

1. *survey.csv*

Field Name	Description
deviceld	participant's unique identifier
sex	1: male, 2: female
age	participant's age
marriage	participant's marital status 1: single, 2: married, 3: not want to reveal
occupation	1: undergraduate students, 2: graduate students, 3: office workers
smartwatch	whether a participant has experience with a smartwatch 1: yes, 2: no
regular	participant's lifestyle regularity 1: very regular, 2: regular, 3: average, 4: irregular, 5: very irregular
exercise	participant's exercise frequency 1: more than 5 times per week, 2: 3-4 times per week, 3: 2 times per week, 4: 1 time or less per week, 5: rarely do, remark: more than 30 min per event
coffee	participant's coffee consumption level 1: no coffee, 2: less than 1 cup per day, 3: 1 cup per day, 4: 2 cups per day, 5: 3 or more cups per day
smoking	participant's smoking frequency 1: non-smokers, 2: occasionally smoking, 3: less than half a pack per day, 4: half to one pack per day, 5: more than one pack per day
drinking	participant's alcohol consumption level 1: barely or not drink, 2: 1-2 times per month, 3: 1-2 times per week, 4: 3-5 times per week, 5: almost daily
height	height in cm
weight	weight in kg
ISI_1	Score of Insomnia Severity Index at the beginning of the experiment. A total score ranging from 0 to 28: absence of insomnia (0–7); sub-threshold insomnia (8–14); moderate insomnia (15–21); and severe insomnia (22–28)
ISI_2	Score of Insomnia Severity Index in the middle of the experiment.
ISI_F	Score of Insomnia Severity Index at the end of the experiment.
PHQ9_1	Score of the 9-question instrument given to patients in a primary care setting to screen for the presence and severity of depression at the beginning of the experiment: none (0-4), mild (5-9), moderate (10-14), moderately severe (15-19), severe (20-27).
PHQ9_2	Score to screen for the presence and severity of depression in the middle of the experiment

PHQ9_F	Score to screen for the presence and severity of depression at the end of the experiment
GAD7_1	Score of Anxiety Test Questionnaire at the beginning of the experiment. Scores of 5, 10, and 15 are taken as the cut-off points for mild, moderate, and severe anxiety, respectively
GAD7_2	Score of Anxiety Test Questionnaire in the middle of the experiment.
GAD7_F	Score of Anxiety Test Questionnaire at the end of the experiment.
MEQ	Score of Morningness eveningness questionnaire: definitely morning type (70–86), moderately morning type (59–69), neither type (42–58), moderately evening type (31–41), and definitely evening type (16–30)

2. `sensor_hrv.csv` and `sensor_hrv_filtered.csv`

Field Name	Description
deviceId	Participant's unique identifier
ts_start	Unix epoch timestamp corresponding to the starting time of a slice
ts_end	Unix epoch timestamp corresponding to the ending time of a slice
missingness_score	Measurement of the level of error allowance in HRV analysis
HR	Heart rate monitor sensor in beats per minute
ibi	Interbeat intervals, the period between successive heartbeats
acc_x_avg	X-component of acceleration of a device averaged per the 5-minute interval
acc_y_avg	Y-component of acceleration of a device averaged per the 5-minute interval
acc_z_avg	Z-component of acceleration of a device averaged per the 5-minute interval
grv_x_avg	Orientation of a device around the X-axis averaged per the 5-minute interval
grv_y_avg	Orientation of a device around the Y-axis averaged per the 5-minute interval
grv_z_avg	Orientation of a device around the Z-axis averaged per the 5-minute interval
grv_w_avg	The angle of rotation of a device averaged per the 5-minute interval
gyr_x_avg	X-component of the angular velocity of a device averaged per the 5-minute interval
gyr_y_avg	Y-component of the angular velocity of a device averaged per the 5-minute interval
gyr_z_avg	Z-component of the angular velocity of a device averaged per the 5-minute interval
steps	Number of steps
distance	Moving distance in meter
calories	Calories burned in kcal
light_avg	The brightness of ambient light averaged per the 5-minute interval
sdnn	The standard deviation of RR intervals
sdsd	The standard deviation of successive RR interval
rmssd	Root mean square of successive RR interval
pnn20	Percent of successive RR intervals that differ by more than 20 ms

pnn50	Percent of successive RR intervals that differ by more than 50 ms
lf	Absolute power of the low-frequency band
hf	The absolute power of the high-frequency band
lf/hf	The ratio of LF to HF

3. sleep_diary.csv

Field Name	Description
userId	Same with deviceId
date	Date after the reported sleep night
go2bed	Go-to-bed time in 24-hour format
asleep	Fall-asleep time in 24-hour format
wakeup	Wake-up time in 24-hour format
wakeup@night	Number of times a participant was awake during sleep
waso	The duration of mid-sleep awake time in minutes
sleep_duration	Total sleep time in hours
in_bed_duration	Total time spent in bed in hours
sleep_latency	Total time in hours taken to fall asleep
sleep_efficiency	The ratio between the time a person spends asleep to the time spent in bed

4. ppg.csv.gz

Field Name	Description
deviceId	Participant's unique identifier
ts	Unix epoch timestamp
ppg	The amount of green light that is reflected from a person's blood vessel

5. hrm.csv.gz

Field Name	Description
deviceld	Participant's unique identifier
ts	Unix epoch timestamp
HR	Heart rate

6. acc.csv.gz

Field Name	Description
deviceld	Participant's unique identifier
ts	Unix epoch timestamp
x	X-component of acceleration of a device
y	Y-component of acceleration of a device
z	Z-component of acceleration of a device

7. grv.csv.gz

Field Name	Description
deviceld	Participant's unique identifier
ts	Unix epoch timestamp
x	Orientation of a device around the X-axis
y	Orientation of a device around the Y-axis
z	Orientation of a device around the Z-axis
w	The angle of rotation of a device

8. gyr.csv.gz

Field Name	Description
deviceId	Participant's unique identifier
ts	Unix epoch timestamp
x	X-component of the angular velocity of a device
y	Y-component of the angular velocity of a device
z	Z-component of the angular velocity of a device

9. lit.csv.gz

Field Name	Description
deviceId	Participant's unique identifier
ts	Unix epoch timestamp
ambient_light_intensity	The brightness of ambient light in lux

10. ped.csv.gz

Field Name	Description
deviceId	Participant's unique identifier
ts	Unix epoch timestamp
steps	Number of steps
steps_walking	Number of walking steps
steps_running	Number of running steps
distance	Moving distance in meter
calories	Calories burned in kcal