A Bibliometric Study of FOMO (Fear of Missing Out) Research and Digital Mental Health (2005–2025)

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Article Info

ABSTRACT

This study performs an extensive bibliometric review of international research on Fear of Missing Out (FoMO) and digital mental health from 2005 to 2025. Data from the Scopus database were utilized to examine 1,226 publications with Bibliometrix (R) and VOSviewer, facilitating the mapping of co-authorship, co-citation, and keyword co-occurrence networks. The findings delineate three primary research domains: FoMO as a psychological construct associated with anxiety and social requirements; FoMO as a precursor to mental health challenges, including depression, loneliness, and internet addiction; and FoMO as a focal point in studies of digital well-being and behavioral control. The United States, Germany, and China are prominent contributors, bolstered by robust international collaboration networks. Temporal and density visualizations indicate a thematic transition from conceptual exploration to preventive and multidisciplinary frameworks that integrate psychology, health, and technology. The research provides actionable insights for the development of digital literacy initiatives and mental health interventions, while underscoring the importance of ethical media utilization. This research provides a comprehensive analysis of the intellectual structure, key contributors, and prospective research goals regarding FoMO and digital mental health, marking one of the initial longitudinal mappings in this field.

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1. INTRODUCTION

In the digital age, human interaction is increasingly facilitated by technology. The extensive use of social media and mobile communication platforms has transformed social presence, belonging, and self-esteem, fostering an environment in which individuals incessantly observe others' lives online [1]. This tendency has facilitated the rise of the Fear of Missing Out (FoMO)—a widespread anxiety that others may be enjoying fulfilling experiences in one's absence. [1] formally characterized FoMO as "a pervasive apprehension that others might be having rewarding experiences from which one is absent," and associated it with the needs for relatedness and competence within the Self-Determination Theory framework. Since that time, FoMO has emerged as one of

the most scrutinized socio-psychological conceptions within the realms of digital communication, social media, and mental health [2], [3].

In the last twenty years, the prevalence of cellphones and digital connectivity has intensified the existence of FoMO across many age demographics and cultures. Studies indicate that elevated levels of FoMO are associated with heightened problematic social media usage, smartphone addiction, and psychological discomfort [4], [5]. [4] shown that FoMO mediates the connection between social anxiety and problematic smartphone usage, indicating that persons with elevated anxiety may obsessively monitor social media to preserve a sense of belonging. Likewise, [6]indicated that FoMO forecasted obsessive online activities and diminished emotional regulation. The expanding body of research positions FoMO as a critical element connecting digital involvement and mental health concerns.

Alongside the emergence of FoMO research, the domain of digital mental health has garnered considerable academic focus. Digital mental health involves the examination and utilization of technology-driven resources—such as applications, online treatment, and telepsychiatry—to enhance psychological well-being [7]. Nonetheless, whereas numerous digital solutions seek to enhance mental health, these same technologies frequently exacerbate cognitive overload, social comparison, and self-esteem challenges (Brailovskaia et al., 2021). Thus, FoMO has a dual role: it is simultaneously a symptom and a catalyst of the tensions present in digital mental health ecosystems.

The relationship between FoMO and mental health is intricate. FoMO can intensify anxiety, sadness, sleep disruption, and loneliness; conversely, digital platforms offer opportunities for social interaction and emotional support [8], [9]. A meta-analysis conducted by [6] revealed a continuous correlation between elevated FoMO and diminished life satisfaction, as well as increased negative affect. These findings

highlight that FoMO is not merely a behavioral phenomenon of the digital era, but a psychosocial construct linked to individual well-being and the technology context.

Notwithstanding an increase in empirical research, the literature continues to be disjointed across fields like psychology, communication, education, and public health. Certain research highlight the impact of FoMO on academic distraction and performance [10], whereas others investigate its influence on consumer decision-making or digital marketing behavior [11]. A comprehensive knowledge of the evolution of FoMO research within the broader digital mental health field is absent. Bibliometric analysis provides a systematic method to bridge this gap by assessing publishing trends, citation networks, and topic development over time [12]. This mapping not only delineates the intellectual structure of the discipline but also illustrates the evolution of research objectives and collaborations from initial psychological investigations to modern digital well-being frameworks.

Recent bibliometric analyses in related fields—such as social media addiction [13], digital well-being [14], and cyberpsychology [15]—illustrate the efficacy of this approach in revealing nascent research clusters and intellectual trends. To far, no bibliometric analysis has thoroughly investigated the interaction of FoMO and digital mental health over an extended timeframe. In light of the exponential increase in pertinent papers since 2015 and the ongoing transformation of post-pandemic digital behavior, such an overview is both opportune and essential.

Despite the extensive discourse surrounding FoMO in behavioral and psychological research, the discipline is deficient in a comprehensive synthesis of its intellectual evolution, multidisciplinary connections, and thematic progression within the realm of digital mental health. Previous assessments have been either narrative or meta-analytic, frequently constrained to particular age demographics or individual platforms (e.g., Instagram, TikTok). A

complete bibliometric mapping identifying the principal authors, institutions, sources, and theme co-occurrences influencing FoMO research internationally is still lacking. As a result, the academic community lacks a cohesive comprehension of the evolution of FoMO's conceptual parameters and its mental health ramifications throughout the past two decades (2005–2025). This gap obstructs theoretical integration, practical implementation, and interdisciplinary cooperation in tackling psychological concerns of the digital age.

This study intends to deliver an exhaustive bibliometric overview of research concerning Fear of Missing Out (FoMO) and digital mental health from 2005 to 2025. It aims to carefully chart the chronological progression of academic articles concerning FoMO and its association with mental health in digital environments, delineating the topic's development over time. The study delineates the preeminent authors, journals, institutions, and nations contributing to this expanding domain, providing insights into the global distribution and leadership of FoMO-related research. Furthermore, it analyzes co-citation, keyword co-occurrence, and bibliographic coupling networks to elucidate significant topic clusters and intellectual connections among studies, revealing how researchers perceive and address the convergence of FoMO and digital well-being. The research elucidates critical pathways linking FoMO and mental health in digital contexts by visualizing the intellectual framework and emerging tendencies. This bibliometric synthesis seeks to address knowledge deficiencies, delineate future research directions, and furnish an evidence-based comprehension of the relationship between FoMO research and the broader domain of digital mental health. The results are anticipated to provide significant insights for scholars, healthcare professionals, and policymakers aiming to understand and mitigate the psychological effects of hyperconnectivity in the contemporary digital landscape. ==assessment. Journal of Business & Economics Research, 14(1), 33–44.==

2. METHODS

This study utilized a quantitative bibliometric methodology to thoroughly delineate the intellectual terrain of research on Fear of Missing Out (FoMO) and digital mental health from 2005 to 2025. Bibliometric analysis facilitates the quantitative assessment of scientific publications, uncovering publication trends, research frontiers, and collaborative networks [12]. The data for this study were obtained from the Scopus database, chosen for its extensive coverage of peer-reviewed journals across several fields, including psychology, communication, and health sciences [16]. The search query employed was: TITLE-ABS-KEY ("fear of missing out" OR "FoMO") AND ("digital mental health" OR "mental wellbeing" OR "online wellbeing" OR "internet addiction" OR "social media use"), restricted to articles and reviews in English, spanning the publication period from 2005 to 2025. This inquiry produced a preliminary dataset of 1,437 records as of January 2025. Duplicate and irrelevant records were identified and eliminated based on titles and abstracts in accordance with the PRISMA identification and eligibility protocol, yielding a final sample of 1,226 publications for analysis.

The bibliometric data were exported in CSV and BibTeX formats, encompassing metadata including authors, titles, abstracts, keywords, affiliations, and references. The investigation utilized the Bibliometrix R-package (version 4.3) and VOSviewer (version 1.6.20) to extract essential bibliometric markers. A descriptive study was performed to ascertain trends in publication growth, prolific authors, leading journals, and nation distributions. Network analysis, encompassing co-authorship, co-citation, and bibliographic coupling, were conducted to elucidate scientific collaboration and conceptual frameworks within the discipline. Keyword co-occurrence analysis was employed to discern principal study themes and nascent subjects pertaining to FoMO and digital mental health. Each map was depicted according to normalized association strength,

with node size reflecting occurrence frequency and connection thickness denoting relationship strength between items [17].

To guarantee analytical rigor, all bibliometric maps were personally verified and cross-referenced with the source information. Temporal trend analysis was utilized to investigate the progression of significant phrases and clusters across time. Furthermore, theme evolution analysis and conceptual structure mapping were performed to investigate the intellectual advancement of FoMO research and its intersection with digital mental health discourse. This integration of quantitative mapping and qualitative analysis enabled the study to elucidate the evolution of FoMO scholarship from initial psychological frameworks to more expansive digital well-being paradigms. Ethical considerations were satisfied by examining publicly accessible bibliographic data, which did not include any human subjects or confidential information. The methodological framework offers a thorough and reproducible basis for comprehending global dynamics, collaborative patterns, and thematic transitions in FoMO and digital mental health research.

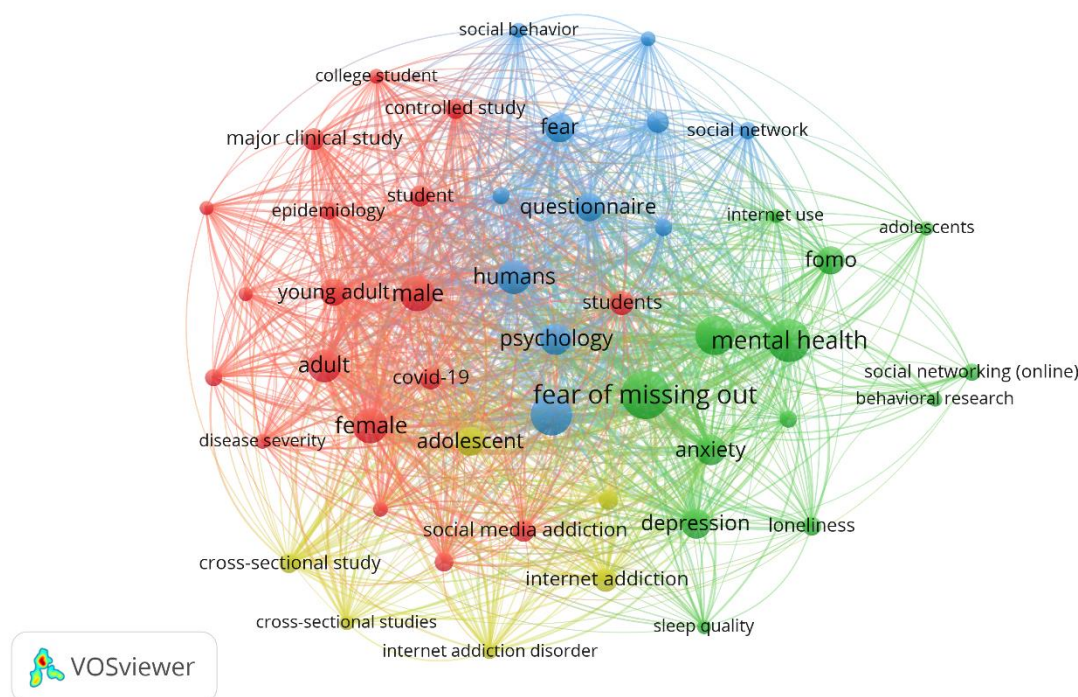## 3. RESULTS AND DISCUSSION

3.1 Keyword Co-Occurrence Network

Figure 1. Network Visualization
Source: Data Analysis Result, 2025

Figure 1 reveals The VOSviewer network visualization depicts the co-occurrence of author keywords in publications regarding Fear of Missing Out (FoMO) and digital mental health from 2005 to 2025. Each hue signifies a unique theme cluster, the node size reflects keyword frequency, and the link thickness represents co-occurrence intensity. The map delineates four predominant clusters—red, green, blue, and yellow—illustrating the conceptual framework of FoMO research across psychological, behavioral, and clinical aspects.

The green cluster is centered on the principal phrases "fear of missing out," "mental health," "anxiety," "depression," "internet addiction," and "social media

addiction." This cluster signifies the psychopathological aspect of FoMO, associated with emotional disorders, behavioral dependencies, and cognitive maladjustments. The intricate relationship among FoMO, anxiety, and depression highlights significant academic attention on the mental health implications of continuous online activity. The incorporation of sleep quality and loneliness indicates that FoMO-driven obsessive online behavior leads to emotional fatigue and diminished well-being. This theme area highlights the evolution of FoMO from a social phenomenon to a quantifiable factor influencing digital mental health outcomes [6].

The red cluster encompasses demographic and methodological terminology, including "young adult," "adolescent," "male," "female," "college student," "major clinical study," and "epidemiology." This pattern indicates a demographically oriented stream of FoMO research that examines vulnerabilities specific to certain populations. The prevalence of terminology associated with students and teenagers indicates the predominance of youth-focused research, as younger demographics are more susceptible to digital networks and social comparison phenomena. The emergence of COVID-19 underscores a temporal increase in papers analyzing FoMO during isolation caused by the pandemic, when digital engagement escalated [18]. This cluster constitutes the empirical foundation of the discipline, wherein cross-sectional and clinical methodologies assess the prevalence and psychological correlates of FoMO.

The blue cluster encompasses "fear," "social behavior," "social network," and "psychology." This encapsulates the behavioral and theoretical basis of FoMO research, grounded on social and cognitive psychology. It posits that FoMO is understood as a motivational and emotional construct influencing human-computer interaction behaviors. The recurrent connection with "questionnaire" suggests dependence on psychometric tools, such the FoMO Scale [1] to implement the construct in various

situations. The strong connection among "fear," "social network," and "students" suggests that digital socialization practices are crucial for comprehending FoMO, particularly within the contexts of self-determination, belongingness, and social comparison.

The yellow cluster comprises phrases such as "cross-sectional study," "internet addiction disorder," and "behavioral research." This section delineates the methodological and diagnostic aspects, highlighting the study design patterns employed in the FoMO literature. The recurrent utilization of cross-sectional and epidemiological methodologies indicates a lack of methodological diversity, potentially constraining causal inference. Nonetheless, the closeness of this cluster to mental health and addiction terminology indicates that quantitative behavioral techniques are essential for delineating the relationship between digital involvement and psychopathology. This indicates prospects for future study to utilize longitudinal and experimental methods to elucidate FoMO's temporal and causal mechanisms [12].

The VOSviewer map indicates that FoMO research has evolved into a multidisciplinary domain encompassing psychology, public health, and digital behavior studies. The centrality of "fear of missing out" as a pivotal node linking mental health, behavioral addiction, and demographic determinants highlights its integrative essence. The intersection of clusters signifies a growing convergence of clinical psychology, digital well-being, and sociotechnical study. This bibliometric graphic delineates the intellectual framework of FoMO research and underscores its progression from a conceptual construct of social anxiety to an evidence-based paradigm within digital mental health discourse. Future research could enhance understanding by integrating these clusters through mixed-method and cross-cultural studies to elucidate FoMO's intricate effects on mental well-being in the hyperconnected era.

Figure 2. Overlay Visualization
Source: Data Analysis Result, 2025
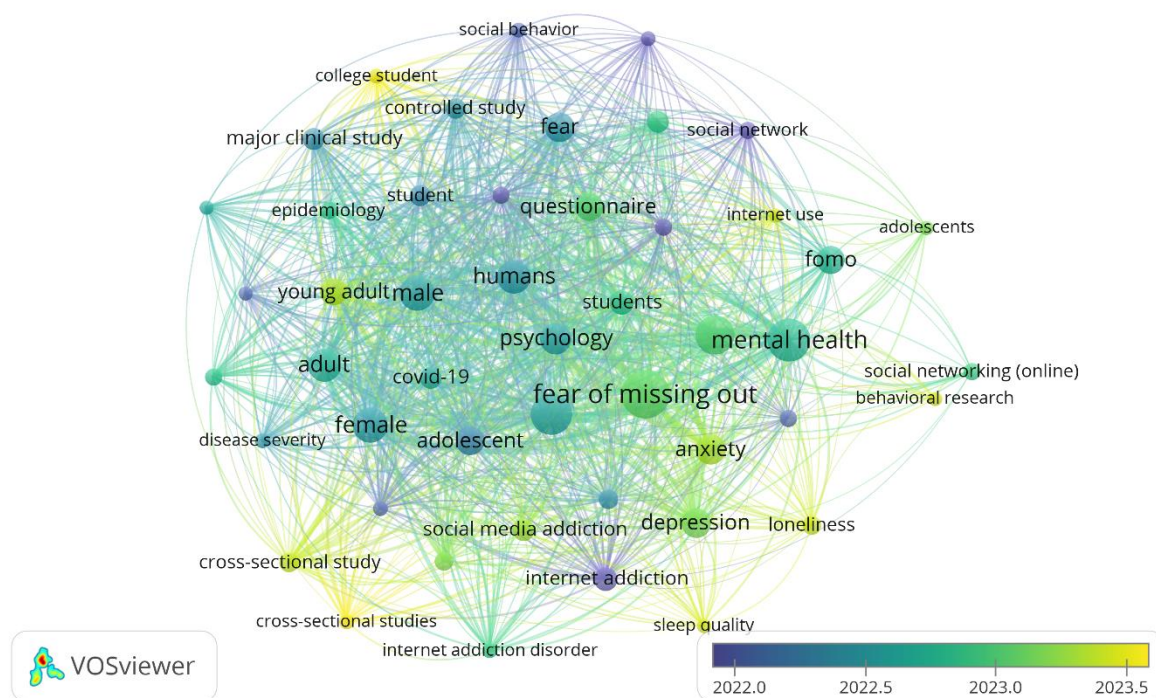
The overlay visualization map from VOSviewer depicts the historical progression of research themes in the domain of Fear of Missing Out (FoMO) and digital mental health from 2022 to 2025. The color gradient—from blue (older studies) to yellow (more current publications)—illustrates the evolving focus of study topics over time. Initial studies (shown in blue) concentrated on fundamental constructs such fear, psychology, social behavior, and questionnaires. These keywords suggest that early FoMO research primarily focused on conceptualizing and quantifying the phenomenon through psychometric measures within psychological frameworks. During this period, FoMO was regarded as an emergent socio-cognitive construct associated with the need for belonging, self-determination, and the psychological motivations underlying social media usage [1].

As the discipline advanced (shown by green nodes), the topic scope broadened to include clinical and behavioral aspects, linking FoMO with mental health, depression, anxiety, internet addiction, and sleep quality.

This move signifies a methodological change aimed at investigating the psychopathological ramifications of FoMO and its mediating function in digital stress and emotional disorders [4], [6]. The prevalence of keywords like young adult, college student, female, and COVID-19 indicates that research is increasingly focused on particular demographic groups and contextual elements affecting digital mental health during and post-pandemic. This phase of studies often utilized cross-sectional designs to investigate the relationships between FoMO intensity, online behavior, and psychological well-being in student and adolescent populations [10]

The yellow-highlighted nodes, denoting publications from late 2023 onwards, signify a novel research frontier focusing on behavioral research, online social networking, and digital well-being. This recent trend signifies a shift from solely diagnostic research to intervention-focused studies, emphasizing measures to alleviate the effects of FoMO through mindfulness, digital detox initiatives, and responsible media use [18]. The correlation among FoMO, mental health, and behavioral research in this

era indicates increasing interdisciplinarity—merging psychology, communication studies, and health informatics to foster sustainable technology utilization. The overlay map illustrates a temporal progression from conceptual development (2013–2017) to

clinical exploration (2018–2022) and ultimately to preventive and digital well-being paradigms (2023–2025), affirming FoMO's emergence as a pivotal construct in the examination of mental health in the digital era.
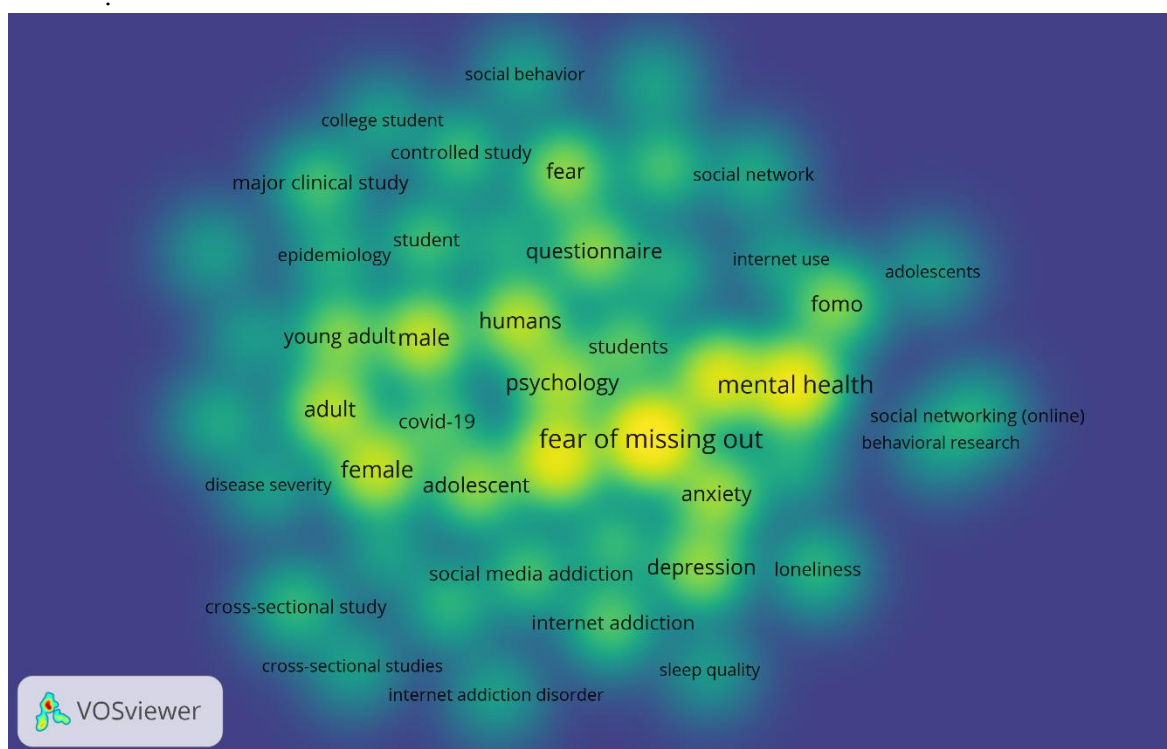

Figure 3. Density Visualization
Source: Data Analysis, 2025

The density visualization map depicts the intensity and concentration of research effort in the domain of Fear of Missing Out (FoMO) and digital mental health. The warmest locations, depicted in bright yellow, signify keywords with the highest co-occurrence frequency, highlighting primary areas of academic focus. The primary focus on "fear of missing out," "mental health," "psychology," and "humans" underscores FoMO's role as the conceptual and methodological nucleus of this study domain. The terms "anxiety," "depression," "social media addiction," and "internet addiction" coalesce into dense yellow-green clusters, indicating their persistent interconnection in empirical research examining the psychological and behavioral ramifications of digital involvement. This pattern illustrates the evolution of the field towards an

integrated paradigm linking FoMO with emotional well-being, addictive behaviors, and larger psychosocial dynamics in online contexts [4], [6].

The cooler green and blue zones at the periphery—featuring terms such as "sleep quality," "behavioral research," "social networking (online)," and "epidemiology"—suggest nascent or underexplored issues. These domains indicate novel avenues in FoMO research, especially for physiological consequences (e.g., sleep disruption) and interdisciplinary approaches that amalgamate behavioral sciences and public health. The significant prevalence of demographic phrases like "young adult," "college student," and "adolescent" underscores the population categories most commonly examined, indicating that youth and student demographics continue to be essential in

digital mental health discussions. The density map illustrates FoMO as a highly interwoven research nexus, linking mental health, behavioral addiction, and social network psychology, while also emphasizing the increasing academic focus on the preventative, therapeutic, and behavioral aspects of digital well-being.
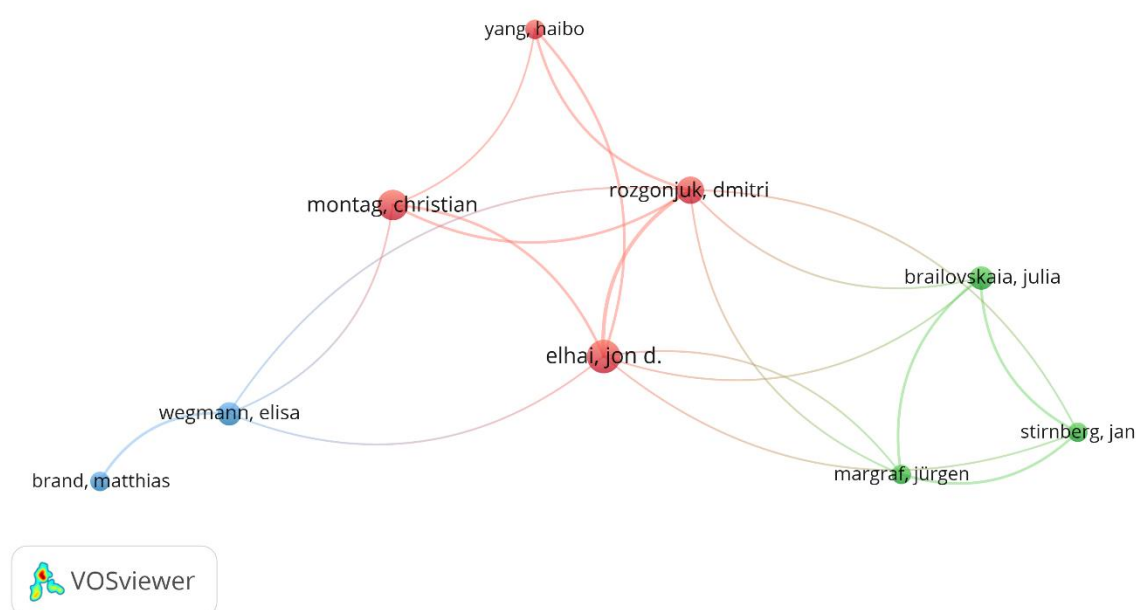
3.2 Co-Authorship Network

Figure 4. Author Collaboration Visualization
Source: Data Analysis, 2025

Figure 4 illustrates the visualization of the author cooperation network underscores the prominent scholars and research clusters engaged in the investigation of Fear of Missing Out (FoMO) and digital mental health. The map illustrates three primary collaborative clusters, each denoted by a unique color. The red cluster, consisting of Jon D. Elhai, Dmitri Rozgonjuk, Christian Montag, and Haibo Yang, constitutes the most important and integrated group. This cluster embodies the principal intellectual community facilitating the amalgamation of FoMO research with subjects including anxiety, depression, and problematic smartphone usage. Elhai and Montag, often regarded as seminal authors, have collaboratively produced multiple researches investigating the psychological underpinnings of FoMO and its associations with digital addiction and emotional dysregulation [4], [6]. The green cluster, comprising Julia Brailovskaia, Jürgen Margraf, and Jan Stirnberg, represents a concurrent research avenue centered on clinical psychology and digital well-being, specifically examining the correlation between FoMO, depression, narcissism, and social media use. The blue cluster, comprising Matthias Brand and Elisa Wegmann, underscores cognitive-behavioral frameworks of internet addiction, linking FoMO to self-regulation, impulse control, and user motivation. The observable links across clusters—particularly between Elhai, Brailovskaia, and Brand—indicate an emerging trend of interdisciplinary research networks that integrate psychological theory, clinical diagnostics, and digital behavior analysis. This network demonstrates that FoMO research has developed into a unified yet interdisciplinary domain, propelled by

ongoing collaborations among leading scientists in Europe, the United States, and East Asia.
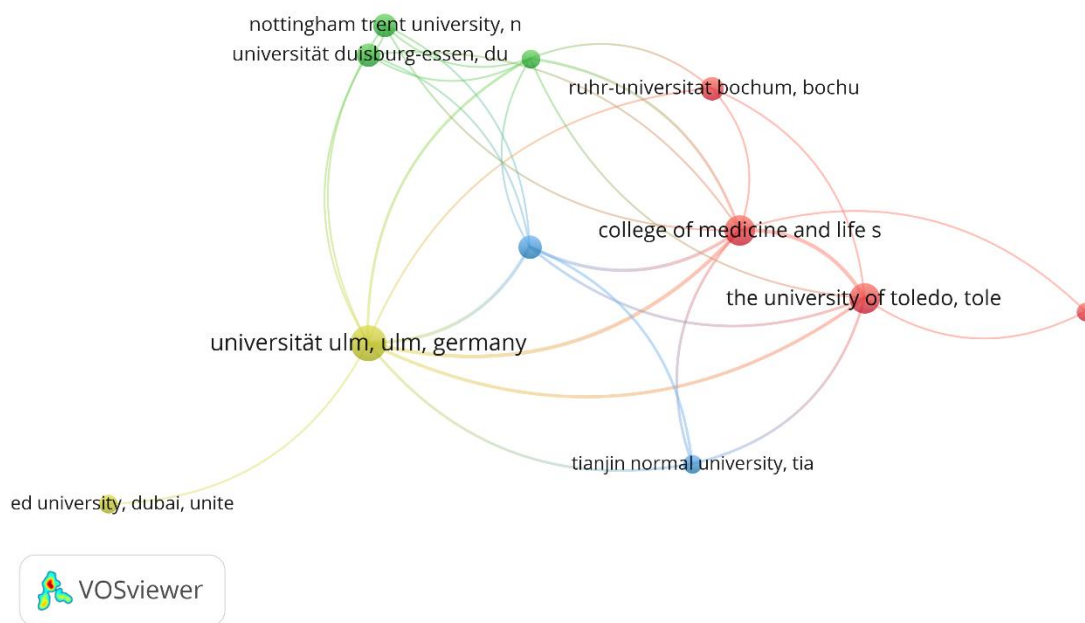

Figure 5. Affiliation Collaboration Visualization
Source: Data Analysis, 2025

Figure 5 reveals the depiction of the institutional collaboration network demonstrates the worldwide academic alliances that have notably advanced research on Fear of Missing Out (FoMO) and digital mental health. The network demonstrates multiple significant institutional clusters linked by robust co-authorship and collaborative publications. The red cluster, lead by The University of Toledo and the College of Medicine and Life Sciences (USA), serves as a primary focus for collaboration, frequently engaging with European and Asian institutions in interdisciplinary research on the psychological and therapeutic consequences of FoMO. This underscores the crucial function of American institutions—especially in health and behavioral sciences—in forming the empirical and theoretical bases for studies linked to FoMO (Elhai et al., 2018). The yellow and green clusters, spearheaded by Universität Ulm, Ruhr-Universität Bochum, and Universität Duisburg-Essen in

Germany, signify the European research network that has significantly advanced the comprehension of FoMO concerning digital addiction, mental health, and social media behavior [18].

Simultaneously, the blue cluster, comprising Tianjin Normal University (China) and its affiliations with German universities, exemplifies the emergence of transcontinental partnerships in FoMO studies, amalgamating cultural and cross-national viewpoints on digital mental health. The network indicates developing affiliations with Nottingham Trent University (UK) and United Arab Emirates University (Dubai), suggesting a broadening of study outside Western contexts to encompass global comparative frameworks. Universität Ulm and The University of Toledo serve as crucial nodes, underscoring their function as collaborative anchors that connect European psychology research with North American medical and technical studies. This map

illustrates FoMO and digital mental health as a globally interconnected research field, marked by robust interinstitutional collaborations, chiefly among Europe, North America, and East Asia, that collectively enhance comprehension of psychological well-being in digitally integrated societies.
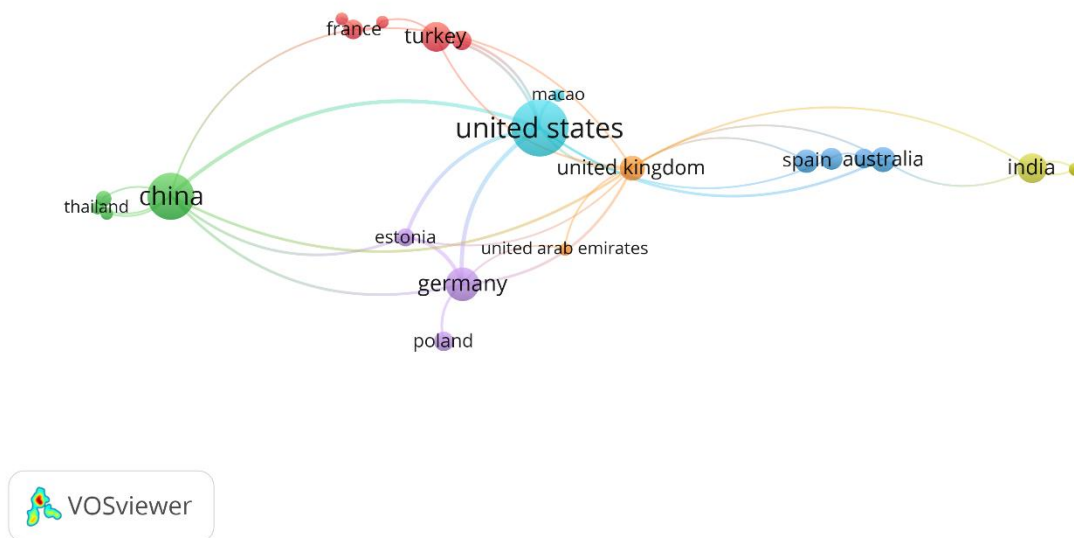

Figure 6. Country Collaboration Visualization
Source: Data Analysis, 2025

Figure 6 reveals the visualization of the country collaboration network illustrates the worldwide framework of Fear of Missing Out (FoMO) and digital mental health research, highlighting a significant concentration of academic output and international cooperation across several prominent nations. The United States emerges as the most pivotal and integrated node, functioning as a principal hub for international research collaborations. It sustains robust collaboration relationships with the United Kingdom, Germany, and China, illustrating the multidisciplinary and cross-cultural essence of FoMO scholarship that amalgamates psychology, neuroscience, and communication studies. The significance of the U.S. node highlights its influential role in formulating theoretical frameworks and empirical methodologies in the field, especially in connecting FoMO to digital behavior, emotional regulation, and technology-induced anxiety [4].

Meanwhile, China represents a rapidly emerging contributor, connected through dense collaborations with Thailand, Germany, and the United States, signifying growing research output from Asian institutions. Collaborations between Chinese and European entities frequently emphasize the cultural aspects of FoMO, the utilization of mobile technology, and intergenerational disparities in digital mental health. The United Kingdom, Australia, and Spain constitute an integrated regional cluster that prioritizes communication, well-being, and public health viewpoints. Minor yet significant contributors encompass Turkey, France, Poland, and India, each signifying a growing regional interest in FoMO occurrences across various cultural and digital landscapes. This visualization illustrates that FoMO and digital mental health have developed into a globally

disseminated research field characterized by robust transcontinental collaboration—led by the United States, bolstered by Europe, and progressively enhanced by Asia's expanding involvement in digital psychology and mental health research.

3.3 Citation Analysis

The bibliometric data above identifies the ten most significant articles in the domain of Fear of Missing Out (FoMO) and digital

mental health from 2005 to 2025. These studies jointly constitute the philosophical underpinning and expanding research emphasis on the impact of FoMO on mental well-being, social behavior, and digital engagement across diverse demographic groups. The citation counts, varying from 98 to 655, demonstrate both theoretical advancements and empirical investigations of FoMO's psychological ramifications in the context of ubiquitous connectedness.

Table 1. Top Cited Research

Citations	Authors and year	Title
655	Elhai, J.D., Levine, J.C., Dvorak, R.D., Hall, B.J. (2016)	Fear of missing out, need for touch, anxiety and depression are related to problematic smartphone use
301	Barry, C.T., Sidoti, C.L., Briggs, S.M., Reiter, S.R., Lindsey, R.A. (2017)	Adolescent social media use and mental health from adolescent and parent perspectives
272	Liu, H., Liu, W., Yoganathan, V., Osburg, V.-S. (2021)	COVID-19 information overload and generation Z's social media discontinuance intention during the pandemic lockdown
253	van Rooij, A.J., Lo Coco, G., De Marez, L., Franchina, V., Abeele, M.V. (2018)	Fear of missing out as a predictor of problematic social media use and phubbing behavior among flemish adolescents
168	Elhai, J.D., Gallinari, E.F., Rozgonjuk, D., Yang, H. (2020)	Depression, anxiety and fear of missing out as correlates of social, non-social and problematic smartphone use
140	Gupta, M., Sharma, A. (2021)	Fear of missing out: A brief overview of origin, theoretical underpinnings and relationship with mental health
117	Tandon, A., Dhir, A., Talwar, S., Kaur, P., Mäntymäki, M. (2022)	Social media induced fear of missing out (FoMO) and phubbing: Behavioural, relational and psychological outcomes
116	Fitz, N., Kushlev, K., Jagannathan, R., ... Paliwal, D., Ariely, D. (2019)	Batching smartphone notifications can improve well-being
107	Brown, L., Kuss, D.J. (2020)	Fear of missing out, mental wellbeing, and social connectedness: A seven-day social media abstinence trial
98	Xie, X., Wang, Y., Wang, P., Zhao, F., Lei, L. (2018)	Basic psychological needs satisfaction and fear of missing out: Friend support moderated the mediating effect of individual relative deprivation

Source: Scopus, 2025

The highly referenced work by [4], which has garnered 655 citations, establishes a foundational connection between FoMO, anxiety, and depression in relation to problematic smartphone use, thus paving the way for future investigations into digital reliance and emotional regulation. Subsequently, [19] and van [10]broadened the discussion by situating FoMO within teenage demographics, investigating the relationship between social media usage and mental health outcomes, as well as behaviors like phubbing. Recent studies, such as those by [20] and [21], demonstrate the field's adaptability to current difficulties, including the effects of pandemic-induced digital overload and the behavioral consequences of FoMO in online interactions. The incorporation of theoretical analyses like those of [22]enhances the scholarly discourse by delineating the conceptual development of FoMO and its psychological foundations. These publications collectively indicate a shift from basic investigations of FoMO's emotional associations to comprehensive analyses that incorporate technology usage, well-being, and social connections—highlighting the increasing acknowledgment of FoMO as a significant concept in digital mental health research.

Practical Implications

This bibliometric analysis offers significant insights for politicians, educators, doctors, and digital platform developers aiming to alleviate the detrimental psychological effects of Fear of Missing Out (FoMO) in a progressively interconnected world. The results indicate a significant correlation between FoMO and anxiety, sadness, and excessive internet usage, underscoring the necessity for evidence-based digital well-being programs and psychological literacy initiatives. Educational institutions can utilize this evidence to create programs that assist students in regulating online involvement and mitigating compulsive social media habits. The incorporation of FoMO-related evaluations into digital mental health screenings in healthcare settings can improve the early identification of anxiety and depression symptoms linked to excessive connection. Moreover, social media developers and technology companies may leverage these insights to guide ethical platform design, fostering features that mitigate social comparison and promote thoughtful usage. At the societal level, the identification of global research centers and collaborative networks facilitates international partnerships in mental health policy and research, ensuring that culturally responsive frameworks address FoMO among varied populations.

Theoretical Contributions

This work theoretically enhances the comprehension of FoMO as a multifaceted concept located at the convergence of psychological motivation, digital behavior, and mental health outcomes. The paper methodically maps two decades of global research, offering a macro-level picture of the evolution of FoMO from a social-psychological phenomenon to a prominent concept in digital mental health discourse. Bibliometric data substantiates the amalgamation of Self-Determination Theory (SDT) and Cognitive-Behavioral Theory (CBT) as preeminent explanatory frameworks, highlighting the role of unmet social needs, diminished autonomy, and excessive online participation in exacerbating emotional discomfort. Furthermore, the co-occurrence and temporal analyses indicate the creation of novel theoretical connections among FoMO, digital addiction, emotional regulation, and social comparison theory, thereby broadening its conceptual scope. This study elucidates prominent authors, institutions, and theme clusters, so enhancing the intellectual framework of FoMO research and offering scientists a guide to formulate more cohesive models that link psychological characteristics with digital environmental variables. It connects micro-level cognitive theories with macro-level sociotechnical systems, establishing FoMO as an essential framework for comprehending human behavior in digital environments.3

Limitations and Future Research Directions

This study provides a thorough summary, although certain limitations must be recognized. The analysis was exclusively based on the Scopus database, which, despite its comprehensiveness, may exclude pertinent papers indexed in other sources (e.g., Web of Science, PubMed, or regional journals). Future study may amalgamate several databases to improve coverage and validate results through cross-comparison. Secondly, bibliometric mapping fundamentally records quantitative publication trends rather than qualitative subtleties, so constraining interpretive depth about theoretical frameworks and causal connections. A mixed-method bibliometric-content strategy could resolve this by integrating citation analysis with comprehensive topic coding. The study concentrated on writings from 2005 to 2025, a timeframe characterized by swift technology advancements, particularly the emergence of AI-driven social media algorithms, which may transform the psychological dynamics of FoMO beyond existing frameworks. Consequently, subsequent study ought to investigate emergent phenomena such as algorithmic anxiety, digital detox behavior, and AI-mediated self-comparison as extensions of FoMO theory. Notwithstanding these constraints, the study provides a solid empirical basis and presents a reproducible methodological framework for future researchers examining the relationship between digital use and mental health.

4. CONCLUSION

In the last twenty years, Fear of Missing Out (FoMO) has transformed from a specialized psychiatric concept into a fundamental framework for comprehending the relationship between digital connectivity and mental health. This study, using bibliometric mapping of 1,226 papers from 2005 to 2025, identified three primary pathways in FoMO research: conceptual inquiry, clinical association, and digital well-being intervention. The co-occurrence analysis revealed "mental health," "anxiety," "depression," and "social media addiction" as primary study focal points, suggesting FoMO's profound integration inside modern mental health discussions. Overlay and density visualizations indicated a temporal transition from initial psychological models to interdisciplinary frameworks encompassing digital behavior, clinical psychology, and behavioral research.

The networks of authors, institutions, and countries revealed a worldwide integrated research community dominated by the United States, Germany, China, and the United Kingdom. These collaborations have generated a unified body of research that connects psychological theory with public health consequences. Notwithstanding this advancement, deficiencies persist in the incorporation of emerging technologies—such as AI-driven social media platforms and digital detox strategies—into FoMO and mental health research. Consequently, forthcoming research ought to use longitudinal and cross-cultural methodologies, integrating psychological perspectives with digital ethics, user interface design, and neurocognitive evaluation. This bibliometric data highlights FoMO's importance as a psychological and sociotechnical phenomenon, underlining its influence on the global discourse regarding digital mental health and well-being.

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