



Figure S1. Funnel plot of publication bias for the 21 studies (M±SD of sleep duration) in the meta-analysis

Table S1. Sleep habits variables

Sleep habits	Mean time	95%CI for ES		Sample size	I^2 (%)	P
		Lower point	Upper point			
Time to go to bed (time point, 8 studies)	09:03 pm	08:48 pm	09:18 pm	33517	95.6	<0.001
Sleep latency (minutes, 6 studies)	30.66	20.32	41.00	31107	99.8	<0.001
Time to get up (time point, 7 studies)	05:24 am	04:58 am	05:50 am	31213	99.9	<0.001
Bed time (hours, 5 studies)	7.82	7.43	8.21	27297	99.3	<0.001

SE: Standard error

Table S2. Subgroup analyses of the rate of <5 hours/day, <7 hours/day and >8 hours/day

Subgroups	Categories (Number of studies)	Proportion (%)	95%CI (%)		Events	Sample size	I ² (%)	P	Q (P)
Region	Rural (1)	52.5	49.5	55.5	546	1040	-	-	5.68(0.017)
	Urban (4)	10.4	1.0	19.7	277	3173	97.7	<0.001	
Sample Size	≤820 (3)	13.0	2.4	47.4	255	1673	99.5	<0.001	0.009(0.93)
	>820 (2)	11.6	1.4	53.9	568	2540	99.9	<0.001	
Area	East (3)	5.7	1.5	19.7	131	2353	97.9	<0.001	3.51(0.06)
	Middle (2)	32.9	8.4	72.4	692	1860	99.5	<0.001	
Survey time	2001-2009 (3)	20.7	5.0	56.5	655	1893	99.3	<0.001	3.05(0.08)
	2012 (1)	1.5	0.1	19.4	22	1500	-	-	
Publishing language	Chinese (4)	13.4	3.6	38.7	814	4113	99.5	<0.001	0.07(0.79)
	English (1)	09.0	0.5	63.9	823	4213	-	-	

Table S2 B Subgroup analyses of the rate of short sleep duration (<7 hours/day)

Subgroups	Categories (Number of studies)	Proportion (%)	95%CI (%)		Events	Sample size	I ² (%)	P	Q (P)
Region	Rural (4)	39.5	28.3	50.7	12403	41726	99.7	<0.001	0.74(0.39)
	Urban (6)	45.5	37.4	53.6	11604	34167	99.3	<0.001	
Sample Size	≤1500 (6)	21.0	14.8	28.9	1517	6120	99.4	<0.001	1.36(0.24)
	>1500 (5)	27.7	19.7	37.5	15225	48954	99.6	<0.001	
Area	East (7)	40.2	29.2	51.2	8992	27230	99.5	<0.001	1.04(0.59)
	Middle (4)	41.5	27.3	55.6	7773	22968	99.6	<0.001	
	West (2)	29.7	23.3	36.1	5424	19845	97.8	<0.001	
Survey time	1993-2009 (5)	47.2	29.2	65.2	6325	20610	99.7	<0.001	0.12(0.73)
	2010-2013 (4)	42.3	28.9	55.8	21111	62892	99.8	<0.001	

Publishing language	Chinese (5)	49.8	34.9	64.8	19275	59069	99.7	<0.001	2.07(0.15)
	English (6)	36.1	23.3	48.9	8843	26660	99.7	<0.001	

Table S2 C Subgroup analyses of the rate of long sleep duration (>8 hours/day)

Subgroups	Categories (Number of studies)	Proportion (%)	95%CI (%)		Events	Sample size	I ² (%)	P	Q (P)
Region	Rural (1)	9.7	8.4	11.1	171	1756	-	-	1.72(0.19)
	Urban (5)	20.0	12.9	27.1	5672	27690	97.7	<0.001	
Sample Size	≤3100 (5)	17.9	11.7	26.4	1805	8030	98.8	<0.001	0.51(0.48)
	>3100 (4)	14.3	8.8	22.4	4455	29267	99.5	<0.001	
Area	East (7)	23.3	14.2	35.8	7884	32626	99.8	<0.001	0.15(0.93)
	Middle (1)	15.8	10.2	23.6	174	1040	-	-	
	West (2)	23.3	21.7	25.0	1333	4759	96.8	<0.001	
Survey time	1993-2010 (4)	34.6	11.8	57.4	7485	29538	99.8	<0.001	0.89(0.35)
	2011-2014 (3)	19.6	5.8	33.4	1504	6515	99.2	<0.001	
Publishing language	Chinese (5)	22.2	17.9	26.5	5732	27362	94.6	<0.001	0.10(0.76)
	English (5)	22.8	4.2	41.3	2928	12678	99.8	-	

Table S3. Subgroup analyses of sleep habits

Table S3 A Subgroup analyses of time to go to bed									
Subgroups	Categories	Mean	95%CI			Sample size	I ² (%)	P	Q (P)
	(Number of studies)								
Region	Rural (2)	08:23 pm	08:09 pm	08:36 pm	2720	96.9	<0.001	45.89	
	Urban (6)	09:14 pm	09:08 pm	09:24 pm	30797	98.0	<0.001	(<0.001)	
Sample Size	≤1360 (4)	08:56 pm	08:34 pm	09:18 pm	2667	99.3	<0.001	0.68(0.41)	
	>1360 (4)	09:09 pm	08:48 pm	09:31 pm	30850	99.7	<0.001		
Area	East (4)	09:23 pm	09:06 pm	09:41 pm	29834	97.7	<0.001	10.99	
	Middle (4)	08:43 pm	08:27 pm	09:00 pm	3683	99.5	<0.001	(0.001)	
Survey time	1997-2004 (4)	09:14 pm	08:55 pm	09:33 pm	27829	98.96	<0.001	2.83(0.09)	
	2005-2009 (4)	08:51 pm	08:31 pm	09:10 pm	5688	99.63	<0.001		

Table S3 B Subgroup analyses of sleep latency(minutes)									
Subgroups	Categories	Mean	95%CI			Sample size	I ² (%)	P	Q (P)
	(Number of studies)								
Sample Size	≤1450(3)	27.70	13.74	41.65	1937	88.7	<0.001	0.34(0.56)	
	>1450 (3)	33.49	19.85	47.12	29170	99.9	<0.001		
Survey time	1997-2014 (2)	37.96	25.28	50.65	26866	99.8	<0.001	1.52(0.22)	
	2014-2016 (2)	26.66	13.95	39.38	2968	93.4	<0.001		
Publishing language	Chinese (4)	32.32	20.06	44.58	29834	99.8	<0.001	0.22(0.64)	
	English (2)	27.13	9.23	45.02	1273	46.1	0.173		

Table S3 C Subgroup analyses of time to get up									
Subgroups	Categories	Mean	95%CI			Sample size	I ² (%)	P	Q (P)
	(Number of studies)								
Region	Rural (2)	06:00 am	05:10 am	06:50 am	2720	99.9	<0.001	2.80(0.09)	

	Urban (5)	05:10 am	04:38 am	05:41 am	28493	99.9	<0.001	
Sample Size	≤1040 (4)	05:17 am	04:37 am	05:57 am	2667	99.9	<0.001	0.31(0.58)
	>1040 (3)	05:34 am	04:48 am	06:20 am	28546	98.0	<0.001	
Area	East (3)	05:40 am	05:39 am	05:40 am	27530	97.5	<0.001	0.68(0.41)
	Middle (4)	05:07 am	05:05 am	05:08 am	3683	99.9	<0.001	
Survey time	1997-2004 (4)	05:05 am	04:25 am	05:45 am	27829	99.9	<0.001	2.11(0.15)
	2005-2009 (3)	05:50 am	05:04 am	06:37 am	3384	99.8	<0.001	

Table S3 D Subgroup analyses of Bed time(hours)

Subgroups	Categories	Mean	95%CI		Sample size	<i>I</i> ² (%)	<i>P</i>	<i>Q</i> (<i>P</i>)
	(Number of studies)							
Sample Size	≤500 (3)	7.48	7.30	7.66	1150	87.4	<0.001	35.46
	>500 (2)	8.30	8.09	8.50	26147	95.9	<0.001	(<0.001)
Area	East (3)	8.10	7.87	8.33	26334	97.1	<0.001	13.28
	Middle (2)	7.41	7.13	7.70	963	89.1	0.003	(<0.001)
Publishing language	Chinese (3)	7.68	7.04	8.31	26024	99.6	<0.001	0.45
	English (2)	8.02	7.24	8.80	1273	98.5	<0.001	(0.50)