

Supplementary Table 1. Age, sleep quality, sleep quantity, chronotype, and quality of life variables of middle adult (35 years or older and younger than 65 years) participants

	All sex	Female	Male	<i>p</i> *
Number of participants	1,435 (100)	728 (100)	707 (100)	
Age (year)	49.6±8.3	49.7±8.3	49.5±8.2	0.586
PSQI score	3.9±0.1	4.0±2.6	3.7±2.2	0.017
Poor sleep quality	69 (4.8)	43 (5.9)	26 (3.7)	0.048
Week average sleep duration (min)	421.3±62.8	422.6±61.3	423.3±61.7	0.769
ME scale	21.7±0.2	22.1±6.9	21.4±6.7	0.055
Morningness	351 (24.5)	167 (22.9)	184 (26.0)	0.152
Eveningness	301 (21.0)	166 (22.8)	135 (19.1)	0.152
DI scale	18.0±0.1	18.3±4.9	17.8±5.0	0.067
Strong distinctiveness	583 (40.6)	306 (42.0)	277 (39.2)	0.271
EQ-5D-3L utility score	0.931±0.061	0.929±0.061	0.933±0.062	0.265
Quality of life				
Impaired mobility	44 (3.1)	22 (3.0)	22 (3.1)	0.921
Impaired self-care	23 (1.6)	9 (1.2)	14 (2.0)	0.262
Impaired usual activities	46 (3.2)	23 (3.2)	23 (3.3)	0.920
Pain/discomfort	223 (15.5)	120 (16.5)	103 (14.6)	0.317
Anxiety/depression	163 (11.4)	93 (12.8)	70 (9.9)	0.086

Variables are presented as means±standard deviations or numbers (percentage). *compared between genders. PSQI: Pittsburgh Sleep Quality Index, ME: morningness-eveningness, DI: distinctiveness, EQ-5D-3L: EuroQol-5D 3-level version