

YOGA THERAPY : A SCIENTOMETRICS ANALYSIS

S.Elango

Part-Time Research Scholar, Department of Library and Information Science, Chikkaiah Naicker College, Erode

Dr. Captain T. Magudeswaran

Librarian, Department of Library and Information Science, Chikkaiah Naicker College, Erode

Dr.S.Swaminathan

Librarian, Sri Ramakrishna Mission Vidyalaya College of Education, Coimbatore

Abstract

Yoga is a 5000-year-old Indian body of knowledge . The science of Yoga imbibes the complete essence of the Way of Life. The study examined Yoga Therapy research performance during 1989-2017 by conducting scientometric analysis of collected data has been extracted from Scopus database. The study mainly focused the year wise publication, Authorship pattern, Country-wise publication and language wise publication. The study found that It was noted that highest number of publications were published in the year 2017 and most of research outcomes were in English Language

Keywords : Yoga, Yoga Therapy, Bibliometric, Scientometric

Introduction

Yoga is a 5000-year-old Indian body of knowledge. Though many think of yoga only as a physical exercise where people twist, turn, stretch, and breathe in the most complex ways, these are actually only the most superficial aspect of this profound science of unfolding the infinite potentials of the human mind and soul. The science of Yoga imbibes the complete essence of the Way of Life. Regular yoga practice can help reduce the level of sugar in the (blood, along with lowering blood pressure, keeping our weight in check, reducing the severity of the symptoms and slowing the rate of progression of the disease.. Stress is one of the major reasons for diabetes. It increases the secretion of glucagon (a hormone responsible for increasing blood glucose levels) in the body. The consistent practice of yoga aasanas, pranayama and a few minutes of meditation can help reduce stress in the mind and protect the body from its adverse effects. This, in turn, reducing the amount of glucagon and improve the action of insulin. The practice of yoga is also a proven to lose weight and slow the process of fat accumulation. Surya namaskar anti kopalbhati pranayama are some of the most effective-yoga poses that aid weight loss. Since obesity is a major contributing factor for diabetes, doing yoga to keep your weight in check is the key

Objectives:

The following are the major objectives have been framed for the study as follows;

1. To identify the annual growth rate of research productivity on Yoga therapy during the study period.
2. To trace the types of documents and language on Yoga therapy in global level.
3. To know the authorship pattern and productivity on Yoga therapy during the study period.
4. To find out the country wise distribution on Yoga therapy at global level.

Review of Literature

Gupta and Mueen (2018) assessed 3966 global research publications on yoga research covered in Scopus database during the period 2007-2016. As per this study, the global output on yoga research registered as 7.79% of growth, and citation impact averaging to 10.44 citations per paper. The largest global publication share made from USA (38.35%), followed by India (19.29%) and U.K. (6.61%) among top 10 most prolific countries.

McLean and Mendis (2007) carried out a bibliometric analysis on the Australian rural research trends and evaluate these trends with international RH research output during the study period. Medline-listed publications on rural health or rural health services from 1990 to 2005 were downloaded using PubMed and written to a Microsoft Access database using specially developed software. There were 20913 rural health publications retrieved of which 1442 (6.8%) were from Australia. It was known from the analysis that the yearly publications at worldwide had increased from 410 to 1207, at the same time as the contribution from Australia had also increased from 17 (4.1%) to 198 (16.4%). It was followed by Canadian and USA contributions increased from 10 (2.4%) to 110 (9.1%) and 131 (32%) to 298 (24.7%) respectively.

Methodology

The literature output of on Yoga therapy was collected for a period from 1998 to 2017 from the Scopus database by using the keywords 'Yoga therapy'

Data Analysis and Interpretation

Table 1

Year-wise Publication Output

S. No.	Publication Year	Recs	(%)	TLCS	TGCS
1	1989	29	0.29	72	701
2	1990	55	0.55	70	1298
3	1991	128	1.29	307	7102
4	1992	175	1.76	397	10049
5	1993	198	1.99	522	8263
6	1994	153	2.57	339	6390
7	1995	195	2.36	406	10122
8	1996	255	2.48	604	9835
9	1997	234	2.36	477	11295
10	1998	246	2.48	399	12030
11	1999	311	3.13	698	17698
12	2000	300	3.02	629	15930
13	2001	353	3.56	845	22819
14	2002	334	3.36	695	19946
15	2003	300	3.02	452	13097
16	2004	355	3.58	791	22751
17	2005	350	3.53	927	20261
18	2006	348	3.51	504	15398
19	2007	359	3.62	842	15407
20	2008	399	4.02	729	14288

S. No.	Publication Year	Recs	(%)	TLCS	TGCS
21	2009	446	4.50	728	16538
22	2010	424	4.27	557	15447
23	2011	461	4.65	700	14424
24	2012	512	5.16	654	12758
25	2013	570	5.75	742	12462
26	2014	592	5.97	392	12750
27	2015	571	5.76	280	9831
28	2016	617	6.22	273	8579
29	2017	636	6.41	192	7164
30	Unknown	5	0.05	0	4

The Table-1 concerned with year distribution of publications in the bibliometric study on yoga therapy literature output during 1989-2017. It was noted that highest number of publications were published in the year 2017 with 636 (6.41%) contributions. It was followed by 2016 with 617 (6.22) contributions and 2014 with 592 (5.97%) contributions.

Table -2

Most Prolific Authors

S. No.	Author	Recs	(%)	TLCS	TGCS
1	Hu FB	62	0.5	116	6392
2	Cramer H	48	0.4	288	1386
3	Ritz E	44	0.4	178	2135
4	Dobos G	35	0.3	266	1261
5	Ilonen J	33	0.3	123	1012
6	Lauche R	33	0.3	266	1159
7	Wang Y	32	0.3	9	541
8	Willett WC	30	0.3	54	3952
9	Knip M	29	0.3	101	1094
10	Manson JE	29	0.3	62	3778
11	Gangadhar BN	28	0.2	306	802
12	Langhorst J	26	0.2	213	968
13	Liu Y	25	0.2	8	244
14	Zhang Y	25	0.2	2	434
15	Erllich HA	24	0.2	324	1435
16	Sowers JR	24	0.2	114	1953
17	Lernmark A	23	0.2	117	1037
18	Parving HH	23	0.2	203	4547
19	Wang J	23	0.2	19	793
20	Yoshikawa Y	23	0.2	101	1148

The table-2 concerning the top 20 authors in the scientometric study on yoga therapy literature output during 1989-2017 .It revealed that Hu FB was ranked first with 62 (0.5%) contributions having TGCS of 6392. It was followed by Cramer H with 48 (0.4%) contributions

having TGCS of 1386 and Ritz E with 44 (0.4%) contributions having TGCS of 2135.

Table-3

Authorship Pattern

S. No.	Author	Recs	(%)
1	Single Author	770	6.80
2	Double Author	1123	9.92
3	Three Author	1335	11.80
4	Four Author	1558	13.77
5	Five Author	1548	13.68
6	Six Author	1305	11.53
7	Seven & Above	3677	32.49
Total		11316	100

The table-3 shows the authorship pattern depicted that Seven & Above author topped with 3677 (32.49%) publications followed by Four Authors 1558 (13.77%) and Five Authors 1548 (13.68%) respectively. It was observed that 770 (6.80%) contributions were made by Single Authorship pattern which occupied the least position in the table. Hence, it was clearly known that multiple authorship pattern was common trend in the yoga therapy literature output during 1998-2017.

Table -4

Document Types

S. No.	Document Type	Recs	(%)	TLCS	TGCS
1	Article	8478	74.9	12177	273206
2	Review	1528	13.5	2203	75342
3	Meeting Abstract	624	5.5	9	181
4	Article; Proceedings Paper	427	3.8	661	17624
5	Editorial Material	107	0.9	125	1624
6	Letter	58	0.5	75	1415
7	Note	44	0.4	57	1274
8	Article; Book Chapter	14	0.1	1	171
9	Correction	11	0.1	1	12
10	Review; Book Chapter	11	0.1	9	187
11	Article; Early Access	4	0.0	0	3

S. No.	Document Type	Recs	(%)	TLCS	TGCS
12	Article; Retracted Publication	2	0.0	2	48
13	Correction, Addition	2	0.0	0	0
14	Discussion	2	0.0	0	13
15	Book Review	1	0.0	0	0
16	News Item	1	0.0	0	0
17	Reprint	1	0.0	0	1
18	Review; Early Access	1	0.0	0	1

The table-4 dealing with document type in the bibliometric study on yoga therapy literature output during 1998-2017. It was observed that 'Article' was the most preferred document type which received 8478 (74.9%) publications with TGCS of 273206. It was followed by 'Review' which received 1528 (13.5%) publications with TGCS of 75342 and 'Meeting Abstract' which received 624 (5.5%) publications with TGCS of 181. It can be understood that the research scientists working on yoga therapy giving their preference to publish their research work in the form of 'Article'.

Table -5

Language-wise Output

S. No.	Language	Recs	(%)	TLCS	TGCS
1	English	10847	95.9	15256	369419
2	German	155	1.4	33	516
3	Russian	104	0.9	11	142
4	Spanish	88	0.8	10	495
5	French	60	0.5	8	244
6	Portuguese	22	0.2	0	176
7	Chinese	6	0.1	1	29
8	Italian	6	0.1	0	16
9	Japanese	6	0.1	1	12
10	Turkish	5	0.0	0	12
11	Czech	4	0.0	0	1
12	Serbian	4	0.0	0	10
13	Polish	3	0.0	0	17
14	Korean	2	0.0	0	6
15	Hungarian	1	0.0	0	0
16	Malay	1	0.0	0	5
17	Slovak	1	0.0	0	2
18	Slovenian	1	0.0	0	0

The above table regarding the language in the bibliometric study on yoga therapy literature output during 1998-2017 depicted that English was the highly preferred language which received 10847 (95.9%) publications with TGCS of 369419. It was followed by German which received 155 (1.4%) publications with TGCS of 516 and Russian which received 104 (0.9%) publications with TGCS of 142. It is evidently known that English was well-connected language for the research scientists working on yoga therapy during the study period.

Table 6
Country-wise Publications

S. No.	Country	Recs	(%)	TLCS	TGCS
1	USA	3339	29.5	6438	161111
2	UK	917	8.1	1490	46818
3	Germany	811	7.2	1509	29579
4	Japan	774	6.8	1221	22103
5	Peoples R China	668	5.9	441	10964
6	Italy	648	5.7	735	21103
7	India	497	4.4	968	8283
8	Canada	461	4.1	636	17596
9	Australia	423	3.7	491	15415
10	Unknown	405	3.6	454	10559
11	France	370	3.3	508	14823
12	Netherlands	370	3.3	454	18160
13	Spain	338	3.0	390	11268
14	Sweden	300	2.7	718	17132
15	Turkey	295	2.6	170	5288
16	Brazil	245	2.2	218	4698
17	South Korea	208	1.8	238	4105
18	Denmark	204	1.8	386	13662
19	Taiwan	174	1.5	169	3634
20	Finland	148	1.3	273	7730

The table-6 dealing with most producing countries in the Scientometric study on yoga therapy literature output during 1998-2017 indicted that highest number of publications had produced by USA with 3339 (29.5%) publications with TGCS of 16111. It was followed by UK that produced 917 (8.1%) publications with TGCS of 46818 and Germany produced 811 (7.2%) publications with TGCS of 29579 correspondingly.

Conclusion

The research activity of Yoga Yoga Therapy have been examined. It was observed that highest number of publications were published in the year 2017 with 636 (6.41%) contributions. It also revealed that Hu FB was ranked first with 62 (0.5%) contributions having TGCS of 6392. It is found that the authorship pattern depicted that Seven & Above author topped with 3677 (32.49%) publications followed by Four Authors 1558 (13.77%). It was observed that 'Article' was the most preferred document type which received 8478 (74.9%) publications with TGCS of 273206. The Yoga Therapy with Special reference to Diabetes has indeed progressed in term of quality of research.

References

- Gupta BM, Ahmed KKM, Dhawan SM, Gupta R (2018).. Yoga Research a Scientometric Assessment of Global Publications Output during 2007-16. *Pharmacog J.* 10(3), 394-402.
- Mclean, R., Mendis, K., Harris, B., & Canalese, J (2007). Retrospective bibliometric review of rural health research Australia's Contributions and other trends, 1-13

