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Global Publications on Covid-19 and Psychology: A Scientometric Assessment

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The article evaluates the global output on 'COVID-19 and Psychology' using bibliometric methods and indicators. The quantitative and qualitative analysis of all the publications in Scopus database was performed using 'Covid- 19' and its synonyms keywords in 'Keyword' and 'Title' tags. The results obtained were further restricted to the subject Psychology under the subject tag.

A total of 8205 global publications were identified on the topic of 'Covid- 19 and Psychology' in Scopus database, that were cited 63361 times with an average of 7.72 citations per paper. About one-sixth (17.9%) of these publications received external funding support and registered 11.35 citations per paper. The maximum number of publications emerged from the USA, the

U.K. and China (2640, 997 and 757 publications), and publications from Canada (16.68 and 2.16), Australia (15.25 and 1.98), U.K. (13.49 and 1.75) received the highest citation per paper and relative citation index. The organisations that produced the highest number of publications were Sapienza University of Rome, Italy (97 papers), University College London, U.K. (95 papers) and King's College London, U.K (91 papers). The organizations with highest citation impact per paper and relative citation index were: Peking University, China (46.46 and 6.02), University of Michigan, Ann Arbor, USA (41.74 and 5.41) and University of Queensland, Australia (39.48 and 5.11). The authors that produced the highest number of publications were G.J. Asmundson (26 papers), S. Grover (22 papers) and S. Taylor (22 papers). The authors who had the highest citation impact per paper and relative citation index were K.M. Douglas (137.6 and 17.82), M.M. Paluszek (68.27 and 8.84) and S.K. Kar (63.9 and 8.28). The journals that produced the highest number of publications were *Frontiers in Psychology* (1028 papers), *Asian Journal of Psychiatr*y (324 papers) and the most impactful journals were *Nature Human Behavior* (52.18), *Lancet Child & Adolescent Health* (43.68) and *Asian Journal of Psychiatry* (19.78). The most studied subfields as reflected in keyword frequency were: Mental Health (1187), Anxiety (1176), Depression (881), Mental Disease (408), Distress Syndrome (217), etc. A significant amount of

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literature has emerged on psychological impact of COVID-19 since the beginning of the pandemic.

Keywords:*Covid-19, Psychology, India, Bibliometric, Scientometrics,*

1 INTRODUCTION

Covid-19 pandemic, which emerged in late 2019, has affected the whole world in the last two years. Only a small proportion of the population has been affected by the virus, but the mental health impact of the virus has been much more widespread. The psychological impact of Covid-19 has been widely investigated during the last two years. Many systematic reviews and meta- analysis have evaluated the data that has emerged on the psychological impact of Covid-19. However, there are a limited number of bibliometric studies on the psychological impact of Covid-19. In one of the bibliometric studies, Zambrano et al., [1]undertook a bibliometric analysis of 226 global publications on psychological issues related to Covid-19 indexed in Scopus database. Most of such publications were related to anxiety and depression and most of these studies were conducted in China. In another bibliometric study, Ho et al [2]analysed the characteristics of the Covid-19 publications in the ten psychology- related Web of Science subject categories in the Social Science Citation Index during the initial 10-months after the Covid-19 outbreak. Six publication indicators were examined across authors, institutions, and countries and it was seen that highest number of empirical investigations into the psychological impact of Covid-19 emerged from USA, and the majority of the research across all countries was on clinical issues and psychopathology. The findings of this analysis also suggested that Covid-19 had substantial psychological implications. There are recommendations offered for future research and clinical practice. Besides overall psychological research, a number of bibliometric studies have focused on impact of Covid-19 on mental health [3-13], depressive disorders [13,14], schizophrenia [13], sleep disorder [15], suicide [16-17] and delirium [18].

In view of non-availability of comprehensive bibliometric studies on this topic 'Covid-19 and Psychology', the authors decided to undertake such a study after two years of the pandemic, The present study aims to examine the global research on the theme 'Covid-19 and Psychology', based on quantitative and qualitative methods and indicators based on publications and citations registered by them. In the study, the main focus was to assess the global publications in terms of overall characteristics and identify trends in research, besides examining citation impact, extent of funded research and international collaborations, leading global countries, organizations and authors, leading journals publishing papers on this topic and characteristics of high-cited papers.

2 METHODOLOGY

All relevant publications on 'Covid-19 and Psychology' indexed in the Scopus database (https://www.scopus.com) were identified, retrieved and downloaded on 7th November2021 using a search strategy. The search strategy used a set of keywords

related to Covid-19 in field tags, 'Keyword' or 'Title' (Article Title) for search and retrieval and was restricted to subject 'Psychology' in subject tag. The analytical provisions as provided in the Scopus database were utilized to ascertain the distribution of publications output by broad subject areas, collaborating countries, contributing authors, affiliating organizations and source journals. The citations to publications were counted from date of their publication till 7thNovember 2021. The study used metrics and indicators to quantify and evaluate the performance of the most productive countries, organizations, authors and journals. The VOSviewer and Biblioshiny applications for bibliometrix were used to evaluate and visualise the collaborative interaction among most productive countries, organisations, authors and keywords.

3 RESULTS AND ANALYSIS

31 OVERALL OUTPUT

A total of 8205 (2019=2; 2020=2621 and 2021=5056) global publications were published on 'Covid-19 and Psychology'as indexed in Scopus database till 7thNovember 2021. The 8205 global publications received 63361 citations with an average citation of 7.72 citations per paper. Of the 8205 global publications, 1469 (17.9%) were supported by external funding from 150+ external agencies. The papers based on funding received 16675 citations, averaging 11.35 citations per paper. The major funding agencies (along with their output) supporting research in this area were National Institute of Health (221 papers), National Natural Science Foundation of China (162 papers), National Institute of Mental Health (99 papers), U.S. Department of Health and Human Service (90 papers), National Science Foundation (77 papers), and National Institute of Drug Abuse (73 papers).

32 TOP 10 COUNTRIES

The number of publications emerging from the top 10 countries varied from 234 to 2640 publications and they together consisted of 7327 papers and78630 times, constituting 89.3% share and more than 100.0% share in global publications and citations. Three countries contributed publications above the group average (732.7) of top 10 countries: the USA (2640 publications), the U.K. (997 publications) and China (757 publications). Five countries registered citation per paper and relative citation index above the group average (10.73 and 1.39) of top 10 countries, i.e., Canada (16.68 and 2.16), Australia (15.25 and 1.98), the U.K. (13.49 and 1.75), India (12.23 and 1.58) and China (12.02 and 1.56) (Table 1).

Table 1. Bibliometric Profile of Top 10 Countries

S.No.	Name of the country	TP	TC	CPP	HI	ICP	%ICP	RCI
1	USA	2640	21701	8.22	65	841	31.86	1.06
2	U.K.	997	13448	13.49	54	522	52.36	1.75
3	China	757	9099	12.02	44	324	42.80	1.56
4	Italy	626	6636	10.60	39	263	42.01	1.37
5	Spain	453	4291	9.47	31	198	43.71	1.23
6	Canada	446	7438	16.68	34	257	57.62	2.16
7	Australia	409	6238	15.25	35	254	62.10	1.98
8	Germany	388	3174	8.18	27	182	46.91	1.06
9	India	377	4612	12.23	28	95	25.20	1.58
10	France	234	1993	8.52	24	124	52.99	1.10
	Total of top 10 countries	7327	78630	10.73	381	3060		1.39
	Global total output	8205	63361	7.72				
	Share of top 10 countries in global output	89.30						

321 COLLABORATIVE LINKAGES AMONG TOP 10 COUNTRIES

The total collaborative linkages among the top countries varied from 137 to 912 and individual country-to- country collaborative linkages varied from 5 to 183. The top 3 countries registering the highest collaborative linkages (912, 657 and 403) were the USA, the U.K. and Australia. The least collaborative linkages (137, 217 and 276) were registered by authors from India, France and Germany. In terms of individual country to country linkages, USA-U.K. registered the highest number of linkages (183), followed by USA-China (156 linkages), USA-Canada (141 linkages), USA-Australia (107 linkages), USA- Italy (96 linkages), and U.K.-Italy (89 linkages) (Table 2)

Table 2. Collaborative Linkages among Top 10 Countries

S.No.	Name of the country	Collaborative linkages with other top 10 countries	TCL (NOC)
1	USA	2(183), 3(156), 4(96), 5(63), 6(141), 7(113), 8(69), 9(43), 10(48)	912 (9)
2	U.K.	1(183), 3(66), 4(89), 5(56), 6(67), 7(89), 8(49), 9(31), 10(47)	657 (9)
3	China	1(156), 2(66), 4(21), 5(10), 6(33), 7(37), 8(18), 9(7), 10(7)	355 (9)
4	Italy	1(96), 2(89), 3(21), 5(59), 6(25), 7(34), 8(32), 9(11), 10(29)	396 (9)
5	Spain	1(63), 2(56),3(10), 4(59), 6(22), 7(22), 8(26), 9(12), 10(15)	291 (9)
6	Canada	1(141), 2(67), 3(33), 4(25), 5(22), 7 (43), 8(24), 9(10), 10(27)	392 (9)
7	Australia	1(113), 2(89), 3(37), 4(34), 5(22), 6(43), 8(33), 9(13), 10(19)	403 (9)
8	Germany	1(69), 2(49), 3(18), 4(32), 5(26), 6(24), 7(33), 9(5), 10(20)	276 (9)
9	India	1(43), 2(31), 3(7), 4(11), 5(12), 6(10), 7(13), 8(5), 10(5)	137 (9)
10	France	1(48), 2(47), 3 (7), 4(29), 5(15), 6(27), 7(19), 8(20), 9(5)	217 (9)

33 DISTRIBUTION OF POPULATION AGE GROUP

The majority of studies on 'Covid-19 and Psychology' focused on adults population (1713 publications, 14.78% share), followed by children (584 publications, 7.12%), adolescents (530 publications, 6.46% share), middle aged (481 publications, 5.86% share) and aged (438 publications; 5.34% share). In terms of impact, studies focusing on adolescents registered the highest (21.52) citation impact per paper (CPP), followed by those focusing on middle aged (19.78), aged (18.76), adults (16.03) and children (7.12).

34 SIGNIFICANT KEYWORDS

The 113 important keywords (with frequency of appearance varying from 6 to 2525) could be identified from the global literature on 'Covid-19 and Psychology', which either independently or in combination with other related keywords were focused in research on various aspects of the theme. Some of the important keywords reflecting various areas, as identified through their frequency of appearance were 'mental health' (1187), 'anxiety' (1176), 'depression' (881), 'mental disease' (408), and 'distress syndrome' (217) (Table 3).

Table 3. List of Significant Keywords appearing in Global Literature on 'Covid-19 and Psychology'

S.No	Name of the Keyword	Frequency	S. No	Name of the Keyword	Frequency	S. No	Name of the Keyword	Frequency
1	Pandemic	2525	39	Psychological trauma	90	77	Intellectual Disability	36
2	Mental Health	1187	40	Unemployment	90	78	Delirium	34
3	Anxiety	1176	41	Trauma	88	79	Alcohol Consumption	32
4	Psychology	1159	42			80	Geriatric Psychiatry	32
5	Depression	881	43	Social Interaction	85	81	Violence	31
6	Virus Pneumonia	726	44	Isolation	84	82	Psychosis	31
7	Quarantine	434	45	Social Psychology	84	83	Mood Disorders	31
8	Stress	408	46	Domestic Violence	75	84	Opioid Use Disorders	30
9	Mental Disease	408	47	Suicide Ideation	73	85	Aggression	30
10	Lockdown	341	48	Sleep Disorder	73	86	Sexual Behavior	29
11	Mental Stress	337	49	Psyo-trauma	68	87	Family Therapy	29
12	Social Isolation	336	50	Dementia	68	88	Suicide Attempt	26
13	Telemedicine	320	51	Substance Related Disorders	67	89	Sexuality	24
14	Social Distancing	298	52	Stigma	67	90	Drug Overdose	22

15	Mental Health Services	276	53	Emotion Regulation	66	91	Disability	22
16	Fear	273	54	Child Abuse	66	92	Intellectual Impairment	22
17	Anxiety Disorders	268	55	Opiate Addition	65	93	Personality Disorder	21
18	Social Support	267	56	PTSD	62	94	Attention Deficit Disorder	21
19	Copying Behavior	254	57	Autism	61	95	Conspiracy Theory	21
20	Psychological Stress	230	58	Obsessive Compulsive Disorder	56	96	Sleep Wake Disorder	20
21	Social Media	220	59	Autism Spectrum Disorder	56	97	Partner Violence	20
22	Distress Syndrome	217	60	Sleep Quality	53	98	Confusion	19

35 TOP 25 ORGANISATIONS

The top 25 organisations (producing between 43 to 97 publications) together published 1510 publications that received 29665 citations, accounting for 19.4% and 46.82% share of global publications and citations. On further analysis, it was observed that: eleven organisations published papers above the group average of 25 organisations (60.4); nine organisations registered CPP and relative citation index (RCI) above their group average (19.65 and 2.54) (Table4).

Table 4.Bibliometric Profile of Top 8 Most Productive and 8 Most Impactful Organisations

S.No	Name of the Organisation	TP	TC	CPP	HI	ICP	%ICP	RCI
1	Sapienza University of Rome, Italy	97	1034	10.66	14	39	40.21	1.38
2	University College London, U.K.	95	2450	25.79	20	48	50.53	3.34
3	King's College London, U.K.	91	1665	18.30	21	53	58.24	2.37
4	University of Toronto, Canada	85	1842	21.67	14	53	62.35	2.81
5	Harvard Medical School, USA	84	654	7.79	14	32	38.10	1.01
6	University of Padova, Italy	75	1121	14.95	15	49	65.33	1.94
7	University of British Columbia, Canada	71	2783	39.20	16	38	53.52	5.08
8	University of Melbourne, Australia	67	1049	15.66	12	45	67.16	2.03
1	Peking University, China	48	2230	46.46	13	26	54.17	6.02
2	University of Michigan, Ann Arbor, USA	43	1795	41.74	12	13	30.23	5.41
3	University of Queensland, Australia	50	1974	39.48	12	31	62.00	5.11
4	University of British Columbia, Canada	71	2783	39.20	16	38	53.52	5.08
5	VrijeUniversiteit Amsterdam, Netherlands	50	1787	35.74	12	37	74.00	4.63
6	National University of Singapore	43	1364	31.72	11	24	55.81	4.11
7	University College London, U.K.	95	2450	25.79	20	48	50.53	3.34
8	Huazhong University of Science and Technology, China	46	1176	25.57	14	22	47.83	3.31

351 COLLABORATION AMONG TOP 25 ORGANISATIONS

Except one organisation, all other 24 top organisations had one-to-one collaborative links with other top organisations. The total collaborative linkages of top 25 organisations varied from 4 to 63 and individual organisation-to- organisation linkages varied from 0 to 25. The top 5organisations having largest collaborative links (63. 52, 49, 48 and 46) were University College London, U.K., King's College London, U.K., University of Melbourne, Australia, University of Oxford and University of British Columbia, Canada. In terms of organisation-to-organisation linkages, University College London, and University of Oxford together registered the highest number of linkages (25), followed by University College London, U.K and King's College London, U.K. (15 linkages) (Table 5).

Table 5. Collaborative Linkages among Top 25 Organisations

S.No	Name of the Organisation	Collaboration Links with other Organisations	TCL(NOO)
1	Sapienza University of Rome, Italy	2(2), 4(2), 6(5), 10(3), 13(2),14(3), 15(2), 16(6), 18(2)	32 (9)
2	University College London, U.K.	1(**2**)**, 3(15)**, 7(2),8(5), **10(25),**13(1), 14(3), 16(2), 22(3), 23(1), 24(2) 25(4)	63(12)
3	King's College London, U.K.	**2(**VrijeUniversiteit Amsterdam, Netherlands (1)	52(12)
4	University of Toronto, Canada	1(2), 3(3), 5(2), 6(2), 7(5), 8(3), 9(3), 10(2), 13(2), 17(1), 18(2), 21(2), 22(2), 23(4), 24(1), 25(3)	39(16)
5	Harvard Medical School, USA	4(2), 6(1), 7(1),8(3), 9(2), 10(4), 12(6), 13(1), 17(1), 18(2), 19(2), 20(2), 24(1)	28(14)
6	University of Padova, Italy	1(5), 3(8), 4(2), , 8(2), 10(2), 14(4), 16(3),21(1), 22(4)	33(9)
7	University of British Columbia, Canada	2(2), 3(2), 4(5), 5(1), 8(5), 9(3), 11(2),12(3), 11(2), 12(3), 13(1), 14(2), 17(1),16(3), 18(5), 24(1),25(5),	46(17)
8	University of Melbourne, Australia	2(5), 3(8), 4(3), 5(3), 6(2), 7(5), 9(2), 12(2), 13(1), 14(2), 16(4), 17(1), 18(3), 19(1), 23(2), 25(5)	49(16)
9	Columbia University, USA	4(3), 7(3), 8(2), 12(4), 13(2), 18(2), 21(1)	17(7)
10	University of Oxford, U.K.	1(**3**)**, 2(25),** 3(4), 4(2), 5(4), 6(2), 14(4), 20(4)	48(8)
11	National Institute of Mental Health & Allied Sciences, Bangalore, India	Nil	Nil
12	University of California, Los Angles, USA	5(6), 7(3),8(3), 9(2),13(1), 16(4), 18(3),, 24(3)	25(8)
13	Tele Aviv University, Israel	1(2), 2(1), 4(2), 5(1), 7(1), 8(1), 12(1), 14(2), 18(2), 21(8), 22(5), 23(1),24(2), 25(1)	30(14)
14	VrijeUniversiteit Amsterdam, Netherlands	1(3), 2(3), 6(4), 7(2), 8(2), 10(4), 15(1), 16(3), 17(2), 20(2), 21(1), 22(1), 23(2), 24(3), 25(2)	35(15)
15	Catholic University of the Sacred Heart, Italy	1(2), 14(1), 22(1), 23(1)	5(4)
16	University of Queensland, Australia	1(6), 2(2), 3(2), 6(3), 7(3), 8(4), 12(4), 14(3) , 18(2), 20(2), 21(2), 25(3)	34(12)
17	Peking University, China	3(5), 4(1), 5(1), 7(1), 8(1), 14(2), 18(1), 19(6), 23(1), 24(1)	20(10)
18	Yale University School of Medicine, USA	1(2), 4(2), 5(2), 7(5), 8(3), 9(2), 12(3), 13(2), 23(1), 24(3), 25(1)	26(11)
19	Huazhong University of Science and Technology, China	5(2), 8(1), 24(1)	4(3)
20	University of Sao Paulo, Brazil	3(3), 5(2), 14(2), 16(2), 21(1), 22(1)	11(6)
21	Bar Ilan University, Israel	3(1), 4(2), 6(1), **13(8)**, 14(1), 16(2), 20(1), **22(11)**	27(8)
22	University of Haifa, Israel	2(3), 3(2), 4(2), 13(5), 14(1), 21(1)	14(6)
23	National University of Singapore	2(1), 3(1), 4(3), 8(2), 13(1), 14(2), 15(1), 18(1)	12(8)
24	University of Michigan, Ann Arbor, USA	2(2), 4(1), 7(1), 12(3), 13(2), 17(1), 18(3), 19(1), 25(2)	16(9)
25	UNSW Sydney, Australia	2(4), 4(3), 7(5), 8(5),, 13(1), 14(2), 18(1), 24(2)	23(8)

36 TOP 25 AUTHORS

10to 26 papers were published by the top 25 authors. Together these top 25 authors published 346 papers that were cited 10234 times, accounting for 4.22% and 16.15% share of global publications and citations respectively. On further analysis, it was observed that 9 authors published papers above the group average of 25 authors and 9 authors registered CPP and RCI above the group average (29.58 and 3.83)(Table 6).

Table 6. Bibliometric Profile of Top 8 Most Productive and 8 Most Impactful Authors

S.No.	Name of the author	Affiliation of the author	TP	TC	CPP	HI	ICP	%ICP	RCI
1	G.J. Asmundson	University of Regina, Canada	26	1549	59.58	15	13	50.00	7.72
2	S. Grover	Postgraduate Institute of Medical Education & Research, Chandigarh, India	22	257	11.68	9	2	9.09	1.51
3	S. Taylor	University of British Columbia, Canada	22	1401	63.68	13	7	31.82	8.25
4	A. Mehra	Postgraduate Institute of Medical Education & Research, Chandigarh, India	20	249	12.45	9	2	10.00	1.61
5	S. Sahoo	Postgraduate Institute of Medical Education & Research, Chandigarh, India	20	249	12.45	9	2	10.00	1.61
6	M.D. Griffith	Nottingham Trent University, U.K.	17	629	37.00	9	16	94.12	4.79
7	D. McKay	Fordham University, USA	16	858	53.63	11	13	81.25	6.95
8	G. Arslan	Mehmet AkifErsoy, Turkey	15	115	7.67	6	11	73.33	0.99

1	K.M. Douglas	University of Kent, U.K.	10	1376	137.6	6	5	50	17.82
2	M.M. Paluszek	University of British Columbia, Canada	11	751	68.27	8	5	45.45	8.84
3	S.K. Kar	K.G. Medical University, Lucknow, India	10	639	63.9	4	4	40	8.28
4	S. Taylor	University of British Columbia, Canada	22	1401	63.68	13	7	31.82	8.25
5	G.J. Asmundson	University of Regina, Canada	26	1549	59.58	15	13	50	7.72
6	D. McKay	Fordham University, USA	16	858	53.63	11	13	81.25	6.95
7	M.D. Griffith	Nottingham Trent University, U.K.	17	629	37	9	16	94.12	4.79

37 TOP 25 JOURNALS

Of the 8205 papers, 8157 papers were published in journals, 34 in conference proceedings, 8 in book series and 6 as books. The top 25 journals published 47 to 1028 papers and together contributed 3398 papers, constituting 41.66% share of global journal output. The maximum number of papers were published in *Frontiers in Psychology* (1028 papers), followed by *Asian Journal of Psychiatr*y (324 papers), *Journal of Affective Disorders* (219 papers) (Table 7)

Table 7. Profile of Top 8 Most Productive and Most Impactful Journals

S.No.	Name of the Journal	TP	TC	CPP
1	Frontiers in Psychology	1028	5293	5.15
2	Asian Journal of Psychiatry	324	6408	19.78
3	Journal of Affective Disorders	219	4066	18.57
4	Personality & Individual Differences	198	1581	7.98
5	Psychological Trauma. Theory Research Practice and Policy	160	2503	15.64
6	Current Psychology	142	337	2.37
7	Education Sciences	131	518	3.95
8	Journal of Substance Abuse Treatment	98	242	2.47

38 HIGH-CITED PAPERS

Of the 8205 papers, only 93 papers (1.13%) received 100 or more number of citations. Of the 93 papers, 64 papers received 100-200 citations, 13 papers in 203-278 citations range, 9 papers in citation range of 309-396, 5 papers in citation range of 458-803 and 2 papers were cited 1110-1232 times. The 93 high-cited papers have received 20212 citations with an average CPP of 217.33.The 93 high-cited papers have the participation of 437 organizations and 782 authors.

4 DISCUSSION

This bibliometric analysis of the Scopus database reveals that since the onset of the pandemic, 8205 publications on 'Covid-19 and Psychology' were published over the period of nearly two years. This finding suggests that over the last 2 years period, literature on the psychological impact of the pandemic had expanded rapidly. This possibly happened because of rapid publication of Covid -19 related- research in the initial phase of the pandemic to improve the knowledge about the topic, possibly to help improve the care of people suffering from the Covid-19 infection and general population in general.

The authors from the USA contributing to maximum number of publications is in the expected lines and this finding suggests that overall there is no significant change in the research publication productivity across the globe due to the pandemic. The total publications received 63361 citations, averaging 7.72 CPP. About one-sixth (17.9%) of these publications received external funding support and received 16675 citations, averaging 11.35 CPP. These findings suggest that rapid publication led to an upsurge of the citations of the papers.

The most significant key words identified in the literature on 'Covid-19 and Psychology' were 'mental health' (1187), 'anxiety' (1176), 'depression' (881), 'mental disease' (408), and 'distress syndrome' (217). These keywords suggest that during the pandemic the major focus of the research was the negative aspects of the pandemic on the mental health.

The top 25 organisations and authors together accounted for 19.4% and 4.22% and 46.82% and 16.15% share of global publications and citations. If one looks at this profile, it is evident that, the most productive authors were not limited to developed countries like the USA and the UK, but also included researchers from China and India. This finding suggest that possibly the huge gap between the authors from developed countries and developing countries narrowed down during the ongoing pandemic with respect to Covid-19 research on psychological aspects of the pandemic.

The five most productive journals were Frontiers *in Psychology* (1028 papers), *Asian Journal of Psychiatry* (324 papers), *Journal of Affective Disorders* (219 papers), *Personality & Individual Differences* (198 papers) and *Psychological Trauma. Theory, Research Practice and Policy* (160 papers). The five most impactful journals were *Nature Human Behavior* (52.18), *Lancet Child & Adolescent Health* (43.68), *Asian Journal of Psychiatry* (19.78), *Journal of Affective Disorders* (18.57)

and Psychological Medicine (17.16). These findings reflect the role played by some of the journals to publish Covid- 19 related papers rapidly to help authors across the globe to publish their data.

Finding of this study must be interpreted in light of its limitations. The study was based on the Scopus search engine, which could have led to exclusion of publications published in journals not listed in the Scopus database and in regional languages. No attempt was made to assess the quality of the research.The citation counts were also limited to Scopus search engine, which usually records lower number of citations, compared to search engines like Google scholar. Accordingly, our search could have led to underestimation of citation indexes.

To conclude, the bibliometric analysis presented above provides a glimpse of the research activities in the area of 'Covid-19 and Psychology'. This analysis demonstrates that the research output was not limited to the traditional top researchers or top institutes of the world, but had much wider research landscape.

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