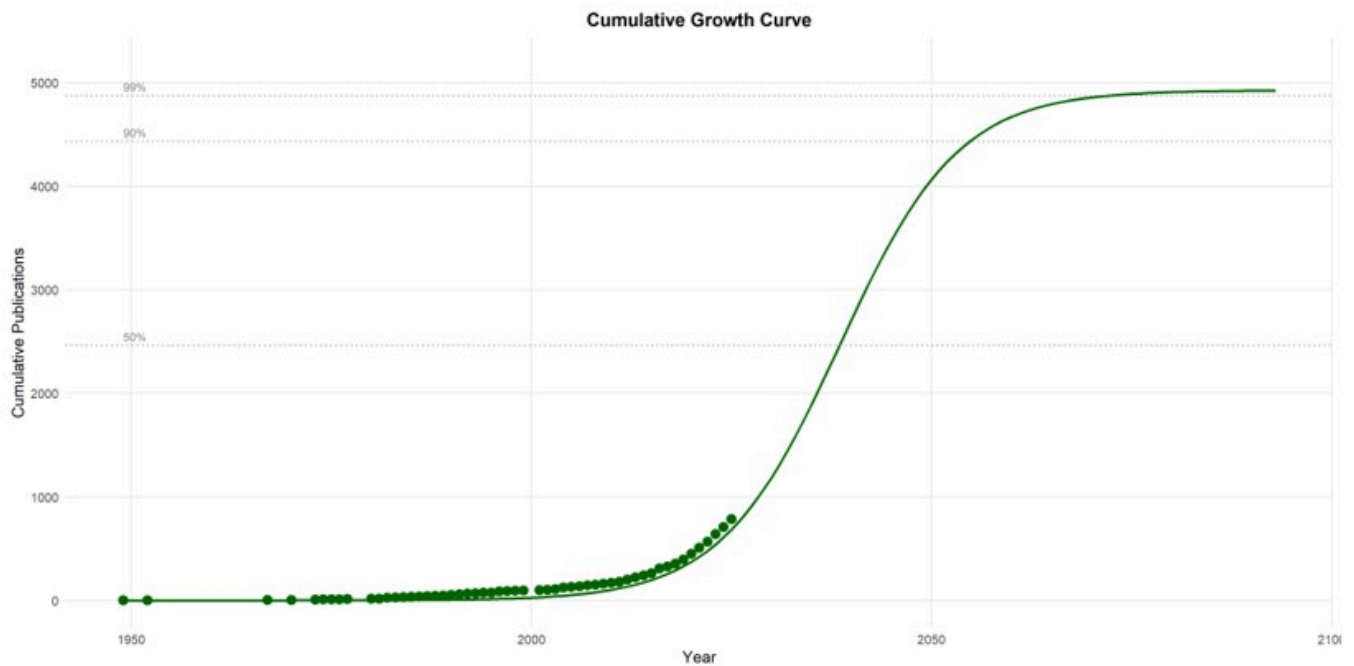


Figure 3

Figure 4 – Cumulative growth curve

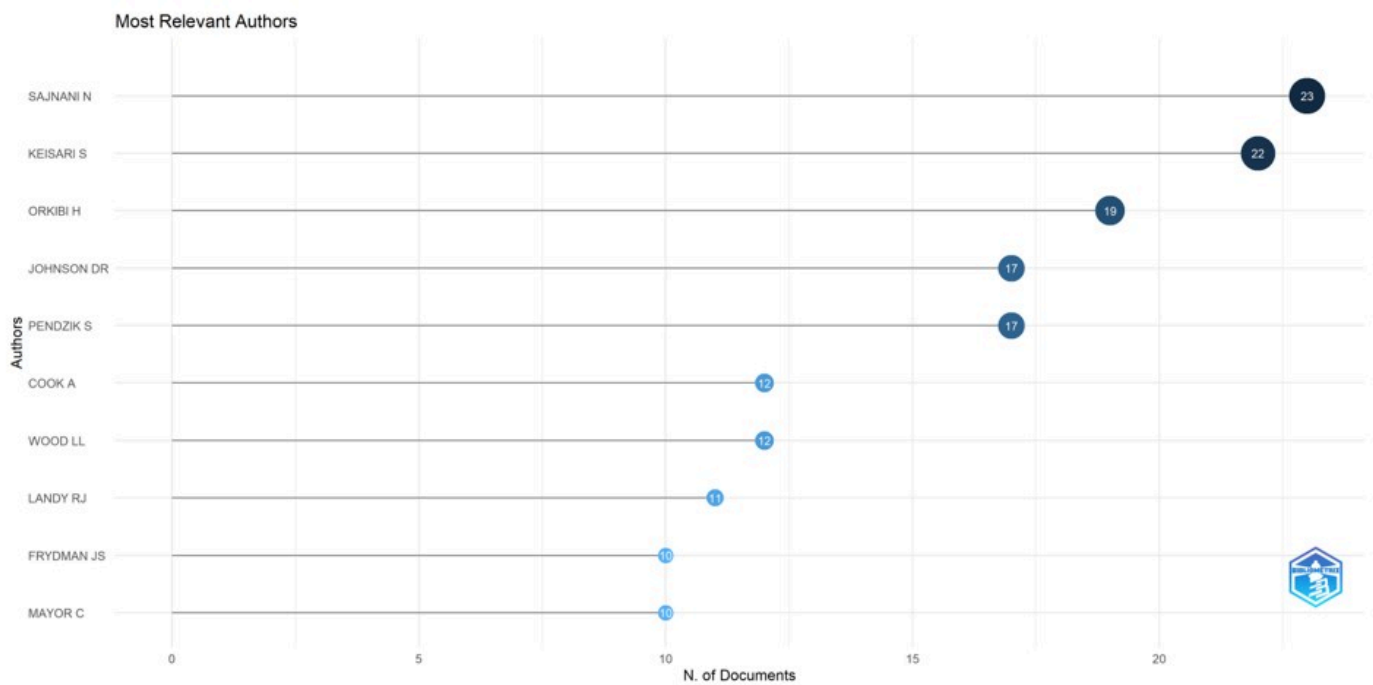


Figure 4

Figure 5- Top 10 most prolific authors in the field of drama therapy

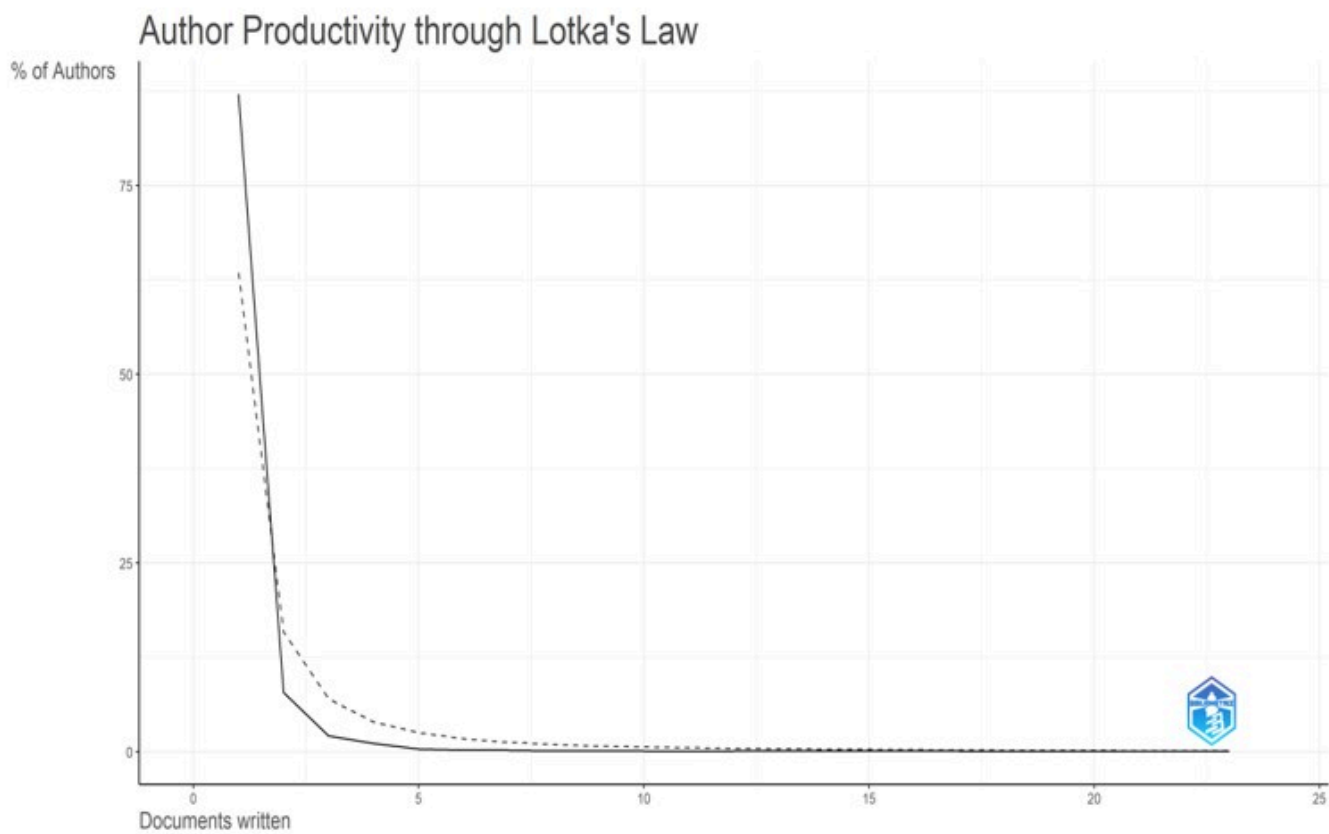


Figure 5

Figure 6 - Author productivity through Lotka’s law

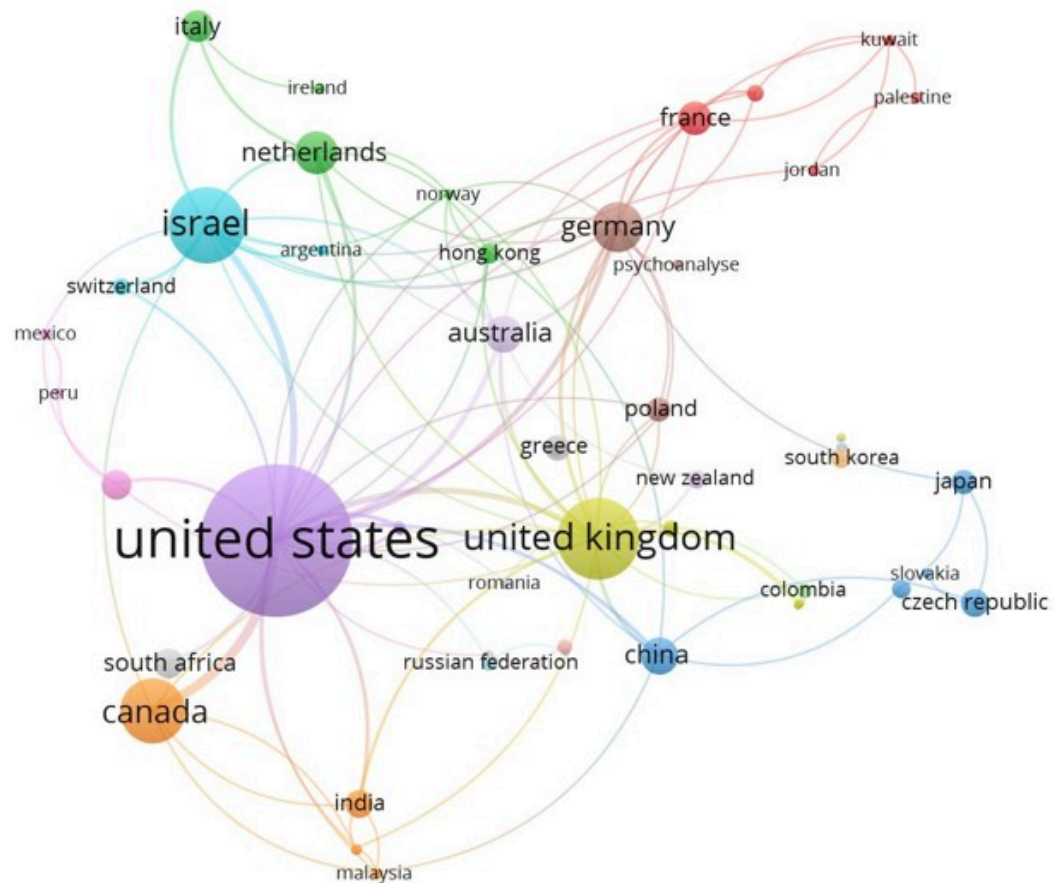


Figure 6

Figure 7 – Co-authorship analysis based on Countries