



Research Paper

Bibliometric Study of Publications on the Impact of Covid-19 and Psychology

A.J. Rekha

Ph.D. Research Scholar
Department of Library and Information Science
Periyar University
Salem-11, Tamil Nadu India

Dr. M. Jayaprakash

University Librarian
Periyar University
Salem-11, Tamil Nadu India

Dr. Surendran Cherukodan

Assistant Librarian
School of Engineering
Cochin University of Science and Technology (CUSAT)
Cochin-682022, Kerala India

ABSTRACT

The paper examines the global research output on psychology during the COVID-19 pandemic. The Scopus database was used to identify the publications on psychology during the COVID-19 pandemic from the beginning of the pandemic up to 22nd August 2022. The 11750 publications emerging from 143 countries were found on the topic. The publications from the top 10 most productive countries accounted for 87% of all publications. The highest number of publications emerged from the United States, the United Kingdom, and China. The top 10 most productive organizations and authors contributed 12.83% and 11.48% of publications respectively. The maximum number of papers were published in the *Frontiers In Psychology*, followed by the *Asian Journal Of Psychiatry* and *Journal Of Affective Disorders*. This study reveals that the field of psychology has received considerable attention during the ongoing COVID-19 pandemic. In terms of authors, organizations, and countries, research collaboration is comparatively high. It is necessary to pay more attention to low-income nations. Under COVID-19, psychological research has become much more popular and important.

Keywords: Covid-19, coronavirus, Psychology, Bibliometrics, Scientometrics.

Received 14 Apr., 2023; Revised 28 Apr., 2023; Accepted 30 Apr., 2023 © The author(s) 2023.

Published with open access at www.questjournals.org

I. INTRODUCTION

The psychological distress and symptoms of mental illness are very much part of widespread outbreaks of infectious disease, such as COVID-19 (Bao Y., et al., 2020). People around the world have experienced severe psychological suffering as a result of Coronavirus Disease 19 (COVID-19). It is mainly due to loss of job, income, life of the beloved etc. Worries and anxiety about COVID-19 and its impact can be overwhelming and Social distancing makes it even more challenging. The COVID-19 pandemic may have brought many changes in life by altering daily routines. Financial pressures and social isolation causes worry about getting sick, how long the pandemic will last, whether job will be affected and what the future will bring. Also Information overload, rumors and misinformation can make the life feel out of control and make it unclear what to do. (<https://www.mayoclinic.org/diseases-conditions/coronavirus/in-depth/mental-health-covid-19/art-20482731>).

However, possibly there is an increase in publications related to psychology in the scientific literature after the declaration of covid 19 as a pandemic by World health organization (WHO) on March 11, 2020.(Lu J., et al.,2020). There are different ways to understand the publications on a particular topic and this Bibliometric study is an important one. Bibliometrics is a key means that is frequently utilized in many disciplines to quantify and qualitatively assess scientific research. It can help to identify the contribution of publications from various countries, institutions, and authors

In majority studies, authors carried out a quantitative assessment of publications on psychology published from 2019 to 2021and here discussed the data till 2022. Based on the understating of the content of published literature presented some suggestions for practitioners and future researchers that in the psychological assessment for COVID-19 survivors, clinicians should include social support, negative appraisal, positive appraisal, and self-efficacy, which may be essential parameters for monitoring the ongoing psychological and perceived physical health of COVID-19 survivors.(Nawaz K., et al., 2020). On November 16, 2021, 2096 high-quality research articles and reviews were downloaded as data from the Web of Science core collection. Additionally, this article would assist researchers in planning for future opportunities to contribute to academic advancement and applied technique as well as decision-making for the research of psychological and behavioural disorders under COVID-19.(Dong X.,et al., 2022). The study aims to identify the current psychological research status from the perspective of COVID-19; for this extracted the data from the Scopus database. To outline the trends in terms of the number of publications, and coauthorships,etc (Nawaz K., et al., 2020). This article's goal was to do a bibliometric analysis of the psychological science related to the COVID-19 pandemic that has been produced. It was possible to contribute to future studies by identifying authors, documents, and journals that had given the publication of articles related to COVID-19 priority by analyzing the bibliometric data of the articles (Zambrano D.,et al.,2021). To understand the academic community's attention, focus, and research collaboration on psychological and behavioral research during the COVID-19 pandemic, conducted a macro analysis using a bibliometric approach. (Dong X.,et al., 2022). In the first half of 2020, 223 articles were found to have been published. According to the findings, the research is mostly concerned with how the epidemic is affecting mental health. The majority of the investigations, which primarily focused on anxiety and depression were carried out in China, where the pandemic identified first(Zambrano D.,et al.,2021). where the pandemic identified first (Lu J., et al.,2020).

II. MATERIALS AND METHODS

For this study, a set of two types of keywords related to "COVID-19," "coronavirus," and "psychology" were used in the Scopus database's "Article Title tag," which allowed for the identification, retrieval, and downloading of the global publications on the "Impact of COVID-19 on psychology" on August 22, 2022. The search method for the nation was further honed to obtain publication output data for the top 10 nations as well as statistics on worldwide output by the subject, country, organization, author, and journal

III. RESULTS

Publication growth

The global publications on "Impact of COVID-19 on psychology" consisted of 11750 records (2020 =2272; 2021 =5280;2022=4198) as indexed in the Scopus database. The articles and letters constituted the largest share (84.29% and 4.49%, respectively) of the full share of the publications, followed by reviews, notes, editorials, etc.

Table 1 Publications from Top 10 countries on psychology, coronavirus, and COVID-19.

S NO.	COUNTRY	PUBLICATIONS	PERCENTAGE
1	United States	3685	31.36
2	United Kingdom	1306	11.11
3	China	1157	9.85
4	Italy	903	7.69
5	Canada	631	5.37
6	Spain	612	5.21
7	Germany	579	4.93
8	Australia	557	4.74
9	India	471	4
10	Turkey	321	2.73

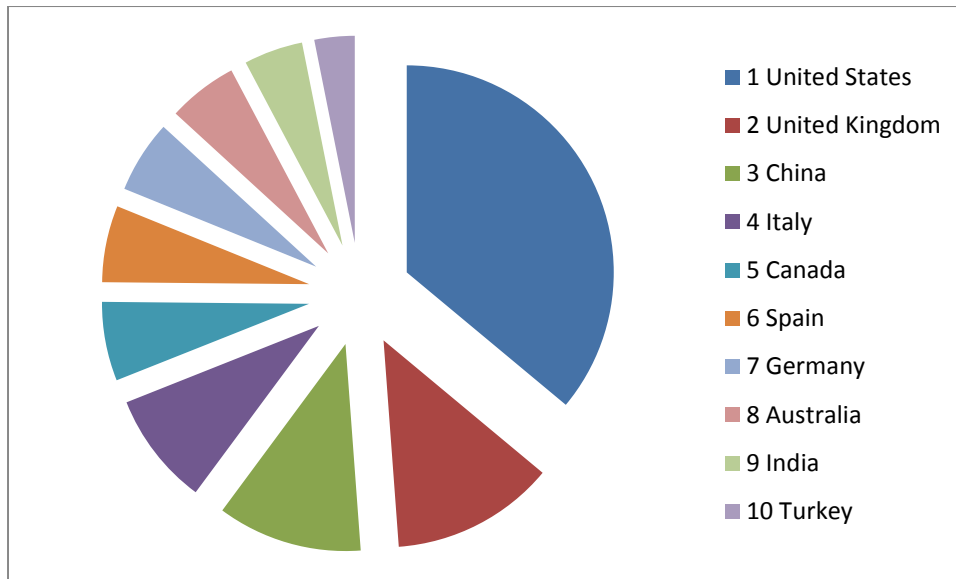


Figure 1 Publications from Top 10 countries on psychology, coronavirus, and COVID-19.

Countries

With a higher number of publications, the authors from 143 countries contributed to publications, and their distribution was uneven, The highest number of publications emerged from the United States, followed by the United Kingdom and China, accounting for 31.36%, 11.11%, and 9.85% of the total publication share, respectively (Table 1). Overall, the top ten countries accounted for 87% of the total publications on the subject.

Important keywords

A list of 160 important keywords was identified based on the frequency of appearance in the literature. The most frequent keywords, along with psychology, were covid 19 and human (Table 2)

Table 2 The common Keywords in the literature on psychology published about COVID-19 and coronavirus.

S.NO.	KEYWORD	FREQUENCY
1	COVID-19	7472
2	Human	4031
3	Humans	3582
4	Pandemic	3575
5	Pandemics	2381
6	Coronavirus Disease 2019	2207
7	Female	1837
8	SARS-CoV-2	1831
9	Adult	1747
10	Mental Health	1720

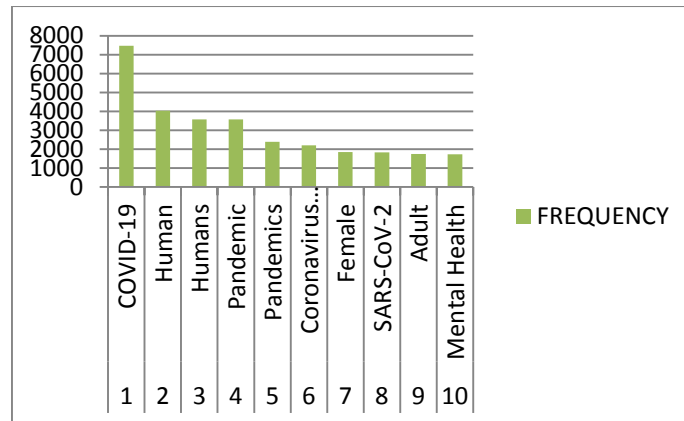


Figure 2 The common Keywords in the literature on psychology published about COVID-19 and coronavirus

Top 10 most productive organizations

one hundred and sixty organizations contributed to the research on psychology in the context of COVID-19, Authors from the top 10 most productive organizations together contributed to 13.84% (n= 1050) of the total publications.

Table 3. 10 most productive organizations to psychology research during the COVID-19 pandemic.

S NO.	NAME OF THE ORGANIZATION	PUBLICATIONS
1	Sapienza Università di Roma	135
2	University College London	126
3	King's College London	118
4	Università degli Studi di Padova	112
5	Harvard Medical School	110
6	University of Toronto	110
7	University of Melbourne	100
8	Columbia University	84
9	The University of British Columbia	78
10	Tel Aviv University	77

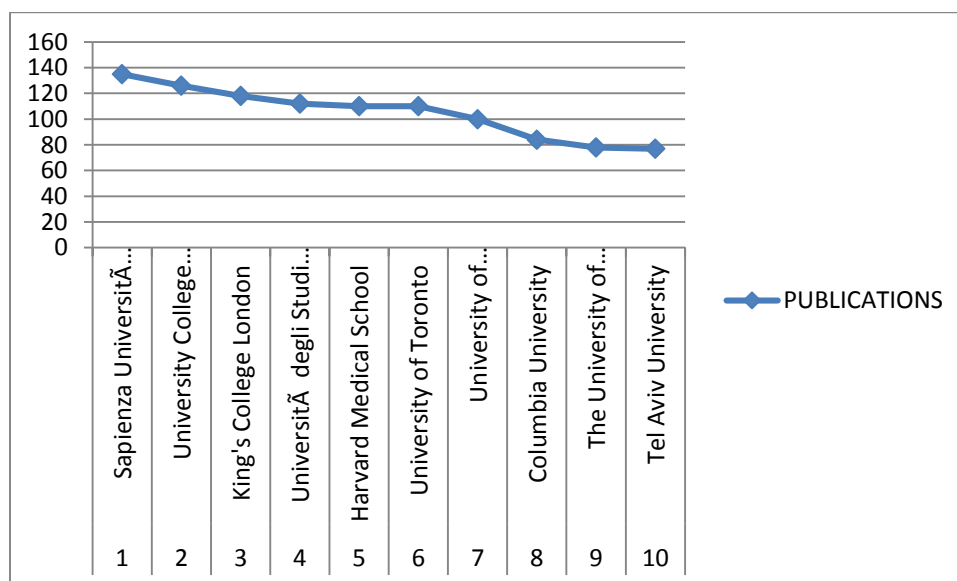


Figure 3. 10 most productive organizations to psychology research during the COVID-19 pandemic

one hundred fifty-eight authors participated in global research on psychology about COVID-19. The majority of the authors published between 1 and 15 papers, and only 10 authors published 12 or more documents. The research productivity of the top 10 most productive authors varied from 15 to 31 articles, and together these 10 authors contributed 11.49% (n =190) of the publications.

Table 4. Top 10 most productive authors on publications on psychology during the COVID-19 pandemic.

S.NO.	AUTHOR NAME	PUBLICATIONS
1	Griffiths, M.D.	31
2	Arslan, G.	20
3	Caycho-Rodríguez, T.	20
4	Asmundson, G.J.G.	18
5	Cheung, T.	18
6	Xiang, Y.T.	18
7	Grover, S.	17
8	Shevlin, M.	17
9	Pakpour, A.H.	16
10	Brailovskaia, J.	15

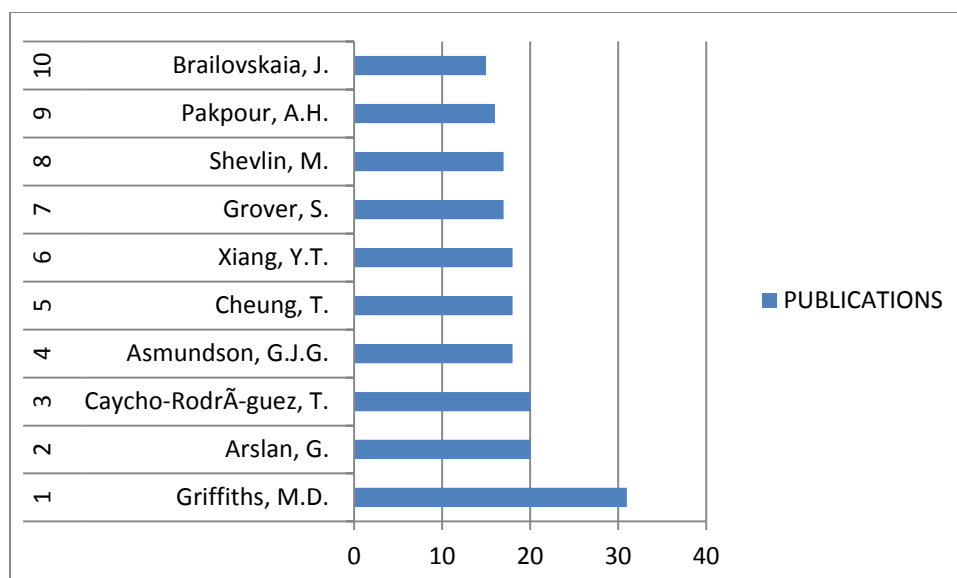


Figure 4. Top 10 most productive authors on publications on psychology during the COVID-19 pandemic

All papers on the topic appeared mainly in 160 journals, with the majority of the journals. The top 10 most productive journals published 99 to 1506 papers which is 3321=40.6% share of global publications in journals. Frontiers In Psychology was the topmost productive journal (with 1506 papers), followed by Asian Journal Of Psychiatry (316 articles), Journal Of Affective Disorders (315 documents), Current Psychology (274 reports), and Personality And Individual Differences (213 papers), etc. (Table 5).

Table 5. Top 10 most productive Journals on publications on psychology during the COVID-19 pandemic.

S.NO.	JOURNALS	PUBLICATIONS
1	Frontiers In Psychology	1506
2	Asian Journal Of Psychiatry	316
3	Journal Of Affective Disorders	315
4	Current Psychology	274
5	Personality And Individual Differences	213

6	Psychological Trauma Theory Research Practice And Policy	194
7	Education Sciences	175
8	Psychology Health And Medicine	123
9	AIDS And Behavior	106
10	Humanities And Social Sciences Communications	99

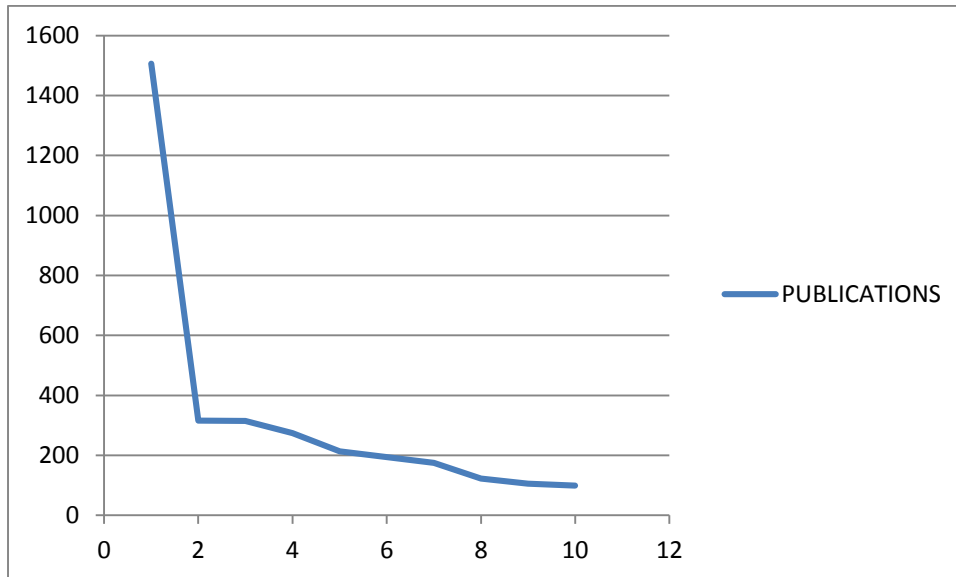


Figure 5. Top 10 most productive Journals on publications on psychology during the COVID-19 pandemic

IV. DISCUSSION

In this study, the literature on "COVID-19 and psychology" found in the Scopus database for the years 2020–22 is examined. There are 11750 documents in total. In comparison to PubMed and Web of Science, the Scopus database is more extensive. 68.9% of the 686 articles on the subject were funded by various national and global research agencies. These results imply that publications on this subject are spreading quickly. This means that psychology has received more attention. These articles were published in 158 countries, with 86.99% of the output coming from the top 10 most productive countries.

The conclusion implies data on psychology in the context of a continuing pandemic in 143 countries around the world. As a result, even though there have been a lot more publications on the subject, it can be stated that these articles do reflect the overall view of psychology. The United States produced the most publications, followed by the United Kingdom and China. In terms of the number of cases, mortality, and probably other socioeconomic effects, these countries are among those that have been most severely affected by the pandemic. Accordingly, this discovery might be a reflection of the pandemic's effects and a suggestion that the severely affected nations might also see higher rates of psychiatric issues. However, additional solid research is required to confirm this notion. A significant part of the publications was in the form of articles and letters (84.29% and 4.49%, respectively), with reviews, editorials, and notes coming in second and third. These results may indicate that the majority of the literature on the subject is composed of systematic studies.

The most frequent terms found in publications that described psychological activities were mental health, anxiety, depression, psychology, psychiatry, mental health, mental disease, fear of social isolation, social distancing, etc. These terms refer to the psychological discomfort, psychiatric morbidity, or the condition, activating factor related to psychological issues during the pandemic. Most publications came from wealthy countries such as the USA and the United Kingdom. This makes sense considering that the universities and authors from these countries were some of the most productive. Authors from some developing nations, such as India, did, indeed, make a considerable contribution to the study of this subject. These results can be explained by the fact that these countries have high rates of psychological troubles of the pandemic situation, and perhaps during the pandemic, there was an increase in these issues or they received more attention, which resulted in a higher number of publications from these countries.

Out of all the journals, *Frontiers In Psychology* had the most papers published (1506), followed by the *Asian Journal Of Psychiatry* (316), *Journal Of Affective Disorders* (315), *Current Psychology* (274), and *Personality And Individual Differences* (274). (213 papers). This may have been influenced by the policy of

some of these publications to quickly trace and publish papers linked to COVID-19. These results imply that these publications may have published more studies on the subject since the pandemic's start. Furthermore, the majority of these papers were published as open-access articles, allowing academics from all around the world to freely access them. A group representing the International COVID-19 psychological problems prevention research collaboration raised concerns about the titles and content of some of the articles after learning that a significant number of articles on psychology had been published in the journal *Frontiers in Psychology*.

V. CONCLUSION

The Scopus database, which is far more comprehensive than Pubmed and also covered papers up to August 22nd, 2022, is the foundation of this study's strength. The fact that we did not precisely assess the type of articles in terms of how many of the publications were original papers is one of the study's weaknesses, though. Neither did our study make an effort to evaluate the papers' quality. Since the start of the epidemic, several papers have addressed psychology, according to the current study's findings. The United States, the United Kingdom, and China are where the majority of publications have originated. The journal *Frontiers in Psychology* has the most articles published.

According to our experience, certain COVID-19 survivors are more likely to show negative behavioral and emotional reactions like anger, bitterness, hatred, and fear, all of which need to be handled delicately in the post-COVID era. In terms of authors, organizations, and countries, research collaboration is comparatively high. It is necessary to pay more attention to low-income nations. Under COVID-19, psychological research has become much more popular and important.

REFERENCES

- [1]. Bao, Y., Sun, Y., Meng, S., Shi, J., & Lu, L. (2020). 2019-nCoV epidemic: address mental health care to empower society. *The Lancet*, 395(10224), e37-e38.
- [2]. Dong, X., Wei, X., Shu, F., Su, Q., Wang, J., Liu, N., & Qiu, J. (2022). A Bibliometric Analysis on Global Psychological and Behavioral Research Landscape on COVID-19 Pandemic. *International Journal of Environmental Research and Public Health*, 19(2), 879.
- [3]. Grover, S., Gupta, B. M., Mamdapur, G. M., & Surulinathi, M. (2021). Bibliometric Study of Publications on Impact of Covid-19 and Sleep Disorders. *Journal of Young Pharmacists*, 13(3), S72.
- [4]. Gul, S., Ur Rehman, S., Ashiq, M., & Khattak, A. (2020). Mapping the scientific literature on COVID-19 and mental health. *Psychiatria Danubina*, 32(3-4), 463-471.
- [5]. Grover, S., Gupta, B. M., & Mamdapur, G. M. (2021). COVID-19 and suicidal behavior: A bibliometric assessment. *Asian journal of psychiatry*, 65, 102817.
- [6]. Lu, J., Sheldenkar, A., & Lwin, M. O. (2020). A decade of antimicrobial resistance research in social science fields: a scientometric review. *Antimicrobial Resistance & Infection Control*, 9(1), 1-13.
- [7]. Mayo clinic about covid 19 (2022, December 5) Retrieved from: <https://www.mayoclinic.org/diseases-conditions/coronavirus/in-depth/mental-health-covid-19/art-20482731>
- [8]. Maalouf, F. T., Mdawar, B., Meho, L. I., & Akl, E. A. (2021). Mental health research in response to the COVID-19, Ebola, and H1N1 outbreaks: A comparative bibliometric analysis. *Journal of Psychiatric Research*, 132, 198-206.
- [9]. Nawaz, K., Saeed, H. A., & Sajeel, T. A. (2020). Covid-19 and the State of Research from the Perspective of Psychology. *Int. J. Bus. Psychol*, 2, 35-44.
- [10]. Rajkumar, R. P. (2020). COVID-19 and mental health: A review of the existing literature. *Asian journal of psychiatry*, 52, 102066.
- [11]. Zambrano, D., SERRATO ALVAREZ, D. A. N. I. E. L. A., & Galindo Caballero, O. J. (2021). Publications in psychology related to COVID-19: a bibliometric analysis. *Psicología desde el Caribe*, 38(1), 11-28.