Al-Ishlah: Jurnal Pendidikan
Vol.18, 3 (September, 2026), pp. 4048-4060
ISSN: 2087-9490 EISSN: 2597-940X, DOI: 10.35445/alishlah.v18i3.9583

Meta-Bibliometric Study of Effective Counseling Strategies for Addictive Behavior: Identification of Research Gaps from 2000 to 2026

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ARTICLE INFO

Keywords:

counseling;
addictive behavior;
research cap;
bibliometric

Article history:

Received 2026-02-06
Revised 2026-07-11
Accepted 2026-09-30

ABSTRACT

The growing complexity of substance-related and behavioral addictions has increased the demand for evidence-informed counseling interventions. However, the global development of addiction counseling research and its emerging knowledge gaps remain insufficiently mapped. This study aims to examine publication trends, scientific contributions, collaboration networks, and emerging research themes in addiction counseling from 2000 to early 2026. A bibliometric analysis was conducted using 298 English-language, open-access articles retrieved from Scopus on February 2, 2026. Biblioshiny and VOSviewer were employed to analyze scientific productivity, author and institutional contributions, international collaboration, and keyword co-occurrence patterns. Publications increased substantially after 2013, reaching their highest annual output in 2023. The United States and the United Kingdom emerged as major research contributors, with the University of California and King's College London among the leading institutions. Keyword mapping identified cognitive behavioral therapy, internet addiction, gaming addiction, social media addiction, mHealth, and co-occurring mental health conditions as prominent research themes. The findings also indicated emerging opportunities for research on technology-assisted counseling, culturally responsive interventions, and school-based addiction prevention. Addiction counseling research increasingly addresses digital behavioral addictions and technology-supported interventions. These findings provide a bibliometric foundation for identifying future research priorities and strengthening counselor education. Further empirical studies are needed to evaluate intervention effectiveness and develop culturally appropriate counseling models for emerging addictive behaviors.

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1. INTRODUCTION

Addiction remains one of the most pressing global public health and social challenges, affecting millions of individuals and generating substantial psychological, social, and economic consequences (Alimoradi et al., 2022; Beyari, 2023; Organization, 2024; Tanhan et al., 2024). In recent decades, the

scope of addiction has expanded beyond substance dependence to include a wide range of behavioral addictions, such as problematic internet use, online gaming, social media use, and gambling (Akerele, 2022; Santangelo et al., 2022; Zhao et al., 2025; Zou et al., 2025). The World Health Organization recognizes addiction as a major health concern that affects individuals, families, and communities worldwide (Organization., 2025). Along with the rapid development of digital technologies, emerging forms of behavioral addiction have become increasingly prevalent, particularly among adolescents and young adults (Deng et al., 2025; Jiang et al., 2023; Zhao et al., 2025; Zou et al., 2025). These developments have increased the demand for counseling interventions that are responsive to both conventional substance-related addictions and newer technology-mediated addictive behaviors.

Guidance and counseling play a central role in addiction prevention, treatment, and recovery by helping individuals understand the psychological mechanisms underlying addictive behaviors, develop adaptive coping strategies, and maintain long-term behavioral change (Brooks & McHenry, 2023; Cerasa et al., 2024; Ekeng et al., 2025; Nasution et al., 2023). Contemporary counseling approaches include Cognitive Behavioral Therapy (CBT), Motivational Interviewing, family-based counseling, mindfulness-based interventions, relapse prevention programs, and more recently, technology-assisted services such as tele-counseling and mobile health (mHealth) interventions (Çınaroğlu & Yılmazer, 2024; Grant, 2023; Mehr et al., 2025; Nasution & Karneli, 2025). As addiction profiles continue to evolve, counseling research has expanded considerably, resulting in a rapidly growing and increasingly diverse body of literature.

Despite this growth, the existing literature remains fragmented. Most previous studies have focused on addiction prevalence, risk factors, clinical outcomes, or the effectiveness of specific therapeutic interventions for particular types of addiction (Akerele, 2022; Belfiore et al., 2024; Smirni et al., 2023). Although these studies provide valuable empirical evidence, they offer limited insight into the overall development of counseling research as a scientific field. Specifically, little is known about how counseling strategies have evolved across both substance and behavioral addictions, who the major contributors are, how international collaborations have developed, and which emerging topics are shaping future research agendas.

Furthermore, existing bibliometric studies on addiction generally examine addiction research from broader medical, psychological, or public health perspectives, while bibliometric mapping specifically focusing on counseling strategies across different forms of addictive behavior remains limited. Consequently, there is insufficient evidence regarding the intellectual structure of the field, publication trends, institutional and international collaboration patterns, and emerging research themes that could inform counselor education, future research priorities, and evidence-informed policy development. A comprehensive bibliometric synthesis is therefore needed to provide a systematic overview of how counseling research on addictive behaviors has developed over time and to identify areas that remain underexplored.

Bibliometric analysis offers a robust approach for quantitatively mapping scientific knowledge, identifying influential publications, collaboration networks, research hotspots, and thematic evolution within a particular discipline. By integrating Biblioshiny and VOSviewer, bibliometric studies enable researchers to visualize the intellectual landscape of a research field and identify opportunities for future investigation. Such evidence is particularly valuable for counseling researchers, educators, and policymakers seeking to understand current developments and formulate strategic directions for addiction counseling research. Accordingly, this study aims to map the intellectual structure, publication trends, key contributors, collaboration patterns, and emerging research topics in global research on counseling strategies for addictive behaviors published between 2000 and early 2026. Using a meta-bibliometric approach, this study provides a comprehensive overview of the evolution of addiction counseling research and identifies knowledge gaps that may guide future investigations, counselor education, and the development of evidence-informed counseling policies in the context of both substance-related and behavioral addictions.

2. METHODS

2.1 Research Design

This study employed a meta-bibliometric research design to systematically map the global scientific landscape of counseling strategies for addictive behaviors. Bibliometric analysis is a quantitative approach used to evaluate scientific publications, identify research trends, examine intellectual structures, analyze collaboration patterns, and detect emerging research themes within a particular field (Donthu et al., 2021). This study combined performance analysis and science mapping approaches using Biblioshiny (Bibliometrix package in RStudio) and VOSviewer version 1.6.20.

2.2 Data Source and Search Strategy

Bibliographic data were retrieved exclusively from the Scopus database because of its comprehensive journal coverage, rigorous indexing standards, and widespread use in bibliometric research. The search was conducted on 2 February 2026 using the Advanced Search feature in the TITLE-ABS-KEY field to retrieve publications explicitly discussing counseling strategies for addictive behaviors.

The search strategy employed the following Boolean query:

```
TITLE-ABS-KEY(
("counseling strategy" OR "counseling intervention"
OR "guidance and counseling"
OR "psychological intervention"
OR "counseling model")
AND
("addiction" OR "dependence"
OR "addictive behavior"
OR "substance abuse"
OR "internet addiction"
OR "social media addiction"
OR "gaming addiction"))
```

Because Scopus is a dynamic database that is continuously updated, publication records may change over time. Therefore, all analyses reported in this study were based exclusively on the dataset retrieved on 2 February 2026. Consequently, publications indexed in 2026 represent only records available up to the retrieval date and should be interpreted as partial-year data rather than complete annual publication records.

2.3 Eligibility Criteria and Screening Procedure

A predefined screening procedure was employed to ensure that the final dataset was relevant to the research objective. Four sequential eligibility criteria were applied.

First, the initial search identified 934 publications. Second, publications were limited to those published between 2000 and early 2026, resulting in 883 records. Third, only English-language publications were retained to ensure consistency in bibliometric analyses, leaving 547 records. Finally, only Open Access publications with Final publication status were included, resulting in a final dataset of 298 articles.

Open-access publications were selected to ensure complete accessibility of bibliographic information and to facilitate transparency and reproducibility of the bibliometric analysis. Nevertheless, this criterion may have excluded influential subscription-based publications and should therefore be considered a limitation of the present study.

The final corpus consisted of 298 articles that met all predefined eligibility criteria and were included in the bibliometric analysis. The complete screening procedure is presented in Figure 1.

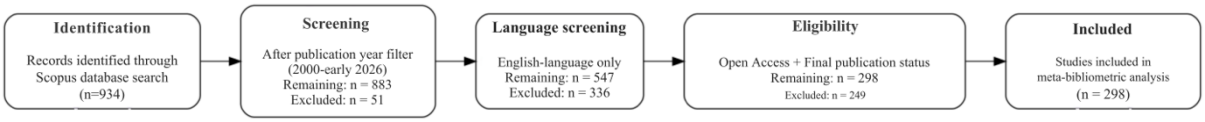


Figure 1. Bibliometric screening procedure for article selection

2.4 Data Extraction

The selected publications were exported directly from Scopus in both BibTeX (.bib) and CSV (.csv) formats. The exported metadata included publication year, authors, affiliations, source titles, abstracts, author keywords, index keywords, citations, and references. BibTeX files were analyzed using Biblioshiny, whereas CSV files were imported into VOSviewer version 1.6.20 for network visualization.

2.5 Bibliometric Indicators

The bibliometric analysis consisted of two complementary approaches: performance analysis and science mapping.

Performance analysis was conducted to evaluate:

- annual scientific production;
- publication growth trends;
- the most productive authors;
- the most productive institutions;
- the most productive countries;
- source journals;
- citation performance; and
- international collaboration patterns.

Science mapping was performed to visualize relationships among publications and identify the intellectual structure and thematic evolution of counseling research on addictive behaviors.

2.6 Biblioshiny Analysis

Bibliometric analyses were conducted using Biblioshiny, the web interface of the Bibliometrix package in RStudio. Biblioshiny was used to calculate descriptive bibliometric indicators, annual scientific production, country scientific production, institutional productivity, author productivity based on Lotka's Law, collaboration networks, thematic evolution, and trend topics.

Annual scientific production was analyzed to examine the temporal development of publications during the study period and to identify changes in research activity over time. The analysis focused on describing publication trends rather than evaluating the clinical effectiveness of counseling interventions.

2.7 VOSviewer Analysis

Science mapping was performed using VOSviewer version 1.6.20. The analysis used author keywords as the unit of analysis with the full counting method. A minimum occurrence threshold of three was applied to include keywords that appeared at least three times in the dataset.

Three visualization techniques were employed:

1. Network Visualization to identify thematic clusters and relationships among keywords.
2. Overlay Visualization to illustrate the temporal evolution of research topics.
3. Density Visualization to identify highly investigated themes based on keyword concentration.

In all visualizations, node size represents keyword frequency, whereas link strength indicates the co-occurrence relationship between keywords. These analyses were used to identify dominant themes, collaboration patterns, and emerging research topics in global counseling research on addictive behaviors.

3. FINDINGS AND DISCUSSION

Based on the selection process with criteria established to achieve the objectives of the study, the following are the results of the study that will be discussed in this study

3.1 Findings

The final bibliometric corpus consisted of 298 English-language research articles published between 2000 and early 2026, retrieved from the Scopus database after applying the predefined eligibility criteria. These articles were published across 188 scientific journals, reflecting the multidisciplinary nature of research on counseling strategies for addictive behaviors. All documents included in the analysis were classified as journal articles. The dataset demonstrated an annual publication growth rate of 5.48%, indicating a steady increase in scholarly interest in addiction counseling over the past two decades. The publications accumulated a total of 7,248 citations, with an average of 24.32 citations per article, suggesting that the literature has received considerable academic attention. Among the publication outlets, Frontiers in Psychiatry emerged as the most productive journal with 14 publications, followed by PLOS ONE (8 articles), International Journal of Environmental Research and Public Health (7 articles), Nicotine and Tobacco Research (6 articles), and Addictive Behaviors, BMC Psychiatry, BMJ Open, Drug and Alcohol Dependence, and Trials, each contributing five publications.

The bibliometric corpus involved 1,805 authors, with an average of 6.6 co-authors per article, demonstrating the collaborative nature of addiction counseling research. Only nine articles were written by a single author, while 22.15% of the publications involved international co-authorship, indicating an increasing trend toward global scientific collaboration. The average document age was 6.67 years, reflecting a relatively recent body of literature with sustained citation impact. Furthermore, the dataset contained 880 author keywords and 2,170 Keywords Plus, providing a comprehensive foundation for subsequent analyses of publication trends, collaboration networks, and thematic evolution in counseling research on addictive behaviors.

3.1.1 Life Cycle of Scientific Production

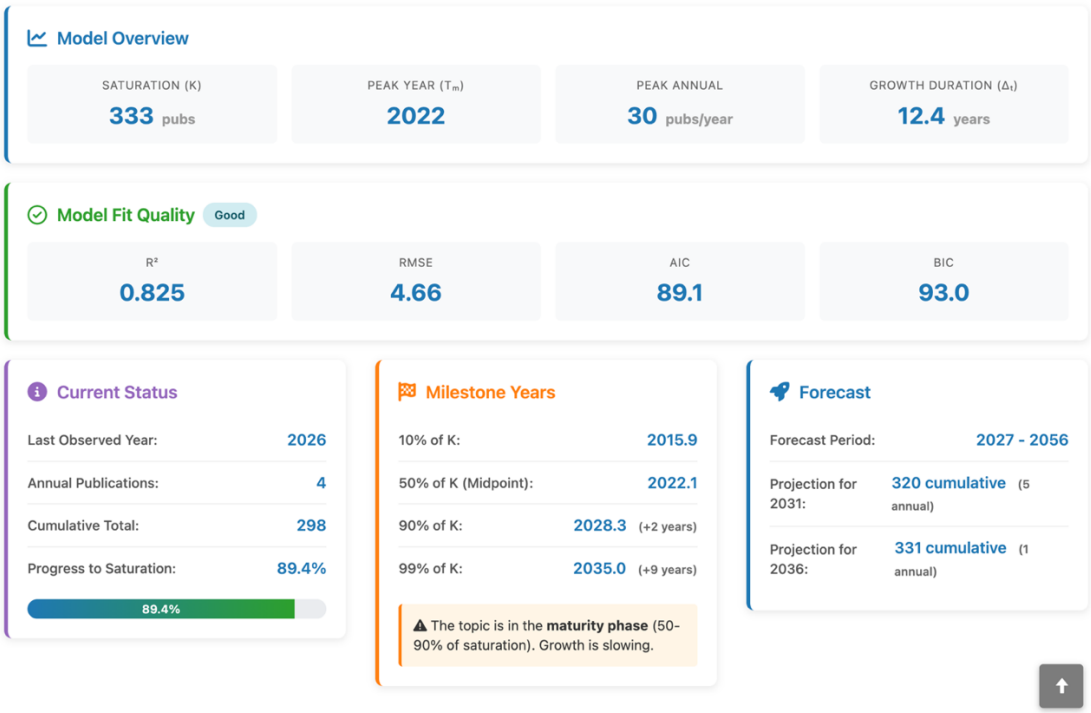


Figure 1. Life Cycle

The results of *the Life Cycle of Scientific Production* analysis confirm that the topic of counseling strategies to overcome student addiction is currently in a significant maturity phase, with a saturation level of 89.4%. This position indicates that the field of research has a well-established theoretical foundation and is widely recognized in global scientific literature, but still leaves 10.6% critical space for novelty exploration. The strength of this topic lies in empirical data showing peak productivity in 2022, which indicates that the issue of addiction in higher education remains a top priority on the international research agenda, making the continuation of this study a matter of high urgency.

Furthermore, this research is crucial to meet future research needs, given the slowdown in publication growth after 2022, which indicates the need for reorientation through the identification of new clusters. With a stable accumulation of literature projected until 2035, this bibliometric study is able to bridge the knowledge gap by mapping the effectiveness of counseling strategies that have not been optimally explored. Therefore, this research not only provides a comprehensive retrospective overview but also serves as a strategic guide for clinicians, counselors, and policymakers in educational institutions to implement interventions that are more adaptive to contemporary addiction trends.

3.1.2 Publication trends on addiction counseling interventions (2000-2026)

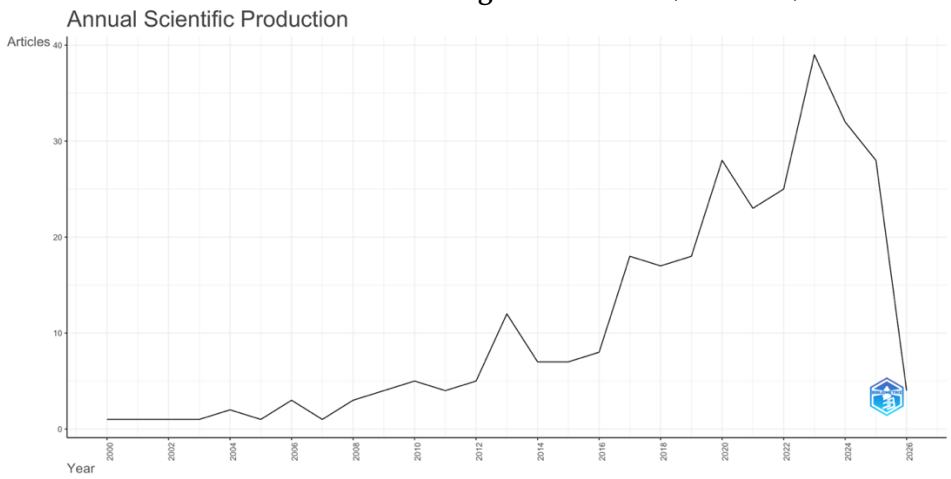


Figure 2. Publication Trends (2000-2026)

Based on Figure 2, the annual publications presented show a significant and progressive growth trend in the discourse on addiction counseling strategies over the past two decades. In the early period (2000–2012), scientific productivity tended to stagnate with a volume of less than 5 articles per year, but began to show consistent escalation since 2013 and reached a sharp surge in the 2020–2025 period, peaking in 2023 with 39 articles. Although data for 2026 only records 4 articles due to the current year, the overall trend shows that the topic of psychological intervention in addictive behavior has transformed from a marginal issue to a dynamic global research focus, reflecting an increasingly intensive academic response to the complexity of the phenomenon of addiction in the modern era. Based on these trends, the following are the most productive authors on this research topic:

3.1.3 Analysis of Author Productivity

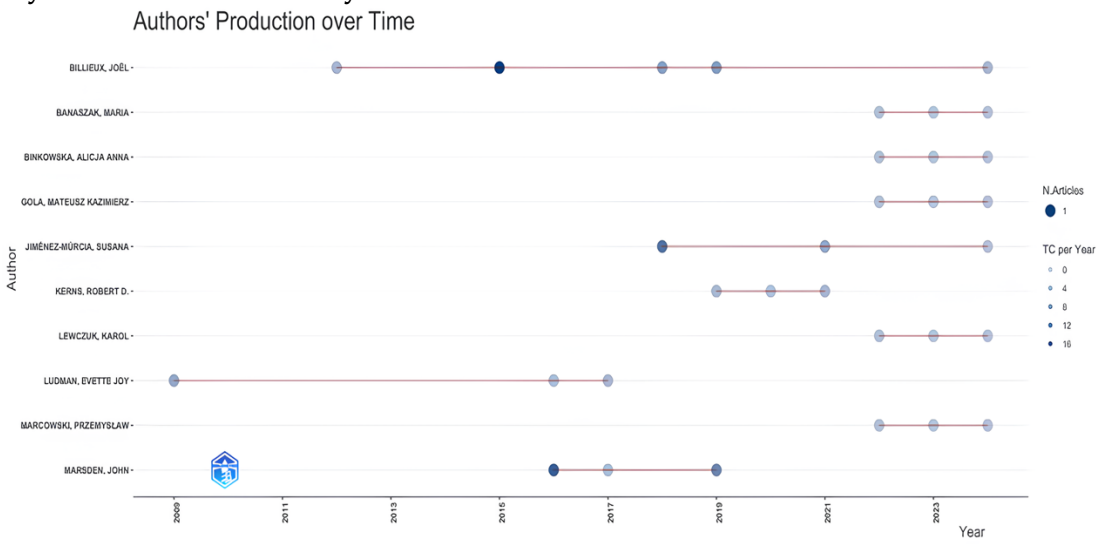


Figure 3. Author Productivity

Figure 3, which shows the annual distribution and productivity of authors, reveals a significant escalation in research over the past two decades, with the growth of literature starting at showing a sharp acceleration since 2013 and peaking in the 2020–2025 period with a highest volume of 39 articles in 2023. This trend indicates that the issue of addiction counseling strategies has shifted to become a priority in the global research agenda, supported by the contributions of key authors such as Billieux, Joël, with 5 publications, as well as other productive researchers such as Banaszak, Maria and Gola, Mateusz Kazimierz, who each contributed 3 major articles. Although the data for 2026 has only recorded 4 articles due to the current year, the consistency of scientific output over the past five years confirms that this field is in a phase of intellectual maturity with the active involvement of experts who are continuously developing effective interventions for addictive behavior. Based on the author data, we will discuss country collaboration related to the research topics discussed:

3.1.4 Countries' Collaboration World Map

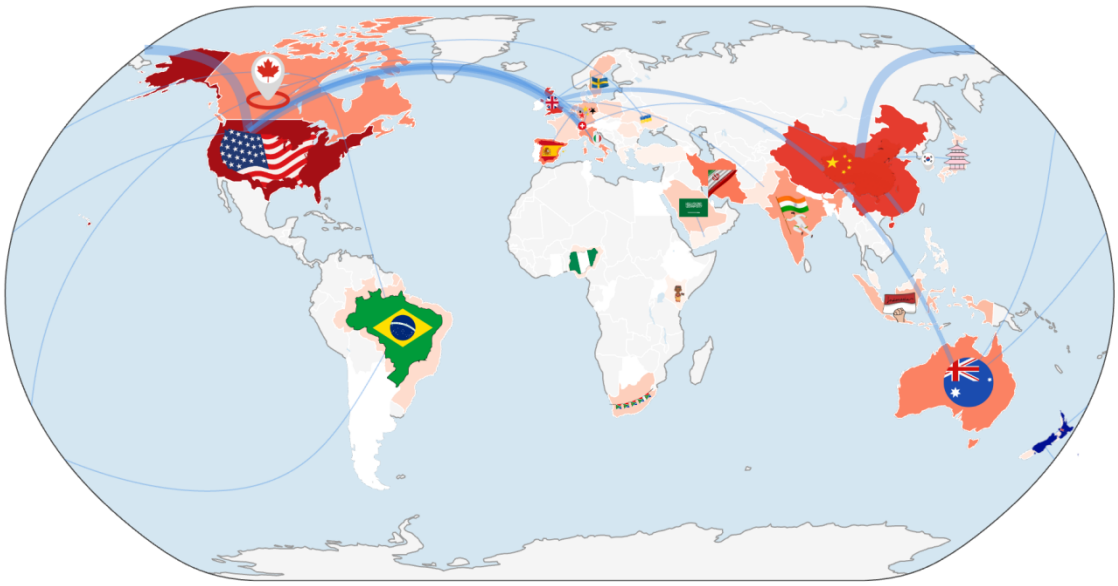


Figure 4. Country Collaboration

Based on Table 4, the bibliometric analysis of international cooperation networks shows that research on addiction counseling strategies exhibits a pattern of extensive global collaboration, with

developed countries dominating as the main research hubs. Collaboration frequency data shows that the United States (USA) leads the global research network with the highest intensity of cooperation, particularly with the United Kingdom (6 collaborations), China (5 collaborations), and extensive reach to various countries in Asia, Europe, and Africa. In addition, Switzerland has emerged as a key actor in Europe with significant collaboration frequency with Belgium (4 collaborations), while the United Kingdom and China also play a central role in connecting cross-continental research centers. Interestingly, developing countries such as Indonesia are beginning to integrate into this research ecosystem through strategic collaboration with China, the Netherlands, the Philippines, and Ukraine. The diversity of these inter-country connections reflects a global consensus on the urgency of addressing addiction, where the integration of knowledge between countries not only strengthens methodological validity but also enables the transfer of intervention strategies that are more adaptive to cross-cultural contexts. Based on the collaboration data of these countries, the following universities are productive in relation to this research:

3.1.5 Institutional Affiliations: Global Research Excellence Centers

Table 1. Productivity Affiliations

Affiliation	Articles
University of California	16
King's College London	14
Johns Hopkins Bloomberg School of Public Health	12
University College London	12
The University of Queensland	10
University of Washington	10
Yale School of Medicine	10
Kerman University of Medical Sciences	8
Massachusetts General Hospital	8
University of Utah School of Medicine	8
Harvard Medical School	7
Southwest University	7
Bushehr University of Medical Sciences	6
Johns Hopkins University School of Medicine	6

Based on Table 1, Analysis of publication distribution by institutional affiliation, research productivity on addiction counseling strategies is significantly dominated by leading academic institutions and medical centers from Western countries, confirming the centrality of global expertise in this region. The University of California ranks first as the most productive institution with 16 articles, followed by King's College London with 14 articles, and Johns Hopkins Bloomberg School of Public Health and University College London, each contributing 12 articles. In addition to the dominance of institutions from the United States and the United Kingdom, such as Yale School of Medicine and the University of Washington, there were also significant contributions from institutions in other regions, such as The University of Queensland (10 articles) and Kerman University of Medical Sciences (8 articles). The concentration of publications at these reputable institutions reflects the existence of well-established research infrastructure and strong interdisciplinary collaboration in developing innovative psychological interventions for addictive behavior. Next, we analyze the keywords that appear most frequently in this study:

3.1.6 Keyword Analysis

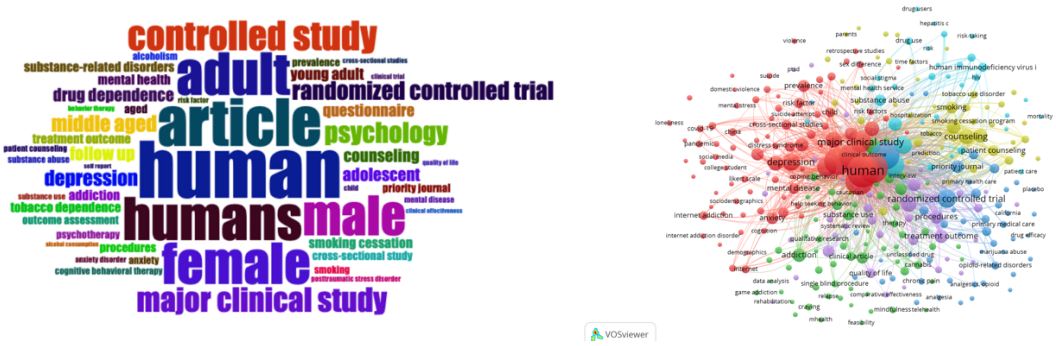


Figure 5. Keyword Trends

Based on Figure 5, the visualization of keywords from Biblioshiny and VOSviewer, the intellectual structure in addiction counseling strategy research shows a strong focus on rigid clinical methodologies and specific target populations. *Co-occurrence* analysis shows that terms such as "human," "major clinical study," "controlled study," and "randomized controlled trial" appear as central clusters, indicating that current global literature strongly emphasizes an *evidence-based medicine* approach in validating the effectiveness of interventions. In addition, keyword mapping reveals a close relationship between counseling interventions and variables of accompanying mental health disorders, such as "depression," "anxiety," and "post-traumatic stress disorder." Interestingly, significant clusters are beginning to emerge in the digital realm, such as "internet addiction," "social media," and "game addiction," which synergize with modern intervention techniques such as "cognitive behavioral therapy" and "mhealth." This signifies a paradigm shift in research that not only focuses on conventional substance addiction but also begins to explore the effectiveness of technology-based counseling to address contemporary addictive behaviors in the "adolescent" and "adult" demographic groups.

3.2 Discussion

This meta-bibliometric analysis reveals the highly dynamic evolutionary trajectory of addiction counseling strategy research from 2000 to early 2026. Exponential growth in the last decade, with peak productivity in 2023, reflects a global paradigm shift in the perception of addiction. While at the beginning of the millennium the main focus of research was on chemical dependence, current bibliometric data shows that the scientific community has massively expanded its scope towards digital behavioral addiction. This indicates that addiction is now understood as an impulse control disorder that is no longer tied to substances, but rather to brain *reward* mechanisms triggered by modern technology interaction patterns (Lee et al., 2025). The dominance of elite institutions such as the University of California and King's College London in producing high-quality literature sends a strong signal about the centrality of rigid clinical methodologies. The use of *Randomized Controlled Trials* (RCTs), which appear dominant in keyword analysis, indicates that the effectiveness of counseling interventions must now be validated through *evidence-based medicine* standards (Garland, 2024; Van de Vliet et al., 2023). However, the centralization of research in developed countries (Global North) creates its own challenges in terms of generalizing findings. Counseling strategies that are effective in the West may require significant cultural modification when implemented in regions with collectivist social structures, such as Indonesia or other parts of Asia. This geographical concentration also reveals an important research gap, as relatively few studies originate from low- and middle-income countries (LMICs). Consequently, evidence regarding culturally responsive counseling interventions in diverse socioeconomic settings remains limited, highlighting the need for broader international research participation.

An in-depth analysis of keywords shows that counseling interventions no longer stand alone but are integrated with the treatment of mental health comorbidities. The strong relationship between "human," "depression," and "anxiety" in the VOSviewer map confirms that the most effective addiction

counseling strategy is one that adopts a holistic approach. Counselors cannot focus solely on addictive behavior, but must be able to simultaneously intervene in emotional disorders that are often the trigger or impact of addiction (Brooks & McHenry, 2023; Chadha et al., 2024). This places techniques such as *Cognitive Behavioral Therapy* (CBT) and *Acceptance and Commitment Therapy* (ACT) as key pillars in contemporary literature. One of the most crucial findings in this study is the emergence of *mHealth* and *tele-counseling* trends as the forefront of future interventions. The gap between the number of people suffering from addiction and the availability of professional counselors has sparked innovation in the form of digital platforms. Research literacy in the 2020-2026 period shows that remote intervention is no longer just a post-pandemic emergency alternative, but a key strategy for reaching hidden populations who are reluctant to seek help due to social stigma. The effectiveness of technology in facilitating anonymity has been proven to reduce psychological barriers for individuals suffering from pornography or online gambling addiction to access professional help (Jayathilake, 2025; Milašiu, 2025). Nevertheless, keyword mapping indicates that digital technologies remain represented by only a limited number of themes, such as mHealth and tele-counseling. This suggests that the integration of counseling science with emerging digital technologies—including artificial intelligence, digital decision-support systems, and adaptive intervention platforms—remains at an early stage and represents a promising direction for future research.

Despite increased productivity, this study identified a significant *research gap* between developing theory and field implementation. There is a lag in the development of counseling protocols specific to new types of addiction, such as social media addiction and compulsive cryptocurrency trading, compared to research on traditional substance addiction (Perkinson et al., 2022). Most of the literature is still descriptive or preliminary in nature, while there is an urgent need for standardized intervention guidelines for practitioners. This gap creates a risk that counseling practitioners in the field may use methods that are no longer relevant to the characteristics *of digital natives*, who are the most affected group. Furthermore, although internet addiction has become an increasingly prominent research topic, counseling studies specifically addressing social media addiction, gaming addiction, pornography addiction, and gambling addiction remain comparatively limited. These emerging behavioral addictions require more specialized counseling protocols and stronger empirical evidence to support evidence-informed practice.

The research gap is also evident in the lack of collaborative involvement between technology (IT) experts and guidance and counseling experts in mapping addiction prevention algorithms. The country's collaboration map shows that research is still dominated by health and psychology experts, while future addiction challenges will depend heavily on how *gamification* design influences human behavior. Interdisciplinary integration between computer science and behavioral science must be the next priority agenda to create preventive strategies that are embedded directly in the digital ecosystem, not just curative interventions after addiction occurs. The impact of this research on the academic and practical worlds is significant, especially in formulating an adaptive counselor training curriculum.

The results of this study urge higher education institutions to review the classical counseling models that are taught and begin to incorporate digital competencies into the therapeutic process. This urgency is driven by the fact that addiction in the future will become increasingly segmented and personalized. Without the support of bibliometric data that maps these global trends, the development of addiction countermeasure policies at the national level will lose direction and tend to be reactive rather than proactive. In addition, relatively limited attention has been devoted to school-based addiction prevention and counselor education within the mapped literature. Considering that schools are among the primary settings for early prevention and counselors are key agents in implementing evidence-based interventions, future research should place greater emphasis on developing school-based counseling models and strengthening counselor-training programs that incorporate digital competencies and culturally responsive practices.

The limitations of this study in terms of its reliance on the Scopus database provide opportunities for future researchers to conduct cross-database syntheses such as Web of Science or PubMed to enrich perspectives. In addition, the study period until early 2026, which includes partial-year publication

records available at the time of data retrieval, provides a predictive picture that must be approached critically. However, overall, this meta-bibliometric study has successfully laid a strong foundation for understanding the direction in which addiction counseling strategy research is heading. The emphasis on global collaboration, technology integration, and the treatment of mental comorbidity are key to advancing addiction counseling research in response to emerging societal challenges. Future studies are also encouraged to incorporate systematic reviews, meta-analyses, longitudinal designs, and experimental research to evaluate the effectiveness of specific counseling interventions identified through bibliometric mapping.

4. CONCLUSION

This meta-bibliometric study mapped the global scientific landscape of counseling strategies for addictive behaviors published between 2000 and early 2026 using a dataset of 298 Scopus-indexed articles. The findings reveal a substantial increase in research productivity after 2013, with the highest annual publication output recorded in 2023, indicating growing scholarly attention to addiction counseling in response to the increasing complexity of both substance-related and behavioral addictions. The United States and the United Kingdom remain the dominant contributors to international collaboration networks, while leading universities and research institutions play central roles in advancing evidence-based counseling research.

Keyword co-occurrence analysis demonstrates a notable shift in research focus toward digital behavioral addictions, including internet addiction, gaming addiction, and social media addiction. In addition, Cognitive Behavioral Therapy (CBT), mHealth, and tele-counseling emerged as prominent themes in the contemporary literature, together with increasing attention to comorbid mental health conditions such as anxiety and depression. These findings illustrate the ongoing transformation of addiction counseling research toward more technology-integrated and multidisciplinary approaches.

This study contributes to the literature by providing a comprehensive overview of publication trends, influential contributors, international collaboration patterns, and emerging research topics in addiction counseling. The findings offer valuable insights for researchers, counselor educators, practitioners, and policymakers in identifying priority areas for future research, strengthening counselor education, and supporting the development of evidence-informed counseling policies. Nevertheless, the findings should be interpreted in light of several limitations, as the analysis was restricted to Scopus-indexed English-language Open Access publications, and the publication records for 2026 represent partial-year data available up to the retrieval date.

Future research is encouraged to integrate bibliometric mapping with systematic literature reviews or meta-analyses to evaluate the effectiveness of specific counseling interventions across different forms of addictive behaviors. Further investigation is also needed to expand research involving low- and middle-income countries and to develop culturally responsive, technology-integrated, and evidence-based counseling approaches that address the evolving challenges of addiction in the digital era.

REFERENCES

Akerele, E. (2022). *Substance and non-substance related addictions: a global approach*. Springer Nature.

Alimoradi, Z., Lotfi, A., Lin, C. Y., Griffiths, M. D., & ... (2022). Estimation of behavioral addiction prevalence during COVID-19 pandemic: a systematic review and meta-analysis. In *Current addiction …*. Springer. https://doi.org/10.1007/s40429-022-00435-6

Belfiore, C. I., Galofaro, V., Cotroneo, D., Lopis, A., Tringali, I., Denaro, V., & Casu, M. (2024). A Multi-Level Analysis of Biological, Social, and Psychological Determinants of Substance Use Disorder and Co-Occurring Mental Health Outcomes. *Psychoactives*, *3*(2), 194–214. https://doi.org/10.3390/psychoactives3020013

Beyari, H. (2023). *The Relationship between Social Media and the Increase in Mental Health Problems*. https://doi.org/https://doi.org/10.3390/ijerph20032383

Brooks, F., & McHenry, B. (2023). *A contemporary approach to substance use disorders and addiction counseling*. John Wiley & Sons.

Cerasa, A., Gaggioli, A., Pioggia, G., & Riva, G. (2024). Metaverse in Mental Health: The Beginning of a Long History. *Current Psychiatry Reports*, *26*(6), 294–303. https://doi.org/10.1007/s11920-024-01501-8

Chadha, Y., Patil, R., Toshniwal, S., Sinha, N., & Toshniwal, S. S. (2024). Internet addiction management: A comprehensive review of clinical interventions and modalities. *Cureus*, *16*(3).

Çınaroğlu, M., & Yılmazer, E. (2024). Transformative emotional journeys: reconceptualizing guilt, shame, hope, and compassion in addiction therapy tt - Dönüştürücü Duygusal Yolculuklar: Bağımlılık Terapisinde Suçluluk, Utanç, Umut ve Merhameti Yeniden Kavramsallaştırmak. *Meriç Uluslararası Sosyal ve Stratejik Araştırmalar Dergisi*, *8*(2), 123–156. https://doi.org/10.54707/meric.1473774

Deng, W. Q., Pare, G., Belisario, K., Doggett, A., Pigeyre, M., & Munafò, M. R. (2025). *Externalizing as a common genetic influence for a broad spectrum of substance use and behavioral conditions : A developmental perspective from the Avon Longitudinal Study of Parents and Children*. *July*, 2559–2572. https://doi.org/10.1111/add.70163

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. https://doi.org/https://doi.org/10.1016/j.jbusres.2021.04.070

Ekeng, E. B., Fidelis, U. B., Unimna, U. F., Chukwuka, A. E., Kingsley, O. A., & Asuquo, E. E. (2025). The Role Of Counselling In Drugs And Alcohol Rehabilitation Process. *Global Journal of Educational Research*, *24*(1), 37–41.

Garland, E. L. (2024). Mindfulness-Oriented Recovery Enhancement: Implementing an evidence-based intervention for chronic pain, opioid use, and opioid addiction in clinical settings. *British Journal of Clinical Pharmacology*, *90*(12), 3028–3035.

Grant, K. W. (2023). *Fundamentals of Psychotherapy: Essential Skills that Bridge Theory and Practice*. Kevin William Grant.

Jayathilake, M. H. D. S. (2025). *Exploring the Psychological Impacts of Pornography Addiction in Adults Aged 20 to 40 in the Central Province*. *173*(1), 95–109. https://doi.org/10.47119/10.47119/IJRP1001731520257875

Jiang, W., Cai, L., & Wang, Z. (2023). Common hyper-entropy patterns identified in nicotine smoking, marijuana use, and alcohol use based on uni-drug dependence cohorts. *Medical & Biological Engineering & Computing*, *61*(12), 3159–3166. https://doi.org/10.1007/s11517-023-02932-w

Lee, T., Park, S., Lee, S., Hwangbo, A., Bae, H., Lee, Y., & Choi, H. J. (2025). Hijacked Brain in Modern Obesity: Cue, Habit, Addiction, Emotion, and Restraint as Targets for Personalized Digital Therapy and Electroceuticals. *Journal of Obesity & Metabolic Syndrome*, *34*(3), 196–212. https://doi.org/10.7570/jomes25053

Mehr, S. R., Nakhaei, B., Soleimani, H., Madadlou, S. K., Maleky, A. A., & Abbasi-Maleki, S. (2025). Addiction and stress: Exploring the reward pathways in brain affected by different drugs. *Progress in Brain Research*, *291*, 381–404.

Milašiu, V. (2025). *Internet Addiction as a Human Rights Issue*. *2021*, 113–137.

Nasution, S., Jamaris, J., Solfema, S., & Almizri, W. (2023). The role of guidance and counseling teachers in preparing students for the society 5.0 Era. *Jurnal Bimbingan Dan Konseling Terapan*, *7*(2), 143–150.

Nasution, S., & Karneli, Y. (2025). Behavioral Approaches in Overcoming Zoophobia: Modern Desensitization as a Revolutionary Therapy. *Jurnal Psikoedukasi Dan Konseling*, *8*(2), 92–99.

Organization., W. H. (2025). Addictive behaviours. *WHO*.

Organization, W. H. (2024). *Global status report on alcohol and health and treatment of substance use disorders*. World Health Organization.

Perkinson, R. R., Jongsma Jr, A. E., & Bruce, T. J. (2022). *The addiction treatment planner*. John Wiley & Sons.

Santangelo, O. E., Provenzano, S., & Firenze, A. (2022). Risk factors for addictive behaviors: a general overview. *International Journal of Environmental Research and Public Health*, *19*(11), 6583.

Smirni, D., Smirni, P., Lavanco, G., & Caci, B. (2023). Premorbid personality traits as risk factors for behavioral addictions: a systematic review of a vulnerability hypothesis. In *Children* (Vol. 10, Issue 3, p. 467). https://doi.org/10.3390/children10030467

Tanhan, F., Özok, H. İ., Kaya, A., & Yıldırım, M. (2024). Mediating and moderating effects of cognitive flexibility in the relationship between social media addiction and phubbing. *Current Psychology*, *43*(1), 192–203. https://doi.org/10.1007/s12144-023-04242-8

Van de Vliet, P., Sprenger, T., Kampers, L. F. C., Makalowski, J., Schirrmacher, V., Stücker, W., & Van Gool, S. W. (2023). The Application of Evidence-Based Medicine in Individualized Medicine. In *Biomedicines* (Vol. 11, Issue 7, p. 1793). https://doi.org/10.3390/biomedicines11071793

Zhao, Q., Zhang, X., & Wei, Z. (2025). Summary and Prospect of Addiction. *Substance and Non-Substance Addiction*, 301–317.

Zou, Z., Wang, X., Wang, H., Wang, X., Ding, J., Uquillas, F. d'Oleire, & Chen, H. (2025). and Non-substance Addiction. *Substance and Non-Substance Addiction*, 3.