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The Quantum Opportunity Program Demonstration:

Initial Post-Intervention Impacts

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EXECUTIVE SUMMARY

From July 1995 through September 2001, the U.S. Department of Labor (DOL) and the Ford Foundation (Ford) operated a demonstration of the Quantum Opportunity Program (QOP). QOP offered intensive and comprehensive services to help at-risk youth graduate from high school and enroll in postsecondary education or training. The QOP demonstration included several features of Workforce Investment Act (WIA) youth programs, and findings from the demonstration might provide some insight about the implementation challenges that such WIA programs will encounter and the potential effectiveness of those programs.

The QOP demonstration targeted youth with low grades entering high schools with high dropout rates. Randomly selected eligible youth were enrolled in QOP and served even if they transferred to other schools, dropped out of school, became incarcerated, or became inactive in QOP for a long time. QOP's primary goals were to increase the rates of high school graduation and enrollment in postsecondary education or training. Its secondary goals were to improve high school grades and achievement test scores and to reduce risky behaviors, such as substance abuse, crime, and teen parenting.

QOP was mainly an after-school program providing case management and mentoring, supplemental education, developmental activities, community service activities, supportive services, and financial incentives. These services were provided year-round for five years to enrollees who had not graduated from high school, and were designed to be comprehensive enough to address all barriers to success and to be intensive. The program model specified roughly 15 to 25 enrollees per case manager, and it prescribed an annual participation goal of 750 hours for each enrollee who had not graduated. From graduation to the end of the demonstration, enrollees who had graduated received limited services—some mentoring and assistance with enrolling in postsecondary education or training.

Community-based organizations (CBOs) in seven sites operated QOP demonstration programs. Five sites (Cleveland, Fort Worth, Houston, Memphis, and Washington, D.C.) were funded by DOL. Four of the five served 100 youth each, and the Washington, D.C., site served 80 youth. The other two sites (Philadelphia and Yakima) served 50 youth each with funding from Ford, which also funded the technical assistance provided to sites throughout the demonstration. DOL has funded the evaluation of the QOP demonstration.

Evaluation Design

To estimate QOP's impacts on high school performance and graduation, postsecondary education or training, and risky behaviors, we have conducted three surveys, administered achievement tests in reading and mathematics, and collected high school transcripts for a group of youth who were enrolled in QOP and a group of statistically identical youth—the control group—who were not allowed to participate in QOP. We formed the QOP and

control groups at the start of the demonstration by randomly assigning each of the nearly 1,100 youth eligible for the program to one group or the other.

In this report, we present QOP's impacts on outcomes measured using data from the third survey conducted to date. The survey was administered by telephone and began approximately two years after the end of the demonstration when most sample members were 21 or 22 years old (one year after the end of the demonstration when most sample members were 20 or 21 years old in the Washington, D.C., site, where program operations began one year later than in the other sites).

Findings based on data from the first two evaluation surveys—which were conducted in-person and by telephone, respectively—were presented in previous reports. Those surveys were administered during the four and fifth years of the demonstration, that is, before the demonstration was over and when many sample members were still attending high school. The impacts presented in this report are the first post-intervention impacts from the evaluation of the QOP demonstration. A future report will present additional post-intervention impacts estimated from data collected in the final evaluation survey, which will be conducted in fall 2004, a little more than five years after sample members were scheduled to graduate from high school (a little more than four years after scheduled graduation for sample members in the Washington, D.C., site).

The Context for Interpreting the Impacts of the QOP Demonstration

The impacts of the QOP demonstration are not determined entirely by the features of the QOP model. The impacts are also influenced—probably heavily—by how well the demonstration sites implemented the QOP model, how much they spent on the program, and the extent to which QOP enrollees participated in the program. Because the quality of implementation, the amount of spending, and the extent of participation were not varied by design, it is not strictly valid to conclude, for example, that better impacts in one site relative to other sites were caused by closer fidelity to the QOP model in that site. However, understanding the patterns of implementation, costs, and participation provides a context for assessing the impacts presented in this report and understanding the potential sources of variation in impacts.

Through annual site visits, annual QOP conferences, and conference calls with QOP staff, we assessed how well the CBOs in the QOP demonstration implemented the program model. From information provided by QOP staff, we also measured QOP costs and the extent to which enrollees participated in QOP's educational, developmental, and community service activities. Because financial incentives were provided for participation in these three activities only, the participation data do not include time spent being mentored if the mentoring was not part of an educational, developmental, or community service activity.

Neither DOL nor, to a lesser degree, Ford required sites to implement fully all of the elements of the QOP model, in part to allow some flexibility for adjusting implementation to local or changing circumstances. Our analysis of program implementation revealed that two sites implemented a version of QOP that deviated substantially from the program model and that the other five sites implemented versions that deviated moderately from the model.

With the exception of the Philadelphia site—where the program was operated by the CBO that helped to design the QOP model and oversaw a small-scale pilot of QOP from 1989 through 1993—local CBOs found implementing QOP difficult, primarily because QOP was substantially more comprehensive, intensive, and complex than their traditional programs. Although sites implemented the mentoring and developmental components relatively well, no site fully and effectively implemented the education component, and sites generally did not meet their enrollees' needs for some supportive services, including child care, health and mental health services, and substance abuse treatment.

In addition to the deviations from the program model, we found that most enrollees attended relatively few program activities. Enrollees spent an average of 174 hours per year on QOP's educational, developmental, and community service activities—23 percent of the annual goal of 750 hours—through the first four years of the demonstration. The average fell steadily from 247 hours in the first year to 89 hours in the fourth year, while the fraction of enrollees spending no time at all on these activities rose steadily from 1 percent to 36 percent. We also found that participation varied substantially from site to site, ranging from a low of 68 hours per year to a high of 345 hours.

The total cost of QOP per enrollee over the full five-year demonstration period was $18,000 to $22,000 for DOL-funded sites; $23,000 for the Yakima site; and $49,000 for the Philadelphia site. These figures do not include the cost of the technical assistance that was provided to sites.

What Were QOP's Impacts?

Impacts on Primary Outcomes

- **QOP did not achieve its first primary objective.** That is, it did not increase the likelihood of graduating from high school with a diploma. It also did not increase the likelihood of completing high school by earning either a diploma or a GED. These findings are based on all of the available data, including data from the survey that was conducted a little more than three years after scheduled graduation (two years in the Washington, D.C., site). As discussed in detail in this report, the finding that there was no impact on the likelihood of high school graduation differs from the previous finding that there was an increased likelihood of graduation based on data collected during the first year after scheduled graduation when many sample members were still attending high school (Maxfield et al. 2003b). That short-term impact no longer pertains.

- **QOP is achieving its second primary objective.** By a little more than three years after sample members were scheduled to graduate from high school (two years in the Washington, D.C., site), QOP had increased by 9 percentage points the likelihood of ever engaging in postsecondary education or training, including college attendance, vocational or technical school attendance, apprenticeship enrollment, and armed forces enlistment. QOP had also increased by 7 percentage points the likelihood of ever attending college and by 6 percentage points the likelihood of completing at least one quarter at college, although

impacts decline and become insignificant at higher levels of educational attainment (e.g., completing at least one year at college). Data collected in the next survey will reveal whether QOP prepared enrollees to persist in and complete their education and training activities so that the gains in attendance translate into substantial gains in attainment, as indicated by, for example, receipt of a college degree.

Impacts on Secondary Outcomes

- **QOP did not achieve its secondary objective of improving high school grades and achievement test scores.** This finding, presented in previous reports, is based on data from transcripts and reading and mathematics tests administered for the evaluation.

- **QOP has not generally achieved its secondary objective of reducing the broad range of risky behaviors targeted by the program.** It did not decrease the likelihood of teen parenting. Moreover, in the period shortly before the most recent survey, when most sample members were 21 or 22 years old (20 or 21 in the Washington, D.C., site), QOP did not decrease the likelihood of binge drinking, committing a crime, or being arrested or charged with a crime. However, QOP enrollees were less likely than control group members to have used an illegal drug.

Subgroup and Site Impacts

- **QOP did not increase the likelihood of high school completion for any site or for any of the subgroups defined by the observed baseline characteristics of sex, age at entry into ninth grade, or grade point average in the eighth grade.**

- **QOP might be more effective for some subgroups of enrollees than for others.** In particular, QOP increased postsecondary attainment among younger enrollees (the two-thirds of enrollees who were age 14 or younger when they entered the ninth grade), but it had no impact on the postsecondary attainment of older enrollees (those who were over age 14 when they entered the ninth grade). QOP also seems to have been more beneficial for enrollees in the bottom two-thirds of the eligible grade distribution than for enrollees in the top third of the distribution, although few differences in impacts are significant. (The eligible grade distribution excludes youth who were ineligible for QOP because their grades were too high.)

- **QOP's impacts varied by site.** Both the Cleveland and Philadelphia sites had beneficial impacts—mainly on postsecondary attainment—and neither had detrimental impacts. The Cleveland site increased by 18 percentage points the likelihood of ever attending college and by 14 percentage points the likelihood of completing at least one year of college. The Philadelphia site increased by 19 percentage points the likelihood of ever attending a four-year college and by 15

percentage points the likelihood of completing at least one year at a four-year college. Except for a reduction in illegal drug use in the Washington, D.C., site, none of the other five sites had beneficial impacts, while some had detrimental impacts.

These findings are based largely on data collected a little more than three years after sample members were scheduled to graduate from high school (two years in the Washington, D.C., site). The findings raise several important questions: Will the impacts on engagement in postsecondary education and training be sustained? More specifically, will QOP enrollees persist in and complete college or other forms of training? Will members of the control group catch up to QOP enrollees in both attendance and attainment? Data from the next survey—which will begin in fall 2004, a little more than five years after scheduled high school graduation (four years in the Washington, D.C., site) and two years after the previous survey—will shed light on these questions. The survey will also provide additional data for estimating the impacts of QOP on both the work experiences of enrollees and their engagement in risky behaviors, such as substance abuse and crime.

INTRODUCTION

This report presents the first post-intervention impacts of the Quantum Opportunity Program (QOP)[1] demonstration.[2] From July 1995 through September 2001, the U.S. Department of Labor (DOL) and the Ford Foundation (Ford) operated a demonstration of QOP designed to help at-risk[3] high-school-age youth graduate from high school and enroll in postsecondary education or training to improve their prospects for success in the labor market. QOP was an intensive case management and mentoring program that emphasized after-school supplemental academic education, developmental activities, and community service. The QOP demonstration included several features of Workforce Investment Act (WIA) youth programs, and findings from the demonstration might provide some insight into the implementation challenges that such WIA programs will encounter and the programs' potential effectiveness.

QOP is one of several approaches to assisting at-risk youth evaluated in recent years by DOL and the Department of Education (ED), including Job Corps, Job Training Partnership Act (JTPA) youth programs, Career Academies, Center for Employment Training (CET), Upward Bound, and Talent Search. As employers demanded more advanced technical, cognitive, and work-readiness skills in entry-level employees, DOL and ED became concerned that some youth are not effectively prepared to meet these rising standards. Such youth are at increased risk of unemployment, poverty, welfare dependency, substance abuse, criminal activity, and teenage childbearing. Finding effective approaches to assisting these youth in achieving economic self-sufficiency is critical to avoiding the personal losses resulting from such life events and to reducing the costs associated with, for example, criminal activity and the provision of assistance through Unemployment Insurance, WIA, Temporary Assistance for Needy Families (TANF), Medicaid, and other public programs. The importance to the nation's economy was described in a recent speech by Alan Greenspan, chair of the Board of Governors of the Federal Reserve System:

> As history clearly shows, our economy is best served by full and vigorous engagement in the global economy. Consequently, we need to increase our efforts to ensure that as many of our citizens as possible have the opportunity to capture the benefits that flow from that engagement…. [O]ne critical element in creating those opportunities is to provide rigorous education and ongoing training to all members of our society, … a strategy that we now should embrace with renewed commitment (Greenspan 2004).

[1] The acronym QOP is customarily pronounced *kwäp*.

[2] Previous reports (Maxfield et al. 2003b and Schirm et al. 2003) presented short-term impacts based on data collected while the demonstration was still underway.

[3] At-risk youth are at a greater risk of substance abuse, criminal activity, teenage childbearing, not completing high school, or not enrolling in a postsecondary education or training program, compared to the average high-school-age youth in the United States.

Addressing an issue that is especially relevant to the long-term prospects of at-risk youth, Chairman Greenspan also observed:

> [T]he apparent imbalances between the supply and demand for labor across the spectrum of skills…have the potential to hamper the adjustment flexibility of our economy overall. But these growing imbalances are also aggravating the inequality of incomes in this country. The single central action necessary to ameliorate these imbalances and their accompanying consequences for income inequality is to boost the skills, and thus earning potential, of those workers lower on the skill ladder. (Greenspan 2004).

Recent data confirm the large differences in earnings across education/skill levels. In 2000, males and females age 25 to 34 with at least a bachelor's degree earned on average 60 and 95 percent more, respectively, than males and females age 25 to 34 who had received a high school diploma or general educational development (GED) certificate but had not attended college. Despite their earnings disadvantage relative to college graduates, the young adults who had completed high school via a diploma or GED still earned substantially more than high school dropouts of the same age—37 percent more for males and 43 percent more for females, on average (U.S. Department of Education 2002).

With competition from abroad and the introduction of new technologies, there have been some trends in relative earnings over the last two decades—most notably, an increase in earnings for college graduates relative to high school graduates (U.S. Department of Education 2002). Nevertheless, substantial gaps between the earnings of young adults with different levels of educational attainment persisted throughout the period, including the late 1980s when three organizations—Opportunities Industrialization Centers of America (OICA) in Philadelphia; the Ford Foundation; and Remediation and Training Institute in Alexandria, Virginia—developed the QOP model. The developers of the QOP model believed that acquiring human capital by completing high school and engaging in postsecondary education or training substantially enhances a youth's prospects for a successful career with sufficiently high earnings to support a good standard of living for a family. They also believed that engaging in risky behaviors—such as substance abuse, crime, and teenage childbearing—created barriers to success.

To promote the acquisition of human capital and the avoidance of risky behaviors, the developers of the QOP model created the program to provide intensive and comprehensive services over several years to a broad range of at-risk youth, including especially those youth who might not otherwise be sufficiently motivated to apply to or actively participate in such a program. In addition to educational services for developing or encouraging the development of human capital, QOP would emphasize mentoring and personal and cultural development activities. From the perspective of the juvenile justice literature, the mentoring and development activities would mitigate the influence of risk factors in a youth's social environment—such as gangs and neighborhood drug dealers—and strengthen the youth's resiliency in resisting the risk factors (U.S. Department of Justice 1995).

Following development of the program model, Ford funded and OICA oversaw a small-scale QOP pilot in six sites from 1989 through 1993. The Center for Human

Resources at Brandeis University evaluated the pilot, obtaining some findings that were encouraging to DOL and Ford. In early 1995, DOL and Ford agreed to test QOP on a larger scale via a demonstration with two sites—Philadelphia and Yakima—under private management and administration and with five sites—Cleveland, Fort Worth, Houston, Memphis, and Washington, D.C.—under federal management and administration, specifically, under the pilot and demonstration authority of JTPA.

The QOP demonstration served a single cohort of youth from the beginning of the ninth grade in the fall of 1995 through the fall of 2000.[4] A local community-based organization (CBO) in each of the seven demonstration sites implemented and operated a QOP program. Each CBO teamed with from one to three high schools and had 50, 80, or 100 youth enrolled in the program. By the end of the demonstration, enrollees were in a variety of statuses, including attending college or another postsecondary training program, still attending high school, attending a GED certification program, working after finishing high school, and working or unemployed after dropping out of high school.

The primary objectives of the demonstration were to increase the likelihood of high school completion and the likelihood of enrollment in postsecondary education or training. Its secondary objectives were to increase academic achievement while in high school and to reduce risky behaviors, such as substance abuse, crime, and teenage childbearing. Under contract to DOL, Mathematica Policy Research is evaluating the QOP demonstration, and assessed in previous reports the program's implementation and short-term impacts (Maxfield et al. 2003a and 2003b and Schirm et al. 2003). The short-term impacts were based on data collected during the fourth and fifth years of the demonstration, that is, while sites were still providing services to enrollees and when many youth were either still attending high school or had only recently graduated. This report presents the first post-intervention impacts, which are based on data collected a little more than two years after the end of the demonstration when most members of the evaluation sample were 21 or 22 years old (one year after the end of the demonstration in the Washington, D.C., site when most sample members there were 20 or 21 years old). A future report will present even longer-term program impacts.

After briefly describing the QOP target group and program model in the next section, we summarize our previously-reported findings pertaining to the following questions:

- How well was the QOP program model implemented in the demonstration sites?
- How much did QOP cost?
- How much time did enrollees spend on program activities?

[4] All events occurred one year later in the Washington, D.C., site.

Following the review of the implementation, cost, and participation findings, we present estimates of the post-intervention impacts of QOP.

THE QOP TARGET GROUP AND PROGRAM MODEL

The target group in the QOP demonstration was youth entering the ninth grade in fall 1995 (1996 in the Washington, D.C., site) who met the following criteria:

- Began the ninth grade at a high school selected for the QOP demonstration. Each high school had a dropout rate of 40 percent or more.
- Were not repeating the ninth grade.
- Were not so physically disabled or learning disabled that participation in the program would not be appropriate, as determined by the school.
- Had a grade point average (GPA) below the 67th percentile among the students meeting the first three requirements. (The GPA was calculated from final grades received in the eighth grade.)

The QOP model consisted of four primary components: case management and mentoring, education, developmental activities, and community service. Secondary aspects of the program model included financial incentives—stipends, accrual accounts, enrollee bonuses, and staff bonuses—and supportive services—snacks, transportation assistance, and other services as needed, including child care, health and mental health services, and substance abuse treatment.

Compared to the models for most other youth programs, the QOP model required more intensive case management and mentoring in four ways:

1. Enrollees were to have greater access to case managers and were to be involved in more program activities for longer periods of time. Each case manager was to have a caseload of approximately 15 to 25 enrollees. The QOP model set a target of 250 hours per year for activities in each of three service components—education, developmental activities, and community service—for a total of 750 hours per year until an enrollee graduated from high school. Enrollees who took

full advantage of QOP received services for five years.[5] Most case managers were available during off hours for enrollees to call in emergencies.[6]

2. Enrollees were to remain in the program for longer periods because services would be provided for up to five years and program eligibility was not contingent on enrollee behavior. Youth continued to be enrolled in QOP even if they transferred to another school, dropped out of school, became incarcerated, or became inactive in QOP for a long time. In contrast to some other youth programs, QOP did not accept or retain only those youth who were sufficiently motivated to apply and actively participate. The demonstration's approach of enrolling all randomly selected eligible youth reflected the program's philosophy that the least-motivated youth might benefit the most from receiving help.

3. Enrollees were to receive more comprehensive services because the scope of case management called for addressing all barriers that enrolled youth faced. Case managers either addressed a barrier directly—by arranging transportation to program activities, for example—or referred the enrollee to another community resource, such as a substance abuse treatment program.

4. Enrollees were to participate in the program throughout school vacations and the summer. Enrollees who failed a class during the school year were encouraged to attend summer school. Case managers assisted enrollees who were age 16 or older to find summer jobs. Developmental and community service activities continued throughout the summer for all enrollees.

Each of the other three components of the QOP model was geared toward achieving a specific program goal.

- **Educational activities** were intended to improve academic achievement, increase the likelihood of completing high school, and increase the likelihood of going on to college or some other postsecondary training program. After an academic assessment, which formed the basis of an individualized education plan, educational services were to consist of one-on-one tutoring and computer-assisted instruction in specific coursework as well as in basic reading and mathematics. Educational services also included visiting nearby college campuses and other activities designed to promote awareness of and planning for college or other postsecondary training.

- **Developmental activities** included life skills and employment-readiness skills training that was designed to reduce risky behaviors by improving enrollees' decision-making and social skills and to prepare enrollees for seeking and retaining jobs. Developmental activities also promoted cultural awareness and

[5] Enrollees who had graduated from high school received some mentoring and assistance in enrolling in postsecondary education or training between graduation and the end of the fifth year of the demonstration.

[6] Our assessment of how well these and other features of the QOP model were implemented in the demonstration sites is summarized below and discussed in detail in Maxfield et al. (2003a).

provided recreation, which was fun for enrollees and helped them build strong relationships with their case managers and peers.

- **Community service activities**, such as visiting the residents of a local nursing home or volunteering at a local food bank, were designed to help youth develop a sense of responsibility for the quality of life of others in their neighborhood.

The QOP model addressed numerous barriers to success by specifying that supportive services were to be provided either directly or indirectly through referrals to other resources in the community. QOP case managers referred enrollees to community health and mental health services; summer jobs programs; and local agencies that provide housing, food, income support, or child care.

In addition to supportive services, QOP provided youth with three types of financial incentives to attend program activities. The first was a stipend of approximately $1.25 for every hour devoted to educational activities, developmental activities that were not purely recreational, and community service. A matching amount was either set aside or deposited in an accrual account and promised to the enrollee when he or she earned a high school diploma or GED certificate and enrolled in college, a certified apprenticeship program, an accredited vocational/technical training program, or the armed forces Enrollees in some sites also received bonuses for completing major program activities.[7]

QOP also provided financial incentives to program staff. The two Ford-funded sites compensated staff entirely through incentive payments based on the time enrollees spent on educational, developmental, and community service activities, while some DOL-funded sites provided bonuses to staff based at least partly on enrollee participation in these program activities.

Although the goals of QOP were similar to those of many other federal youth programs or demonstrations—such as Job Corps, Career Academies, the CET demonstration, School-to-Work programs, Upward Bound, and Talent Search—QOP's approach to achieving these goals, which we have just described, was different. QOP was more intensive and comprehensive than most youth programs or demonstrations, and it had a substantially greater emphasis on mentoring. QOP also enrolled less motivated youth than most programs do because it did not limit enrollment to those youth who were sufficiently motivated to apply to and remain active in the program. QOP explicitly targeted youth with lower grades than Upward Bound and Talent Search do, and it included out-of-school youth, unlike Career Academies, School-to-Work, Upward Bound, and Talent Search. Unlike Job Corps and CET, QOP included in-school youth. Maxfield et al. (2003b) discuss in greater detail these and other differences between QOP and other federal youth programs.

[7] Financial incentives were not provided for time spent being mentored if the mentoring was not part of an educational, developmental, or community service activity.

While QOP differed substantially from several other youth programs, it had many similarities with WIA youth programs. In contrast to JTPA youth programs, WIA youth programs and QOP provide services that are comprehensive and long term, including:

- Case management and mentoring by a caring adult
- Tutoring in basic education and study skills as well as close collaboration with local high schools and school districts to improve enrollees' educational achievement
- Community service and leadership training
- Year-round services, including a summer jobs program that is integrated into the educational component of the program
- A broad array of supportive services, including transportation, child care, food, and emergency financial assistance
- Technical assistance to local service providers in recognition of the fact that the model is unfamiliar and difficult to implement

These similarities between QOP and WIA youth programs suggest that the findings from the evaluation of the QOP demonstration might reveal some of the implementation challenges that WIA youth programs might encounter and indicate whether WIA youth programs are likely to be effective.

HOW WELL WAS QOP IMPLEMENTED?

As we learned from annual site visits, annual QOP conferences, and conference calls with QOP staff, two demonstration sites implemented a version of QOP that deviated substantially from the program model. The other five sites implemented versions that deviated moderately from the model. (See Maxfield et al. (2003a) for a detailed description of how the program was implemented in each site.)

There were two main reasons why the QOP programs implemented by the demonstration CBOs did not closely adhere to the QOP model. First, with the exception of the Philadelphia site where the program was operated by the CBO that helped to design the QOP model and oversaw the previous QOP pilot, local CBOs found implementing QOP to be difficult, primarily because QOP was substantially more comprehensive, intensive, and complex than their traditional programs. Second, neither DOL nor, to a lesser degree, Ford required sites to implement fully all of the elements of the QOP model, in part to allow some flexibility for adjusting implementation to local or changing circumstances.

By some measures, most sites implemented QOP with the prescribed intensity. All sites implemented the prescribed ratio of about 15 to 25 enrollees per case manager. Case managers developed deep personal relationships with the 40 to 60 percent of enrollees who attended some program activities regularly and addressed a wide range of barriers facing those youth. Most case managers stayed with the program for several years, and many stayed for the entire five years of the demonstration. QOP's policy of providing access to services regardless of an enrollee's behavior or status (such as becoming incarcerated, moving to another community, or dropping out of high school) was well implemented.

By other measures, however, the demonstration CBOs did not implement QOP with the prescribed intensity. Only two sites offered the prescribed number of hours of educational, developmental, and community service activities. The other sites offered fewer than the prescribed number of hours for at least one program component, frequently the community service component. Furthermore, the demonstration revealed the practical limitation of QOP's policy of case managers being on duty or on call for large numbers of hours each week. Such a policy is limited by the case managers' personal lives, the physical difficulties of providing services to enrollees who moved far away, and the legal limits on case manager overtime under the Fair Labor Standards Act.

Most sites did not implement the education component effectively. In particular, few sites regularly assessed academic performance via achievement tests, no site developed individualized education plans based on assessment results, no site implemented a sustained program of course-based tutoring, and only three sites successfully implemented computer-assisted instruction. These limitations might reflect, in part, the fact that QOP case managers were hired based on their training and experience in mentoring and delivering social services rather than teaching, tutoring, or other education-related activities.

The developmental component was relatively well implemented. Sites offered many different activities. Although developmental activities were intended to focus on life skills that would enable the youth to avoid risky behaviors, this component included many recreational activities at most sites. Nevertheless, participants found recreational activities to be fun, and case managers found them to be useful for fostering program participation and building strong relationships with and among their enrollees.

The community service component at most sites did not follow the program model. The most common reasons for deviations were the enrollees' lack of interest and the case managers' belief that enrollees needed other QOP services more. Most sites decided to reallocate their resources away from community service to mentoring, case management, and educational activities.

Most sites operated QOP throughout school-year vacations and the summer months. Several sites subsidized the fee for summer school for enrollees who needed it. One site developed its own summer school during a summer in which the local public school district did not operate summer school. Case managers reported that many enrollees needed both summer school, because of failing a course during the school year, and a summer job, because of being a member of a low-income family.

Enrollee stipends were well implemented and appeared to be an effective way to attract the enrollees to program activities in the first year or two of the demonstration. As enrollees aged and could earn much more per hour by working, case managers found that other incentives, such as recognition, attention, and prizes, could replace the stipends.

JTPA accounting regulations prohibited DOL-funded CBOs from establishing accrual accounts for enrollees. Instead, these CBOs kept informal records of accrual account balances and paid those balances to qualifying enrollees at the end of the demonstration. According to case managers, the resulting absence of periodic account statements limited the effectiveness of accrual accounts in increasing program participation. Nonetheless, the accounts enabled many enrollees to save for postsecondary education or training. Account balances at the end of the demonstration ranged from a few hundred dollars to nearly $10,000, with most being in the range of $1,000 to $3,000.[8]

Most sites supplied many of the most commonly needed supportive services, including afternoon snacks and transportation to program activities. On the other hand, most sites did not meet their enrollees' needs for child care, health and mental health services, substance abuse treatment, and family counseling. In fact, QOP proved to be more a prevention program than a remediation program. The most well developed aspects of QOP were designed to prevent youth from engaging in risky behaviors. QOP was less well developed for providing services to youth facing the consequences of the risky behaviors in which they had already engaged.

HOW MUCH DID QOP COST?

The total QOP expenditure per enrollee averaged $25,000 for the full five years of the demonstration. The five-year expenditure per enrollee for the DOL-funded sites ranged from $18,000 to $22,000.[9] For the two Ford-funded sites, the expenditure per enrollee was $23,000 in Yakima and $49,000 in Philadelphia. Compared with the other sites, Philadelphia had much higher expenditures per enrollee in all measured categories: staff wages and benefits, student stipends and accrual account contributions, and other costs.

[8] As of the second telephone survey, just over two-fifths of the QOP enrollees had received the money from their accrual accounts. Among these enrollees, the most common uses for the money were purchasing supplies for school or a training program (reported by 77 percent) and paying tuition (reported by 69 percent). Other common uses were paying for transportation or moving expenses (44 percent) and paying for rent or other living expenses (39 percent). About 98 percent of the enrollees who received the money from their accrual accounts used at least some of the money for one or more of these four purposes.

[9] DOL sites were required to match the federal grant with local funds during the first four years of the demonstration. However, the Houston site lost its local matching funds during the third and fourth years. About one-third of the lost funds were replaced by DOL with grant funds received from the Office of Juvenile Justice and Delinquency Prevention (U.S. Department of Justice) for reducing gang activity. DOL also allowed the value of staff time spent on grant administration to be classified as local matching funds.

Annual expenditures at most sites varied over the five years of the demonstration. Spending typically increased each year during the first four years and decreased during the fifth year. QOP coordinators reported that they developed a better understanding of what they could do with the money and where they needed to spend it after the first year or two of the demonstration.

These cost figures cover program operations and management, but exclude the cost of technical assistance provided by OICA. Because of the anticipated need for technical assistance and OICA's experience in helping to design the QOP model, Ford awarded a grant to OICA to provide technical assistance for the QOP demonstration. Technical assistance included helping sites set up management information software, funding annual week-long training conferences for all QOP staff, and answering questions as needed. OICA provided technical assistance for the demonstration at a cost of $1,125,000, or $38,000 per year per site (not counting the Philadelphia site itself). In addition to providing technical assistance, OICA operated the Philadelphia site throughout the demonstration.

HOW MUCH DID ENROLLEES PARTICIPATE IN QOP?

Most enrollees did not attend most program activities. According to the QOP participation data for the first four years of the demonstration, enrollees spent an average of 174 hours per year on educational, developmental, and community service activities—23 percent of the annual goal of 750 hours. Enrollees spent an average of 72 hours per year on education (29 percent of the goal), 76 hours on developmental activities (30 percent of the goal), and 26 hours on community service (11 percent of the goal). The average time spent on these QOP activities fell steadily from 247 hours in the first year of the demonstration to 89 hours in the fourth year. The percentage of enrollees spending no time at all on QOP activities increased steadily from 1 percent in the first year to 36 percent in the fourth year. This is disappointing for a program based on the belief that youth programs must be intensive to be effective.[10] The roughly 12 percent of enrollees who spent 100 or fewer hours on QOP activities during the entire demonstration reported being uninterested in those activities or having other after-school activities, such as playing a sport, working, or caring for other family members.

Participation varied substantially from site to site. Participation ranged from highs of 345 hours per year per enrollee in the Yakima site and 244 hours in the Philadelphia site to a low of 68 hours in the Fort Worth site. Compared with enrollees at the Fort Worth site,

[10] Because financial incentives were provided for participation in educational, developmental, and community service activities, the participation data do not include time spent being mentored if the mentoring was not part of one of those three activities. At least some enrollees might have received substantial mentoring. Although the participation data exclude mentoring time, they include for some enrollees bonus hours that were awarded for achieving significant milestones, such as earning a B average or higher during a grading period in high school. Such bonus hours could not be distinguished from regular hours spent on educational, developmental, and community service activities.

enrollees at the Yakima site spent about 7 times as many hours on educational activities, 3 times as many hours on developmental activities, 15 times as many hours on community service activities, and 5 times as many hours on all three components combined.

ESTIMATING THE IMPACTS OF QOP

To estimate the impacts of QOP, we translated each program goal, such as high school graduation, into a quantifiable outcome, such as whether a youth graduated from high school. We measured each outcome for a group of youth enrolled in QOP and a group of statistically identical youth, called the control group. We formed the QOP group and the control group at the start of the demonstration by randomly assigning each youth eligible for the program to one group or the other. All members of the QOP group were enrolled in QOP. Members of the control group were not allowed to participate in QOP and, thus, show what would have happened to the enrollees had they not been enrolled.

We interviewed enrollees and control group members in person in the spring of the fourth academic year of the demonstration, that is, just before they were scheduled to graduate from high school.[11] The survey collected data on risky behaviors and factors that assist a youth in resisting negative influences in his or her social environment. At the same time, we administered achievement tests in reading and mathematics. During the last—that is, the fifth—year of the demonstration, we conducted a telephone survey covering high school graduation, postsecondary activities, risky behaviors, and (for the enrollee group) attitudes toward QOP. Shortly thereafter, we requested transcripts from the high schools that sample members had attended since the beginning of the demonstration. More recently, we conducted a second telephone survey for which interviewing began two years after the end of the demonstration when most sample members were 21 or 22 years old (one year after the end of the demonstration in the Washington, D.C, site when most sample members there were 20 or 21 years old). This second telephone survey covered the same broad topics as the first telephone survey.

The response rates for the in-person survey and the first telephone survey were 84 percent and 83 percent, respectively. The response rate for the second telephone survey was 75 percent. For each survey, the response rate for the QOP group exceeded the response rate for the control group by about 7 to 10 percentage points.[12]

We estimated the impact of QOP on an outcome by subtracting the mean outcome for the control group from the mean outcome for the QOP group.[13, 14] For this report, we

[11] Exhibit 1 presents key dates pertaining to our data collection activities.

[12] We collected complete transcript data for 74 percent of sample members and partial academic records for another 8 percent of sample members.

[13] All impact estimates presented in this report are simple difference-of-means estimates, except in Appendix F, where we present regression-adjusted impact estimates. Using regression methods allows us to

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measured outcomes using only data from the second telephone survey, except in the case of outcomes pertaining to high school completion. For those outcomes, we used data from the first telephone survey and school transcripts in addition to the data collected in the second telephone survey, as described in Appendix F.

As noted above, a future report will present even longer-term impacts estimated from data collected in a third telephone survey. That survey will begin in fall 2004—two years after the start of the second telephone survey and a little more than five years after sample members were scheduled to graduate from high school (four years after scheduled graduation in the Washington, D.C, site). At that time, most sample members will be 23 or 24 years old (22 or 23 in the Washington, D.C., site).

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adjust for purely random baseline differences between QOP and control group members. With very few exceptions, which are noted below, difference-of-means and regression-adjusted estimates imply the same conclusions.

[14] When estimating means for each group, we used weights to adjust for survey nonresponse, as described in Appendix E. In Appendix F, we assess the sensitivity of our estimates to the models used to derive weights, and find that our estimates are robust, with very few exceptions. In addition to discussing our approach to weighting, Appendix E describes in detail how we estimate impacts and their variances, that is, the error associated with the impact estimates.

Exhibit 1. Key Dates Pertaining to Data Collection for the QOP Evaluation Impact Study

All Sites except Washington, D.C., Site	
Students Entered Ninth Grade	August – September 1995
In-Person Survey and Achievement Tests	February - April 1999
On-Time Graduation Date	May – June 1999
First Telephone Survey	November 1999 - June 2000
School Records Collection	September 1999 - December 2000
End of Demonstration	September 2000
Second Telephone Survey	September 2002 – April 2003
Washington, D.C., Site	
Students Entered Ninth Grade	August – September 1996
In-Person Survey and Achievement Tests	April 2000
On-Time Graduation Date	June 2000
First Telephone Survey	November 2000 - April 2001
School Records Collection	December 2000 - April 2001
End of Demonstration	September 2001
Second Telephone Survey	September 2002 – April 2003

IMPACTS ON QOP'S FIRST PRIMARY OUTCOME: HIGH SCHOOL COMPLETION

QOP did not significantly increase the likelihood of graduating from high school with a diploma (see Table 1). It also did not significantly increase the likelihood of completing high school by earning either a diploma or a GED.[15]

How do we reconcile the first of these findings with the result reported in Maxfield et al. (2003b) that, as of the first telephone survey (two years earlier), QOP increased by 7 percentage points the likelihood of earning a diploma? One possible explanation is that QOP enrollees were more likely than control group members to graduate on time—that is, in four years—but that control group members subsequently caught up by remaining in school longer and graduating in, say, five years. This conjecture is supported by our previous finding (in Maxfield et al. 2003b) that, while QOP increased the likelihood of graduating with a diploma, it did not increase the likelihood of graduating with a diploma, receiving a GED, or remaining in high school. However, the conjecture is not supported by an estimate (not shown in Table 1) of the impact on on-time graduation based on all of the data collected to date, including data from the second telephone survey. That estimate reveals that QOP had no impact on the likelihood of graduating on time.[16, 17]

Further analysis suggests that several factors account for the differences among estimates of QOP's impact on high school graduation. As discussed in Appendix F, the differences are attributable to different patterns of nonresponse reflected in the currently available data versus the previously available data and the classification of some sample members who had not apparently graduated as of the first telephone survey as graduates based on data from the second telephone survey. These and additional findings reported in Appendix F confirm the result reported above: QOP did not increase the likelihood of graduating from high school.[18, 19]

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[15] Throughout this report, we use the statistical definition of "significant." Under that definition, an estimated impact is significant if, according to the available data, it is highly likely that the impact is different from zero. That an impact is significant does not imply that it is, for example, large or substantively important. When we say in this report that "QOP had an impact" on a particular outcome, that impact is significant unless otherwise noted. Likewise, when we say that "QOP did not have an impact," the impact is not significant.

[16] About 46 and 45 percent of QOP and control group members, respectively, graduated on time. The impact based on unrounded means is 0 percentage points.

[17] In Maxfield et al. (2003b), we measured graduation at the time of the first telephone survey rather than on-time graduation. The former corresponds closely to graduation in fewer than five years. When we use all of the data now available to estimate the impact on the likelihood of graduating in fewer than five years, we find that 49 and 47 percent of QOP and control group members, respectively, graduated in fewer than five years, implying a statistically insignificant impact of 2 percentage points.

[18] The sensitivity analyses presented in Appendix F demonstrate that the estimates of QOP's impact on the likelihood of graduating from high school are not sensitive to how we adjust via weighting for missing data on graduation status; how we measure graduation status using the data now available when, for example, there appear to be inconsistencies between the survey responses of sample members and their high school

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Why was QOP unsuccessful in achieving its first primary objective? Our finding that QOP did not increase the likelihood of high school graduation is consistent with the level of enrollee participation. Although QOP enrollees spent substantially more time in program activities than did participants in the typical JTPA youth program, for example, the number of hours spent on program activities by the average QOP enrollee fell substantially below the program goal during the program's first year. Then, hours of participation fell steadily for the average enrollee while the proportion of enrollees with little connection to the program grew steadily, as discussed above and in Schirm et al. (2003).[20]

The finding of no impact on high school graduation is also consistent with the demonstration sites' limited success in implementing the education component of the QOP model. Tutoring was poorly implemented by all of the sites, and most sites did not develop formal, comprehensive individualized education plans for enrollees. Even though case managers monitored class attendance and course grades—activities that might have enhanced enrollees' prospects for graduating—we found previously that QOP did not improve enrollees' grades, increase the number of credits earned, or raise achievement test scores (Maxfield et al. 2003b).

With no beneficial effects on these indicators of academic achievement, QOP might still have increased the likelihood of graduation through intensive mentoring and case management. A main objective of that component, which was much better implemented than the education component, was to keep enrollees focused on and overcoming barriers to the goal of graduation (and the goal of enrollment in postsecondary education or training). Case managers attempted to prevent each enrollee from giving up on school, advocated on behalf of the enrollee with the school, and tried to protect the enrollee from outside

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transcripts; or whether we use regression methods to adjust for random baseline differences between the QOP and control groups.

[19] One potential concern about estimates derived using data from the second telephone survey is that the estimated impacts for the Washington, D.C., site and, therefore, the estimated impacts for the whole QOP demonstration might be affected by the relatively large difference in response rates between QOP and control group members in the Washington, D.C., site (92 percent versus 62 percent, respectively) and by the fact that program operations began a year later and sample members are typically a year younger in the Washington, D.C., site than in the other six sites. In Appendix F, we assess whether our estimated impacts for the QOP demonstration are sensitive to whether we include or exclude the Washington, D.C., site. We found that they are generally not sensitive.

[20] Considering the impact findings in the light of the implementation, cost, and participation findings enables us to speculate about whether the average size of an impact and its variation across sites, for example, are broadly consistent with the average level of participation and variations in participation. However, the implementation, cost, and participation findings cannot generally explain—in a causal sense—the impact findings. The reason is that the QOP demonstration was not designed to assess the effects of variations in implementation, costs, and participation. Instead, the only factor that was experimentally controlled was whether a student was enrolled in QOP. Even quasi-experimental methods that use statistical modeling cannot help much in the search for explanations because the demonstration included only a small number of sites, and they differed in so many ways that we cannot disentangle the effects of their differences.

distractions and responsibilities that would divert the enrollee's attention from school. However, these efforts were apparently not sufficient for the average enrollee.

Table 1. Impacts on High School Completion

Outcome	QOP Group Mean (percentage)	Control Group Mean (percentage)	Impact (percentage points)
Received HS diploma	60	64	-3
Received HS diploma or GED	76	76	0

SOURCE: Telephone surveys and transcripts.

NOTE: Each impact was derived by subtracting the control group mean from the QOP group mean prior to rounding those means; thus, an impact might not equal the difference between the rounded means that are displayed. Estimates were obtained using weights to adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first and second telephone surveys, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

* Estimate significantly different from zero at the 90% confidence level, two-tailed test
** Estimate significantly different from zero at the 95% confidence level, two-tailed test
*** Estimate significantly different from zero at the 99% confidence level, two-tailed test

IMPACTS ON QOP'S SECOND PRIMARY OUTCOME: POSTSECONDARY EDUCATION OR TRAINING

QOP increased by 9 percentage points—from 53 to 62 percent—the likelihood of ever engaging in postsecondary education or training, including college attendance, vocational or technical school attendance, apprenticeship enrollment, and armed forces enlistment (see Table 2).[21] Most of this impact was attributable to increased college attendance, which rose by 7 percentage points, and it appears that about half of the impact on college attendance resulted from attendance at four-year colleges while the other half was a consequence of attendance at two-year colleges.[22] This pattern of impacts is consistent with the emphasis placed on college rather than on other forms of postsecondary education or training, especially during the first four years of the QOP demonstration (Maxfield et al. 2003a). Our findings are also consistent with the short-term impacts reported by Maxfield et al. (2003b), which revealed that QOP enrollees were more likely than control group members to be engaged in postsecondary education or training or to have been accepted by a college by the time of the first telephone survey.

When we consider the various levels of attainment reported by sample members—such as completing one quarter, one year, or two years of college—rather than just the fact of attendance, we find that impacts generally decline as the standard of attainment is raised (see Table 2). This finding is probably attributable, in part, to the limited time available for attending college before the second telephone survey. While many sample members who graduated from high school took more than four years to do so, even those who graduated on time had only about three and one-half years (two and one-half years in the Washington, D.C., site) to undertake postsecondary education or training after graduation but before the second telephone survey.[23] Although 33 percent of QOP enrollees had completed at least one quarter at a college, only 13 percent had completed at least two years.

The ability of QOP enrollees to persist in postsecondary education or training might also be hampered if QOP did not adequately prepare them for such activities. Our previous

[21] A sample member is classified as ever engaging in postsecondary education or training if he or she was engaged in such activities at the time of the second telephone survey or had previously engaged in such activities.

[22] As noted in Table 2, the impact on ever attending a four-year college is not significant. As noted in Appendix F, this impact and the impacts on educational attainment at four-year colleges are significant when the Washington, D.C., site is excluded from the analysis. However, the effect of excluding the Washington, D.C., site seems to be attributable to that site's not having an impact on attendance and attainment at four-year colleges rather than to a bias from the differential survey response rates (between QOP and control group members) or sample members not having as much time to enroll in college as in the other sites because of the delay in the start of the demonstration in that site.

[23] It is likely that some sample members who had enrolled in postsecondary education or training did not do so in the first few months after graduating from high school. Others who enrolled might have dropped out of their education or training programs, at least temporarily. Both of these behaviors would limit attainment.

finding (Maxfield et al. 2003b) that QOP did not raise academic achievement as measured by grades or test scores suggests that at least some QOP enrollees might struggle in college and drop out before obtaining a degree. Data from our next survey—which will be conducted two years after the second telephone survey and a little more than five years after scheduled high school graduation (four years after scheduled graduation in the Washington, D.C., site)—will shed further light on QOP's impacts on persisting in and completing postsecondary education or training activities.

Although one of QOP's primary objectives was to increase the likelihood that enrollees engage in postsecondary education or training, and the program appears to have been successful—at least to date—in achieving this objective, nearly two-fifths of enrollees had not engaged in any postsecondary education or training activities before the second telephone survey (see Table 2). Moreover, less than one-third of enrollees were engaged in such activities at the time of the survey (see Table 3).[24, 25] Thus, it is important to determine whether enrollees were engaged in some form of gainful activity, even if it was not postsecondary education or training. Specifically, we can examine whether they were employed.[26]

We find that control group members were more likely to have a job or a full-time job than QOP enrollees (see Table 3). However, when we consider positive attributes of a job other than hours of work, such as health insurance benefits or a high wage, we find that control group members were not more likely than QOP enrollees to have jobs with such

[24] As noted above, these enrollees are included in the two-fifths of enrollees who have ever engaged in postsecondary education or training.

[25] Considering just college enrollment, we find that 17 percent of QOP enrollees were attending college at the time of the survey. According to national data for October 2002, 29 percent of blacks and 17 percent of Hispanics age 20 to 24 were enrolled in college (www.census.gov, accessed May 21, 2004a). For QOP enrollees, we also find that 37 percent had ever attended or were currently attending college, 33 percent had completed at least one quarter at college, and 25 percent had completed at least one year. According to national data for March 2002, 47 percent of non-Hispanic blacks and 31 percent of Hispanics age 20 to 24 had completed at least some college (www.census.gov, accessed May 21, 2004b). (About two-thirds of the members of the QOP demonstration sample are non-Hispanic black, and just over one-quarter are Hispanic, although compared to the national populations of blacks and Hispanics, many were at higher-than-average academic risk when they entered high school.) If we consider only the QOP enrollees who had completed high school via either a diploma or GED, we find that 51 percent had ever attended or were currently attending college. According to data from the National Education Longitudinal Study (NELS), 54 percent of 1992 high school graduates whose average grade was a C or lower from sixth to eighth grade had enrolled in college at some time by 1994 (U.S. Department of Education 2002). (Although a youth had to have relatively low grades to be eligible for QOP, as described above, many members of the demonstration sample had above a C average in eighth grade.) All of these figures suggest that the average levels of college attendance and attainment by QOP enrollees might be roughly similar to those of other young adults with similar backgrounds. For some of the indicators of attendance and attainment, the averages for QOP enrollees reflect the beneficial impacts of the program. As noted above, QOP increased by 7 percentage points the likelihood of ever attending college and by 6 percentage points the likelihood of completing one quarter at college.

[26] As sample members complete or drop out of postsecondary education or training activities, analyzing subsequent employment behavior using data from the next survey will help to shed light on the gains from education and training.

attributes. The one exception is that control group members were more likely to have a full-time job that provided health insurance benefits.

One reason why QOP enrollees might have been less likely to work is that they were more likely to be enrolled in college or engaged in some other postsecondary education or training activity. Trading off work in favor of education or training would be consistent with the message emphasized by QOP case managers that obtaining further education or training is strongly preferred to taking a job immediately after high school.[27, 28] Although we find that QOP increased the likelihood that an enrollee was engaged in postsecondary education or training at the time of the second telephone survey, the impact was not significant.[29] Nevertheless, we do find support for our conjecture when we consider whether sample members were either employed (in jobs with a variety of attributes) or engaged in postsecondary education or training. That is, when we examine measures of activity that count both employment and postsecondary education or training as gainful activities, we find no significant differences between QOP enrollees and control group members in the likelihood of engaging in some gainful activity (see Table 3).[30, 31]

Our findings that QOP did not have an impact on high school completion and had, as of the second telephone survey, small to modest impacts on attainment of postsecondary education or training are consistent with the lack of success of demonstration sites in implementing some components of the QOP model and the limited amount of enrollee participation, as discussed above. QOP's greater success in achieving its second primary objective versus its first objective is consistent with the somewhat greater success that the sites had in implementing postsecondary planning compared with some other elements of QOP's education component (Maxfield et al. 2003a). Along with the mentoring provided by case managers, postsecondary planning activities might have spurred enrollees to think for

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[27] The tradeoff is not absolute, and many sample members who were engaged in postsecondary education or training also held jobs. Among QOP enrollees who were engaged in postsecondary education or training, about three-fifths also worked, and about one-third worked full time.

[28] The interpretation of an impact on an employment outcome is ambiguous. Although QOP sought to prepare enrollees for good jobs, it attempted to do so by directing enrollees to postsecondary education or training. For a given enrollee, taking a job is a poor outcome—in light of QOP's objectives—if it is to the exclusion of postsecondary education or training. However, it is a good outcome if the enrollee would not have engaged in postsecondary education or training.

[29] This insignificant impact pertains, as noted, to activity at the time of the survey. The significant impacts discussed previously in this section pertain to activity that took place—but might have ended—at any time before the survey as well as activity that was taking place at the time of the survey.

[30] About one-fifth of sample members were neither employed nor engaged in postsecondary education or training. The most commonly given reasons for not working were that the sample member was looking for work or had to stay home with children.

[31] As demonstrated in Appendix F, our findings pertaining to postsecondary attainment and current activities are not sensitive to how we adjust via weighting for survey nonresponse or whether we use regression methods to adjust for baseline differences between the QOP and control groups. The one exception is that the regression-adjusted impact on the likelihood of having a job, which implies a decrease of six percentage points, is not significant, whereas the difference-of-means estimate showing a reduction of seven percentage points is significant.

the first time and, then, keep thinking about college as an attainable goal. Those activities might also have helped enrollees to enter college by helping them collect information about colleges, prepare for the SAT or ACT, and complete application and financial aid forms. However, as noted above, the data collected in our next survey will enable us to assess more fully QOP's impact on enrollees' abilities to persist in and complete college (or other postsecondary education or training).

Table 2. Impacts on Postsecondary Attainment

Outcome	QOP Group Mean (percentage)	Control Group Mean (percentage)	Impact (percentage points)
Ever attended or currently attending a 4-year college	15	12	3
Completed at least 1 quarter at a 4-year college	14	12	2
Completed at least 1 year at a 4-year college	12	9	3
Completed at least 2 years at a 4-year college	8	5	2
Ever attended or currently attending a 2- or 4-year college	37	30	7*
Completed at least 1 quarter at a 2- or 4-year college	33	27	6*
Completed at least 1 year at a 2- or 4-year college	25	20	4
Completed at least 2 years at a 2- or 4-year college	13	10	2
Ever in college, voc/tech school, apprenticeship, or military	62	53	9**
Completed 2 years of college, completed voc/tech school or an apprenticeship, or in the military	24	23	1

SOURCE: Telephone survey.

NOTE: Each impact was derived by subtracting the control group mean from the QOP group mean prior to rounding those means; thus, an impact might not equal the difference between the rounded means that are displayed. Estimates were obtained using weights to adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

* Estimate significantly different from zero at the 90% confidence level, two-tailed test
** Estimate significantly different from zero at the 95% confidence level, two-tailed test
*** Estimate significantly different from zero at the 99% confidence level, two-tailed test

Table 3. Impacts on Current Activities

Outcome	QOP Group Mean (percentage)	Control Group Mean (percentage)	Impact (percentage points)
In a 4-year college	9	7	2
In a 2- or 4-year college	17	16	1
In college, voc/tech school, apprenticeship, or military	30	26	4
Has a job	65	72	-7*
Works at least 35hrs/week at main job	45	56	-11***
Has a job with health insurance	43	45	-2
Has a job that pays >= $10/hr	22	25	-2
Has a full time job with health insurance	31	38	-8**
Has full time job that pays >= $10/hr	16	20	-4
Has a full time job with health insurance that pays >= $10/hr	13	15	-2
In college, voc/tech school, apprenticeship, military, or a job	77	78	-1
In college, voc/tech school, apprenticeship, military, or full time job	65	68	-4
In college, voc/tech school, apprenticeship, military, or job with health insurance	61	59	3
In college, voc/tech school, apprenticeship, military, or job that pays >= $10/hr	46	44	2
In college, voc/tech school, apprenticeship, military, or full time job with health insurance	53	54	-1
In college, voc/tech school, apprenticeship, military, or full time job that pays >= $10/hr	42	41	2
In college, voc/tech school, apprenticeship, military, or full time job with health insurance that pays >= $10/hr	40	36	4

SOURCE: Telephone survey.

NOTE: Each impact was derived by subtracting the control group mean from the QOP group mean prior to rounding those means; thus, an impact might not equal the difference between the rounded means that are displayed. Estimates were obtained using weights to adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

* Estimate significantly different from zero at the 90% confidence level, two-tailed test
** Estimate significantly different from zero at the 95% confidence level, two-tailed test
*** Estimate significantly different from zero at the 99% confidence level, two-tailed test

IMPACTS ON QOP'S SECONDARY OUTCOMES: HIGH SCHOOL PERFORMANCE AND RISKY BEHAVIORS

QOP's secondary objectives were to improve enrollees' academic performance while in high school and reduce their engagement in risky behaviors. As discussed in Maxfield et al. (2003b), QOP did not improve achievement test scores, grades, or credits earned in high school, and it did not reduce disciplinary actions.[32]

Maxfield et al. (2003b) also found that QOP did not reduce any risky behaviors, and according to data from the in-person survey, it increased some risky behaviors, specifically the fraction of enrollees who had a drink and the fraction of enrollees who used an illegal drug in the 30 days before the survey.[33] These impacts pertain to the period when the in-person and first telephone surveys were conducted and most sample members were in their late teens. When the second telephone survey was conducted, almost all sample members were over the age of 21.[34] What were QOP's impacts on risky behaviors at that time?

We find that, compared with members of the control group, QOP enrollees were less likely to use illegal drugs in the 30 days before the survey (see Table 4). We also find, however, that QOP did not reduce the likelihood of binge drinking, committing a crime, being arrested or charged with a crime, or having a child before the age of 18.[35] This might not be surprising because even though QOP's developmental component was implemented

[32] We have not administered another round of achievement tests or collected additional transcript data, and, in the second telephone survey, we did not attempt to obtain further information about academic performance while in high school, except to ascertain graduation status.

[33] By paying stipends and bonuses for participation, QOP might have provided some enrollees with the money to buy alcohol and drugs. By bringing enrollees together through program activities, QOP might have introduced some negative peer effects and facilitated the spread of drinking and drug use. It is also possible—and may be likely—that the detrimental effects were not caused by QOP, as discussed in detail in Maxfield et al. (2003b) and Schirm et al. (2003). As reported in the latter, data collected in the first telephone survey reveal that QOP had beneficial—but not significant—impacts on drinking and drug use.

[34] In the Washington, D.C., site, 10 percent of survey respondents were 19, 63 percent were 20, and 26 percent were 21 or older.

[35] Although QOP significantly reduced binge drinking according to difference-of-means estimates obtained under some alternative adjustments for survey nonresponse, QOP's impact on binge drinking was not significant according to a regression estimate that adjusts for baseline differences between QOP enrollees and control group members. Appendix F presents these alternative estimates. As discussed below, any impact that QOP might have had on binge drinking was substantially attributable to one site (Philadelphia), where the rate of binge drinking among QOP enrollees was unusually low. Across all sites, the mean rates for binge drinking and illegal drug use are similar to the national rates for non-Hispanic blacks and Hispanics age 18 to 25. According to 2002 data from the National Survey on Drug Use and Health, 26 percent of non-Hispanic blacks and 35 percent of Hispanics engaged in binge drinking in the 30 days before the survey, while 18 and 14 percent used an illegal drug (www.oas.samhsa.gov, accessed May 21, 2004). (As noted above, about two-thirds of the members of the QOP demonstration sample are non-Hispanic black, and just over one-quarter are Hispanic.)

much more successfully than some other components, it was geared toward preventing risky behaviors rather than remediating the effects of the risky behaviors in which many enrollees had already engaged before entering QOP (Maxfield et al. 2003a). Thus, QOP might not have been able to end, for example, an ongoing pattern of substance abuse.[36] It is also possible that any positive effects of the preventive measures undertaken by QOP were offset by the negative peer effects introduced by bringing enrollees together for program activities.[37]

The reason that QOP sought to reduce risky behaviors was that developers of the QOP model shared the widespread belief that engagement in risky behaviors creates barriers to high school graduation, postsecondary education and training, and productive careers. Although QOP did not achieve across-the-board decreases in targeted risky behaviors—substance abuse, crime, and teen parenting—or an increase in high school graduation, it does appear to have increased the likelihood of engaging in postsecondary education or training, at least to date. It is also possible that the case management, mentoring, and developmental activities that were undertaken to reduce risky behaviors might have improved the family lives of enrollees by, for example, fostering the attitudes and interpersonal skills that promote better relationships with spouses, significant others, and children. We have found, however, that QOP has not reduced the likelihood that an enrollee is a single parent or that an enrollee has a child with whom he or she is not living (see Table 4). We have also found that QOP has not decreased the likelihood of living in a household that receives public assistance.[38, 39]

[36] Some of the subgroup impacts presented below might not be consistent with this conjecture. Specifically, we find that QOP reduced substance abuse for older sample members but not for younger sample members.

[37] When we excluded the Washington, D.C., site (see Appendix F), we found that the impacts on binge drinking and illegal drug use are reversed, that is, QOP decreased the likelihood of binge drinking but had no impact on the likelihood of using illegal drugs.

[38] When evaluating QOP's effectiveness, it is important to understand that improving the quality of an enrollee's family life in young adulthood along these dimensions was not a stated objective of the program.

[39] When we excluded the Washington, D.C., site, we found that QOP enrollees are more likely than control group members to live in a household that receives food stamps.

Table 4. Impacts on Risky Behaviors and Family Life

Outcome	QOP Group Mean (percentage)	Control Group Mean (percentage)	Impact (percentage points)
Binge drinking in past month	25	31	-6
Binge drinking on 8 or more days in past month	7	5	2
Used an illegal drug in past month	12	18	-6**
Committed a crime in past 3 months	8	9	-2
Arrested or charged in past 3 months	5	5	-0
Had first child before age 18	19	15	3
Currently living with natural children, but no spouse	26	23	3
Have children with whom not currently living	14	13	1
Currently receiving welfare	15	13	2
Currently receiving food stamps	22	17	5
Currently receiving welfare or food stamps	24	20	4

SOURCE: Telephone survey.

NOTE: Each impact was derived by subtracting the control group mean from the QOP group mean prior to rounding those means; thus, an impact might not equal the difference between the rounded means that are displayed. Estimates were obtained using weights to adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

* Estimate significantly different from zero at the 90% confidence level, two-tailed test
** Estimate significantly different from zero at the 95% confidence level, two-tailed test
*** Estimate significantly different from zero at the 99% confidence level, two-tailed test

IMPACTS ON SUBGROUPS

Impact estimates for the full evaluation sample might conceal important differences in impacts across subgroups. If an impact exists overall, it might be heavily concentrated in or could be much larger for some subgroups. Conversely, if an impact does not exist for the entire QOP target group, it might still exist for some subgroups. Thus, estimates of subgroup impacts can help policymakers identify the persons for whom a program is most effective and thereby better target a program or better tailor its services.

We present impacts for subgroups defined by baseline characteristics—sex, age, and GPA. After examining subgroup impacts, we present impacts for each of the seven demonstration sites.

The QOP demonstration was designed primarily to estimate demonstration-wide impacts. Thus, the sample for a subgroup or individual site is small, generally reducing the precision of impact estimates and making it difficult to be confident that an estimated impact is significantly different from zero.[40]

All of the tables of subgroup and site impacts present two types of significance tests. One test is whether the impact is significantly different from zero, as indicated by asterisks. The other test is whether the impact for one subgroup is different from the impact for all of the other subgroups combined, as indicated by daggers (†). The conclusions presented in the text are based on whether the impacts are significantly different from zero, unless otherwise noted.[41]

Before discussing the impacts for specific subgroups, we note that QOP did not increase the likelihood of earning a high school diploma or earning a diploma or GED for any subgroup. That is, QOP did not achieve its first primary objective.

Impacts by Sex

QOP registered some impacts for both males and females (see Tables 5-8). However, QOP does not seem to have consistently benefited one group more than the other, except perhaps by reducing substance abuse among males.[42]

[40] Site and subgroup sample sizes are reported in Appendices C and D (Tables C.3 and D.2).

[41] When we analyzed the impacts for three subgroups defined by rank in the baseline grade distribution, we performed a third significance test: we tested whether the impact for the subgroup in the middle of the distribution is significantly different from the impact for the subgroup at the bottom of the distribution. We found that, for all but one outcome, the impacts for the two subgroups are not significantly different.

[42] About half of QOP enrollees were male.

QOP had impacts on engagement in postsecondary education and training for both males and females (see Table 6). For males, QOP increased by 9 percentage points the likelihood of ever attending college. For females, QOP's impact on college attendance was not significant. However, QOP increased by 10 percentage points a female enrollee's chances of ever engaging in postsecondary education and training through its effects on the likelihood of attending a vocational or technical school, enrolling in an apprenticeship program, or enlisting in the armed forces. Although significantly different from zero, neither of these impacts was significantly different from the impact of the opposite sex group.[43]

QOP reduced substance abuse among males (see Table 8); it reduced by 12 percentage points the likelihood of binge drinking and by 8 percentage points the likelihood of using an illegal drug during the month before the second telephone survey. In contrast, we find an increase in frequent binge drinking among females. However, it is possible that QOP did not cause this increase. Rather, the available data suggest possible differences between QOP and control group females in the accuracy with which they reported frequent binge drinking. Specifically, in all sites except Yakima, the control group means pertaining to frequent binge drinking were 0 percent, whereas the QOP group means ranged between 0 and 7 percent. While the incidence of frequent binge drinking among control group members was probably low, it seems unlikely that it was zero in six of the seven sites.[44, 45]

How do these findings compare with the impacts estimated previously from data collected during the last two years of the demonstration and reported in Maxfield et al. (2003b)? For males, the reduction in binge drinking reported here contrasts with the increase found before.[46] For females, we no longer find an increase in the likelihood of high school graduation.[47, 48]

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[43] Among all of the outcomes examined in Tables 5 to 8, there is only one—having a job that pays at least $10 per hour—for which the impacts for males and females are significantly different (see Table 7). QOP decreased by 10 percentage points the likelihood that a male had a high-wage job, while it increased by 7 percentage points the likelihood that a female had such a job. Both of these impacts are significantly different from zero as well as significantly different from each other. Although we find for each sex other significant impacts on activities at the time of the survey, males are neither more nor less likely to be gainfully engaged in education, training, or work (regardless of job attributes).

[44] In Yakima, the control group and QOP group means were, respectively, 11 and 18 percent.

[45] A possible explanation for this systematic difference in reporting between QOP enrollees and members of the control group may be that, due to their QOP experience, QOP enrollees are more likely to answer such sensitive questions accurately.

[46] Negative peer effects may have been one of the factors leading to the earlier detrimental impact on male binge drinking.

[47] As reported in Maxfield et al. (2003b), QOP increased by 9 percentage points the likelihood that a female enrollee was engaged in postsecondary education or training, attending high school or a GED class, or working. QOP also increased by 9 percentage points the likelihood that a female enrollee graduated from high school. Both QOP impacts on male enrollees were detrimental—QOP decreased high school GPAs and increased binge drinking.

[48] The section above pertaining to QOP's impacts on high school completion discusses the sources of differences between the previously reported impact estimates and the estimates presented in this report.

Table 5. Impacts on High School Completion by Sex (Percentage Points)

	Impacts		
Outcome	Male	Female	Total Sample
Received HS diploma	-1	-5	-3
Received HS diploma or GED	-1	3	0

SOURCE: Telephone surveys and transcripts.

NOTE: Each impact was derived by subtracting the control group mean from the QOP group mean. Estimates were obtained using weights to adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first and second telephone surveys, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

† Significantly different from the impact on all other sample members at the 90% confidence level, two-tailed test
†† Significantly different from the impact on all other sample members at the 95% confidence level, two-tailed test
††† Significantly different from the impact on all other sample members at the 99% confidence level, two-tailed test

* Estimate significantly different from zero at the 90% confidence level, two-tailed test
** Estimate significantly different from zero at the 95% confidence level, two-tailed test
*** Estimate significantly different from zero at the 99% confidence level, two-tailed test

Table 6. Impacts on Postsecondary Attainment by Sex (Percentage Points)

Outcome	Impacts		
	Male	Female	Total Sample
Ever attended or currently attending a 4-year college	3	1	3
Completed at least 1 quarter at a 4-year college	2	1	2
Completed at least 1 year at a 4-year college	4	1	3
Completed at least 2 years at a 4-year college	2	2	2
Ever attended or currently attending a 2- or 4-year college	9*	3	7*
Completed at least 1 quarter at a 2- or 4-year college	8	4	6*
Completed at least 1 year at a 2- or 4-year college	7	1	4
Completed at least 2 years at a 2- or 4-year college	3	-1	2
Ever in college, voc/tech school, apprenticeship, or military	6	10*	9**
Completed 2 years of college, completed voc/tech school or an apprenticeship, or in the military	1	-1	1

SOURCE: Telephone survey.

NOTE: Each impact was derived by subtracting the control group mean from the QOP group mean. Estimates were obtained using weights to adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

† Significantly different from the impact on all other sample members at the 90% confidence level, two-tailed test
†† Significantly different from the impact on all other sample members at the 95% confidence level, two-tailed test
††† Significantly different from the impact on all other sample members at the 99% confidence level, two-tailed test

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** Estimate significantly different from zero at the 95% confidence level, two-tailed test
*** Estimate significantly different from zero at the 99% confidence level, two-tailed test

Table 7. Impacts on Current Activities by Sex (Percentage Points)

Outcome	Impacts		
	Male	Female	Total Sample
In a 4-year college	5*	-1	2
In a 2- or 4-year college	6	-3	1
In college, voc/tech school, apprenticeship, or military	5	3	4
Has a job	-10*	-2	-7*
Works at least 35hrs/week at main job	-9	-12**	-11***
Has a job with health insurance	-5	4	-2
Has a job that pays >= $10/hr	-10†††, *	7†††, *	-2
Has a full time job with health insurance	-10*	-4	-8**
Has full time job that pays >= $10/hr	-7	1	-4
Has a full time job with health insurance that pays >= $10/hr	-3	1	-2
In college, voc/tech school, apprenticeship, military, or a job	-3	2	-1
In college, voc/tech school, apprenticeship, military, or full time job	-1	-6	-4
In college, voc/tech school, apprenticeship, military, or job with health insurance	2	7	3
In college, voc/tech school, apprenticeship, military, or job that pays >= $10/hr	-2	7	2
In college, voc/tech school, apprenticeship, military, or full time job with health insurance	-1	2	-1
In college, voc/tech school, apprenticeship, military, or full time job that pays >= $10/hr	2	3	2
In college, voc/tech school, apprenticeship, military, or full time job with health insurance that pays >= $10/hr	7	3	4

Source: Telephone survey.

Note: Each impact was derived by subtracting the control group mean from the QOP group mean. Estimates were obtained using weights to adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

† Significantly different from the impact on all other sample members at the 90% confidence level, two-tailed test
†† Significantly different from the impact on all other sample members at the 95% confidence level, two-tailed test
††† Significantly different from the impact on all other sample members at the 99% confidence level, two-tailed test

* Estimate significantly different from zero at the 90% confidence level, two-tailed test
** Estimate significantly different from zero at the 95% confidence level, two-tailed test
*** Estimate significantly different from zero at the 99% confidence level, two-tailed test

Table 8. Impacts on Risky Behaviors and Family Life by Sex (Percentage Points)

	Impacts		
Outcome	Male	Female	Total Sample
Binge drinking in past month	-12**	-2	-6
Binge drinking on 8 or more days in past month	0	4**	2
Used an illegal drug in past month	-8*	-3	-6**
Committed a crime in past 3 months	-3	-1	-2
Arrested or charged in past 3 months	1	-2	-0
Had first child before age 18	5	0	3
Currently living with natural children, but no spouse	2	3	3
Have children with whom not currently living	4	-1	1
Currently receiving welfare	1	-1	2
Currently receiving food stamps	4	2	5
Currently receiving welfare or food stamps	3	0	4

SOURCE: Telephone survey.

NOTE: Each impact was derived by subtracting the control group mean from the QOP group mean. Estimates were obtained using weights to adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

† Significantly different from the impact on all other sample members at the 90% confidence level, two-tailed test

†† Significantly different from the impact on all other sample members at the 95% confidence level, two-tailed test

††† Significantly different from the impact on all other sample members at the 99% confidence level, two-tailed test

* Estimate significantly different from zero at the 90% confidence level, two-tailed test

** Estimate significantly different from zero at the 95% confidence level, two-tailed test

*** Estimate significantly different from zero at the 99% confidence level, two-tailed test

Impacts by Age When Entering Ninth Grade

About two-thirds of all QOP enrollees were age 14 or younger when they entered the ninth grade. QOP more effectively increased engagement in postsecondary education and training for these younger enrollees than for the older enrollees who were over age 14 when they entered the ninth grade. Among older enrollees, QOP reduced substance abuse but increased the likelihood of being a single parent or living in a household receiving food stamps.

QOP's beneficial impact on younger enrollees' postsecondary attainment contrasts with the lack of impact on older enrollees' postsecondary attainment. For younger enrollees, QOP increased by 10 percentage points the likelihood of ever attending postsecondary education and training. Most of this impact was attributable to increased college attendance, which rose by 12 percentage points (see Table 10). QOP also increased the likelihood that younger enrollees completed at least one quarter, one year, or two years of college. These impacts were significantly different from the impacts on older enrollees. QOP's impact on the likelihood that enrollees attended college at the time of the second survey differed significantly between younger enrollees (5-percentage-point increase) and older ones (7-percentage-point decrease), although neither impact was significantly different from zero (see Table 11). Finally, we found that QOP reduced the likelihood that younger enrollees held a job at the time of the second survey (including a job with positive attributes, such as health insurance). Except for the impact of QOP on the likelihood of holding a full-time, high-wage job with health insurance, the impacts on current work activities on younger enrollees did not differ significantly from the impact on older enrollees.

QOP had no impacts on risky behaviors and family life for younger enrollees, and mixed impacts on older enrollees. For older enrollees, beneficial impacts include reductions of 13 percentage points in binge drinking and illegal drug use (see Table 12).[49] However, we also find that older enrollees are, relative to older control group members, more likely to be single parents and to be living in households receiving food stamps. For only the last of these outcomes is the impact on older enrollees significantly different from the impact on younger enrollees.

[49] Older enrollees are more likely to be male than are younger enrollees, which might partly explain the similar findings on the reduction of substance abuse for older enrollees and male enrollees.

When comparing these findings with our previously reported impacts for younger and older enrollees, we find that QOP continues to have a beneficial impact on the likelihood that younger enrollees engage in postsecondary education or training. However, we no longer find an increase in the likelihood that younger enrollees graduated from high school.[50]

[50] The only short-term impact on younger enrollees that was significantly different from the impact on older enrollees was the likelihood of having a child at the time of the first telephone survey. QOP decreased by 9 percentage points the fraction of younger enrollees who had a child at the time of the first telephone survey. The impact differed significantly from both zero and the (insignificant) 6-percentage-point increase in the fraction of older enrollees who had a child. In addition to the beneficial impact on the likelihood that a younger enrollee had a child, QOP increased by 12 percentage points the likelihood of graduating from high school and by 7 percentage points the likelihood of engaging in postsecondary education or training. For older enrollees, QOP had two beneficial impacts on a set of key outcomes in the short run—a 10-percentage-point increase in the likelihood of engaging in postsecondary education or training, attending high school or a GED class, or working and an 11-percentage-point decrease in the likelihood of ever being arrested for or charged with a crime.

Table 9. Impacts on High School Completion by Age When Entering Ninth Grade (Percentage Points)

Outcome	Impacts		
	Age > 14	Age ≤14	Total Sample
Received HS diploma	-10	2	-3
Received HS diploma or GED	-1	3	0

SOURCE: Telephone surveys and transcripts.

NOTE: Each impact was derived by subtracting the control group mean from the QOP group mean. Estimates were obtained using weights to adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first and second telephone surveys, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

† Significantly different from the impact on all other sample members at the 90% confidence level, two-tailed test
†† Significantly different from the impact on all other sample members at the 95% confidence level, two-tailed test
††† Significantly different from the impact on all other sample members at the 99% confidence level, two-tailed test

* Estimate significantly different from zero at the 90% confidence level, two-tailed test
** Estimate significantly different from zero at the 95% confidence level, two-tailed test
*** Estimate significantly different from zero at the 99% confidence level, two-tailed test

Table 10. Impacts on Postsecondary Attainment by Age When Entering Ninth Grade (Percentage Points)

Outcome	Impacts		
	Age > 14	Age ≤14	Total Sample
Ever attended or currently attending a 4-year college	3	4	3
Completed at least 1 quarter at a 4-year college	2	3	2
Completed at least 1 year at a 4-year college	1	5	3
Completed at least 2 years at a 4-year college	-2	4	2
Ever attended or currently attending a 2- or 4-year college	-4†	12†, ***	7*
Completed at least 1 quarter at a 2- or 4-year college	-4†	11†, **	6*
Completed at least 1 year at a 2- or 4-year college	-5†	8†, **	4
Completed at least 2 years at a 2- or 4-year college	-6†	5†, *	2
Ever in college, voc/tech school, apprenticeship, or military	4	10**	9**
Completed 2 years of college, completed voc/tech school or an apprenticeship, or in the military	-9†	4†	1

SOURCE: Telephone survey.

NOTE: Each impact was derived by subtracting the control group mean from the QOP group mean. Estimates were obtained using weights to adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

† Significantly different from the impact on all other sample members at the 90% confidence level, two-tailed test
†† Significantly different from the impact on all other sample members at the 95% confidence level, two-tailed test
††† Significantly different from the impact on all other sample members at the 99% confidence level, two-tailed test

* Estimate significantly different from zero at the 90% confidence level, two-tailed test
** Estimate significantly different from zero at the 95% confidence level, two-tailed test
*** Estimate significantly different from zero at the 99% confidence level, two-tailed test

Table 11. Impacts on Current Activities by Age When Entering Ninth Grade (Percentage Points)

Outcome	Impacts		
	Age > 14	Age ≤14	Total Sample
In a 4-year college	3	3	2
In a 2- or 4-year college	-7††	5††	1
In college, voc/tech school, apprenticeship, or military	-1	6	4
Has a job	-5	-9**	-7*
Works at least 35hrs/week at main job	-7	-14*	-11***
Has a job with health insurance	1	-5	-2
Has a job that pays >= $10/hr	0	-2	-2
Has a full time job with health insurance	-3	-10**	-8**
Has full time job that pays >= $10/hr	3	-6*	-4
Has a full time job with health insurance that pays >= $10/hr	6†	-5†,*	-2
In college, voc/tech school, apprenticeship, military, or a job	0	-3	-1
In college, voc/tech school, apprenticeship, military, or full time job	-5	-5	-4
In college, voc/tech school, apprenticeship, military, or job with health insurance	1	2	3
In college, voc/tech school, apprenticeship, military, or job that pays >= $10/hr	-2	4	2
In college, voc/tech school, apprenticeship, military, or full time job with health insurance	-1	-2	-1
In college, voc/tech school, apprenticeship, military, or full time job that pays >= $10/hr	2	2	2
In college, voc/tech school, apprenticeship, military, or full time job with health insurance that pays >= $10/hr	6	3	4

SOURCE: Telephone survey.

NOTE: Each impact was derived by subtracting the control group mean from the QOP group mean. Estimates were obtained using weights to adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

† Significantly different from the impact on all other sample members at the 90% confidence level, two-tailed test
†† Significantly different from the impact on all other sample members at the 95% confidence level, two-tailed test
††† Significantly different from the impact on all other sample members at the 99% confidence level, two-tailed test

* Estimate significantly different from zero at the 90% confidence level, two-tailed test
** Estimate significantly different from zero at the 95% confidence level, two-tailed test
*** Estimate significantly different from zero at the 99% confidence level, two-tailed test

Table 12. Impacts on Risky Behaviors and Family Life by Age When Entering Ninth Grade (Percentage Points)

	Impacts		
Outcome	Age > 14	Age ≤14	Total Sample
Binge drinking in past month	-13*	-2	-6
Binge drinking on 8 or more days in past month	4	2	2
Used an illegal drug in past month	-13**	-3	-6**
Committed a crime in past 3 months	-2	-2	-2
Arrested or charged in past 3 months	2	-1	-0
Had first child before age 18	2	3	3
Currently living with natural children, but no spouse	12**	1	3
Have children with whom not currently living	4	0	1
Currently receiving welfare	6	1	2
Currently receiving food stamps	19†††, ***	-1†††	5
Currently receiving welfare or food stamps	15††, **	0††	4

SOURCE: Telephone survey.

NOTE: Each impact was derived by subtracting the control group mean from the QOP group mean. Estimates were obtained using weights to adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

† Significantly different from the impact on all other sample members at the 90% confidence level, two-tailed test

†† Significantly different from the impact on all other sample members at the 95% confidence level, two-tailed test

††† Significantly different from the impact on all other sample members at the 99% confidence level, two-tailed test

* Estimate significantly different from zero at the 90% confidence level, two-tailed test

** Estimate significantly different from zero at the 95% confidence level, two-tailed test

*** Estimate significantly different from zero at the 99% confidence level, two-tailed test

Impacts by Rank in the Baseline Grade Distribution

When assessing impacts for the subgroups defined by rank in the baseline (eighth grade) distribution, it is important to remember that, to be eligible for QOP, a youth had to be in the bottom two-thirds of the grade distribution based on grades from the eighth grade. We defined the subgroups by dividing each QOP school's evaluation sample into thirds. Thus, for example, the youth in the middle third of the evaluation sample fell between roughly the 22nd and 44th percentiles in the grade distribution for all entering ninth graders.

Across the three subgroups of enrollees defined by rank in the baseline grade distribution, we find that QOP was more successful for enrollees in the bottom and middle thirds of the distribution than for enrollees in the top third of the distribution. For enrollees in the top third of the baseline grade distribution, QOP had some detrimental impacts but no beneficial impacts. It decreased by 12 percentage points the likelihood of attending college at the time of the second telephone survey and increased by 8 percentage points the likelihood of an enrollee having a child with whom he or she was not living at the time of the survey. Both of these impacts were significantly different from the impacts of all other enrollees (see Tables 13-16).

For enrollees in the bottom third of the baseline grade distribution, QOP had beneficial impacts, but no detrimental impacts. It increased the likelihood of ever attending a four-year college by 7 percentage points and of attending either a two- or a four-year college by 14 percentage points. Only the latter impact is significantly different from the impact for all other enrollees. QOP also decreased the likelihood of illegal drug use by 10 percentage points.[51]

Finally, for enrollees in the middle third of the baseline grade distribution, the pattern of impacts is qualitatively similar to the pattern among enrollees in the bottom third of the distribution.[52] That is, QOP had some beneficial impacts, but no detrimental impacts. For

[51] The similarity between QOP's impacts on enrollees in the bottom third of the baseline distribution and its impacts on male enrollees—increased college attendance and decreased drug use—might be partly explained by the fact that enrollees in the bottom third of the baseline grade distribution are more likely to be male than are enrollees in the top two-thirds of the distribution. More generally, the baseline characteristics defining subgroups are related. For example, males are more likely to be in the bottom third of the baseline grade distribution than are females, as noted above. Furthermore, compared with younger enrollees, older enrollees are more likely to be male and in the bottom third of the grade distribution. Given such relationships, a beneficial impact on older enrollees, for instance, might be attributable to beneficial effects associated with being older, being male, or having lower grades. Although such effects could potentially be disentangled by defining subgroups based on two (or three) baseline characteristics—rather than just one characteristic—sample sizes are too small to allow us to obtain impact estimates that are sufficiently reliable to be informative. This was the case when we defined subgroups based on both age at entry into ninth grade and rank in the baseline grade distribution.

[52] The only impact that was significantly different for enrollees in the middle third of the distribution relative to those in the bottom third of the distribution pertained to the likelihood of having children with whom the enrollee was not living at the time of the second survey. The 8-percentage-point decrease for enrollees in the middle of the distribution is significantly different from the (insignificant) 3-percentage-point increase for enrollees at the bottom of the distribution.

the enrollees in the middle third of the distribution, QOP increased by 7 percentage points the likelihood of completing at least two years of college. QOP also decreased enrollees' likelihood of illegal drug use, their likelihood of committing a crime, and their likelihood of having children with whom they were not living at the time of the second telephone survey.

This pattern of impacts across the three subgroups is consistent with reports from case managers that their caseloads included youth who were doing well enough in school that they had little need for QOP services. Although case managers reported that many enrollees at the bottom of the GPA distribution faced numerous barriers to academic success, QOP was still able to increase the group's likelihood of college attendance.

We find that the pattern of impacts across the three subgroups is generally similar to the pattern of short-term impacts that we obtained earlier, although it appears that QOP might be more successful in the longer run than in the shorter run in achieving some of its objectives for enrollees in the bottom third of the distribution. Another exception is that we no longer find an increase in the likelihood of high school completion for enrollees in the middle third of the distribution.[53]

[53] Previously, we found that QOP had a single impact—an 8-percentage-point increase in binge drinking—for enrollees in the top third of the baseline grade distribution. For enrollees in the middle third of the baseline grade distribution, QOP had several short-term impacts, all of which were beneficial. QOP increased the likelihood of earning a diploma, the likelihood of earning a diploma or a GED, and the likelihood of college attendance or acceptance. It also decreased the likelihood of having a child at the time of the first telephone survey. For enrollees in the bottom third of the baseline grade distribution, QOP had beneficial impacts on the likelihood of attending postsecondary education or training and the likelihood of ever being arrested or charged with a crime, but it also had a detrimental impact on illegal drug use.

Table 13. Impacts on High School Completion by Rank in the Baseline Grade Distribution (Percentage Points)

Outcome	Impacts			
	Bottom Third	Middle Third	Top Third	Total Sample
Received HS diploma	-1	4	-8	-3
Received HS diploma or GED	3	5	-3	0

SOURCE: Telephone surveys and transcripts.

NOTE: Each impact was derived by subtracting the control group mean from the QOP group mean. Estimates were obtained using weights to adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first and second telephone surveys, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

† Significantly different from the impact on all other sample members at the 90% confidence level, two-tailed test
†† Significantly different from the impact on all other sample members at the 95% confidence level, two-tailed test
††† Significantly different from the impact on all other sample members at the 99% confidence level, two-tailed test

* Estimate significantly different from zero at the 90% confidence level, two-tailed test
** Estimate significantly different from zero at the 95% confidence level, two-tailed test
*** Estimate significantly different from zero at the 99% confidence level, two-tailed test

Table 14. Impacts on Postsecondary Attainment by Rank in the Baseline Grade Distribution (Percentage Points)

	Impacts			
Outcome	Bottom Third	Middle Third	Top Third	Total Sample
Ever attended or currently attending a 4-year college	7*	-3	4	3
Completed at least 1 quarter at a 4-year college	6	-3	3	2
Completed at least 1 year at a 4-year college	6*	-1	2	3
Completed at least 2 years at a 4-year college	5	2	-1	2
Ever attended or currently attending a 2- or 4-year college	14†, ***	9	-5	7*
Completed at least 1 quarter at a 2- or 4-year college	9*	9	0	6*
Completed at least 1 year at a 2- or 4-year college	6	4	2	4
Completed at least 2 years at a 2- or 4-year college	5	7*	-6	2
Ever in college, voc/tech school, apprenticeship, or military	10	8	10	9**
Completed 2 years of college, completed voc/tech school or an apprenticeship, or in the military	1	5	-2	1

SOURCE: Telephone survey.

NOTE: Each impact was derived by subtracting the control group mean from the QOP group mean. Estimates were obtained using weights to adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

† Significantly different from the impact on all other sample members at the 90% confidence level, two-tailed test
†† Significantly different from the impact on all other sample members at the 95% confidence level, two-tailed test
††† Significantly different from the impact on all other sample members at the 99% confidence level, two-tailed test

* Estimate significantly different from zero at the 90% confidence level, two-tailed test
** Estimate significantly different from zero at the 95% confidence level, two-tailed test
*** Estimate significantly different from zero at the 99% confidence level, two-tailed test

Table 15. Impacts on Current Activities by Rank in the Baseline Grade Distribution (Percentage Points)

	Impacts			
Outcome	Bottom Third	Middle Third	Top Third	Total Sample
In a 4-year college	4	2	-1	2
In a 2- or 4-year college	7	5	-12††, *	1
In college, voc/tech school, apprenticeship, or military	5	7	-2	4
Has a job	-9	-6	-1	-7*
Works at least 35hrs/week at main job	-9	-10	-8	-11***
Has a job with health insurance	-8	-5	8†	-2
Has a job that pays >= $10/hr	-7	-3	4	-2
Has a full time job with health insurance	-7	-9	-1	-8**
Has full time job that pays >= $10/hr	-4	-6	-1	-4
Has a full time job with health insurance that pays >= $10/hr	-3	-3	0	-2
In college, voc/tech school, apprenticeship, military, or a job	-1	-2	3	-1
In college, voc/tech school, apprenticeship, military, or full time job	1	0	-10	-4
In college, voc/tech school, apprenticeship, military, or job with health insurance	2	5	4	3
In college, voc/tech school, apprenticeship, military, or job that pays >= $10/hr	4	2	0	2
In college, voc/tech school, apprenticeship, military, or full time job with health insurance	4	3	-5	-1
In college, voc/tech school, apprenticeship, military, or full time job that pays >= $10/hr	7	2	-6	2
In college, voc/tech school, apprenticeship, military, or full time job with health insurance that pays >= $10/hr	10	6	-5	4

SOURCE: Telephone survey.

NOTE: Each impact was derived by subtracting the control group mean from the QOP group mean. Estimates were obtained using weights to adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

† Significantly different from the impact on all other sample members at the 90% confidence level, two-tailed test
†† Significantly different from the impact on all other sample members at the 95% confidence level, two-tailed test
††† Significantly different from the impact on all other sample members at the 99% confidence level, two-tailed test

* Estimate significantly different from zero at the 90% confidence level, two-tailed test
** Estimate significantly different from zero at the 95% confidence level, two-tailed test
*** Estimate significantly different from zero at the 99% confidence level, two-tailed test

Table 16. Impacts on Risky Behaviors and Family Life by Rank in the Baseline Grade Distribution (Percentage Points)

Outcome	Impacts			
	Bottom Third	Middle Third	Top Third	Total Sample
Binge drinking in past month	-7	-4	-7	-6
Binge drinking on 8 or more days in past month	4	2	0	2
Used an illegal drug in past month	-10*	-8*	-1	-6**
Committed a crime in past 3 months	2	-6*	-1	-2
Arrested or charged in past 3 months	2	-1	-1	-0
Had first child before age 18	6	3	0	3
Currently living with natural children, but no spouse	2	7	3	3
Have children with whom not currently living	3	-8††,*	8††,**	1
Currently receiving welfare	3	-4	7	2
Currently receiving food stamps	8	1	8	5
Currently receiving welfare or food stamps	7	-2	10	4

SOURCE: Telephone survey.

NOTE: Each impact was derived by subtracting the control group mean from the QOP group mean. Estimates were obtained using weights to adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

† Significantly different from the impact on all other sample members at the 90% confidence level, two-tailed test

†† Significantly different from the impact on all other sample members at the 95% confidence level, two-tailed test

††† Significantly different from the impact on all other sample members at the 99% confidence level, two-tailed test

* Estimate significantly different from zero at the 90% confidence level, two-tailed test

** Estimate significantly different from zero at the 95% confidence level, two-tailed test

*** Estimate significantly different from zero at the 99% confidence level, two-tailed test

IMPACTS BY SITE

Examining post-intervention impacts derived from data collected in the second telephone survey, we find that impacts appear to vary widely by site (see Tables 17-20). However, many seemingly large differences are not significant because of small sample sizes. Moreover, whether we consider all of the estimates or just the significant estimates, the patterns of impacts are not always consistent.

None of the sites increased the likelihood of earning a high school diploma or a GED. As for the other outcomes, the results generally appear to be mixed. The only exceptions are Cleveland and Philadelphia where all of the significant impacts are beneficial. In Cleveland, beneficial impacts pertained to postsecondary educational attainment, and included an 18-percentage-point increase in the likelihood of ever attending college, a 20-percentage-point increase in the likelihood of completing at least one quarter of college, and a 14-percentage-point increase in the likelihood of completing at least one year of college. The second of these impacts was significantly different from the impact for the other six sites combined.

Philadelphia also had several beneficial impacts on postsecondary educational attainment. For example, the site increased by 19 percentage points the likelihood of ever attending a four-year college, by 15 percentage points the likelihood of completing at least one year at a four-year college, by 16 percentage points the likelihood of completing at least two years at a college, and by 15 percentage points the likelihood of attending a four-year college at the time of the second telephone survey. All of these impacts were significantly different from the impacts for the other six sites combined. We also found that the Philadelphia site decreased by 35 percentage points the likelihood of binge drinking in the month before the survey. However, close examination of the QOP group and control group means reveals that the QOP group's mean was unusually, and perhaps implausibly, low. In the Philadelphia site, only 5 percent of QOP enrollees reported binge drinking, while 45 percent of control group members reported binge drinking in that site. In the other six sites combined, the rate of binge drinking among QOP enrollees was substantially higher and similar to that of control group members in those sites.[54]

In the other sites, although most impact estimates were not significant, the impacts were mixed or more generally detrimental. The only beneficial impact that was significantly different from zero in these other sites was a 16-percentage-point decrease in the likelihood of illegal drug use in Washington, D.C. The Washington, D.C., site, however, also had significant detrimental impacts: a 5-percentage-point increase in the likelihood of frequent

[54] The rate of binge drinking among QOP enrollees was 31 percent in Fort Worth, 27 percent in Cleveland, 30 percent in Washington, D.C., 21 percent in Houston, 17 percent in Memphis, and 43 percent in Yakima. The rate of binge drinking among control group members was 40 percent in Fort Worth, 35 percent in Cleveland, 17 percent in Washington, D.C., 31 percent in Houston, 17 percent in Memphis, and 35 percent in Yakima. Appendix H presents these and other means for sites.

binge drinking, an 18-percentage-point increase in the likelihood of teen parenthood, and an 18-percentage-point increase in the likelihood of single parenting

The only significant impacts at the Houston, Memphis, and Yakima sites were detrimental impacts that pertained to risky behaviors and family life. Both Memphis and Yakima increased the likelihood of living in a household receiving food stamps. Yakima also increased the likelihood of enrollees having children with whom they were not living. The latter impact was significantly different from the impacts for the other six sites combined.[55] None of the impacts in Fort Worth was significantly different from zero.[56]

These impacts are broadly consistent with the pattern of short-term impacts obtained before. Previously, we found that Cleveland had beneficial impacts and no detrimental impacts; Washington, D.C., Houston, and Memphis had detrimental impacts and no beneficial impacts; and the other three sites—Fort Worth, Philadelphia, and Yakima—had no significant impacts or both significant beneficial and significant detrimental impacts.

Some of the variation in site-specific impacts might result from site-by-site variation in the depth of understanding of the QOP approach to youth development, the background and training of the case managers and coordinator, the style of mentoring QOP enrollees, or other such factors. For example, that the Philadelphia site had relatively large impacts is consistent with several of the site's characteristics. One such characteristic is that, from the outset, the QOP staff in Philadelphia understood the complex and nontraditional QOP

[55] This finding may be partially explained by the fact that in Yakima, QOP enrollees were more likely than control group members to be male (although this difference is not statistically significant). The males in our evaluation sample were more likely than the females to have children with whom they were not living.

[56] Grouping sites by funding source, we find that the five DOL-funded sites collectively had one beneficial and one detrimental impact. They reduced by 5 percentage points the likelihood of illegal drug use in the month before the survey but increased by 7 percentage points the likelihood of single parenthood. Neither of these impacts was significantly different from the impacts of the Ford-funded sites. In contrast, the two Ford-funded sites increased postsecondary attendance and attainment. For example, they increased the likelihood of engaging in some form of postsecondary training by 17 percentage points and increased the likelihood of completing at least two years of college by 10 percentage points. The latter impact was significantly different from the impact of the DOL-funded sites, as were the Ford-funded sites' 13- and 10-percentage-point increases in the likelihood of ever attending a four-year college and the likelihood of completing at least one year at a four-year college. The Ford-funded sites decreased the likelihood of holding a job at the time of the second telephone survey, of working full time, and of holding a job with health insurance. However, when we examine measures of activity that count both employment and postsecondary education or training as gainful activities, we find no significant differences in the Ford-funded sites between QOP enrollees and control group members in the likelihood of participation in some gainful activity. Although the Ford-funded sites had a significant beneficial impact on binge drinking, the impact is attributable to one of the two sites—Philadelphia—and, as noted above, seems to be due to an unusually low QOP group mean. The Ford-funded sites had a detrimental impact of 12 percentage points on the likelihood that an enrollee had children with whom he or she was not currently living. Some of the differences in impacts between the DOL- and Ford-funded sites might be attributable to the differences in implementation discussed above and in Maxfield et al. (2003), while funding source per se has, perhaps, little influence. Moreover, there were differences in implementation among the five DOL-funded sites and differences in implementation between the two Ford-funded sites that might have led to the variations in impacts within each of the two groups of sites defined by funding source.

model, especially the education component, and they were able to implement it more effectively and quickly than staff in other sites. Many QOP staff in other sites regarded QOP as substantially different from other programs operated by their CBOs. They reported that they needed at least one year, two training conferences, and ongoing technical assistance to understand the model and how to implement it. Staff in the Philadelphia site, including one of the original designers of the QOP model, provided technical assistance to the other sites.

The prominent role of the Philadelphia CBO in designing and, later, marketing the QOP model might have given the site a substantial stake in the success of the demonstration and might have led its management to invest greater resources than were invested in other sites. For example, the Philadelphia site spent more than twice as much per enrollee as did any other site, and a case manager in the Philadelphia site received substantially higher compensation than a case manager in any other site. The higher level of compensation in the Philadelphia site might have produced more effective case management by, for example, encouraging case managers to devote extra time to QOP activities.[57]

[57] Although variations in staff compensation, staff background and training, and mentoring style, for example, might have caused some of the variations in site impacts, the QOP demonstration was not designed to measure the effects of such factors. For a discussion of how the impacts of mentoring programs might be associated with various indicators of mentoring style, see Rhodes et al. (2002).

Table 17. Impacts on High School Completion by Site (Percentage Points)

Outcome	Impacts							
	Fort Worth	Cleveland	D.C.	Houston	Memphis	Philadelphia	Yakima	Total Sample
Received HS diploma	-8	6	1	-6	-9	4	-11	-3
Received HS diploma or GED	1	5	6	-6	-6	5	-7	0

SOURCE: Telephone surveys and transcripts.

NOTE: Each impact was derived by subtracting the control group mean from the QOP group mean. Estimates were obtained using weights to adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first and second telephone surveys, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

† Significantly different from the impact for all other sites at the 90% confidence level, two-tailed test
†† Significantly different from the impact for all other sites at the 95% confidence level, two-tailed test
††† Significantly different from the impact for all other sites at the 99% confidence level, two-tailed test

* Estimate significantly different from zero at the 90% confidence level, two-tailed test
** Estimate significantly different from zero at the 95% confidence level, two-tailed test
*** Estimate significantly different from zero at the 99% confidence level, two-tailed test

Table 18. Impacts on Postsecondary Attainment by Site (Percentage Points)

Outcome	Impacts							
	Fort Worth	Cleveland	D.C.	Houston	Memphis	Philadelphia	Yakima	Total Sample
Ever attended or currently attending a 4-year college	-5	8	-7	-2	2	19††,**	7	3
Completed at least 1 quarter at a 4-year college	-5	8	-7	-2	-2	17††,**	5	2
Completed at least 1 year at a 4-year college	-3	7	-6	4	0	15††,**	5	3
Completed at least 2 years at a 4-year college	1	6	-4	-1	0	10*	5	2
Ever attended or currently attending a 2- or 4-year college	8	18**	-1	-10	3	11	18	7*
Completed at least 1 quarter at a 2- or 4-year college	2	20†,**	-1	-10††	7	17	7	6*
Completed at least 1 year at a 2- or 4-year college	-5	14*	-3	-2	9	14	5	4
Completed at least 2 years at a 2- or 4-year college	-0	8	-1	-8††	-3	16††,**	3	2
Ever in college, voc/tech school, apprenticeship, or military	9	11	9	-7†	4	16	18	9**
Completed 2 years of college, completed voc/tech school or an apprenticeship, or in the military	-4	-1	8	-10	-1	14	-0	1

SOURCE: Telephone survey.

NOTE: Each impact was derived by subtracting the control group mean from the QOP group mean. Estimates were obtained using weights to adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

† Significantly different from the impact for all other sites at the 90% confidence level, two-tailed test
†† Significantly different from the impact for all other sites at the 95% confidence level, two-tailed test
††† Significantly different from the impact for all other sites at the 99% confidence level, two-tailed test

* Estimate significantly different from zero at the 90% confidence level, two-tailed test
** Estimate significantly different from zero at the 95% confidence level, two-tailed test
*** Estimate significantly different from zero at the 99% confidence level, two-tailed test

Table 19. Impacts on Current Activities by Site (Percentage Points)

Outcome	Impacts							
	Fort Worth	Cleveland	D.C.	Houston	Memphis	Philadelphia	Yakima	Total Sample
In a 4-year college	-2	3	-4	-3	2	15††, **	2	2
In a 2- or 4-year college	-4	5	-1	-8	-2	5	11	1
In college, voc/tech school, apprenticeship, or military	-1	7	-1	2	-6	9	17	4
Has a job	2	-3	-4	-3	-4	-14	-21*	-7*
Works at least 35hrs/week at main job	1	-8	-9	-16*	-8	-21	-17	-11***
Has a job with health insurance	2	11	1	-0	-11	-12	-7	-2
Has a job that pays >= $10/hr	-12	-6	11†	-3	-3	9	-11	-2
Has a full time job with health insurance	4	4	-8	-13	-8	-13	-19*	-8**
Has full time job that pays >= $10/hr	-11	-6	5	-6	-2	6	-13	-4
Has a full time job with health insurance that pays >= $10/hr	-1	-3	9	-5	-4	4	-13*	-2
In college, voc/tech school, apprenticeship, military, or a job	3	-1	2	4	-9	-5	-1	-1
In college, voc/tech school, apprenticeship, military, or full time job	5	5	-3	-11	-12	-12	2	-4
In college, voc/tech school, apprenticeship, military, or job with health insurance	3	13	1	4	-13††	2	10	3
In college, voc/tech school, apprenticeship, military, or job that pays >= $10/hr	-8	-1	11	4	-6	9	4	2
In college, voc/tech school, apprenticeship, military, or full time job with health insurance	6	12	-2	-6	-13	-5	3	-1
In college, voc/tech school, apprenticeship, military, or full time job that pays >= $10/hr	-9	2	7	-1	-4	9	9	2
In college, voc/tech school, apprenticeship, military, or full time job with health insurance that pays >= $10/hr	0	3	10	0	-6	10	11	4

SOURCE: Telephone survey.

NOTE: Each impact was derived by subtracting the control group mean from the QOP group mean. Estimates were obtained using weights to adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

† Significantly different from the impact for all other sites at the 90% confidence level, two-tailed test
†† Significantly different from the impact for all other sites at the 95% confidence level, two-tailed test
††† Significantly different from the impact for all other sites at the 99% confidence level, two-tailed test

* Estimate significantly different from zero at the 90% confidence level, two-tailed test
** Estimate significantly different from zero at the 95% confidence level, two-tailed test
*** Estimate significantly different from zero at the 99% confidence level, two-tailed test

Table 20. Impacts on Risky Behaviors and Family Life by Site (Percentage Points)

	Impacts							
Outcome	Fort Worth	Cleveland	D.C.	Houston	Memphis	Philadelphia	Yakima	Total Sample
Binge drinking in past month	-8	-7	12††	-9	0	-35†††, ***	8	-6
Binge drinking on 8 or more days in past month	1	-7†	5*	6*	-3	5	6	2
Used an illegal drug in past month	2†	-14	-16*	5†	-2	-8	-8	-6**
Committed a crime in past 3 months	-3	-6	-8	-1	1	-2	7	-2
Arrested or charged in past 3 months	-2	5	1	4	2	-8	-3	-0
Had first child before age 18	1	-7	18††, ***	0	10	3	-0	3
Currently living with natural children, but no spouse	-6	11	18††, ***	0	12	-8	-4	3
Have children with whom not currently living	-2	1	-2	-6	-8	9	14†, *	1
Currently receiving welfare	0	-2	2	3	3	-1	9	2
Currently receiving food stamps	-3	3	-8†	7	12*	6	16†, **	5
Currently receiving welfare or food stamps	-1	1	-5	7	9	4	14**	4

SOURCE: Telephone survey.

NOTE: Each impact was derived by subtracting the control group mean from the QOP group mean. Estimates were obtained using weights to adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

† Significantly different from the impact for all other sites at the 90% confidence level, two-tailed test
†† Significantly different from the impact for all other sites at the 95% confidence level, two-tailed test
††† Significantly different from the impact for all other sites at the 99% confidence level, two-tailed test

* Estimate significantly different from zero at the 90% confidence level, two-tailed test
** Estimate significantly different from zero at the 95% confidence level, two-tailed test
*** Estimate significantly different from zero at the 99% confidence level, two-tailed test

SUMMARY

Several findings emerge from our analysis of the first round of data collected after the end of the QOP demonstration:

- QOP did not achieve its first primary objective. That is, it did not increase the likelihood of graduating from high school with a diploma. It also did not increase the likelihood of completing high school by earning either a diploma or a GED.

- QOP is achieving its second primary objective. By a little more than three years after sample members were scheduled to graduate from high school (two years in the Washington, D.C., site), QOP had increased by 9 percentage points the likelihood of ever engaging in postsecondary education or training, including college attendance, vocational or technical school attendance, apprenticeship enrollment, and armed forces enlistment. QOP had also increased by 7 percentage points the likelihood of ever attending college and by 6 percentage points the likelihood of completing at least one quarter at college, although impacts decline and become insignificant at higher levels of educational attainment (e.g., completing at least one year at college). Data collected in the next survey will reveal whether QOP prepared enrollees to persist in and complete their education and training activities so that the gains in attendance translate into substantial gains in attainment, as indicated by, for example, receipt of a college degree.

- QOP has not generally achieved its secondary objective of reducing a broad range of risky behaviors targeted by the program. It did not decrease the likelihood of teen parenting. Moreover, in the period shortly before the most recent survey, when most sample members were 21 or 22 years old (20 or 21 in the Washington, D.C., site), QOP did not decrease the likelihood of binge drinking, committing a crime, or being arrested or charged with a crime. However, QOP enrollees were six percentage points less likely than control group members to have used an illegal drug.

- There is evidence that QOP was more effective for some subgroups of enrollees than for others. In particular, QOP increased postsecondary attainment among younger enrollees (the two-thirds of enrollees who were age 14 or younger when they entered the ninth grade), but it had no impact on the postsecondary attainment of older enrollees (those who were over age 14 when they entered the ninth grade). Although most differences between subgroup impacts are not statistically significant because of small sample sizes, these differences in impacts between younger and older enrollees are significant. Other findings pertaining to subgroup impacts include the following:

- QOP did not increase the likelihood of earning a high school diploma or earning a diploma or GED for any subgroup defined by the observed baseline characteristics of sex, age at entry into ninth grade, and GPA in the eighth grade.

- QOP does not seem to have consistently benefited one sex more than the other, except perhaps by reducing substance abuse among males. QOP decreased binge drinking and illegal drug use among males by 12 and 8 percentage points, respectively, although these impacts are not significantly different from the impacts for females.

- QOP increased attainment of postsecondary education and training for younger enrollees, as noted above. Specifically, it increased the likelihood of ever attending college by 12 percentage points, the likelihood of completing at least one year of college by 8 percentage points, and the likelihood of completing at least two years of college by 5 percentage points. These impacts are significantly different from the impacts on older enrollees. For the older enrollees, QOP decreased binge drinking and illegal drug use but increased the likelihood of being a single parent or living in a household receiving food stamps. Among these impacts for older enrollees, only the impact on food stamp receipt is significantly different from the corresponding impact for younger enrollees.

- QOP seems to have been more beneficial for enrollees in the bottom two-thirds of the eligible grade distribution than for enrollees in the top third of the eligible distribution, although few differences in impacts are significant. (The eligible grade distribution excludes youth who were ineligible because their grades were too high.) For enrollees in the bottom two-thirds of the eligible grade distribution, QOP had beneficial impacts on some outcomes measuring engagement in postsecondary education and training and on some risky behaviors. For enrollees in the top third of the distribution, QOP had no beneficial impacts and one detrimental impact—an increase in the likelihood that an enrollee had children with whom he or she was not living.

- QOP's impacts appear to vary widely by site, although many seemingly large impacts and seemingly large differences in impacts are not significant because of small sample sizes. Both the Cleveland and Philadelphia sites had beneficial impacts—mainly on postsecondary attainment—and neither had detrimental impacts. The Cleveland site increased by 18 percentage points the likelihood of ever attending college and by 14 percentage points the likelihood of completing at least one year of college. The Philadelphia site increased by 19 percentage points the likelihood of ever attending a four-year college and by 15 percentage points the likelihood of completing at least one year at a four-year college. Except for a reduction in illegal drug use in the Washington, D.C., site, none of the other five sites had beneficial impacts, while some had detrimental impacts. None of the seven sites in the QOP demonstration achieved QOP's first primary objective of increasing high school graduation.

These findings are based largely on data from the second telephone survey, which started a little more than three years after sample members were scheduled to graduate from high school (two years after scheduled graduation in the Washington, D.C., site). The findings raise several important questions: Will the impacts on engagement in postsecondary education and training be sustained? More specifically, will QOP enrollees persist in and complete college or other forms of training? Will members of the control group catch up to QOP enrollees in both attendance and attainment? Data from the next survey—which will begin in fall 2004, two years after the previous survey, when most sample members will be 23 or 24 years old (22 or 23 in the Washington, D.C., site)—will shed light on these questions. The survey will also provide additional data on the impacts of QOP on both the work experiences of enrollees and the characteristics of their jobs.

REFERENCES

Greenspan, Alan. "The Critical Role of Education in the Nation's Economy." Speech presented at the Greater Omaha Chamber of Commerce 2004 Annual Meeting, Omaha, Nebraska, February 20, 2004.

Maxfield, Myles, Laura Castner, Vida Maralani, and Mary Vencill. "The Quantum Opportunity Program Demonstration: Implementation Findings." Washington, DC: Mathematica Policy Research, Inc., 2003a.

Maxfield, Myles, Allen Schirm, and Nuria Rodriguez-Planas. "The Quantum Opportunity Program Demonstration: Implementation and Short-Term Impacts." Washington, DC: Mathematica Policy Research, Inc., 2003b.

Rhodes, Jean E., et al. "A Critical View of Youth Mentoring." *New Directions for Youth Development*, no. 93, edited by Jean E. Rhodes. San Francisco: Jossey-Bass, Spring 2002.

Schirm, Allen, Nuria Rodriguez-Planas, Myles Maxfield, and Christina Tuttle. "The Quantum Opportunity Program Demonstration: Short-Term Impacts." Washington, DC: Mathematica Policy Research, Inc., 2003.

Substance Abuse and Mental Health Services Administration. [http://www.oas.samhsa.gov/WebOnly.htm]. Accessed May 21, 2004.

U.S. Census Bureau. [http://www.census.gov/population/www/socdemo/school/cps2002.html]. Accessed May 21, 2004a.

U.S. Census Bureau. [http://www.census.gov/population/www/socdemo/education/ppl-169.html]. Accessed May 21, 2004b.

U.S. Department of Education. "The Condition of Education 2002." NCES 2002-025. Washington, DC: U.S. Department of Education, 2002.

U.S. Department of Justice. "Guide for Implementing the Comprehensive Strategy for Serious, Violent, and Chronic Juvenile Offenders." Washington, DC: U.S. Department of Justice, 1995.

APPENDIX A

OBTAINING AN EVALUATION SAMPLE AND CONDUCTING RANDOM ASSIGNMENT

Four steps led up to and concluded with random assignment: (1) developing lists of eligibles, (2) initial sampling, (3) obtaining consent, and (4) random assignment. These steps needed to be completed to obtain an evaluation sample for the QOP demonstration.

To implement the four steps in the seven sites, we developed an individualized Student Selection Plan (SSP) for each site by customizing a generic plan to accommodate local circumstances. Exhibit A.1 displays the generic plan. As it turned out, few accommodations to local circumstances were required; therefore, all of the SSPs were similar. The main differences in the sites' SSPs concerned the number of QOP schools, how QOP slots were allocated across schools, and the dates of sampling and random assignment. In the three sites with more than one QOP school, the QOP CBO was responsible for determining how slots would be allocated across the schools.

Although random assignment was successfully implemented in the seven demonstration sites, the sites encountered three main problems in implementing the evaluation design: (1) developing accurate lists of eligibles, (2) contacting students, and (3) collecting completed forms. In the remainder of this appendix, we discuss these implementation problems in the context of the four steps listed earlier. Although we present examples from individual sites, the examples usually illustrate experiences common to most or all sites.

DEVELOPING LISTS OF ELIGIBLES

As shown in the model SSP, the generic instruction to each site was as follows:

> *Each school should compile a list of students who have entered the 9th grade for the first time in the current academic year and send the list to MPR. For every student, the list should include at least two pieces of identifying information and the students' 8th grade GPA.*

Fulfillment of this instruction completed the site's responsibility. Then:

> *For each school, MPR will rank students—from highest to lowest—according to their GPAs from the 8th grade. The students in the bottom two-thirds of the GPA distribution for their school are eligible.*

Although seemingly straightforward, these first two steps in implementing the evaluation design were probably the most difficult. They might also prove to be among the more difficult steps in implementing an ongoing QOP program. There were two main problems in developing an accurate list of eligibles for a school: (1) determining current enrollment and (2) calculating GPAs.

EXHIBIT A.1

Quantum Opportunity Program Student Selection Plan

This plan outlines the steps for selecting students for the Quantum Opportunity Program (Quantum). For each step, we have listed the responsibilities of local Quantum staff (including staff of the participating high schools) and the responsibilities of Mathematica Policy Research (MPR) staff.

1. Submitting Lists of Students.

Quantum. Each school should compile a list of students who have entered the 9th grade for the first time in the current academic year and send the list to MPR. For every student, the list should include at least two pieces of identifying information and the student's 8th grade GPA.

2. Identifying Eligible Students.

MPR. For each school, MPR will rank students—from highest to lowest—according to their grade point averages (GPAs) from the 8th grade. The students in the bottom two-thirds of the GPA distribution for their school are eligible for Quantum.

3. Selecting a Group of Eligible Students to Receive Quantum Information and Consent Packets.

MPR. MPR will randomly select a group of 132 eligible students from ABC High School and 88 eligible students from XYZ High School. MPR will send the list of selected students to Quantum staff on [date]. If permission is obtained from their parents, these students will be the study group. Only some (about half) of the students in the study group will later be selected, at random, to participate in the Quantum program.

4. Distributing Quantum Information and Consent Packets.

Quantum. Quantum staff should distribute Quantum information and consent packets to all 220 students in the prospective study group. The packet will contain a cover letter from the student's school, a brochure describing the Quantum program and the Quantum study, a consent form seeking parental permission for the student to participate in the study, and a locator form. Quantum staff should make copies of the cover letter (on school letterhead) and copies of the consent and locator forms and assemble the packets.

MPR. MPR will draft all materials for the Quantum information and consent packet. MPR will also make copies of the brochures and send these to Quantum staff.

5. Collecting Completed Consent and Locator Forms.

Quantum. Quantum staff should collect completed consent and locator forms. When a student returns completed forms, Quantum staff should attach preprinted labels for that student to the forms. It is important that completed consent and locator forms be obtained for all 132 students at ABC High School and 88 students at XYZ High School so that every interested student will have an opportunity to be considered for participation in the Quantum program. Quantum staff will be responsible for purchasing an incentive item and distributing it to students who promptly return completed consent and locator forms.

MPR. MPR will provide two preprinted labels for each student, one label for the consent form and one label for the locator form. MPR will pay for the incentive.

6. Submitting Consent and Locator Forms.

Quantum. Completed consent and locator forms should be sent to MPR at least weekly.

7. Selecting Students for the Quantum Program.

MPR. MPR will compile a list of all students for whom affirmative consent and a completed locator form have been obtained. The list will be sent to Quantum staff for verification.

Quantum. After verifying that the list of students with affirmative consent and completed locator forms is correct, Quantum staff should sign the list and send it to MPR.

MPR. From the list of students with affirmative consent and completed locator forms, MPR will randomly select 60 students from ABC High School and 40 students from XYZ High School to participate in the Quantum program. Students who are not randomly selected for the Quantum program will be assigned to the control group for the study. On [date], MPR will send lists of Quantum group students and control group students to Quantum staff.

Quantum. Quantum staff should notify all students about their group assignments (Quantum or control), and should inform MPR when all students have been notified. After notifying Quantum students of their selection, Quantum staff should begin recruiting them for participation in the Quantum program. Only students randomly selected for the Quantum group may participate in the Quantum program. Students assigned to the control group and students who did not receive or did not complete consent and locator forms cannot participate in the Quantum program. All students in the Quantum and control groups are part of the Quantum study.

8. Submitting Lists of Quantum Participants.

Quantum. To provide data for analyses of Quantum participation patterns, Quantum staff should send to MPR a list of all students participating in the Quantum program on the following dates: .... After [date], a list of Quantum participants should be submitted every twelve weeks.

If this plan meets with your approval, please sign below and return to MPR. If you have any questions concerning this plan or any other issues related to the study, please call [MPR site liaison] at [phone number]. Thank you for your assistance in developing this plan.

_____ _____

Quantum Coordinator Date

Determining Current Enrollment

As a rule, most QOP schools did not know precisely which students were enrolled in the ninth grade. The explanation was sporadic attendance by many students combined with high turnover, both from year to year and within a year, as students' families moved frequently.

Although we considered requesting first-day-of-school enrollment lists, we learned from school and district staff that such lists would be unreliable.[58] Many students expected to enroll in a school do not do so, and many unexpected students enroll. Moreover, some students do not attend school for the first few weeks of the year, especially if school starts before Labor Day.

In lieu of a first-day-of-school enrollment list, we accepted the first properly constructed list (with grades) that a school could produce. Such a list typically became available a month or more after school started.[59]

Even several weeks into the school year, however, students continued to transfer from school to school, and some students had attended classes on only a few days. For example, five weeks into the school year, one QOP school constructed a list of ninth graders who were not repeating the ninth grade and were not ineligible because of a disability. The school constructed a second list of such students two weeks later. Nearly one out of every six students on the first list was not on the second list. However, out of every five students dropped, one was replaced by a new student. We suspect that many of the students that were dropped had left the school before the construction of the first list and that school record keeping was just catching up to student movements. Nevertheless, reports by school and QOP staff suggested that some dropped students and some added students probably had moved during the two-week period between lists.

Once a school had a list of currently enrolled ninth graders, "categorically ineligible" students—students repeating the ninth grade and disabled students for whom QOP would have been inappropriate in the school's judgment—had to be dropped from the list. Although a couple of schools neglected to drop a category of ineligible students in a first attempt to develop a list of eligibles, none of the schools in the demonstration appeared to have any significant difficulties in identifying categorically ineligible students.

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[58] Even if first-day-of-school lists had been more reliable, schools generally were not prepared to produce them because doing so would have interfered with regular school activities.

[59] If an ongoing QOP program were to start delivering services very near the beginning of the school year, the proportion of students selected for QOP who turned out to have transferred to other schools would be much higher than in this demonstration, in which service delivery started almost half way through ninth grade. Also, many (if not most) students new to the school district or coming from middle schools within the district that are not traditionally feeder schools for the QOP high school would effectively be ineligible for QOP. As we discuss later, however, even when lists are constructed several weeks into the school year, many students new to a district are ineligible for QOP because no grades are available for them.

Calculating GPAs

After developing a list of currently enrolled ninth graders and dropping from the list categorically ineligible students, a school attempted to calculate an eighth-grade GPA for each remaining student on the list. Initial conversations with school staff revealed confusion about what would constitute an acceptable GPA. Some thought that GPA means a credit-weighted average on a four-point scale. We were told, for example, that it would not be possible to obtain GPAs for one school because only "grade averages" (on a 100-point scale) were available. Such confusion was easily eliminated by distributing a brief memorandum discussing the calculation of GPAs and other issues pertaining to eligibility.[60]

Although it might be more serious if QOP were a permanent rather than a demonstration program, another minor problem was that two schools did not have the resources to calculate GPAs. For one school, QOP staff calculated GPAs from students' eighth-grade transcripts. For the other school, we performed the necessary calculations.[61]

The most serious problem that arose in attempting to calculate GPAs was obtaining eighth- grade transcripts for students who were new to the local public school system after transferring from other school systems or private schools. The typical procedure for calculating GPAs involved two steps. First, district and school staff obtained GPAs for as many students as possible from a computerized database. That database rarely included grades for students new to the system. Second, if the database contained no grades, QOP staff searched a student's paper files for an eighth-grade transcript. If a transcript were available, QOP staff calculated a GPA by hand.[62] More often than not, however, no transcript appeared in a student's file.

For one QOP school, no grades were available in the district's database for nearly 17 percent of students. QOP staff were able to locate an eighth-grade transcript for only 20 percent of those students. So, overall, GPAs could be calculated for just 87 percent of the school's categorically eligible students.[63]

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[60] Some school staff were also confused about how to rank students based on grades. One school initially had a separate ranking for each middle school that fed students to the high school. We eliminated the confusion by having each QOP school send us a list with names and grades for all categorically eligible students. Then, we ranked students and identified the (fully) eligible students, that is, the students in the bottom two-thirds of the grade distribution.

[61] For another school, QOP staff entered GPAs from students' transcripts into a database.

[62] The main difficulty in this case was making sure that the GPA was comparable to other students' GPAs—that it was, for example, on the same scale.

[63] In two other schools, GPAs could be calculated for 88 and 65 percent of categorically eligible students. For the first school, QOP staff had to track down GPAs for about one in six students for whom GPAs could be calculated. For the other school, it was two in five.

The consequences of this problem were borne by students. Because there was no basis for ranking students for whom a GPA could not be calculated, such students were ineligible for QOP. Thus, potentially many students who were experiencing the difficulties of entering a new school system had no opportunity to enroll in QOP because their transcripts were less mobile then they were.

While problems arose in determining enrollment and calculating GPAs, we should note that in some sites accomplishing both of those tasks seemed more than twice as difficult as accomplishing either one of them. The problem was that information in a school system was dispersed. The QOP school had more accurate enrollment data than the central district office but much less easy access (if any access) to computerized records of grades.[64] Moreover, there was rarely one person who had a good working knowledge of each data source. This problem was made worse by the fact that the most knowledgeable person generally did not have the authority to take direction from a third party (us or the CBO) or to make judgments such as whether a particular special education student should be eligible for QOP. Yet another obstacle was that schools often had little experience in responding to information requests such as those that we made. A final obstacle was that despite enthusiasm for QOP and a cooperative spirit on the part of school and district staff, determining which students were eligible for QOP was generally not a high priority. Thus, the resources needed to do the job accurately were not always available.[65]

We discovered many errors in some lists submitted to us and returned the lists to the schools for corrections.[66] Nevertheless, because little information was available for assessing the accuracy of the lists, we are certain that the final lists contained errors, some of which were discovered later in the process of obtaining an evaluation sample. Only by requesting more data and further burdening the schools could the numbers of errors have been determined and reduced substantially.

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[64] For one QOP school, an enrollment list prepared by the central district office missed three-fifths of the students on the school's own enrollment list. At the same time, over one-quarter of the students on the district-prepared list were no longer enrolled according to the school's list. For another school, the differences were less extreme, but still large. The district's list missed one-quarter of the students on the school's list, while about one-sixth of the students on the district's list were not on the school's list.

[65] For school staff, the highest priority was running the school. When attention was given to QOP, the highest priority of school and QOP staff was, understandably, serving students. Promoting fairness by ensuring the accuracy of the list of eligible students, most of whom would not be served by QOP, was a lower priority.

[66] The most common errors were excluding students new to the school system and including repeaters. On lists submitted by one site, for example, we discovered that new students had been excluded. We discovered this by observing that not a single student had attended eighth grade in a school outside of the city. For one school, which had grades 9 through 12, we noticed that several students had attended that school the previous year, suggesting that repeaters had been included.

INITIAL SAMPLING

In all but two QOP schools, we drew a simple random sample (without replacement) from the list of students eligible for QOP. The selected students were eligible for random assignment if consent was obtained for them to participate in the evaluation. The students who were not selected for the initial sample were not eligible for random assignment and therefore no longer had an opportunity to participate in QOP. We did not draw random samples for two schools because the number of eligible students was less than the target sample size. We conducted sampling independently for each school.

The initial sampling of eligibles had two purposes: (1) to minimize the impact of the evaluation on students and (2) to minimize the burden on QOP staff. Although such concerns about impact and burden arise in every random assignment evaluation, they were heightened in the QOP demonstration because in several of the QOP schools, the number of eligible students was substantially greater than the target size of the evaluation sample (100 in the Ford-funded sites and 200 in all but one of the DOL-funded sites). Thus, there were many extra students who would not be selected for the limited number of QOP slots (50 in the Ford-funded sites and 100 in all but one of the DOL-funded sites) and were not needed to form a control group for the evaluation. Locating those students, telling them and their parents about QOP and the evaluation, and obtaining consent for them to participate in the evaluation would have substantially increased the workload of QOP staff. Moreover, many more students than necessary would have had their hopes raised, only to be disappointed later. Sampling limited the number of disappointed students.

Once we decided to sample eligible students, we had to determine the size of the sample. We wanted to obtain a control group for each school that was the same size as the QOP group, implying a target sample size that was twice the number of available QOP slots. However, if we had drawn a sample with as many students as the target size of the evaluation sample, we would have had no surplus to allow for students who left the QOP school between development of the school enrollment roster and sampling (because they transferred, dropped out, or were expelled); for students who simply could not be located (or, if located, could not be contacted); and for students for whom consent was denied (explicitly or, by nonresponse, implicitly). Losing those students and dropping below the target size for the evaluation sample because we had no surplus would have reduced the precision of impact estimates. On the other hand, if we had a generous surplus, we would have disappointed more students than necessary and excessively burdened QOP staff.

After weighing these considerations, we drew for each school a sample of eligible students that was 10 percent larger than the target size for the evaluation sample. Accordingly, if a CBO in a DOL-funded site with two QOP schools specified that one school would have 60 QOP slots while the other would have 40, we drew a sample of 132 ($= 60 \times 2 \times 1.1$) students for the first school and 88 ($= 40 \times 2 \times 1.1$) students for the second

school.[67] There were two exceptions to this rule for setting the sample size. First, if (the number of QOP slots × 2 × 1.1) was greater than the number of eligible students in a school, we selected all of the eligible students. Second, last-minute changes in the allocation of QOP slots across the Memphis schools caused minor deviations from the formula.[68]

Our sample size choice was a compromise between the ideal of randomly selecting a sample of eligible students and getting consent for every one of them and the reality that it could not be done. To emphasize the importance of reaching out to every eligible student—regardless of the student's initial interest in QOP—as a fundamental principle of the program, we instructed QOP staff to make every reasonable effort to obtain a completed consent form for each student in the sample. In addition, as we discuss later, we imposed safeguards to ensure that such efforts were undertaken.

OBTAINING CONSENT

After selection of the initial sample for each school, QOP staff attempted to distribute information packets to each selected student. The packets contained a cover letter from the student's school (usually signed by the principal), a brochure describing the program and the evaluation, and a parental consent form for the evaluation.[69] In addition to collecting completed consent forms, QOP staff were responsible for having students and their parents complete a "locator" form that would provide tracking information to enable us to contact students for follow-up data collection. All but one site chose to include the locator form in the packet with the other materials.

Although sites varied in how they distributed and collected completed consent and locator forms, a typical approach involved the following four steps: (1) hold an in-school assembly to speak with students and distribute packets; (2) try to find at the school the students who did not attend the assembly; (3) request that students return completed forms to a specified location (usually an office in the school); and (4) follow up with telephone calls and, more often, home visits to meet with parents and obtain completed forms. QOP staff carried out these steps, sometimes with limited assistance from school staff.[70]

The home visits were especially important in obtaining completed forms from as many students in the sample as possible. First, a home visit was the first contact with a nontrivial

[67] The factor of 2 in the mathematical expressions reflects the fact that we wanted to obtain a control group that was the same size as the QOP group. The QOP group had as many students as there were QOP slots.

[68] To avoid any further delays in enrolling students in QOP, we did not draw a supplemental sample if the 10 percent surplus in the original sample turned out to be too small. Instead, we allowed the control group to be smaller than the QOP group.

[69] Spanish language materials were available.

[70] The Yakima site deviated most dramatically from the approach outlined. Confidentiality restrictions severely limited the role of QOP staff until parental consent was obtained. Therefore, school staff were responsible for locating students, distributing materials, and collecting completed consent forms.

fraction of students who attended school sporadically. Second, it was often the most reliable means of getting forms delivered to a parent, completed, and returned to QOP staff.

To expedite the process of obtaining consent, all sites offered a nominal incentive, such as movie theater or grocery store gift certificates, for returning completed forms promptly. Nevertheless, obtaining consent was difficult and time-consuming. For the median student, one month elapsed between the time when the student was selected for the sample of students who could receive information packets and the time when we received a completed consent form for that student.[71] For 17 percent of students, more than seven weeks elapsed.

Two of the implementation problems mentioned earlier arose in the process of obtaining consent and explain why the process was so difficult and time-consuming. These problems were (1) contacting students and (2) collecting completed forms.

Every site encountered difficulties in locating and contacting a substantial fraction of students. The main reason was that the students' families moved frequently, which was an explanation noted earlier for why schools had trouble in determining their current enrollment. For some of these students, QOP staff learned that after the school constructed the enrollment list used for identifying eligibles and drawing the initial sample, the students quit attending the QOP school, often because they had moved and transferred to another school. For students still thought to be living nearby and enrolled in the QOP school, QOP staff often discovered that the contact information contained in school records was badly out of date. Sometimes, the information was current but inaccurate, referring, for example, to a nonexistent address. Using various means, such as talking with a student's friends, QOP staff were often able to determine where a student lived. However, it was still difficult to contact some students' families because there was no telephone in the home, no adult was at home much of the time, or a convenient meeting time could not be arranged.

Problems did not end when contact was made with a student. An information packet given to a student often was not delivered to the student's parents, and sometimes completed forms were not returned to school. In other instances, parents did not read the materials or complete the forms. Sometimes, the seeming lack of reliability was attributable, in fact, to an initial lack of interest in QOP, concern about the time commitment required, or suspicions about government programs. QOP staff discussed these issues at length with students and parents. To address concerns about time commitments, for example, QOP staff explained that students were not obligated to participate in QOP if selected and could refuse to answer survey questions or take evaluation achievement tests.

Generally, when less intrusive approaches had failed in getting forms completed, the most effective strategy seemed to be for QOP staff to visit parents in the students' homes

[71] This figure overstates the time required for a site to obtain a completed form. First, a day or two—sometimes more—elapsed between sample selection and the first attempt to contact a student. Second, a site typically waited until it had received completed forms for several students before shipping the forms to us. Therefore, some forms may have been in a site's possession for a few days before being shipped. Even considering these two factors and the time required for shipping, we figure that it took, on average, two to three weeks to contact a student and collect a completed consent form.

and wait there while the parents completed the forms. In contrast, telephone calls to parents achieved only limited success when previous contact with the student alone had failed.

The only other problem in obtaining completed forms pertained to how they were completed—specifically, ensuring that the consent form was properly marked and signed and that the most important items on the locator form were provided. Although about 40 percent of locator forms (and 1 percent of consent forms) had deficiencies and were returned to sites, correcting the deficiencies was usually straightforward and caused only minor delays in random assignment.

RANDOM ASSIGNMENT

After three to four months of developing a list of eligibles and obtaining completed consent and locator forms for students, the final activities required to complete random assignment took about one day. The main activities were a series of checks designed to ensure that random assignment was conducted properly and fairly.

To be eligible for random assignment, a student had to (1) be eligible for QOP (some students were found to be ineligible after selection of a school's initial sample), (2) have parental permission to participate in the evaluation, and (3) have a completed locator form. Before we proceeded to random assignment of the eligible students to QOP and control groups, we required QOP coordinators to:

- Verify that the list of students eligible for random assignment was accurate.
- Verify the planned allocation of QOP slots across schools (if there was more than one school).
- Verify that QOP staff had made good-faith efforts to locate, contact, and obtain completed forms for students who were not eligible for random assignment.

Typically, the last verification involved a student-by-student review of the actions taken by QOP staff and the outcome (e.g., QOP staff discovered that the student moved to another state three months earlier). Sites had to establish that parental permission and a completed locator form were highly unlikely to be forthcoming in the near future.

After the verifications were completed, we randomly assigned students eligible for random assignment to QOP and control groups. One student was assigned to each available QOP slot regardless of how many students were eligible for random assignment. We conducted random assignment independently for each school.

After completing random assignment for a site, we sent the QOP coordinator the list of QOP group students and the list of control group students. QOP staff were responsible for notifying all students about the outcome of random assignment. To maintain the integrity of random assignment, we imposed two rules: (1) a student in the control group could not participate in QOP and (2) a student who was not eligible for random assignment could not

participate in QOP. To our knowledge based on several monitoring activities, these rules were not violated.

SCHOOL-BY-SCHOOL SUMMARY OF SAMPLE DEVELOPMENT

Table A.1 shows how the evaluation sample was developed for each school. The first row shows the number of slots allocated to each school. The second row in the table—headed "GPA Eligibles"—shows the number of students in each school who were attending the school, were entering ninth grade for the first time, were appropriate for QOP in accordance with applicable laws and regulations, and were in the bottom two-thirds of the grade distribution based on grades from the eighth grade (among students satisfying the first three criteria). The number of eligible students ranged from 82 to 523 across the QOP schools. Using the procedures described in detail earlier, we selected from the list of GPA Eligibles an "Initial Sample" consisting of the number of students shown in the third row. Then, we instructed QOP staff to obtain consent for participation in the evaluation for all students in the initial sample.

As discussed in the main text, about five percent of the students in the initial sample—the students in the row headed "Ineligibles"—were determined to be ineligible for QOP based, in most instances, on evidence from school records indicating that a student had never attended the QOP school or had left the school early in the school year before QOP eligibility was determined. The parents/guardians of about another seven percent of the students in the initial sample never responded to QOP staff's attempts to obtain consent. As we noted before, there was strongly suggestive evidence from school staff or other sources—but not definitive evidence from school records—that many of these students were, in fact, ineligible. However, in some instances, the failure to respond probably was a passive denial of consent. Parents/guardians actively denied consent for another two percent of the initial QOP sample. Before we would conduct random assignment for a school, QOP staff had to verify that they had made substantial efforts to contact and obtain consent from the nonrespondents.[72]

The "Consenters" row in Table A.1 gives the number of students who were eligible for random assignment and therefore constitute our evaluation sample. From among these students, we filled the available QOP slots independently for each school by simple random sampling without replacement. Students who were selected for QOP became QOP enrollees. Students who were not selected for QOP became the control group.[73]

[72] The nonresponse and active denial of consent percentages are the same when the base for the percentages is the number of students in the "Net Eligible Sample" rather than the initial sample.

[73] One seemingly minor limitation of the group of consenters as a representative sample of the population of students who satisfy the QOP eligibility criteria is that a few implicit and explicit denials of consent might not have occurred in the absence of the evaluation. However, it seems unlikely that more than a trivial number of students would have accepted a 100 percent chance to participate in QOP but rejected a 50 percent chance that was essentially costless.

Table A.1. Development of the Evaluation Sample

	Cleveland	Washington, D.C.			Fort Worth	Houston			Memphis				Philadelphia	Yakima	All Sites
	Collinwood	Anacostia	Eastern	Total	Paschal	Austin	Yates	Total	Carver	Hamilton	Hillcrest	Total	Franklin	Davis	Total
QOP Slots	100	40	40	80	100	50	50	100	35	27	38	100	50	50	580
GPA Eligibles	175	130	165	295	398	523	305	828	82	225	108	415	210	229	2550
Initial Sample	175	88	88	176	220	110	110	220	82	58	88	228	110	110	1239
– Ineligibles	9	11	4	15	18	5	7	12	0	0	1	1	9	0	64
Net Eligible Sample	166	77	84	161	202	105	103	208	82	58	87	227	101	110	1175
Consenters	158	72	82	154	177	92	94	186	70	54	75	199	95	100	1069
Denied Consent	1	1	0	1	8	5	4	9	0	0	3	3	2	0	24
Did Not Respond	7	4	2	6	17	8	5	13	12	4	9	25	4	10	82
Consent Probability[a]	95	94	98	96	88	88	91	89	85	93	86	88	94	91	91
QOP Enrollees	100	40	40	80	100	50	50	100	35	27	38	100	50	50	580
Controls	58	32	42	74	77	42	44	86	35	27	37	99	45	50	489
QOP Probability[b]	63	56	49	52	56	54	53	54	50	50	51	50	53	50	54

[a] $100 \times$ Consenters/Net Eligible Sample

[b] $100 \times$ QOP Enrollees/Consenters

APPENDIX B

THE BASELINE DATA

Baseline data represent sample members' characteristics that were unaffected by QOP, either because they were determined prior to the demonstration or because—like age—they cannot be affected by a social program. We used baseline characteristics to:

- Correct for nonresponse bias in the impact estimates.
- Adjust for random differences between the QOP group and the control group.
- Estimate impacts on subgroups of enrollees.

DATA SOURCES FOR THE BASELINE DATABASE

The baseline database contains information on sex, date of birth, race, ethnicity (Hispanic origin), and eighth-grade grade point average (GPA). Because DOL elected not to conduct a baseline survey, data on these characteristics were collected from four other sources: (1) the database used to determine eligibility for QOP; (2) the telephone survey administered during the fall and winter of the fifth year after sample members entered the ninth grade; (3) high school transcripts; and (4) QOP case managers. The eligibility database included eighth-grade GPA and the name of the school attended at the beginning of ninth grade. It also often included date of birth, and for some schools, it included sex, race, or ethnicity.

DEVELOPMENT OF THE BASELINE DATABASE

To develop the baseline database, we used the four data sources hierarchically in the order listed above. If a value needed for the baseline database was available from the eligibility database, no other sources were consulted. Thus, the final source, QOP case managers, was used only when the value was not available from the first three sources. After using the first three data sources and imputing sex based on sample members' first names (for about 17 percent of sample members), there were no missing values for GPA in eighth grade, school attended, or sex, and there were only five missing values for date of birth. The missing data rates for ethnicity and race were 15 and 26 percent, respectively. We imputed for the missing values using a sequential hot deck procedure, which is described in Schirm et al. (2003).

APPENDIX C

FOLLOW-UP DATA FROM THE SECOND TELEPHONE SURVEY

Data on nearly all outcomes considered in our analysis of initial post-intervention impacts were obtained from our second telephone survey, which was administered during the fall and the winter of the seventh year after sample members entered the ninth grade (two years after the end of the demonstration).[74] The only outcomes based partly on other data are our measures of high school completion, which were constructed—as described in Appendix F—using data from the first and second telephone surveys and high school transcripts. The first telephone survey was conducted during the fifth year of the demonstration—two years before the second telephone survey.

In this appendix, we describe the fielding procedures for the second telephone survey.[75] Then, after discussing the response rates to the second telephone survey, we examine the prevalence of missing values for outcomes, that is, item nonresponse.

FIELDING PROCEDURES FOR THE SECOND TELEPHONE SURVEY

Table C.1 lists the sites and schools that participated in the QOP demonstration. Table C.2 presents the dates for all follow-up data collection activities completed to date.

Initial interviews for the second telephone survey were conducted using computer-assisted telephone interviewing (CATI) followed by in-person follow-up of nonrespondents. The interview took about 15 minutes to complete. A copy of the questionnaire is available upon request.

Each sample member was mailed a letter prior to the start of interviewing. The letter indicated that we would call for an important follow-up study and encouraged the sample member to participate. In addition, the letter indicated that we would pay $15 for completing the interview.

Overall, 79 percent of the sample members who responded did so via telephone, 19 percent responded in-person, and 1 percent responded by mail.[76]

[74] The program in the Washington, D.C. site started one year later than the programs in the other sites, and in that site, the second telephone survey was conducted during the fall and winter of the sixth year after sample members entered the ninth grade (one year after the end of the demonstration).

[75] The instruments, fielding procedures, and response rates for the previous data collection activities are presented in Schirm et al. (2003).

[76] Numbers do not add up to 100 percent due to rounding. All of the in-person completes were obtained by having the sample member call one of our telephone interviewers using a cell phone provided by a field locator. The interview was then conducted using the CATI system and in the presence of the field locator (hence the designation "in-person").

RESPONSE RATES FOR THE SECOND TELEPHONE SURVEY

Table C.3 displays the unit response rates for the second telephone survey and prior data collection activities. The figures are presented separately for QOP and control group members and are presented for the full sample and by school.

According to Table C.4, which displays the final disposition report for the second telephone survey, the overall response rate to the survey was 75 percent.[77] The difference in response rates between the QOP and control groups was 10 percentage points overall (80 percent for the QOP group and 70 percent for the control group). As with the previous surveys, the differential varied widely across schools and sites. Across sites, the largest differences in response rates between the QOP and control groups were for the Washington, D.C., site (30 percentage points) and the Cleveland site (14 percentage points). As indicated in Table C.4, most nonrespondents to the second telephone survey were sample members who could not be located.

MISSING VALUES

Item nonresponse was uncommon—often less than one percent—for all outcome measures used in the impact analysis (see Tables C.5 and C.6). Moreover, item nonresponse differed very little between the QOP and control groups.

[77] The difference between the second telephone survey response rates found in Tables C.3 and C.4 is explained by the difference in the base for the rates (N=1,069 for Table C.3, and N=1,058 for Table C.4). Table C.3 counts all sample members in the original sample, whereas Table C.4 excludes those sample members who were known to have died prior to the start of the second telephone survey data collection or who had been removed from the tracking database prior to the second telephone survey.

Table C.1. QOP Sites and Schools

QOP Site	Schools
Fort Worth, TX	Paschal High School
Cleveland, OH	Collinwood High School
Washington, DC	Anacostia High School Eastern High School
Houston, TX	Austin High School Yates High School
Memphis, TN	Carver High School Hamilton High School Hillcrest High School
Philadelphia, PA	Ben Franklin High School
Yakima, WA	Davis High School

Table C.2. Data Collection Fielding Dates

Instrument	Fielding Dates
Non-DC In-Person Survey/Achievement Tests	February - April 1999
DC In-Person Survey/Achievement Tests	April 2000
Non-DC First Telephone Survey	November 1999 - June 2000
DC First Telephone Survey	November 2000 - April 2001
Non-DC School Records	September 1999 - December 2000
DC School Records	December 2000 - April 2001
Second Telephone Survey	September 2002 - April 2003

Table C.3. Response Rates for Data Collection Activities (Percentages, except for sample sizes)

	Fort Worth	Cleveland	Washington, D.C.			Houston			Memphis				Philadelphia	Yakima	All Sites
	Paschal	Collinwood	Eastern	Anacostia	Total	Yates	Austin	Total	Hillcrest	Hamilton	Carver	Total	Franklin	Davis	Total
Sample size															
Overall	177	158	82	72	154	94	92	186	75	54	70	199	95	100	1,069
QOP	100	100	40	40	80	50	50	100	38	27	35	100	50	50	580
Control	77	58	42	32	74	44	42	86	37	27	35	99	45	50	489
In-person survey															
Overall	83	82	87	82	84	82	93	88	85	80	86	84	89	76	84
QOP	88	84	92	88	90	90	94	92	92	78	83	85	92	82	88
Control	77	79	81	75	78	73	93	83	78	81	89	83	87	70	80
Achievement tests															
Reading															
Overall	82	83	85	82	84	82	96	89	85	80	86	84	89	75	84
QOP	87	85	92	88	90	90	96	93	92	78	83	85	92	80	88
Control	77	79	79	75	77	73	95	84	78	81	89	83	87	70	80
Mathematics															
Overall	81	83	85	82	84	82	96	89	85	80	86	84	89	75	84
QOP	86	85	92	88	90	90	96	93	92	78	83	85	92	80	87
Control	75	79	79	75	77	73	95	84	78	81	89	83	87	70	80
First telephone survey															
Overall	84	86	85	69	78	81	95	88	85	76	84	82	82	83	83
QOP	85	86	95	85	90	88	94	91	92	74	89	86	84	82	87
Control	82	86	76	50	65	73	95	84	78	78	80	79	80	84	80
Transcripts															
Overall	87	70	93	85	89	83	96	89	83	63	83	77	79	79	82
QOP	93	68	98	92	95	92	98	95	87	67	86	81	82	88	86
Control	79	72	88	75	82	73	93	83	78	59	80	74	76	70	77
Second telephone survey															
Overall	80	74	78	74	76	68	72	70	73	70	71	72	62	81	74
QOP	83	79	93	88	90	72	74	73	76	67	74	73	64	82	78
Control	75	66	64	56	61	64	69	66	70	74	69	71	60	80	69

SOURCE: In-person survey, achievement tests, telephone surveys, and transcripts.

Table C.4. Second Telephone Survey Dispositions, by Site and QOP/Control Status

Disposition	Fort Worth			Cleveland			Washington, D.C.			Houston		
	Total N=176	QOP N=99	Control N=77	Total N=157	QOP N=99	Control N=58	Total N=154	QOP N=80	Control N=74	Total N=184	QOP N=100	Control N=84
Complete												
Total	141 (80%)	83 (84%)	58 (75%)	117 (75%)	79 (80%)	38 (66%)	117 (78%)	72 (92%)	45 (62%)	130 (71%)	73 (73%)	57 (68%)
Telephone	99 (56%)	55 (56%)	44 (57%)	92 (59%)	64 (65%)	28 (48%)	105 (68%)	64 (80%)	41 (55%)	101 (55%)	62 (62%)	39 (46%)
Mail	2 (1%)	1 (1%)	1 (1%)	1 (1%)	0 (0%)	1 (2%)	0 (0%)	0 (0%)	0 (0%)	2 (1%)	0 (0%)	2 (2%)
Field	40 (23%)	27 (27%)	13 (17%)	24 (15%)	15 (15%)	9 (16%)	12 (8%)	8 (10%)	4 (5%)	27 (15%)	11 (11%)	16 (19%)
Not Complete												
Total	35 (20%)	16 (16%)	19 (25%)	40 (26%)	20 (20%)	20 (35%)	37 (24%)	8 (10%)	29 (39%)	54 (29%)	27 (27%)	27 (32%)
Not located	14 (8%)	7 (7%)	7 (9%)	24 (15%)	13 (13%)	11 (19%)	25 (16%)	5 (6%)	20 (27%)	35 (19%)	18 (18%)	17 (20%)
Located, not interviewed	4 (2%)	2 (2%)	2 (3%)	3 (2%)	1 (1%)	2 (3%)	3 (2%)	0 (0%)	3 (4%)	6 (3%)	3 (3%)	3 (4%)
Incarcerated or institutionalized	1 (1%)	1 (1%)	0 (0%)	6 (4%)	4 (4%)	2 (3%)	3 (2%)	1 (1%)	2 (3%)	2 (1%)	0 (0%)	2 (2%)
Out of area	8 (5%)	3 (3%)	5 (7%)	5 (3%)	1 (1%)	4 (7%)	1 (1%)	0 (0)%	1 (1%)	6 (3%)	3 (3%)	3 (4%)
Military	3 (2%)	2 (2%)	1 (1%)	1 (1%)	1 (1%)	0 (0%)	1 (1%)	0 (0%)	1 (1%)	3 (2%)	3 (3%)	0 (0%)
Refused	5 (3%)	1 (1%)	4 (5%)	1 (1%)	0 (0%)	1 (2%)	1 (1%)	0 (0%)	1 (1%)	2 (1%)	0 (0%)	2 (2%)
Deceased	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	3 (2%)	2 (3%)	1 (1%)	0 (0%)	0 (0%)	0 (0%)

Table C.4 (continued)

Disposition	Memphis Total N=197	Memphis QOP N=98	Memphis Control N=99	Philadelphia Total N=92	Philadelphia QOP N=48	Philadelphia Control N=44	Yakima Total N=98	Yakima QOP N=49	Yakima Control N=49	All Sites Total N=1,058	All Sites QOP N=573	All Sites Control N=485
Complete												
Total	143 (73%)	73 (75%)	70 (71%)	59 (65%)	32 (67%)	27 (63%)	81 (83%)	41 (84%)	40 (82%)	788 (75%)	453 (80%)	335 (70%)
Telephone	122 (62%)	62 (63%)	60 (61%)	49 (53%)	28 (58%)	21 (48%)	63 (64%)	31 (63%)	32 (65%)	631 (60%)	366 (64%)	265 (55%)
Mail	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (1%)	0 (0%)	1 (2%)	6 (1%)	1 (0%)	5 (1%)
Field	21 (11%)	11 (11%)	10 (10%)	10 (11%)	4 (8%)	6 (14%)	17 (17%)	10 (20%)	7 (14%)	151 (14%)	86 (15%)	65 (13%)
Not Complete												
Total	54 (27%)	25 (26%)	29 (29%)	33 (36%)	16 (33%)	17 (39%)	17 (17%)	8 (16%)	9 (18%)	270 (26%)	120 (21%)	150 (31%)
Not located	27 (14%)	10 (10%)	17 (17%)	19 (21%)	10 (21%)	9 (21%)	6 (6%)	3 (6%)	3 (6%)	150 (14%)	66 (12%)	84 (17%)
Located, not interviewed	13 (7%)	7 (7%)	6 (6%)	2 (2%)	1 (2%)	1 (2%)	0 (0%)	0 (0%)	0 (0%)	31 (3%)	14 (2%)	17 (4%)
Incarcerated or institutionalized	2 (1%)	1 (1%)	1 (1%)	6 (7%)	4 (8%)	2 (5%)	0 (0%)	0 (0%)	0 (0%)	20 (2%)	11 (2%)	9 (2%)
Out of area	8 (4%)	4 (4%)	4 (4%)	3 (3%)	1 (2%)	2 (5%)	7 (7%)	3 (6%)	4 (8%)	38 (4%)	15 (3%)	23 (5%)
Military	1 (1%)	1 (1%)	0 (0%)	1 (1%)	0 (0%)	1 (2%)	0 (0%)	0 (0%)	0 (0%)	10 (1%)	7 (1%)	3 (1%)
Refused	1 (1%)	1 (1%)	0 (0%)	1 (1%)	0 (0%)	1 (2%)	4 (4%)	2 (4%)	2 (4%)	15 (1%)	4 (1%)	11 (2%)
Deceased	2 (1%)	1 (1%)	1 (1%)	1 (1%)	0 (0%)	1 (2%)	0 (0%)	0 (0%)	0 (0%)	6 (1%)	3 (1%)	3 (1%)

Table C.5. Item Response Rates for Outcomes Pertaining to High School Completion, Postsecondary Attainment, and Current Activities (Percentages)

Outcome	QOP Group	Control Group	Total Sample
Received HS diploma	100.0	100.0	100.0
Received HS diploma or GED	100.0	100.0	100.0
Ever attended or currently attending a 4-year college	100.0	99.7	99.9
Completed at least 1 quarter at a 4-year college	99.3	99.4	99.4
Completed at least 1 year at a 4-year college	99.3	99.4	99.4
Completed at least 2 years at a 4-year college	99.3	99.4	99.4
Ever attended or currently attending a 2 or 4-year college	100.0	99.7	99.9
Completed at least 1 quarter at a 2 or 4-year college	99.1	98.2	98.7
Completed at least 1 year at a 2 or 4-year college	99.1	98.2	98.7
Completed at least 2 years at a 2 or 4-year college	99.1	98.2	98.7
Ever in college, voc/tech school, apprenticeship, or military	100.0	99.4	99.7
Completed 2 years of college, completed voc/tech school, or an apprenticeship, or in the military	99.6	97.9	98.9
In a 4-year college	100.0	99.7	99.9
In a 2 or 4-year college	100.0	99.7	99.9
In college, voc/tech school, apprenticeship, or military	100.0	99.4	99.7
Has a job	100.0	99.4	99.7
Works at least 35hrs/week at main job	99.3	99.1	99.2
Has a job with health insurance	98.0	96.7	97.5
Has a full time job with health insurance	98.2	97.6	98.0
Has a job that pays >= $10/hr	96.9	97.9	97.3
Has full time job that pays >= $10/hr	97.8	98.5	98.1
Has a full time job with health insurance that pays >= $10/hr	98.2	97.9	98.1
In college, voc/tech school, apprenticeship, military, or a job	100.0	99.4	99.7
In college, voc/tech school, apprenticeship, military, or full time job	99.6	99.1	99.4
In college, voc/tech school, apprenticeship, military, or job with health insurance	98.7	97.6	98.2
In college, voc/tech school, apprenticeship, military, or job that pays >= $10/hr	98.0	98.5	98.2
In college, voc/tech school, apprenticeship, military, or full time job with health insurance	98.7	97.9	98.4
In college, voc/tech school, apprenticeship, military, or full time job that pays >= $10/hr	98.7	99.1	98.9
In college, voc/tech school, apprenticeship, military, or full time job with health insurance that pays >= $10/hr	99.1	98.2	98.7

SOURCE: Telephone surveys and transcripts for the two outcomes pertaining to high school completion. Second telephone survey for all other outcomes.

Table C.6. Item Response Rates for Outcomes Pertaining to Risky Behaviors and Family Life (Percentages)

Outcome	QOP Group	Control Group	Total Sample
Binge drinking in past month	99.6	98.8	99.2
Binge drinking on 8 or more days in past month	99.6	98.8	99.2
Used an illegal drug in past month	99.8	99.4	99.6
Committed a crime in past 3 months	99.8	99.4	99.6
Arrested or charged in past 3 months	99.6	99.4	99.5
Had first child before age 18	98.9	98.5	98.7
Currently living with natural children, but no spouse	99.1	99.1	99.1
Have children with whom not currently living	98.9	99.1	99.0
Currently receiving welfare	98.5	99.1	98.7
Currently receiving food stamps	98.0	98.8	98.4
Currently receiving welfare or food stamps	97.8	98.8	98.2

SOURCE: Second telephone survey.

APPENDIX D

OUTCOMES AND SUBGROUPS

This appendix describes the outcomes and subgroups of enrollees for which we estimated impacts.

OUTCOMES

The outcomes fall into four broad categories:

1. *High School Completion.* The outcomes in this category measure receipt of a high school diploma or receipt of a general educational development (GED) certificate.

2. *Postsecondary Attainment.* The outcomes in this category measure cumulative attainment of postsecondary education and training through college, vocational/technical schools, certified apprenticeship programs, and the armed forces.

3. *Postsecondary Activity.* The outcomes in this category measure engagement in postsecondary education and training activities or employment at the time of the second telephone survey.

4. *Risky Behaviors and Family Life.* The outcomes in this category measure substance abuse, criminal activity, involvement with the criminal justice system, teen pregnancy, single parenting, noncustodial parenting, and welfare receipt.

Table D.1 displays the complete list of outcomes by category. Most of the outcomes are self-explanatory, although several require additional explanation, which is presented below.

High School Completion

Data on high school completion were obtained from the first and second telephone surveys and from transcripts. Appendix F explains how we measured high school completion using these data.[78]

[78] All other outcomes considered in this report were measured using data from the second telephone survey only.

Risky Behaviors

Substance Abuse. "Binge" drinking means drinking five or more drinks in a row. In the main text of this report, binge drinking is described as "frequent" if it occurs on at least 8 out of the past 30 days. The outcome "used any drug in the past 30 days" indicates that the respondent reported using at least one of the following illegal drugs or types of illegal drugs: marijuana or hashish; cocaine or crack cocaine; heroin, opium, or methadone; stimulants; depressants; inhalants; or hallucinogens. Because the rates at which sample members were using most of the individual drugs were low and the evaluation samples for schools and sites were small, impacts for individual drugs could not be reliably estimated and are not presented.

Criminal Activity. The outcome "committed any crime in the past 3 months" indicates that the respondent reported committing at least one of the following six crimes: (1) sold illegal drugs, (2) stole a motor vehicle, (3) stole something other than a motor vehicle, (4) attacked and seriously hurt or killed someone, (5) carried a hand gun, and (6) committed a sexual assault. Because the rates at which sample members were committing most of the individual crimes were low and the evaluation samples for schools and sites were small, impacts for individual crimes could not be reliably estimated and are not presented.

SUBGROUPS

We present impacts for subgroups defined by baseline characteristics—sex, age, and GPA. Table D.2 lists the subgroups and their sample sizes.

When assessing impacts for the subgroups defined by rank in the baseline grade distribution, it is important to remember that to be eligible for QOP, a youth had to be in the bottom two-thirds of the grade distribution based on grades from the eighth grade. Thus, youth in the bottom third of the baseline grade distribution for QOP eligibles were at or below the 22nd percentile in the distribution for all youth, including those who were not eligible for QOP based on their grades. Likewise, the youth in the middle and top thirds of the baseline grade distribution for QOP eligibles were between the 22nd and 44th percentiles and between the 44th and 66th percentiles, respectively, in the grade distribution for all youth.

Table D.1. Outcomes

Category
High School Completion
Received HS diploma[a]
Received HS diploma or GED[a]
Postsecondary Attainment
Ever attended or currently attending a 4-year college
Completed at least 1 quarter at a 4-year college
Completed at least 1 year at a 4-year college
Completed at least 2 years at a 4-year college
Ever attended or currently attending a 2 or 4-year college
Completed at least 1 quarter at a 2 or 4-year college
Completed at least 1 year at a 2 or 4-year college
Completed at least 2 years at a 2 or 4-year college
Ever in college, voc/tech school, apprenticeship, or military
Completed 2 years of college, voc/tech school, apprenticeship, or military
Current Activities
In a 4-year college
In a 2 or 4-year college
In college, voc/tech school, apprenticeship, or military
Has a job
Works at least 35hrs/week at main job, i.e., has a full time job
Has a job with health insurance
Has a job that pays >= $10/hr
Has a full time job with health insurance
Has full time job that pays >= $10/hr
Has a full time job with health insurance that pays >= $10/hr
In college, voc/tech school, apprenticeship, military, or a job
In college, voc/tech school, apprenticeship, military, or full time job
In college, voc/tech school, apprenticeship, military, or job with health insurance
In college, voc/tech school, apprenticeship, military, or job that pays >= $10/hr
In college, voc/tech school, apprenticeship, military, or full time job with health insurance
In college, voc/tech school, apprenticeship, military, or full time job that pays >= $10/hr

Table D-1 (continued)

Category
In college, voc/tech school, apprenticeship, military, or full time job with health insurance that pays >= $10/hr
Risky Behaviors and Family Life
Binge drinking in past month[a]
Binge drinking on 8 or more days in past month[a]
Used an illegal drug in past month
Committed a crime in past 3 months[a]
Arrested or charged in past 3 months
Had first child before age 18
Currently living with natural children, but no spouse
Have children with whom not currently living
Currently receiving welfare
Currently receiving food stamps
Currently receiving welfare or food stamps

NOTE: Except for the high school completion outcomes, we measured all outcomes using data from the second telephone survey. We measured the high school completion outcomes using data from the first and second telephone surveys and high school transcripts, as described in Appendix F.

[a] A more detailed explanation of how this outcome was measured can be found in the text of the appendix.

Table D.2. Subgroups

Subgroup	Sample Size
Sex	
Males	576
Females	493
Age when entered ninth grade	
14 or younger	706
Over 14	363
Rank in baseline grade distribution (based on eighth-grade GPA)	
In the bottom third of the grade distribution	380
In the middle third of the grade distribution	359
In the top third of the grade distribution	330

APPENDIX E

WEIGHTING, IMPACT ESTIMATION, AND VARIANCE ESTIMATION

WEIGHTING TO ADJUST FOR NONRESPONSE

We developed person-level weights to adjust for the potential effects of unit nonresponse. Unit nonresponse occurred, for example, when a sample member did not respond at all to the second telephone survey, that is, the sample member did not answer any questions on the survey.[79] About 25 percent of sample members did not respond to the second telephone survey. The unit nonresponse rate for the control group was higher than the overall rate, while the unit nonresponse rate for QOP enrollees was lower than the overall rate. The difference between the unit nonresponse rates for the two groups was about ten percentage points.

Differences in baseline characteristics between respondents and nonrespondents could potentially cause differences between the outcomes of respondents and those of nonrespondents. In such a circumstance, an impact estimated using data from respondents only (since there are no outcome data from nonrespondents) would be a biased estimate of the impact that we seek, which is the impact on all sample members, respondents and nonrespondents. The size of the bias is not estimable.

To adjust for the effects of nonresponse and reduce potential nonresponse bias, we assigned weights to respondents. We assigned larger weights to the respondents who more closely resembled the nonrespondents in terms of baseline and other characteristics and smaller weights to the respondents who less closely resembled the nonrespondents.[80] Although differential weighting of respondents tended to increase the variances of impact estimates (by measurable amounts), we accepted small increases in variances to enhance our confidence that we controlled nonresponse bias to the extent possible.

Weights

We derived three different sets of weights to adjust for nonresponse: (1) weights for the outcome measuring receipt of a high school diploma; (2) weights for the outcome measuring receipt of a high school diploma or GED; and (3) weights for all of the other outcomes.

To derived the third set of weights, we estimated two separate logit regression models to predict the probability that each sample member responded to the second telephone survey—one for the QOP group and one for the control group. To derive the other two sets of weights, we repeated this process, defining a sample member as a "respondent" if we were able to ascertain whether the sample member received a diploma (for the first set of weights) or whether he or she received a diploma or a GED (for the second set of

[79] In contrast, item nonresponse occurred when a sample member did not provide a valid answer to a question that was asked even though he or she answered other questions on the survey. As shown in Appendix C, item nonresponse rates were typically very low.

[80] As described in detail below, we evaluated resemblance using response propensity scores.

weights).[81] Then, we estimated the impact on an outcome using the appropriate set of weights.

We derived each set of weights by carrying out the following four steps:

1. ***We estimated a "best" logit model for predicting response propensity scores (probabilities) separately for QOP and control group members.*** The best regression model included 22 predictors that we "forced" into the model and additional predictors that we selected using an automated forward selection procedure with a liberal inclusion criterion.[82] The predictors forced into the model were an intercept, 10 school indicators, an indicator for whether the sample member responded to the first telephone survey, and the 10 interactions between the first telephone survey response indicator and the 10 school indicators. Additional potential predictors included baseline characteristics and outcomes measured in the in-person and first telephone surveys.[83]

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[81] As described in detail in Appendix F, we determined a sample member's high school completion status based primarily on that person's responses to questions asked during the first and second telephone surveys, supplemented in a few cases by information from high school transcripts. For some sample members, we could not determine whether they had earned a diploma or GED. For example, if a sample member did not respond to the second telephone survey after previously reporting having dropped out of school, we cannot be certain that the sample member did not earn a GED or return to school and earn a diploma after the first telephone survey. For the two main outcomes measuring high school completion (as opposed to the alternative measures considered in the sensitivity analyses of Appendix F), we classify such a person as a nonrespondent. If, instead, a sample member did not respond to the second telephone survey after previously reporting having earned a GED, we still cannot be certain that the sample member did not return to school and earn a diploma. Hence, for the outcome that measures receipt of a diploma, we classify such a person as a nonrespondent. However, for the outcome that measures receipt of a diploma or a GED, we classify the person as a respondent. There are 16 such sample members. They are the only sample members whose response status is different for the two high school completion outcomes. Because the response patterns are different for the two outcomes, we derived different sets of weights to use when estimating impacts. (We derived additional sets of weights for one of the alternative measures considered in Appendix F and for measures of on-time graduation and graduation in less than five years.)

[82] Our model selection procedure first estimated coefficients for the predictors forced into the model. Then, the procedure determined which excluded predictor had the largest adjusted chi-squared statistic for inclusion in the model. If the statistic was significant at the 75 percent confidence level, the procedure added the predictor to the model. The procedure never removed a predictor from the model. The procedure continued evaluating and adding excluded predictors until there was no excluded predictor that satisfied the criterion for inclusion.

[83] The baseline characteristics include an indicator for being male, an indicator for being black, an indicator for being Hispanic, two indicators for age when entering ninth grade (one for under 14 and one for over 14), two indicators for rank based on eighth-grade GPA (one for middle third and one for top third), percentile rank based on eighth-grade GPA, and the percentile rank squared. Other potential predictors included the interactions between any two baseline characteristics (except for interactions between the predictors based on eighth-grade GPA), and the interactions between any baseline characteristic and any school indicator. An exception to this was that the indicators for race and Hispanic origin were interacted with the school indicators for only the two schools with substantial diversity by race or Hispanic origin (Paschal in Fort Worth and Davis in Yakima). The outcomes measured in the in-person survey include an indicator for binge drinking in the 30 days before the survey, an indicator for using any illegal drug in the 30 days before the

(continued)

2. ***We derived predicted response propensity scores based on sample members'*** characteristics ***using the best logit model for a sample member's evaluation group (QOP or control).***

3. ***We assigned a weight to a respondent equal to the inverse of the respondent's*** propensity score. We assigned a weight equal to zero to each nonrespondent. To reduce the variability in weights and the resulting increase in variance of impact estimates, we trimmed weights to 3, that is, any weight greater than 3 was set equal to 3.[84] Weighting respondents based on inverse propensity scores ensured that we assigned a relatively large weight to a respondent who had a relatively low response propensity and, thus, resembled a nonrespondent.

4. ***We ratio adjusted weights to sum to the number of respondents in each of the 22*** weighting ***classes defined by the cross-classification of school (11 categories) and experimental group (2 categories—QOP and control).***

Having developed these weights, we estimated an impact as the difference between the *weighted* QOP group mean and the *weighted* control group mean. The details of the estimation of impacts and the variances of those impacts are presented in the next section.[85]

(continued)

survey, an indicator for committing a crime in the 12 months before the survey, and an indicator for having ever been arrested or charged. The outcomes measured in the first telephone survey include an indicator for being in high school at the time of the survey; an indicator for having earned a high school diploma; an indicator for having earned a high school diploma, a GED, or a high school certificate; an indicator for having earned a high school diploma, a GED, or a high school certificate or attending high school at the time of the survey; an indicator for attending college at the time of the survey; an indicator for attending postsecondary training at the time of the survey; an indicator for attending postsecondary training or having a job with health insurance at the time of the survey; an indicator for attending or being accepted into college at the time of the survey; an indicator for having one or more children at the time of the survey; an indicator for binge drinking in the 30 days before the survey; an indicator for frequent binge drinking in the 30 days before the survey; an indicator for using illegal drugs in the 30 days before the survey; and an indicator for having been suspended from school.

[84] This resulted in the trimming of five of the weights for the outcome measuring receipt of a high school diploma, seven of the weights for the outcome measuring receipt of a high school diploma or GED, and fifteen of the weights for all of the other outcomes.

[85] In Appendix F, we assess the sensitivity of our results to whether and how we adjust for nonresponse. We find that our results are generally not sensitive.

Impacts for Schools

We estimated the impact for a school according to:

$$impact_{school} = \bar{X}_{Q,school} - \bar{X}_{C,school}$$

where X is the outcome of interest, Q and C denote the QOP and control groups, and, for example:

$$\bar{X}_{Q,school} = \frac{\sum_{i \in Q,school} w_i X_i}{\sum_{i \in Q,school} w_i}$$

w_i is the weight for sample member i.[86] In other words, we estimated the impact for a school by subtracting the mean outcome among members of the control group for that school from the mean outcome among QOP enrollees for that school. Each sample member remained a member of the group to which he or she was originally assigned, regardless of subsequent behavior, such as transferring to another school, dropping out of school, or (for enrollees) dropping out of QOP.

Treating the QOP group and the control group as independent samples from a superpopulation, we estimated the variance (the standard error squared) of the school-level impact according to:[87]

$$\text{var}\left(impact_{school}\right) = \text{var}\left(\bar{X}_{Q,school} - \bar{X}_{C,school}\right) = \text{var}\left(\bar{X}_{Q,school}\right) + \text{var}\left(\bar{X}_{C,school}\right)$$

[86] Because all of the sample members from a school had the same probability of assignment to the QOP group, the only purpose of weighting is to adjust for unit nonresponse. We described earlier in this appendix how we derived weights.

[87] The basic idea is that we are not really interested in just the small population of youth who were eligible for random assignment. Rather, we would like to generalize to a "superpopulation" that includes other youth, including those who met the four QOP eligibility criteria (but were not selected for the initial sample) and those who would have been eligible in prior or subsequent academic years. If the group of youth eligible for random assignment were our population of interest, the QOP and control means would be correlated (because the control group is the complement of the QOP group). However, that correlation is not estimable—without some simplifying assumption—because we observe each sample member in only one experimental state, that is, as either a QOP enrollee or a control. One simplifying assumption is that the impact of QOP is additive and fixed (the same for all youth). This assumption and the superpopulation approach lead to the same statistical procedure.

We estimated the variance of the QOP group mean for a given school according to:[88]

$$\text{var}\left(\bar{X}_{Q,school}\right) = \frac{1}{\left(\sum_{i \in Q,school} w_i\right)^2}\left(\frac{n_{Q,school}}{n_{Q,school}-1}\right)\sum_{i \in Q,school} w_i^2\left(X_i - \bar{X}_{Q,school}\right)^2$$

where $n_{Q,school}$ is the number of responding sample members in the school's QOP group. When calculating any of the sums needed for estimating a mean or a variance, we included only those sample members with valid (nonmissing) data for the outcome under consideration.[89]

Impacts for Sites

We estimated the impact for a site according to:

$$impact_{site} = \sum_{school \in H_{site}} W_{school}\, impact_{school}$$

where H_{site} is the set of schools from which youth were selected for the QOP program operated at the site in question.[90] In other words, we estimated the impact for a site by taking a weighted average of the impacts for the schools at that site. We based the school-level weights (the W) on the allocation of slots observed in the demonstration. In fact, W_{school} was the fraction of the site's QOP slots allocated to the particular school. Thus, W_{school} was 1.00 for Collinwood (Cleveland), Paschal (Fort Worth), Franklin (Philadelphia), and Davis (Yakima); 0.50 for Anacostia (Washington, D.C.), Eastern (Washington, D.C.), Austin (Houston), and Yates (Houston); 0.35 for Carver (Memphis); 0.27 for Hamilton (Memphis); and 0.38 for Hillcrest (Memphis). This was our best estimate of how slots would have been allocated had the sites been part of an ongoing, national program. In such a program, as in the demonstration, CBOs in some sites would work with just one school, while CBOs in other sites would have the same number of slots, but work with two or three schools. In the latter case, the CBOs would likely allocate slots in the same way that the CBOs in the demonstration did. Note that for each site:

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[88] A similar expression pertains for the variance of the control group mean.

[89] For all outcomes except those measuring high school completion, sample members who did not respond at all to the second telephone survey were excluded because their weights were equal to zero. Sample members who responded to the survey but did not answer the question or questions relevant to the outcome were excluded from only those calculations for which they were missing data. The former group was substantially larger than the latter group for all the outcomes that we considered. We sought to compensate for the loss of the former group by weighting respondents, as described previously. For the outcomes measuring high school completion, there was no item nonresponse.

[90] H_{site} consists of one school for Cleveland, Fort Worth, Philadelphia, and Yakima; two schools for Washington, D.C., and Houston; and three schools for Memphis.

$$\sum_{school \in H_{site}} W_{school} = 1$$

This approach to weighting schools when calculating an impact estimate for a site implied, for example, that:

$$impact_{Memphis} = 0.35 \times impact_{Carver} + 0.27 \times impact_{Hamilton} + 0.38 \times impact_{Hillcrest}$$

Treating the allocation of QOP slots across schools within a site as fixed, we estimated the variance of the site-level impact according to:

$$\text{var}\left(impact_{site}\right) = \sum_{school \in H_{site}} W^2_{school} \text{var}\left(impact_{school}\right)$$

This expression reflects the fact that for each site, we had the full population of schools from which youth were selected and the fact that random assignment was carried out independently in each school.

Impacts for the Whole Demonstration

We estimated the impact for the whole QOP demonstration according to:

$$impact_{demo} = \sum_{site = 1}^{7} A_{site} impact_{site}$$

where

$$\sum_{site = 1}^{7} A_{site} = 1$$

We assumed that $A_{site} = 1/7$ for all sites. Thus, we estimated the impact for the whole demonstration by taking the simple average of the seven site impacts. Our equal weighting of sites was based on the belief—or best guess—that if QOP were implemented as an ongoing, national program, CBOs would have roughly equal numbers of QOP slots. The relatively small sizes of the Washington, D.C., and Ford-funded programs in the demonstration were due to circumstances that we do not think would be replicated in a regular program.[91]

[91] The Ford Foundation wanted to fund two sites, but at only half of the size of DOL-funded sites, an outcome that would be unlikely to occur in a program that is fully funded by the federal government. The Washington, D.C., site was allocated 100 QOP slots, but given the short duration of the demonstration and the one-year delay in beginning program operations in the site, efforts to identify eligible youth were halted at a third QOP school that would have had 20 slots. This decision was not made early enough to increase the number of slots at the two remaining QOP schools.

For deriving all of the estimates presented in this report, we assumed that the collection of sites in the QOP demonstration was a fixed set, that is, a population. Thus, we estimated the variance of the demonstration-level impact according to:

$$\text{var}\left(impact_{demo}\right) = \sum_{site\,=\,1}^{7} A_{site}^{2}\ \text{var}\left(impact_{site}\right)$$

Although the sites in the demonstration were not really a population, they were also not a probability sample. Nevertheless, if statistically significant impact estimates from the demonstration are to be useful for informing policy, the demonstration sites must be approximately representative of a population of potential sites. Then, we would want to treat the demonstration sites as a random sample (of size seven), and estimate the "total" variance of an impact estimate. The total variance has both a within-site component and a between-site component. The within-site component reflects the sampling error from selecting samples of youth in each site, and is captured by the expression already given for the variance of the demonstration-level impact. The between-site component reflects the differences among the impacts for the different sites. Although we might have preferred to obtain estimates of total variances, we cannot estimate total variances very precisely because there were only seven sites in the demonstration. In fact, we discovered in the analysis of short-term impacts that for a large majority of impacts, the estimated total variance was smaller—often substantially smaller—than the estimated within-site component of variance. Because we prefer a well-estimated within-site component of variance to a poorly estimated total variance, we present the former as our variance estimates.

We conducted t-tests to determine whether estimated impacts were significantly different from zero. For a t-test, we calculated a t-statistic by dividing an impact estimate by its standard error. The standard error is the square root of the variance, and the variance was estimated according to the relevant expression given in this appendix.

APPENDIX F

SENSITIVITY ANALYSES

In this appendix, we assess the sensitivity of the impact estimates to alternative estimation approaches. In particular, we assess the sensitivity to:

- *Alternative approaches to measuring high school completion.* To gauge the potential importance of concerns about both nonresponse and the accuracy of responses, we have assessed the sensitivity of the impact estimates to alternative ways of measuring high school completion, some of which infer graduation status based on certain assumptions that we have made when the available data are incomplete or seemingly inconsistent.

- *Alternative models of nonresponse.* To assess the sensitivity of our results to whether and how we adjust for nonresponse, we estimated impacts using alternative weights to adjust for nonresponse.

- *Using regression methods to adjust the impact estimates for random differences between the QOP group and the control group.* Although the difference-of-means estimates presented in this report are unbiased, they may have been affected by purely random differences between the baseline characteristics of QOP enrollees and the baseline characteristics of members of the control group. Therefore, we adjusted for such differences using regression methods.

In each case, we determined whether our conclusions would have been different had they been based on estimates derived using the alternative approaches. We found that our conclusions are generally robust.

In addition to these sensitivity analyses, we assessed whether our impact estimates for the whole QOP demonstration are sensitive to the inclusion or exclusion of the Washington, D.C., site. We undertook this assessment for two reasons. First, the difference between the treatment and control group response rates in the Washington, D.C., site was relatively large (30 percentage points, as documented in Appendix C). Second, program operations began a year later and sample members are typically a year younger in the Washington, D.C., site than in the other six sites. As in the other sensitivity analyses, this sensitivity analysis revealed that our conclusions are generally robust.

THE SENSITIVITY OF IMPACT ESTIMATES TO ALTERNATIVE APPROACHES TO DEFINING HIGH SCHOOL GRADUATION STATUS

We determined a sample member's high school graduation status based primarily on that person's responses to questions asked during the first and second telephone surveys,

supplemented in a few cases by information from high school transcripts.[92] Such an approach to measuring this outcome—the same basic approach taken with the National Education Longitudinal Survey—raises two concerns. First, as noted in Appendix C, some sample members did not respond to the surveys or had incomplete transcript data. Second, some sample members might not have provided accurate responses to the questions about high school completion.

To reduce the effects of survey nonresponse, we developed weights that adjust for differences between respondents and nonrespondents.[93] Furthermore, to gauge the potential importance of concerns about both nonresponse and the accuracy of responses, we have also assessed the sensitivity of the impact estimates to alternative ways of measuring high school completion, some of which infer graduation status based on certain assumptions that we have made when the available data are incomplete or seemingly inconsistent.

If a sample member had graduated from high school prior to the first telephone survey and reported that outcome on the survey, we could determine that the sample member was a high school graduate without making any assumptions even if that person did not respond to the second telephone survey. However, if a sample member did not respond to the second telephone survey after previously reporting having dropped out of school, we cannot be certain that the sample member did not return to school and graduate after the first telephone survey. For the first outcome measure in Table F.1—the measure that we used in the main text of this report—we classify such a person as a nonrespondent. For the second measure (the "First Alternative") in Table F.1, we classify the person as a nongraduate if he or she had been out of school for one entire academic year and part of another, had not progressed beyond tenth grade as of the first telephone survey, or was not on a pace to graduate from high school in five years based on credits received; otherwise, the sample member was classified as a nonrespondent.[94] To derive the third measure of high school graduation (the "Second Alternative") in Table F.1, we examined the transcripts of sample members who reported having graduated. In contrast to our specification of the first measure, where we treated survey responses as fully accurate, we viewed survey responses more skeptically in developing the third measure of graduation. Specifically, if the available transcript data clearly contradicted a sample member's survey response or strongly suggested that the person had not graduated, we classified him or her as a nongraduate.

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[92] For 10 sample members who had not responded to the telephone surveys, the sample members' transcripts indicated that they had graduated from high school. For most sample members who did not respond to our surveys, transcript data were incomplete.

[93] We describe our method for deriving weights in Appendix E. Later in this appendix, we assess the sensitivity of estimates to alternative models for obtaining weights.

[94] We also classified as nongraduates (rather than nonrespondents) a very small number of sample members who did not respond to the second telephone survey after reporting on the first telephone survey that they had received GEDs.

According to Table F.1, the estimated impact of QOP on high school graduation is not sensitive to how we measure graduation. All of the estimates imply that QOP did not significantly increase the likelihood of graduating from high school.[95]

Although the alternative estimates in Table F.1 imply the same conclusion, why are they different from the estimate reported previously (Maxfield et al. 2003b), which indicated that as of the first telephone survey, QOP significantly increased by seven percentage points the likelihood of earning a diploma? One possible explanation is that QOP enrollees were more likely than control group members to graduate on time—in four years—or in one extra semester but the control group members subsequently caught up by remaining in school longer and graduating in, say, five full years. As noted in the main text, however, estimates based on all of the data collected to date, including data from the second telephone survey, reveal that QOP did not significantly increase the likelihood of graduating on time or in less than five years.

To explore this issue further, we examined differences between the current and previous classifications of sample members as graduates, nongraduates, or nonrespondents.[96] We found that there are five groups of sample members:[97]

- Sample members who are now classified the same as before.

- Sample members for whom the data from the second telephone survey helped to resolve apparent inconsistencies between data from the first telephone survey and data from high school transcripts.[98]

- Sample members who reported having graduated by the time of the second telephone survey after reporting in the first telephone survey that they had not yet graduated because they had dropped out of school or were still attending school.

- Sample members for whom a final graduation status (graduate/nongraduate) could not be determined because they did not respond to the second telephone survey after reporting in the first telephone survey that they had not yet graduated because they had dropped out of school or were still attending school.

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[95] Given that the sample members entered—and often remained in—high schools with high dropout rates (over 40 percent) the means in Table F.1 seem plausible.

[96] We classify as a nonrespondent a sample member whose graduation status we cannot determine.

[97] The groups include 70, 5, 7, 11, and 7 percent of all sample members, respectively.

[98] There were also small numbers of sample members who (1) said during the second telephone survey that they had not graduated after reporting during the first telephone survey that they had graduated, (2) did not respond to the first telephone survey but graduated later according to transcripts, or (3) graduated according to additional data obtained from school officials.

- Sample members whose final graduation status was determined from their responses to the second telephone survey but whose prior status could not be determined because they did not respond to the first telephone survey.

We derived alternative impact estimates by excluding one or more of the last four groups or simulating different statuses for the members of one or more groups. Our findings suggest that the differences between the current and previous impact estimates are attributable to the differences between the current and previous classifications for all four groups, rather than any one or two groups.

Table F.1. Impacts on High School Graduation Using Alternative Approaches to Measuring Graduation Status

Outcome	QOP Group Mean (percentage)	Control Group Mean (percentage)	Impact (percentage points)
Received HS diploma	60	64	-3
Received HS diploma (First Alternative)	58	56	2
Received HS diploma (Second Alternative)	53	49	3

SOURCE: Telephone surveys and transcripts.

NOTE: Each impact was derived by subtracting the control group mean from the QOP group mean prior to rounding those means; thus, an impact might not equal the difference between the rounded means that are displayed. Estimates were obtained using weights to adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first and second telephone surveys, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

* Estimate significantly different from zero at the 90% confidence level, two-tailed test
** Estimate significantly different from zero at the 95% confidence level, two-tailed test
*** Estimate significantly different from zero at the 99% confidence level, two-tailed test

THE EFFECTS OF NONRESPONSE AND THE SENSITIVITY OF IMPACT ESTIMATES TO THE APPROACH FOR ADJUSTING FOR NONRESPONSE

To assess the sensitivity of our results to whether and how we adjust for nonresponse, we estimated impacts using alternative weights to adjust for nonresponse.[99] Tables F.2 through F.5 present the impact estimates that we obtained using three alternative weights to adjust for nonresponse: (1) weights that adjust for baseline differences between respondents and nonrespondents; (2) weights that adjust for differences between respondents and nonrespondents in baseline characteristics and response rates to the first telephone survey; and (3) weights that adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first and second telephone surveys, and outcomes measured in the in-person and first telephone surveys. The estimates obtained using the latter of these weights were our preferred estimates and were those presented in the tables in the main part of the report. Unweighted estimates are also presented for comparison purposes.

Alternatively, to assess the effects of differential nonresponse between the QOP and control groups, we derived impact estimates by making the response rate for the QOP group equal to the response rate for the control group for each of the 11 QOP schools. That is, if the QOP group had a higher response rate, we treated enough QOP group respondents as nonrespondents to lower the implied response rate to the level of the control group. The QOP group respondents that were treated as nonrespondents were the last ones to respond to the survey.

Comparing the alternative impact estimates suggests that whether and how we weight to adjust for nonresponse might affect only two of our conclusions. The first is that QOP did not have an impact on completion of at least one year at a college, and the second is that QOP did not have an impact on binge drinking. However, as we mentioned in the main part of the report, the impact on binge drinking is due to one site—Philadelphia—and might not be attributable to QOP.

[99] Appendix E describes the methodology we followed to develop person-level weights to adjust for the potential effects of unit nonresponse.

Table F.2. Impacts on High School Completion Obtained With Alternative Approaches to Adjusting for Nonresponse (Percentage Points)

Outcome	Unweighted Estimates	Weighted Estimates (1)	Weighted Estimates (2)	Weighted Estimates (3)	Unweighted Estimates[a]
Received HS diploma	1	1	0	-3	1
Received HS diploma or GED	2	3	1	0	2

SOURCE: Telephone surveys and transcripts.

NOTE: Each impact was derived by subtracting the control group mean from the QOP group mean. The weights used to derive the first column of weighted estimates adjust for baseline differences between respondents and nonrespondents. The weights used to derive the second column of weighted estimates adjust for differences between respondents and nonrespondents in baseline characteristics and response rates to the first and second telephone surveys. The weights used to derived the third column of weighted estimates adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first and second telephone surveys, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

[a] These estimates were derived by making the response rate for the QOP group equal to the response rate for the control group for each of the 11 schools. That is, if the QOP group had a higher response rate, we treated enough QOP group respondents as nonrespondents to lower the implied response rate to the level of the control group. The QOP group respondents that were treated as nonrespondents were the last ones to respond to the survey.

* Estimate significantly different from zero at the 90% confidence level, two-tailed test
** Estimate significantly different from zero at the 95% confidence level, two-tailed test
*** Estimate significantly different from zero at the 99% confidence level, two-tailed test

Table F.3. Impacts on Postsecondary Attainment Obtained With Alternative Approaches to Adjusting for Nonresponse (Percentage Points)

Outcome	Unweighted Estimates	Weighted Estimates (1)	Weighted Estimates (2)	Weighted Estimates (3)	Unweighted Estimates[a]
Ever attended or currently attending a 4-year college	3	4	4	3	3
Completed at least 1 quarter at a 4-year college	2	3	3	2	2
Completed at least 1 year at a 4-year college	2	4	4*	3	3
Completed at least 2 years at a 4-year college	2	3	3	2	2
Ever attended or currently attending a 2 or 4-year college	6*	7**	8**	7*	8**
Completed at least 1 quarter at a 2 or 4-year college	6*	7**	7*	6*	8**
Completed at least 1 year at a 2 or 4-year college	4	6*	6*	4	5
Completed at least 2 years at a 2 or 4-year college	1	2	2	2	2
Ever in college, voc/tech school, apprenticeship, or military	9**	9**	9**	9**	9**
Completed 2 years of college, completed voc/tech school, or an apprenticeship, or in the military	0	1	1	1	1

SOURCE: Telephone survey.

NOTE: Each impact was derived by subtracting the control group mean from the QOP group mean. The weights used to derive the first column of weighted estimates adjust for baseline differences between respondents and nonrespondents. The weights used to derive the second column of weighted estimates adjust for differences between respondents and nonrespondents in baseline characteristics and response rates to the first telephone survey. The weights used to derived the third column of weighted estimates adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

[a] These estimates were derived by making the response rate for the QOP group equal to the response rate for the control group for each of the 11 schools. That is, if the QOP group had a higher response rate, we treated enough QOP group respondents as nonrespondents to lower the implied response rate to the level of the control group. The QOP group respondents that were treated as nonrespondents were the last ones to respond to the survey.

* Estimate significantly different from zero at the 90% confidence level, two-tailed test
** Estimate significantly different from zero at the 95% confidence level, two-tailed test
*** Estimate significantly different from zero at the 99% confidence level, two-tailed test

Table F.4. Impacts on Current Activities Obtained With Alternative Approaches to Adjusting for Nonresponse (Percentage Points)

Outcome	Unweighted Estimates	Weighted Estimates (1)	Weighted Estimates (2)	Weighted Estimates (3)	Unweighted Estimates[a]
In a 4-year college	2	3	2	2	2
In a 2 or 4-year college	1	2	2	1	2
In college, voc/tech school, apprenticeship, or military	5	5	4	4	5
Has a job	-6*	-7*	-7*	-7*	-5
Works at least 35hrs/week at main job	-12***	-11***	-11***	-11***	-10***
Has a job with health insurance	-3	-3	-3	-2	-2
Has a job that pays >= $10/hr	-1	-1	-2	-2	0
Has a full time job with health insurance	-8**	-8**	-7*	-8**	-8**
Has full time job that pays >= $10/hr	-4	-4	-4	-4	-3
Has a full time job with health insurance that pays >= $10/hr	-3	-2	-2	-2	-2
In college, voc/tech school, apprenticeship, military, or a job	-1	-1	-1	-1	0
In college, voc/tech school, apprenticeship, military, or full time job	-4	-4	-4	-4	-4
In college, voc/tech school, apprenticeship, military, or job with health insurance	2	3	3	3	3
In college, voc/tech school, apprenticeship, military, or job that pays >= $10/hr	3	3	2	2	3
In college, voc/tech school, apprenticeship, military, or full time job with health insurance	-2	-1	-1	-1	-2
In college, voc/tech school, apprenticeship, military, or full time job that pays >= $10/hr	2	2	2	2	2
In college, voc/tech school, apprenticeship, military, or full time job with health insurance that pays >= $10/hr	4	5	4	4	4

SOURCE: Telephone survey.

NOTE: Each impact was derived by subtracting the control group mean from the QOP group mean. The weights used to derive the first column of weighted estimates adjust for baseline differences between respondents and nonrespondents. The weights used to derive the second column of weighted estimates adjust for differences between respondents and nonrespondents in baseline characteristics and response rates to the first telephone survey. The weights used to derived the third column of weighted estimates adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

[a] These estimates were derived by making the response rate for the QOP group equal to the response rate for the control group for each of the 11 schools. That is, if the QOP group had a higher response rate, we treated enough QOP group respondents as nonrespondents to lower the implied response rate to the level of the control group. The QOP group respondents that were treated as nonrespondents were the last ones to respond to the survey.

* Estimate significantly different from zero at the 90% confidence level, two-tailed test
** Estimate significantly different from zero at the 95% confidence level, two-tailed test
*** Estimate significantly different from zero at the 99% confidence level, two-tailed test

Table F.5. Impacts On Risky Behaviors And Family Life Obtained With Alternative Approaches To Adjusting For Nonresponse (Percentage Points)

Outcome	Unweighted Estimates	Weighted Estimates (1)	Weighted Estimates (2)	Weighted Estimates (3)	Unweighted Estimates[a]
Binge drinking in past month	-7**	-8**	-6*	-6	-6*
Binge drinking on 8 or more days in past month	1	1	2	2	1
Used an illegal drug in past month	-6**	-6**	-6*	-6**	-5**
Committed a crime in past 3 months	-2	-3	-2	-2	-2
Arrested or charged in past 3 months	0	0	0	-0	0
Had first child before age 18	4	4	4	3	4
Currently living with natural children, but no spouse	5	4	4	3	6*
Have children with whom not currently living	-1	0	0	1	-2
Currently receiving welfare	2	1	2	2	3
Currently receiving food stamps	5*	5	5	5	5
Currently receiving welfare or food stamps	5	4	4	4	5

SOURCE: Telephone survey.

NOTE: Each impact was derived by subtracting the control group mean from the QOP group mean. The weights used to derive the first column of weighted estimates adjust for baseline differences between respondents and nonrespondents. The weights used to derive the second column of weighted estimates adjust for differences between respondents and nonrespondents in baseline characteristics and response rates to the first telephone survey. The weights used to derived the third column of weighted estimates adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

[a] These estimates were derived by making the response rate for the QOP group equal to the response rate for the control group for each of the 11 schools. That is, if the QOP group had a higher response rate, we treated enough QOP group respondents as nonrespondents to lower the implied response rate to the level of the control group. The QOP group respondents that were treated as nonrespondents were the last ones to respond to the survey.

* Estimate significantly different from zero at the 90% confidence level, two-tailed test
** Estimate significantly different from zero at the 95% confidence level, two-tailed test
*** Estimate significantly different from zero at the 99% confidence level, two-tailed test

Baseline Differences Between the QOP and Control Groups

According to Table F.6, there was just one statistically significant difference between the means of baseline characteristics for the QOP and control groups for the whole demonstration. Compared with the control group, the QOP group had fewer youth in the middle third of the eighth-grade GPA distribution. When we examined QOP and control group means for schools—the level at which we conducted random assignment—we found only a few significant differences (not shown in Table F.6). For example, compared with the school's control group, the QOP group from Austin High School (Houston) had more youth over age 14 and fewer youth from the top third of the grade distribution; the QOP group from Yates High School (Houston) had fewer youth from the bottom third and more youth from the top third of the grade distribution; and the QOP group from Hillcrest High School (Memphis) had more youth from the middle third of the grade distribution.

Deriving Regression-Adjusted Impact Estimates

Our regression model included 37 variables: 11 school indicators, 11 interactions between a QOP/control indicator and the 11 school indicators, an indicator for being male, an indicator for being over age 14 when entering ninth grade, an indicator for being in the middle third of the eighth-grade GPA distribution, an indicator for being in the top third of the eight-grade GPA distribution, five variables obtained by interacting the last four baseline characteristic variables, and six additional variables obtained by interacting some of the baseline characteristic variables with some of the school indicators.[100] We estimated the parameters of this regression model for each outcome considered. Because all of the outcomes are binary, we used logit regression methods. We obtained impact and variance estimates for schools from probabilities predicted by the logit model for the outcome under consideration.[101] After deriving school-level estimates, we derived site- and demonstration-level estimates using the expressions in Appendix E.

[100] The last six variables were included to adjust for significant differences between the QOP and control groups in some of the QOP schools.

[101] Suppose that we are estimating a regression-adjusted impact on high school graduation. Then, for every sample member from a given school, we used the estimated logit model for high school graduation to obtain four predicted probabilities while ignoring the sample member's actual QOP/control status: (1) the probability of graduation if the sample member is a control, (2) the probability of graduation if the sample member is a QOP enrollee and the effect of QOP is measured by the coefficient on the interaction between the indicator for the sample member's school and the QOP/control indicator, (3) the probability of graduation if the sample member is a QOP enrollee and the effect of QOP is measured by the coefficient on the interaction between the indicator for the sample member's school and the QOP/control indicator *plus* the standard error of the coefficient, and (4) the probability of graduation if the sample member is a QOP enrollee and the effect of QOP is measured by the coefficient on the interaction between the indicator for the sample member's school and the QOP/control indicator *minus* the standard error of the coefficient. Next, we calculated the mean for each of these probabilities across all of the sample member from the school. The

(continued)

Regression-Adjusted Impact Estimates

Tables F.7 through F.10 present difference-of-means and regression-adjusted impact estimates. Comparing the alternative impact estimates suggests that regression adjustment might affect only one of our conclusions—that QOP significantly reduced the likelihood that an enrollee had a job. Table F.9 shows that regression adjustment reduced by one percentage point—from a significant seven to an insignificant six percentage points—the impact on having a job at the time of the survey. The other impacts that were significant according to difference-of-means estimates are also significant according to regression-adjusted estimates.[102]

(continued)

second mean minus the first mean was our impact estimate for the school. We estimated the variance of the impact by squaring the difference between the third and fourth means and dividing by four.

[102] The significance level sometimes differed between the difference-of-means and the regression-adjusted estimates.

Table F.6. Group Means for Baseline Characteristics (Percentages)

Baseline Characteristic	Means	
	QOP Group	Control Group
Male	52	56
Age when entering ninth grade		
< 14	11	11
14	53	57
> 14	36	31
Hispanic	26	26
Black	68	68
Rank based on eighth-grade GPA		
Bottom Third	37	34
Middle Third	31†	36†
Top Third	32	30

SOURCE: Baseline database.

NOTE: The evaluation sample had 580 QOP enrollees and 489 controls.

† Significantly different from the mean for the other group at the 90% confidence level, two-tailed test

†† Significantly different from the mean for the other group at the 95% confidence level, two-tailed test

††† Significantly different from the mean for the other group at the 99% confidence level, two-tailed test

Table F.7. Difference-of-Means Versus Regression-Adjusted Impacts on High School Completion (Percentage Points)

Outcome	Difference of Means	Regression Adjusted
Received HS diploma	-3	-1
Received HS diploma or GED	0	2

SOURCE: Telephone surveys and transcripts.

NOTE: Estimates were obtained using weights to adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first and second telephone surveys, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

* Estimate significantly different from zero at the 90% confidence level, two-tailed test
** Estimate significantly different from zero at the 95% confidence level, two-tailed test
*** Estimate significantly different from zero at the 99% confidence level, two-tailed test

Table F.8. Difference-of-Means Versus Regression-Adjusted Impacts on Postsecondary Attainment (Percentage Points)

Outcome	Difference of Means	Regression Adjusted
Ever attended or currently attending a 4-year college	3	4
Completed at least 1 quarter at a 4-year college	2	3
Completed at least 1 year at a 4-year college	3	4
Completed at least 2 years at a 4-year college	2	3
Ever attended or currently attending a 2 or 4-year college	7*	8**
Completed at least 1 quarter at a 2 or 4-year college	6*	7*
Completed at least 1 year at a 2 or 4-year college	4	5
Completed at least 2 years at a 2 or 4-year college	2	3
Ever in college, voc/tech school, apprenticeship, or military	9**	10***
Completed 2 years of college, completed voc/tech school or an apprenticeship, or in the military	1	2

SOURCE: Telephone survey.

NOTE: Estimates were obtained using weights to adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

* Estimate significantly different from zero at the 90% confidence level, two-tailed test
** Estimate significantly different from zero at the 95% confidence level, two-tailed test
*** Estimate significantly different from zero at the 99% confidence level, two-tailed test

Table F.9. Difference-of-Means Versus Regression-Adjusted Impacts on Current Activities (Percentage Points)

Outcome	Difference of Means	Regression Adjusted
In a 4-year college	2	3
In a 2 or 4-year college	1	2
In college, voc/tech school, apprenticeship, or military	4	5
Has a job	-7*	-6
Works at least 35hrs/week at main job	-11***	-11***
Has a job with health insurance	-2	-2
Has a job that pays >= $10/hr	-2	-1
Has a full time job with health insurance	-8**	-7*
Has full time job that pays >= $10/hr	-4	-3
Has a full time job with health insurance that pays >= $10/hr	-2	-2
In college, voc/tech school, apprenticeship, military, or a job	-1	-1
In college, voc/tech school, apprenticeship, military, or full time job	-4	-3
In college, voc/tech school, apprenticeship, military, or job with health insurance	3	4
In college, voc/tech school, apprenticeship, military, or job that pays >= $10/hr	2	3
In college, voc/tech school, apprenticeship, military, or full time job with health insurance	-1	0
In college, voc/tech school, apprenticeship, military, or full time job that pays >= $10/hr	2	2
In college, voc/tech school, apprenticeship, military, or full time job with health insurance that pays >= $10/hr	4	4

SOURCE: Telephone survey.

NOTE: Estimates were obtained using weights to adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

* Estimate significantly different from zero at the 90% confidence level, two-tailed test
** Estimate significantly different from zero at the 95% confidence level, two-tailed test
*** Estimate significantly different from zero at the 99% confidence level, two-tailed test

Table F.10. Difference-of-Means Versus Regression-Adjusted Impacts on Risky Behaviors and Family Life (Percentage Points)

Outcome	Difference of Means	Regression Adjusted
Binge drinking in past month	-6	-5
Binge drinking on 8 or more days in past month	2	2
Used an illegal drug in past month	-6**	-6**
Committed a crime in past 3 months	-2	-2
Arrested or charged in past 3 months	-0	-1
Had first child before age 18	3	3
Currently living with natural children, but no spouse	3	3
Have children with whom not currently living	1	1
Currently receiving welfare	2	1
Currently receiving food stamps	5	4
Currently receiving welfare or food stamps	4	3

SOURCE: Telephone survey.

NOTE: Estimates were obtained using weights to adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

* Estimate significantly different from zero at the 90% confidence level, two-tailed test
** Estimate significantly different from zero at the 95% confidence level, two-tailed test
*** Estimate significantly different from zero at the 99% confidence level, two-tailed test

THE SENSITIVITY OF IMPACT ESTIMATES TO INCLUDING AND EXCLUDING THE WASHINGTON, D.C., SITE

Tables F.11 through F.14 present two sets of impact estimates: (1) the estimates obtained when the Washington, D.C., site is included and (2) the estimates obtained when that site is excluded. The former are the estimates presented in the main text of this report. The latter are repeated below in Tables F.15 through F.18, which also present the QOP and control group means obtained when the Washington, D.C., site is excluded.

As noted above, one reason for undertaking this sensitivity analysis is that program operations began a year later in the Washington, D.C., site than in the other sites and sample members are typically a year younger in the Washington, D.C., site. This does not threaten the internal validity of the impact estimates for the Washington, D.C., site. However, if all else were equal, the estimates for that site might still differ from the estimates for the other sites if the impacts for some outcomes tend to rise or fall as time passes or as sample members age.[103] Among the outcomes that might be susceptible to impacts changing over time are the high school completion outcome that counts the receipt of a GED as a form of completion and the outcomes pertaining to postsecondary education and training if some young adults who did not receive a diploma take several years to earn a GED while others who have completed high school delay enrollment in a postsecondary education or training program or enroll part time and take several years to complete the program. For the impacts pertaining to risky behaviors and family life, impacts might change with age as, for example, a young adult reaches the legal drinking age.

Although these effects are conceivable, it is difficult to predict their direction, that is, whether a given impact will rise or fall with time or the age of sample members. According to Tables F.11 through F.14, we obtain for most outcomes essentially the same results when the Washington, D.C., site is included as when it is excluded. With only a few exceptions, significant impacts remain significant, and insignificant impacts remain insignificant. When differences are found, they do not always follow a consistent pattern. For example, excluding the Washington, D.C., site reverses the impacts on binge drinking and illegal drug use, with the former becoming significant while the latter becomes insignificant.[104]

[103] The second telephone survey was conducted from September 2002 through April 2003 in all sites. Thus, it began one year after the end of the demonstration and a little more than two years after scheduled graduation in the Washington, D.C., site. In the other sites, the survey began two years after the end of the demonstration and a little more than three years after scheduled graduation.

[104] Although an impact could become insignificant because the sample size is smaller and the impact is less precisely estimated when the Washington, D.C., site is excluded, the point estimate for the impact on illegal drug use is smaller without that site. The relatively high rate of illegal drug use among control group members in the Washington, D.C., site (see Appendix H) suggests that the relatively low rate of binge drinking is not simply an effort to avoid engaging in illegal behavior (underage drinking).

Despite our previous conjecture, we find that excluding the Washington, D.C., site does not affect the impact on the likelihood of high school completion via a diploma or GED or most of the impacts pertaining to postsecondary education and training. However, we do find differences in the impacts pertaining to postsecondary attendance and attainment at four-year colleges. This effect of excluding the Washington, D.C., site seems to be attributable to that site's not having an impact on attendance and attainment at four-year colleges rather than to sample members not having as much time to enroll in college as in the other sites because of the delay in the start of the demonstration in that site. In fact, we find that control group members in the Washington, D.C., site have managed to enter four-year colleges relatively quickly—25 percent had ever attended a four-year college compared with just 10 percent in the other six sites. Of course, it is still possible that the (insignificant) detrimental impact on the likelihood of attending a four-year college—a 7-percentage-point reduction—will improve over time.

Table F.11. Impacts on High School Completion When the Washington, D.C., Site Is Included and When It Is Excluded (Percentage Points)

	Washington, D.C., Site	
Outcome	Included	Excluded
Received HS diploma	-3	-4
Received HS diploma or GED	0	-1

SOURCE: Telephone surveys and transcripts.

NOTE: Each impact was derived by subtracting the control-group mean from the QOP-group mean prior to rounding those means; thus, an impact might not equal the difference between the rounded means that are displayed. Estimates were obtained using weights to adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first and second telephone surveys, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

* Estimate significantly different from zero at the 90% confidence level, two-tailed test
** Estimate significantly different from zero at the 95% confidence level, two-tailed test
*** Estimate significantly different from zero at the 99% confidence level, two-tailed test

Table F.12. Impacts on Postsecondary Attainment When the Washington, D.C., Site Is Included and When It Is Excluded (Percentage Points)

	Washington, D.C., Site	
Outcome	Included	Excluded
Ever attended or currently attending a 4-year college	3	5*
Completed at least 1 quarter at a 4-year college	2	4
Completed at least 1 year at a 4-year college	3	5**
Completed at least 2 years at a 4-year college	2	3*
Ever attended or currently attending a 2 or 4-year college	7*	8**
Completed at least 1 quarter at a 2 or 4-year college	6*	7*
Completed at least 1 year at a 2 or 4-year college	4	6
Completed at least 2 years at a 2 or 4-year college	2	3
Ever in college, voc/tech school, apprenticeship, or military	9**	9**
Completed 2 years of college, completed voc/tech school or an apprenticeship, or in the military	1	0

SOURCE: Telephone survey.

NOTE: Each impact was derived by subtracting the control-group mean from the QOP-group mean prior to rounding those means; thus, an impact might not equal the difference between the rounded means that are displayed. Estimates were obtained using weights to adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first and second telephone surveys, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

* Estimate significantly different from zero at the 90% confidence level, two-tailed test
** Estimate significantly different from zero at the 95% confidence level, two-tailed test
*** Estimate significantly different from zero at the 99% confidence level, two-tailed test

Table F.13. Impacts on Current Activities When the Washington, D.C., Site Is Included and When It Is Excluded (Percentage Points)

	Washington, D.C., Site	
Outcome	Included	Excluded
In a 4-year college	2	3
In a 2 or 4-year college	1	1
In college, voc/tech school, apprenticeship, or military	4	5
Has a job	-7*	-7*
Works at least 35hrs/week at main job	-11***	-12***
Has a job with health insurance	-2	-3
Has a job that pays >= $10/hr	-2	-5
Has a full time job with health insurance	-8**	-8*
Has full time job that pays >= $10/hr	-4	-5*
Has a full time job with health insurance that pays >= $10/hr	-2	-4
In college, voc/tech school, apprenticeship, military, or a job	-1	-1
In college, voc/tech school, apprenticeship, military, or full time job	-4	-4
In college, voc/tech school, apprenticeship, military, or job with health insurance	3	3
In college, voc/tech school, apprenticeship, military, or job that pays >= $10/hr	2	1
In college, voc/tech school, apprenticeship, military, or full time job with health insurance	-1	0
In college, voc/tech school, apprenticeship, military, or full time job that pays >= $10/hr	2	1
In college, voc/tech school, apprenticeship, military, or full time job with health insurance that pays >= $10/hr	4	3

SOURCE: Telephone survey.

NOTE: Each impact was derived by subtracting the control-group mean from the QOP-group mean prior to rounding those means; thus, an impact might not equal the difference between the rounded means that are displayed. Estimates were obtained using weights to adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first and second telephone surveys, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

* Estimate significantly different from zero at the 90% confidence level, two-tailed test
** Estimate significantly different from zero at the 95% confidence level, two-tailed test
*** Estimate significantly different from zero at the 99% confidence level, two-tailed test

Table F.14. Impacts on Risky Behaviors and Family Life When the Washington, D.C., Site Is Included and When It Is Excluded (Percentage Points)

	Washington, D.C., Site	
Outcome	Included	Excluded
Binge drinking in past month	-6	-9**
Binge drinking on 8 or more days in past month	2	1
Used an illegal drug in past month	-6**	-4
Committed a crime in past 3 months	-2	-1
Arrested or charged in past 3 months	-0	-0
Had first child before age 18	3	1
Currently living with natural children, but no spouse	3	1
Have children with whom not currently living	1	1
Currently receiving welfare	2	2
Currently receiving food stamps	5	7**
Currently receiving welfare or food stamps	4	6

SOURCE: Telephone survey.

NOTE: Each impact was derived by subtracting the control-group mean from the QOP-group mean prior to rounding those means; thus, an impact might not equal the difference between the rounded means that are displayed. Estimates were obtained using weights to adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first and second telephone surveys, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

* Estimate significantly different from zero at the 90% confidence level, two-tailed test
** Estimate significantly different from zero at the 95% confidence level, two-tailed test
*** Estimate significantly different from zero at the 99% confidence level, two-tailed test

Table F.15. Impacts on High School Completion When the Washington, D.C., Site Is Excluded

Outcome	QOP-Group Mean (percentage)	Control-Group Mean (percentage)	Impact (percentage points)
Received HS diploma	60	64	-4
Received HS diploma or GED	76	77	-1

SOURCE: Telephone surveys and transcripts.

NOTE: Each impact was derived by subtracting the control-group mean from the QOP-group mean prior to rounding those means; thus, an impact might not equal the difference between the rounded means that are displayed. Estimates were obtained using weights to adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first and second telephone surveys, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

* Estimate significantly different from zero at the 90% confidence level, two-tailed test
** Estimate significantly different from zero at the 95% confidence level, two-tailed test
*** Estimate significantly different from zero at the 99% confidence level, two-tailed test

Table F.16. Impacts on Postsecondary Attainment When the Washington, D.C., Site Is Excluded

Outcome	QOP-Group Mean (percentage)	Control-Group Mean (percentage)	Impact (percentage points)
Ever attended or currently attending a 4-year college	15	10	5*
Completed at least 1 quarter at a 4-year college	13	10	4
Completed at least 1 year at a 4-year college	12	7	5**
Completed at least 2 years at a 4-year college	8	4	3*
Ever attended or currently attending a 2 or 4-year college	38	30	8**
Completed at least 1 quarter at a 2 or 4-year college	34	27	7*
Completed at least 1 year at a 2 or 4-year college	26	20	6
Completed at least 2 years at a 2 or 4-year college	13	10	3
Ever in college, voc/tech school, apprenticeship, or military	61	52	9**
Completed 2 years of college, completed voc/tech school or an apprenticeship, or in the military	24	24	0

SOURCE: Telephone survey.

NOTE: Each impact was derived by subtracting the control-group mean from the QOP-group mean prior to rounding those means; thus, an impact might not equal the difference between the rounded means that are displayed. Estimates were obtained using weights to adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

* Estimate significantly different from zero at the 90% confidence level, two-tailed test
** Estimate significantly different from zero at the 95% confidence level, two-tailed test
*** Estimate significantly different from zero at the 99% confidence level, two-tailed test

Table F.17. Impacts on Current Activities When the Washington, D.C., Site Is Excluded

Outcome	QOP-Group Mean (percentage)	Control-Group Mean (percentage)	Impact (percentage points)
In a 4-year college	9	6	3
In a 2 or 4-year college	17	16	1
In college, voc/tech school, apprenticeship, or military	29	24	5
Has a job	66	73	-7*
Works at least 35hrs/week at main job	46	57	-12***
Has a job with health insurance	42	45	-3
Has a job that pays >= $10/hr	22	26	-5
Has a full time job with health insurance	31	38	-8*
Has full time job that pays >= $10/hr	15	21	-5*
Has a full time job with health insurance that pays >= $10/hr	12	15	-4
In college, voc/tech school, apprenticeship, military, or a job	77	79	-1
In college, voc/tech school, apprenticeship, military, or full time job	65	69	-4
In college, voc/tech school, apprenticeship, military, or job with health insurance	60	57	3
In college, voc/tech school, apprenticeship, military, or job that pays >= $10/hr	45	45	1
In college, voc/tech school, apprenticeship, military, or full time job with health insurance	53	53	0
In college, voc/tech school, apprenticeship, military, or full time job that pays >= $10/hr	41	40	1
In college, voc/tech school, apprenticeship, military, or full time job with health insurance that pays >= $10/hr	39	36	3

SOURCE: Telephone survey.

NOTE: Each impact was derived by subtracting the control-group mean from the QOP-group mean prior to rounding those means; thus, an impact might not equal the difference between the rounded means that are displayed. Estimates were obtained using weights to adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

* Estimate significantly different from zero at the 90% confidence level, two-tailed test
** Estimate significantly different from zero at the 95% confidence level, two-tailed test
*** Estimate significantly different from zero at the 99% confidence level, two-tailed test

Table F.18. Impacts on Risky Behaviors and Family Life When the Washington, D.C., Site Is Excluded

Outcome	QOP-Group Mean (percentage)	Control-Group Mean (percentage)	Impact (percentage points)
Binge drinking in past month	24	33	-9**
Binge drinking on 8 or more days in past month	7	6	1
Used an illegal drug in past month	12	16	-4
Committed a crime in past 3 months	8	9	-1
Arrested or charged in past 3 months	5	6	-0
Had first child before age 18	18	17	1
Currently living with natural children, but no spouse	26	25	1
Have children with whom not currently living	15	14	1
Currently receiving welfare	15	13	2
Currently receiving food stamps	23	16	7**
Currently receiving welfare or food stamps	24	19	6

SOURCE: Telephone survey.

NOTE: Each impact was derived by subtracting the control-group mean from the QOP-group mean prior to rounding those means; thus, an impact might not equal the difference between the rounded means that are displayed. Estimates were obtained using weights to adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

* Estimate significantly different from zero at the 90% confidence level, two-tailed test
** Estimate significantly different from zero at the 95% confidence level, two-tailed test
*** Estimate significantly different from zero at the 99% confidence level, two-tailed test

APPENDIX G

QOP AND CONTROL GROUP MEANS FOR SUBGROUPS

Table G.1. QOP Group Means Pertaining to High School Completion by Sex (Percentages)

	Means		
Outcome	Male	Female	Total Sample
Received HS diploma	57	63	60
Received HS diploma or GED	60	85	76

SOURCE: Telephone surveys and transcripts.

NOTE: Means were estimated using weights to adjust adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

Table G.2. Control Group Means Pertaining to High School Completion by Sex (Percentages)

	Means		
Outcome	Male	Female	Total Sample
Received HS diploma	58	69	64
Received HS diploma or GED	61	81	76

SOURCE: Telephone surveys and transcripts.

NOTE: Means were estimated using weights to adjust adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

Table G.3. QOP Group Means Pertaining to Postsecondary Attainment by Sex (Percentages)

	Means		
Outcome	Male	Female	Total Sample
Ever attended or currently attending a 4-year college	15	14	15
Completed at least 1 quarter at a 4-year college	14	13	14
Completed at least 1 year at a 4-year college	11	11	12
Completed at least 2 years at a 4-year college	7	8	8
Ever attended or currently attending a 2 or 4-year college	34	40	37
Completed at least 1 quarter at a 2 or 4-year college	30	37	33
Completed at least 1 year at a 2 or 4-year college	24	26	25
Completed at least 2 years at a 2 or 4-year college	11	14	13
Ever in college, voc/tech school, apprenticeship, or military	56	67	62
Completed 2 years of college, completed voc/tech school or an apprenticeship, or in the military	21	26	24

SOURCE: Telephone survey.

NOTE: Means were estimated using weights to adjust adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

Table G.4. Control Group Means Pertaining to Postsecondary Attainment by Sex (Percentages)

	Means		
Outcome	Male	Female	Total Sample
Ever attended or currently attending a 4-year college	12	13	12
Completed at least 1 quarter at a 4-year college	12	12	12
Completed at least 1 year at a 4-year college	8	10	9
Completed at least 2 years at a 4-year college	5	6	5
Ever attended or currently attending a 2 or 4-year college	25	37	30
Completed at least 1 quarter at a 2 or 4-year college	23	33	27
Completed at least 1 year at a 2 or 4-year college	17	26	20
Completed at least 2 years at a 2 or 4-year college	8	15	11
Ever in college, voc/tech school, apprenticeship, or military	50	57	53
Completed 2 years of college, completed voc/tech school or an apprenticeship, or in the military	20	26	23

SOURCE: Telephone survey.

NOTE: Means were estimated using weights to adjust adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

Table G.5. QOP Group Means Pertaining to Current Activities by Sex (Percentages)

	Means		
Outcome	Male	Female	Total Sample
In a 4-year college	10	9	9
In a 2 or 4-year college	17	17	17
In college, voc/tech school, apprenticeship, or military	30	30	30
Has a job	68	64	65
Works at least 35hrs/week at main job	53	37	45
Has a job with health insurance	44	43	42
Has a job that pays >= $10/hr	25	21	22
Has a full time job with health insurance	35	26	31
Has full time job that pays >= $10/hr	21	12	16
Has a full time job with health insurance that pays >= $10/hr	16	11	13
In college, voc/tech school, apprenticeship, military, or a job	80	76	77
In college, voc/tech school, apprenticeship, military, or full time job	70	59	65
In college, voc/tech school, apprenticeship, military, or job with health insurance	63	62	61
In college, voc/tech school, apprenticeship, military, or job that pays >= $10/hr	49	45	46
In college, voc/tech school, apprenticeship, military, or full time job with health insurance	56	51	53
In college, voc/tech school, apprenticeship, military, or full time job that pays >= $10/hr	46	40	42
In college, voc/tech school, apprenticeship, military, or full time job with health insurance that pays >= $10/hr	43	39	40

SOURCE: Telephone survey.

NOTE: Means were estimated using weights to adjust adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

Table G.6. Control Group Means Pertaining to Current Activities by Sex (Percentages)

	Means		
Outcome	Male	Female	Total Sample
In a 4-year college	5	9	7
In a 2 or 4-year college	12	20	16
In college, voc/tech school, apprenticeship, or military	25	27	26
Has a job	78	66	72
Works at least 35hrs/week at main job	62	49	56
Has a job with health insurance	49	39	45
Has a job that pays >= $10/hr	35	14	25
Has a full time job with health insurance	45	30	38
Has full time job that pays >= $10/hr	27	12	20
Has a full time job with health insurance that pays >= $10/hr	19	10	15
In college, voc/tech school, apprenticeship, military, or a job	83	74	78
In college, voc/tech school, apprenticeship, military, or full time job	72	65	68
In college, voc/tech school, apprenticeship, military, or job with health insurance	61	55	59
In college, voc/tech school, apprenticeship, military, or job that pays >= $10/hr	50	37	44
In college, voc/tech school, apprenticeship, military, or full time job with health insurance	57	49	54
In college, voc/tech school, apprenticeship, military, or full time job that pays >= $10/hr	44	37	41
In college, voc/tech school, apprenticeship, military, or full time job with health insurance that pays >= $10/hr	36	36	36

SOURCE: Telephone survey.

NOTE: Means were estimated using weights to adjust adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

Table G.7. QOP Group Means Pertaining to Risky Behaviors and Family Life by Sex (Percentages)

	Means		
Outcome	Male	Female	Total Sample
Binge drinking in past month	30	17	25
Binge drinking on 8 or more days in past month	8	6	7
Used an illegal drug in past month	15	8	12
Committed a crime in past 3 months	12	2	8
Arrested or charged in past 3 months	8	1	5
Had first child before age 18	13	26	19
Currently living with natural children, but no spouse	9	45	26
Have children with whom not currently living	24	3	14
Currently receiving welfare	8	21	15
Currently receiving food stamps	15	29	22
Currently receiving welfare or food stamps	15	32	24

SOURCE: Telephone survey.

NOTE: Means were estimated using weights to adjust adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

Table G.8. Control Group Means Pertaining to Risky Behaviors and Family Life by Sex (Percentages)

	Means		
Outcome	Male	Female	Total Sample
Binge drinking in past month	42	19	31
Binge drinking on 8 or more days in past month	8	2	5
Used an illegal drug in past month	24	11	18
Committed a crime in past 3 months	15	3	9
Arrested or charged in past 3 months	7	4	5
Had first child before age 18	8	26	15
Currently living with natural children, but no spouse	7	42	23
Have children with whom not currently living	20	4	13
Currently receiving welfare	7	22	13
Currently receiving food stamps	11	26	17
Currently receiving welfare or food stamps	12	31	20

SOURCE: Telephone survey.

NOTE: Means were estimated using weights to adjust adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

Table G.9. QOP Group Means Pertaining to High School Completion by Age When Entering Ninth Grade (Percentages)

	Means		
Outcome	Age > 14	Age ≤ 14	Total Sample
Received HS diploma	44	70	60
Received HS diploma or GED	60	85	76

SOURCE: Telephone surveys and transcripts.

NOTE: Means were estimated using weights to adjust adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

Table G.10. Control Group Means Pertaining to High School Completion by Age When Entering Ninth Grade (Percentages)

	Means		
Outcome	Age > 14	Age ≤ 14	Total Sample
Received HS diploma	54	68	64
Received HS diploma or GED	61	81	76

SOURCE: Telephone surveys and transcripts.

NOTE: Means were estimated using weights to adjust adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

Table G.11. QOP Group Means Pertaining to Postsecondary Attainment by Age When Entering Ninth Grade (Percentages)

	Means		
Outcome	Age > 14	Age ≤ 14	Total Sample
Ever attended or currently attending a 4-year college	10	18	15
Completed at least 1 quarter at a 4-year college	10	17	14
Completed at least 1 year at a 4-year college	8	15	12
Completed at least 2 years at a 4-year college	4	10	8
Ever attended or currently attending a 2 or 4-year college	21	45	37
Completed at least 1 quarter at a 2 or 4-year college	20	40	33
Completed at least 1 year at a 2 or 4-year college	16	29	25
Completed at least 2 years at a 2 or 4-year college	6	16	13
Ever in college, voc/tech school, apprenticeship, or military	49	67	62
Completed 2 years of college, completed voc/tech school or an apprenticeship, or in the military	16	28	24

SOURCE: Telephone survey.

NOTE: Means were estimated using weights to adjust adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

Table G.12. Control Group Means Pertaining to Postsecondary Attainment by Age When Entering Ninth Grade (Percentages)

Outcome	Means		
	Age > 14	Age ≤ 14	Total Sample
Ever attended or currently attending a 4-year college	8	14	12
Completed at least 1 quarter at a 4-year college	8	14	12
Completed at least 1 year at a 4-year college	7	10	9
Completed at least 2 years at a 4-year college	6	6	5
Ever attended or currently attending a 2 or 4-year college	25	33	30
Completed at least 1 quarter at a 2 or 4-year college	24	30	27
Completed at least 1 year at a 2 or 4-year college	21	21	20
Completed at least 2 years at a 2 or 4-year college	12	11	11
Ever in college, voc/tech school, apprenticeship, or military	45	57	53
Completed 2 years of college, completed voc/tech school or an apprenticeship, or in the military	24	24	23

SOURCE: Telephone survey.

NOTE: Means were estimated using weights to adjust adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

Table G.13. QOP Group Means Pertaining to Current Activities by Age When Entering Ninth Grade (Percentages)

	Means		
Outcome	Age > 14	Age ≤ 14	Total Sample
In a 4-year college	4	12	9
In a 2 or 4-year college	6	22	17
In college, voc/tech school, apprenticeship, or military	19	34	30
Has a job	69	63	65
Works at least 35hrs/week at main job	50	43	45
Has a job with health insurance	42	42	42
Has a job that pays >= $10/hr	23	22	22
Has a full time job with health insurance	32	30	31
Has full time job that pays >= $10/hr	19	14	16
Has a full time job with health insurance that pays >= $10/hr	17	10	13
In college, voc/tech school, apprenticeship, military, or a job	79	76	77
In college, voc/tech school, apprenticeship, military, or full time job	64	65	65
In college, voc/tech school, apprenticeship, military, or job with health insurance	56	62	61
In college, voc/tech school, apprenticeship, military, or job that pays >= $10/hr	38	49	46
In college, voc/tech school, apprenticeship, military, or full time job with health insurance	48	55	53
In college, voc/tech school, apprenticeship, military, or full time job that pays >= $10/hr	36	44	42
In college, voc/tech school, apprenticeship, military, or full time job with health insurance that pays >= $10/hr	35	42	40

SOURCE: Telephone survey.

NOTE: Means were estimated using weights to adjust adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

Table G.14. Control Group Means Pertaining to Current Activities by Age When Entering Ninth Grade (Percentages)

	Means		
Outcome	Age > 14	Age ≤ 14	Total Sample
In a 4-year college	1	9	7
In a 2 or 4-year college	13	17	16
In college, voc/tech school, apprenticeship, or military	19	28	26
Has a job	74	72	72
Works at least 35hrs/week at main job	56	57	56
Has a job with health insurance	41	47	45
Has a job that pays >= $10/hr	23	24	25
Has a full time job with health insurance	36	40	38
Has full time job that pays >= $10/hr	16	20	20
Has a full time job with health insurance that pays >= $10/hr	11	16	15
In college, voc/tech school, apprenticeship, military, or a job	79	79	78
In college, voc/tech school, apprenticeship, military, or full time job	68	70	68
In college, voc/tech school, apprenticeship, military, or job with health insurance	55	60	59
In college, voc/tech school, apprenticeship, military, or job that pays >= $10/hr	40	45	44
In college, voc/tech school, apprenticeship, military, or full time job with health insurance	49	57	54
In college, voc/tech school, apprenticeship, military, or full time job that pays >= $10/hr	34	43	41
In college, voc/tech school, apprenticeship, military, or full time job with health insurance that pays >= $10/hr	29	38	36

SOURCE: Telephone survey.

NOTE: Means were estimated using weights to adjust adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

Table G.15. QOP Group Means Pertaining to Risky Behaviors and Family Life by Age When Entering Ninth Grade (Percentages)

	Means		
Outcome	Age > 14	Age ≤ 14	Total Sample
Binge drinking in past month	21	28	25
Binge drinking on 8 or more days in past month	8	6	7
Used an illegal drug in past month	13	13	12
Committed a crime in past 3 months	10	6	8
Arrested or charged in past 3 months	8	4	5
Had first child before age 18	18	19	19
Currently living with natural children, but no spouse	30	26	26
Have children with whom not currently living	17	12	14
Currently receiving welfare	16	15	15
Currently receiving food stamps	30	19	22
Currently receiving welfare or food stamps	31	21	24

SOURCE: Telephone survey.

NOTE: Means were estimated using weights to adjust adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

Table G.16. Control Group Means Pertaining to Risky Behaviors and Family Life by Age When Entering Ninth Grade (Percentages)

	Means		
Outcome	Age > 14	Age ≤ 14	Total Sample
Binge drinking in past month	33	29	31
Binge drinking on 8 or more days in past month	4	5	5
Used an illegal drug in past month	26	16	18
Committed a crime in past 3 months	13	8	9
Arrested or charged in past 3 months	6	4	5
Had first child before age 18	16	16	15
Currently living with natural children, but no spouse	18	24	23
Have children with whom not currently living	13	12	13
Currently receiving welfare	10	14	13
Currently receiving food stamps	11	19	17
Currently receiving welfare or food stamps	16	21	20

SOURCE: Telephone survey.

NOTE: Means were estimated using weights to adjust adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

Table G.17. QOP Group Means Pertaining to High School Completion by Rank in the Baseline Grade Distribution (Percentages)

	Means			
Outcome	Bottom Third	Middle Third	Top Third	Total Sample
Received HS diploma	46	65	73	60
Received HS diploma or GED	66	80	85	76

SOURCE: Telephone surveys and transcripts.

NOTE: Means were estimated using weights to adjust adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

Table G.18. Control Group Means Pertaining to High School Completion by Rank in the Baseline Grade Distribution (Percentages)

	Means			
Outcome	Bottom Third	Middle Third	Top Third	Total Sample
Received HS diploma	47	62	81	64
Received HS diploma or GED	63	75	88	76

SOURCE: Telephone surveys and transcripts.

NOTE: Means were estimated using weights to adjust adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

Table G.19. QOP Group Means Pertaining to Postsecondary Attainment by Rank in the Baseline Grade Distribution (Percentages)

	Means			
Outcome	Bottom Third	Middle Third	Top Third	Total Sample
Ever attended or currently attending a 4-year college	12	13	22	15
Completed at least 1 quarter at a 4-year college	10	12	21	14
Completed at least 1 year at a 4-year college	9	9	17	12
Completed at least 2 years at a 4-year college	6	7	10	8
Ever attended or currently attending a 2 or 4-year college	29	38	43	37
Completed at least 1 quarter at a 2 or 4-year college	23	37	41	33
Completed at least 1 year at a 2 or 4-year college	17	24	34	25
Completed at least 2 years at a 2 or 4-year college	9	13	16	13
Ever in college, voc/tech school, apprenticeship, or military	52	63	71	62
Completed 2 years of college, completed voc/tech school or an apprenticeship, or in the military	20	26	27	24

SOURCE: Telephone survey.

NOTE: Means were estimated using weights to adjust adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

Table G.20. Control Group Means Pertaining to Postsecondary Attainment by Rank in the Baseline Grade Distribution (Percentages)

	Means			
Outcome	Bottom Third	Middle Third	Top Third	Total Sample
Ever attended or currently attending a 4-year college	5	15	18	12
Completed at least 1 quarter at a 4-year college	5	15	18	12
Completed at least 1 year at a 4-year college	3	10	15	9
Completed at least 2 years at a 4-year college	2	5	11	5
Ever attended or currently attending a 2 or 4-year college	15	29	49	30
Completed at least 1 quarter at a 2 or 4-year college	14	28	41	27
Completed at least 1 year at a 2 or 4-year college	10	20	32	20
Completed at least 2 years at a 2 or 4-year college	4	6	22	11
Ever in college, voc/tech school, apprenticeship, or military	41	55	62	53
Completed 2 years of college, completed voc/tech school or an apprenticeship, or in the military	19	21	29	23

SOURCE: Telephone survey.

NOTE: Means were estimated using weights to adjust adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

Table G.21. QOP Group Means Pertaining to Current Activities by Age When Entering Ninth Grade (Percentages)

Outcome	Means			
	Bottom Third	Middle Third	Top Third	Total Sample
In a 4-year college	6	11	11	9
In a 2 or 4-year college	14	18	19	17
In college, voc/tech school, apprenticeship, or military	23	32	34	30
Has a job	64	70	65	65
Works at least 35hrs/week at main job	46	51	39	45
Has a job with health insurance	38	49	43	42
Has a job that pays >= $10/hr	23	20	24	22
Has a full time job with health insurance	28	37	29	31
Has full time job that pays >= $10/hr	19	15	13	16
Has a full time job with health insurance that pays >= $10/hr	14	12	11	13
In college, voc/tech school, apprenticeship, military, or a job	74	81	80	77
In college, voc/tech school, apprenticeship, military, or full time job	61	73	61	65
In college, voc/tech school, apprenticeship, military, or job with health insurance	54	68	65	61
In college, voc/tech school, apprenticeship, military, or job that pays >= $10/hr	42	46	50	46
In college, voc/tech school, apprenticeship, military, or full time job with health insurance	46	62	54	53
In college, voc/tech school, apprenticeship, military, or full time job that pays >= $10/hr	40	44	42	42
In college, voc/tech school, apprenticeship, military, or full time job with health insurance that pays >= $10/hr	36	43	40	40

SOURCE: Telephone survey.

NOTE: Means were estimated using weights to adjust adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

Table G.22. Control Group Means Pertaining to Current Activities by Rank in the Baseline Grade Distribution (Percentages)

Outcome	Means			
	Bottom Third	Middle Third	Top Third	Total Sample
In a 4-year college	2	8	12	7
In a 2 or 4-year college	8	13	30	16
In college, voc/tech school, apprenticeship, or military	17	25	36	26
Has a job	73	76	66	72
Works at least 35hrs/week at main job	56	61	48	56
Has a job with health insurance	45	53	35	45
Has a job that pays >= $10/hr	30	23	20	25
Has a full time job with health insurance	36	46	30	38
Has full time job that pays >= $10/hr	23	21	15	20
Has a full time job with health insurance that pays >= $10/hr	17	16	11	15
In college, voc/tech school, apprenticeship, military, or a job	75	83	77	78
In college, voc/tech school, apprenticeship, military, or full time job	60	73	71	68
In college, voc/tech school, apprenticeship, military, or job with health insurance	52	63	61	59
In college, voc/tech school, apprenticeship, military, or job that pays >= $10/hr	38	44	50	44
In college, voc/tech school, apprenticeship, military, or full time job with health insurance	43	60	58	54
In college, voc/tech school, apprenticeship, military, or full time job that pays >= $10/hr	32	42	48	41
In college, voc/tech school, apprenticeship, military, or full time job with health insurance that pays >= $10/hr	27	37	45	36

SOURCE: Telephone survey.

NOTE: Means were estimated using weights to adjust adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

Table G.23. QOP Group Means Pertaining to Risky Behaviors and Family Life by Rank in the Baseline Grade Distribution (Percentages)

Outcome	Means			
	Bottom Third	Middle Third	Top Third	Total Sample
Binge drinking in past month	25	24	27	25
Binge drinking on 8 or more days in past month	9	6	5	7
Used an illegal drug in past month	16	9	11	12
Committed a crime in past 3 months	13	4	4	8
Arrested or charged in past 3 months	9	3	3	5
Had first child before age 18	21	15	17	19
Currently living with natural children, but no spouse	27	25	28	26
Have children with whom not currently living	18	10	12	14
Currently receiving welfare	15	11	20	15
Currently receiving food stamps	21	21	25	22
Currently receiving welfare or food stamps	23	21	29	24

SOURCE: Telephone survey.

NOTE: Means were estimated using weights to adjust adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

Table G.24. Control Group Means Pertaining to Risky Behaviors and Family Life by Rank in the Baseline Grade Distribution (Percentages)

Outcome	Means			
	Bottom Third	Middle Third	Top Third	Total Sample
Binge drinking in past month	32	28	34	31
Binge drinking on 8 or more days in past month	5	4	5	5
Used an illegal drug in past month	26	17	11	18
Committed a crime in past 3 months	12	10	5	9
Arrested or charged in past 3 months	7	4	4	5
Had first child before age 18	16	12	17	15
Currently living with natural children, but no spouse	25	18	25	23
Have children with whom not currently living	14	18	4	13
Currently receiving welfare	12	15	14	13
Currently receiving food stamps	13	20	17	17
Currently receiving welfare or food stamps	15	23	20	20

SOURCE: Telephone survey.

NOTE: Means were estimated using weights to adjust adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

APPENDIX H

QOP AND CONTROL GROUP MEANS FOR SITES

Table H.1. QOP Group Means Pertaining to High School Completion by Site (Percentages)

	Means							
Outcome	Fort Worth	Cleveland	D.C.	Houston	Memphis	Philadelphia	Yakima	Total Sample
Received HS diploma	72	51	64	47	56	80	53	60
Received HS diploma or GED	85	73	76	65	71	85	77	76

SOURCE: Telephone surveys and transcripts.

NOTE: Means were estimated using weights to adjust adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

Table H.2. Control Group Means Pertaining to High School Completion by Site (Percentages)

	Means							
Outcome	Fort Worth	Cleveland	D.C.	Houston	Memphis	Philadelphia	Yakima	Total Sample
Received HS diploma	80	45	63	53	64	76	65	64
Received HS diploma or GED	84	68	70	71	77	80	84	76

SOURCE: Telephone surveys and transcripts.

NOTE: Means were estimated using weights to adjust adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

Table H.3. QOP Group Means Pertaining to Postsecondary Attainment by Site (Percentages)

	Means							
Outcome	Fort Worth	Cleveland	D.C.	Houston	Memphis	Philadelphia	Yakima	Total Sample
Ever attended or currently attending a 4-year college	7	16	18	12	13	23	18	15
Completed at least 1 quarter at a 4-year college	7	16	18	10	10	21	16	14
Completed at least 1 year at a 4-year college	6	14	13	10	10	15	14	12
Completed at least 2 years at a 4-year college	5	12	9	4	4	10	11	8
Ever attended or currently attending a 2 or 4-year college	43	34	30	26	36	35	55	37
Completed at least 1 quarter at a 2 or 4-year college	37	34	30	24	32	33	44	33
Completed at least 1 year at a 2 or 4-year college	23	28	18	21	29	25	31	25
Completed at least 2 years at a 2 or 4-year college	10	18	12	5	10	19	16	13
Ever in college, voc/tech school, apprenticeship, or military	56	73	67	46	64	56	69	62
Completed 2 years of college, completed voc/tech school or an apprenticeship, or in the military	21	31	26	12	22	32	25	24

SOURCE: Telephone survey.

NOTE: Means were estimated using weights to adjust adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

Table H.4. Control Group Means Pertaining to Postsecondary Attainment by Site (Percentages)

Outcome	Means							
	Fort Worth	Cleveland	D.C.	Houston	Memphis	Philadelphia	Yakima	Total Sample
Ever attended or currently attending a 4-year college	12	8	25	14	12	4	11	12
Completed at least 1 quarter at a 4-year college	12	8	25	12	12	4	11	12
Completed at least 1 year at a 4-year college	9	8	19	6	9	0	9	9
Completed at least 2 years at a 4-year college	4	6	12	5	4	0	7	5
Ever attended or currently attending a 2 or 4-year college	35	17	30	36	33	24	37	30
Completed at least 1 quarter at a 2 or 4-year college	35	14	30	34	25	15	37	27
Completed at least 1 year at a 2 or 4-year college	28	14	21	23	20	11	26	20
Completed at least 2 years at a 2 or 4-year college	10	9	12	13	13	3	13	11
Ever in college, voc/tech school, apprenticeship, or military	47	63	58	53	59	40	51	53
Completed 2 years of college, completed voc/tech school or an apprenticeship, or in the military	24	32	18	22	23	17	25	23

SOURCE: Telephone survey.

NOTE: Means were estimated using weights to adjust adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

Table H.5. QOP Group Means Pertaining to Current Activities by Site (Percentages)

Outcome	Means							
	Fort Worth	Cleveland	D.C.	Houston	Memphis	Philadelphia	Yakima	Total Sample
In a 4-year college	4	9	13	6	6	15	11	9
In a 2 or 4-year college	15	14	17	12	14	18	28	17
In college, voc/tech school, apprenticeship, or military	23	35	35	27	24	23	42	30
Has a job	75	67	61	75	67	54	58	65
Works at least 35hrs/week at main job	67	43	42	53	42	32	37	45
Has a job with health insurance	53	46	46	45	38	24	45	42
Has a job that pays >= $10/hr	29	16	27	20	18	28	18	22
Has a full time job with health insurance	49	33	31	32	28	15	28	31
Has full time job that pays >= $10/hr	27	9	21	13	14	19	10	16
Has a full time job with health insurance that pays >= $10/hr	23	7	20	9	11	13	7	13
In college, voc/tech school, apprenticeship, military, or a job	79	73	77	86	77	66	83	77
In college, voc/tech school, apprenticeship, military, or full time job	76	65	65	68	58	49	71	65
In college, voc/tech school, apprenticeship, military, or job with health insurance	61	65	67	62	54	45	76	61
In college, voc/tech school, apprenticeship, military, or job that pays >= $10/hr	45	47	53	47	37	43	51	46
In college, voc/tech school, apprenticeship, military, or full time job with health insurance	59	58	58	52	45	36	66	53
In college, voc/tech school, apprenticeship, military, or full time job that pays >= $10/hr	44	44	49	40	34	36	49	42
In college, voc/tech school, apprenticeship, military, or full time job with health insurance that pays >= $10/hr	40	42	49	36	32	34	49	40

SOURCE: Telephone survey.

NOTE: Means were estimated using weights to adjust adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

Table H.6. Control Group Means Pertaining to Current Activities by Site (Percentages)

Outcome	Means							
	Fort Worth	Cleveland	D.C.	Houston	Memphis	Philadelphia	Yakima	Total Sample
In a 4-year college	6	6	17	9	4	0	9	7
In a 2 or 4-year college	19	9	18	20	16	12	17	16
In college, voc/tech school, apprenticeship, or military	24	28	35	25	30	15	25	26
Has a job	73	70	65	78	71	68	79	72
Works at least 35hrs/week at main job	66	50	51	69	51	53	54	56
Has a job with health insurance	51	35	45	46	48	36	52	45
Has a job that pays >= $10/hr	41	23	16	23	21	19	30	25
Has a full time job with health insurance	45	29	39	45	36	29	47	38
Has full time job that pays >= $10/hr	38	15	16	19	17	13	23	20
Has a full time job with health insurance that pays >= $10/hr	24	10	11	14	15	9	20	15
In college, voc/tech school, apprenticeship, military, or a job	76	74	76	82	86	71	84	78
In college, voc/tech school, apprenticeship, military, or full time job	71	60	68	79	69	62	69	68
In college, voc/tech school, apprenticeship, military, or job with health insurance	58	52	66	58	67	44	65	59
In college, voc/tech school, apprenticeship, military, or job that pays >= $10/hr	53	47	42	43	43	34	47	44
In college, voc/tech school, apprenticeship, military, or full time job with health insurance	53	45	60	58	58	41	63	54
In college, voc/tech school, apprenticeship, military, or full time job that pays >= $10/hr	53	43	42	41	39	27	40	41
In college, voc/tech school, apprenticeship, military, or full time job with health insurance that pays >= $10/hr	40	39	39	36	37	24	38	36

SOURCE: Telephone survey.

NOTE: Means were estimated using weights to adjust adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

Table H.7. QOP Group Means Pertaining to Risky Behaviors and Family Life by Site (Percentages)

	Means							
Outcome	Fort Worth	Cleveland	D.C.	Houston	Memphis	Philadelphia	Yakima	Total Sample
Binge drinking in past month	31	27	30	21	17	5	43	25
Binge drinking on 8 or more days in past month	12	2	5	8	2	5	13	7
Used an illegal drug in past month	7	15	13	13	16	5	13	12
Committed a crime in past 3 months	4	8	3	6	13	5	13	8
Arrested or charged in past 3 months	1	7	3	9	5	5	5	5
Had first child before age 18	10	17	23	17	28	28	9	19
Currently living with natural children, but no spouse	13	38	26	23	35	38	12	26
Have children with whom not currently living	7	21	8	13	16	17	16	14
Currently receiving welfare	7	11	19	10	19	31	11	15
Currently receiving food stamps	6	26	15	16	28	46	18	22
Currently receiving welfare or food stamps	10	26	23	18	28	46	18	24

SOURCE: Telephone survey.

NOTE: Means were estimated using weights to adjust adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

Table H.8. Control Group Means Pertaining to Risky Behaviors and Family Life by Site (Percentages)

	Means							
Outcome	Fort Worth	Cleveland	D.C.	Houston	Memphis	Philadelphia	Yakima	Total Sample
Binge drinking in past month	40	35	17	31	17	40	35	31
Binge drinking on 8 or more days in past month	11	9	0	2	5	0	7	5
Used an illegal drug in past month	5	29	29	9	18	13	22	18
Committed a crime in past 3 months	7	14	11	7	12	7	7	9
Arrested or charged in past 3 months	3	2	2	5	3	13	8	5
Had first child before age 18	10	24	5	18	18	25	9	15
Currently living with natural children, but no spouse	19	26	8	22	23	46	16	23
Have children with whom not currently living	8	20	10	19	24	8	2	13
Currently receiving welfare	7	14	16	7	16	32	3	13
Currently receiving food stamps	9	23	24	9	16	40	2	17
Currently receiving welfare or food stamps	11	25	28	11	20	42	5	20

SOURCE: Telephone survey.

NOTE: Means were estimated using weights to adjust adjust for differences between respondents and nonrespondents in baseline characteristics, response rates to the first telephone survey, and outcomes measured in the in-person and first telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.