

Supplementary Tables

Supplementary Table 1 Publication and citation analysis per year (1979-2018)

Year	Frequency	Cumulative total papers	Annual Growth Rate	Total Citations	Cumulative citations	Citations Per Paper
1979	0	0	-	0	0	-
1980	1	1	100	0	0	0
1981	4	5	300	2	2	0.5
1982	4	9	0	4	6	1
1983	4	13	0	6	12	1.5
1984	6	19	50	16	28	2.67
1985	4	23	-33.33	11	39	2.75
1986	1	24	-75	10	49	10
1987	3	27	200	17	66	5.67
1988	6	33	100	12	78	2
1989	2	35	-66.67	15	93	7.5
1990	1	36	-50	20	113	20
1991	5	41	400	19	132	3.8
1992	1	42	-80	19	151	19
1993	2	44	100	21	172	10.5
1994	2	46	0	29	201	14.5
1995	4	50	100	45	246	11.25
1996	1	51	-75	63	309	63
1997	6	57	500	103	412	17.17
1998	6	63	0	73	485	12.17
1999	4	67	-33.33	51	536	12.75
2000	7	74	75	103	639	14.71
2001	5	79	-28.57	95	734	19
2002	2	81	-60	89	823	44.5
2003	4	85	100	136	959	34
2004	2	87	-50	139	1098	69.50
2005	4	91	100	184	1282	46

2006	5	96	25	167	1449	33.4
2007	8	104	60	164	1613	20.5
2008	9	113	12.50	184	1797	20.44
2009	12	125	33.33	207	2004	17.25
2010	15	140	25	334	2338	22.27
2011	23	163	53.33	353	2691	15.35
2012	21	184	-8.70	564	3255	26.86
2013	31	215	47.62	532	3787	17.16
2014	54	269	74.19	821	4608	15.2
2015	66	335	22.22	1067	5675	16.17
2016	64	399	-3.03	1116	6791	17.44
2017	85	484	32.81	1503	8294	17.68
2018	123	607	44.71	1996	10290	16.23

Supplementary Table 2 Authorship pattern, productivity and collaboration in combined physical activity and sleep research

Year	Frequency	%	Number of authors	Average Number of Authors Per Paper	Single authored papers	%	Multi authored papers	%	Number of authors in multi authored papers	Degree of Collaboration	Collaboration Index	Single-Country Collaboration	Multi-Country Collaboration
1980	1	0.2	1	1.0	1	1	0	0	0	0.0	-	0	0
1981	4	0.7	9	2.3	2	1	2	1	7	0.5	3.5	1	1
1982	4	0.7	17	4.3	0	0	4	1	17	1.0	4.3	4	0
1983	4	0.7	12	3.0	0	0	4	1	12	1.0	3.0	4	0
1984	6	1.0	29	4.8	0	0	6	1	29	1.0	4.8	4	1
1985	4	0.7	15	3.8	0	0	4	1	15	1.0	3.8	3	0
1986	1	0.2	7	7.0	0	0	1	1	7	1.0	7.0	0	1
1987	3	0.5	9	3.0	0	0	3	1	9	1.0	3.0	2	1
1988	6	1.0	25	4.2	0	0	6	1	25	1.0	4.2	5	1
1989	2	0.3	4	2.0	1	1	1	1	3	0.5	3.0	0	1
1990	1	0.2	9	9.0	0	0	1	1	9	1.0	9.0	0	1
1991	5	0.8	12	2.4	3	1	2	0	9	0.4	4.5	2	0
1992	1	0.2	5	5.0	0	0	1	1	5	1.0	5.0	0	0
1993	2	0.3	10	5.0	0	0	2	1	10	1.0	5.0	2	0
1994	2	0.3	11	5.5	0	0	2	1	11	1.0	5.5	1	1
1995	4	0.7	14	3.5	0	0	4	1	14	1.0	3.5	3	0
1996	1	0.2	4	4.0	0	0	1	1	4	1.0	4.0	0	1
1997	6	1.0	20	3.3	1	0	5	1	19	0.8	3.8	5	0
1998	6	1.0	23	3.8	0	0	6	1	23	1.0	3.8	4	2
1999	4	0.7	23	5.8	0	0	4	1	23	1.0	5.8	4	0
2000	7	1.2	24	3.4	1	0	6	1	23	0.9	3.8	5	1
2001	5	0.8	16	3.2	2	0	3	1	14	0.6	4.7	3	0
2002	2	0.3	11	5.5	0	0	2	1	11	1.0	5.5	2	0
2003	4	0.7	31	7.8	0	0	4	1	31	1.0	7.8	4	0
2004	2	0.3	7	3.5	1	1	1	1	6	0.5	6.0	0	0
2005	4	0.7	13	3.3	1	0	3	1	12	0.8	4.0	2	1
2006	5	0.8	16	3.2	0	0	5	1	16	1.0	3.2	3	2
2007	8	1.3	26	3.3	1	0	7	1	25	0.9	3.6	6	1
2008	9	1.5	57	6.3	0	0	9	1	57	1.0	6.3	6	2
2009	12	2.0	72	6.0	0	0	12	1	72	1.0	6.0	10	2
2010	15	2.5	78	5.2	0	0	15	1	78	1.0	5.2	11	3
2011	23	3.8	151	6.6	0	0	23	1	151	1.0	6.6	21	2

2012	21	3.5	126	6.0	0	0	21	1	126	1.0	6.0	17	3
2013	31	5.1	152	4.9	2	0	29	1	150	0.9	5.2	24	5
2014	54	8.9	273	5.1	4	0	50	1	269	0.9	5.4	42	8
2015	66	10.9	355	5.4	2	0	64	1	353	1.0	5.5	51	13
2016	64	10.5	391	6.1	0	0	64	1	391	1.0	6.1	50	14
2017	85	14.0	562	6.6	1	0	84	1	561	1.0	6.7	57	27
2018	123	20.3	733	6.0	4	0	119	1	729	1.0	6.1	83	36
Total	607	100.0	3353	5.5	27	0	580	1	3326	1.0	5.7	441	131