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**Background**

Child care subsidies help offset the costs of child care for low-income working parents, for over 1 million children under age 6.

Recent studies find a negative effect of child care subsidy use in preschool on children’s school readiness. However, the mechanisms underlying the observed negative effect of subsidies on children are poorly understood.

**Research Questions for Program of Research**

1. What is the relationship between child care subsidy use during preschool and children’s cognitive skills at kindergarten entry?
2. What is the relationship between child care subsidy use and child care quality?
3. What is the relationship between child care subsidy use and the home environment?
4. To what extent do child care quality and the home environment mediate the relationship between child care subsidy use during preschool and children’s cognitive skills at kindergarten entry?

**Method**

**Data:** Early Childhood Longitudinal Study – Birth cohort: a nationally representative longitudinal survey of child characteristics, experiences, and development from birth to school entry

**Counterfactual:** Child care subsidy recipients are contrasted with all non-recipients, including children who do and do not get non-parental care (since child care subsidy use may induce families to use child care who otherwise would not)

**Analysis Methods:** RQ 1: Value-added models and propensity score analysis; RQ 2 & 3: OLS and logistic regression (may use propensity scores or IV approach); RQ 4: Structural equation modeling (may use cluster analysis for mediators)

**Theoretical Model**

![Theoretical Model Diagram]

**Results, Child Development**

**Effect of Child Care Subsidy Receipt on Kindergarten Reading and Math Scores, Controlling for Lagged Test Scores and Child and Family Characteristics (Hawkinson, Griffen, Dong, & Maynard)²**

<table>
<thead>
<tr>
<th>Variables</th>
<th>K Reading</th>
<th>K Math</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child care subsidy receipt (vs. no subsidy, with or without child care)</td>
<td>-1.67 *</td>
<td>.86</td>
</tr>
<tr>
<td>Preschool scores in domain</td>
<td>0.71 ***</td>
<td>.03</td>
</tr>
<tr>
<td>N = 5,750, R² = .47 for reading, N = 5,705, R² = .53 for math</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Results, Parenting**

**Regression of Observed Parenting Behavior in Five Domains on Child Care Subsidy Receipt and Control Variables**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Emotional Support</th>
<th>Cognitive Development</th>
<th>Intrusiveness</th>
<th>Negative Regard</th>
<th>Detachment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimate</td>
<td>p</td>
<td>Estimate</td>
<td>p</td>
<td>Estimate</td>
<td>p</td>
</tr>
<tr>
<td>Child care subsidy receipt</td>
<td>-0.17 .022</td>
<td>-0.30 .151</td>
<td>-0.08 .418</td>
<td>-0.12 .066</td>
<td>-0.05 .527</td>
</tr>
</tbody>
</table>

N = 5,100

* p < .05   ** p < .01   *** p < .005

Note: Both models include the following covariates measured at age 2 unless otherwise indicated: Bayley’s mental scores of general development, child and family characteristics, child care information, child breathing rate and quality of child care. All analysis models include two appraisals: child and mother’s age at the child’s birth, and home language.

**Next Steps for Dissertation**

Further investigation of potential mediators:
- Parenting behaviors and home environment
- Child care utilization, characteristics, and quality
- Modeling theoretical model in SEM framework

**Ongoing Challenges**

- Ensuring that selection bias is accounted for in analysis methods
- Considering using instrumental variables approach, with state policy features as instrument
- Handling missing data
- May use multiple imputation, concerns about MAR assumption
- Using survey weights with complex analysis methods