

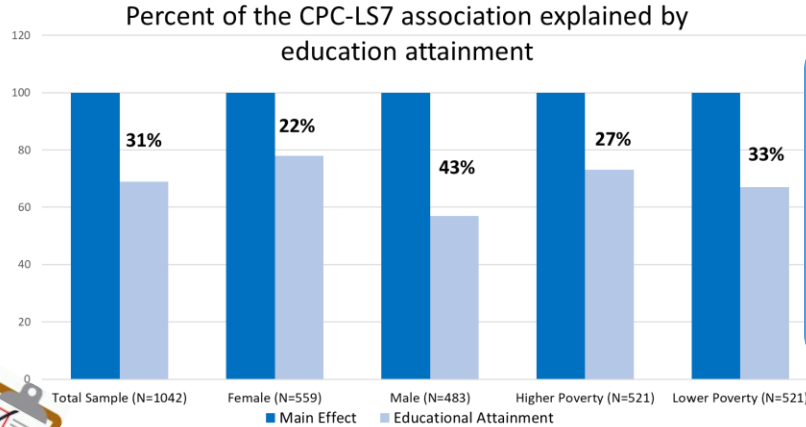
Association of Early Childhood Education and Midlife Cardiovascular Health in a Low-Income, Predominantly Black Cohort

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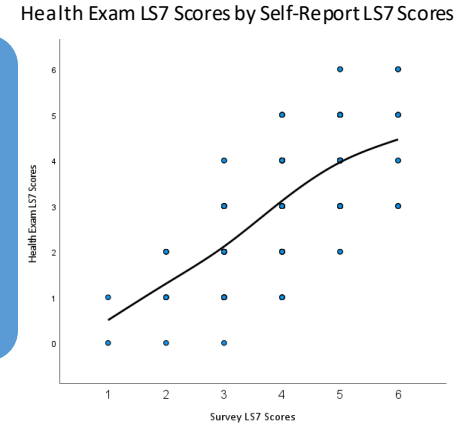


Highlights

- Cardiovascular disease (CVD) is the **leading cause of death** in the US, and Black Americans are **30% more likely to die** from CVD than White Americans
- **Early childhood education (ECE) programs** may promote long-term cardiovascular health (CVH) and reduce these disparities
- Socioeconomic resources, like **education attainment**, are strong predictors of adult health and may explain a significant portion of the relationship between ECE and CVH



In-person health exams validate self-report LS7 scores
 $r = .67$,
 $p < .001$



Learning Objectives

1. **Analyze the effect** of high-quality ECE, the Child-Parent Center Program (CPC) on ideal CVH (iCVH)
2. **Evaluate mediation** of the CPC-iCVH relationship via education attainment (EA)
3. **Assess the validity** of AHA's Life's Simple 7 by correlating self-report to in-person health exams



Mediation Pathway: Unstandardized Regression Coefficients by Subgroups

	Total Sample	In-Person Exam	Women	Men	High Poverty	Low Poverty
CPC → LS7	.174*	.305	.218*	.145	.227*	.165
CPC → EA	.553***	.425	.441*	.679***	.615**	.574**
EA → LS7	.097***	.161***	.102***	.090***	.098***	.095***

EA = years of education by age 34
LS7 = score out of 7 for iCVH

* $p < .05$
** $p < .01$
*** $p < .001$

Data & Methods



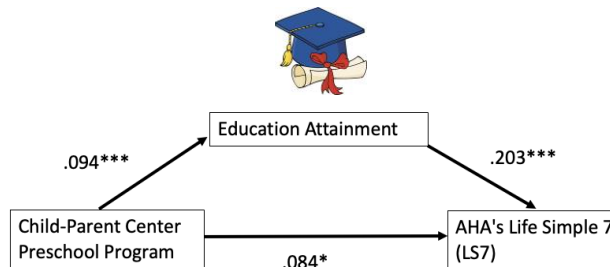
Sample: CPC participants and a comparison group (N=1042, 93% Black) from high poverty communities in Chicago, followed through midlife, using a quasi-experimental design. 301 participants also completed an in-person health exam.

Measure: American Heart Association's Life's Simple 7 (LS7)

- Comprehensive measure of cardiovascular risk using both **biometric and lifestyle indicators**
- Score of 7 indicates iCVH



Education attainment explains 31% of the CPC-Life's Simple 7 relationship



Mediation pathway for the total sample using standardized regression coefficients



Public Health Implications



- Early childhood education has **far-reaching and compounding protective effects** on health over the life course
- Education attainment is a **powerful pathway of impact**, explaining almost a third of the CPC to LS7 association
- AHA's Life's Simple 7 is a **valid, positive measure** of modifiable lifestyle and biometric indicators of cardiovascular health

