



Mapping Scientific Literature on Mental Health and Depression in Football Players: Insights from a Scopus Bibliometric Analysis

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ABSTRACT

Mental health problems, like depression, are now seen as major issues for football players because of the mental stress and physical challenges of the sport. This study will use bibliometric methods to map out and study worldwide research trends on mental health and depression in football players from 2015 to 2025. A bibliometric analysis was done using the Scopus database. The data was analyzed with VOSviewer and R-studio software to study performance and map out the science, including looking at who wrote together, how often keywords appeared together, and how often articles were cited. This bibliometric study gives a full picture of research activity on mental health and depression in football players.

INTRODUCTION

Football is one of the most popular and demanding sports in the world, attracting millions of professional and amateur players. Alongside the physical demands of the sport, football players often face intense psychological pressures, including performance anxiety, injuries, competitive stress, and career uncertainty. These challenges can lead to various mental health issues, with depression being one of the most commonly reported conditions. In recent years, there has been growing recognition of the importance of mental health in sports, particularly in high-performance settings such as professional football. However, despite the increasing awareness, mental health issues among football players often remain underreported, undertreated, and stigmatized. As a result, scientific research plays a crucial role in understanding the prevalence, causes, and consequences of mental health problems in this population.

During the COVID-19 pandemic, research on athlete mental health intensified. Santomauro et al. (2021), in a landmark study published in *The Lancet*, analyzed the global burden of depression and anxiety disorders and highlighted that athletes, particularly footballers, experienced a spike in psychological distress due to disrupted schedules and isolation. Additionally, the Mental Health Survey of League of Ireland Footballers (Molloy Moules, 2025) surveyed 219 players and reported that 63% had experienced at least one symptom of a mental health disorder. The study also found that part-time players and goalkeepers were among the most affected groups, reinforcing the urgent need for targeted psychological interventions in football.

While several studies have explored aspects of mental health in athletes, there is a lack of consolidated evidence specifically focusing on football players. Furthermore, it remains unclear how research output on this topic has evolved over time, which themes are most prominent, and which countries and institutions are contributing to the development of this field. A bibliometric analysis provides a valuable tool to map the scientific literature, identify key research trends, and highlight gaps in knowledge.

Therefore, this study aims to conduct a bibliometric analysis using data from the Scopus database to explore research trends on mental health and depression among football players during the period 2015–2025. The findings are expected to offer insights into the structure and evolution of this research area and provide direction for future investigations and international collaboration.

LITERATURE REVIEW

The Cognitive-Behavioral Theory

Mental health is a fundamental component of overall well-being, and its importance in sports has gained growing attention in recent years. Football players, both amateur and professional, are exposed to various psychological stressors including performance anxiety, injury recovery, competition pressure, and media scrutiny. These factors contribute to increased vulnerability to mental health disorders, particularly depression (Rice et al., 2016). The Cognitive-Behavioral Theory (Beck, 1976) explains that negative thought patterns and maladaptive coping mechanisms are often linked with depressive symptoms among athletes. Additionally, the Stress-Injury Model (Andersen &

Williams, 1988) highlights how psychological stress increases susceptibility to physical injuries, which in turn can worsen mental health outcomes.

Studies have shown that the stigma surrounding mental illness in sports environments often leads to underreporting and undertreatment (Gulliver et al., 2012). This suggests the need for a deeper understanding of how mental health issues manifest specifically in football contexts, making this area of research both timely and socially significant.

METHODOLOGY

The study applied a descriptive bibliometric approach utilizing data extracted from international publications indexed in the Scopus database (accessible via www.scopus.com). The dataset was compiled on May 25, 2025, using the keywords "mental health" AND "psychological well-being" "depression" OR "football players." The analysis was carried out with the support of VOSviewer (version 1.6.18) and R-Studio (version 4.3.2) to perform comprehensive bibliometric mapping.

Research Procedure

Data associated with the selected keywords spanning the years 2015 to 2025 were downloaded in CSV format from the Scopus database. These records were subsequently processed using VOSviewer version 1.6.18 and R-Studio version 4.3.2. As noted by Eck and Waltman (2010), VOSviewer is a specialized tool for constructing and visualizing bibliometric networks, enhancing the interpretation of keyword co-occurrence, author collaboration, and citation patterns. R-Studio was employed to visualize publication trends, identify prolific journals, map citation distribution across countries, track international collaborations, and analyze institutional affiliations.

Data Analysis

The retrieval of bibliographic data took place on May 25, 2025, based on the specified keyword combinations. The bibliometric analysis captured several dimensions of scholarly output, including research productivity, most-cited journals, top contributing countries, patterns of collaboration, and institutional involvement, as illustrated in the figures throughout this paper.

RESULT DAN DISCUSSION

We used VosViewer to study the database from Scopus and find important details about "mental health" AND "psychological well-being" "depression" OR "football players". This gave us basic information about studies done between 2015 and 2025.

The publication trend from 2015 to 2025

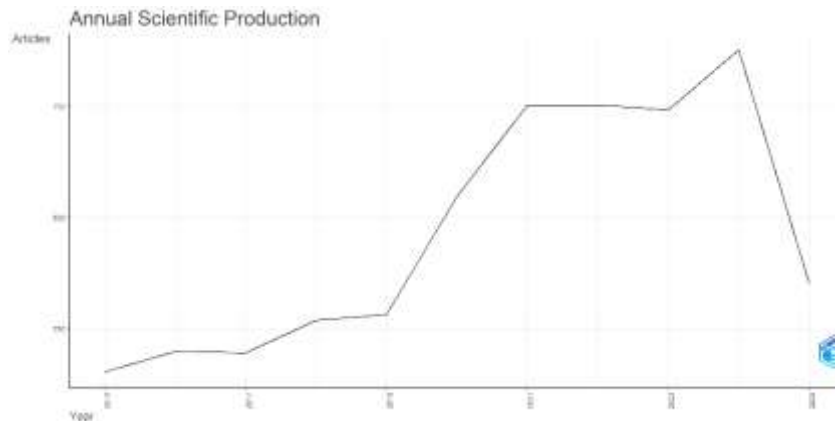


Figure 1. The publication trend from 2015 to 2025

Annual scientific production from year to year shows a significant increase, especially in 2024 (Figure 1), while the year 2025 is still ongoing and data were collected on May 25, 2025. This increase indicates that research related to the mental health AND psychological well-being depression OR football players remains an interesting topic to be further explored.

Top 10 Journal with the Most Articles

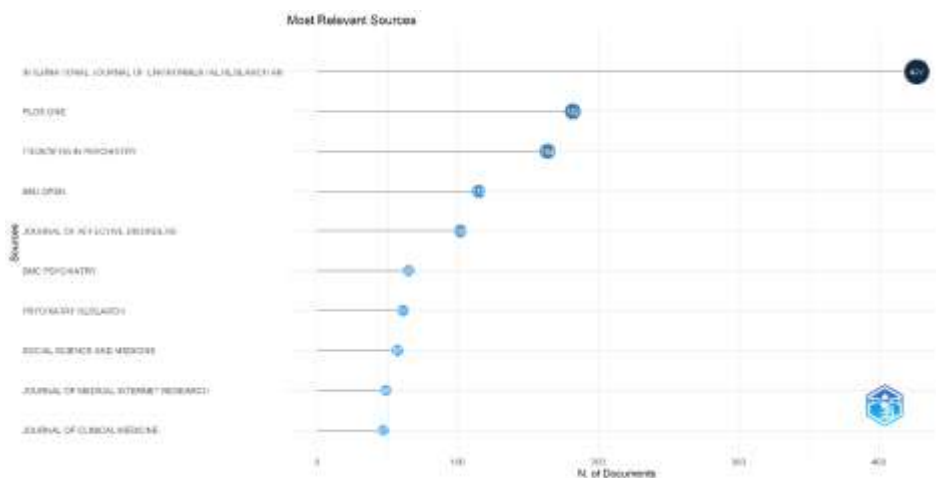


Figure 2. Top 10 Journals that publish the most articles related mental health AND psychological well-being depression OR football players

The analysis identified the top 10 journals with the highest number of published articles. International Journal of Enviromental Research An publishes the most articles about the Health Promoting Family Approach, with a total of 427 articles. Plos One published a total of 182 articles. Frontiers in Psychiatry publishes the most articles about mental health AND psychological well-being depression OR football players the with a total of 164 articles. BMJ Open published a total of 115 articles, Journal of Affective Disorders published a total of 102 articles, BMC Psychiatry published a total of 65 articles, Psychiatry Research published a total of 65 articles, Social Science and Medicine published

a total of 57 articles, Journal of Medical Internet Research published a total of 49 articles, and the last Journal of Clinical Medicine each contributed 47 articles.

Top 10 Author Affiliation

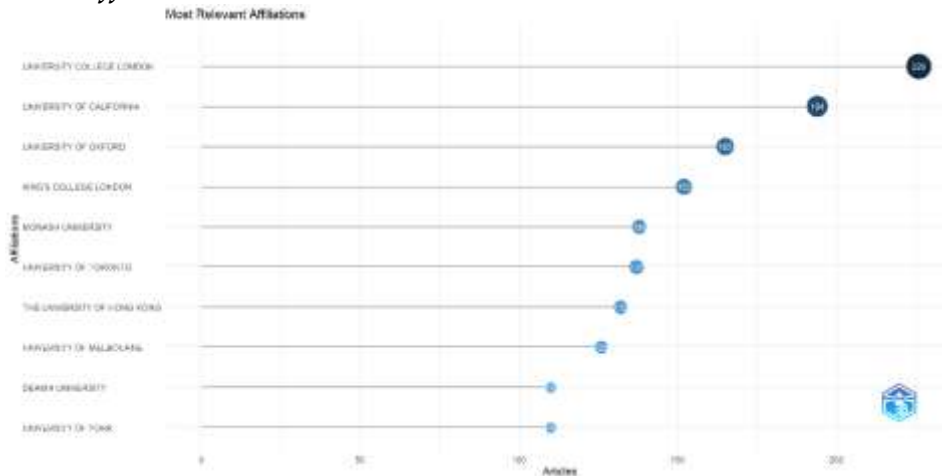


Figure 3. Top 10 Articles Author affiliation related to mental health AND psychological well-being depression OR football players

The most prevalent institution among the top 10 author affiliations is the University College London, with a total of 226 author. And then, there is University of California with a total of 194 author. University of Oxford with a total of 165 author, Kings's College London with a total of 152 author, University of Toronto with a total of 138 author, The University of Hongkong with a total of 137 author, University of Melbourne with a total of 132 author. The last Deaking University and University of York with a total of 110 author.

Research Collaboration Countries

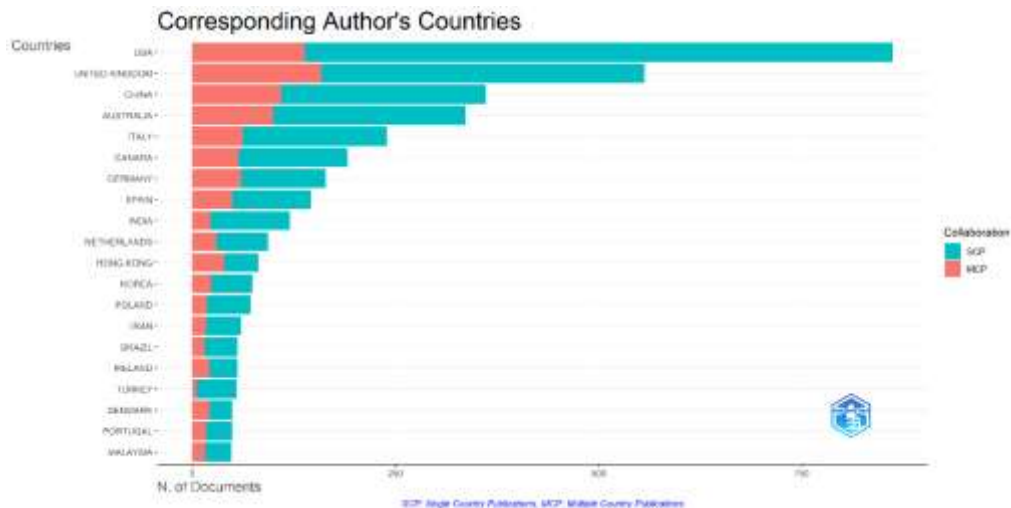


Figure 4. Top Twenty Correspondences by Country of Writers

The highest number of writer collaborations is from the United States, followed by United Kingdom, China, Australia, and Italia. There is no Indonesia

The most prevalent keywords among the top 10 used by the authors is human, female, article, anxiety disorder, mental disease, quality of life, major clinical study, cross-sectional study, mental stress and questionnaire. The frequently appearing keywords are human and female. This aligns with the study by Mental Health Survey of League of Ireland Footballers (News Report, 2025) a survey of 219 League of Ireland players found that 63% of respondents experienced at least one symptom of a mental health disorder. Part-time players and those who left school early were more vulnerable to anxiety. Goalkeepers showed a higher rate of symptoms compared to players in other positions.

Top 10 Author

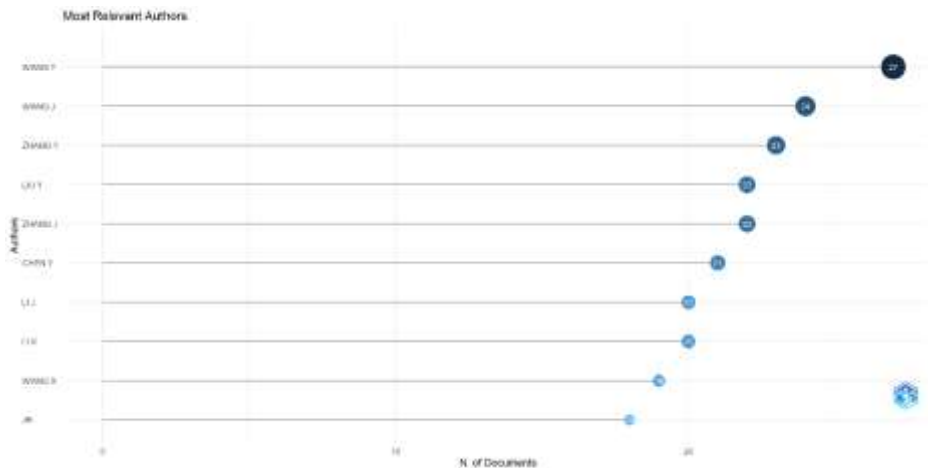


Figure 7. Top 10 author related to mental health AND psychological well-being depression OR football players

The most prevalent author among the top 10 author is Wang Y with a total of 27 articles. Second is Wang J with a total of 24 articles. Third is Zhang Y with a total of 23 articles. Fourth and fifth is Liu Y and Zhang J with a total of 22 articles. Sixth is Chen Y with a total of 21 articles. Seventh and eighth is Li J and Li X with a total of 20 articles. Ninth Wang X with a total of 19 articles. And the last is JR with a total of 18 articles.

Average Citation Per Year

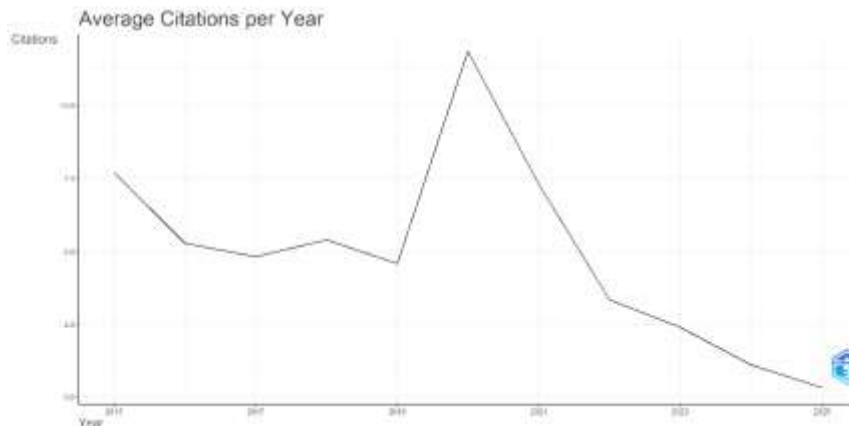


Figure 7. Average citation per year related to mental health AND psychological well-being depression OR football players

The average citation trend per year from year to year shows a significant increase, especially in 2020 (Figure 7).

A Visualization Used to Map Research Themes or Topics Based on Keywords, Co-Word Analysis, or Clustering

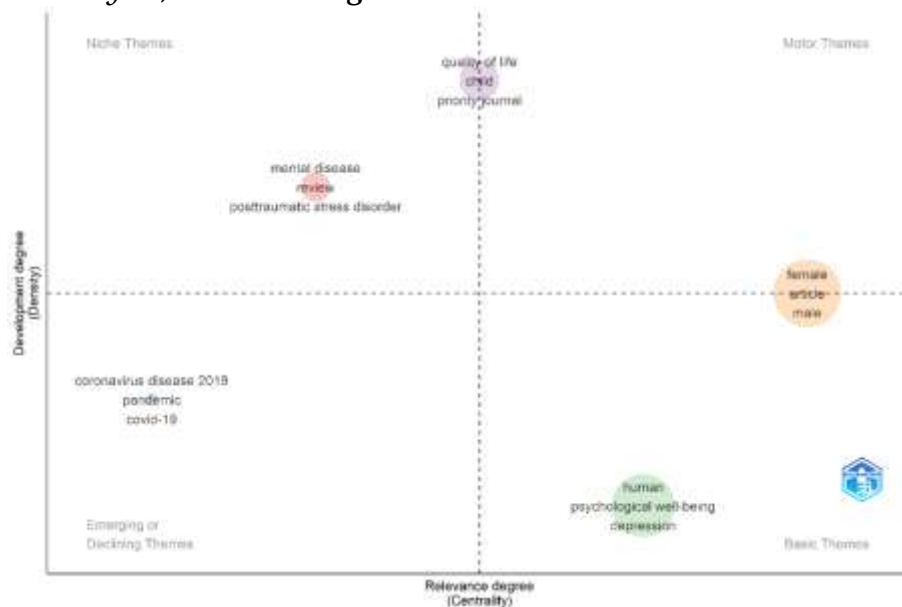


Figure 8. A visualization used to map research themes or topics based on keywords, co-word analysis, or clustering

This thematic map reveals the structure and focus of research topics within your dataset. Psychological well-being” and “depression” are central but not deeply explored, implying a need for more detailed study. Gender-related keywords (female, male) are central and well-developed, possibly reflecting demographic patterns in mental health research.

Top 10 Most Global Cited Documents

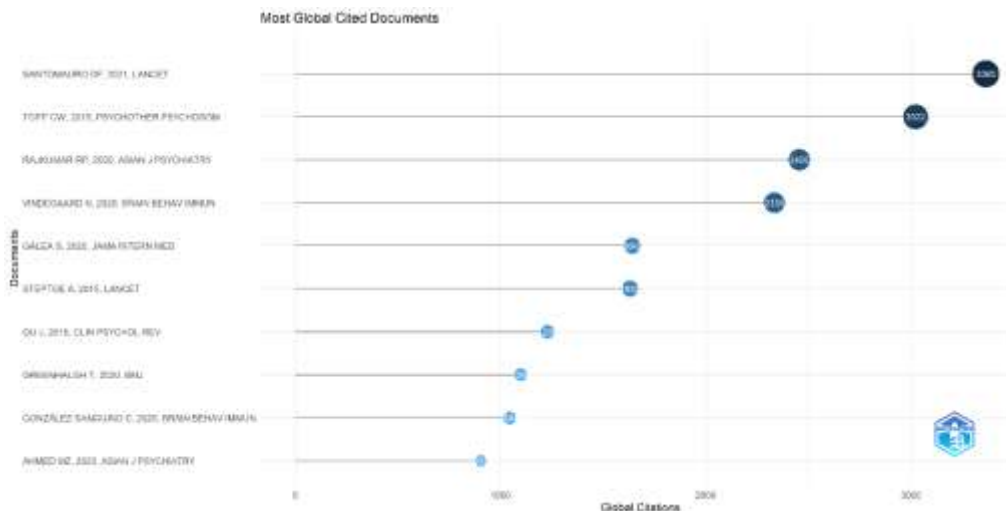


Figure 9 Top 10 global cited documents related to mental health AND psychological well-being depression OR football players

This bar-bubble chart displays the top 10 most globally cited documents in the analyzed dataset. The horizontal axis represents the number of global citations, which refers to how many times each document has been cited in total, regardless of source. Each row represents a specific publication, showing: author(s), year of publication, journal name, total number of citations (indicated by the number inside the circle and the position on the x-axis) and journal impact.

Top 3 Most Cited Documents, first is Santomauro DF, 2021, *The Lancet* with total of 3365 articles citations, this journal describe about Likely a landmark study on the global burden of mental health during COVID-19. Second is Topp CW, 2015, *Psychotherapy and Psychosomatics* with total of 3022 articles citations, this journal describe about Possibly related to well-being scale development or validation. Third is Rajkumar RP, 2020, *Asian Journal of Psychiatry* with total of 3365 article citations, this journal describe about known for early commentary or review on psychological effects of COVID-19.

Next, Vindegaard N, 2020, *Brain, Behavior, and Immunity* with total of 2335 articles citations. Galea S, 2020, *JAMA Internal Medicine* with total of 1462 articles citations. And then Steptoe A, 2015, *The Lancet* with total of 1633 articles citations. These articles reflect key contributions to mental health, psychological well-being, and the impact of the COVID-19 pandemic, which dominated the citation landscape during 2020–2021.

CONCLUSION AND RECOMMENDATION

This bibliometric study successfully mapped the scientific literature on mental health and depression in football players over the past decade (2015–2025). The findings show a growing trend in scientific publications, particularly after the COVID-19 pandemic, which significantly raised global awareness about psychological well-being in sports. Key research hotspots identified include topics such as "mental health," "depression," and "psychological well-being," with major contributions coming from countries like the United States, United Kingdom, China, and Australia. Although demographic-related terms (e.g., female, male, human) are central and well-developed, core issues such as depression and psychological well-being remain underexplored, signaling the need for more targeted research. The most cited documents reveal that foundational studies during the COVID-19 era remain highly influential in shaping the discourse around mental health in football. These insights provide direction for researchers and institutions to address existing gaps and foster international collaboration in sports mental health research.

Future research should focus on emerging but underdeveloped themes, particularly those related to psychological support systems, stigma reduction, and post-retirement mental health among football players.

FURTHER RESEARCH

This study is limited by its reliance on a single database (Scopus) and keyword-based retrieval, which may exclude relevant studies not indexed or those using alternative terminology. Future research could integrate multiple databases (e.g., Web of Science, PubMed) and employ machine learning for more

comprehensive thematic extraction. In addition, qualitative studies are encouraged to complement bibliometric insights with in-depth understanding of athlete experiences.

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