A Bibliometric Study on the Impact of Social Media Use on Mental Health in a Socio-Cultural Context

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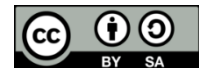[1] IPOSS Jakarta, Indonesia
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Article Info

ABSTRACT

The growing prevalence of social media has sparked significant academic interest in understanding its impact on mental health. This bibliometric study explores the relationship between social media use and mental health within various socio-cultural contexts, highlighting prevailing themes, trends, and gaps in the literature. Using data from major academic databases, the study identified key research areas, including the association between social media and mental health issues such as depression, anxiety, and addiction, as well as the role of interventions in mitigating these impacts. The findings reveal a strong focus on the negative effects of social media, particularly among adolescents and university students, and emphasize the importance of cultural factors in shaping these outcomes. While interventions and policy recommendations are increasingly being explored, gaps remain in understanding long-term effects, culturally diverse contexts, and potential positive outcomes of social media use. This study underscores the need for continued, multidisciplinary research to inform culturally sensitive practices and policies that address the complexities of social media's impact on mental health.

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1. INTRODUCTION

Social media platforms have woven themselves into the fabric of daily life, profoundly influencing how individuals communicate, consume information, and perceive the world around them. The rapid proliferation of these platforms over the last two decades has prompted an increased interest in understanding their broader implications on society. One area of particular concern is the impact of social media on mental health. Studies have consistently demonstrated a correlation between extensive social media use and various mental health issues, such as anxiety, depression, and decreased self-esteem [1], [2]. However, the depth of this impact can vary significantly across different socio-cultural backgrounds, suggesting that the effects of social media are not uniform but instead shaped by contextual factors [3].

The influence of culture on social media usage patterns further complicates this relationship. Cultural norms and values play a crucial role in shaping online behavior, from the type of content shared to the ways in which users interact with each other. For instance, collectivist societies may leverage social media differently compared to individualistic societies, potentially moderating the mental health outcomes associated with its use [4]. Additionally, cultural stigma surrounding mental health can affect how individuals express and address their mental well-being on these platforms, influencing both the content and frequency of their posts [2]. Understanding these nuanced interactions is vital for developing culturally sensitive approaches to mitigate the negative impacts of social media on mental health.

Despite the growing body of research, there remains a gap in comprehensive studies that systematically analyze the breadth of literature on the intersection of social media use, mental health, and socio-cultural factors. Previous bibliometric analyses have focused either on social media or mental health independently, with less attention given to how these dynamics interplay within specific cultural or societal frameworks [5], [6]. As social media continues to evolve and integrate further into everyday life, the need to synthesize existing research through a bibliometric approach becomes increasingly critical. Such an analysis can provide a macroscopic view of the research landscape, highlighting trends, gaps, and the evolution of themes over time.

The existing literature indicates a clear link between social media use and mental health outcomes but lacks a unified examination of how socio-cultural contexts influence this relationship. Most studies do not consider the cultural underpinnings that might affect social media interactions and their psychological effects. This oversight can lead to a homogenized understanding of social media's impact on mental health, potentially overlooking critical cultural nuances that could inform more effective interventions and policies. Moreover, the rapidly changing landscape of digital communication necessitates a continual update and synthesis of existing research to capture the latest trends and shifts in usage patterns, mental health implications, and cultural contexts.

The primary objective of this study is to conduct a comprehensive bibliometric analysis of the literature on the impact of social media use on mental health within various socio-cultural contexts. This analysis aims to map the existing academic discourse, identify predominant research themes, and uncover gaps in the literature. By doing so, the study will provide valuable insights into the complex interplay between social media use, mental health issues, and cultural factors, offering a foundation for future research and policy-making that is attuned to the cultural dimensions of social media's psychological impacts.

2. LITERATURE REVIEW

2.1 Social Media and Mental Health

The relationship between social media use and mental health has been a subject of scholarly attention for several years, with research primarily focusing on negative outcomes such as anxiety, depression, and reduced well-being. [7] highlight the intense pressure social media can impose on users through constant social comparison, leading to diminished self-esteem. Similarly, [8] found that high levels of engagement with platforms like Facebook are associated with symptoms of depression among young adults, attributed to envy and a skewed perception of others' lives. However, the literature is not entirely skewed towards negative outcomes; some studies have identified positive aspects of social media use, such as

increased social support and connectivity, which can be beneficial to mental health [9].

2.2 *The Role of Cultural Context*

The socio-cultural context significantly influences how social media impacts mental health. Hofstede's cultural dimensions theory provides a framework for understanding these variances, particularly between individualistic and collectivist societies [10]. In individualistic cultures, social media often serves as a platform for self-expression and identity formation, which can lead to positive outcomes like increased self-esteem [11]. In contrast, in collectivist cultures, where community and harmony are emphasized, social media can sometimes exacerbate pressures to conform, leading to increased anxiety and stress [11]. These findings suggest that cultural context can either buffer or exacerbate the psychological impacts of social media.

2.3 *Cultural Differences in Social Media Usage*

The way individuals use social media also varies across different cultural contexts. Studies like those by [12] have shown that users in East Asian contexts, which typically emphasize collectivist values, are more likely to use social media for group activities and maintaining existing relationships. Conversely, users in Western countries, which tend to value individualism, are more inclined to use these platforms for self-promotion and the acquisition of new social connections [13]. These differences not only affect social media's mental health impacts

but also the strategies that might be employed to mitigate any negative effects.

2.4 *Stigma and Mental Health Discourse on Social Media*

The stigma associated with mental health varies significantly across cultures and can influence how people discuss and address mental health issues on social media. In many Western societies, there has been a gradual destigmatization of mental health issues, reflected in open discussions and advocacy on social media platforms [14]. However, in many Asian and Middle Eastern countries, mental health stigma remains strong, often limiting open discussion and support seeking on social media [4]. Understanding these differences is crucial for creating effective interventions that leverage social media to support mental health in various cultural contexts.

3. METHODS

This bibliometric study will employ a systematic approach to analyze the existing literature on the impact of social media use on mental health within various socio-cultural contexts. The data for the analysis will be extracted from Scopus database. The search strategy will involve using keywords related to "social media," "mental health," "cultural impact," and "bibliometric analysis" to ensure comprehensive coverage of relevant articles published up to the present year. Inclusion criteria will include peer-reviewed articles written in English that specifically discuss the relationship between social media use and mental health outcomes across different cultural settings. The data extraction will focus on variables such as publication year, authors, and citation counts. VOSviewer will be utilized for data visualization and to

identify trends, clusters, and citation networks within the corpus.

4. RESULTS AND DISCUSSION

4.1 Citation Analysis

Table 2. Top Cited Research

| Citations	Authors and year	Title
5681	[15]	Global, regional, and national incidence, prevalence, and years lived with disability for 328 diseases and injuries for 195 countries, 1990-2016: A systematic analysis for the Global Burden of Disease Study 2016
3870	[16]	Multidisciplinary research priorities for the COVID-19 pandemic: a call for action for mental health science
3466	[17]	Impact of COVID-19 pandemic on mental health in the general population: A systematic review
3316	[18]	Using social and behavioural science to support COVID-19 pandemic response
3282	[19]	Community resilience as a metaphor, theory, set of capacities, and strategy for disaster readiness
1798	[20]	Mental health problems and social media exposure during COVID-19 outbreak
1632	[21]	Use of mass media campaigns to change health behaviour
1627	[22]	Adolescence: A foundation for future health
1595	[23]	Effects of COVID-19 on college students' mental health in the United States: Interview survey study
1448	[24]	Self-harm and suicide in adolescents

Source: Publish or Perish Output, 2024
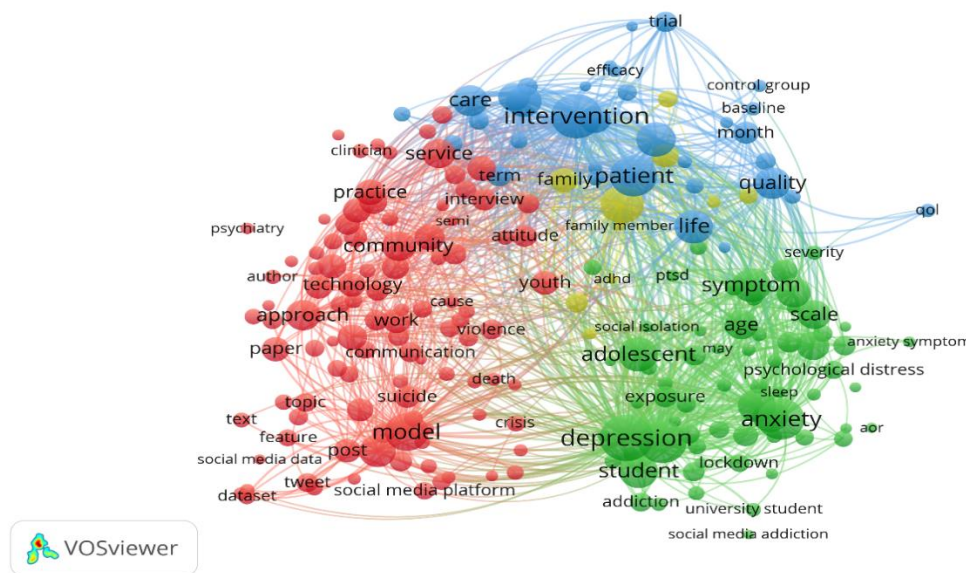
Figure 1. Network Visualization
Source: Data Analysis Result, 2024

This VOSviewer visualization provides a bibliometric analysis focused on the intersection of social media use and mental health, as evidenced by the distribution and clustering of keywords within the research literature. The visualization is color-coded to denote distinct thematic clusters, each representing a

different focus within the broader research topic. For example, the red cluster heavily features terms like "depression," "suicide," and "crisis," suggesting a concentration on severe mental health issues and their association with social media use. This cluster indicates a significant volume of research directed towards understanding the direct impacts of social media content and interactions on depressive symptoms and suicidal behaviors.

The green cluster highlights another key area of focus within the domain—terms such as "anxiety," "stress," and "psychological distress" are prominent, along with "adolescent" and "student." This suggests a substantial body of research is dedicated to exploring how social media affects anxiety levels and general psychological distress, particularly among younger demographics such as students and adolescents. The inclusion of "lockdown" and "social media addiction" points to recent concerns over increased social media use during pandemic-related restrictions and its potential for contributing to anxiety and addictive behaviors.

The blue cluster incorporates terms related to the methodologies and frameworks

employed in studying these phenomena, such as "intervention," "trial," "efficacy," and "control group." This cluster is indicative of the research that not only investigates the outcomes of social media use but also assesses the effectiveness of interventions designed to mitigate its negative impacts on mental health. The presence of these terms underscores an active area of research that is focused on developing and testing interventions, which could range from clinical treatments to educational programs aimed at promoting healthier social media habits.

Finally, the overlapping and proximity of different clusters suggest that while the research areas are distinct, they are closely related and interdependent. The visualization's structure, with some terms bridging multiple clusters (e.g., "adolescent," "symptom"), highlights the complex and multifaceted nature of how social media impacts mental health across different life stages and conditions. It reflects an integrated research landscape where psychological, developmental, and therapeutic dimensions intersect, offering a comprehensive view of how social media is studied in the context of mental health across diverse fields and methodologies.
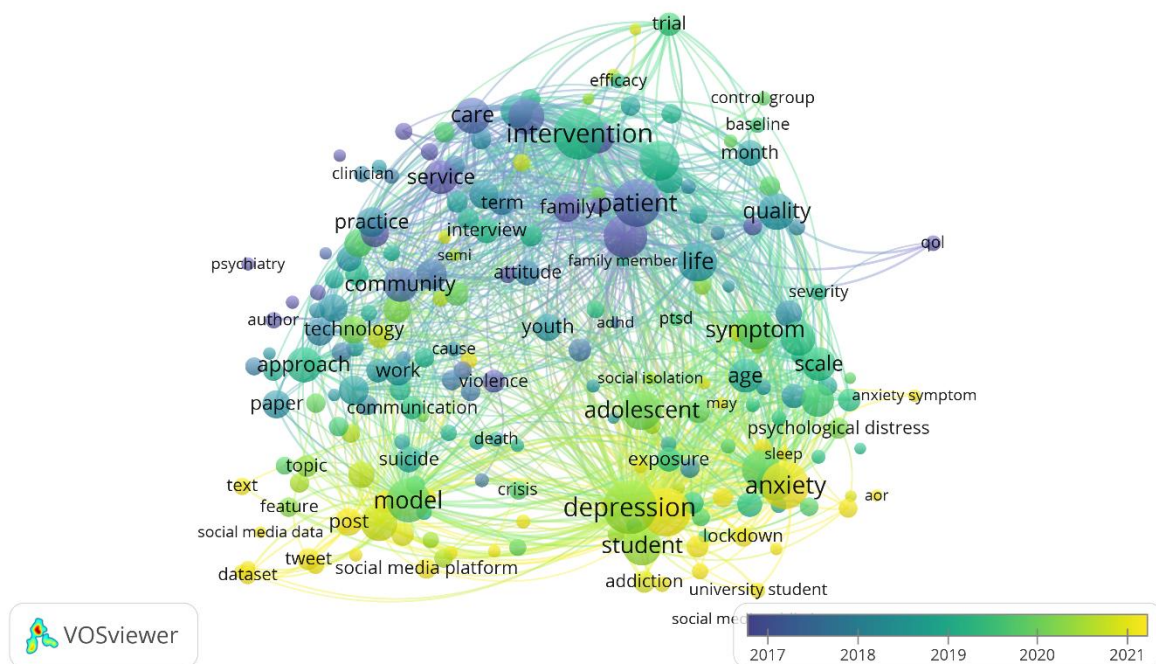

Figure 2. Overlay Visualization

This VOSviewer visualization maps the bibliometric landscape concerning the impact of social media on mental health, with a focus on temporal trends from 2017 to 2021. The distribution of nodes, represented by keywords, and their connections through various lines, indicate the density and complexity of research interactions over these years. The nodes are color-coded to show the progression of research focus over time, beginning from 2017 in lighter shades and moving towards darker shades by 2021. The visualization reveals a sustained and growing interest in areas such as "depression," "anxiety," and "social media addiction," suggesting a continued concern regarding the adverse effects of social media use on psychological well-being.

The thematic clusters depicted in the visualization indicate a multidisciplinary approach to examining the effects of social media. The green cluster, where terms like "depression," "anxiety," and "student" are closely grouped, points to a concentration of studies focused on the mental health of adolescents and young adults—a demographic that heavily utilizes social media. This grouping highlights the concern over social media's role in exacerbating mental health issues during formative years. The temporal overlay shows that newer terms related to "lockdown" have emerged, indicating a pivot in research focus due to the global COVID-19 pandemic, which has heightened concerns around isolation and its psychological effects.

Furthermore, the proximity of methodological terms such as "intervention," "trial," and "efficacy" in relation to mental health issues signifies a proactive research shift towards not only understanding but also addressing the impacts through practical interventions. This suggests a responsive academic field that is not only interested in theoretical analyses but is also engaged in developing and testing solutions. The visualization also underscores the global nature of this research, with widespread implications and relevance across various cultural and geographical contexts, necessitating a diverse approach to understanding and mitigating the negative outcomes associated with social media usage.
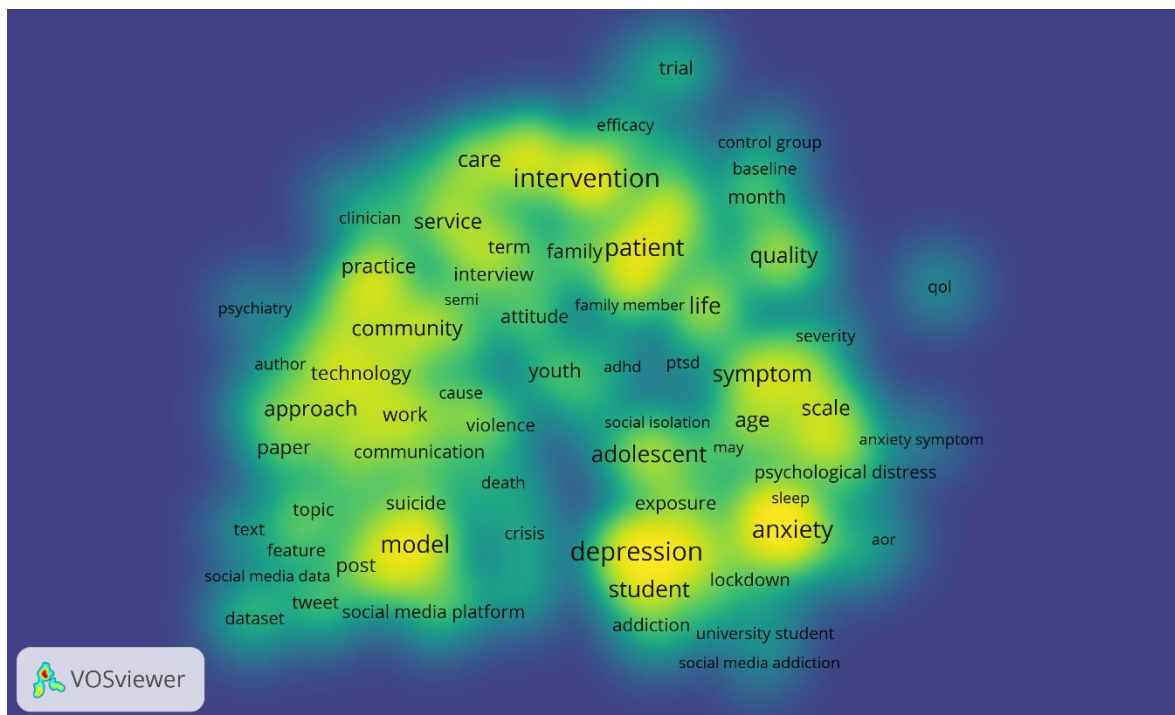
Figure 3. Density Visualization
Source: Data Analysis, 2024

This VOSviewer visualization showcases a thematic heat map, illustrating the concentration of research within the field of mental health as it intersects with social media use. The highlighted terms such as "depression," "anxiety," "intervention," and "addiction" are prominently centered, demonstrating that these are core areas of focus within the literature. The colors ranging from green through yellow to red indicate the intensity and frequency of these terms within the research corpus, with red signifying the most frequently discussed concepts. This color gradient suggests a high volume of studies centered around the direct effects of social media on mental health conditions like depression and anxiety, as well as the exploration of interventions aimed at mitigating these impacts.

Additionally, the presence of terms such as "adolescent," "student," and "lockdown" in close proximity to mental health issues indicates a specific focus on how younger demographics are affected by social media, particularly under conditions such as those imposed by the COVID-19 pandemic. The map also suggests a multidisciplinary approach to these topics, with terms like "trial," "efficacy," and "control group" pointing towards a strong inclination towards rigorous scientific methods to test hypotheses regarding social media's impact. This indicates not only an awareness of the problems posed by social media but also a concerted effort within the research community to apply and assess potential solutions through controlled experimental designs.

Discussion
Synthesis of Findings

The bibliometric mapping revealed a heavy concentration of research on the negative aspects of social media, such as depression, anxiety, and addiction. This focus is consistent with existing literature that links prolonged social media use with detrimental psychological outcomes. Studies like those by [7] have demonstrated a strong correlation between increased social media exposure and rising rates of depressive symptoms among adolescents. Our analysis supports these findings, highlighting ongoing concerns about the psychological distress associated with digital social interactions.

However, the visualization also pointed to significant research interest in interventions designed to mitigate these effects. The presence of terms like "intervention," "trial," and "efficacy" suggests a proactive scholarly response aimed at developing strategies to reduce harm and promote healthier use of these platforms. This aligns with the work by researchers such as [25], who explore the potential of psycho-educational interventions to improve mental health outcomes for frequent social media users.

The inclusion of socio-cultural contexts in this body of research indicates a growing acknowledgment of the role that cultural norms and values play in shaping social media use and its impact. For instance, collectivist societies might experience different social media-related mental health outcomes compared to individualistic societies, which can be attributed to differing societal norms about privacy, community interaction, and stigma surrounding mental health discussions.

Implications for Practice and Policy

The findings from this study have important implications for both mental health practitioners and policymakers. For practitioners, understanding the nuanced ways in which social media can impact mental health is crucial for developing effective treatment plans, particularly for younger individuals who are most vulnerable to these effects. It also highlights the importance of integrating digital literacy education into mental health interventions, which can

empower users to navigate social media in healthier ways.

For policymakers, the results underscore the need for regulations that protect users from the potential harms of excessive social media use. This could include policies that require social media platforms to implement features that discourage prolonged use or that promote positive mental health practices. Additionally, there is a critical need for policies that foster broad public education campaigns to raise awareness about the potential mental health risks associated with social media use and to promote healthier engagement with these technologies.

Gaps and Future Research Directions

Despite the breadth of research covered in this bibliometric analysis, there remain several gaps that future studies should address. One such area is the long-term effects of social media use on mental health. Most current studies employ cross-sectional designs, which do not capture the longitudinal impact. Future research should focus on longitudinal studies that can better assess causal relationships between social media use and mental health over time. Another gap is the limited focus on positive outcomes associated with social media use. While it is crucial to understand the risks, exploring the benefits—such as increased social support, community building, and the potential for positive self-expression—can provide a more balanced view and inform more comprehensive strategies for social media usage. Furthermore, there is a need for more culturally diverse research. The majority of existing studies are concentrated in Western contexts, which may not be universally applicable. More studies are needed in diverse cultural settings to understand how cultural differences in social media use and mental health stigma can influence mental health outcomes. This could lead to more culturally sensitive approaches to both research and interventions.

5. CONCLUSION

In conclusion, this bibliometric study has highlighted the extensive focus within the research community on the negative impacts of social media on mental health and the proactive efforts to mitigate these effects through various interventions. By mapping the prevailing themes and trends, this study not only reinforces the need for ongoing research in this area but also prompts a reevaluation of current approaches to digital health and well-being in the digital age. Future research should continue to explore these dynamics, ensuring a broader cultural perspective and adopting longitudinal methodologies to provide deeper insights into the long-term impacts of social media use.

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