

# Proposal 4: Designing Effective Mentoring Programs for Disadvantaged Youth

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## Introduction

The need for mentoring programs is indisputable. Over 30 percent of children live in households headed by a single parent (or no parent), a rate that has doubled over the past forty-five years (see figure 4-1). Six in ten African American children live in households of this type, which actually reflects a slight decline in recent years; this rate has been as high as two-thirds. Estimates indicate that upwards of 9 million children have no caring adults in their lives (Bruce and Bridgeland 2014; Cavell et al. 2009). This policy memo reviews the evidence of success from past and current mentoring programs and proposes ways to move forward that could truly make a difference in the lives of young people by providing them with opportunities that could propel them forward in life.<sup>1</sup>

Although there are 5,000 mentoring programs in this country providing services to 3 million young people (Dubois et al. 2011)—with Big Brothers Big Sisters alone serving almost 200,000 children (Big Brothers Big Sisters of America 2012)—many youth remain unserved. Before we propose expanding mentoring programs to more youth, it is critical that we identify existing programs and the components of those programs that work best. This paper will do that, and then, based on the best available evidence, will argue that community-based mentoring programs in the vein of the traditional Big Brothers Big Sisters model are most effective. I contend that community-based programs should receive additional support of nongovernmental organizations (NGOs)—including nonprofits, foundations, and charitable organizations—as well as private-sector entities. Moreover,

I propose that these programs be implemented in accordance with a set of best practices and be rigorously evaluated in order to determine the key components for program success with the goal of designing the best possible interventions for improving the life outcomes of disadvantaged youth.

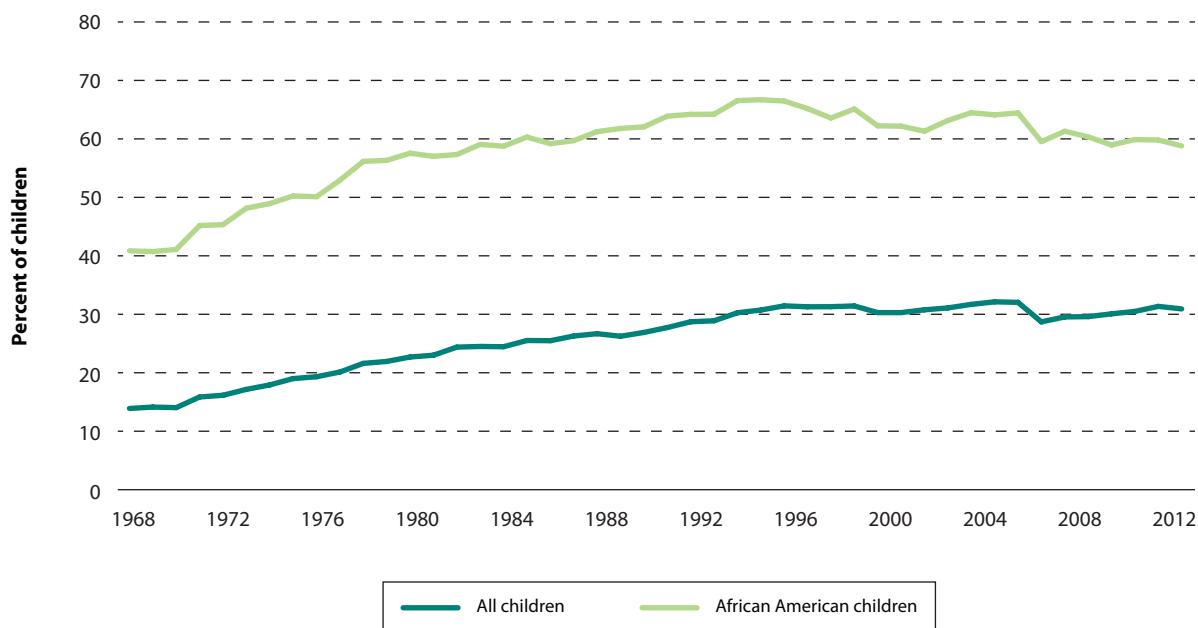
## The Challenge

A wide variety of programs aim to pair disadvantaged youth with role models in one-on-one relationships in hopes of providing these youth with advice and guidance that they may not otherwise have. As noted at the outset, there is an immense need for mentors in this country given the number of children who lack proper adult guidance (about 9 million), but determining how to establish an effective mentoring program is not entirely straightforward. A major obstacle to moving forward is sorting through the breadth of research on past and existing programs. This proposal does so and addresses this central question: What can we learn about existing mentoring programs to help design or modify them so that they alleviate poverty among young people?

First, the specific focus of individual programs is important to consider in evaluating past research. Mentoring programs come in many forms, some of which may satisfy a variety of different goals but do not address poverty reduction specifically. For instance, some programs assign mentors to victims of child abuse, where the goal of the program is to limit the emotional damage done to the child. This may indirectly enable the child to be more successful in the labor

FIGURE 4-1.

## Percent of Children Living in Households Headed by a Single Parent or No Parent, 1968–2013



Sources: U.S. Census Bureau 2013; author's calculations.

market, but that is not its specific focus. Other examples of programs in this category include those that are directed at teen-pregnancy prevention, improvement of health status, or reduction of recidivism among criminals. They may be successful in their own dimensions and should be supported accordingly, but my focus here is primarily on direct attempts to improve economic well-being as at least one of the main goals of the program.

Second, my focus on alleviating poverty is a major filter in evaluating past evidence. The most direct way to improve labor market success for a participant is to improve her educational outcomes. Several mentoring programs have that as an explicit goal, perhaps among many goals; these are the programs I consider. For instance, we have direct evidence that children who get better grades, score higher on standardized tests, and are more likely to complete high school also do better in the labor market. This policy memo concentrates on those measures that can be directly translated into subsequent labor market success.

Third, I do not consider training and career development programs that include mentoring as just a minor aspect, such as Career Academies and Job Corps. The key component of programs like these is vocational training. Mentoring services are included, but they are far from the focus of the programs.

Robert Lerman's proposal in this series discusses these types of programs in greater detail.

One final restriction that I impose in examining previous research is to focus on those evaluations that are conducted within an experimental context. It is common in the literature to find examples of program evaluations that rely on what are often labeled quasi-experiments. Typically, in these examples, treatment and control groups are identified. The treatment group represents those members who voluntarily participated in the program, however, and the control group is created as a set of other individuals who have similar demographic characteristics (e.g., age, race, family income). Selection bias is an obvious concern in these evaluations: those who are more motivated to succeed volunteer to participate, and this differential level of motivation is not necessarily matched in the control group. These studies have an obvious bias in the direction of finding a positive effect of the program—a conclusion that may or may not be warranted. For this reason, I exclude these studies from my review.

The extensive resources provided by Child Trends, which catalogs a large array of interventions with a multitude of program goals, are beneficial to this review (Child Trends 2014). All of these interventions have been evaluated using true experimental designs. In the Child Trends database,

twenty-four interventions include some form of mentoring component, but most do not satisfy the four conditions identified earlier.<sup>2</sup>

Various types of programs include a substantive mentoring component with a key focus on improving educational outcomes and subsequent labor market success. They can be categorized in a number of dimensions, distinguishing between those that are publicly or privately funded, those that are school-based versus community-based, those that offer a comprehensive set of services that include mentoring, and those that largely or exclusively focus on mentoring alone.

The distinction between publicly and privately funded programs is obvious. School-based programs are those in which the mentor typically meets with the mentee after school; an important element of the meeting is frequently helping with school work. Because of the central nature of the school environment, these programs tend to meet less over the course of a typical week and for fewer weeks per year dependent on the school calendar and, particularly, with gaps during school vacations and over the summer. Community-based programs include longer meetings (perhaps on weekends) throughout the year and do not focus explicitly on academic support.

Programs that offer more-comprehensive services along with mentoring can include aspects like financial incentives, community service requirements, supplemental education, and the like. Given that mentoring is a sufficiently important component of these programs, I include these programs in this review.

In sum, my criteria narrow the focus to programs (1) that are primarily targeted at improving economic outcomes, (2) that include mentoring as a substantial component of the intervention, (3) that measure educational outcomes, and (4) that have been evaluated using an experimental design. Evaluations are available for five past interventions that satisfy these criteria. The features of these five programs are summarized below and in table 4-1.

Two of these evaluations were conducted by Big Brothers Big Sisters, which is the largest and best-known mentoring agency in the country. It is a nonprofit organization that has been matching volunteer mentors to disadvantaged youth for over a century. More recently, it has conducted two evaluations of the programs that it runs. The first evaluation focused on its community-based mentoring programs, which follow its original model (Tierney, Grossman, and Resch 1995). In this evaluation, treatment group members were matched to mentors who were members of the community, and the pair met a few times a month for an average of four hours per meeting over the course of at least one year. The youth were

between ten and fourteen years old, largely economically disadvantaged, and almost exclusively living in single-parent households. The results indicate that the youth who received the mentoring treatment skipped school less often and felt more confident in their ability to complete schoolwork. Their grades also went up by 0.08 GPA points (on a 4-point scale).<sup>3</sup>

The second evaluation run by Big Brothers Big Sisters addressed a school-based model of mentoring. In this program, treatment-group youth, who were in Grades 4–9, were matched with volunteer mentors, and the pair met over the course of one school year, typically for one hour per week. Most of these meetings ended when the school year came to a close. Academic support was often included in these meetings, but this was not the exclusive focus. Two-thirds of the students were receiving free or reduced-price lunch (indicating they lived in lower-income households) and around half lived in single-parent households. The results of this intervention were mixed. Some academic outcomes did improve, including the number of assignments completed and teacher ratings of overall academic performance. The impact on grades, however, was half the size of that in the community-based program (0.04 GPA points) and was not statistically significant.

Two other school-based mentoring programs have been evaluated using an experimental design: the Student Mentoring Program (SMP; Bernstein et al. 2009), funded by the No Child Left Behind Act, and the Study of Mentoring in the Learning Environment (SMILE; Karcher 2008). The design of both programs included meetings between students and mentors for one hour per week over the course of the school year. In practice, fewer meetings actually took place. SMP duration averaged about one meeting per week over five or six months; SMILE duration averaged only eight meetings over three months. In both programs meetings included discussions of academic activities, but were not limited to such discussions. In SMP, most of the student participants were receiving free or reduced-price lunch, almost half were living in single-parent households, and the majority were deemed academically at-risk. Most students in SMILE had family incomes under \$20,000. The results from both programs were discouraging; the interventions led to no significant improvement in any academic outcome. In attempting to reconcile the results from the three student-based mentoring programs, Wheeler, Keller, and DuBois (2010) contend that the limited impact of SMP and SMILE relative to that of Big Brothers Big Sisters (which was not overwhelming in the first place) may be attributable to the fact that 17 percent of assigned student–mentor pairs never actually met in SMP and relatively few student–mentor meetings took place in SMILE.

TABLE 4-1.

**Overview of Mentoring Programs Reviewed**

Program	Type of program and funding	Frequency and duration of meetings	Composition of sample	Sample size	Impact on academic outcomes	Cost per participant per year (in 2013 dollars)
Big Brothers Big Sisters Community-Based Mentoring	Community-based mentoring (privately funded)	Two to four times per month for at least one year; typical meeting lasted four hours	Ages 10 to 14; 60% boys; from single-parent, low-income households; with some history of violence or substance abuse	959	Significant effects on several measures, including a 0.08 increase in grade point average (GPA)	\$1,530
Big Brothers Big Sisters School-Based Mentoring	School-based mentoring (privately funded)	One-hour weekly meetings for one academic year (under six months in practice)	Grades 4–9; 69% free or reduced-price lunch; close to 50/50 gender ratio; around half in single-parent households	1,139	Significant effects on several measures, such as absenteeism and assignments completed, but no significant effects on GPA	\$1,177
Department of Education Student Mentoring Program (SMP)	School-based mentoring (publicly funded)	One-hour weekly meetings for one academic year (under six months in practice)	Grades 4–8; 85% free or reduced-price lunch; 44% in single-parent households; 60% at academic risk	2,573	No observable impact	\$1,522
Quantum Opportunities Program (QOP)	Comprehensive program including substantive mentoring component (privately funded)	Goal was 750 hours/year, but actual average was 177 hours/year	At-risk students entering Grade 9	1,069	No observable impact	\$35,730
Study of Mentoring in the Learning Environment (SMILE)	School-based mentoring (privately funded)	One-hour weekly meetings for one academic year (under six months in practice)	Mainly Latino students between ten and eighteen years of age; most with annual family income under \$20,000	516	No observable impact	No data available

Sources: Bernstein et al. 2009; Karcher 2008; Herrera et al. 2007; Schirm, Stuart, and McKie 2006; Tierney, Grossman, and Resch 1995; author's calculations.

Finally, the Quantum Opportunities Project provided more-extensive services than the other programs, including homework help, tutoring, life and family skills counseling (including counseling on alcohol and drug abuse, sex, and family planning), and a significant community service requirement, along with a substantive mentoring component (Hahn, Leavitt, and Aaron 1994; Schirm, Stuart, and McKie 2006). In addition, students received financial incentives to encourage them to stay in the program. This program focused on at-risk students entering ninth grade. Of the five interventions reviewed here, the Quantum Opportunities Project is clearly the most extensive, both in terms of services provided, program length, and cost. An initial pilot of the intervention showed positive results, including a 21 percent increase in high school graduation rates. The success of the pilot led to a larger-scale evaluation, but the results could not be replicated, particularly in terms of educational attainment. The follow-up study was unable to find any effect in that dimension.<sup>4</sup>

All of this evidence suggests that a traditional mentoring program of the community-based type, such as Big Brothers Big Sisters, is the approach most likely to be successful in improving subsequent labor market earnings among disadvantaged youth. School-based approaches have yielded mixed results, at best. Several potential explanations could explain this finding. First, their organization around the school imposes administrative hurdles that may lead to fewer and shorter meetings between mentors and mentees. Second, the emphasis on schoolwork, even if it is not exclusive, may hinder the true benefit of a mentoring intervention, which is providing an adult voice of reason to adolescents who may be lacking one. Conventional community-based approaches also dominate a comprehensive approach that offers a number of services, including a substantive mentoring component. Perhaps it is no surprise based on the longevity of the program that Big Brothers Big Sisters is the type of intervention that provides the clearest benefits to its participants.

## A New Approach

I propose that NGOs and private-sector entities consider expanding mentoring programs of the community-based form. Having access to an adult, trusted voice of reason would likely be helpful to disadvantaged youth seeking to climb the economic ladder. Based on my discussion below regarding the public and private returns to mentoring programs, I make the case that NGOs and private-sector groups should promote these types of programs.

Beyond the general support for community-based mentoring programs, I propose that these groups implement community-

based mentorship programs with a set of best practices in mind; it is useful to consider the components of those programs that would generate the greatest gains for program participants. One reason that community-based programs may have been more successful than school-based programs is the nature and the extent of interaction between the mentor and mentee. These programs had more contact hours (typically three or four meetings per month lasting, on average, four hours per meeting) over a longer period of time (about a year) than school-based programs. This aspect likely contributed to its success. School-based programs also focus directly, although not exclusively, on academic support; community-based programs do not. Apparently, providing life guidance may be more important than providing academic guidance.

One other aspect of program implementation that would likely be desirable is the demographic match between the mentor and mentee. Evidence from educational research and evaluations of job-placement programs suggests that having mentors that are of the same race and perhaps of the same gender as the mentee is an important element of a successful program (see Behncke, Frölich, and Lechner 2010; Dee 2004, 2005). Interestingly, Big Brothers Big Sisters does not mandate matches by race, although it does by gender.

In terms of other program components, we do not have the luxury of additional experimental evidence to provide strong recommendations regarding the specific content that should be included in model mentoring programs. What we do have, however, is the approach that Big Brothers Big Sisters used in its community-based programs that have been successfully evaluated with positive results. Tierney, Grossman, and Resch (1995) document these program elements. I propose that NGOs and private-sector entities consider the following factors when promoting mentorship programs:

1. These programs should undertake thorough screening of potential mentors. Tierney, Grossman, and Resch (1995) report that Big Brothers Big Sisters uses background checks to screen out those determined to “pose a safety risk, are unlikely to honor their time commitment or are unlikely to form positive relationships with the youth.” Only around one-third of their volunteers met that test. Big Brothers Big Sisters rejected those whom it deemed inappropriate and those who did not complete the necessary steps of the screening process.
2. Mentorship programs should undergo a thorough screening of potential mentees. Those adolescents who participate must be interviewed along with their (single) parent, pass a home assessment, receive parental permission, and have a “minimal level of social skills” (Tierney, Grossman, and Resch 1995).



3. Extensive training of mentors is recommended, although it is not mandatory. The training should address youth development, communication skills, and suggestions about how to interact with a mentee, among other priorities.
4. As mentioned earlier, matches between the mentor and the mentee should be made based on preferences and expediency. Gender, geographic proximity, and availability are common match factors, along with the interests of both the mentor and mentee.
5. Finally, mentorship programs should include an element of supervision of the mentor–mentee relationship. Case managers should routinely check in with the mentor and the mentee in order to verify that the match has been successful.

These five program components have not been separately evaluated with a rigorous methodology designed to determine their role in the success of the program. Nevertheless, they do provide a starting point; their combination has been found to be effective in Big Brothers Big Sisters community-based mentoring programs. NGOs and private-sector entities should ideally combine and implement these elements in mentorship programs for disadvantaged youth.

Finally, given that these program components have not been thoroughly evaluated, NGOs and private-sector entities interested in mentoring programs should support the most rigorous possible experimental evaluation. For instance, evaluations should attempt to answer questions such as the following: Is the estimated impact reproducible in other settings? What screens should be used in the selection of mentors? How often and for how long should mentors and mentees meet? What types of activities provide the greatest benefit to the mentee? We cannot answer these questions based on the available evidence, but it would be valuable to have these answers, among many others, to be able to identify the key components for program success and help design the best possible intervention. Evaluation of implemented programs would therefore be a critical aspect of continuing and expanding these types of programs.

## **COSTS AND BENEFITS**

Just because community-based mentoring programs appear to be the best approach to implement, it would be premature to judge these programs to be “worth it.” I argue that these programs are worth expanding from the perspective of an NGO or private-sector group looking to improve outcomes for at-risk youth, but whether it is worth it for the government to financially support these programs is a higher hurdle that mentoring programs would be less likely to overcome.

A critical component of this analysis is the distinction between returns to the program that are received by the participant (private returns) and those that are received by society more broadly (social returns). If the private returns of a program are greater than its costs, then the program is worth it in the sense that investing one dollar in the program is better than simply transferring one dollar to the participant. An NGO or private-sector entity that intends to help disadvantaged youth would be better off investing in the program than simply giving away the money. If the social returns are greater than one dollar, then the program is worth it to taxpayers because they actually profit from making the transfer; the program yields benefits to them that are greater than the investment. In this case, the public sector should be willing to invest in the program.

Discussions about the value of supporting a public program frequently focus on the social benefits. Programs that assist underprivileged populations satisfy this condition by increasing tax revenue, reducing expenditures for social programs, and reducing crime. A perfect example is the Perry Preschool program, which Elizabeth Cascio and Diane Schanzenbach discuss in their proposal in this series.

Generating social benefits that are greater than the program’s cost, though, is very hard to do. Even when we can increase the earnings of disadvantaged individuals, it is hard to increase them enough to put them into the range of incomes where tax receipts would be substantial. Typically, when we are able to provide strong evidence of generating social benefits in excess of program costs, the key component is a reduction in crime and incarceration. This was true in the Perry Preschool program. Those outcomes are so costly to society that relatively modest effects can provide tremendous public savings.

It is difficult to determine whether traditional mentoring programs reduce crime and incarceration. The outcomes most closely approximating criminal activity in the Big Brothers Big Sisters evaluation are “number of times stole something” and “number of times damaged property” (Tierney, Grossman, and Resch 1995). The treatment group was not statistically significantly less likely to engage in either of these behaviors (although the point estimates were negative). The outcome “number of times hit someone” did drop significantly, but its relationship to crime is less clear. We do see that drug and alcohol use declined for participants in traditional mentoring programs, and it is possible that this would translate into reduced criminal activity subsequently, but that is a rather substantial leap. In the end, it is possible that Big Brothers Big Sisters could pass a societal benefit–cost test, perhaps even convincingly, but it is not clear that it could do so based on the available evidence.

This does not mean that it is not beneficial for the government to invest in mentoring programs, but rather that the investment would need to be supported by another form of return. In particular, society may receive value simply by helping the poor improve their outcomes from a purely altruistic perspective. It makes us happier if individuals who are having difficulty getting by have an easier time of it. Of course, providing a value to altruism to incorporate into a formal benefit–cost comparison is a difficult proposition. That determination would have to result from the political process.

For the private sector, however, altruism is the goal. The goal of the private sector is to spend its money wisely in a way that yields the greatest impact. Again, that sector can always just transfer money to targeted populations directly, so a program is only desirable if the private benefit the program generates in the form of higher incomes for its participants is greater than the dollar cost of providing these programs. To satisfy this criterion means comparing private benefits to the cost of implementation. This is the form of benefit–cost analysis I conduct here.

The good news for mentoring programs is that they easily satisfy this test. Levine and Zimmerman (2010) provide details of the approach that lead to this conclusion, but I summarize it here. The general idea is to obtain program effects in terms of some form of educational outcome and then use a conversion factor that translates that educational outcome into higher subsequent wages. In this case, we know from the Big Brothers Big Sisters community-based evaluation that program participants experienced a 0.08 point improvement in their GPAs. Levine and Zimmerman (2010) then used data from the 1979 National Longitudinal Survey of Youth to generate a conversion factor between GPA and wages. This wage effect is presumed to be constant over the remainder of the individual's life; the analysis then calculates the present discounted value of this higher-earnings stream throughout the individual's life. The results of this analysis indicate that Big Brothers Big Sisters generates about a \$7,500 expected benefit relative to the program cost of about \$1,600 (where all values are measured in 2013 dollars). Benefits exceed costs by a ratio of almost 5:1.<sup>5</sup> From this perspective, mentoring programs are a great investment.

Mentoring programs thus appear to generate private returns that are considerably in excess of their costs, but it is less clear that they will generate a positive benefit–cost ratio when the focus is on social returns. The focus on altruism in justifying the intervention is better suited for those NGOs and private-sector entities that are trying to accomplish exactly that goal. On the whole, I am in full support of these groups moving full-speed ahead in implementing community-based mentoring

programs with a set of best practices in mind. Should altruism become a recognized goal of public policy, governmental support of these programs would be desirable as well.

## Questions and Concerns

*Have the previously conducted evaluations provided enough guidance to inform the design and implementation of new programs?*

The simple answer to this question is that it is rare to have enough evidence to be certain of all the best elements that should be incorporated into new programs. In this case, we have evaluations that enable us to rule out certain types of programs (like those that are school-based), and one evaluation that provides strong support for advancing community-based programs. That evaluation was extensive, but there are always limitations in going forward with new programs based on the results of a single experiment. Clearly, additional experimentation should be conducted to fill some of the holes in our knowledge.

This may be an example where the best is the enemy of the good. By the standards of program evaluation, the Big Brothers Big Sisters community-based program is an effective one and it should be emulated. Certainly, future experimentation should continue to address these lingering questions and help inform subsequent program design, but based on what we know now, the Big Brothers Big Sisters community-based program model is an approach that is worthy of expansion.

*Is it possible to expand the scale of community-based mentoring programs like Big Brothers Big Sisters to address the size of the adolescent population in need of those services?*

The estimates I provided above suggest that millions of adolescents could benefit from mentoring programs. Existing programs like Big Brothers Big Sisters do serve about 200,000 individuals now, though, suggesting that it is possible to run programs like this on a large scale. It is prudent to be realistic on the ability of programs like this to satisfy existing need, however. The logistical difficulties associated with managing such a large number of mentoring relationships, let alone the recruiting and training of so many mentors, are substantial. Moreover, at approximately \$1,500 per mentor, supporting just 1 million mentors would cost \$1.5 billion, and the need is considerably greater than that. Despite my earlier claim that mentoring is an intervention that is better suited for NGOs and private-sector entities, the extent of the need may be beyond these groups' means. Yet that does not lessen the importance of the policy proposal I am making here. It is better to make a

sizeable dent in an important social problem than to ignore it because it cannot be solved completely.

*Are there any circumstances under which the federal government should intervene to provide mentoring services?*

The purpose of this proposal is not to rule out federal intervention to help address the lack of adult, caring relationships in the lives of many of America's youth. The argument I am making is that the hurdle is higher for justifying a role for public-sector intervention. Since it is unlikely that mentoring programs can effectively demonstrate social benefits beyond program costs, justification for supporting them is largely based on altruism. At least some component of the private sector has that as an explicit goal, making it a more-natural fit for that sector to tackle this issue. Some government programs provide benefits for largely altruistic reasons, though; the Low Income Home Energy Assistance Program is an example. If mentoring programs could satisfy the altruistic goals of the public sector, then there is no reason (outside budgetary constraints) why it could not support them.

## Conclusion

Well-designed mentoring programs could go a long way toward giving better opportunities to the more than 9 million children growing up in America who have no caring adults

in their lives. Valiant attempts have been made to alleviate the difficulties associated with this caring gap in the lives of disadvantaged youth. In fact, five thousand mentoring programs currently provide services to 3 million young people; Big Brothers Big Sisters alone serves almost 200,000 children. Yet many disadvantaged youth still remain without a mentor.

Evaluating mentoring requires combing through extensive research on the programs and components already in play. This policy memo tackles that task. After a careful review of the best available evidence, I maintain that community-based mentoring programs in the vein of the traditional Big Brothers Big Sisters model are effective and should receive further support of NGOs and private-sector groups, with a set of best practices in mind as well as with rigorous evaluation to determine the important components for effective mentoring.

A key consideration is whether government provision of mentorship programs is justified—in other words, whether the social returns of the program (e.g., in terms of crime reduction and increased tax revenue) exceed its costs. I find that public spending on mentorship is not justified on these grounds, and that mentorship programs should instead be provided by NGOs and private-sector entities looking to improve outcomes for at-risk youth. Indeed, altruism is a part of the mission for these groups, and the benefit of providing mentorship to disadvantaged youth outweighs the costs.



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## Endnotes

1. Earlier this year, President Obama introduced an initiative, My Brother's Keeper, calling for the private and philanthropic sectors to institute mentoring programs. In his remarks he credited those who "never gave up on me, and so I didn't give up on myself" (Obama 2014).
2. To provide a couple of examples, Child Trends identifies the programs Fostering Healthy Futures and Parent Mentors for Children with Asthma. These programs are targeted at children who have suffered abuse in foster-care settings and children who need assistance dealing with their respiratory issues, respectively. Lawner, Beltz, and Moore (2013) summarizes most of these programs.
3. The impact on GPA is only statistically significant at the 10 percent level. Given the overall strength of the results indicating that academic ability improved and the ability to more-easily translate GPA into subsequent wages, I conclude that this is a meaningful effect and take this estimate as a summary statistic of the educational impact of the intervention. The point estimates also suggest that the effect of mentoring on academic achievement in this experiment is larger for girls than for boys, although these differences are unlikely to be statistically significant (insufficient information is provided to conduct a formal hypothesis test).
4. One possible explanation for the divergence in results is that the pilot results were strongly (although not exclusively) restricted to one of the five sites in which the program was implemented (Levine and Zimmerman 2010). The ability of a single administrator to make a program work and the inability to replicate those results elsewhere is one potential weakness of any smaller-scale intervention.
5. One shortcoming of this analysis is that we have access to only the short-run effect of the Big Brothers Big Sisters intervention. An active literature exists in other areas, such as the Head Start program, that is concerned with test score fade-out and the long-term impact on economic outcomes. We do not have the ability to explore that issue more deeply in this context. Yet the benefit-cost ratio we report here is so large that the short-run impact would have to depreciate extensively to substantively alter this result.

## References

- Behncke, Stefanie, Markus Frölich, and Michael Lechner. 2010. "A Caseworker Like Me: Does The Similarity between the Unemployed and Their Caseworkers Increase Job Placements?" *Economic Journal* 120 (549):1430–59.
- Bernstein, Lawrence, Catherine Dunn Rappaport, Lauren Olsho, Dana Hunt, and Marjorie Levin. 2009. "Impact Evaluation of the U.S. Department of Education's Student Mentoring Program." U.S. Department of Education, Washington, DC.
- Big Brothers Big Sisters of America. 2012. "Annual Report 2011/12." Philadelphia: Big Brothers Big Sisters of America.
- Bruce, Mary, and John Bridgeland. 2014. "The Mentoring Effect: Young People's Perspectives on the Outcomes and Availability of Mentoring." Civic Enterprises with Hart Research Associates for MENTOR: The National Mentoring Partnership, Washington, DC.
- Cavell, Timothy, David DuBois, Michael Karcher, Thomas Keller, and Jean Rhodes. 2009. "Policy Brief: Strengthening Mentoring Opportunities for At-Risk Youth." National Mentoring Center, Portland, OR.
- Child Trends. 2014. "List of Programs." Child Trends, Bethesda, MD. <http://www.childtrends.org/what-works/list-of-programs/>.
- Dee, Thomas S. 2004. "Teachers, Race and Student Achievement in a Randomized Experiment." *Review of Economics and Statistics* 86 (1): 195–210.
- Dee, Thomas S. 2005. "A Teacher Like Me: Does Race, Ethnicity or Gender Matter?" *American Economic Review* 95 (2): 158–65.
- DuBois, David L., Nelson Portillo, Jean E. Rhodes, Naida Silverthorn, and Jeffrey C. Valentine. 2011. "How Effective Are Mentoring Programs for Youth? A Systematic Assessment of the Evidence." *Psychological Science in the Public Interest* 12 (2): 57–91.
- Hahn, Andrew, Tom Leavitt, and Paul Aaron. 1994. "Evaluation of the Quantum Opportunities Program. Did the Program Work?" Center for Human Resources, Brandeis University, Waltham, MA.
- Herrera, Carla, Jean Baldwin Grossman, Tina J. Kauh, Amy F. Feldman, Jennifer McMaken, and Linda Z. Jucovy. 2007. "Making a Difference in Schools: The Big Brothers Big Sisters School-Based Mentoring Impact Study." Public/Private Ventures, Philadelphia, PA.
- Karcher, Michael J. 2008. "The Study of Mentoring in the Learning Environment (SMILE): A Randomized Evaluation of the Effectiveness of School-based Mentoring." *Prevention Science* 9 (2): 99–113.
- Lawner, Elizabeth, Martha Beltz, and Kristin A. Moore. 2013. "Research Brief: What Works for Mentoring Programs: Lessons from Experimental Evaluations of Programs and Interventions." Child Trends, Bethesda, MD.
- Levine, Phillip B., and David J. Zimmerman. 2010. *Targeting Investments in Children: Fighting Poverty When Resources Are Limited*. Chicago: University of Chicago Press.
- Obama, Barack. 2014. "Remarks by the President on 'My Brother's Keeper' Initiative." The White House, Washington, DC.
- Schirm, Allen, Elizabeth Stuart, and Allison McKie. 2006. "The Quantum Opportunity Program Demonstration: Final Impacts." Mathematica Policy Research, Washington, DC.
- Tierney, Joseph P., Jean Baldwin Grossman, and Nancy L. Resch. 1995. "Making a Difference: An Impact Study of Big Brothers Big Sisters." Public/Private Ventures, Philadelphia, PA.
- U.S. Census Bureau. 2013. "Living Arrangements of Children." U.S. Census Bureau, Washington, DC. <https://www.census.gov/hhes/families/data/children.html>.
- Wheeler, Marc E., Thomas E. Keller, and David L. DuBois. 2010. "Review of Three Recent Randomized Trials of School-Based Mentoring." *Social Policy Report* 24 (3): 1–19.