Data Storytelling: Adult Income Data

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Adult Incomes Dataset Info

- Dataset containing information about adult incomes, each observation includes:
  - Age - age of recorded
  - Workclass - type of industry
  - Education- education level
  - Occupation - name of occupation
  - Relationship - relationship status
  - Race- race of respondent
  - Gender- gender of respondent
  - Hours-per-week - hours in standard workweek
  - Native-coutry- where was respondent was from
  - Income- greater than 50K annual salary or less than or equal to 50K annual salary
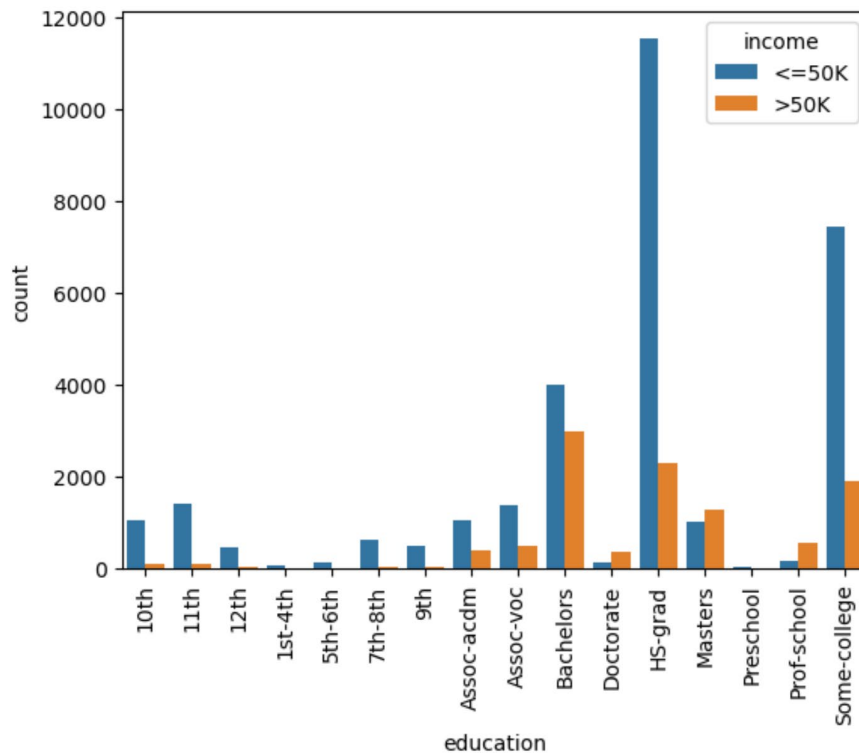
Questions Asked

1.) How does income vary by education level?

2.) How does income vary by number of hours worked?

3.) How does income vary by race?

4.) How does income vary by gender?

5.) How does income vary by age?

6.) How does income vary by marital status for females?

Note: Although the original dataset included observations from multiple countries, majority of the observations were from the United States so the data analyzed in this study was limited to observations from the United States.
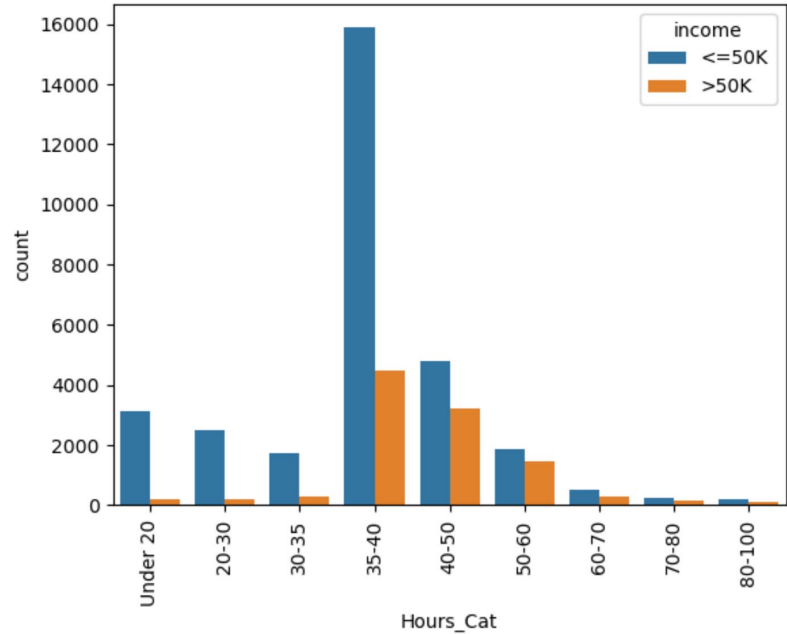
Income by Education Level

- Data set included wide variety of education levels
- Most observations belong to individuals with HS-level, Some-College, Bachelors, and Masters level education
- Individuals with Bachelors level education associated with highest incomes
- Individuals with HS-level/Some-college education associated with lowest incomes
- Other education levels surveyed do not have many observations present so it is difficult to detect trends with certainty
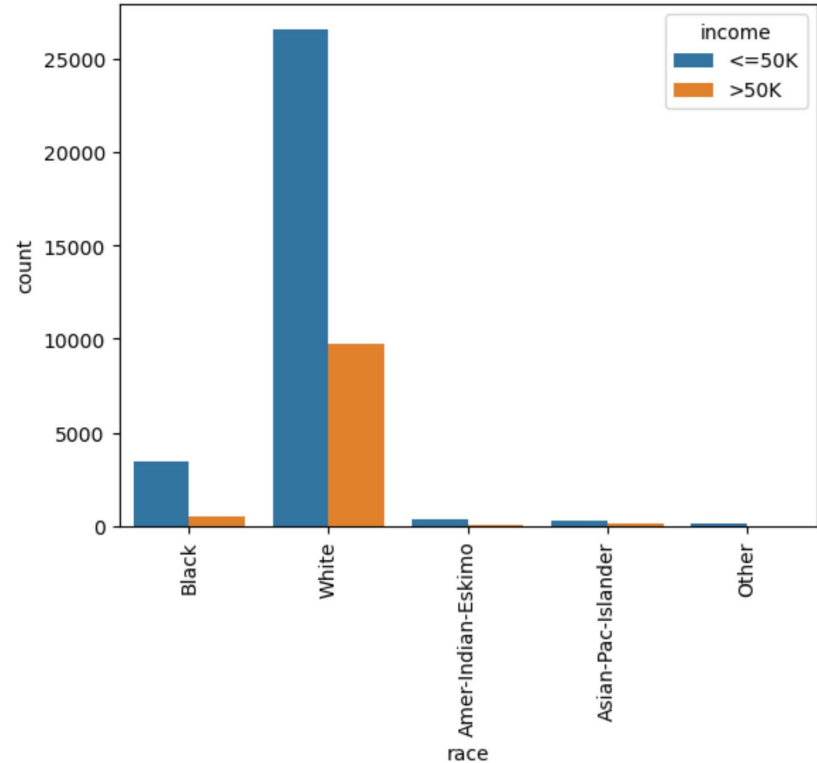
Income by Hours-Worked-Per-Week

- Dataset included discrete observations for hours-per-week worked, these were placed into bins for ease of plotting
- Working 35-40 hr work week is the most common
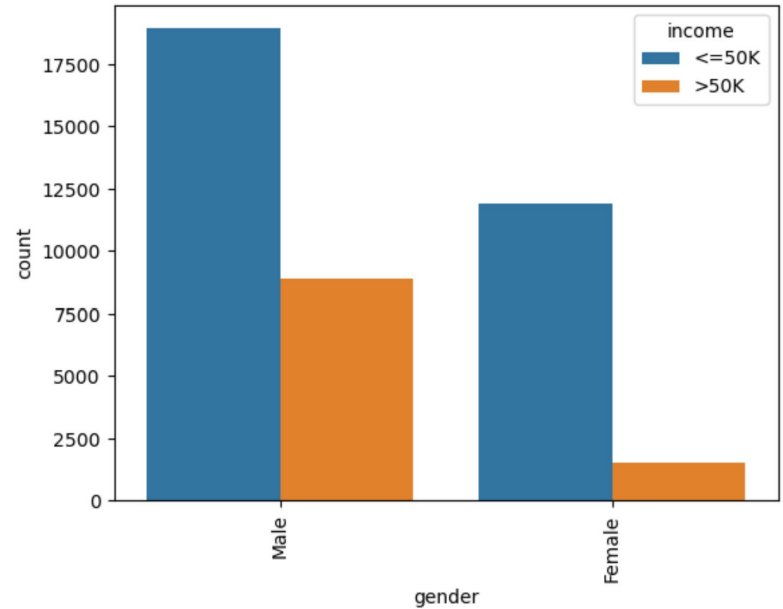- Individuals with highest incomes work at least 35 hr work week

Income by Race

- Dataset does not contain an equal number of samples per race surveyed, need to verify if ratio of each race in samples is representative of US population
- Individuals classifying as race of White associated with most observations & have highest incomes
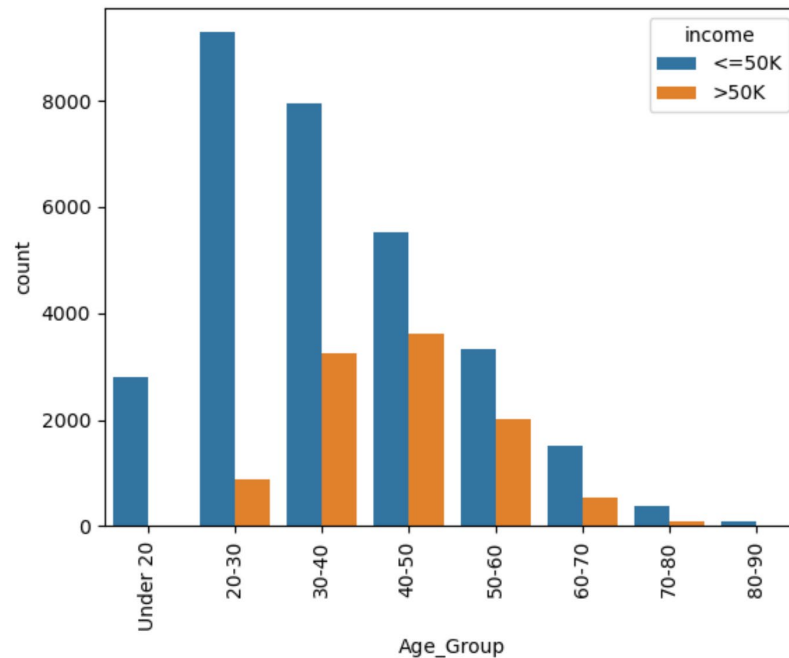
Income by Gender

- Dataset contains majority male observations,
- Ratio of male : female observations in dataset may be indicative of working population in US but this should be verified
- Individuals identifying as male gender are associated with higher incomes
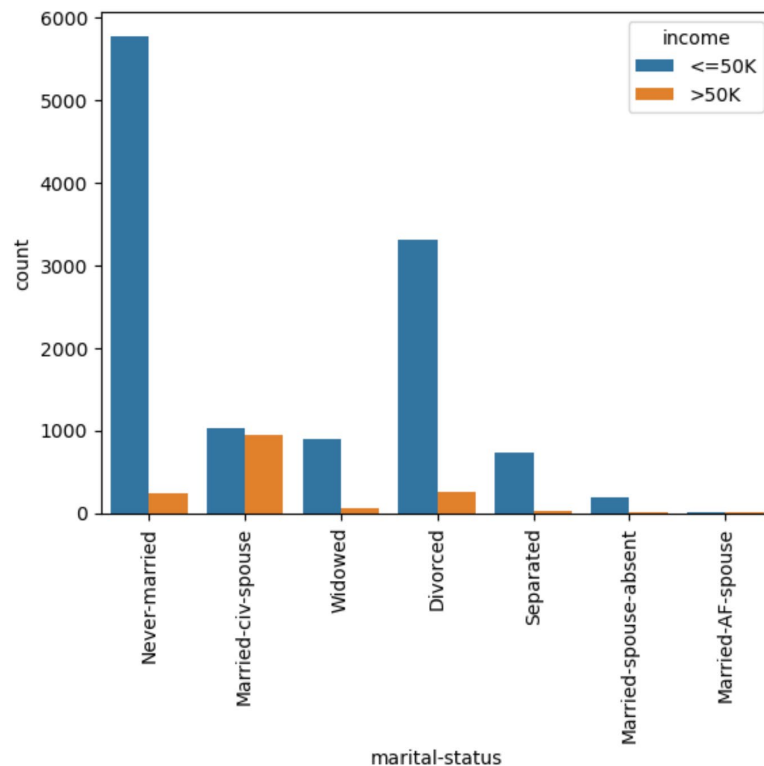
Income by Age

- Dataset included discrete observations for age of each respondent, these were placed into bins for ease of plotting
- Highest incomes were associated with individuals that were further into their careers (30-60 years of age)

Income by Marital Status of Females

- As noted earlier, dataset contained mostly male gender observations
- Interested to see if females that were married (i.e. potentially raising children) were associated with lower incomes
- Lowest income females were never-married or divorced
- Women that are married with children may not be earning an individual income so would not have been included in survey

Summary of Trends

- Higher education levels are associated with higher incomes
- 35-40hr work week is the most common, individuals with highest incomes work at minimum 35 hr work week
- Individuals classifying as race of White associated with most observations & have highest incomes
- Highest incomes were associated with individuals that were further into their careers, ~ 30-60 years of age
- Lowest income females were never-married or divorced