

# A study on time awake in bed

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# Agenda

## 01 Objective

Why I did this study

## 02 Data Used

Where I found the data and how I cleaned on **Excel**

## 03 Findings

My analysis and the results on **R**

## 04 Recommendations

From now on, you can...



# 01 Objective

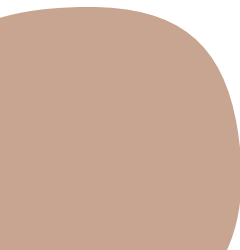
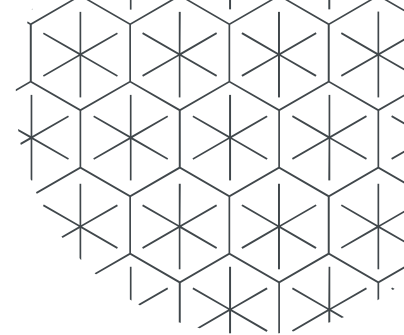
To analyse how long people spend time in bed awakening but not sleeping in order to give findings to people and pay attention to their sleeping figures to obtain better sleep.

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## 02 Data Used

- File: sleepDay\_merged\_re.csv
- Source: <https://www.kaggle.com/datasets/arashnic/fitbit>
- Period covered: April 12th 2016 to May 4th 2016
- Data were cleaned as far as possible in **Excel**
  1. Removed duplicates (3 samples were removed)
  2. Got the general value of date by using `=LEFT(C2,FIND(" ",C2,1)-1)`
  3. Used the function Text to columns to separate the month, date and year.
  4. Used the formula `=Date(year,month,day)` to store dates in cells.
  5. Used the formula `=MIN()` and `=MAX()` to figure out the period covered.
  6. Then, the data (410 samples) was ready to be analyzed!



## 03 Findings (in R)

### — Data Summary —

	Values
Name	sleep_day\$TotalTimeInBed ...
Number of rows	410
Number of columns	1

### ----- Column type frequency:

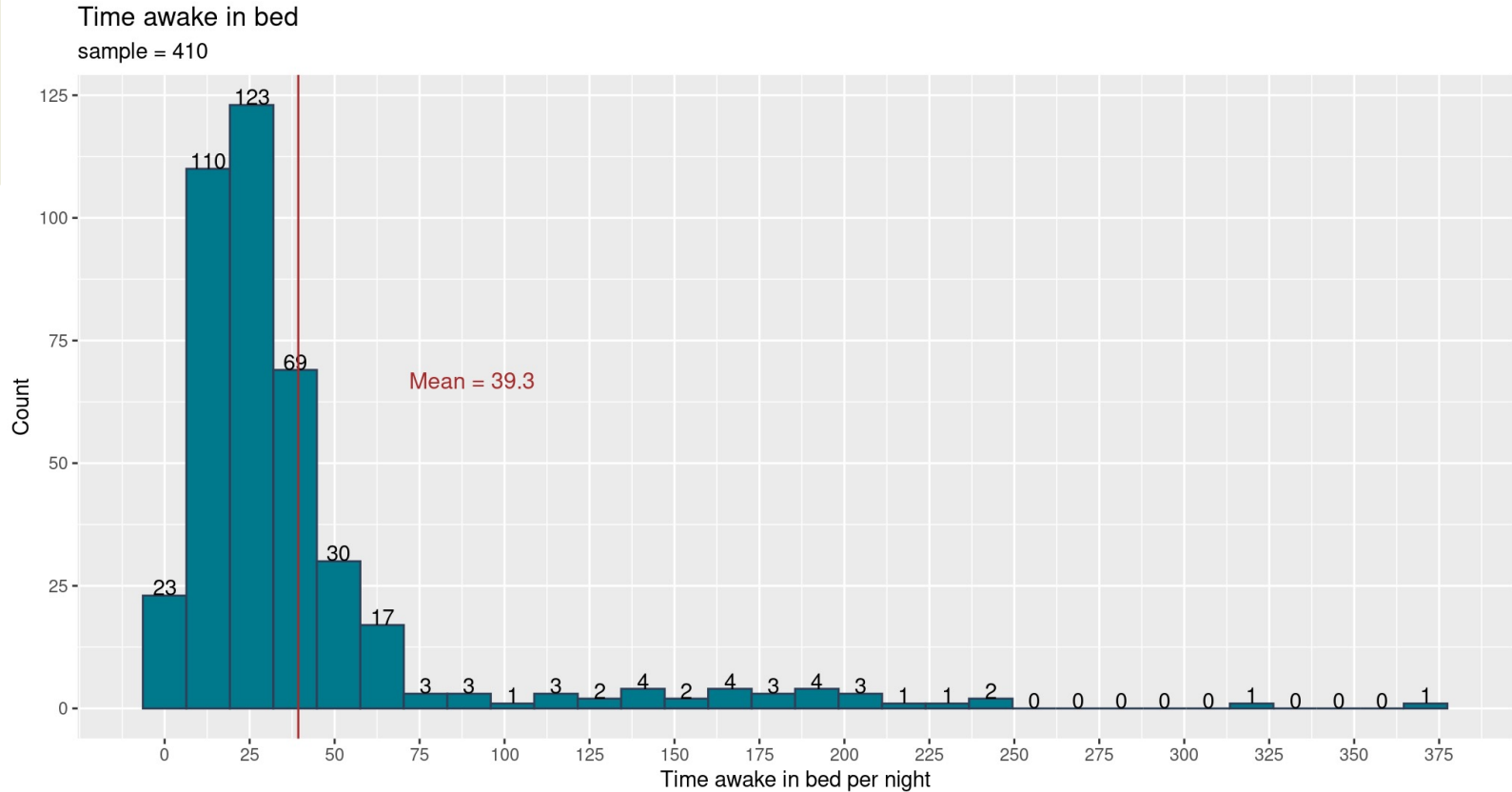
numeric	1
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Group variables	None
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### — Variable type: numeric —

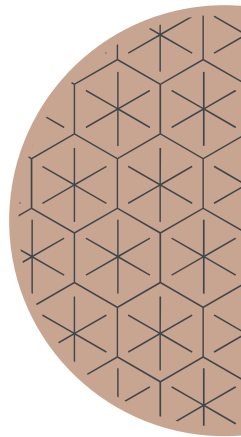
	skim_variable	n_missing	complete_rate	mean	sd	p0	p25	p50	p75	p100
1	data	0	1	39.3	46.7	0	17	25.5	40	371

## 03 Findings (in R)



## 03 Findings (in R)

- The average awake time in bed was 39.3 minutes.
- The standard deviation time awake time in bed was 46.7 minutes. (that's a lot!)
- The lowest awake time in bed was 0. (someone fell asleep immediately)
- The highest awake time in bed was 371 minutes. (nearly 6.2 hours... so bad)
- → Then I went back to find who was awake for so long. I figured out that this person spent time in bed for 16 hours in total. Interesting...
- Between the 25th percentile and 75th percentile was 17-40 minutes and the median was 25.5 minutes.



## 04 Recommendations

### I will say...

It is normal to be awake in bed for some time. Few people can sleep right away so don't be frustrated if you are struggling to sleep. You can search for some methods recommended by others and just try to reduce your awake time day by day. You can also wear a **Bellabeat Leaf** to track your improvements!



# Thank you!

**Bellabeat Leaf** can be worn as a bracelet, necklace, or clip. The Leaf tracker connects to the Bellabeat app to track activity, sleep, and stress. Discover more on [bellabeat.com/product/leaf-urban/](https://bellabeat.com/product/leaf-urban/)

