

Social Programs That Work Review

# Evidence Summary for Big Brothers Big Sisters Community-Based Mentoring

## HIGHLIGHTS:

- **PROGRAM:** A widely implemented community-based mentoring program for disadvantaged youth.
- **EVALUATION METHODS:** Two well-conducted randomized controlled trials (RCTs), each with a multi-state sample of over 1,000 youths averaging 12 years of age.
- **KEY FINDINGS:** The more recent RCT (Study 2, below) found 20-40% reductions in youth substance use and delinquent behavior four years after study entry. The earlier RCT (Study 1) measured a much broader array of outcomes and found beneficial effects on a sizable subset, especially in the areas of substance use and education, at follow-ups 18 months and 21-23 years after study entry.
- **OTHER:** Both studies have limitations that make their findings, taken together, highly promising but not definitive. Limitations include, for example, (i) the risk of chance findings in Study 1 driven by the large number of outcomes examined; and (ii) sample attrition in Study 2 that was somewhat higher in the program group than control group, potentially undermining randomization.

[Disclosure: Arnold Ventures provided funding for one of the two RCTs (Dubois, Herrera, et.al).]

## I. Evidence rating: **NEAR TOP TIER**

The standard for Near Top Tier is:

*Programs shown to meet almost all elements of the Top Tier standard, and which only need one additional step to qualify. This category primarily includes programs that meet all elements of the Top Tier standard in a single study site, but need a replication RCT to confirm the initial findings and establish that they generalize to other sites. This is best viewed as tentative evidence that the program would produce important effects if implemented faithfully in settings and populations similar to those in the original study.*

## **II. Description of the Program:**

Big Brothers Big Sisters of America is the largest mentoring organization in the United States, with over 230 agencies serving 109,254 youths nationwide in 2020. Community-Based Mentoring is the organization's flagship program. The program matches youth age 6-18, predominantly from low-income, single-parent households, with adult volunteer mentors who are typically young (20-34) and well-educated (the majority are college graduates).

The youth's parent/guardian applies for his or her child to be matched with a mentor through a written application and child/parent interview. Potential mentors are screened by a Big Brothers Big Sisters caseworker through a personal interview, home visit, and criminal, background, and reference check to ensure that they are not a safety risk and are likely to form a positive relationship with the youth. Prior to a match being made, the youth and parent meet with the potential mentor; the match's completion requires the parent's approval.

The mentor and youth typically meet 2-4 times per month for at least a year and engage in activities of their choosing (e.g. studying, cooking, playing sports). The typical meeting lasts 3-4 hours.

For the first year, Big Brothers Big Sisters case workers maintain monthly contact with the mentor, as well as the youth and his or her parent, to ensure a positive mentor-youth match, and to help resolve any problems in the relationship. Mentors are encouraged to form a supportive friendship with the youth and not seek to modify the youth's behavior or character.

The program's total cost per youth is approximately \$4,000 to \$6,000 (2026 dollars), based on the estimates described in the studies below.

[Click here for the Big Brothers Big Sisters website.](#)

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

This program has been evaluated in two large RCTs, launched in 1991 and 2018 respectively.

### **STUDY 1 (Grossman and Tierney)**

This was an RCT with a sample of all 1,138 youths, age 10-16, who applied to one of eight large Big Brothers Big Sisters agencies in various U.S. cities between October 1991 and February 1993, met the program's eligibility requirements, and agreed to participate in the study. The youths were randomly assigned to (i) a program group, which agency staff sought to match with a mentor; or (ii) a control group that was placed on a waitlist for the duration of the study (18 months). Big Brothers Big Sisters successfully provided 78% of the youths in the program group with a mentor.

At the time of study entry, sample members averaged 12 years of age. 62% were boys, 56% were minorities, and 43% lived in households receiving food stamps and/or welfare.

**Effects 18 months after random assignment, based on youth reports:**

The study measured 48 outcomes and found 8 statistically significant beneficial effects ( $p < 0.05$ ) and 3 near-significant beneficial effects ( $p < 0.10$ ). These effects include, as illustrative examples:

- Reduction in likelihood of initiating illegal drug use during the 18-month study period, from 12% for the control group to 6% for the program group ( $p < 0.05$ ).
- Reduction in likelihood of initiating alcohol use during the 18-month study period, from 27% for the control group to 19% for the program group (near significant,  $p < 0.10$ ).
- 32% fewer incidents of hitting someone in the previous 12 months (2.7 incidents per person in the control group vs. 1.8 in the program group,  $p < 0.05$ ).
- Increase in average GPA from 2.63 in the control group to 2.71 in the program group (near significant,  $p < 0.10$ ).

The study found no statistically significant effects on many other outcomes, such as stealing or damaging property, fighting, smoking, or hours spent on homework.

**Effects 21-23 years after random assignment, when participants were in their early 30s, based on administrative records:**

- Increase in having ever enrolled in college, from 51% for the control group to 61% for the program group ( $p < 0.05$ ).
- Increase in having ever been married, from 37% for the control group to 43% for the program group (near significant,  $p < 0.10$ ).
- Reduction in teen parenthood (births to females and fatherhood among males), from 31% for the control group to 26% for the program group (near significant,  $p < 0.10$ ).

The study found no statistically significant effects on having ever been incarcerated, nor on economic outcomes including average annual earnings and employment between ages 25-30 and receipt of government benefits.

**Discussion of Study Quality:**

- The study had low to moderate sample attrition: 18-month outcomes were obtained for 85% of the program group and 83% of the control group; long-term outcomes were obtained for 78% of the program group and 74% of the control group.
- The study appropriately measured outcomes for all youth assigned to the program group, regardless of whether or how long they participated in the program (i.e., the study used an intention-to-treat analysis).
- At the study's inception, the program and control groups were highly similar in demographic and other characteristics.

- This was a multi-site study with a sample of all eligible applicants (ages 10-16) to eight large Big Brothers Big Sisters agencies across the U.S., providing evidence of the program's effectiveness under real-world conditions.
- Study Limitations:
  - The study measured numerous outcomes, creating a risk that some of the statistically significant beneficial effects could be false-positive – i.e., chance – findings (since each test for statistical significance has roughly a 1 in 20 chance of yielding a false result).
  - 18-month study outcomes were measured exclusively through youth self-reports and not corroborated with more objective measures (e.g., school administrative records). Self-reports can be prone to social desirability bias (e.g., the program group's overstatement of positive behavior out of gratitude to the mentor and/or program).
  - Although the 18-month interviews were conducted by a research team that was independent of Big Brothers Big Sisters, the interviewers were not blind as to whether the youths were in the program versus control group. Without blinding, it is possible that an interviewer's bias (e.g., pre-existing belief in the program's effectiveness) could influence his or her measurement of outcomes.

### **STUDY 2 (Dubois, Herrera, et al)**

This was an RCT with a sample of 1,358 youths, age 10+, who applied to one of 17 Big Brothers Big Sisters agencies in 13 states between February 2018 and February 2020. The youths were randomly assigned to (i) a program group, which agency staff sought to match with a mentor; or (ii) a control group that was eligible for the program after the four-year study period. Big Brothers Big Sisters successfully provided 68% of the youths in the program group with a mentor over the four years following study entry.

At the time of study entry, sample members averaged 12 years of age. 63% were boys, 69% were Black or Hispanic, and their families' average annual income was approximately \$30,000.

#### **Effects on the four primary, pre-registered study outcomes, measured 4 years after random assignment:**

- Statistically significant reduction in violence-related delinquent behavior over the past 2.5 years from 43% in the control group to 30% in the program group, based on combined parent and youth reports ( $p < 0.01$ ).
- Statistically significant reduction in recurring substance use over the past six months from 31% in the control group to 18% in the program group, based on youth self-reports ( $p < 0.01$ ).
- Statistically significant reduction in property-related delinquent behavior over the past 2.5 years, from 34% in the control group to 26% in the program group, based on combined parent and

youth reports ( $p < 0.05$ ). However, confidence in this finding is tempered by the fact that it lost statistical significance when the analysis adjusted for the study's examination of multiple outcomes.

- No discernible effect on the likelihood of being arrested over the past four years, based on administrative records. 13% of the control group had been arrested compared to 9% of the program group, but this difference was not statistically significant.

**Discussion of Study Quality:**

- The study appropriately measured outcomes for all youth assigned to the program group, regardless of whether or how long they participated in the program (i.e., the study used an intention-to-treat analysis).
- The program and control groups were highly similar in their baseline demographic, behavioral, and other characteristics. This was true of both the original randomized sample and the follow-up sample (after attrition).
- This was a large study conducted at 17 Big Brothers Big Sisters agencies in 13 states, providing evidence of the program's effectiveness as implemented on a sizable scale under real-world conditions.
- Outcomes were measured using an online survey method that minimized the possibility that interviewer bias could have influenced the results.
- Study Limitations:
  - The three findings based on youth and/or parent reports suffered from sample attrition that was somewhat higher in the program group than the control group. Specifically, outcome data were obtained for 75% of program youth vs. 84% of control youth for the property-related and violence-related delinquent behavior outcomes, and for 70% of program youth vs. 79% of control youth for the substance use outcome. Such attrition may have undermined the equivalence of the two groups created by randomization, leading to inaccurate findings.
  - The study relied on youth and parent reports to measure the delinquency and substance use outcomes, which can be prone to social desirability bias (e.g., the program group's overstatement of positive behavior out of gratitude to the mentor and/or program).
  - The finding that was not subject to the above limitations – the lower arrest rate in the program vs. control group based on administrative records – did not reach statistical significance and is therefore suggestive but not reliable.

## OTHER STUDIES

Two additional randomized controlled trials of the community-based Big Brothers Big Sisters program have been conducted, but we do not describe these RCTs here due to study limitations that limit confidence in the results (e.g. short follow-up periods and modest sample sizes).

### IV. References:

<http://www.bbbs.org/> (Big Brothers Big Sisters website)

#### **Study 1**

Grossman, Jean B. and Joseph P. Tierney, “Does Mentoring Work? An Impact Study of the Big Brothers Big Sisters Program.” *Evaluation Review*, Vol. 22, No. 3, June 1998, pp 403-426, [linked here](#).

Tierney, Joseph P., and Jean B. Grossman, “Making a Difference: An Impact Study of Big Brothers Big Sisters.” Public/Private Ventures, 1995 (reprinted 2000), [linked here](#).

Bell, Alex and Neviana Petkova, “The Long-Term Impacts of Mentors: Evidence from Experimental and Administrative Data.” 2024, [linked here](#).

#### **Study 2**

Dubois, David L., Carla Herrera, Julius Rivera, Vanessa Brechling, and Staci Root, “Randomized Controlled Trial of the Effects of the Big Brothers Big Sisters Community-Based Mentoring Program on Crime and Delinquency: Interim Report of Findings,” 2022, [linked here](#).

Dubois, David., Carla Herrera, Julius Rivera, Vanessa Brechling, and Staci Root, “Randomized controlled trial of the effects of the Big Brothers Big Sisters Community-Based Mentoring Program on crime and delinquency: Four-year findings.” University of Illinois Chicago, 2025, [linked here](#).

#### **Other Studies**

Herrera, Carla, David L. DuBois and Jean B. Grossman. “The Role of Risk: Mentoring Experiences and Outcomes for Youth with Varying Risk Profiles,” A Public/Private Ventures project distributed by MDRC, 2013, [linked here](#).

Herrera, Carla, David L. DuBois, Janet Heubach, and Jean B. Grossman. “Effects of the Big Brothers Big Sisters of America Community-Based Mentoring Program on Social-Emotional, Behavioral, and Academic Outcomes of Participating Youth: A Randomized Controlled Trial,” *Children and Youth Services Review*, Vol. 144, January 2023, [linked here](#).

Washington State Institute for Public Policy, Mentoring: Big Brothers Big Sisters Community-Based (taxpayer costs only), 2019.