Married Occupations

An analysis on the social implications of occupations of married couples



Final Project
Flatiron School Data Science Immersive
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Data

U.S. Census Data ACS

Occupations and genders

Data I created/combined:

- Sum of occupations by gender
- Sum of unique couples by occupation
- Percentage of occupation out of total
- Salaries of females and males
- Income inequality per couple

Goals

EDA

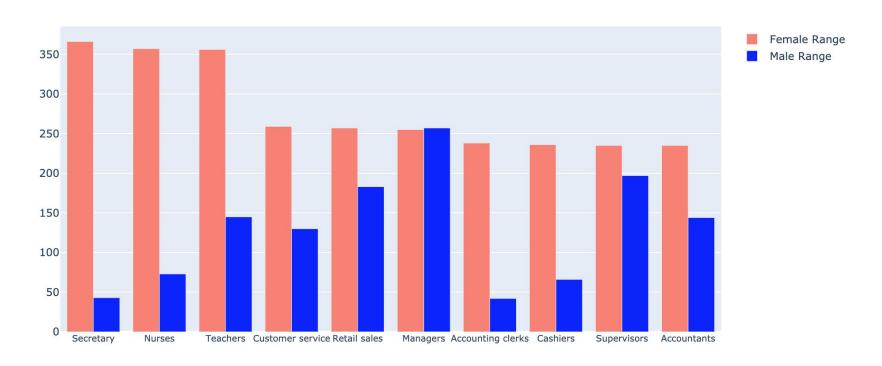
- Upward mobility
- Largest range of choices
- Trends in marital choices by gender

Models:

- K-Nearest Neighbors Classifier
- K Means Clustering

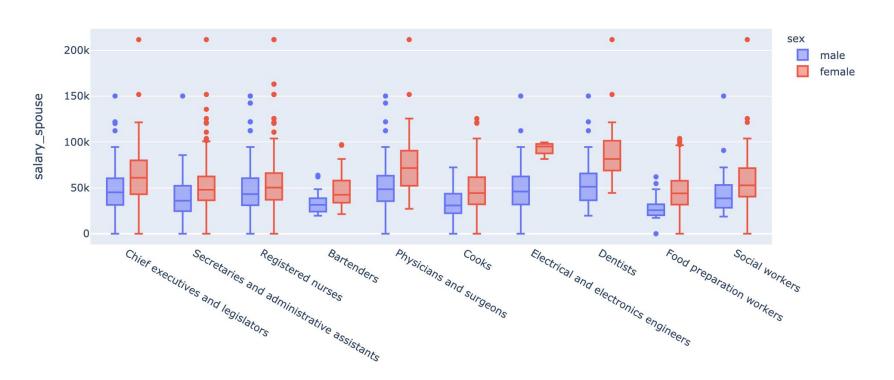
Largest Range of Choices to Marry

Occupations With Most Choices



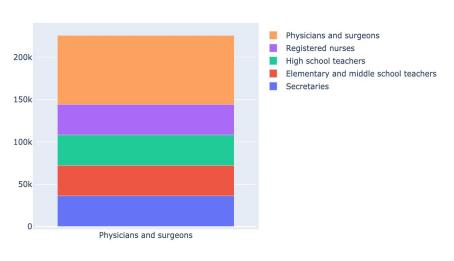
Differences in Spousal Salary Ranges by Gender

Salary Ranges of Spouse

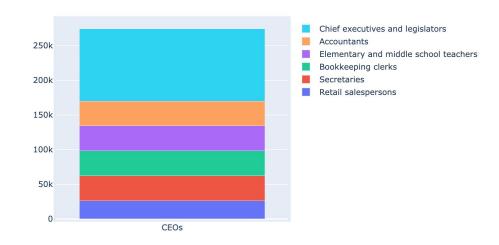


Upward Financial Mobility

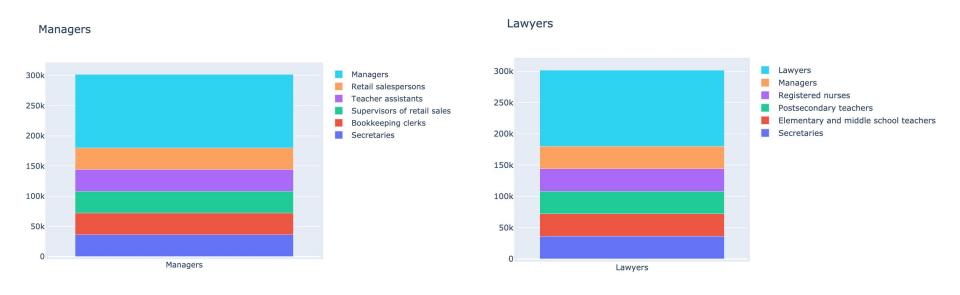
Physicians and Surgeons



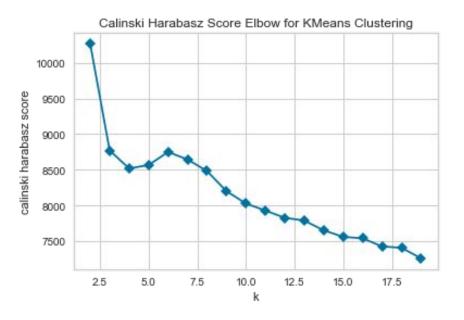
Chief executive officers and legislators

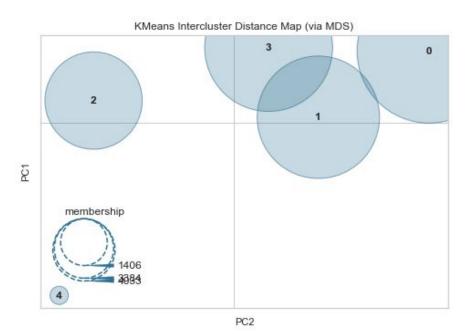


Upward Financial Mobility



K Means Clustering



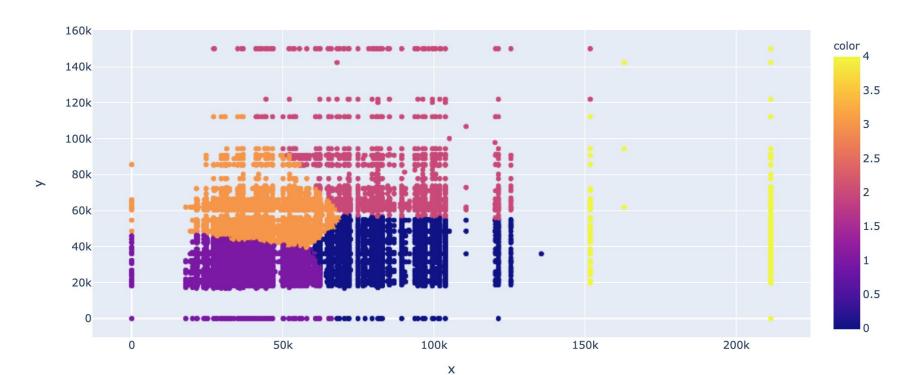


Cluster Demographics

	Most Common Male Occupations	Most Common Female Occupations	Average Combined Salary
Group 0	Managers, CEOs, accountants	Primary school teachers, secretaries, accountants	\$123,658
Group 1	Drivers, janitors, supervisors of retail workers	Secretaries, cashiers, housekeeping cleaners	\$68,198
Group 2	Managers, lawyers, CEOs	Nurses, managers, postsecondary teachers	\$159,725
Group 3	Drivers, supervisors, primary school teachers	Primary school teachers, nurses, managers	\$103,693
Group 4	Physicians & surgeons, dentists	Pharmacists, secretaries, primary school teachers	\$256,210

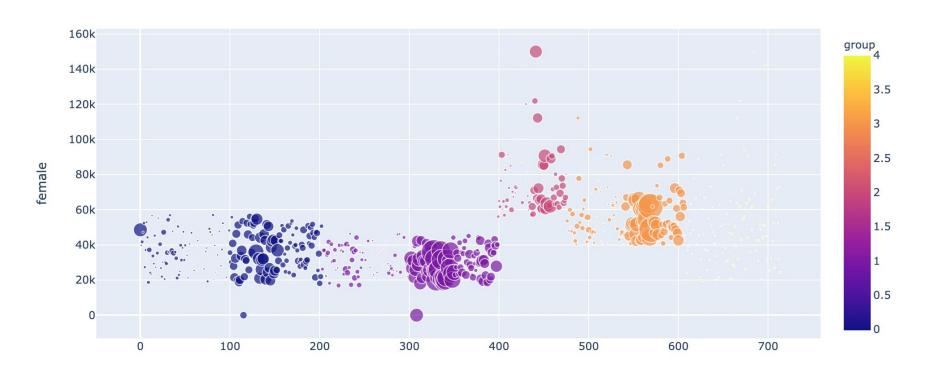
Clusters, visualized

Male vs Female Salary Clustering



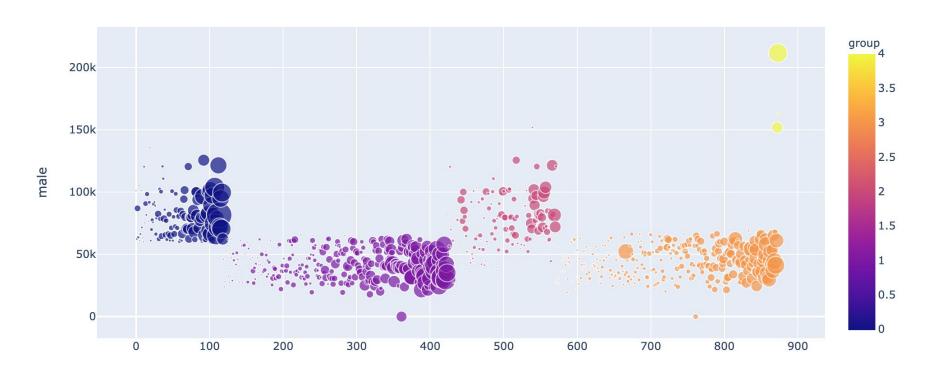
Clusters, visualized

Female Salaries by Cluster



Clusters, visualized

Male Salaries by Cluster



Conclusions

- Women have better chances at marrying a higher income than men.
- Certain occupations (nurses, secretaries, schoolteachers) have better chances and opportunities of marrying "up".
- At high incomes, women care more about marrying someone of similar salary than men.
- Similar incomes are the most important feature of married occupations.
- 3 distinct income classes among combined salary of married couples