

What does the Data reveal about Dating?

(Does your major say something about what your looking for in a partner?)

Research Questions and Study Objectives:

I hope to determine whether someone's major choice is correlated with the attributes that they value most in potential partners. Explore whether someone's field of study systematically changes their dating preferences.

- Do STEM majors vs. non-STEM majors systematically value certain attributes more/less?
- Which majors value intelligence most?
- Which majors value attractiveness most?

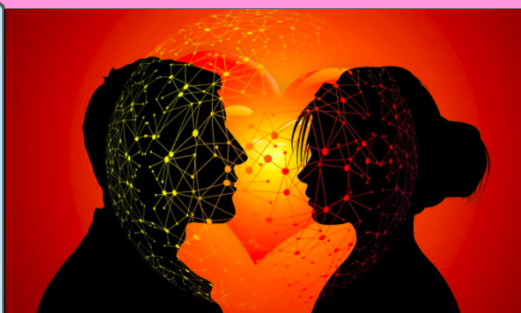
Data Description:

This dataset is from a series of speed dating events. The data includes an extensive list of variables about the participants including gender, race, major, age, intended career, most valued attributes of a partner, and much more.

Dataset: <https://www.kaggle.com/annavictoria/speed-dating-experimentggle>

Tools and Methods:

- Download dataset, import csv to jupyter notebook, create dataframe with pandas package
- Use Matplot to create 2 histograms: 1 of STEM majors top attributes and 1 of non-STEM top attributes
- Conduct T-test to see whether Stem majors are statistically significantly more interested in particular attributes than non STEM
- Create 2 wordclouds of all majors; most prominent majors will be attractiveness in the first wordcloud and intelligence in the second wordcloud
- Export visualizations and add to storyboard



Discussion of results:

- Discuss results of the first histogram
- Discuss results of the second histogram
- Discuss the results of my T-tests and what this means (i.e. there is or is not statistically significant difference between STEM major preferences and non STEM preferences)
- Explain which majors value intelligence most as seen in wordcloud
- explain which majors value attractiveness most as seen in the other wordcloud

I expect to find some type of correlation between the major and the attributes preferred in a partner. I hypothesize that business/economics student's will value beauty (attractiveness) the most, math/engineering student's will value brains (intelligence) most, and humanities/art student's will value fun the most. After I have finished my analysis of the data I will have much more to add to this section. This is where I will discuss my visual aids and explain the connection to my original hypothesis/study objectives.

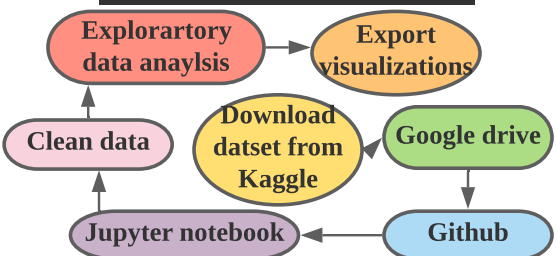
Interpretation of results:

The two attributes I am most curious about are attractiveness and intelligence (brains vs. beauty). I am hoping that there is a significant difference in which attribute the students prefer between the different majors. My overarching idea is that depending on what major you decide to study, it may say something about your personality and values; which in turn is observed in the dating attribute preferences from my dataset. Furthermore, I am interested to see which specific characteristics certain majors rank as most important, which may suggest the values/preferences of different majors in general. Some questions I would like to explore in the future related to this data: Does this say something about the psychology of stem majors/non stem majors? Are people's attribute preferences leading to their major choice? Or conversely, are the majors causing the students to think in a certain way about attribute preferences?

Histogram of Stem majors 6 attributes ranked (Figure 1)

Histogram of non-Stem majors top 6 attributes ranked (Figure 2)

Workflow Process



Wordcloud of majors based on which major values attractiveness most highly (Figure 3)

Wordcloud of majors based on which majors value intelligence most highly (Figure 4)

Citations/Sources:

1. Dighum 100 lecture notes and slides
2. <https://www.kaggle.com/annavictoria/speed-dating-experimentggle>
3. <https://academic.oup.com/qje/article-abstract/121/2/673/1884033?redirectedFrom=PDF>
4. <https://www.vecteezy.com/vector-art/268807-cupid>
5. <https://www.zmescience.com/science/online-dating-pandemic-0423/>
6. <https://stackoverflow.com/questions/2969044/python-string-escape-vs-unicode-escape>