

Executive Summary

Question What is the effect of access to universal public preschool on mothers' education outcomes?

Importance Access to affordable childcare has proven positive effects for both children and parents. Though most previous literature on the impact of these programs on mothers has focused on employment outcomes, this study explores whether women use the time freed up by access to public preschool to pursue further education.

Design I use a regression discontinuity design that takes advantage of age eligibility thresholds in universal public preschool programs in Florida and Washington, DC. I compare mothers whose youngest child was just young enough to enroll in public preschool when the program in their state began to mothers whose youngest child was slightly too old to enroll. I use data from the American Community Survey.

Main Findings Mothers in Washington, DC with access to public preschool had approximately 1.4 years more years of education than mothers who did not have access to public preschool. Results for DC fluctuate between years, likely because a small sample size limited the quality of my data. I find little to no effect in Florida.

Results I include results for educational attainment (the total number of years in school) and the rate of mothers with college degrees. My models cover 2, 3, 4, and 5 years after the preschool programs were implemented.

- ➔ **Washington, DC** Educational attainment was around 1.4 years higher for women with age-eligible children 2 and 4 years after the start of the preschool program (statistically significant at $p = 0.1$ level). Results for 3 and 5 years after show a small opposite effect, though there is no visual discontinuity and they are not statistically significant. The effect on the rate of mothers with college degrees was also mixed. 2 years after implementation, rates for mothers with college degrees were 9.5% higher for women with age-eligible children. However, the trend flips 5 years after implementation where the rate of college degrees was 20% higher for mothers with age-ineligible children. This may be due to outliers in the data.
- ➔ **Florida** Florida's results generally show little to no effect. 5 years after the start of the preschool program, women with age-eligible children had about 0.28 more years of education than women with age-ineligible children (statistically significant at $p = 0.1$ level). Impact on the rate of mothers with college degrees is similar: any changes are close to zero and trend negative. The biggest impact is 5 years after program implementation, when the rate of mothers with college degrees was approximately 4% higher for mothers whose child was eligible for public preschool compared to women whose child was slightly too old. This result is also statistically significant at the $p = 0.1$ level.

Conclusions and Relevance Due to limitations in the regression discontinuity design, these treatment effects are only generalizable to the group of women whose youngest child was slightly below or above the age eligibility threshold when DC or Florida implemented their preschool programs. Additionally, a small sample size for DC limits any strong interpretations of results. However, these results suggest that access to public preschool may have a positive effect on mothers' education. Differences between effects in DC and Florida potentially occur because of differences in sample sizes, because DC offers two years of preschool and Florida only offers one, or because mothers in DC tend to be richer and have a higher baseline education. Future research should investigate characteristics of preschool programs that have higher impacts on maternal socio-economic outcomes.