Brighten study

Data available (number of participants)

V1

- Baseline demographics: 1110
- Baseline phq9: 957
- Biweekly phq9: 637
- Daily phq2: 721
- Passive data: 561

V2

- Baseline demographics: 1083
- Baseline phq9: 962
- Biweekly phq9: 296
- Daily phq2: 345
- Passive data:
 - Weather: 342
 - Location clusters: 328
 - Mobility: 334
 - o Phone: 39

Data available combined (number of participants)

V1

- baseline demographics + baseline PHQ9:957
- baseline PHQ9 + biweekly PHQ9: 541
- baseline demographics + biweekly PHQ9:637
- biweekly PHQ9 + passive data: 452
- biweekly PHQ9 + daily PHQ2: 637
- daily PHQ2 + passive data: 495

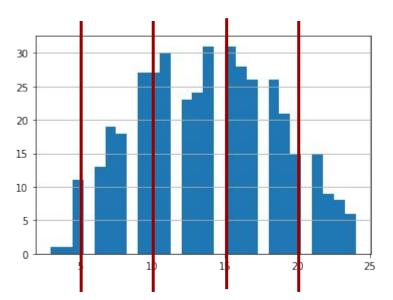
V2

- baseline demographics + baseline PHQ9:
 962
- baseline PHQ9 + biweekly PHQ9: 276
- baseline demographics + biweekly PHQ9:
 296
- all passive combined: 34
- all except phone: 328
- weather + mobility: 334
- weather + mobility+biweekly PHQ9: 262
- weather + mobility+daily PHQ2: 304

PHQ9 scores participants with passive data

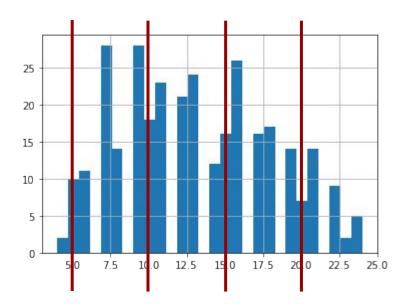
V1

Baseline: mean 13.1 +- 4.8

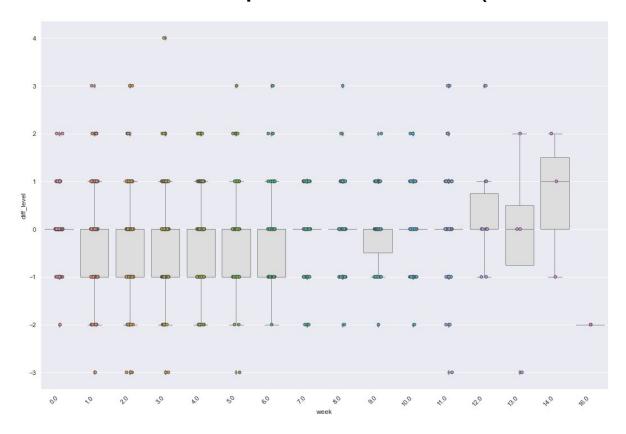


V2

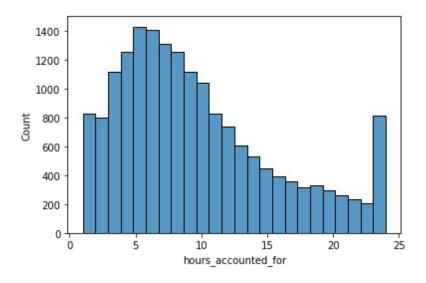
Baseline: mean 13.1 +- 4.9



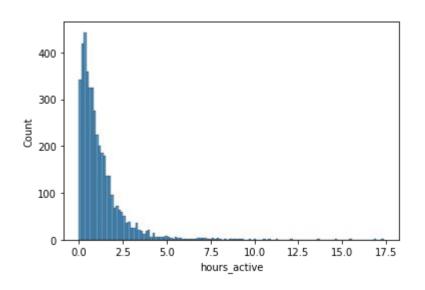
Week differences in depression levels (5 PHQ9 levels)



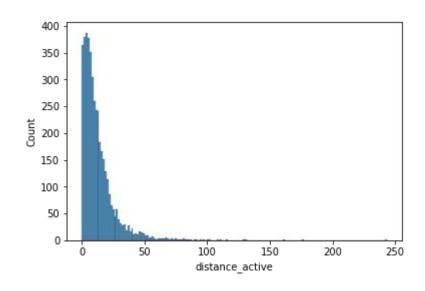
Only 267 participants with > 12 hours accounted for everyday



Hours active 22% = 0 hours



Distance active (km) 21% = 0 km



(0 km removed)

Distance high speed transformation (km)

93% = 0 km

Min value: 4 km

Max value: 6197 km

Hours high speed transformation (km) 93%

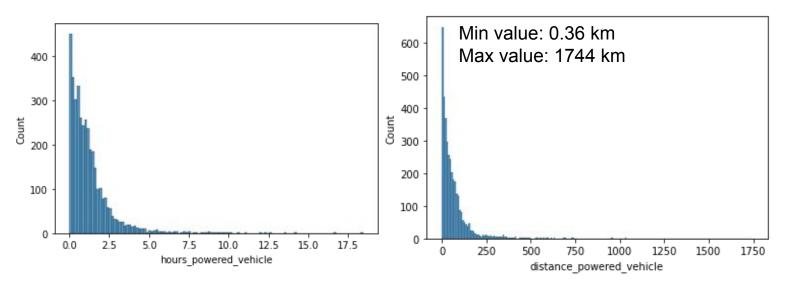
= 0 hours

Min value: 0.02 hours

Max value: 11 hours

Hours powered vehicle 30% = 0 hours

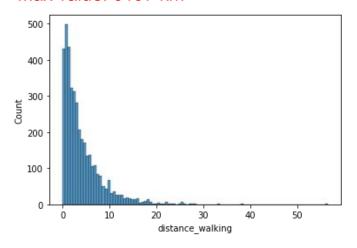
Distance powered vehicle (km) 31% = 0 km



(0 km removed)

Distance walking (km) 28% = 0 km

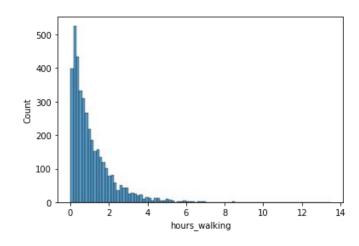
Min value: 4 km Max value: 6197 km



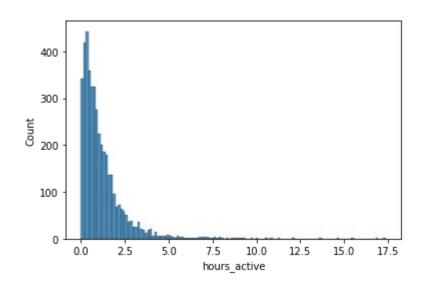
(0 km removed)

Hours walking 28% = 0 km

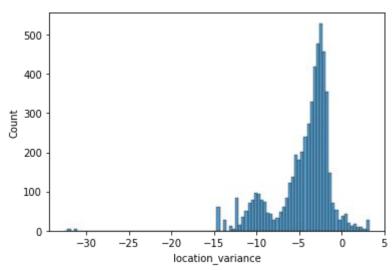
Min value: 0.02 Max value: 13.45



Hours active 22% = 0 hours

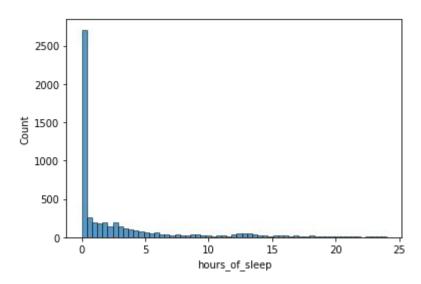


Location variance

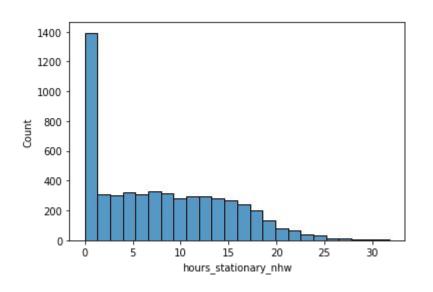


(0 km removed)

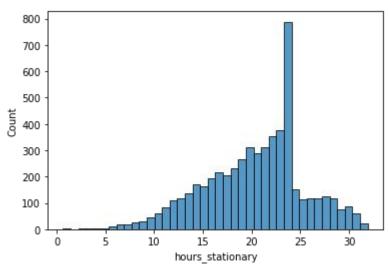
Hours of sleep:

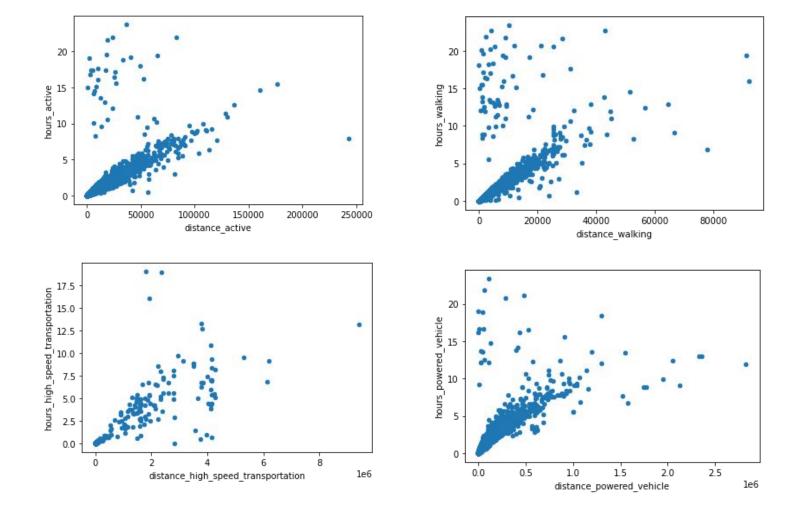


Hours stationary, not home not work



Hours stationary:





Insights from the code

- GPS coordinates were recorded at either
 15min intervals or when the user moved
 100 meters
- Stationary = 4.9 m or 0.7 m/s
- Walking = 0.7 m/s 1.5 m/s
- Active = 1.5 m/s 5.9 m/s
- Powered vehicle = 5.9 m/s 67 m/s
- High-speed transformation = 67 m/s 312m/s