The Impact of Fear of Missing Out on Mental Health: Bibliometric Analysis

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Abstract. The phenomenon of FoMO is increasingly attracting academic attention due to its significant impact on mental health, particularly in the context of social media use. This study aims to analyze global research trends and influential contributions related to the impact of FoMO on mental health. The results show that China is the most productive with 90 articles, no research has been conducted in Indonesia. The most frequently occurring keywords based on the defined terms are "FoMO," followed by "Gender," "Mental Health," and "Psychology." This analysis provides strategic insights for students, guidance counselors, researchers, and policymakers regarding the significant impact of FoMO on mental health. For guidance counselors in schools, addressing FoMO should be a key focus to ensure students' mental health remains intact, by designing and developing counseling techniques and therapies.

Keywords: Fear of Missing Out; Mental Health; Bibliometric Analysis.

1. Introduction

In this modern era, the development of technology is increasingly rapid and has become a primary necessity for society. In everyday life, the influence of technology is unavoidable because almost all activities can be performed easily and quickly thanks to technological advancements. One example of its application is in the field of information and communication. Communication is the process of delivering messages from one individual to another with the aim of providing information or changing attitudes, opinions, or behaviors through language. In an increasingly advanced technological era, human interaction is not only limited to direct communication but also through social media. The development of technology has become an integral part of modern life and is always related to development. In addition to forming communities in physical environments, communities can also be formed through various social media platforms and other platforms.

Various motives drive people to consistently use social networks. Social networks serve as a place of presence or self-representation. Many individuals feel that having an active presence on social media is important to strengthen their identity, build relationships with friends and family, and develop professional networks (Aisyah Fitriah et al., 2023) [1]. Presence on social

media allows them to share important moments in their lives, express opinions, and gain support from their communities (Alfian, 2024) [2].

According to Triyono et al. (Raehana & M. Zain, 2020) [11], social media is online technology that successfully enhances interaction among users. Social media has developed significantly not only as a means of communication but also as a platform for forming social networks and community groups. These social networks have a stronger interactive effect and are more popular than traditional media such as print media, electronic media, broadcasting, and other interpersonal interactions. Social media makes it easier for users to communicate privately with one or more people while connected to the internet, without any limitations of time and place.

Previous research has shown that excessive use of social media is positively correlated with mental health disorders in children, including anxiety and depression (Akbar et al., 2025) [3]. On the other hand, technologies such as health information technology (HIT) and artificial intelligence (AI) can play a vital role in providing innovative solutions to enhance access to mental health services (Alfian, 2024) [2]. Nevertheless, the existing literature is still limited in connecting social media usage with technology-based solutions to support children's mental health specifically.

(Aisyah Fitriah et al., 2023) [1] The existence of social media has provided many benefits to society, especially in terms of information dissemination. Currently, social media has become a very dominant online platform for internet users, as it allows everyone to connect with others around the world. People use social media not only to stay connected with friends, but also to gain popularity or recognition from others (Lim et al., 2021) [9]. In fact, excessive use of social media can have negative impacts on the mental health of adolescents, such as increasing the risk of depression and anxiety, as well as causing social and behavioral problems. Therefore, it is important for parents and caregivers to monitor teenagers' use of social media and help them establish healthy habits in technology use.

(Qurrota & Sokip, 2024) [10] One of the phenomena that has emerged is Fear of Missing Out (FoMO), which is the fear individuals have of missing out on valuable information, experiences, or opportunities that others are having. This phenomenon is characterized by the urge to stay connected, monitor social activities, and anxiety if one cannot keep up with the latest developments. The phenomenon of Fear of Missing Out (FOMO) is becoming increasingly relevant and prominent, especially among the younger generation. FOMO refers to the feelings of anxiety and worry that individuals experience due to the belief that others might be having more satisfying or enjoyable experiences, leading them to feel sidelined (Alfian, 2024) [2]. This phenomenon is often exacerbated by social media, which serves as a platform for sharing life moments, trends, and social activities.

The FOMO phenomenon triggered by social media poses challenges for individuals in managing their consumer behavior. This is exacerbated by the increasing influence of consumerism culture among the younger generation. With a better understanding of the relationship between FOMO, social media, and its effects on mental and financial health, individuals can become more aware of the potential negative impacts (Rahmah, Fitriani, Nopitasari, & Sania, 2024) in (Alfian, 2024) [2].

Furthermore, research by (Hussain, Raja, Haider, Ishaq, & Talpur, 2023) in research (Qurrota & Sokip, 2024) [10] emphasizes that FoMO is not only related to consumptive behavior but also associated with mental health issues such as anxiety and depression. (Lim et al., 2021) [9] The study found that FoMO has a significant positive influence on compulsive buying behavior, where individuals experiencing social anxiety and materialism are more likely to get caught in a cycle of impulsive purchasing. This phenomenon indicates that when individuals feel pressured to meet social expectations shaped by social media, they are more likely to make irrational financial decisions. In this context, the moderating role of mindfulness can help individuals manage the negative impacts of FOMO by enhancing awareness and self-control in consumptive decision-making.

Recent studies show that FoMO is closely related to various mental health indicators. Individuals with high levels of FoMO are more vulnerable to experiencing anxiety, stress, depression, loneliness, and even sleep disturbances. In the context of education, especially for Generation Z and students, FoMO can affect learning concentration, decrease psychological well-being, and lead to problematic social media use (Akbar et al., 2025) [3]. This condition demands a comprehensive understanding of the extent to which FoMO cakontributes to mental health disorders, whether through direct or indirect pathways. Phenomena such as fear of missing out (FoMO), reinforced by social media, can affect children's emotional well- being, increasing anxiety, feelings of inadequacy, and even social isolation (Machado et al., 2024) in research (Lim et al., 2021) [9]. Therefore, it is important to understand how social media impacts children's mental health.

(Alfian, 2024) [2] Mental health as defined by WHO is "a state of well-being in which every individual realizes their potential, can cope with the stresses of life, can work productively and fruitfully, and is able to contribute to their community." Mental health is intrinsic to health and social well-being and enables people to realize their potential, as well as to connect meaningfully with various other aspects. Mental health is crucial for the development of individuals and communities, as WHO states that there is no health without mental health. Globally, the prevalence of mental health disorders is estimated to be 13.0%; or 970 million people suffer from mental health conditions. According to WHO data from the Southeast Asia region. The estimated prevalence is 13.2%, equivalent to 260 million people living with some form of mental health condition, with depression being the largest contributor, while suicide accounts for 1 in 100 deaths globally, and people with severe mental disorders die 10 to 20 years earlier than the average life expectancy of the general population (Hertinjung et al., 2024) [8]. An inseparable part of this population is students.

(Lim et al., 2021) [9] Mental health issues in young people caused by social media addiction can be minimized through healthy activities. A study shows that intensive and long-term social media use has the potential to disrupt the mental and physical health of adolescents. Long-term stress resulting from this use can increase blood pressure among teenagers and negatively impact organs such as the heart and kidneys. Therefore, it is necessary to take care of the mental and physical health of adolescents in a healthy and appropriate manner, such as by increasing positive social activities.

Research on the mental health of students in Indonesia shows a similar trend. (Purborini et al., 2021) [10] involving 123 students found that the proportion of students experiencing mental disorders or having poor mental health is 30%. Among male respondents, 28% of 25

respondents experienced mental disorders. Among females, 31% of 98 respondents experienced mental disorders. Based on marital status, the highest proportion of mental disorders is found in the group that has no partner (unmarried) at 34%. Meanwhile, based on age, the group with the highest proportion is 19-20 years old, with 35 out of 37 respondents (97%). Thus, the average proportion of mental disorders among students is relatively high at 30%. According (Sirkuit et al., 2025) [14] the prevalence of mental health issues among Indonesian residents aged 15 and above who experience schizophrenia and psychosis in their families is 6.7%, with a total of 282,654 individuals; depression at 6.1%, with a total of 706,689, where the age group 15-24 years represents the highest incidence of depression at 6.2% or 157,695 individuals; and emotional mental disorders at 9.8%, with a total of 706,688 individuals. The 15-24 age group is the most affected by emotional mental disorders at 10% or 157,695 individuals. Research on the mental health of college students is still often conducted partially, so comprehensive follow-up treatment measures have yet to be developed.

According to (Sabila & Tawaqal, 2025) [13] FoMO is defined as the anxiety that arises from a person's fear of missing valuable experiences or information that others are experiencing. This condition is closely related to unmet basic psychological needs, such as the need for relatedness and autonomy, which ultimately impacts the decline in subjective well-being. A similar opinion is expressed by (Gupta & Sharma, 2021) [7] who found that FoMO is a strong predictor of problematic social media use, which is then associated with increased levels of stress, anxiety, and depression. This is emphasized by (Alshowkan & Shdaifat, 2025) [4] who showed that individuals with high FoMO are more vulnerable to experiencing negative psychological symptoms, such as feelings of loneliness and sleep disturbances, due to a compulsive urge to always stay connected to social media. Thus, experts agree that FoMO is not just a digital phenomenon, but a psychological factor that has serious implications for mental health, both through direct mechanisms such as anxiety and stress, and indirectly through patterns of excessive social media use.

Mental health is a state of a person who is free from mental disturbances, emotional disturbances, and has a condition that functions normally in carrying out activities to adapt to life and the problems faced (Akbar et al., 2025) [3]. It can be said that mental health is a state of mind in a peaceful, calm situation and valuing what one has at present without comparing it to what others have.

Mental health is a state of a person who is free from mental disturbances, emotional issues, and functions normally in carrying out activities to adjust to life and face the problems encountered. If there are threats and one cannot cope, it will lead to mental disorders. According to (Gautam et al., 2024) [5], mental health can be seen from the absence of disturbances and mental illnesses, the ability to adapt to interpersonal relationships, developing potential, being beneficial to oneself and the environment, and also having faith in God (Akbar et al., 2025).

Research Question
Based on the background, the aim of this research and the type of this research is qualitative with bibliometric analysis, there are several issues that will be the research questions, namely:
1.   How is the publication trend of FoMO with indicators of mental health?
2.   How is the interest in publishing FoMO with mental health indicators in the world?
3.   Who are the authors that have contributed the most?

4. How is the research hotspot map of FoMO with mental health indicators?

2. Method

This research is a qualitative study with bibliometric analysis following the framework developed by Garza-Reyes, 2015 in (Ghozali et al., 2024) [6] utilizing systematic methodology and well-established procedures for reproducibility.

Figure 1 Five stages of Bibliometric Analysis (Garzya-Rayes, 2015)

Bibliometric methodology helps in visualizing concepts with comparable interpretations. Here are some stages in this research:

Definition of Search Keywords

Data collection was conducted using the Scopus database on July 10, 2025, with initial data gathering performed by searching using the keywords TITLE-ABS-KEY ("Fear of Missing Out" AND "mental health"). Based on these keywords, 180 articles were obtained and then narrowed down with several criteria using the keywords TITLE-ABS- KEY ("Fear of Missing Out" AND "mental health") AND PUBYEAR > 2018 AND PUBYEAR < 2026 AND (LIMIT-TO (DOCTYPE, "ar")) AND (LIMIT-TO (LANGUAGE, "English")) AND (LIMIT-TO (OA, "all")).

Initial Search

The initial search using the specified keywords yielded a total of 81 articles based on those keywords. Documents in the Scopus database. This study comprehensively explores the latest analysis on the emerging phenomenon of FoMo in the world. The articles extensively explore issues of multicultural education and counseling.

Search Results Completion

After obtaining the initial search, the next stage combines the screening process for all articles based on the inclusion criteria set in this study. Three inclusion criteria are applied to refine the search results: IC1: Original analysis in English: The included articles must be original analyses written in English. IC2: Final articles: The included articles must be final articles that have been published. IC3: Year range and in line with the keywords. The screening process aims to ensure that the selected articles meet high standards of quality, accuracy, and relevance to the analysis of inidata. This refinement results in the screening of relevant articles, totaling 27 articles.

3. Results and Discussion

Bibliometric analysis in this research uses the Scopus database accessed on July 10, 2025. The Scopus database was chosen because of its accredited research publications, particularly FoMo research with mental health indicators.

Publication Trends This Year (RQ1)

Visually, it can be seen in image 1, depicting the development of literature related to FoMO from year to year. This growth trend continues, with a substantial increase in publications rising year on year.
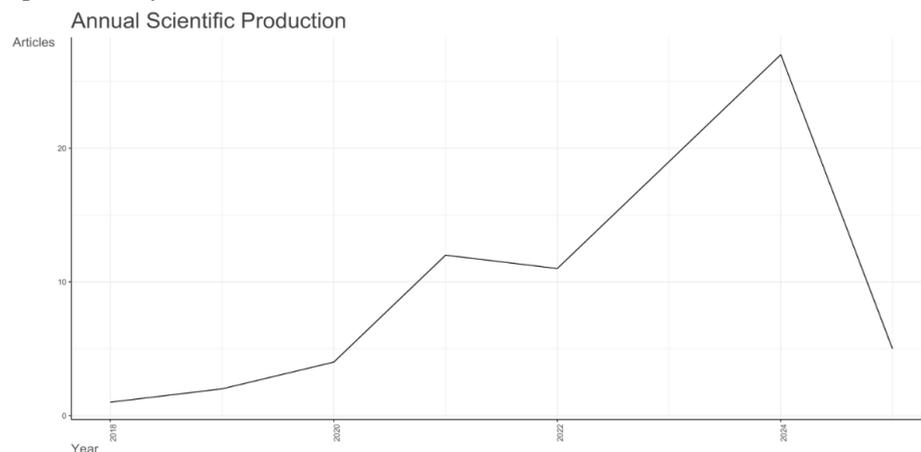
Research productivity from 2018-2025

Figure 2. Trends in the Publication of FoMo Issues Worldwide

Bibliometric analysis shows an increase in the number of publications related to Fear of Missing Out (FoMO) and mental health since 2018, peaking in 2024 with 27 articles. This increase indicates that FoMO is increasingly seen as an important phenomenon in modern psychology, especially in the digital era. According to (Gupta & Sharma, 2021) [7], FoMO is a condition of anxiety that arises from the belief that others might be having more enjoyable experiences. This drives individuals to stay connected through social media. The surge in publications since 2020 can also be understood in the context of the COVID-19 pandemic, where social activities largely shifted to the digital realm. (Soraci et al., 2025) [16] emphasized that during this period, the intensity of social media use increased, and FoMO became one of the strong predictors of emerging psychological issues like anxiety and depression.

The bibliometric analysis in this research will discuss answering the question of which countries have contributed to the study of FoMO. Below are the countries that are active in researching FoMO.
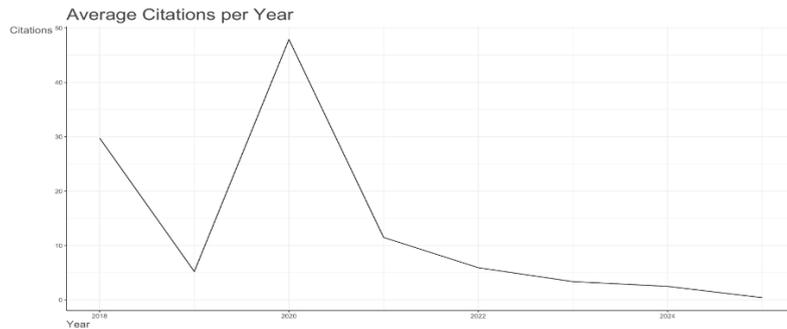
Figure 3. Average citations worldwide from 2018-2025

The highest average citation was recorded in 2020 with 40.9 citations per article. This indicates that the scientific works published in that year had a significant impact and were used as primary references by other researchers. (Gautam et al., 2024) [5] stated that in the early phase of scientific recognition, articles discussing the consequences of FoMO on mental health became the theoretical foundation for further research, including the relationship of FoMO with insomnia, loneliness, and stress. The most citations in 2020 averaged 40.9 citations.

Trends of Member Countries Providing Contributions (RQ2)

The bibliometric analysis in this study will address the question of several countries that contribute to the issue of FoMO. The following are the countries that are actively researching issues related to FoMO.
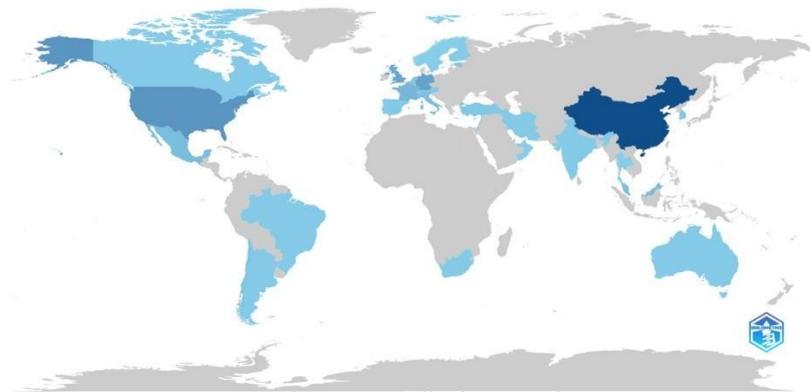
Figure 4. The most contributing countries

China ranks first with 90 publications, followed by the United States (39), Germany (29), and France (15). However, Indonesia has not recorded any publications during this period. This condition highlights a research gap in Indonesia, even though national data shows a high prevalence of mental health issues among adolescents. As stated by (Aisyah Fitriah et al.,

2023) [1] social media does have benefits in disseminating information, but its excessive use can trigger anxiety, depression, and behavioral problems. Therefore, it is important for Indonesian researchers to study FoMO in a local context so that the intervention strategies designed are more aligned with the culture and needs of the community.

Co-authors Who Contribute the Most (RQ3)
Aside from countries, there are several researchers who contribute to issues of multiculturalism in the world. Here are some author researchers from the top 20 of 40 authors that have been found:

Productive author

Figure 5. Most Relevant Author

Based on the data from annual publication counts showing an upward trend in 2024 and 2023, it reflects that research related to FoMO is increasing, with these journals becoming the primary platform for researchers to publish their findings.
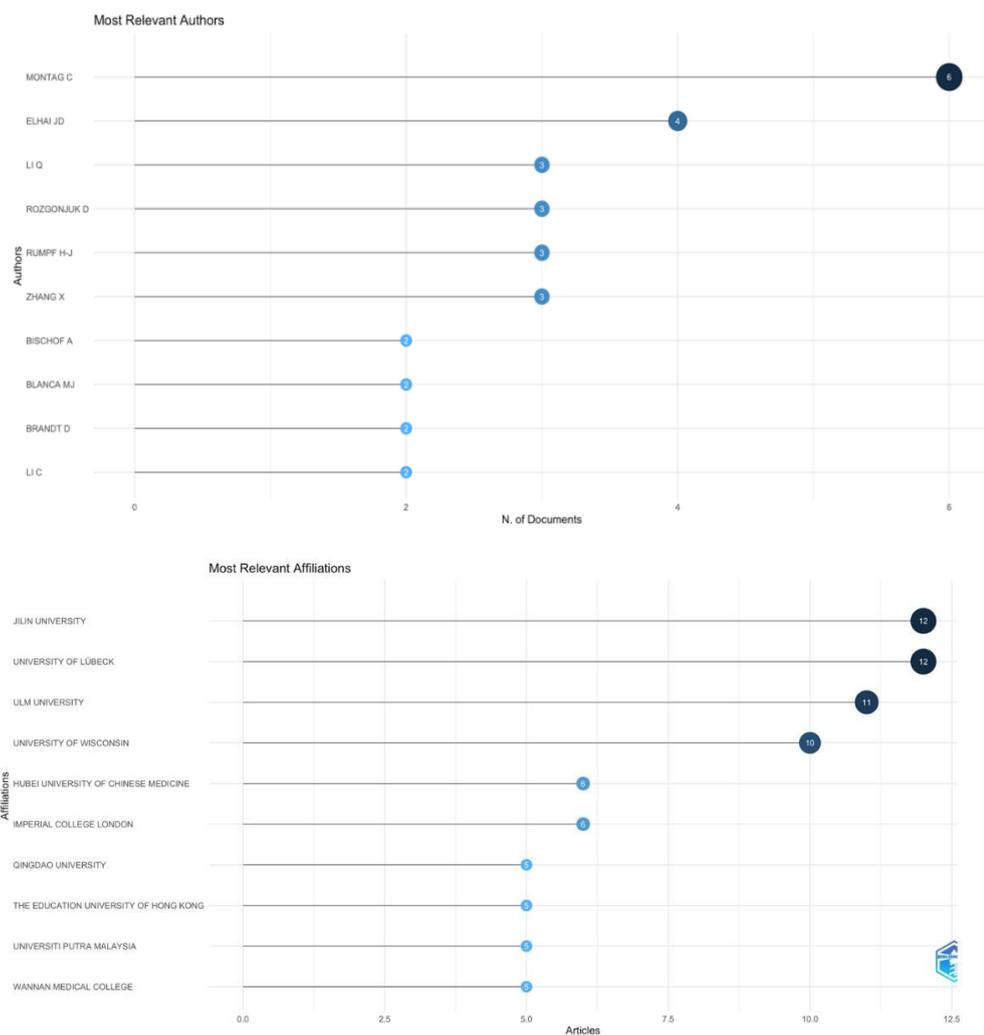
Research Hotspot Map (RQ4)
Next, the analysis of the hotspot map based on the most frequently occurring keywords is "Fear of Missing Out," followed by "Gender," "Mental Health," and "Psychology." This pattern shows that FoMO is studied not only in the context of mental health but also related to psychological aspects and gender differences.

Figure 6. Recapitulation of Vosviewer Keywords

From the image above, it can be seen that the words that appear most frequently based on the established keywords are Fear of missing out, followed by gender, mental health, and psychology.

Previous studies consistently show that FoMO is positively correlated with anxiety, depression, stress, and sleep disorders. (Piko et al., 2025) [15] even emphasize that FoMO can increase feelings of low self-esteem and social isolation, especially among young people who heavily use social media. In the educational context, individuals with high levels of FoMO are reported to have more difficulty concentrating, experience reduced psychological well-being, and are more vulnerable to problematic social media usage behaviors.

The opinions of these experts emphasize that FoMO is not just a digital phenomenon, but a serious psychosocial factor. (Piko et al., 2025) [15] add that FoMO is also related to consumer behavior, where individuals are driven to make compulsive purchases to meet social expectations built by social media. This expands the impact of FoMO, not only on mental health but also on the economic well-being of individuals.

4. Discussion

The results of the bibliometric analysis show that the phenomenon of FoMO is gaining global scientific attention, especially after 2020. The increase in the number of publications in 2024 reflects that this issue is becoming increasingly relevant to current social conditions, where the

use of social media is expanding among adolescents and young adults. The spike in citations in 2020 can also be understood as an early period of academic recognition of the urgency of FoMO's impact on mental health, particularly amid the COVID-19 pandemic that intensified society's dependence on digital media.

The dominance of publications from China, the United States, Germany, and France shows a concentration of research in developed countries with established research ecosystems. The absence of publications from Indonesia indicates that this topic has not been widely researched locally, despite the high prevalence of social media use among adolescents and students in Indonesia. This opens up significant opportunities for Indonesian researchers to fill the research gap with distinctive cultural contexts.

Keyword analysis shows that the topic of FoMO is closely related to mental health issues in general, especially depression, anxiety, and psychological well-being. The emergence of the word "gender" as a key term also indicates that gender differences in responding to FoMO are an important theme in previous research. These findings are consistent with earlier studies that emphasize that individuals with high levels of FoMO are more vulnerable to experiencing anxiety, stress, depression, and sleep disorders.

Thus, the bibliometric results strengthen the argument that FoMO is a psychosocial phenomenon that significantly impacts mental health. For Indonesia, this condition can serve as a strategic basis to encourage contextual research, as well as to design counseling interventions in schools and universities that focus on digital literacy, emotional regulation, and strengthening the mental resilience of the younger generation.

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