

Supplementary Table 6. MR analysis results of DN on 11 sleep-related characteristics.

exposure	outcome	method	nsnp	b	se	pval	lo_ci	up_ci	or	or_lci95	or_uci95
DN	Accelerometer-based sleep duration	MR Egger	10	0.004732	0.01494	0.75962	-0.0245574	0.03402	1.00474	0.97574	1.03461
DN	Accelerometer-based sleep duration	Weighted median	10	0.003693	0.00788	0.63937	-0.0117541	0.01914	1.0037	0.98831	1.01932
DN	Accelerometer-based sleep duration	Inverse variance weighted	10	0.004755	0.00773	0.53861	-0.0104014	0.01991	1.00477	0.98965	1.02011
DN	Accelerometer-based sleep duration	Simple mode	10	0.008482	0.01209	0.50057	-0.0152075	0.03217	1.00852	0.98491	1.03269
DN	Accelerometer-based sleep duration	Weighted mode	10	0.003916	0.00793	0.63343	-0.0116335	0.01946	1.00392	0.98843	1.01966
DN	Chronotype	MR Egger	10	0.00517	0.01453	0.7312	-0.0233114	0.03365	1.00518	0.97696	1.03422
DN	Chronotype	Weighted median	10	0.011733	0.00746	0.11587	-0.0028928	0.02636	1.0118	0.99711	1.02671
DN	Chronotype	Inverse variance weighted	10	0.012175	0.00767	0.11257	-0.002864	0.02721	1.01225	0.99714	1.02759
DN	Chronotype	Simple mode	10	0.037653	0.02005	0.09318	-0.0016545	0.07696	1.03837	0.99835	1.08
DN	Chronotype	Weighted mode	10	0.012367	0.00808	0.16028	-0.0034719	0.02821	1.01244	0.99653	1.02861
DN	daytime napping	MR Egger	12	-0.00709	0.00634	0.28938	-0.0195233	0.00533	0.99293	0.98067	1.00535
DN	daytime napping	Weighted median	12	3.00E-05	0.002	0.98801	-0.0038804	0.00394	1.00003	0.99613	1.00395
DN	daytime napping	Inverse variance weighted	12	0.002591	0.00363	0.47555	-0.004526	0.00971	1.00259	0.99548	1.00975
DN	daytime napping	Simple mode	12	0.022828	0.0137	0.12385	-0.0040243	0.04968	1.02309	0.99598	1.05094
DN	daytime napping	Weighted mode	12	-0.00128	0.00204	0.54362	-0.0052861	0.00272	0.99872	0.99473	1.00273
DN	daytime Sleepiness	MR Egger	10	-0.00433	0.0041	0.32226	-0.0123635	0.00371	0.99568	0.98771	1.00372
DN	daytime Sleepiness	Weighted median	10	-0.00108	0.00166	0.51424	-0.0043373	0.00217	0.99892	0.99567	1.00217
DN	daytime Sleepiness	Inverse variance weighted	10	0.0007	0.00239	0.76959	-0.0039832	0.00538	1.0007	0.99602	1.0054

DN	daytime Sleepiness	Simple mode	10	0.002304	0.00428	0.60306	-0.0060767	0.01068	1.00231	0.99394	1.01074
DN	daytime Sleepiness	Weighted mode	10	-0.00129	0.00167	0.45767	-0.0045587	0.00197	0.99871	0.99545	1.00197
DN	Insomnia	MR Egger	10	-0.00029	0.00447	0.9499	-0.0090476	0.00847	0.99971	0.99099	1.0085
DN	Insomnia	Weighted median	10	0.000541	0.00214	0.80077	-0.0036599	0.00474	1.00054	0.99635	1.00475
DN	Insomnia	Inverse variance weighted	10	0.001403	0.00234	0.5488	-0.0031839	0.00599	1.0014	0.99682	1.00601
DN	Insomnia	Simple mode	10	0.011002	0.00549	0.076	0.0002441	0.02176	1.01106	1.00024	1.022
DN	Insomnia	Weighted mode	10	0.000576	0.00219	0.79873	-0.003725	0.00488	1.00058	0.99628	1.00489
DN	L5Timing	MR Egger	10	0.007185	0.01576	0.66063	-0.0237102	0.03808	1.00721	0.97657	1.03881
DN	L5Timing	Weighted median	10	-0.00527	0.00775	0.49662	-0.0204506	0.00992	0.99475	0.97976	1.00997
DN	L5Timing	Inverse variance weighted	10	-0.00941	0.00893	0.29197	-0.0269122	0.00809	0.99063	0.97345	1.00812
DN	L5Timing	Simple mode	10	-0.04445	0.02063	0.05961	-0.0848928	-0.004	0.95652	0.91861	0.996
DN	L5Timing	Weighted mode	10	-0.00393	0.00835	0.64906	-0.0202946	0.01243	0.99608	0.97991	1.01251
DN	No.of sleep episodes	MR Egger	10	0.014351	0.01145	0.24532	-0.0080838	0.03679	1.01445	0.99195	1.03747
DN	No.of sleep episodes	Weighted median	10	0.015291	0.00771	0.04737	0.0001769	0.03041	1.01541	1.00018	1.03087
DN	No.of sleep episodes	Inverse variance weighted	10	0.015033	0.00626	0.01629	0.0027676	0.0273	1.01515	1.00277	1.02767
DN	No.of sleep episodes	Simple mode	10	0.01548	0.01304	0.26552	-0.0100752	0.04103	1.0156	0.98998	1.04189
DN	No.of sleep episodes	Weighted mode	10	0.01548	0.00745	0.06756	0.0008742	0.03008	1.0156	1.00087	1.03054
DN	Self-reported long sleep	MR Egger	10	-0.00311	0.00248	0.24526	-0.0079669	0.00175	0.9969	0.99206	1.00175
DN	Self-reported long sleep	Weighted median	10	-0.00102	0.00118	0.38969	-0.0033382	0.0013	0.99898	0.99667	1.0013
DN	Self-reported long sleep	Inverse variance weighted	10	-0.00022	0.00143	0.87962	-0.0030195	0.00259	0.99978	0.99699	1.00259
DN	Self-reported long sleep	Simple mode	10	2.60E-05	0.00217	0.9907	-0.0042287	0.00428	1.00003	0.99578	1.00429
DN	Self-reported long sleep	Weighted mode	10	-0.0011	0.00122	0.3907	-0.0034827	0.00129	0.9989	0.99652	1.00129
DN	Self-reported short sleep	MR Egger	10	-0.00105	0.00234	0.66634	-0.0056444	0.00355	0.99895	0.99437	1.00355
DN	Self-reported short sleep	Weighted median	10	-0.00024	0.00154	0.87858	-0.0032511	0.00278	0.99976	0.99675	1.00278
DN	Self-reported short sleep	Inverse variance weighted	10	0.00028	0.00129	0.82795	-0.0022417	0.0028	1.00028	0.99776	1.0028
DN	Self-reported short sleep	Simple mode	10	0.000947	0.00308	0.76518	-0.0050814	0.00698	1.00095	0.99493	1.007

DN	Self-reported short sleep	Weighted mode	10	-0.00016	0.00152	0.91769	-0.0031439	0.00282	0.99984	0.99686	1.00282
DN	Self-reported sleep duration	MR Egger	10	-0.00815	0.00655	0.24865	-0.0209806	0.00469	0.99189	0.97924	1.0047
DN	Self-reported sleep duration	Weighted median	10	-0.00369	0.00355	0.29831	-0.0106397	0.00326	0.99632	0.98942	1.00327
DN	Self-reported sleep duration	Inverse variance weighted	10	-0.00082	0.00375	0.8275	-0.0081622	0.00653	0.99918	0.99187	1.00655
DN	Self-reported sleep duration	Simple mode	10	-0.00675	0.00791	0.41562	-0.0222552	0.00875	0.99327	0.97799	1.00879
DN	Self-reported sleep duration	Weighted mode	10	-0.00385	0.00364	0.31789	-0.0109743	0.00328	0.99616	0.98909	1.00329
DN	Sleep efficiency	MR Egger	10	0.004012	0.01529	0.79964	-0.0259573	0.03398	1.00402	0.97438	1.03457
DN	Sleep efficiency	Weighted median	10	-0.00539	0.00736	0.46382	-0.0198184	0.00903	0.99462	0.98038	1.00908
DN	Sleep efficiency	Inverse variance weighted	10	-0.01024	0.00851	0.22869	-0.0269098	0.00643	0.98981	0.97345	1.00645
DN	Sleep efficiency	Simple mode	10	-0.01717	0.01575	0.30404	-0.0480338	0.0137	0.98298	0.9531	1.0138
DN	Sleep efficiency	Weighted mode	10	-0.00525	0.00787	0.52154	-0.0206667	0.01017	0.99477	0.97955	1.01022