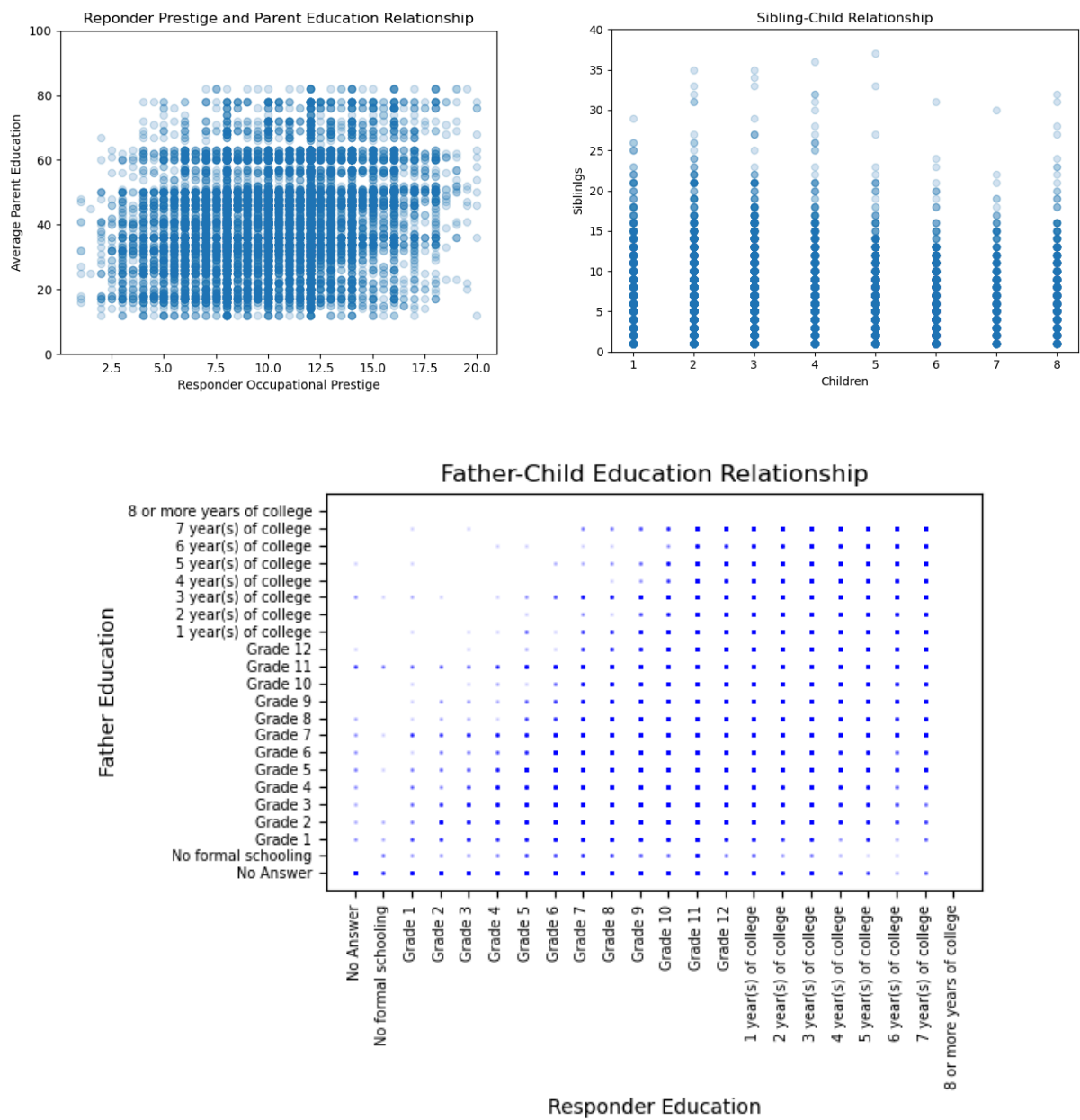GSS

Description

I downloaded a small set of seven variables from The General Social Survey. These variables and their corresponding definitions are: **wrkstat** (work status), **prestige** (occupational prestige score), **educ** (highest year of school completed), **paeduc** (father's highest year of school completed), **maeduc** (mother's highest year of school completed), **childs** (number of children), and **sibs** (number of siblings).
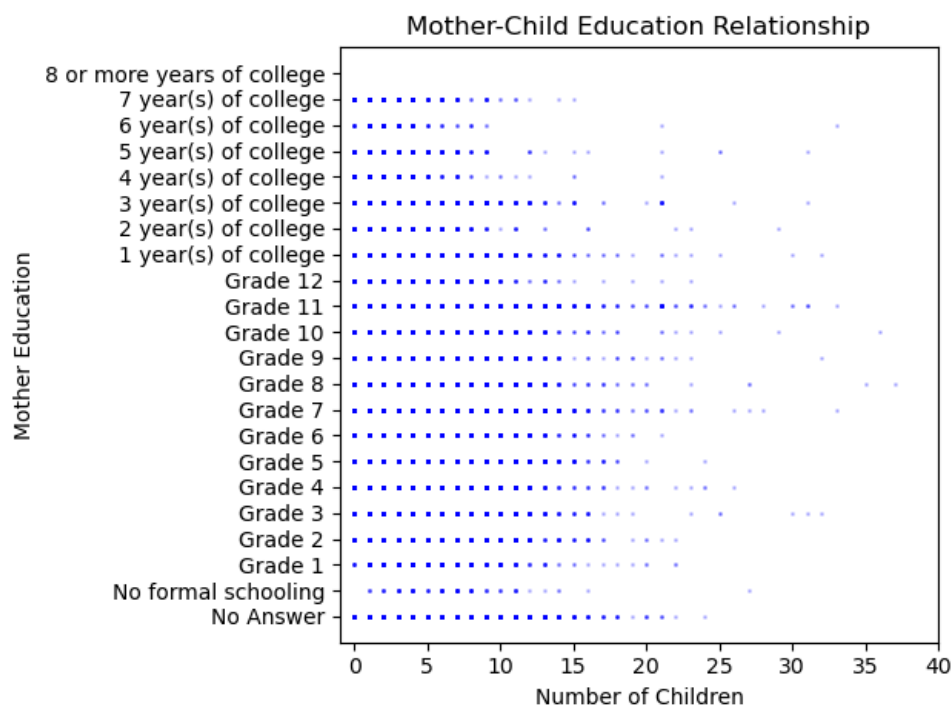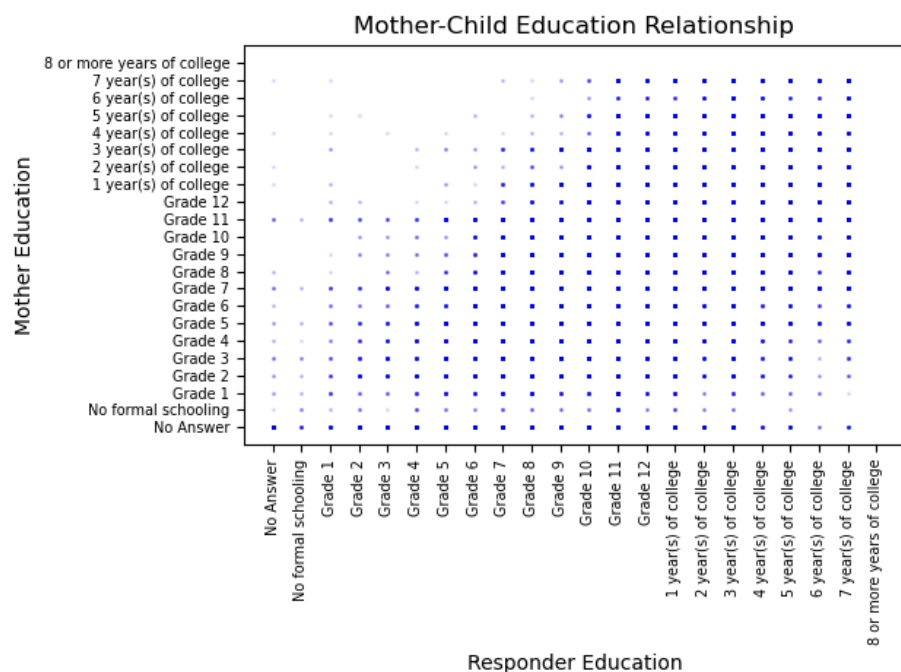
I thought this would be a great collection of variables because we can analyze a number of relationships, as well as relationships that do not directly affect the census responder. For example, I would like to analyze the effect parental education has on their child's education. I'd also like to understand the relationship between children and education, as well as siblings and education. I can understand the relationship between these variables in my own life. I know that my parents' education had an immense impact on my own education. I also know that my two siblings being in college at the same time as me had an effect on the availability of education. I want to see if there is quantitative data to support my current views on the relationship between family and education.
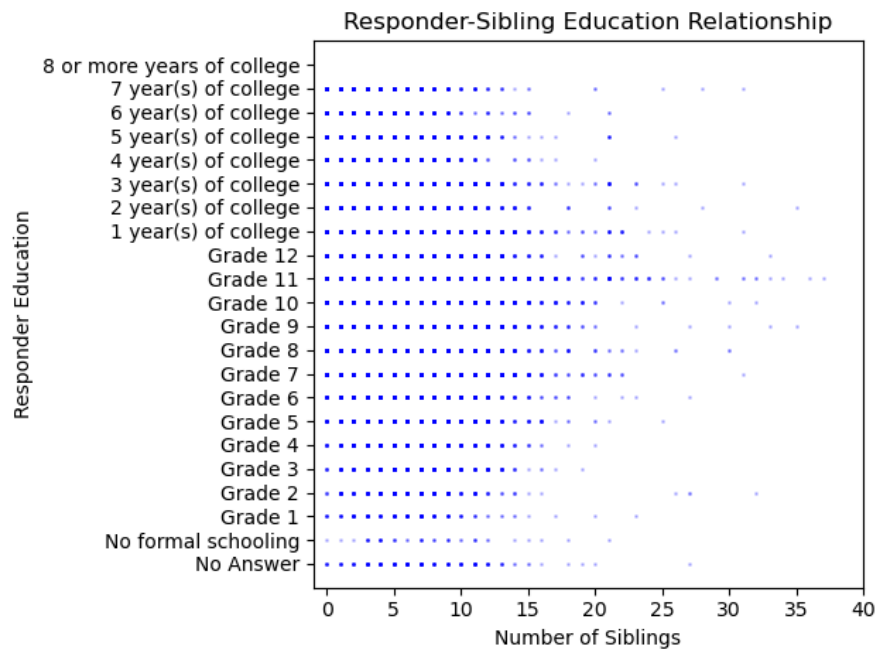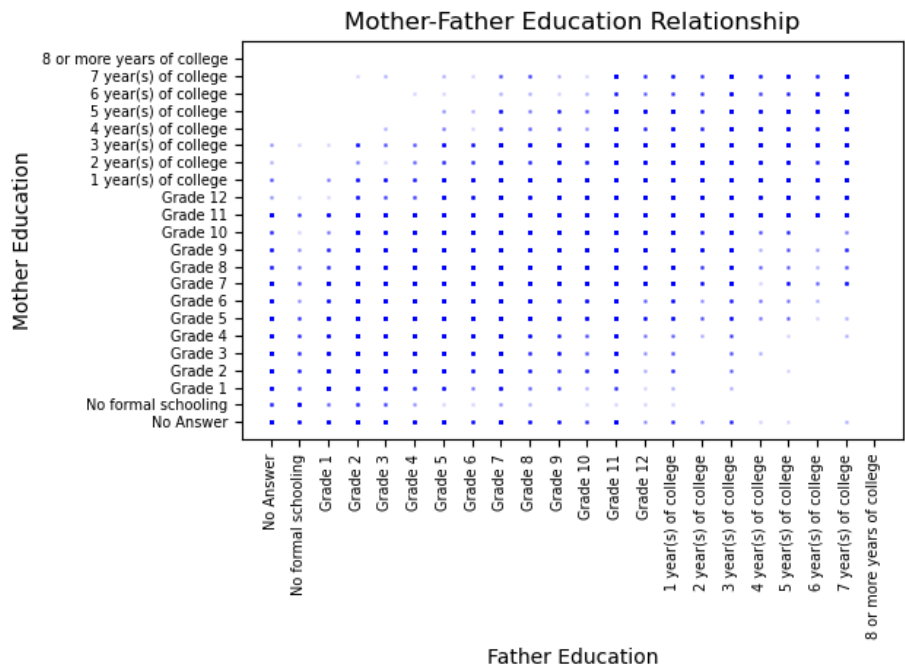
I also want to explore some premonitions I have that are not necessarily based on data. For example, I have a feeling that the number of children a woman has affects her access to education. If a woman has many children, she may have started her family early in her life and did not have access to higher education right after high school. Alternatively, it is difficult for women to be students and mothers simultaneously and the more schooling a woman has, the less time she has in life to have children. Often, childcare falls primarily on mothers. If a woman has

many children, would she ever have time to go back to school? These are questions that I hope to answer using quantitative analysis.

Figures

Mother-Child Education Relationship

Mother Education (y-axis) vs Responder Education (x-axis)

Mother-Child Education Relationship

Mother Education (y-axis) vs Number of Children (x-axis)

Mother-Father Education Relationship

Responder-Sibling Education Relationship

Findings

I was able to find a positive linear relationship between parental education and child education with both paternal and maternal parents, which was expected but still surprising. I expected to find less of a positive correlation between maternal education and child education compared to the the correlation between paternal education and child education. However, I found the correlation to be relatively the same. To explore this, I visualized the relationship between maternal education and paternal education. There, I found a strong positive correlation, meaning that married couples often had similar educational backgrounds.

I also explored the relationship between parental education and responder occupational prestige. I found no obvious correlation between the two, which surprised me. I had expected the same positive trend as in the parent-child education graphs. Also pretty neutral was the relationship between siblings and children. Though it seemed people with many many siblings had a fewer number of children than they had siblings, there did not seem to be any significant trend in the data.

I also explored quantitative data related to my premonition of maternal education, but my results were not very conclusive. It did seem that women who had more than a bachelor's degree had fewer children on average, it was not significant. I should also mention here that there is bias in my assumptions. I assumed all of the responders' siblings were from the same mother, which is definitely not always the case as we can see from extreme outliers.

Overall, I was able to confirm many of my original assumptions, but not to a surprising degree.