

Early Predictors of Adolescent Childbearing: Evidence from the Chicago Longitudinal Study

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Research Questions

- A. Is there an association between participation in the Chicago Child-Parent Center Program and a later reduction or delay in teenage childbearing?
- B. What family background characteristics are associated with adolescent childbearing?

Background & Significance

■ Research

- Early childbearing associated with various risk factors for both mother and child
- Most research has been cross-sectional
- Few studies examine the effects of early childhood programs on teen pregnancy/parenthood

The Chicago Longitudinal Study

- Ongoing panel study of 1,539 (768 female) low-income youth, born in 1980.
- Evaluates Child-Parent Center Program
- Study sample of 638 females (83.1% of the original sample)

Strengths of the Study

- Longitudinal data
- Multiple data sources
- Large, publicly-funded program
- Effects of individual and family factors.

Selected Attributes of Study and Attrition Groups

Background Characteristics	Total N	Study Group (n=638)	Attrition Group (n=130)	P Value
Any Preschool	638	68.0	59.2	.05*
Any Follow On	638	57.0	49.0	.10
Race/Ethnicity (Black=1)	638	95.3	86.9	.00**
Risk Index, Age 8	638	2.66	2.14	.00**
Any free lunch (8)	564	89.4	89.2	.96
Single-parent family (8)	630	56.5	64.8	.09*
Parent not employed (8)	591	57.2	52.2	.44
Parent not a H.S. graduate (8)	635	41.4	45.5	.40
Four or more children (8)	618	37.7	29.6	.10
Mother's Age < 20	609	33.8	35.8	.67
AFDC Receipt, Age 8-9	625	64.3	32.7	.00**
Child Maltreatment, Age 0-3	638	1.7	4.6	.04**

**p < .05 *p < .10

Selected Attributes of Preschool and Comparison Groups

Background Characteristics	Preschool Group (n=434)	Comparison Group (n=204)	P Value
Race/Ethnicity (Black=1)	94.7	96.6	.30
N. of risks, Age 8	2.61	2.75	.20
Any free lunch (8)	89.2	89.8	.83
Single-parent family (8)	55.6	58.5	.49
Parent not employed (8)	60.0	51.1	.04**
Parent not a H.S. graduate (8)	39.3	46.0	.11
Four or more children (8)	32.5	48.5	.00**
Mother's Age < 20	34.6	32.1	.55
AFDC Receipt, Age 8-9	65.7	61.3	.28
Child Maltreatment, Age 0-3	1.4	2.5	.33

** p < .05

Measures

•Outcome Measures

Domain	Measure	Source
•Teen Parent Status (<Age 20; <Age 18)	•Dichotomous measures of teen parenthood	•Adult Survey (age 23)
•Age at First Birth	•Continuous measure of mother's age at birth	•Public Aid Files
		•School Records of Teen Parenthood

•Explanatory Measures

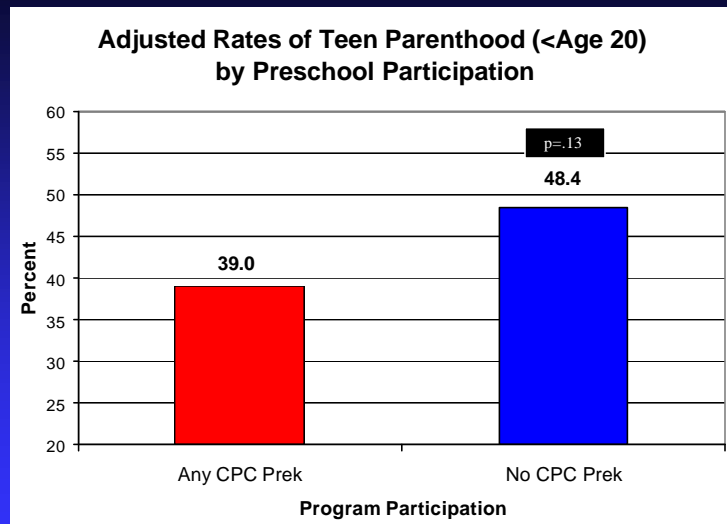
CPC Preschool and Follow-on Program	•Any Preschool •Any Follow-on •Extended Attendance (0, 1-3 yrs., 4-6 yrs.)	Program Records
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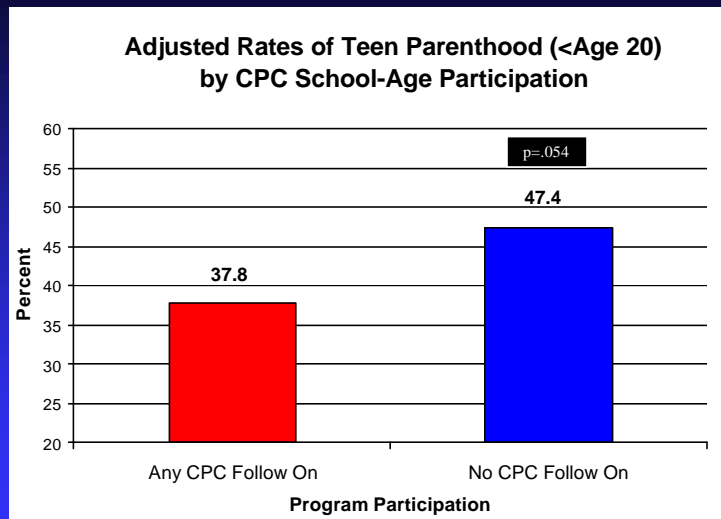
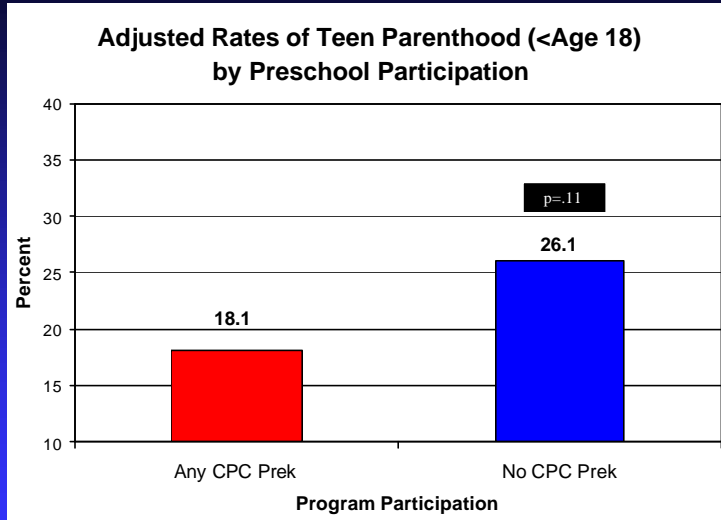
•Covariates: Race/Ethnicity; Risk Index (age 8); Mother's age < 20; Child maltreatment (age 0-3); AFDC receipt (age 8-9); CPC site attendance

Methods

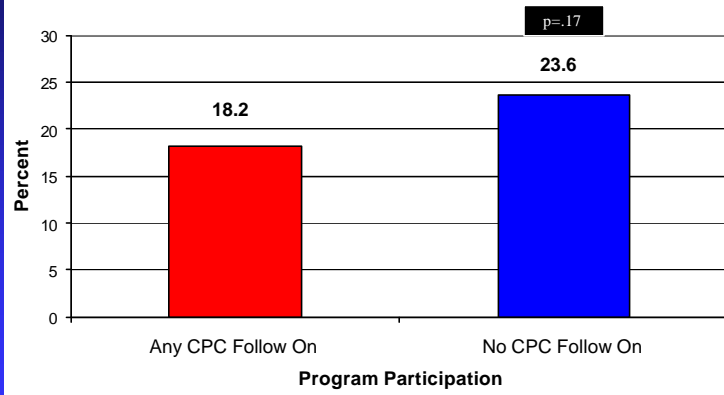
■ Main effects

- ◆ Dichotomous outcomes using probit regression analysis where coefficients are transformed using marginal effects controlling for covariates.
- ◆ Continuous outcome (age of first birth) using linear regression analysis where coefficients represent change after controlling for covariates.

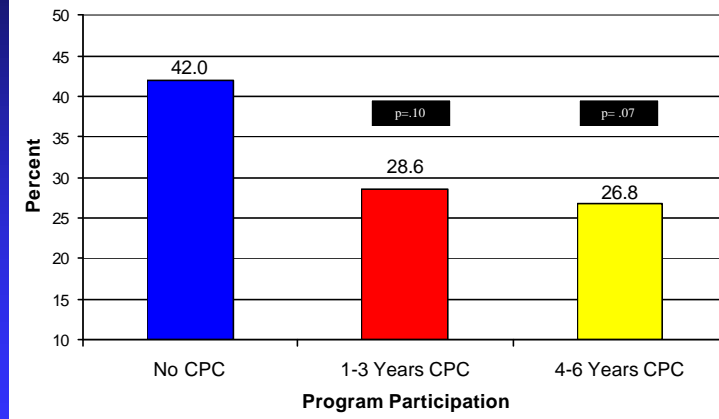




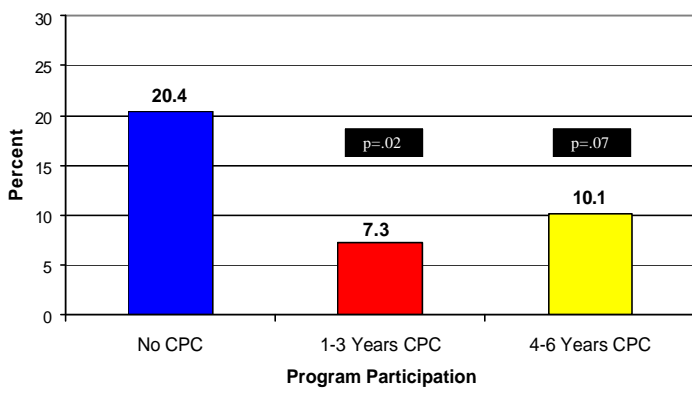
Adjusted Rates of Teen Parenthood (<Age 18) by School-Age Participation



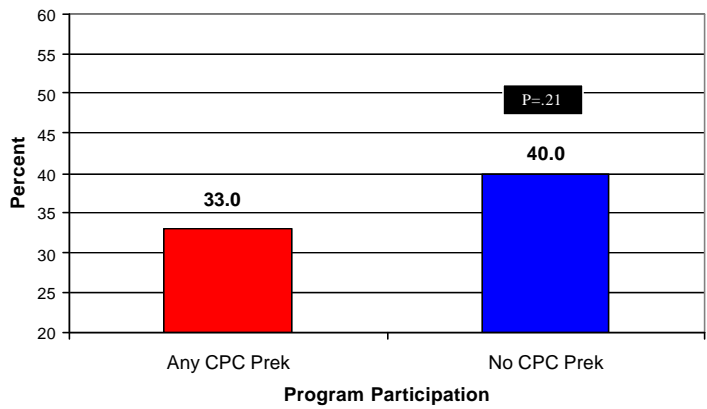
Adjusted Rates of Teen Parenthood (<Age 20) by Extended CPC Participation



Adjusted Rates of Teen Parenthood (<Age18) by Extended CPC Participation



Adjusted Rates of Teen Parenthood (<Age 20) by Preschool Participation N=745



*Unadjusted Rates of Teen Parenthood (<Age 20)
by Select Background Characteristics*

Factor	Total N	Yes %	No %	P Value
Any Preschool	638	40.1	47.5	.08*
Any Follow On	638	39.0	47.1	.04**
African American	638	43.1	30.0	.16
Any Free Lunch (8)	564	44.2	40.0	.53
Single-Parent Family (8)	630	42.7	42.0	.86
Parent Not H.S. Graduate (8)	635	46.8	39.2	.06*
Parent Not Employed (8)	593	45.9	39.1	.10
Four or More Children (8)	618	48.1	39.7	.04**
Mother's Age < 20	609	44.7	40.9	.38
AFDC Receipt, Age 8-9	609	47.7	41.3	.22
Child Maltreatment, Age 0-3	638	45.5	42.4	.84

** p < .05 *p < .10

*Marginal Effects for Program Participation
and Select Characteristics*

Factor	Teen Parent <20	Teen Parent <18
Any Preschool	-9.44	-8.03
Any Follow-On	-9.56*	-5.41
African American	20.70	17.32
Composite Risk (8)	1.17**	2.37
Any Free Lunch (8)	-1.24	-7.33
Single-Parent family (8)	-0.16	-2.22
Parent Not H.S. Graduate (8)	4.89	9.61**
Parent Not Employed (8)	6.15	0.44
Four or More Children (8)	7.41*	1.90
Mother's Age < 20	1.13	1.76
AFDC Receipt, Age 8-9	0.29	8.66**
Child Maltreatment, Age 0-3	-1.98	1.61

** p < .05 * p < .10

Study Findings

- Limited association between preschool, school-age, and extended program participation and reduced parenthood
- No evidence of delayed childbearing
- Cumulative risk index and some individual/family indicators appear to be associated with teen parent status

Limitations

- Results limited to low-income, urban samples
- Differences between sample and attrition group on background characteristics
- Many potential risk and protective factors unaccounted

Implications

- Statistical vs. Practical Significance
- Timing and Duration of Participation
- Model Specification

Acknowledgements

This research is supported by grants from the National Institute of Child Health and Human Development (No. R01HD34294).

We would like to thank the Chapin Hall Center for Children, the Chicago Public Schools, and the study participants for their contributions to this study.

Additional thanks to Michael Niles, Suh-Ruu Oh, and Dylan Robertson for their continued assistance.