#### MARKETING ANALYTICS NANODEGREE

### PROJECT 2

ANALYZE SURVEY DATA



#### DATA PREP

- Combined data when responses were spread over multiple columns
  - Converted birthdate to age
- Removed responses where hours of sitting or sleeping exceeded hours in a day
  - Removed non-English characters

#### RESEARCH QUESTIONS

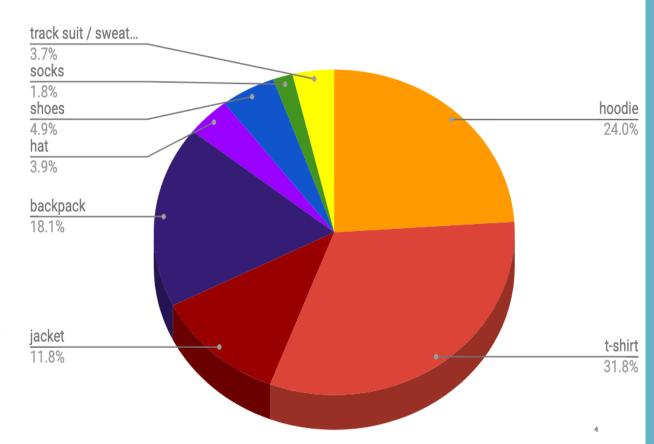
- I. Which resource was most helpful to the highest and lowest formally educated?
- 2. Which item in the swag store appeals most to respondents?
  - 3. What are the sitting and sleeping patterns of students?
- 4. What are the stats on location and age, and is there any relationship?

#### REGARDING SWAG: WHAT'S YOUR FAVE?

According to Udacity students, their favorite swag by far are clothing items worn on top!

Socks fell way behind at a mere 1.8% of those surveyed.

These items could be considered much more useful during a pandemic, when many people are spending their time at home.



# SLEEPING & SITTING PATTERNS OF UDACITY STUDENTS

We have some obvious outliers of 1 and 20 in the sitting hours, with a median of 10 and standard deviation of 2.97.

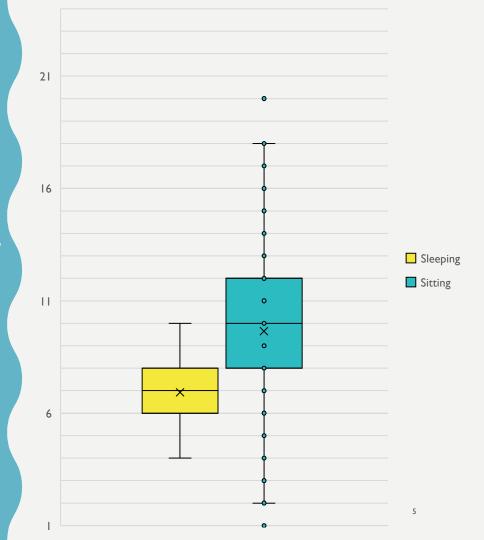
In addition, the range of 19 sitting hours is far greater than the range of 6 sleeping hours.

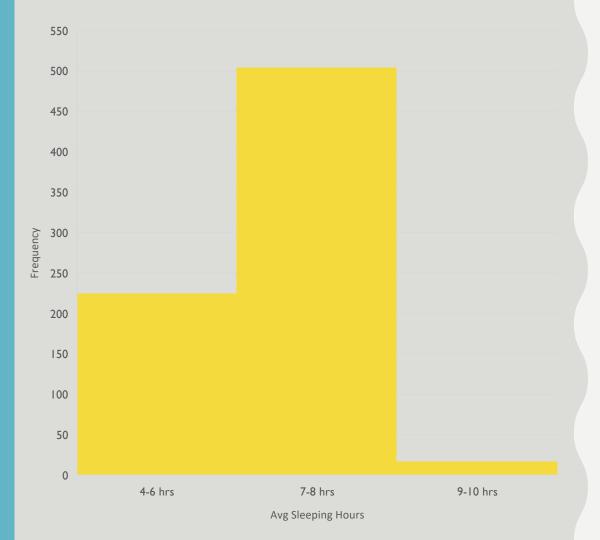
Sitting Quartiles: Q1 8

Q2 10

Q3 12

We can infer the reason for higher sit hours is for Nanodegree schoolwork, but, sitting for more than 8 hours/day can pose serious health risks\*.





## SPEAKING OF SLEEP...

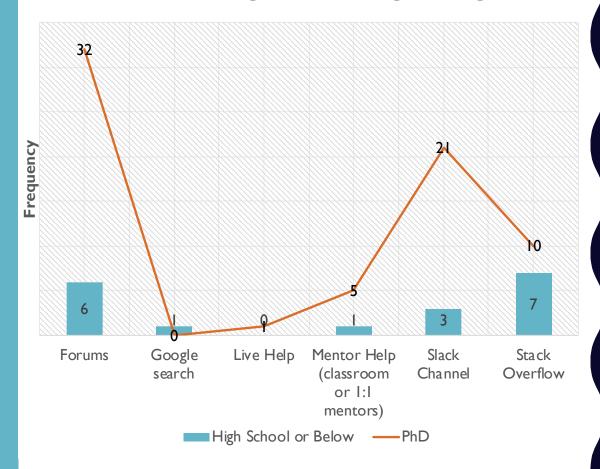
Out of 746 total respondents, 521 (70%!!) got **above** the CDC recommended minimum of 7 hours sleep per night\*.

Per the CDC, "Students should get the proper amount of sleep at night to help stay focused, improve concentration, and improve academic performance."

This implies the majority of Udacity students should do very well studying for their Nanodegrees!

<sup>\*</sup>Adults need 7 or more hours of sleep per night for the best health and wellbeing. Source: CDC

#### What Resource Was Most Helpful When You Got Stuck During Your Nanodegree Program?



### HELP!

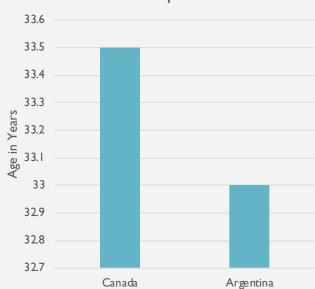
The lowest formal education v. the highest surveyed show quite a difference of where the two groups went for help with their Nanodegree.

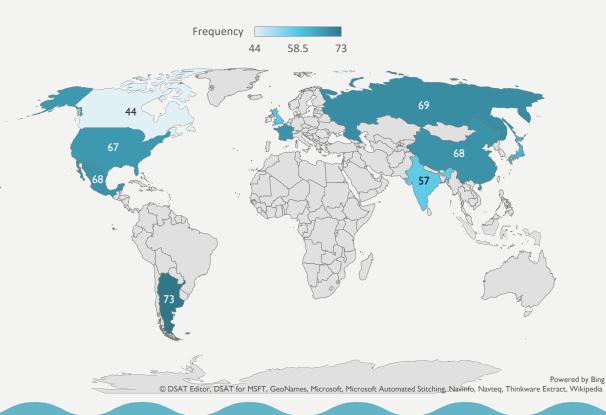
**NO** respondents with HS or below chose 'Live Help' for assistance, and the least popular combined for both groups was Google Search – quite a surprise!

The overwhelming proportion of PhDs, **46%**, went directly to Udacity Forums for help.

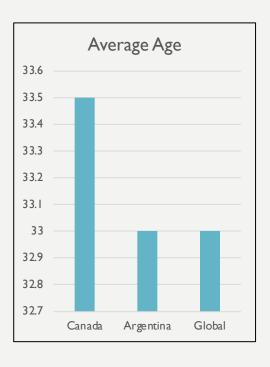
#### **LOCATION & AGE OF STUDENTS**

Average Age of Students in the Countries with Highest and Lowest Respondents





#### **FURTHER INFO ON LOCATION & AGE**



From the previous slide, we can see from the world chart that the highest amount of students surveyed, 73, hail from Argentina, and the lowest from Canada.

The average age for the countries with the highest and lowest respondents is only a difference of  $\frac{1}{2}$  year.

This correlates with the median age, 33, of ALL 746 students surveyed!





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#### **APPENDIX I**

#### **REFERENCES**

- https://www.excelfunctions.net
- https://www.support.microsoft.com
- Zoom chat with friend who is an Excel expert
- Re-watching videos and re-reading my notes
- Udacity Forums