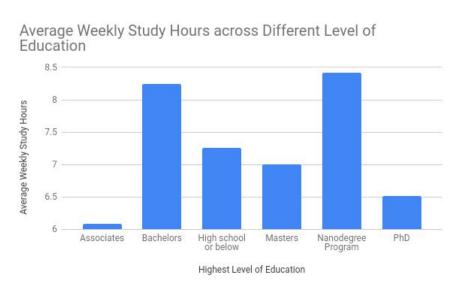
# Analyzing A Survey Data Project

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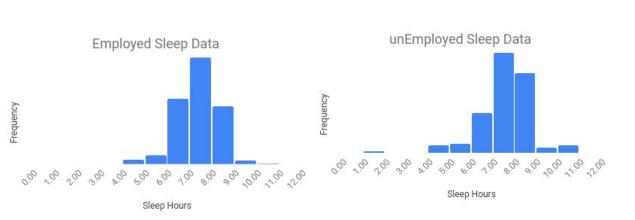
### Highest level of education vs study hours



highest level of education?	AVERAGE of study hrs week sum	MEDIAN of study hrs week sum	MIN of study hrs week sum	MAX of study hrs per week	STDEV of study hrs per week
Associates	6.09	5	2	25	1.135
Bachelors	8.25	6	1	80	1.30
High school or below	7.26	6	2	23	1.30
Masters	7.00	6	1	40	1.30
Nanodegree Program	8.42	6	2	40	1.17
PhD	6.51	5	1	30	1.37

- 1. Comparing the Different Level of education we can see that Nanodegree Students spent the highest average weekly hours studying and the associates spend the least amount of hours.
- 2. The standard deviation and the median across the different level of education is almost the same. Except for Associates and PhD with 5 hours of weekly studying hours.
- 3. The different education differ mostly in the maximum number of study hours. with bachelors holders studying the most hours weekly with a range of 80 hours, below high school studying a range of 23 weekly hours.

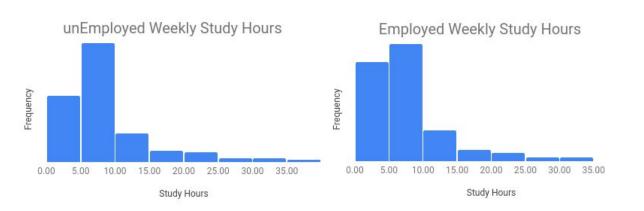
# Does The Employment Affect the Sleeping hours



Summary of Sleep	Employed	unEmployed
Q1	6	7
Median	7	7
Q3	7.75	8
Minimum	4	1
Maximum	10	10
Average	6.88	7.08
std	0.92	1.24

- 1. Comparing the employed to unemployed, there does not appear to be much of a difference in terms of sleeping hours. As can be seen from the histogram and the summary table. Observing the range for sleeping hours for unemployed is 9 hours which is larger than the employed range of 6 hours. Also from the histogram it can be seen that for both sleeping hours from 7-8 is the most frequent. While for the unemployed, the second frequent sleeping hour is 8-9 compared to 6-7 for the employed.
- 2. The average sleeping hours for employed is 6.88 hours compared to 7.02 hours for unemployed.
- 3. The study Deviation is almost the same of 0.92 for employed and 1.24 for unemployed

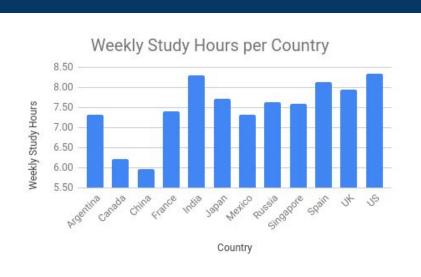
### Does The Employment Affect the Weekly Studying Hours



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Summary	Employed	unEmployed
Q1	4	4
Median	6	6
Q3	6	10
Minimum	0	0
Maximum	80	40
average	6.76	8.19
std	6.29	7.77

- 1. Comparing the employed to unemployed, there seem to be slight difference in terms of the studying hours by observing the right skewed histogram and the summary table.
- 2. The range for studying hours for employed is 40 hours which is larger than the unemployed range of 40 hours. Even though the average studying hours for unemployed is 7.77 hours which is larger than 6.29 for employed. So this range can be a result from an outlier in the data of the employed.
- 3. From the histogram it can be seen that for both studying hours from 5-10 is the most frequent.
- 4. The study Deviation is larger for the unemployed with 7.77 hours compared to 6.29 for the employed.
- 5. For both the median is 6 hours which means that 50% studied around 6 hours regardless of the employment status.

### Study Hours across Different Countries



Country	AVERAGE	MEDIAN	STDEV	MAX	MIN	Range
Argentina	7.32	6.00	5.23	35.00	1.00	34
Canada	6.23	6.00	4.02	20.00	2.00	18
China	5.97	5.00	4.10	30.00	1.00	29
France	7.41	6.00	5.08	21.00	1.00	20
India	8.31	5.00	11.75	80.00	2.00	78
Japan	7.73	6.00	5.56	25.00	1.00	24
Mexico	7.33	6.00	5.32	30.00	1.00	29
Russia	7.64	6.00	6.05	40.00	2.00	38
Singapore	7.61	5.50	6.47	30.00	2.00	28
Spain	8.15	6.00	7.82	40.00	2.00	38
UK	7.96	5.00	7.98	40.00	2.00	38
US	8.35	6.00	6.59	40.00	2.00	38

- Comparing different countries average weekly study hours using the figure and the table summary we can tell there is a difference between the countries. US had the longest weekly study hours with an average of 8.35 hours while china had the least with 5.97 average hours of study.
- The study standard deviation was the largest for india with 11.75 hours while other countries had a standard deviation of around 4-7 hours. This means that india data had a wider spread compared to other countries. While canada had the lowest standard deviation of 4 hours.
- Comparing the range for different countries we can see that the highest range was for india with 78 studying hours compared to other countries that had a values of 18-38. And canada also had the least range with 18 study hours. Which confirm that india data will have the largest variation compared to other countries.
- All the countries had almost similar of median ranging from 5 6 hours which means that 50% studied around 5-6 hours regardless of the country.