

## **Analyzing the Relationship between Marriage and Education Trends between 1995 and 2015 Description**

For this project, I looked into 4 different types of datasets from the timeline datasets excel file posted on elms which were: Marriage Rate & Median Age at First Marriage (Census Bureau's Marital Status of the Population 15 Years Old and Over, by Sex, Race and Hispanic Origin: 1950 to Present dataset and Census Bureau's Estimated Median Age at First Marriage, by Sex: 1890 to the Present dataset), Educational Attainment (Census Bureau's Percent of People 25 Years and Over Who Have Completed High School or College, by Race, Hispanic Origin and Sex: Selected Years 1940 to 2018 dataset), Income and Poverty (Census Bureau's Median Household Income by State: 1969, 1979, 1989, and 1999 ), and Economic Depressions (Wikipedia's List of recessions in the United States dataset). I chose these datasets to look at since I was aiming to find a negative correlation between marriage rate and educational attainment, specifically for females, in the United States between the years 1995 and 2015. Additionally, if a rise in educational attainment over the years happened to exist, I would use the median household income dataset to check whether increasing educational attainment had a positive impact on median household income over the years. Moreover, I also used the economic depressions dataset to check whether the prevalence of economic recessions during certain years impacted the marriage rate and educational attainment trends of the US population between 1995 and 2015.

From the datasets I looked at, I used the median age for first wedding for the male and female US population, the median household income in 1999 CPI-U-RS adjusted dollars for each state, the percent of the US population that is married by sex and total population, the percent of people 25 years and over in the US who completed college or more by sex and total population, and economic recessions time series. I chose to not use the percent of people 25 years and over in the US who completed high school or more since I wanted to specifically compare the marriage rate to higher educational attainment rates. Additionally, I did not divide the percent of the US population that is married or the percent of people 25 years and over in the US who completed college or more by race since I wanted to limit the scope of my project to focus on sex and the rise in women's educational attainment in the US in addition to its subsequent impact on the marriage rate.

Based on my visualizations, I found that the married population in the US has experienced a steady decline between the years 1995 and 2015 and that the US married male population has experienced the largest decline with a 5.25% decrease in size between 1995 and 2015. Meanwhile, educational attainment amongst the US population has been steadily rising. While all sex-based demographic groups within the US experienced an increase in their educational attainment between 1995 and 2015, the percent of females 25 years and over who completed

college or more in the US experienced the greatest rise with a 9.1% increase over the years. Surprisingly, the percent of females 25 years and over who completed college or more in 2015 was greater than that of males by 0.4% thereby, largely decreasing the education gap between the two sexes that began with a 4.2% difference in 1995. By comparing marriage trends to education attainment trends, a strong negative correlation can be found between the two trends. This correlation shows that an inverse relationship exists between the two variables from 1995 to 2015. This makes sense as more people seem to be putting off marriage for the future in an effort to continue their pursuit of higher education in the present.

Additionally, the prevalence of economic recessions during certain years seem to exacerbate this relationship as fewer marriages occur during economic recessions due to possible job instability amongst partners. Additionally, both sexes experienced a large decline in their respective married US populations in 2010 thereby, causing a particularly significant decrease in the total married US population during that year. This is quite interesting to report as it comes right after the Great Recession between 2007 and 2009. On the other hand, the percent of the US population 25 and over who completed college seems to continue to increase.

Since the percent of females in the US 25 years and over who completed college has increased more between 1995 and 2015 in comparison to the percentage of males in the US 25 years and over who completed college, it is clear that this inverse relationship between marriage and educational attainment trends is more impactful for women in the US. Additionally, as the percent of females in the US 25 years and over who completed college increases, the median age of first wedding for females in the US increases as well thereby suggesting that females are putting off marriage for later in their lives while they continue to pursue higher education in the present. This may also explain why the US married male population experienced the largest decline with a 5.25% decrease in size between 1995 and 2015.

**Tableau Public Link:**

[https://public.tableau.com/views/AnalyzingtheRelationshipbetweenMarriageandEducationTrendsbetween1995and2015/Story1?:display\\_count=y&publish=yes&:origin=viz\\_share\\_link](https://public.tableau.com/views/AnalyzingtheRelationshipbetweenMarriageandEducationTrendsbetween1995and2015/Story1?:display_count=y&publish=yes&:origin=viz_share_link)

## Citations:

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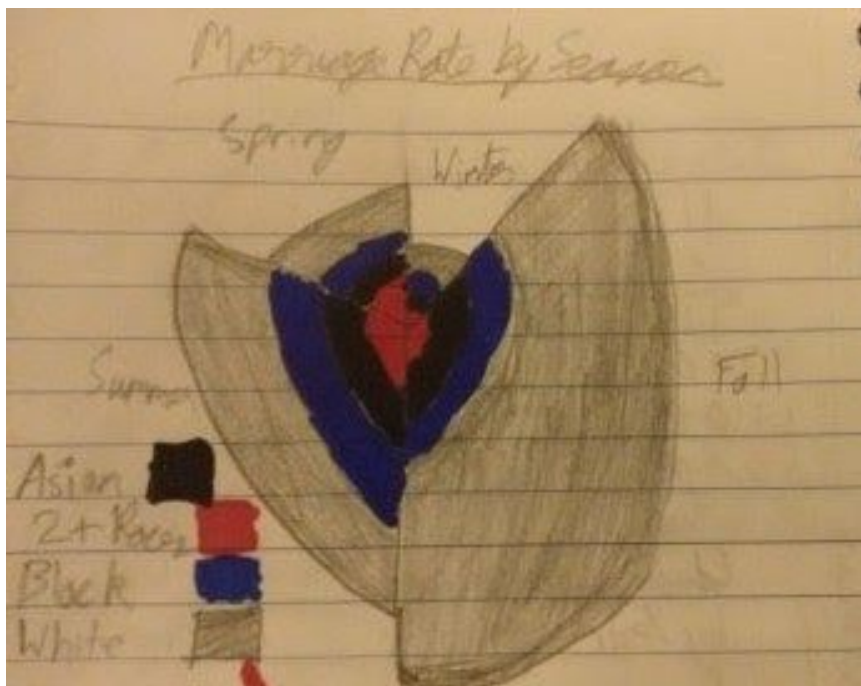
US Census Bureau. “Historical Income Tables: States.” *The United States Census Bureau*, 20 May 2016, <https://www.census.gov/content/census/en/data/tables/time-series/dec/historical-income-states.html>.

US Census Bureau. “CPS Historical Time Series Tables.” *The United States Census Bureau*, 19 Feb. 2019, <https://www.census.gov/data/tables/time-series/demo/educational-attainment/cps-historical-time-series.html>.

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## Early Sketches

- Coxcomb Chart



- Line Graph



- Map Visualization

