Bibliometric Analysis: Mental Health Problems in a Decade

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Article Info	ABSTRACT
	This paper provides a thorough bibliometric analysis of research on mental health published in the last ten years (2014–2024). Mental health issues affect people all around the world, affecting families, communities, and healthcare systems. To spot trends, knowledge gaps, and areas in need of more research, it's critical to comprehend the scientific landscape of mental health research. Using information from 3,588 Scopus databases that were published in the last ten years, this study looked at the journal landscape, citation trends, and publishing trends in mental health research. The analysis draws attention to the growing number of research papers, the significance and power of scholarly work, and the importance of major media outlets on the subject. The findings collected from this study can help policymakers, practitioners, and researchers promote evidence-based interventions, fill research gaps, and advance knowledge to enhance mental health outcomes worldwide.

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1. INTRODUCTION

A person's emotional, psychological, and social well-being are all influenced by their mental health. Mental health diseases affect millions of people globally, ranging from mild ailments like depression and anxiety to severe ones like bipolar disorder and schizophrenia [1], [2]. The frequency of mental health issues and its effects on people as individuals, families, communities, and as a whole have come under more light in recent years [3]. The Sustainable Development Agenda's inclusion of substance addiction and mental health as global health priorities is a step in the right direction toward resolving these issues and helping those in need [4], [5]. The UN Sustainable Development Goals and the Mental Health Action Plan 2013–20 are two initiatives that emphasize how crucial it is to address mental health concerns and lower suicide rates in order to enhance general well-being.

The conversation surrounding mental health has changed dramatically, with a focus on early intervention, destigmatization, and comprehensive treatment strategies. To increase mental health fairness, recent research emphasizes the significance of social determinants of health (SDOH) in mental health outcomes and calls for policies, communities, and individual interventions [6], [7], [8]. The potential of community mental health to enhance mental health at the

population level through interdisciplinary collaboration and creative techniques has drawn attention [9]. The importance of addressing various variables that impact mental health, including socioeconomic inequality and human rights violations, is highlighted by the World Health Organization's (WHO) emphasis on mental health as the cornerstone of societal well-being [10], [11]. Aiming to address the social causes of poor mental health, policy ideas include universal childcare, Medicaid coverage expansion, and reimbursement for peer support specialists.

Urbanization, socioeconomic determinants (e.g., poverty, discrimination), a shortage of mental health specialists, and unequal access to care are some of the factors contributing to the marked rise in mental health difficulties, including stress, anxiety, and depression (SAD) [3], [12], [13]. Middle school antistigma treatments that focus on teenagers' social and cognitive development have been suggested as a means of reducing stigma and improving early intervention [14][15]. Furthermore, studies on community mentor training programs have demonstrated beneficial benefits on knowledge, attitudes, and self-efficacy in assisting young people with mental health concerns, bridging the gap between the beginning of symptoms and intervention [16], [17]. Adopting comprehensive strategies that involve community agencies, after-school programs, and schools can provide staff with the tools they need to successfully handle behavioral and mental health concerns in young people.

Even with great advancements in the field of mental health study and practice, there remain urgent problems that require quick resolution. The global burden of mental health issues is still increasing, which is made worse by elements including environmental stress, socioeconomic inequality, and the COVID-19 pandemic's aftereffects. People with mental health issues have obstacles while trying to get timely and adequate care, which causes significant personal suffering as well as financial costs to society. Furthermore, the stigma attached to mental illness still prevents people from getting the care they need. Comprehensive research efforts are desperately needed to comprehend the complexity of mental health issues and create evidence-based therapies to address them in light of these urgent difficulties.

Even while mental health is becoming more and more important, there are still a lot of gaps and difficulties in our knowledge and treatment of mental health issues. The study literature currently in publication is fragmented, with disparate findings and approaches impeding the synthesis of knowledge and the identification of broad trends. In addition, there is a lack of consensus over the areas that should receive priority for research and intervention, which results in inefficient use of resources and lost chances to have a significant influence. In terms of comprehending mental health issues and offering support services, the spread of digital technology and social media platforms has also added new aspects to the field of mental health. These developments present both opportunities and obstacles. This study aims to accomplish two main goals: first, it will examine the research trajectory on mental health problems over the last ten years, including trends in publication output, citation patterns, and thematic priorities; second, it will identify opportunities, challenges, and gaps in the current literature to help guide future research directions, policy initiatives, and clinical practice.

2. METHODS
2.1 Design
This study conducted a thorough bibliometric examination of research on mental health concerns over the previous ten years (2014–2024) using a strict methodology. Data from Scopus, a popular database that includes a broad spectrum of scientific literature from numerous fields, was used in the analysis. Using sophisticated bibliometric approaches, the methodological approach comprised data collection, processing, and analysis, with a special emphasis on visualization through the use of VOSviewer software.

2.2 Data Collection

Scopus is an extensive bibliographic database that indexes peer-reviewed journals, conference proceedings, and other scholarly publications. The data used in this study were taken from Scopus. The search approach identified 3,588 papers about mental health issues published between 2014 and 2024 using a combination of pertinent keywords and Boolean operators, as shown in Figure 1. Some of the search terms that were used were "mental health," "depression," "anxiety," "schizophrenia," "bipolar disorder," and "substance abuse." Only papers from journals published in the English language were included in the search.
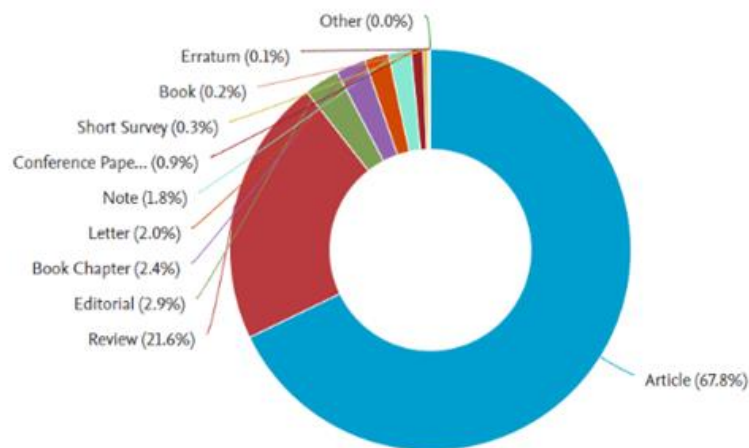

Figure 1. Scopus Database

2.3 Data Processing

To guarantee accuracy and consistency, the acquired data underwent some processing processes after the original dataset was obtained from Scopus. After removing duplicate entries, the dataset was further refined to contain only peer-reviewed journal articles—conference papers, book chapters, and other kinds of documents were not included. 3,588 papers covering various facets of mental health concerns that were published between 2014 and 2024 made up the final dataset.

2.4 Data Analysis with VOSviewer

This study used VOSviewer, a powerful software tool designed for visualizing and analyzing bibliometric networks, to perform some important studies on citation networks, co-authorship, and keyword co-occurrence in the context of mental health issues. Co-authorship analysis examines how scholars in a field collaborate, and VOSviewer makes it easier to visualize co-authorship networks and identify research clusters, collaborative dynamics, and prolific writers. Using keyword co-occurrence analysis, which visualizes clusters of related terms taken from article titles, abstracts, and keywords, one can find recurring themes and issues in the literature on mental health. Citation network analysis also examines the patterns of relationships between citations within articles to identify highly cited publications, prominent works, and citation clusters. These findings provide important information about the state of mental health research.

3. RESULT AND DISCUSSION

3.1 Publication Trends

The amount of research on mental health concerns has steadily increased over the past ten years, according to an analysis of publishing trends. There has been a noticeable rise in the number of articles published in peer-reviewed journals between 2014 and 2024. This increase has been especially pronounced in areas like substance addiction, depression, and anxiety, which is indicative of the growing acknowledgment of these concerns as serious public health concerns. Furthermore, there has been a shift in the

kinds of publications that have been released, such as reviews, editorials, research articles, and meta-analyses, which suggests that the

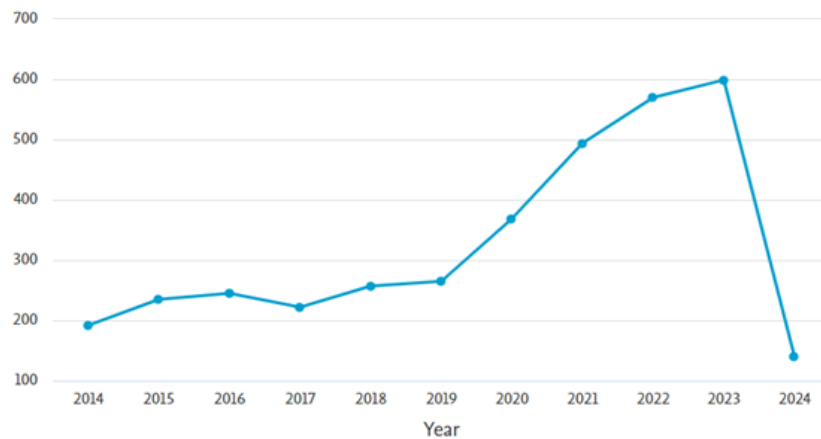area of mental health research is expanding its dissemination and scope of inquiry.

Figure 2. Trend Publications

3.2 Citation Patterns

Citation trends in the literature on mental health issues provide information about the significance and sway of scientific research. Novel therapeutic modalities, causative variables, and epidemiological investigations are frequently the subjects of highly cited papers, demonstrating the significance of evidence-based research in guiding clinical practice and policy formation. By analyzing the impact and influence of their citations in the scientific community, the methodology also reveals important authors and research groups whose work has significantly advanced the area.

A number of significant insights into the scholarly effect and influence of these publications within the field of mental health research are revealed by the citation analysis of the listed papers. Vos et al.'s (2017) thorough analysis, which has received over 5,000 citations, provides insights into the worldwide burden of mental health illnesses and helps guide resource allocation and policy decisions. Similar to this, Walker et al. (2015) emphasize the necessity for integrated

approaches to mental health treatment in their over 2,000 citations, highlighting the substantial influence that mental disorders have on death rates and the global disease burden. Furthermore, Hay et al. (2017) offer vital information to policymakers regarding the significance of giving mental health interventions top priority by shedding light on healthy life expectancy (HALE) and disability-adjusted life years (DALYs) for mental health illnesses. With more than 1,400 citations, Lefaucheur et al. (2014) provide evidence-based recommendations for repetitive transcranial magnetic stimulation (rTMS) that direct both clinical treatment and research. Additionally, Goodkind et al. (2015) provide insight into the neurological foundations of mental disease by proposing possible therapeutic intervention targets. In conclusion, the research on mental health has been greatly impacted by these highly cited articles, which have also shaped clinical practice, informed policy choices, and directed future research efforts.

Table 1. Citations Analysis

Author's	Tittle	Citatons
[18]	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	5.231

[19]	Mortality in Mental Disorders and Global Disease Burden Implications A Systematic Review and Meta-analysis	1.890
[20]	Global, regional, and national disability-adjusted life-years (DALYs) for 333 diseases and injuries and healthy life expectancy (HALE) for 195 countries and territories, 1990-2016: A systematic analysis for the Global Burden of Disease Study 2016	1.555
[21]	Evidence-based guidelines on the therapeutic use of repetitive transcranial magnetic stimulation (rTMS)	1.478
[22]	Identification of a common neurobiological substrate for mental Illness	903

Source: Author's Process Data (2024)

3.3 Journal Landscape

Leading publications on mental health issues include King's College London (131 documents), Harvard Medical School (127 documents), University of Toronto (98 documents), Karolinska Institutet (96 documents), and Yale School of Medicine (79 documents). Several journals have emerged as important channels for research on mental health issues. These journals are crucial as venues for sharing cutting-edge research in their domains because they have large impact factors, citation rates, and high publishing numbers. The analysis also demonstrated the variety of journals that publish research on mental health, from interdisciplinary publications covering more general elements of mental health and well-being to specialized psychiatric journals.
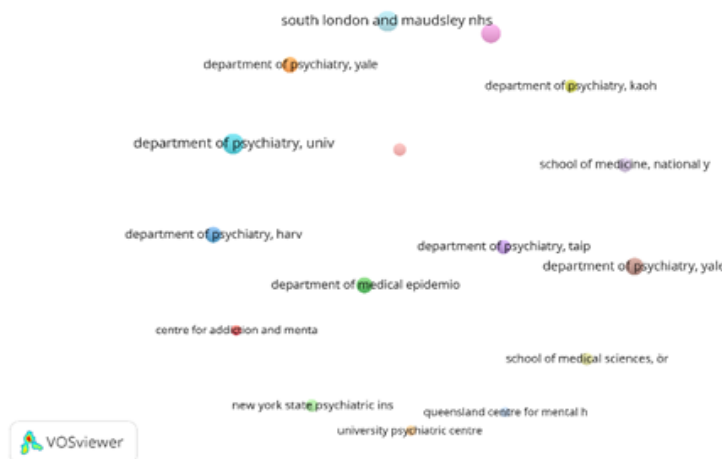

Figure 3. Scopus Results Journal Landscap

Figure 4. Mapping Results vosviewers Results

3.4 Prolific Authors

Based on publication production and citation effect, prolific authors in the field of mental health research were selected. Author collaboration networks demonstrated patterns of information sharing and cooperation, underscoring the value of interdisciplinary approaches in treating complicated mental health problems. This analysis also revealed up-and-coming scholars and rising stars whose work has the potential to influence the course of mental health research and practice in the future.

Table 2. Authors and Document

Author's	Document
Larsson, H.	25
Lichtenstein, P.	21
Rosenheck, R.A.	16
Goldstein, B.I.	14
Andreassen, O.A.	12

Source: Author's Process Data (2024)

Highly productive writers in the field of mental health research were identified by analyzing their impact on citations and number of publications. These writers' collaborative networks revealed patterns of cooperation and knowledge sharing, highlighting the value of interdisciplinary approaches in addressing complex mental health concerns. This analysis also revealed up-and-coming scholars and rising stars whose work has the potential to influence the direction of clinical treatment and research in the field of mental health. Larsson, H. is the most prolific author with 25 documents, followed in order by Andreassen, O.A. with 12 and Lichtenstein, P. with 21, Rosenheck, R.A. with 16, and Goldstein, B.I. with 14. The prolific output of these individuals highlights their significant contributions to the field and suggests that they have the capacity to impact and progress mental health research and practice.
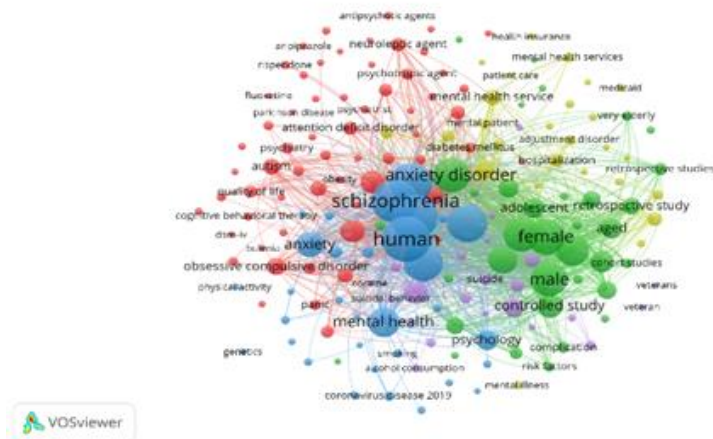

Figure 5. Authors Results and Document by Scopus

3.5 Key Research Topics

A broad range of subjects are covered by important study topics in the field of mental health concerns, such as genetic predisposition, environmental risk factors, psychosocial therapies, and public health campaigns. Through the use of keyword co-occurrence analysis, linked phrase clusters are found in the literature, revealing recurring themes and areas of interest. Furthermore, as the field's priorities and trends change, new subjects like resilience, digital mental health interventions, and cultural influences on mental health are getting more attention.
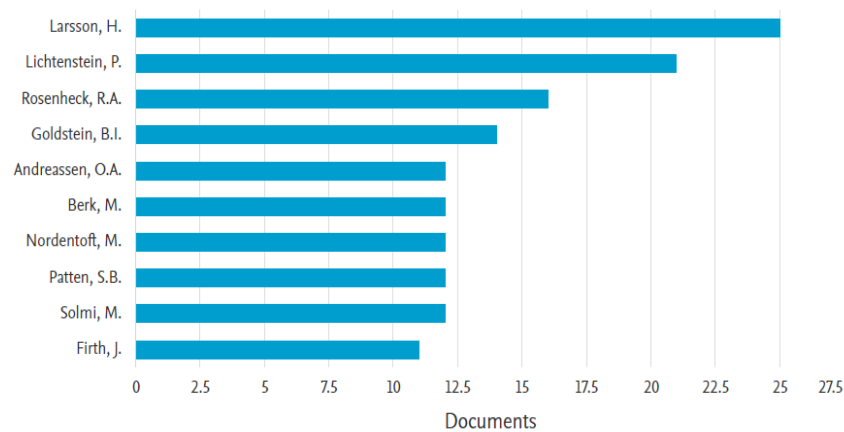
Figure 6. Keywords Analysis

Using tools like VOSviewer, the bibliometric network visualisation of the mental health research domain displays discrete clusters and isolated phrases. Terms like "schizophrenia" and "anxiety disorders" are part of the conspicuous red cluster that focuses on mental health diseases, suggesting a substantial amount of study has been done on these subjects. Aspects of care and therapy are highlighted by the blue cluster, which places special emphasis on pharmaceutical interventions such "antipsychotic agents" and "antidepressant agents." The green cluster, on the other hand, emphasizes health systems and services, such as "mental health services" and "health insurance," demonstrating concern for care delivery and accessibility. In the purple cluster, epidemiology and demography are studied to examine how mental health issues differ among various groups, such as "women" and "veterans." The light blue cluster, on the other hand, draws connections between social and lifestyle aspects like "alcohol consumption" and "social status" and mental health. Singular words like

"COVID-19" allude to new problems that might be the result of recent studies on the pandemic's effects on mental health. The network provides insights into study themes, relationships between topics, and possibly emergent trends in mental health research because of its interconnection and varied line thickness.

3.6 Geographic Distribution

The distribution of research on mental health issues is global, with notable contributions from the US (662 document), UK (254 document), Canada (151 document), Australia (146 document), Italy (88d document), and other European countries. It is clear that researchers from various regions are working together, demonstrating the global reach of mental health research. To properly address the worldwide burden of mental health issues, more funding must be allocated to capacity-building and information exchange, as evidenced by the persistent regional differences in research output and resources.
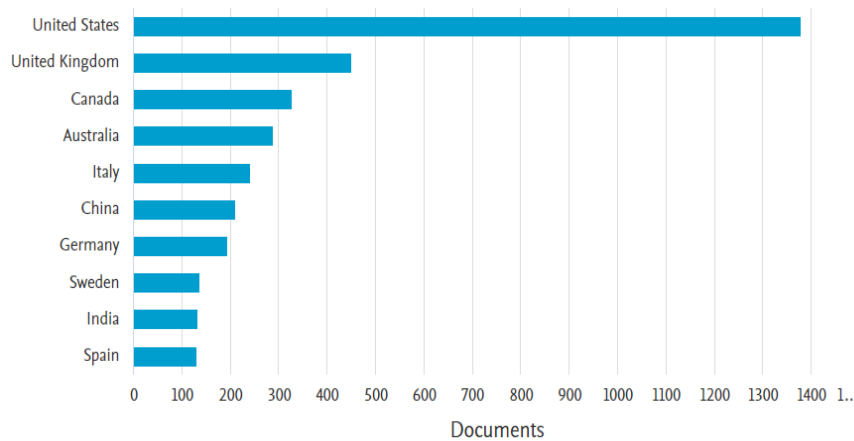
Figure 7. Country Analysis

Discussion

The main conclusions from the examination of citation patterns, publication trends, and the journal landscape in mental health research are summarized in the discussion section. It presents a critical analysis of the findings, considers their ramifications, and sheds light on the study's overall value.

1. Advancing Knowledge in Mental Health Research

The previous ten years have seen a rise in funding and interest in mental health research, as shown by the analysis of publication trends. This emphasizes how public health interventions and scientific research are beginning to prioritize mental health. Gaining knowledge about how research outputs are distributed among various themes and subfields might help one better understand how the field of mental health research is developing. This makes it easier to spot areas of strength, new trends, and possible holes that need more research.

Informing Policy and Practice

Citation patterns show how influential and significant scientific papers are in the topic of mental health. Highly cited papers frequently make significant contributions that influence future paths for research as well as clinical practice and policy decisions. Finding significant writers, research teams, and cooperative networks facilitates the identification of specialists, the formation of alliances, and the expansion of knowledge for the purpose of making wise decisions and developing effective interventions for stakeholders involved in mental health policy and practice.

Navigating the Journal Landscape

Researchers who wish to effectively communicate their work must comprehend the importance and features of several publications in the field of mental health research. Researchers can maximize the visibility and impact of their research findings by identifying suitable venues for publication and by having knowledge about high-impact journals and developing publication sources.

2. Knowledge Gaps and Future Directions

Addressing Research Gaps

There are still problems and inadequacies in the field of mental health research, despite tremendous advancements. This study identifies places where certain topics are yet unexplored or where research outputs may be disproportionate to the burden of illness. By concentrating on understudied areas, utilizing cutting-edge approaches, and encouraging interdisciplinary collaborations to address complex mental health concerns from different viewpoints, future research initiatives should strive to close these gaps.

Embracing Diversity and Inclusion

This analysis emphasizes how crucial it is for research on mental health to be inclusive and diverse in terms of research subjects and regional representation. The relevance and applicability of research findings to a wide range of communities can be improved by initiatives to support diversity in research agendas, authorship, and participation.

Capitalising on Technological Innovations

Digital technology development has created new avenues for improving mental health practice and research. Future studies should make use of technology advancements like mobile health apps, telehealth platforms, and digital treatments to improve treatment outcomes, expand access to care, and support mental health in a variety of populations.

Research Limitations

The data used in this study came from Scopus, which might not include all articles with mental health research. Certain research findings may be underrepresented in some journals because they are not indexed in Scopus, particularly those that are not part of the mainstream of academic publishing.

Furthermore, this study only included English-language articles, which could create bias based on language and omit important contributions that have been published in other languages.

4. CONCLUSSION

To sum up, this study provides insightful information about the status of mental health research during the previous ten years. A thorough image of the scientific environment in mental health can be obtained by analyses of publication trends, citation patterns, and journal landscapes. The results highlight the increasing attention and funding for mental health research, the significance and impact of scientific research, and the importance of major journals in the field. Moving forward, expanding understanding and enhancing mental health outcomes internationally will depend heavily on filling research gaps, encouraging diversity and inclusion, and utilizing technology advancements. Through the promotion of evidence-based policies and interdisciplinary collaboration, stakeholders may effectively collaborate to tackle the multifaceted issues related to mental illness and advance mental health for all.

REFERENCES

[1] N. Khair and S. Malhas, "Fashion-related remedies: Exploring fashion consumption stories during Covid-19. 'Nostalgia overpowering, Old is the new me,'" *Journal of Global Fashion Marketing*, vol. 14, no. 1, pp. 77–92, 2023, doi: 10.1080/20932685.2022.2085604.

[2] M. Dwairy and A. Dor, "Parenting and psychological adjustment of adolescent immigrants in Israel.," *Journal of family psychology : JFP : journal of the Division of Family Psychology of the American Psychological Association (Division 43)*, vol. 23, no. 3, pp. 416–425, Jun. 2009, doi: 10.1037/a0015830.

[3] N. M. Avena, J. Simkus, A. Lewandowski, M. S. Gold, and M. N. Potenza, "Substance Use Disorders and Behavioral Addictions During the COVID-19 Pandemic and COVID-19-Related Restrictions," *Frontiers in Psychiatry*, vol. 12, 2021.

[4] M. S. Hamrah, H. Hoang, J. Mond, B. Pahlavanzade, A. Charkazi, and S. Auckland, "The prevalence and correlates of symptoms of post-traumatic stress disorder (PTSD) among resettled Afghan refugees in a regional area of Australia," *Journal of Mental Health*, vol. 30, no. 6, pp. 674–680, 2021.

[5] F. Ulya, "Literature Review Of Factors Related To Mental Health In Adolescent: Kajian Literatur Faktor Yang Berhubungan Dengan Kesehatan Mental Pada Remaja," *Journal of Health and Therapy*, vol. 1, no. 1, pp. 27–46, 2021.

[6] M. J. Roy, C. Donaldson, R. Baker, and S. Kerr, "The potential of social enterprise to enhance health and well-being: A model and systematic review," *Social science &medicine*, 2014.

[7] M. J. Roy, R. Lysaght, and T. M. Krupa, "Action on the social determinants of health through social enterprise," *CMAJ*. Can Med Assoc, 2017.

[8] J. Wise, C. Caiola, and V. Njie-Carr, "A Fundamental Shift in Nursing is a Requisite for Achieving Health Equity: The Nurses' Role in Addressing Social Determinants of Health," *Journal of the Association of Nurses in AIDS Care*, vol. 34, no. 1, pp. 125–131, 2023.

[9] A. Mustapha, A. K. Amegah, and E. S. Coker, "Harmonization of epidemiologic research methods to address the environmental and social determinants of urban slum health challenges in Sub-Saharan Africa," *International Journal of Environmental Research and Public Health*, vol. 19, no. 18, p. 11273, 2022.

[10] W. H. Organization, "The World Health Report 2001: Mental health: new understanding, new hope," 2001.

[11] W. H. Organization, "Mental health: strengthening our response." 2018.

[12] E. Nugroho, A. A. Nisa, W. H. Cahyati, and Najib, "Perception, mental health, and social media exposure on adolescents in Indonesia during COVID-19 pandemic," *Journal of Pharmacy and Pharmacognosy Research*, vol. 11, no. 3, pp. 426–436, 2023, doi: 10.56499/jppres22.1560_11.3.426.

[13] P. V Kloutsiniotis, D. M. Mihail, N. Mylonas, and A. Pateli, "Transformational Leadership, HRM practices and burnout during the COVID-19 pandemic: The role of personal stress, anxiety, and workplace loneliness," *International Journal of Hospitality Management*, vol. 102, p. 103177, 2022.

[14] Y. Xu, Y. Liu, Z. Chen, J. Zhang, H. Deng, and J. Gu, "Interaction effects of life events and hair cortisol on perceived stress, anxiety, and depressive symptoms among Chinese adolescents: testing the differential susceptibility and diathesis-stress models," *Frontiers in Psychology*, vol. 10, p. 297, 2019.

[15] I. Harsono, "Determinants of Economic Growth, Poverty, and Unemployment: A Path Analysis Study," *Jurnal Ilmu Sosial dan Humaniora*, vol. 12, no. 2, pp. 359–366, 2023.

[16] A. R. Lopes and O. K. Nihei, "Depression, anxiety and stress symptoms in Brazilian university students during the COVID-19 pandemic: Predictors and association with life satisfaction, psychological well-being and coping strategies," *PLoS One*, vol. 16, no. 10, p. e0258493, 2021.

[17] N. Marlianti, I. H. Wahyunadi, and I. Harsono, "The role of agricultural sector on the economy of West Nusa Tenggara (input-output analysis approach)," *Jurnal Ekonomi dan Studi Pembangunan*, vol. 9, no. 2, pp. 176–189, 2017.

[18] T. Vos *et al.*, "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," *The Lancet*, vol. 390, no. 10100, pp. 1211–1259, 2017.

[19] E. R. Walker, R. E. McGee, and B. G. Druss, "Mortality in mental disorders and global disease burden implications: a systematic review and meta-analysis," *JAMA psychiatry*, vol. 72, no. 4, pp. 334–341, 2015.

[20] S. I. Hay *et al.*, "Global, regional, and national disability-adjusted life-years (DALYs) for 333 diseases and injuries and healthy life expectancy (HALE) for 195 countries and territories, 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016," *The Lancet*, vol. 390, no. 10100, pp. 1260–1344, 2017.

[21] J.-P. Lefaucheur *et al.*, "Evidence-based guidelines on the therapeutic use of repetitive transcranial magnetic stimulation (rTMS)," *Clinical Neurophysiology*, vol. 125, no. 11, pp. 2150–2206, 2014.

[22] M. Goodkind *et al.*, "Identification of a common neurobiological substrate for mental illness," *JAMA psychiatry*, vol. 72, no. 4, pp. 305–315, 2015.