

# Analyzing smartwatch data metrics

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## Introduction

The Fitbit dataset consists of data recorded by Fitbit devices – wearable fitness trackers that monitor health and activity. These trackers capture details like steps, distance, calories, heart rate, and sleep patterns. The dataset includes diverse measurements collected from users over time, revealing insights into daily routines, activity levels, sleep quality, and general health.

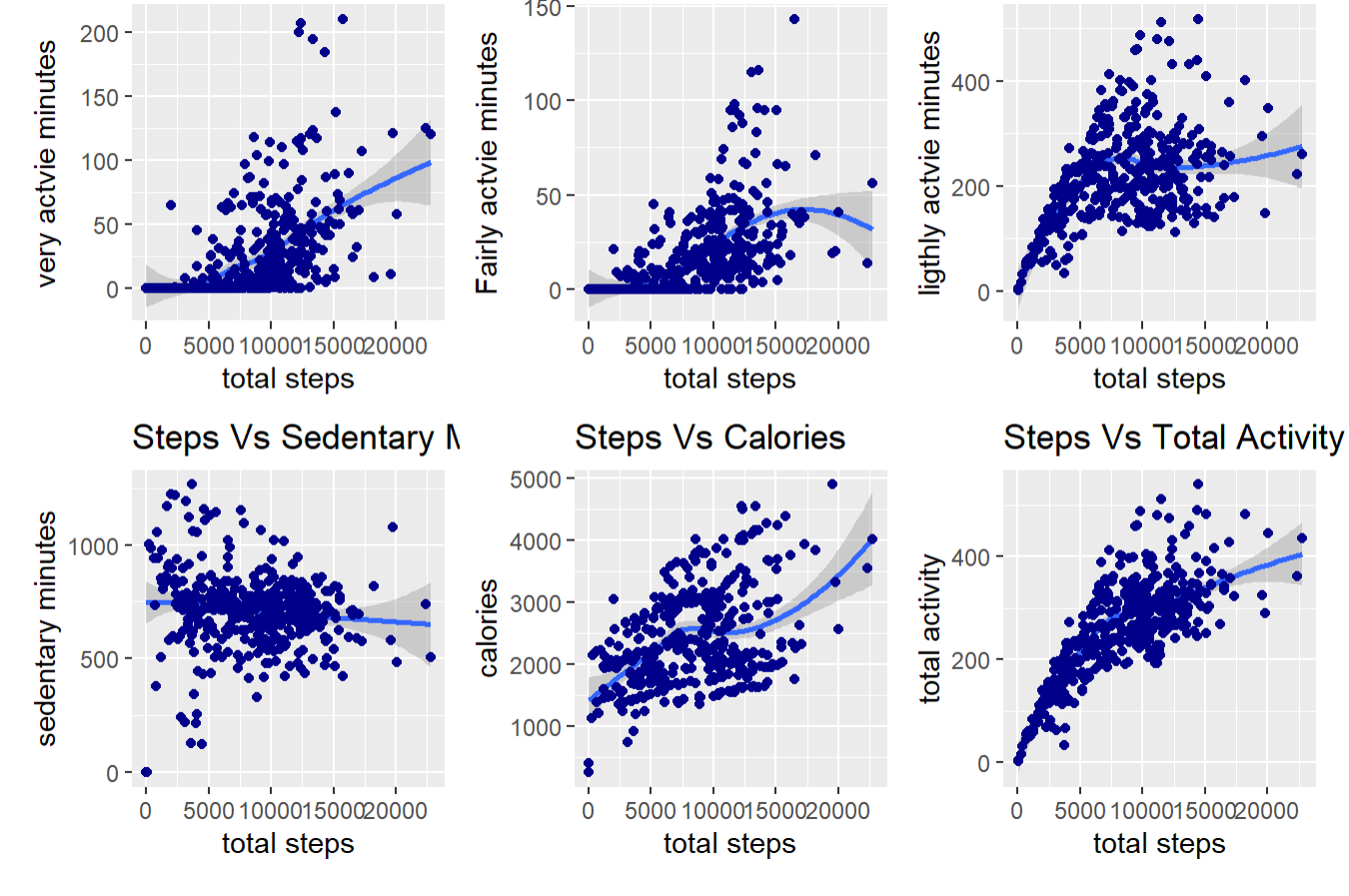
## About dataset

The original data set has been taken from <https://www.kaggle.com/arashnic/fitbit> from Möbius. It contains personal fitness tracker from thirty fitbit users.

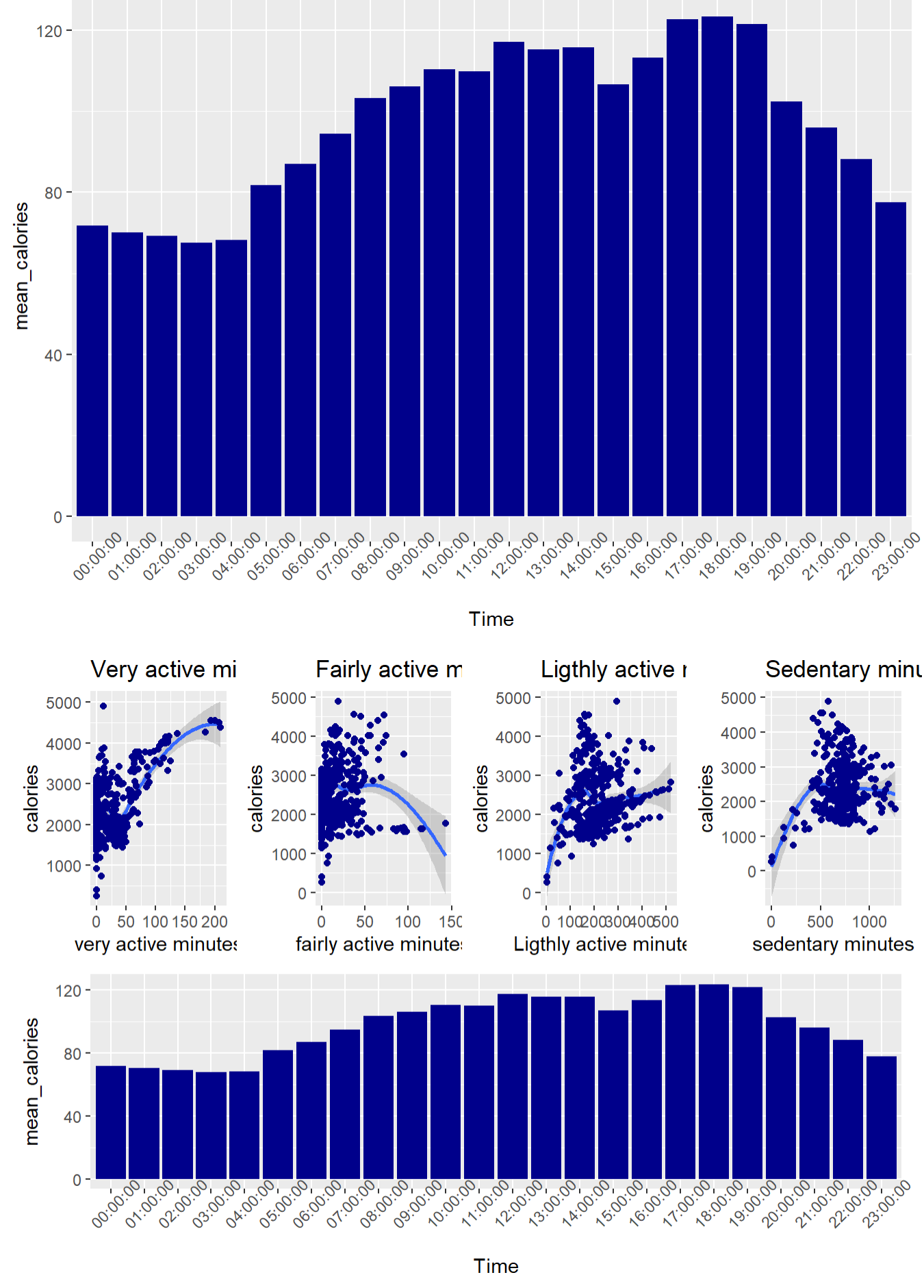
## Assessment

- exploring potential correlations between different metrics, such as the relationship between active minutes and heart rate, to uncover possible associations
- Identifying daily and weekly trends in active minutes, sleep duration, and other key metrics to understand how individuals' behaviors change over time;
- Investigate sleep-related data to determine average sleep duration, sleep consistency, and any potential connections with other factor

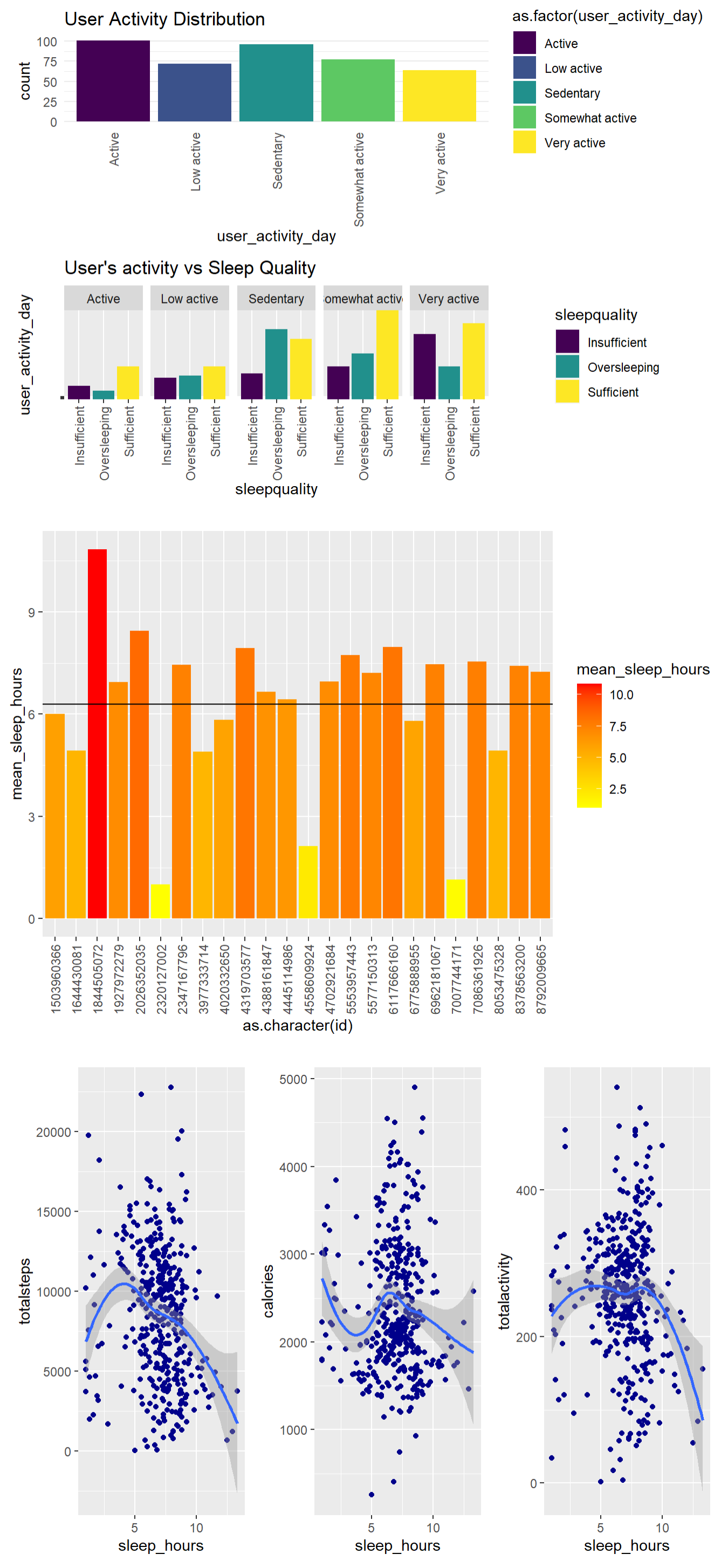
## Steps



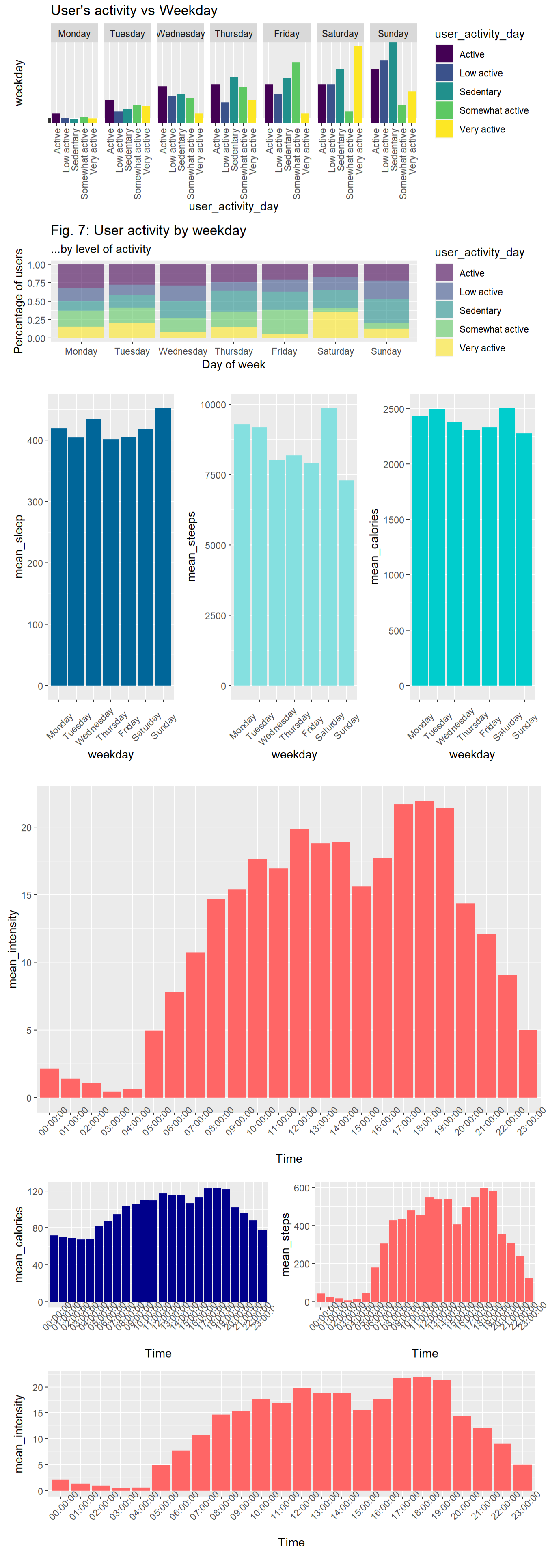
## Calories



## Sleep



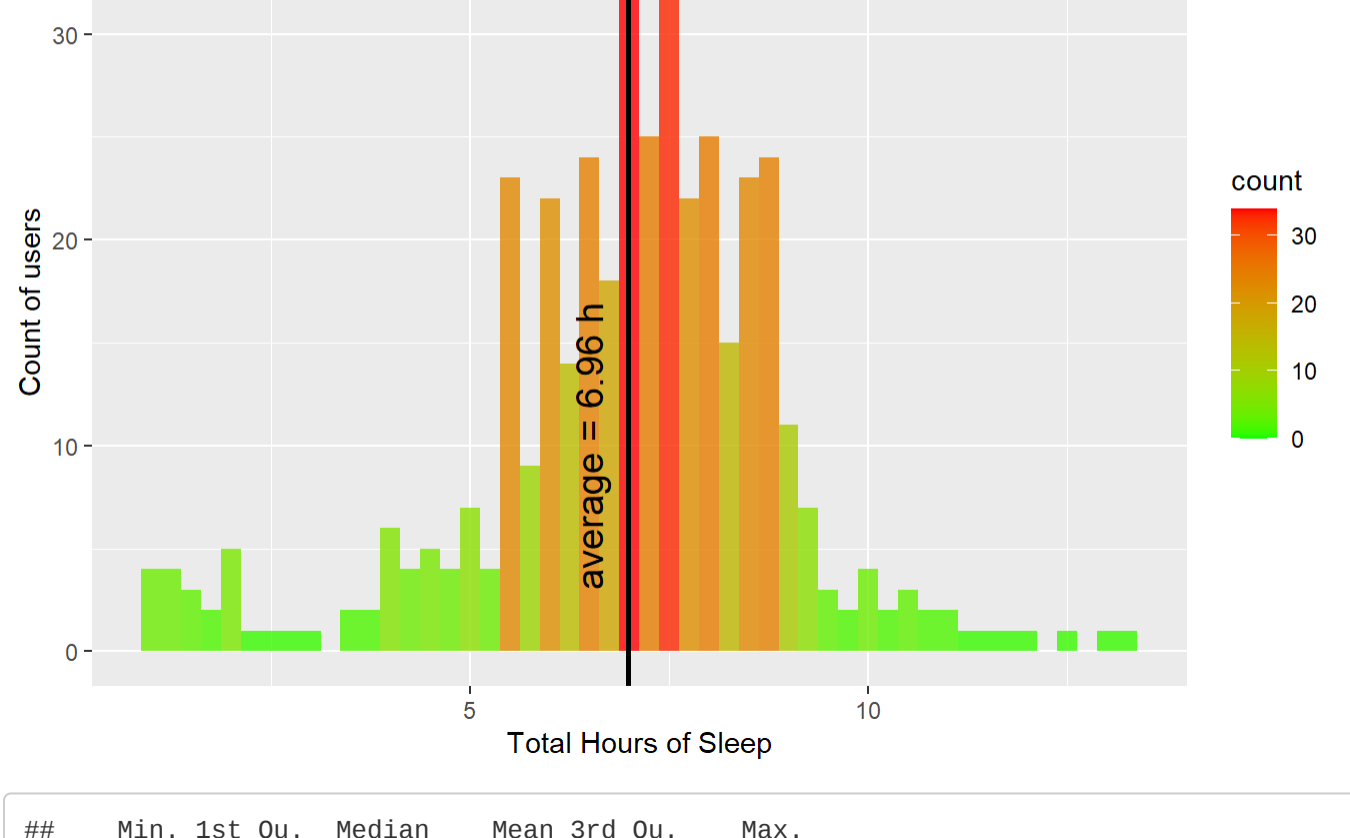
## Weekly



## Users

Fig. 4: Distribution of users...

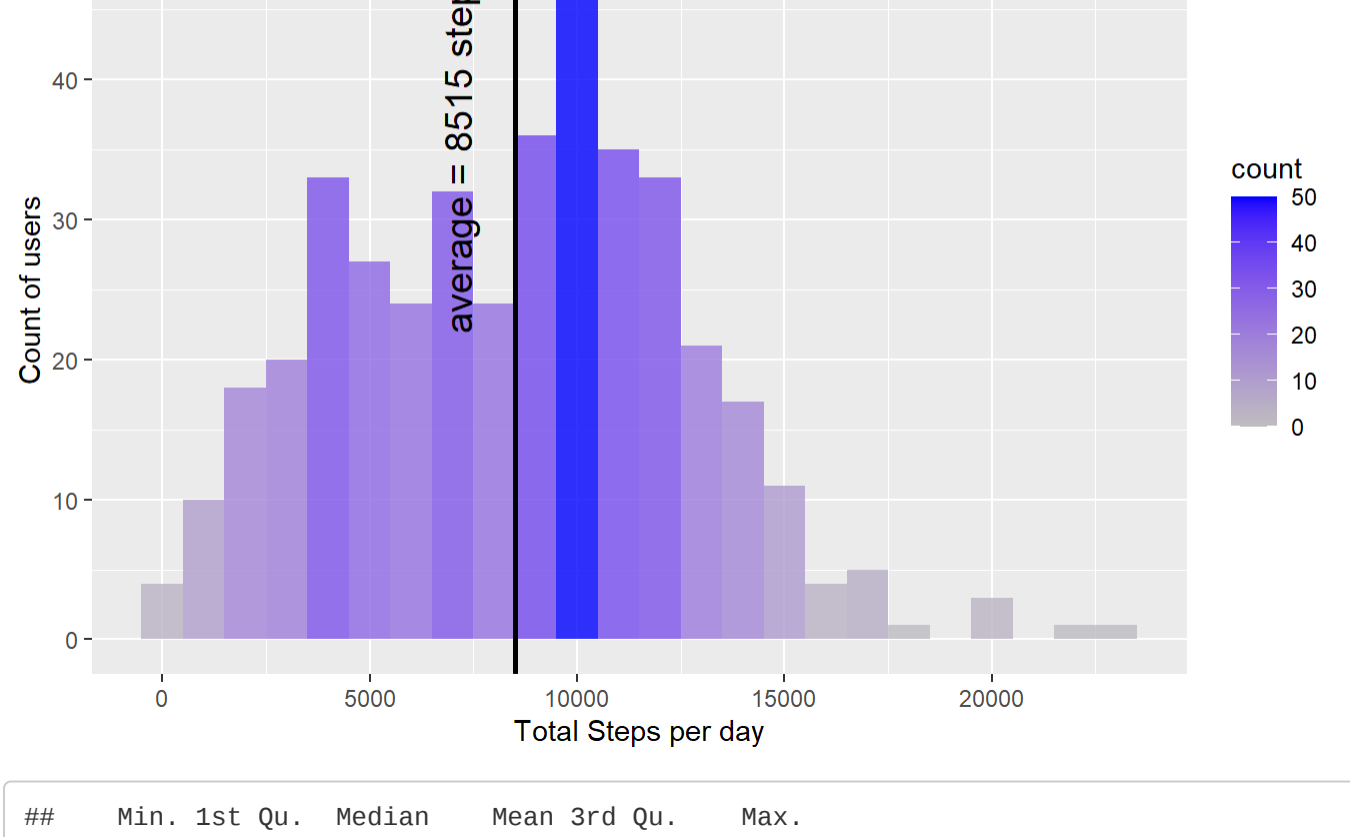
...by Total Hours of Sleep



##	Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
##	1.698	6.698	7.289	6.987	8.298	13.389

Fig. 5: Distribution of users...

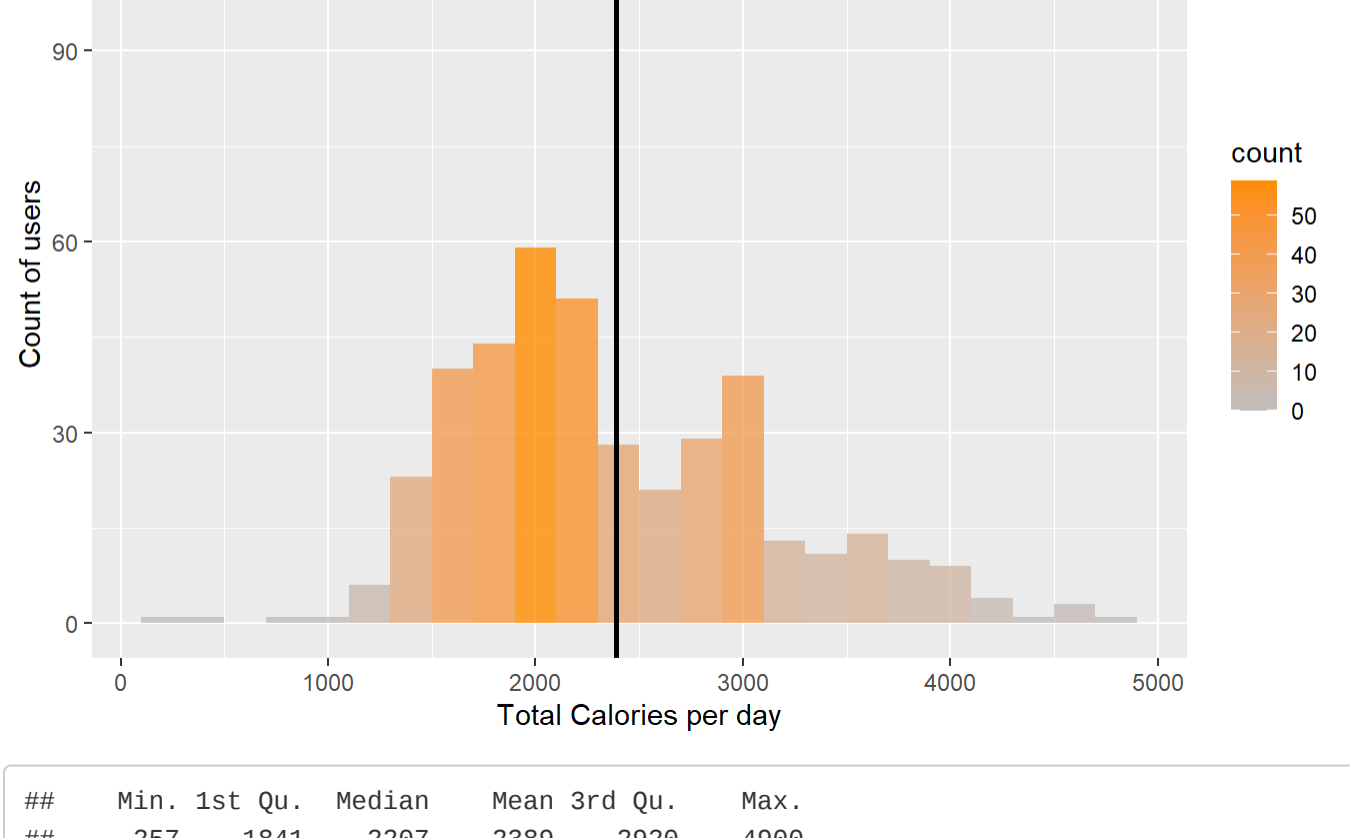
...by Total Daily Steps



##	Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
##	17	5199	8913	8515	11378	22778

Fig. 6: Distribution of users...

...by Calories burned daily



##	Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
##	257	1841	2267	2389	2928	4968