



The Influence of Social Media on Athletes' Mental Health: A Bibliometric Analysis

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Keywords

Social Media; Mental Health; Athletes; Bibliometric Analysis

Abstract

This study aims to examine research trends related to the influence of social media on athletes' mental health using a bibliometric analysis approach. A bibliometric trend analysis was conducted using data retrieved from the Scopus database. A total of 261 documents published between 2014 and 2025 were analyzed with VOSviewer to identify publication growth, author productivity, geographical distribution, collaboration networks, and keyword co-occurrence patterns. The results reveal a substantial increase in research output over the past decade, indicating growing academic interest in this topic. Key themes frequently addressed include mental health, fan engagement, self-presentation, anxiety, and psychological support for athletes. Research contributions are predominantly led by developed countries such as the United States, the United Kingdom, and Australia, highlighting strong international collaboration, while developing regions remain underrepresented. Keyword analysis demonstrates the dual role of social media, functioning both as a source of psychological pressure through criticism and social comparison, and as a platform for support and positive social interaction. In conclusion, the impact of social media on athletes' mental health represents an evolving research field that requires broader global perspectives and multidisciplinary approaches to inform effective policies and interventions in the digital sports environment.

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INTRODUCTION

In recent decades, social media has experienced rapid development and become an integral part of daily life (Mahara, 2023), including in the realm of sports (Saxena & Saroha, 2023). Platforms like Instagram, Twitter, TikTok, and Facebook offer athletes direct access to connect with fans, share personal moments, and even promote themselves (Bahir, 2022). Reports indicate that athletes spend more time on social media compared to the general population, with over 80% of athletes reporting daily usage of two hours or more, averaging four hours per day (Watkins et al., 2022). This heightened engagement is often due to athletes being under constant social media scrutiny regarding their physical appearance and competitive performance (Merrill & Faustin, 2023). However, alongside its benefits, intensive interaction with social media can have negative impacts on athlete mental health (Bissell et al., 2024). Stress, pressure to maintain a perfect image, and continuous exposure to public criticism are among the challenges they face (Al-Sammak et al., 2024; D.Kalpana, 2024).

Research indicates that social media can trigger anxiety, depression, and other mental health issues in athletes, particularly younger ones. Additionally, social media may influence athletes' focus and confidence in their performance skills (Merrill & Faustin, 2023). Consequently, athletes must not only manage high expectations from coaches and fans in real life but also navigate the pressures of self-image in the digital world (Shreffler et al., 2017). Negative comments, social comparisons, and cyberbullying exacerbate mental health challenges for athletes (Meggs & Ahmed, 2024). Therefore, it is crucial for athletes, coaches, and stakeholders to acknowledge the potential adverse effects of social media and develop effective strategies to manage its pressures, safeguarding both mental well-being and performance (Al-Sammak et al., 2024; Angwaomaodoko, 2024).

As the understanding of social media's impact on athlete mental health grows, research in this field continues to expand (Meggs & Ahmed, 2024; Wu et al., 2023). Despite increasing attention to this topic, there remains a limited understanding of how research trends and dynamics in this area have evolved over time. Bibliometric studies offer a means to analyze research trends on this topic, identifying patterns, publication volumes, and key contributors to the development of this literature (Chen & Hsieh, 2022; Jangid et al., 2023). Such analyses can provide valuable insights for researchers, practitioners, and policymakers in exploring the influence of social media on athletes' mental health.

This article aims to explore the evolving research trends related to the influence of social media on athlete mental health through a bibliometric analysis. Using this approach, we will map how this theme has developed over time, identify key contributors in the field, and examine collaboration patterns among researchers, countries, and institutions contributing to this literature. By analyzing publication trends, influential authors, and focal journals, this study seeks to provide a comprehensive research map and clarify the relationship between social media and athletes' mental health.

METHODS

This study utilizes a bibliometric trend analysis to investigate the growing influence of social media on athletes' mental health. The bibliometric approach was selected due to its ability to systematically quantify and visualize research trends over time, enabling the identification of key themes, authors, and significant publications in this evolving field (İri & Ünal, 2024). The data were retrieved exclusively from the Scopus database, which is recognized as one of the most comprehensive and high-quality databases for peer-reviewed literature. The search was conducted on December 20, 2024, using the following query:

TITLE-ABS-KEY ("athlete*" AND "social media" AND "mental health").

To ensure the relevance and quality of the dataset, inclusion and exclusion criteria were applied. The inclusion criteria consisted of publications published between 2014 and 2025, peer-reviewed journal articles, English-language documents, and studies focusing on athletes, social media, and mental health. The exclusion criteria included conference papers, book chapters, editorials, non-English publications, irrelevant studies, and duplicate records.

The study selection process followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines to ensure transparency and reproducibility. A total of 261

records were initially identified from the Scopus database. After the screening process and application of inclusion and exclusion criteria, 237 documents were included in the final analysis. The detailed selection process is illustrated in **Figure 1**.

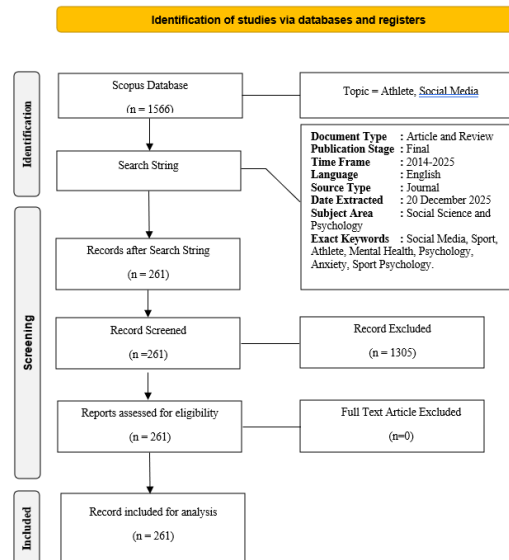


Figure 1. PRISMA Flow Chart of Search and Screening Strategy

The collected data will be analyzed using bibliometric software like VOSviewer to visualize citation networks and keyword co-occurrences (Fitria et al., 2022). Descriptive statistics will be used to analyze the growth of publications, authorship patterns, and institutional contributions. Additionally, the study will assess the geographical distribution of research to determine regional differences in the focus on athletes' mental health in relation to social media. The results will provide a comprehensive overview of the research landscape, highlighting key trends, gaps, and areas for future investigation (Han et al., 2023).

RESULTS AND DISCUSSION

In recent years, social media has become a highly influential platform in various aspects of life, including in the world of sports. Both professional and amateur athletes increasingly use social media as a means to interact with fans, build personal branding, and share moments from their athletic lives. However, behind these benefits, concerns have emerged regarding the negative impact of social media on athletes' mental health. Various studies have shown that excessive exposure to online criticism, pressure to maintain a perfect image, and social comparisons can increase the risk of mental health issues, such as stress, anxiety, and depression, among athletes. This bibliometric study aims to identify trends related to the impact of social media on athletes' mental health by analyzing relevant literature to provide a comprehensive overview of this topic. The research also offers insights into how social media can be used more positively to support athletes' psychological well-being.

Publication Trends

Before conducting the bibliometric network analysis, it is important to present information related to the database, which includes 237 articles obtained from Scopus. **Figure 2** summarizes the distribution of articles addressing athletes' mental health based on their publication year. In 2014, only 6 articles were published. However, there was an increase in the number of publications in 2019, with 22 articles. A significant surge occurred in 2021, with 35

articles, although there was a decrease in 2022, with 26 articles. The number of publications then increased again in 2024, with 49 articles and in 2025 with 34 articles.

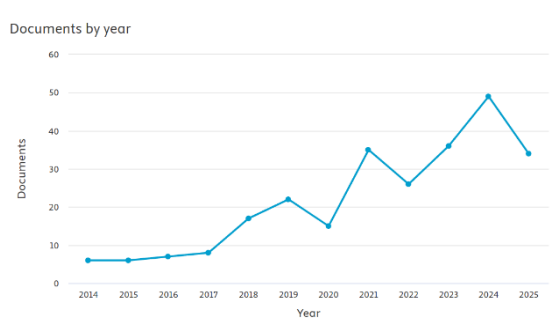


Figure 2. Annual Publication Distribution

Authors and Highest Citations

Figure 3 shows that among the 15 most productive researchers, Sanderson, has published articles related to athletes' mental health between 2015 and 2025. The majority of researchers who began their studies on athletes' mental health have continued publishing in this field, highlighting the significance of this research topic in the development of athletes' mental health.

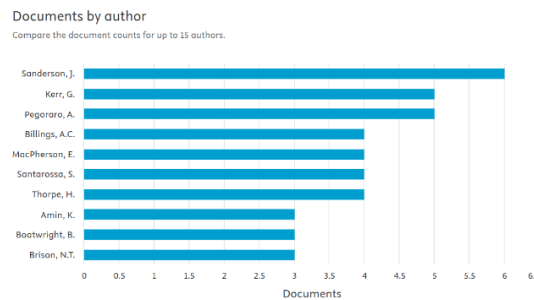


Figure 3: Author Productivity Over Time.

Table 1 shows the 10 authors with the most impactful articles in fitness technology research. The first position is held by an article published by Cheryl Cooky, with a total of 286 citations. The second position is held by an article published by Tony Bruce, with a total of 190 citations. The third position is held by an article published by Holly Thorpe, with a total of 129 citations. The fourth position is an article published by Kim Toffoletti, with a total of 127 citations. The fifth position is an article published by Yiran Su, with a total of 95 citations. Meanwhile, the remaining articles published by other researchers have a total of fewer than 90 citations, listed in order.

Table 1. Ten articles with the most citations based on Scopus.

Document Title	Author & Year	Citation Total
"It's dude time!": A quarter century of excluding women's sports in televised news and highlight shows	(Cooky et al., 2015)	286
New Rules for New Times: Sportswomen and Media Representation in the Third Wave	(Bruce, 2016)	190
Sportswomen and Social Media: Bringing Third-Wave Feminism, Postfeminism, and Neoliberal Feminism Into Conversation	(Thorpe et al., 2017)	129

Female athletes' self-representation on social media: A feminist analysis of neoliberal marketing strategies in "economies of visibility"	(Thorpe et al., 2017)	127
Fan engagement in 15 seconds: Athletes' relationship marketing during a pandemic via TikTok	(Su et al., 2020)	95
The athletic labour of femininity: The branding and consumption of global celebrity sportswomen on Instagram	(El-amrawy et al., 2017; Toffoletti & Thorpe, 2018)	88
Action Sports, Social Media, and New Technologies: Towards a Research Agenda	(Thorpe, 2017)	88
Social media and the politics of gender, race and identity: the case of Serena Williams	(Litchfield et al., 2018)	85
From yellow to blue: Exploring Lance Armstrong's image repair strategies across traditional and social media	(Hambrick et al., 2015)	80
Towards typologies of virtual maltreatment: sport, digital cultures & dark leisure	(Kavanagh et al., 2016)	73

Distribution and Citation Network by Country

The results of the distribution and citation network analysis by country in **Figure 4** show a significant pattern of international collaboration in research on the influence of social media on athletes' mental health. Countries with the highest publication contributions, such as the United States, the United Kingdom, and Australia, dominate the literature in this field. Furthermore, citation analysis indicates that research from these countries also has a substantial impact, with many articles being frequently cited by other researchers worldwide. Other countries, such as Canada, Germany, and Spain, also show significant contributions, though in smaller quantities. International collaboration is evident, with many publications involving authors from different parts of the world, reflecting the importance of a global approach in understanding the impact of social media on athletes' mental health.

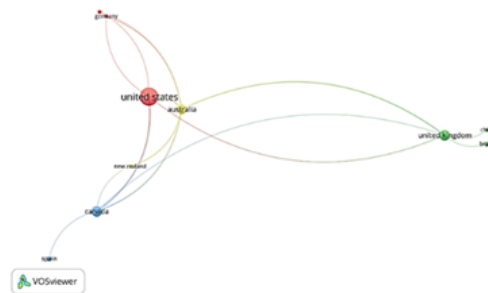


Figure 4. Citation Network Visualization by Country.

The distribution of countries based on citations, documents, and link strength shows a clear variation in the contributions and influence of research in the field of the impact of social media on athletes' mental health. Countries with the highest number of documents, such as the United States, Canada, and Australia, also record significant citations, indicating that research published in these countries is not only abundant but also highly regarded by the global academic community. Link strength, which reflects the connections between publications in the research network, further illustrates the dominance of these countries, with numerous cross-country collaborations enhancing the influence and reach of their studies. Meanwhile, although countries like New Zealand and Spain have fewer documents, they exhibit considerable link strength, indicating that their research is frequently referenced in subsequent studies. This suggests that,

despite the smaller publication contributions from some countries, their impact remains significant in the global development of this topic.

Table 2. Source: Scopus Database, Distribution of Countries Based on Citations, Documents, and Link Strength

Country	Document	Citation	Total Link Strength
United States	107	1782	286
Canada	36	453	190
United Kingdom	35	484	129
Australia	29	793	127
Spain	9	116	95
Brazil	8	109	88
Germany	6	74	88
New Zealand	6	631	85
China	5	12	80
Norway	5	28	73

Most Frequently Used Keywords in the Study

In this study, the keyword analysis aims to identify the trends and main focuses of research related to the impact of social media on athletes' mental health. Based on the results, 17 keywords were grouped into four main clusters. The first cluster consists of terms such as "anxiety," "attitude," "exposure," "mental health," and "mental illness," highlighting the focus on the psychological conditions and mental impacts experienced by athletes due to exposure to social media. The second cluster focuses on social interaction and relationships with fans, with keywords like "engagement," "fan," "nationalism," "self-presentation," and "sports fan," reflecting the influence of social media on public perception and fan involvement in supporting athletes.

The third cluster includes more specific keywords related to social media usage by athletes, such as "elite athlete," "Instagram post," "social media post," and "support," emphasizing the role of social media in shaping self-image and providing support for athletes. Meanwhile, the fourth cluster focuses on the negative impact of social media, with keywords like "abuse," "racism," and "respect," highlighting important issues related to harassment and discrimination often faced by athletes on digital platforms.

Overall, These Four Clusters Reflect The Complexity Of Social Media's Impact On Athletes' Mental Health, Both From The Positive Side Of Support And Engagement, As Well As The Negative Effects Like Harassment And Intense Psychological Pressure. This Analysis Provides In-Depth Insights Into Various Aspects Affecting Athletes' Mental Health In The Context Of The Digital Era.

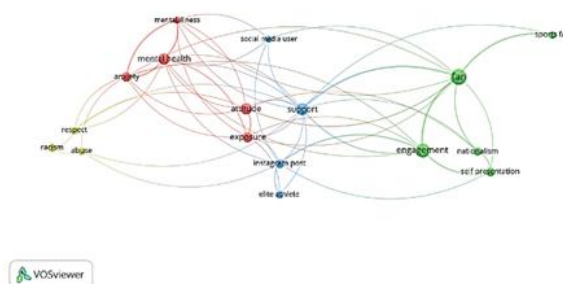


Figure 5. Network Visualization in Athletes' Mental Health

From the co-word analysis, it was found that keywords such as *mental health*, *fan engagement*, *attitude*, and *support* often appear together, illustrating the close relationship between social media interaction and athletes' mental health. This indicates that the main topic

of concern is how social media affects performance pressure, self-image, and the dynamics of relationships between athletes and their fans. Psychological risks, such as online bullying, also emerge as a prominent issue, especially when public expectations of athletes are not met. On the other hand, the network visualization also reveals emerging sub-themes, such as the use of social media as a tool for psychological support, either through direct interaction with fans or through online communities that provide a sense of solidarity and motivation. These sub-themes highlight the positive potential of social media in enhancing athletes' mental well-being if used wisely.

The co-authorship analysis reveals that dominant research clusters come from developed countries such as the United States, the United Kingdom, and Australia. Collaborations between authors from these countries have resulted in influential research, as indicated by the high number of citations. On the other hand, the network visualization also shows that developing countries have a lower representation in this research, highlighting the need for more inclusive global collaboration to understand the impact of social media in a broader context.

The citation network analysis shows that several publications serve as central nodes within the network, indicating that these studies form the foundation for the development of research in the field of athletes' mental health and social media. These publications often focus on the psychosocial aspects of social media interaction, such as how negative comments can affect an athlete's motivation and performance. These findings underscore the importance of foundational literature in guiding further research in this area.

DISCUSSION

The findings of this bibliometric trend analysis reveal a significant increase in research examining the influence of social media on athletes' mental health over the past decade. This trend reflects the growing recognition of the complex relationship between digital platforms and psychological well-being in the athletic community. The analysis highlights key themes such as body image, stress, anxiety, and identity formation among athletes, which have become central topics in the literature. These findings align with previous research indicating the dual-edged nature of social media, where it can act as both a source of support and a trigger for mental health challenges (A.R et al., 2025; Ulvi et al., 2022). The increasing volume of studies since 2014 suggests that the academic community is increasingly focused on understanding the nuanced ways social media impacts athletes, adding depth to existing theories on media influence and psychological health.

This study contributes to the existing body of research by offering a comprehensive bibliometric overview of the field, identifying both trends and gaps in the literature. Notably, it highlights the increasing importance of social media in shaping athletes' mental health, which has not been fully explored in earlier studies. The geographical distribution of research also presents a new insight into regional differences, with North America and Europe leading the way in publications on this topic, while other regions remain underrepresented. This regional imbalance may indicate cultural or infrastructural factors that influence the focus of research. Furthermore, while much of the literature has focused on the negative aspects of social media, this study suggests a growing need for research into its potential positive impacts, such as fostering a sense of community and providing mental health support networks for athletes.

However, this research also has limitations. While the bibliometric analysis provides valuable insights into publication trends and themes, it does not delve into the specific methodologies or quality of the individual studies included. Additionally, the exclusion of grey literature, such as conference proceedings or reports from sports organizations, may have resulted in the omission of valuable data. Future studies could address these limitations by conducting a more in-depth qualitative review of the literature and expanding the scope of the search to include other types of publications. Despite these limitations, the findings of this study offer a significant contribution to the understanding of the growing influence of social media on athletes' mental health and highlight areas for further investigation.

CONCLUSION

This study reveals that the influence of social media on athletes' mental health has become an increasingly important topic in academic literature. Bibliometric analysis shows a significant increase in the number of related publications, reflecting the growing attention from researchers worldwide. The main focus of this study is the positive and negative impacts of social media on athletes, including its role in motivating performance, supporting mental health, but also the potential risks such as social pressure, cyberbullying, and performance anxiety. From the bibliometric trend analysis, it was found that topics such as mental health, fan engagement, attitude, and support are becoming more frequently studied in this context. Furthermore, the bibliometric trend analysis reveals strong research collaboration among developed countries like the United States, the United Kingdom, and Australia, highlighting the global concern about this topic. However, research from developing countries remains relatively scarce. This finding points to the need for further exploration in different cultural and social contexts to understand how social media affects athletes at various levels. The study also highlights the need for a multidisciplinary approach to holistically understand this phenomenon. Collaboration between sports psychologists, technology experts, and policymakers can help develop better risk mitigation strategies for athletes. One important finding is the need for better policies and training to help athletes manage their social media usage in a healthy manner, including utilizing social media as a tool to support their mental health rather than becoming an additional source of pressure. This study has several limitations that need to be considered. First, the use of bibliometric analysis only covers studies indexed in specific databases, so there may be important literature that was overlooked. Second, this study tends to focus on the context of professional athletes, which may not fully reflect the experiences of amateur athletes or students who also face similar challenges. Future research is recommended to expand the geographical and demographic scope, as well as consider longitudinal approaches to measure the long-term impact of social media on athletes' mental health.

In conclusion, the influence of social media on athletes' mental health is a developing field with significant implications. Beyond its theoretical contributions, this study also offers several practical implications for relevant stakeholders. First, athletes are encouraged to develop digital literacy and self-regulation skills to manage their social media use, such as limiting screen time, filtering negative content, and utilizing social media for positive engagement and self-expression. Second, coaches and sports practitioners can incorporate mental health education and social media management strategies into athlete training programs. For example, structured workshops or counseling sessions can be implemented to help athletes cope with online criticism, reduce social comparison, and maintain psychological resilience. Third, sports organizations are recommended to establish clear guidelines and support systems related to social media use. This includes providing access to sport psychologists, creating safe communication channels, and developing policies to prevent and respond to cyberbullying or online harassment targeting athletes. Finally, policymakers and stakeholders should consider integrating digital well-being programs into sports development frameworks. These programs can promote a balanced use of social media, protect athletes' mental health, and encourage the use of digital platforms as tools for social support and positive interaction.

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