From Classrooms to Caregivers: Evaluating Head Start's Influence on Maternal Wellbeing

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Head Start

Head Start: A federally funded program aimed to increase school preparedness for children from low-income backgrounds

- Focus on learning skills, social skills, and health

Eligibility criteria:

- age (3 to 5 years old)
- family size and structure
- family income (falling under state poverty lines)

National Head Start Day, 1965

Research Question and Motivation

Research Question: What effect did Head Start have on maternal physical and emotional wellbeing?

Proposed Mechanism:

- Head Start relieves childcare costs (monetary and time) for mothers
  - Foregone time surrounding caretaking can be invested into increasing maternal wellbeing
  - Foregone childcare costs can be allocated to other investments that improve family wellbeing

Implications:

- Better health and wellbeing are generally valuable for quality of life
- Positive spillover effects for mothers' labor market outcomes

Literature Review and Contributions

1. Analyzing effects of child care programs on maternal outcomes
   - Current research primarily examines Head Start's and other childcare programs' influence on maternal labor supply (Baker et al. 2008, Pihl 2022, Wrohlich 2004)
   - **Main Contribution:** No research analyzes Head Start's influence on maternal physical and mental wellbeing.
2. Examining long-run effects of Head Start
   - Growing literature studying long-term effects of Head Start on adults previously in the program (Currie and Thomas 1995, Deming 2009, Garces et al. 2002)
   - **Main Contribution:** Utilizing a longer period of time to observe mothers rather than children
3. Employing a novel strategy to identify unknown discontinuities

Main Data

National Longitudinal Survey of Youth (NLSY79)

- Nationally-representative panel dataset starting in 1979 observing children aged 14 through 21 as of 1978
- Merging in mother variables with Carneiro and Ginja (2014)
- **Data Limitation:** restricted access to geo-coded data

Maternal Outcomes of Interest:

- depression score
- physical and mental component score
- self-reported health status
- anxiety score
- hours of sleep at night
- hours of exercise

Identification Strategy

Reduced-form model:

$$Y_i = \phi + \gamma E_i + f(Z_i, X_i) + u_i \tag{1}$$

$$E_i = 1[Z_i \leq Z^*(X_i)]$$

- Y_i: outcomes of interest for mother i
- E_i: indicator for Head Start eligibility for mother i's child
- Z_i: mother i's family income
- X_i: indicators for other eligibility determinants for mother i's child (e.g. state, year, family size, family structure)

Interpretation: intent-to-treat, not causal

Identification Strategy (cont.)

Eligibility is not a hard cut-off - **fuzzy regression discontinuity design**

$$Y_i = \alpha + \beta HS_i + g(Z_i, X_i) + \epsilon_i \tag{2}$$

$$HS_i = 1[\eta + \tau E_i + h(Z_i, X_i) + \upsilon_i > 0] \tag{3}$$

- HS_i: indicator if mother i's child participated in Head Start

Main Concern: inaccessibility to geo-coded data means identification of discontinuities is infeasible

- **Solution:** Employ strategies from Porter and Yu (2015)

Next Steps

1. Finish merging maternal health variables into dataset
2. Summary statistics
3. Run the regression for the reduced-form model
4. Seek other potential mechanisms for maternal health

Thank You!

Any questions?

Please email any additional comments or questions to
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