

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:** Both RCTs found sizable reductions in substance use and types of misconduct over an 18-month follow-up period, based on youth and/or parent report.
- **OTHER:** Study limitations include reliance on youth and parent reports to measure outcomes without corroboration through more objective measures, and a follow-up period of only 18 months. One of the RCTs is ongoing and plans to address these limitations by measuring official arrest rates over a four-year follow-up period.

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

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:

Big Brothers Big Sisters of America is the largest mentoring organization in the United States, with over 230 agencies serving more than 100,000 youth nationwide in 2020. Community-Based Mentoring is the

organization's flagship program. The program matches youth ages 6 to 18, predominantly from low-income households, with adult volunteer mentors.

The youth's parent(s)/guardian(s) apply for the youth to be matched with a mentor through a written application and youth/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 parental approval.

The mentor and youth typically meet for 2 to 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 to 4 hours.

For the first year, Big Brothers Big Sisters staff maintain monthly contact with the mentor, as well as the youth and their 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 Washington State Institute for Public Policy (2019) has estimated the cost per youth for a year of services in the Community-Based Mentoring program at \$1,765.

[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. The second RCT reported interim findings in 2022, and is ongoing.

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 youth 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 members of a minority racial/ethnic group, and 43% lived in households receiving either food stamps and/or cash public assistance.

Effects 18 months after random assignment:

The study measured 48 outcomes, and found 8 statistically significant beneficial effects ($p < .05$) and 3 near-significant beneficial effects ($p < .10$). 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 ($p < .05$).
- 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, $p < .10$).
- Fewer incidents of hitting someone in the previous 12 months (2.7 incidents per youth in the control group vs. 1.8 in the program group, $p < .05$).
- Fewer days of school skipped in the previous 12 months (0.9 days per youth in the control group vs. 0.4 in the program group, $p < .01$). Increase in average GPA from 2.63 in the control group to 2.71 in the program group (near significant, $p < .10$).

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

Discussion of Study Quality:

- The study had low sample attrition: 18-month outcomes were obtained for 85% of the program group and 83% 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 to 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).
 - 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 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.

- The study only had an 18-month follow-up; longer term follow-up is necessary to determine if the above effects are sustained over time.

STUDY 2 (Dubois, Herrera, et.al.)

This is an ongoing 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 youth 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 65% of youth in the program group with a mentor over the 18 months 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 over the 18 months after random assignment:

- Statistically-significant reduction in the likelihood of being arrested from 11% in the control group to 5% in the program group, based on combined parent and youth reports ($p < .01$).
- Statistically-significant reduction in the likelihood of any substance use from 17% in the control group to 10% in the program group, based on youth self-reports ($p < .01$).
- No statistically significant effect on property-related delinquent behavior, based on combined parent and youth reports (21% of the control group engaged in such behavior versus 17% of the program group, a difference that was not statistically significant).
- No statistically significant effect on violence-related delinquent behavior, based on combined parent and youth reports (29% of the control group engaged in such behavior versus 24% of the program group, a difference that was not statistically significant).

Discussion of Study Quality:

- The study had low sample attrition: Outcomes were obtained from 87% of the youth and/or their parent, and from 80% of both the youth and parent, with highly similar follow-up rates for the program group versus 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 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 reduced the possibility any interviewer bias could have influenced the results.
- Study Limitations: The main study limitation is its exclusive reliance on youth and parent reports to measure study 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). In addition, the study only had an 18-month follow-up period; longer-term follow-up is needed to determine if the above effects are sustained over time. Importantly, this study is ongoing; future reports will address these limitations by (i) using official arrest records to measure effects on crime, and (ii) measuring outcomes over the four-year period following study entry.

Other Studies:

One additional randomized controlled trial of the community-based Big Brothers Big Sisters program has been conducted, but we do not describe it here due to study limitations that reduce confidence in the results (short follow-up period and small sample size).

IV. References:

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](#).

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

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

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