How Social Media Shapes Mental Health in the Digital Era: A Bibliometric Analysis

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ABSTRACT

Social media contributes to negative and positive mental health issues. This bibliometric examines how social media shapes mental health in the digital era. The research methodology involved descriptive bibliometric analysis using data gathered from international publications sourced from the Scopus database (accessible in www.scopus.com). The analysis was conducted using VOSViewer version 1.6.18 and R-Studio version 4.3.2, facilitating bibliometric analysis. Information regarding the study, focusing on the "mental health and social media" keyword. The results of bibliometric analysis show that publication trends from 1963 to 2024 have increased. Some of the most frequently used keywords by the authors include: human, female, social media, depression, covid-19, mental disease, major clinical study and mental disorder. The International journal of Environmental Research an the most articles about mental health and social media, with a total of 573 articles. The influence of social media on mental health needs further investigation through qualitative research and vertical cohort studies.
INTRODUCTION

In the contemporary landscape of the digital age, social media platforms have become integral to daily life, interaction, and the dissemination of information. However, alongside their pervasive presence, concerns have arisen regarding the potential impact of social media on mental health. This bibliometric analysis seeks to explore and elucidate the evolving scholarly discourse surrounding this intersection of social media and mental health.

According to the 2018 Basic Health Research (Riskesdas), more than 19 million Indonesians aged 15 and older are dealing with mental and emotional disorders. The 2023 global depression data from the World Population Review highlights Ukraine as having the highest depression rate, with 2,800,587 cases, accounting for 6.3 percent of the population. In Indonesia, there were 9,162,886 cases of depression, with a prevalence rate of 3.7 percent. Furthermore, Indonesia's population continues to increase annually, now exceeding 278 million people. This suggests that the number of individuals experiencing depression is likely much higher. Insights from the 1-NAMHS study in 2022.

With the exponential growth of digital platforms, individuals now experience unprecedented levels of connectivity and exposure to diverse perspectives. Yet, amidst the benefits of instant communication and global networking, questions persist regarding the ramifications for psychological well-being. Scholars and researchers have increasingly turned their attention to this complex relationship, investigating how social media usage patterns, content consumption, and online interactions correlate with mental health outcomes. The results research of Beyens et al (2019) showed that there is an influence of social media use on mental health.

By employing bibliometric methods, this study aims to systematically analyze existing literature, identifying key themes, trends, and gaps in current research. By mapping the trajectory of scholarly publications, we aim to provide insights into the overarching narratives, methodologies, and findings that shape our understanding of how social media influences mental health.

METHODS

The study utilized a descriptive bibliometric analysis based on data sourced from Scopus database (accessible at www.scopus.com). The following is an overview of the research method in the table below:

<table>
<thead>
<tr>
<th>Topic</th>
<th>Social Media, Mental Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scope</td>
<td>Data: scopus, spanning: 1963-2023</td>
</tr>
<tr>
<td>Search Keywords</td>
<td>Social AND Media AND Mental AND Health</td>
</tr>
<tr>
<td>Identification Documents</td>
<td>N=14,767</td>
</tr>
</tbody>
</table>

Figure 1. Data Search Strategies Related to Patient Satisfaction from 1963 to 2023
This data was subsequently analyzed using VOSViewer version 1.6.18 and R-Studio version 4.3.2. VOSViewer, as described by Eck and Waltman (2010), specializes in visualizing bibliometric network maps, enabling the interpretation of relationships inherent within bibliometric data. Meanwhile, R-Studio version 4.3.2 was utilized to visualize various aspects including publication trends, leading journals, prominent countries in citations, international collaborations, and author affiliations.

Further data extraction from the Scopus database on Mei 21, 2024, involved employing the keyword "mental health and social media" spanning from 1963 to 2023. Detailed strategies for data retrieval are outlined in the bibliometric analysis figure, encompassing comprehensive insights into study data, publication trends, journals with significant publication rates, countries with notable citation impact, international collaborative efforts, and author affiliations.

RESULTS AND DISCUSSION

The database extracted from Scopus was analyzed using VosViewer to obtain key information regarding studies related to mental health and social media, presenting primary insights into the data of studies spanning from 1963 to 2023.

1. Topic Analysis Based on Keywords Used by the Authors

Some of the most frequently used keywords by the authors include: human, female, social media, depression, covid-19, mental disease, major clinical study and mental disorder. The frequently appearing keywords are social media, human and female. The research findings of Sharma et al (2020) indicate the impact of social media extends widely, influencing not only how individuals perceive themselves and their moods but also their social interactions. It's intriguing to observe its effects in areas such as politics, organizations, and even mental health conditions. The 16 studies categorized social media's effects into positive, negative, and neutral aspects.
2. The Publication Trend from 1963 to 2023

The publication study trend from year to year shows a significant increase, especially between 2022 and 2023 (Figure 2), while the year 2024 is still ongoing and data were collected on Mei 21, 2024. This increase indicates that research related to the mental health and social media an interesting topic to be further explored.

3. Top 10 Journal with the Most Articles

The analysis results indicate the top 10 journals publishing the most articles. The International journal of Enviromental Research an the most articles about mental health and social media, with a total of 573 articles. PLOS ONE published a total of 248 articles. BMJ OPEN journal published a total of 238 articles, journal of medical internet research a total of 226 articles, Frontiers in psychiatry journal a total of 207 articles, Community mental health journal a total of 196 articles. JMR mental health journal a total of 126 articles. Quality of life research journal a total of 122 articles. BMC public health journal total of 118 articles. The last, Frontiers in public health a total of 97 articles. Figure 3 illustrates the top 10 journals publishing the most articles about studies on mental health and social media. One of the journals published by The International journal of Enviromental Research an is Weigle dan Shafi (2024) described about the connection between social media usage (SMU) and mental illness, as well as their habits and experiences on social media, including cyberbullying and sexting. Engagement with social media distinctly affects anxiety, depression, and suicidal tendencies.
Increasing evidence suggests that social media may serve as a medium for the spread of psychiatric issues.

4. **Top 10 Author**

![Figure 5. Top 10 Author Related to Mental Health and Social Media](image)

The author is the most publication related to mental health and social media is NA with a total of 121 articles.

5. **Top 10 Most Global Cited Documents**

![Figure 6. Top 10 Most Globally Cited Documents](image)

The paper by Vost T, 2017 is the most globally cited document with a total of 5319 citations. This is indicated from the research Brailovskaia (2024) the current study integrates existing research from the vicious circle of addictive social media use and mental health model to illustrate how engagement in social media (SM) can lead to the formation of addictive behaviors, the resulting impacts on mental health, and strategies for prevention.

**CONCLUSION**

The bibliometric analysis conducted provides valuable insights into the multifaceted relationship between social media and mental health in the digital era. Through a comprehensive review of scholarly literature, several key findings have
emerged. Firstly, the impact of social media on psychological well-being is a prominent area of study, with significant attention given to its effects on anxiety, depression, and self-esteem among users. Secondly, the analysis reveals a growing body of research focusing on the patterns of social media usage and their correlation with mental health outcomes, highlighting both positive and negative implications.

Moreover, the study identifies critical gaps in current research, particularly in understanding the mechanisms through which social media influences mental health across diverse populations and contexts. Methodologically, the bibliometric approach underscores the need for rigorous and diverse methodologies to capture the complex interplay between digital media engagement and mental well-being effectively.

Looking ahead, future research should aim to address these gaps by exploring nuanced factors such as content exposure, social comparison, and digital literacy in relation to mental health outcomes. Additionally, interventions and policies informed by evidence-based research are essential to mitigate potential negative impacts while harnessing the positive aspects of social media for mental health promotion.

In conclusion, while social media offers unprecedented connectivity and opportunities, its impact on mental health necessitates ongoing interdisciplinary research and collaborative efforts to foster a digitally inclusive and mentally resilient society.

REFERENCES


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