

The Child-Parent Center Education Program and Economic Well-Being in Midlife

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Background

Evidence from studies indicates that public early childhood intervention can improve academic performance and then lead to better developmental outcomes in adulthood.

However, few studies have investigated impacts on economic well-being. Of the few studies assessing economic well-being, findings are inconsistent.

Findings are also inconsistent by gender, and differences by child, family, and neighborhood characteristics need to be further assessed.

Research Questions

- What are the effects of the CPC program on economic well-being?
- Do the effects differ by subgroups?
- Does the Five-Hypothesis Model (5HM) account for the program effects?

Method



Study Sample

- 1,218 youth from the Chicago Longitudinal Study (CLS) who had data available from Illinois Department of Employment Security (IDES) (2015-2019), midlife survey (2015-2017), had known educational attainment by 2017 or crime history between 2015-2018.

Participants deceased by 2018 were excluded.

- Mean age in August 2017 was 37.3
(ranges 36.2-38.7)

Data sources of income

- Illinois Department of Employment Security
(IDES)
- Midlife survey

Age 37 Income Measures

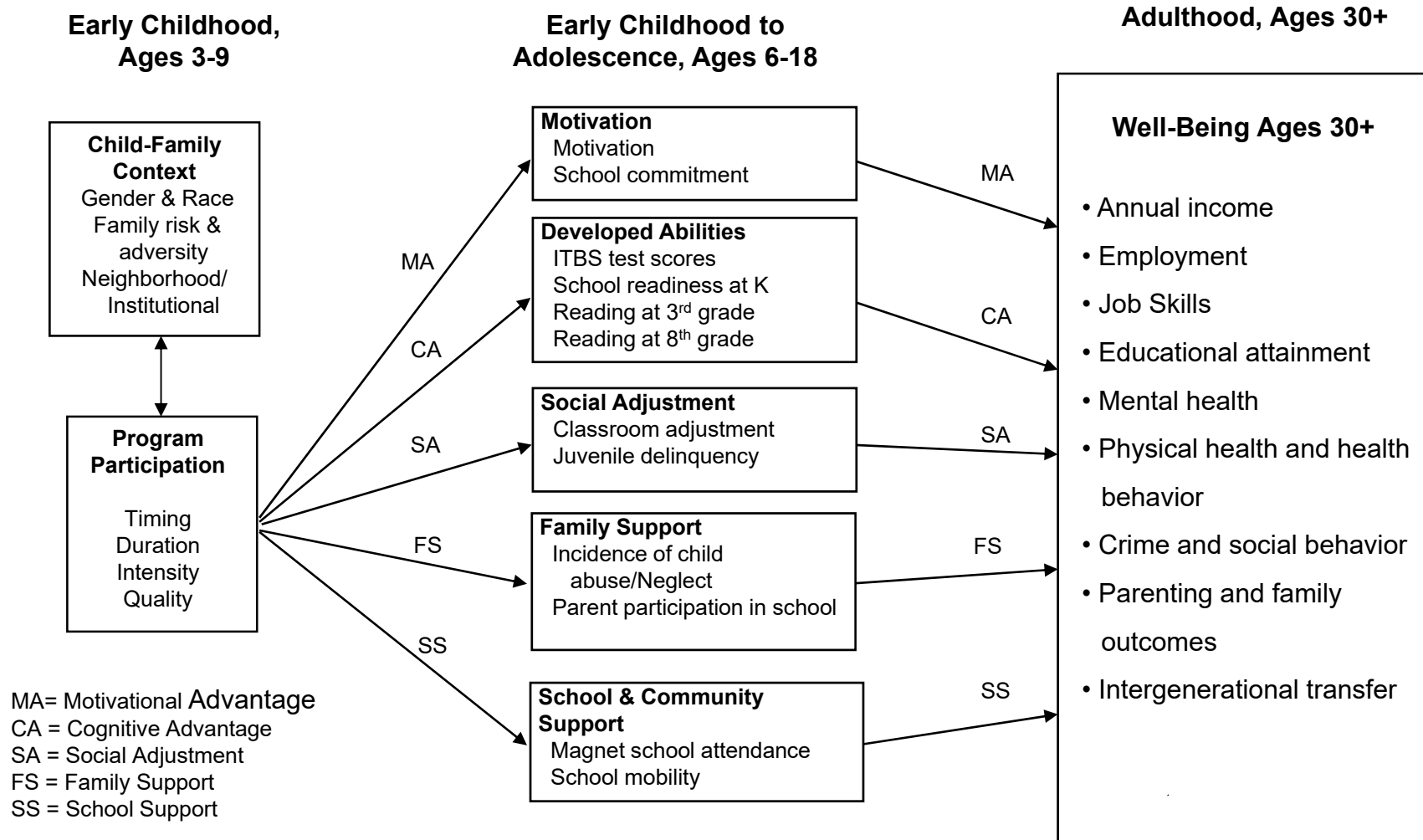
- **Average annual income in 2017\$ (M=\$28,300, SD=\$21,777)**
- **Average annual income \$38,873 or higher, % (M=.27, SD=.45)**

Median wage of all occupations in IL in 2017

Program variables and Covariates

Variables	Measures
CPC Program	
CPC Preschool participation	1=Yes, 0 =No
CPC Follow-on participation	1=Yes, 0 =No
CPC P-3 participation (Extended)	1=Yes, 0 =No
Sociodemographic Factors	
Black	1=Black, 0 = Others
Female	1=Female. 0=Male
Free Lunch eligibility at child's age 3	1=Yes, 0 =No
Mother not completed HS at child's age 3	1=Yes, not completed HS
Single parent status at child's age 3	1=Yes, 0 =No
If had more than 4 children in household at child's age 3	1=Yes, 0 =No
TANF or AFDC participation by child's age 3	1 = Yes, 0 = No
Mother unemployed by child's age 3	1 = Yes, 0 = No
If had teen parents (< 18 years)	1 = Yes, 0 = No
Any child welfare history by age 3	1 = Yes, 0 = No
If missing from any of the family risk indicators	1 = Yes, 0 = No

Five-Hypothesis Model Paths to Adult Well-being



Data Analysis

- Regression
 - Covariates
- Subgroups
 - Analyses were conducted separately by subgroups
 - Gender and mother's high school completion by age 3
- Mediations of the main effects
 - Mediators of the 5 hypotheses were entered into the model separately
- Used Inverse probability weighting (IPW) to adjust for attrition and selection bias in all analyses

Results



Adjusted Rates/Means by Program Groups

	Preschool Groups		P-3 Groups	
	Interv	Comp	4-6 years	Less than 4 years
Age 37 income outcomes				
Average annual income in 2017 \$	\$29,319*	\$25,698	\$30,860*	\$26,558
Average annual income \$38,873 or higher % (Medium wage)	29.2**	20.2	32.1***	22.9

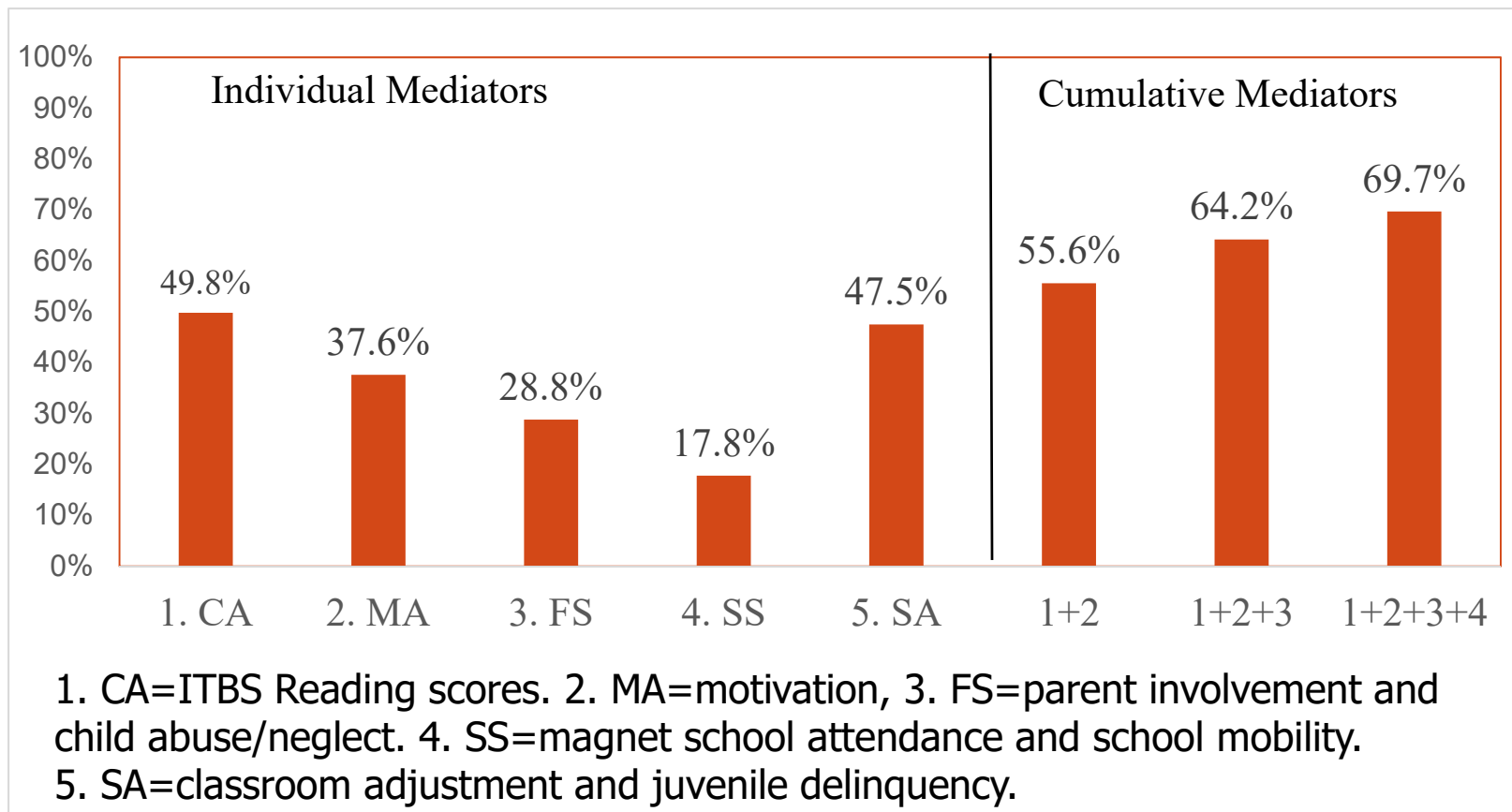
***P<.001 ** p<.01 * p<.05

Average annual income in 2017 \$ by subgroups

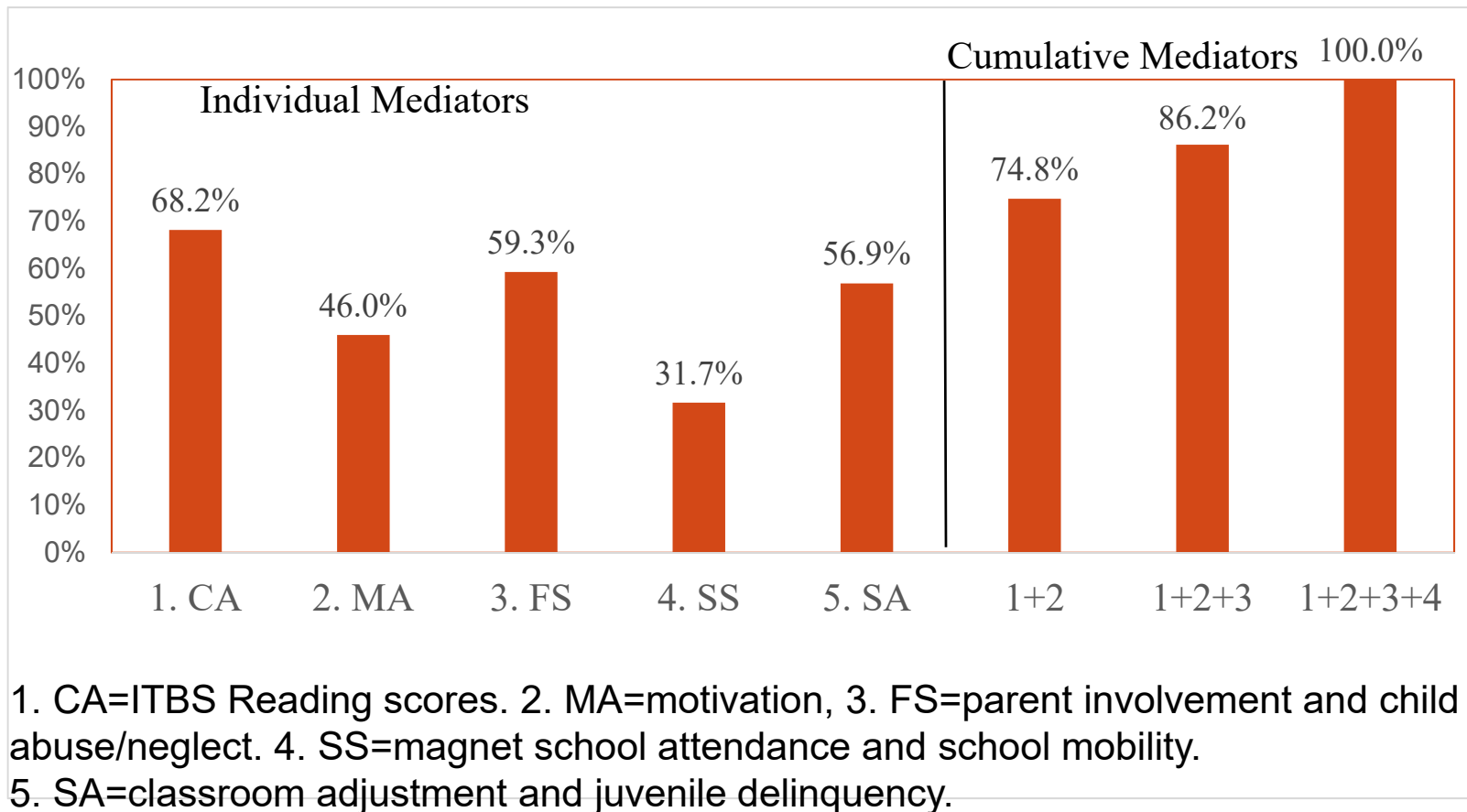
	Preschool Groups		P-3 Groups	
	Interv	Comp	4-6 years	Less than 4 years
Female	\$29,178	\$26,864	\$31,464*	\$27,023
Male	\$29,408**	\$24,636	\$30,278	\$26,005
Mother completed HS	\$30,744	\$29,691	\$32,542	\$28,685
Mother not completed HS	\$27,974***	\$22,276	\$29,537*	\$24,594

***P<.001 ** p<.01 * p<.05

Percent Reduction of Preschool Participation Main Effects Associated with 5HM for Average Annual Income



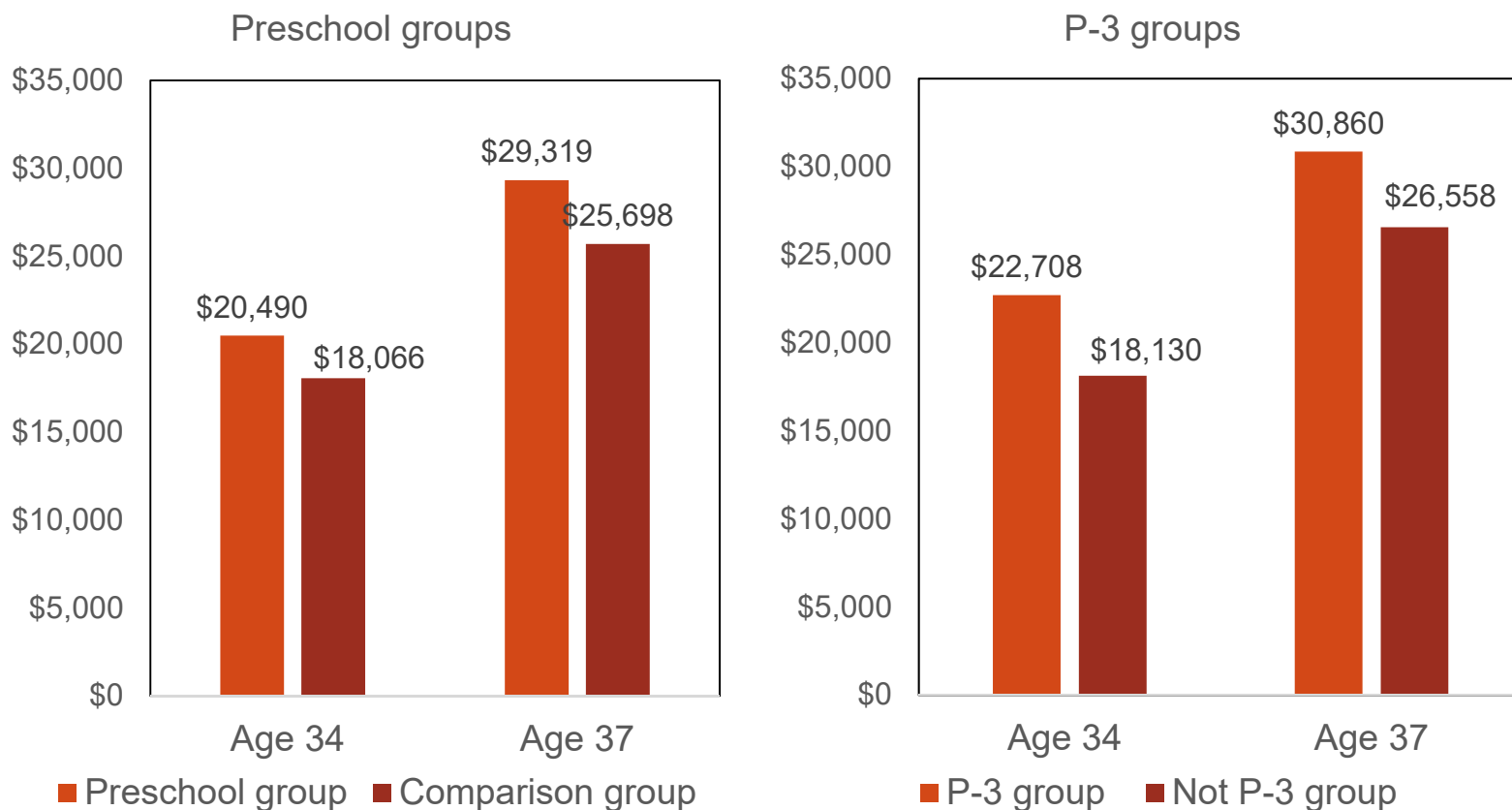
Percent Reduction of P-3 Participation Main Effects Associated with 5HM for Average Annual Income



Discussion



Average Annual income by CPC groups



Limitations

- Quasi-experimental design
- Policy context
- Generalizability and reproducibility

Conclusion

- Findings on the Effects of the CPC program in age 37 income extend on previous CLS studies showing that CPC participation was associated with higher education attainment and lower rates of incarceration.
- CPC program might benefit more for those at higher risk
- Cognitive advantage, social adjustment, and family support play more important roles in explaining how effects of early childhood education might last into adulthood

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- For more information about the Chicago Longitudinal Study, visit:
<https://innovation.umn.edu/cls/>
- Contact Suh-Ruu Ou at sou@umn.edu