

Social Programs That Work Review

## Evidence Summary for the Perry Preschool Project

### HIGHLIGHTS:

- **PROGRAM:** A high-quality preschool program for children from disadvantaged backgrounds.
- **EVALUATION METHODS:** A well-conducted randomized controlled trial (RCT) with a sample of 128 three- and four-year-old African-American children living in poverty and assessed to be at high risk of school failure.
- **KEY FINDINGS:** Large effects on educational attainment, income, criminal activity, and other important life outcomes, sustained well into adulthood.
- **OTHER:** This was a relatively small study launched in the 1960s, and it included a few modest departures from random assignment that may reduce confidence in the findings. Replication of these findings in a second trial would be desirable to confirm the initial results and establish that they generalize to present-day settings.

### I. Evidence rating: **SUGGESTIVE TIER**

The standard for Suggestive Tier is:

*Programs that have been evaluated in one or more well-conducted RCTs (or studies that closely approximate random assignment) and found to produce sizable positive effects, but whose evidence is limited by only short-term follow-up, effects that fall short of statistical significance, or other factors. Such evidence suggests the program may be an especially strong candidate for further research, but does not yet provide confidence that the program would produce important effects if implemented in new settings.*

### II. Description of the Program:

The Perry Preschool Project, carried out from 1962 to 1967, provided high-quality preschool education to three- and four-year-old African-American children living in poverty and assessed to be at high risk of school failure. About 75 percent of the children participated for two school years (at ages 3 and 4); the remainder participated for one year (at age 4). The preschool was provided each weekday morning in 2.5-hour sessions taught by certified public school teachers with at least a bachelor's degree. The average

child-teacher ratio was 6:1. The curriculum emphasized active learning, in which the children engaged in activities that (i) involved decision making and problem solving, and (ii) were planned, carried out, and reviewed by the children themselves, with support from adults. The teachers also provided a weekly 1.5-hour home visit to each mother and child, designed to involve the mother in the educational process and help implement the preschool curriculum at home. The program's cost was approximately \$13,780 per child per school year (in 2017 dollars).

[Click here to go to the Perry Preschool Study's web page.](#)

### **III. Evidence of Effectiveness:**

This program was evaluated in an RCT with a sample of 128 children -- 64 in the program group that received the preschool program, and 64 in the control group that did not.

#### **Educational outcomes for preschool group (versus control group):**

At age 27 follow-up:

- Completed an average of almost 1 full year more of schooling (11.9 years vs. 11 years).
- Spent an average of 1.3 fewer years in special education services -- e.g., for mental, emotional, speech, or learning impairment (3.9 years vs. 5.2 years).
- 44 percent higher high school graduation rate (65 percent vs. 45 percent).

#### **Pregnancy outcomes for preschool group (versus control group):**

At age 27 follow-up:

- Much lower proportion of out-of-wedlock births (57 percent vs. 83 percent).
- 50 percent fewer teen pregnancies on average (0.6 pregnancies/woman vs. 1.2 pregnancies/woman).

#### **Lifetime criminal activity for preschool group (versus control group):**

At age 40 follow-up:

- 46 percent less likely to have served time in jail or prison (28% vs. 52%).
- 33 percent lower arrest rate for violent crimes (32% vs. 48%).

#### **Economic outcomes for preschool group (versus control group):**

At age 40 follow-up:

- 42 percent higher median monthly income (\$2,712 vs. \$1,911 in 2017 dollars).

- 26 percent less likely to have received government assistance (e.g. welfare, food stamps) in the past ten years (59% vs. 80%).

**Discussion of Study Quality:**

- The study had low attrition and a long-term follow-up: Outcome data were obtained for between 91 and 96 percent of the original sample (depending on outcome measure) at the age 27 follow-up, and for 94 percent at the age 40 follow-up.
- The study reported outcomes using an intention-to-treat analysis.
- In measuring outcomes, the study used official crime records, social service records, and high school graduation records to supplement data from personal interviews.
- Staff gathering outcome data were blind as to which individuals were in the preschool group versus control group.
- Prior to the program, the preschool and control groups were equivalent in measures of intellectual performance and almost all demographic characteristics.
- Study Limitations: There were three deviations from random assignment, albeit relatively modest ones.
  - › First, after random assignment, between 5 and 10 children were transferred between the preschool group and the control group to reduce the number of children of employed mothers in the preschool group, because it was difficult to arrange home visits with these working mothers.
  - › Second, the random assignment was carried out in two stages -- (i) matching of the children into pairs based on IQ and randomly assigning each pair member to one of two groups, and (ii) randomly assigning the two groups (by coin toss) to the preschool versus control condition. After the random assignment of children (stage 1), but before the random assignment of the two groups (stage 2), the researchers switched the assignments of 5 to 10 children so as to better balance the two groups on demographic characteristics and intellectual performance.
  - › Third, in the 20 families in the sample with two or more children of preschool age, the younger siblings were assigned to the same group as their older sibling. This is actually a legitimate procedure (it means that families rather than individuals were the unit of random assignment); however, the study then conducted its tests for statistical significance as if individual children had been randomly assigned, possibly leading to erroneous findings of statistical significance.

Overall, we believe this study is a small but reasonably well-designed randomized controlled trial. However, we'd caution that this was a demonstration program with close researcher involvement in program delivery, and we do not yet know if the results can be replicated on a broader scale in typical classroom settings.

**IV. References:**

Lawrence J. Schweinhart, Helen V. Barnes, and David P. Weikart. Significant Benefits: The High/Scope Perry Preschool Study Through Age 27 (High/Scope Press, 1993).

Lawrence J. Schweinhart, PhD. The High/Scope Perry Preschool Study Through Age 40: Summary, Conclusions, and Frequently Asked Questions (High/Scope Press 2004).