Grade: 94 Irene Feng

ifeng2

4/5/16

The three variables I chose were how much sleep I had, my happiness level, and my hunger level. The reason why I picked these three variables is because I know my sleep schedule is very not normal and wanted to see the impact it has on my life. For hunger, I know that I am hungry practically all the time and wanted to know how that impacted my overall mood since I like food a lot. As for happiness, being happy is fairly important to me so I wanted to measure how happy I am in general and how other variables impact it. I believe that the amount of sleep I had would positively correlate with my happiness level because sleep deprivation is connected with depression. Also, I tend to be in a very bad mood in the morning whenever I wake up and don’t get enough sleep. Less sleep during the night means that I might take a nap during the day, which usually worsens my mood as well. I also believe that my hunger level would negatively correlate with my happiness, as in the more hungry I was, the less happy I would be. I thought this because I get grumpy when I am very hungry. So being full would make it so that my mood didn’t worsen if anything. As for how hunger relates to the amount of time I slept, I have a hard time sleeping when I’m hungry. In addition, if I eat too much, I get really sleepy afterwards and usually take a nap. When I take naps during the day, I tend to sleep less at night as well.

To assess these variables, I used a mixture of ways. For sleep, I measured it by how many hours I slept the night before. The item was a simple question simply asking me how many hours of sleep I got. For hunger level and happiness, I rated both on a scale. Hunger had a scale from ‘Very Hungry’ to ‘Very Full’ happiness had a scale from ‘Very Unhappy’ to ‘Very Happy’ Both of these variables ask to rate it at various points in the day: waking up, during class, after class, evening, before sleep. All of my variables were assessed in a continuous way.

My average for the amount of sleep I got was 7.53 hours with a standard deviation of 2.64 hours. Average for hunger was 2.13 waking up, 2.4 during class, 2.87 after class, 2.07 evening, 2.27 before sleeping, and 2.35 overall. The standard deviations for hunger were 0.64 waking up, 0.74 during class, 0.35 after class, 0.80 in the evening, 0.88 before sleeping, and 0.42 overall. For happiness level, the means were 2.53 waking up, 2.67 during class, 2.93 after class, 3.13 in the evening, 3.20 before sleep, and 2.89 overall. The standard deviations for happiness are 0.64 for waking up, 0.62 during class, 0.88 after class, 1.06 in the evening, 1.08 before sleep, and 0.59 overall. What I found unusual is that the average for happiness level increased as the day went on, but the standard deviation typically increased too. I also noticed that hunger level is the highest after class, which makes sense to me because that’s when I normally eat something. The second highest average for hunger is in the evening. And again, this was expected because that’s the time when I eat dinner. For the most part, this data is compatible to what I expected.

All of my variables are rising and falling. Sleep seems to rise steadily, then drop sharply, and then rise again. Hunger level appears to be on a normal level, then drop, then rise, and then drop again. As for happiness, the line rises and drops a lot and there seems to be no pattern. Other than that, none of the variables are steadily rising, falling, or staying the same. The correlation between sleep and hunger is -.19, sleep and happiness is .311, and hunger and happiness is -.18. In terms of Cohen’s standards, the correlation between sleep and hunger as well as happiness and hunger is weak because it is greater than .10 but less than .30. For sleep and happiness, it is a moderately strong correlation because it is greater than .30.

Through analyzing this data, I have confirmed that sleep is moderately linked with my overall happiness. This follows my expectations because I get horrible headaches when I don’t get enough sleep. And that while I may get cranky from being hungry, it doesn’t impact my overall mood too much. I expected this trend, but not for it to be that weak. It could be because I’m used to being perpetually hungry all the time. In addition, I learned that my happiness level goes up as it gets later in the night, which is evidence that I am a more nocturnal person rather than a morning person. The data may also show this because I tend to play with friends during the night, which makes me happy. Also, I noticed that sleep has a negative correlation with hunger. I don’t really understand why that is, but it may be because I spend more time asleep rather than being hungry. The more time I spend awake is just simply more time for me to be hungry.