

Early childhood investments substantially boost adult health ^[1]

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AVAILABILITY

- Full journal article available by subscription ^[2], or check your local or university library.
- Science NOW, popular article: ^[3] "Intensive Day Care May Improve Long-Term Health of Poor Children" ^[3] (full-text)

Abstract:

High-quality early childhood programs have been shown to have substantial benefits in reducing crime, raising earnings, and promoting education. Much less is known about their benefits for adult health. We report on the long-term health effects of one of the oldest and most heavily cited early childhood interventions with long-term follow-up evaluated by the method of randomization: the Carolina Abecedarian Project (ABC). Using recently collected biomedical data, we find that disadvantaged children randomly assigned to treatment have significantly lower prevalence of risk factors for cardiovascular and metabolic diseases in their mid-30s. The evidence is especially strong for males. The mean systolic blood pressure among the control males is 143 millimeters of mercury (mm Hg), whereas it is only 126 mm Hg among the treated. One in four males in the control group is affected by metabolic syndrome, whereas none in the treatment group are affected. To reach these conclusions, we address several statistical challenges. We use exact permutation tests to account for small sample sizes and conduct a parallel bootstrap confidence interval analysis to confirm the permutation analysis. We adjust inference to account for the multiple hypotheses tested and for nonrandom attrition. Our evidence shows the potential of early life interventions for preventing disease and promoting health.

Region: United States ^[4]

Source URL (modified on 27 Jan 2022): <https://childcarecanada.org/documents/research-policy-practice/14/04/early-childhood-investments-substantially-boost-adult>

Links

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