## When Should I Go to the Gym? An Empirical Analysis

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If hell is other people, as a famous economist once said, then the ninth circle surely must look something like the Berkeley RSF at peak hours.<sup>1</sup> Nothing is worse than having to wait in line to get into the gym,<sup>2</sup> a misfortune that can strike any poor soul without the ability to forecast perfectly hoi polloi's gym-going fancies.

So whether you're a good economist and understand congestion externalities, are productive enough to actually consider the value of your time, or are just generally misanthropic, you've probably asked yourself: When should I go to the gym?

I have taken it upon myself to address this question with a cursory look into entry data at the Berkeley RSF.<sup>3</sup> The results are summarized below. Should you have further questions, I would be happy to answer them over deadlifts.

<sup>&</sup>lt;sup>1</sup>Sartre was trained as a sociologist, which is close enough. Also, according to Wikipedia I am abusing the original intent of his famous line (L'enfer, c'est les autres), although the translation is literal. Whatever.

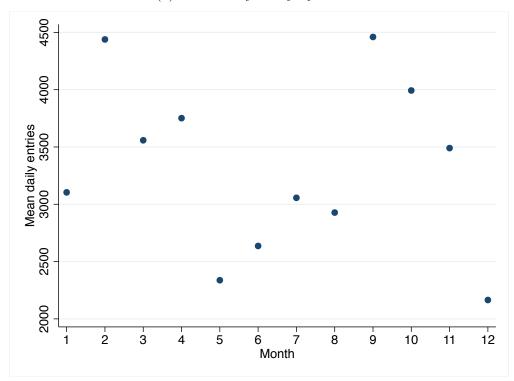
<sup>&</sup>lt;sup>2</sup>This strikes me as entirely novel type of paying not to go to the gym.

 $<sup>^3</sup>$ Data was generously provided by Berkeley Recreational Sports for 1/1/14 to 4/4/16. The data consist of total entry scans by hour and day. All analysis reflect my own opinions and mistakes.

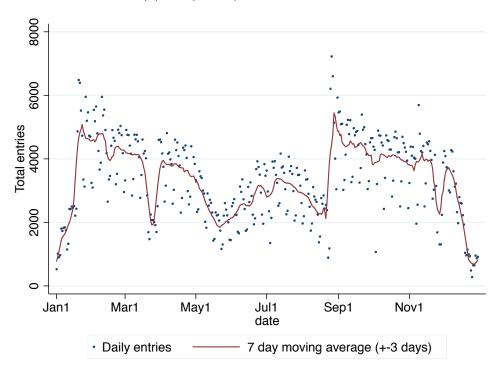
## Is it busier when school is in session?

Yes.

(a) Mean Daily Entry by Month



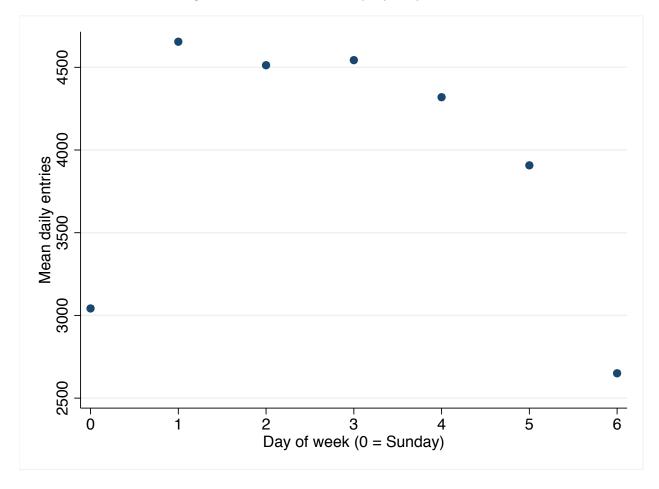
(b) Daily Entry Patterns for 2015



# What day of the week is best?

 ${\bf Friday\text{-}Sunday.}^4$ 

Figure 2: Mean Total Entry by Day of Week

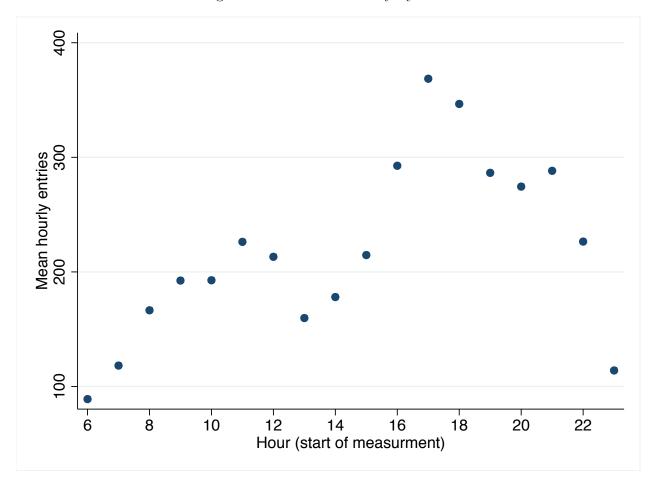


<sup>&</sup>lt;sup>4</sup>In what follows I include only school months: September-November and February-April (inclusive).

# Should I go before lunch or after?

Mornings and early afternoons are generally best.

Figure 3: Mean Total Entry by Hour



Hour refers to the start of the hour of measurement, so 6 refers to 6 to 7am, etc.

#### What if it's the weekend?

(a) Monday (b) Tuesday 200 200 400 400 Total entries 200 300 Total entries 200 300 9 (c) Wednesday (d) Thursday 200 200 400 400 Total entries 200 300 Total entries 200 300 100 (e) Friday (f) Saturday 200 200 400 400 Total entries 200 300 Total entries 200 300 100 100 (g) Sunday 200 400 Total entries 200 300 9 5

Figure 4: Mean Total Entry by Day-of-Week and Hour