

Child Care Subsidies and Child Well-Being

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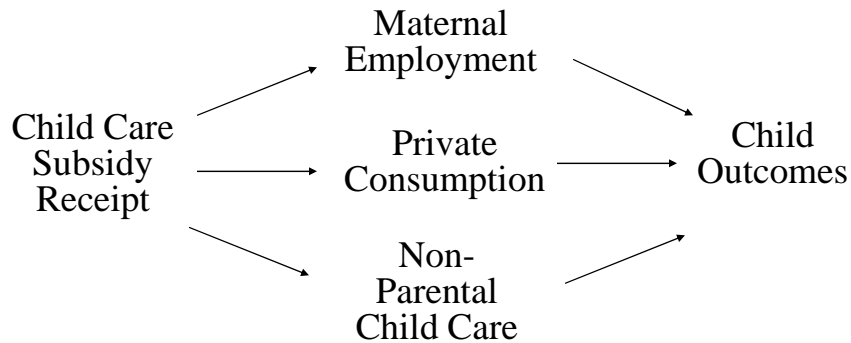
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Why Should We be Concerned About the Impact of Subsidies on Child Well-Being?

Program	Program Participants	Total Expenditures
Child Care and Development Fund	1.7 million (per month, 2005)	\$9.4 billion (2005)
Head Start	906,993 (2005)	\$6.8 billion (2005)
Early Head Start	62,000 (2005)	\$684 million (2005)
Pre-Kindergarten	801,902 (2004-2005 school year)	\$2.8 billion (2004-2005 school year)

Key Channels Through Which Child Care Subsidies Influence Child Outcomes



Unpacking the Channels of a Subsidy Effect

Channel	Subsidy's Effect on Channel	Channel's Effect on Child Development
Maternal Employment		
• Employment	+	-
• Standard work schedule	+	+
• Mother-child interactions	?/-	+
Non-Parental Child Care		
• Any participation	+	?
• High-quality	-	+
• Continuity	?/-	neutral
• Mother-child interactions	?/-	+
Consumption/Disposable \$?	+

Data and Measures for Two Studies: Child Development (#1) and Obesity (#2)

- Early Childhood Longitudinal Study, Kindergarten cohort
 - Use fall and spring of kindergarten waves of data collection
 - Focus on children living with an unmarried mother
 - Exclude children in Head Start
 - Study #1: N = 2,699 to 2,795
 - Study #2: N = 3,113
- Child Outcome Measures
 - Study #1: reading/math test scores, internalizing/externalizing behaviors, approaches to learning, self-control, interpersonal skills, fine/gross motor skills
 - Study #2: BMI, overweight, obese
- Measure of Subsidy Receipt
 - Parent stated that “social service agency or welfare office” helped pay for non-parental child care in year prior to kindergarten

Empirical Analysis

- Child care subsidies are not randomly assigned to low-income families
- Researchers must therefore statistically compensate for differences between subsidy recipients and non-recipients
- We estimate regression models of the following form:

Child outcome = fn(subsidy receipt, child and family characteristics, neighborhood attributes, state economic and policy environment)

Child Development Study (#1): Comparison of Subsidy Recipients and Non-Recipients

Child Outcome	Recipients	Non-Recipients
Reading Test Score	46.79	47.67*
Math Test Score	47.14	47.94
Internalizing Behavior	0.092	0.122
Externalizing Behavior	1.848	-0.139*
Approaches to Learning	-0.864	0.162*
Self-Control	-1.556	0.276*
Interpersonal Skills	-1.340	0.251*
Fine Motor Skills	-0.155	-0.108
Gross Motor Skills	-0.850	0.068*

* Difference is statistically significant at the 10% level

Child Development Study (#1): Association Between Subsidy Receipt and Child Well-Being

Child Outcome	OLS	2-SLS
Reading Test Score	0.653	-3.044*
Math Test Score	0.722	-2.565*
Internalizing Behavior	-0.500	0.981
Externalizing Behavior	1.254*	0.736
Approaches to Learning	-0.007	-3.283*
Self-Control	-1.118*	-3.050*
Interpersonal Skills	-0.632	-2.373
Fine Motor Skills	0.991*	-0.074
Gross Motor Skills	-0.347	-1.850

* Statistically significant at the 10% level

Child Obesity Study (#2): Comparison of Subsidy Recipients and Non-Recipients

Child Outcome	Recipients	Non-Recipients
<i>All Children</i>		
Overweight (%)	0.312	0.289
Obese (%)	0.137	0.133
<i>Children in Parent Care</i>		
Overweight (%)	--	0.241
Obese (%)	--	0.099
<i>Children in Center Care</i>		
Overweight (%)	0.312	0.342
Obese (%)	0.136	0.141

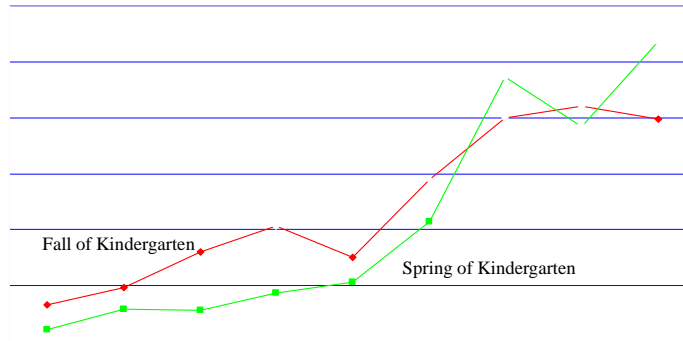
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Child Obesity Study (#2): Association Between Subsidy Receipt and Child Well-Being

	BMI	Overweight	Obese
Include subsidy receipt & family characteristics	0.017*	0.052*	0.031
Control for maternal work	0.016*	0.047*	0.028
Control for child care participation	0.008	0.029	0.017
Control for maternal work & child care participation	0.007	0.028	0.016

* Statistically significant at the 10% level

Child Obesity Study (#2): Impact of Subsidy Receipt for Children at Different BMI Deciles



What Accounts for the Negative Subsidy Effects?

- Several CCDF design features have implications for the quality of child care purchased with subsidies
 - Principle of “parental choice”
 - Conditioning eligibility on employment and income
 - Reliance on subsidized children as a source of revenue
 - Reimbursement rates
- Can parents detect high-quality care, and do they want it?
- The role of maternal employment

Where Do We Go From Here?

- Focus on methods that establish causality (e.g., natural experiments)
- Settle first-order question of whether subsidized children attend higher-quality care
- Get inside the “black box” of the implications of subsidy receipt for child well-being
- Extend outcomes to parental well-being and parent-child relationships
- Expand research focus to school-age children

What Accounts for the Negative Subsidy Effects?

Characteristic (%)	Recipients	Non-Recipients
Nonparental Care < Age 1	0.459	0.431
Nonparental Care Age 1	0.176	0.112***
Nonparental Care Age 2	0.108	0.103
Nonparental Care Age 3	0.149	0.141
5+ Days/Wk in Care	0.823	0.751***
1-20 Hours/Wk in Care	0.296	0.394***
21-39 Hours/Wk in Care	0.285	0.257
40+ Hours/Wk in Care	0.417	0.347***
Multiple Arrangements	0.567	0.408***

Overview of the Child Care and Development Fund (CCDF)

- Created in 1996, the CCDF consolidated four preexisting child care assistance programs
- Eligibility is determined along three dimensions:
 - Subsidized child must be under age 13
 - Parents must engage in a state-defined work activity
 - Family income must be below threshold
- “Equal access” to high-quality providers is a key goal
- States are given substantial flexibility in administration

Descriptive Comparison of Subsidy Recipients and Non-Recipients

Variable (%)	Recipients	Non-Recipients
African American	0.421	0.362**
Low Birth Weight	0.058	0.074
Disabled	0.191	0.154*
Parent Child Care	0.000	0.172***
Center Child Care	0.413	0.120***
Early Maternal Work	0.905	0.840***
SES: 1 st Quintile	0.304	0.302
SES: 2 nd Quintile	0.319	0.246***
SES: 3 rd Quintile	0.206	0.211
SES: 4 th Quintile	0.122	0.131
SES: 5 th Quintile	0.050	0.109***