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## **Professional Standing: Changes in Income Over Time**

### **Research Question**

Our main area of research is into women's professional standings after having children. More specifically, we want to provide analytically explore these sub-genres:

- What is the probability a woman will return to the same (or higher) professional standing after having children?
- How does a woman's professional standing after having children change over the past few decades? How does this differ across industries?
- How does a man's professional standing compare to a woman's after having children?

### **Background Information**

In the 1970s, the proportion of women with higher education degrees to men with higher education degrees increased until flatlining in the 2010s. Along with this, the proportion of women employed to men employed has steadily increased from the 1970s but started flatlining and even started to slightly decrease since the 2000s.<sup>1</sup> Despite being more educated, women are having a difficult time entering the workforce. This issue is exacerbated when women decide to have children with this idea of the "motherhood penalty"<sup>2</sup> where women in the workforce are discriminated against because of the fact that they are mothers.

Both being women in STEM, this topic is very important to us because it provides insight into how the workplace currently operates around women who choose to have children; or the lack thereof. This analysis will be extremely valuable for any young adult as it can help them determine what industries will be worthwhile according to their life plans and desired income attainment.

### **Dataset Description**

We will be utilizing the data from [IPUMS CPS](https://www.census.gov/ipeds/data/cps.html), which supplies census and survey data on a number of demographics (based on gender, socioeconomic status, veteran status, race, etc.) and different sanctions of life, such as economic development, household structure, food security, and more. We have chosen a dataset that captures the information on both men and women with children, including features such as, but not limited to, income, occupation, and the number of children. The dataset will also have information on men as well, as a comparison measure for certain models. We will use this data to gain insight into women's professional lives before and after having children, then see how this differs from men's professional lives before and after having children.

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<sup>1</sup> <https://www.pnas.org/doi/full/10.1073/pnas.1918891117>

<sup>2</sup> <https://www.jstor.org/stable/10.1086/511799>