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**The Quantum  
Opportunity Program  
Demonstration:**

**Final Impacts**

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*Allen Schirm  
Elizabeth Stuart  
Allison McKie*

Submitted to:

U.S. Department of Labor  
Employment and Training Administration  
200 Constitution Avenue, N.W.  
Room N-5637  
Washington, DC 20210

Submitted by:

Mathematica Policy Research, Inc.  
600 Maryland Avenue, S.W.  
Suite 550  
Washington, DC 20024  
(202) 484-9220

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## **D I S C L A I M E R**

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## EXECUTIVE SUMMARY

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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 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, DC) were funded by DOL. Four of the five served 100 youth each, and the Washington, DC 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 four 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 fourth—and final—survey of the evaluation. The survey was administered by telephone and

began nearly six years after most sample members were scheduled to graduate from high school, a time when they were 23 to 25 years old (nearly five years after most sample members were scheduled to graduate from high school, at a time when they were 22 to 24 years old in the Washington, DC 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 (Maxfield et al. 2003b and Schirm et al. 2003). Those surveys were administered during the fourth and fifth years of the demonstration, that is, before the demonstration was over and when many sample members were still attending high school. The first post-intervention impacts were presented in a subsequent report (Schirm and Rodriguez-Planas 2004). They were estimated from data collected in the third evaluation survey—a telephone survey—that began a little more than three years after sample members were scheduled to graduate from high school (two years after scheduled graduation in the Washington, DC 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—perhaps 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 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.

Although all sites were encouraged to implement the QOP model, 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 fewer program activities than was stipulated by the participation goal of 750 hours per year. Enrollees spent an average of 177 hours per year on QOP's educational, developmental, and community service activities—24 percent of the annual goal of 750 hours—through the first four years of the demonstration. The average fell from 247 hours in the first year to 103 hours in the fourth year, while the fraction of enrollees spending no time at all on these activities rose from 1 percent to 26 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 per year.

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?**

Overall, we find that QOP did not achieve its primary or secondary objectives. However, the lack of overall impacts masks some suggestive evidence of promising effects for particular types of students. Although our findings are not conclusive, we find some beneficial effects for the approximately two-thirds of enrollees who were age 14 or younger when they entered ninth grade as well as for enrollees in the Cleveland, Philadelphia, and Washington, DC sites. In contrast, we find almost no beneficial effects for enrollees in the other four sites.

#### **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.
- **QOP has not achieved its second primary objective.** It has not increased the likelihood of ever engaging in postsecondary education or training, including college, vocational/technical school, an apprenticeship, or the military. Furthermore, QOP has not increased persistence in such activities and, thereby, attainment of postsecondary education or training. Although data collected earlier in the evaluation indicated that QOP was increasing rates of entry into postsecondary education or training when sample members were in their late teens and early twenties (Maxfield et al. 2003b and Schirm and Rodriguez-Planas 2004), the most recently collected data reveal that this impact was not sustained in the longer run as sample members entered their mid-twenties.

## **Impacts on Employment and Earnings**

- **QOP has not improved employment-related outcomes.** Improving such outcomes was a principal motivation for QOP's two primary objectives and, thus, an implicit, long-run goal of the program. However, when sample members were entering their mid-twenties, QOP had not increased the likelihood of being employed, the fraction of time employed, annual or hourly earnings, or the likelihood of having a job with benefits, such as health insurance, paid time off, or pension and retirement benefits.

## **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.** When sample members were in their late teens, QOP did not reduce any risky behaviors, such as binge drinking, illegal drug use, crime, or teen parenting (Maxfield et al. 2003b). Although it still did not reduce binge drinking or crime when enrollees were in their early twenties, QOP did reduce illegal drug use (Schirm and Rodriguez-Planas 2004). More recently, according to data collected when sample members were entering their mid-twenties, QOP has not had any such beneficial effects in reducing substance abuse, but has had detrimental effects on crime and involvement with the criminal justice system, increasing by 3 percentage points the likelihood of committing a crime in the three months prior to the most recent survey and by 6 percentage points the likelihood of being arrested for or charged with a crime in the two years before the survey.

## **Subgroup and Site Impacts**

- **QOP seems to have been more effective for younger enrollees than for older enrollees.** QOP increased rates of high school completion and engagement in postsecondary education or training among younger enrollees (the two-thirds of enrollees who were age 14 or younger when they entered the ninth grade), but it had no such impacts on older enrollees (those who were over age 14 when they entered the ninth grade). For younger enrollees, QOP increased by 7 percentage points the likelihood of receiving a diploma and by 6 percentage points the likelihood of receiving a diploma or GED. It also increased by 10 percentage points both the likelihood of ever engaging in postsecondary education or training and the likelihood of completing at least two years of college or the military, completing vocational/technical school or an apprenticeship, or being honorably discharged from the military. QOP did not have consistent patterns of impacts across subgroups defined by the other two observed baseline characteristics: sex or rank in the eligible grade

distribution. (The eligible grade distribution was based on grade point average in the eighth grade and excluded youth who were ineligible for QOP because their grades were too high.)

- **QOP's impacts varied by site.** The Cleveland, Philadelphia, and Washington, DC sites had mostly beneficial impacts. The Cleveland site was the only site that increased high school completion, raising the likelihood of earning a diploma or GED by 19 percentage points. The Cleveland site also increased the likelihood of ever attending a two- or four-year college by 18 percentage points and the likelihood of earning a bachelor's degree by 6 percentage points. In addition to beneficial impacts on some employment-related outcomes and on smoking and binge drinking rates, the Cleveland site reduced by 19 percentage points the likelihood of receiving welfare or food stamps. A 13-percentage-point increase in the likelihood of committing a crime in the two years before the most recent survey was the Cleveland site's only detrimental impact. The Philadelphia site had beneficial impacts on postsecondary educational attainment, increasing by 18 percentage points the likelihood of ever attending a four-year college and by 13 percentage points the likelihood of completing at least two years at a four-year college. Although the Philadelphia site had detrimental impacts on the rate of frequent binge drinking and the likelihood of being arrested or charged with a crime in the two years before the most recent survey, it reduced by 23 percentage points the likelihood of receiving welfare or food stamps. The Washington, DC site increased postsecondary education or training, raising by 15 percentage points the likelihood of ever engaging in postsecondary education or training and by 19 percentage points the likelihood of completing at least two years of college or military service, completing vocational/technical school or an apprenticeship, or being honorably discharged from the military. The Washington, DC site also had beneficial impacts on the rate of frequent binge drinking and the likelihood of having a child with whom the enrollee was not living. With the exception of a decrease in the proportion of enrollees with poor self-reported health status in the Memphis site, none of the other four sites—Fort Worth, Houston, Memphis, or Yakima—had beneficial impacts, while some had detrimental impacts.

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## INTRODUCTION

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This report presents the final estimated impacts of the Quantum Opportunity Program (QOP)<sup>1</sup> demonstration.<sup>2</sup> 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<sup>3</sup> 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.

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, Workforce Investment Act (WIA), Temporary Assistance for Needy Families (TANF), Medicaid, and other public programs. The importance to the nation's economy was described in a speech by Alan Greenspan, then 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).

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<sup>1</sup> The acronym QOP is customarily pronounced *kwäp*.

<sup>2</sup> Maxfield et al. 2003b and Schirm et al. 2003 presented short-term impacts based on data collected while the demonstration was still underway, and Schirm and Rodriguez-Planas (2004) presented the first post-intervention impacts, which were estimated from data collected one to two years after the end of the demonstration.

<sup>3</sup> 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 2002a).

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 2002a). 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 five 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. These findings included increases in high school graduation and enrollment in postsecondary education as well as reductions in risky behaviors. However, the Brandeis evaluation was limited by a small sample size (only 25 QOP enrollees in each of five sites), results primarily attributable to one site, and poor implementation in most of the other sites. In fact, one site was completely dropped from the analysis because of poor implementation (Hahn, Leavitt, and Aaron 1994).<sup>4</sup>

The results from the pilot emerged at a time when DOL considered conducting random assignment evaluations of intensive youth program models in an effort to identify effective programs. Concerned about the consequences of high dropout and low postsecondary enrollment rates among urban youth, DOL sought to further evaluate the promising QOP model. 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, DC—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.<sup>5</sup> 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 has evaluated the QOP demonstration, and assessed in previous reports the program's implementation, short-term impacts, and early post-intervention impacts (Maxfield et al. 2003a and 2003b, Schirm et al. 2003, and Schirm and Rodriguez-Planas 2004). 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. The early post-intervention impacts were 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, DC site, when most sample members there were 20 or 21 years old). This report presents even longer-term program impacts, which are based on data collected a little more than four years after the end of the demonstration, when most members of the

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<sup>4</sup> The pilot and differences between it and the demonstration are discussed in more detail below.

<sup>5</sup> All events occurred one year later in the Washington, DC site.

evaluation sample were 23 to 25 years old (three years after the end of the demonstration in the Washington, DC site, when most sample members there were 22 to 24 years old).

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?

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



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## THE QOP TARGET GROUP

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

- Began the ninth grade at a high school selected for the QOP demonstration. High schools in the DOL-funded sites were required to have dropout rates of 40 percent or more. There was no such explicit criterion for the sites funded by the Ford Foundation.
- 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.)

With the exception of the Yakima site, the QOP demonstration schools primarily served predominantly black or Hispanic populations in urban neighborhoods. The average school size, 1,573 students, was typical for urban high schools during the years that QOP operated.<sup>6</sup> Students within a school tended to be homogeneous with respect to race/ethnicity, with enrollments more than 90 percent black at eight schools and more than 90 percent Hispanic at one school. Of the large urban schools, only the high school in Fort Worth served a relatively mixed student population; 11 percent of its students were black and 45 percent, Hispanic. Black and Hispanic students constituted 42 percent of the enrollment at the demonstration high school located in the mid-size city of Yakima. The neighborhoods served by the schools varied in their poverty status, as indicated by the percentage of students certified for free lunch.<sup>7</sup> In 2003, two schools had fewer than 40 percent of their students certified for free lunch while six of the schools had a rate higher than the national average for large urban high schools (44 percent).<sup>8</sup> In the Philadelphia high school, 90 percent of the students were certified for free lunch in 2003.

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<sup>6</sup> The average enrollment in the 1995–1996 school year at schools spanning grades 9 to 12 and located in a large city was 1,663 students (calculations based on Common Core of Data Public Elementary/Secondary School Universe; U.S. Department of Education 2006).

<sup>7</sup> Calculation of percentages of black and Hispanic students, percentages certified for free lunch, and average enrollment was based on the Common Core of Data Public Elementary/Secondary School Universe (<http://nces.ed.gov/ccd/bat/>, accessed April 11, 2006; U.S. Department of Education 2006). The 2003–2004 school year is the most recent school year for which a majority of the demonstration schools report lunch eligibility.

<sup>8</sup> No schools in Tennessee reported the percentage of students certified for free lunch in 2003–2004 and thus the information is unavailable for the three QOP schools in Memphis.

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## THE PROGRAM MODEL

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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.<sup>9</sup> Most case managers were available during off hours for enrollees to call in emergencies.<sup>10</sup>
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

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<sup>9</sup> 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.

<sup>10</sup> 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).

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 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.<sup>11</sup>

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<sup>11</sup> Financial incentives were not provided for time spent being mentored if the mentoring was not part of an educational, developmental, or community service activity.

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.

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

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## HOW WELL WAS QOP IMPLEMENTED?

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As we learned from annual site visits, annual QOP conferences, and conference calls with QOP staff, two demonstration sites—Fort Worth and Houston—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, although all sites were encouraged to implement all of the elements of the QOP model, neither DOL nor, to a lesser degree, Ford required sites to do so, 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. 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—Houston, Philadelphia, and Yakima—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—Cleveland—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.

Just over two-fifths of the QOP enrollees reported having received the money from their accrual accounts approximately two years after the end of the demonstration, when most of the enrollees were in their early twenties. 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.

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.

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## HOW MUCH DID QOP COST?

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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.<sup>12</sup> 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.

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 both helping to design the QOP model and implementing the program in the Philadelphia site for the pilot study, 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.

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<sup>12</sup> 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.



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## HOW MUCH DID ENROLLEES PARTICIPATE IN QOP?

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Most QOP enrollees generally did not meet the high participation targets set by program developers. According to the QOP participation data for the first four years of the demonstration, enrollees spent an average of 177 hours per year on educational, developmental, and community service activities—24 percent of the annual goal of 750 hours. Enrollees spent an average of 76 hours per year on education (30 percent of the goal), 77 hours on developmental activities (31 percent of the goal), and 24 hours on community service (10 percent of the goal). The average time spent on these QOP activities fell from 247 hours in the first year of the demonstration to 103 hours in the fourth year (see Table 1).<sup>13,14</sup>

The level of participation varied across enrollees, but few enrollees met the participation targets. The percentage of enrollees spending no time at all on QOP activities increased steadily from 1 percent in the first year to 26 percent in the fourth year (see Table 1). Similarly, the percentage of enrollees who spent more than 325 hours on QOP activities—half the target of 750 hours—decreased from 28 percent in the first year to 10 percent in the fourth year. Fewer than 5 percent of enrollees met the participation target of 750 hours in any year of the demonstration, and in fact fewer than half of all enrollees spent more than 750 hours on QOP activities during the entire first four years. However, some enrollees participated at relatively high levels, with approximately 13 percent spending more than 1,500 hours on QOP activities during the first four years of the demonstration.

**Table 1. Participation in QOP Activities**

	Cumulative Years 1 through 4	Year 1	Year 4
Average Number of Hours	708	247	103
Average Hours on Educational Activities	305	110	40
Average Hours on Developmental Activities	306	105	41
Average Hours on Service Activities	97	32	22
No Hours of Participation (percent)	1	1	26
More Than 100 Hours (percent)	88	73	29
More Than 375 Hours (percent)	62	23	11
More Than 750 Hours (percent)	36	1	0
More Than 1,500 Hours (percent)	13	0	0

SOURCE: QOP Demonstration Management Information System (MIS).

<sup>13</sup> These numbers vary slightly from those in previous reports because of corrections to errors found in the participation data.

<sup>14</sup> Because the Memphis site did not submit participation data for the fourth year of the demonstration, all numbers relating to participation in the fourth year exclude that site. Participation information was received from all other sites for years one through four.

Participation also varied substantially from site to site (see Table 2). 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, 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.

The levels of participation might be disappointing for a program based on the belief that youth programs must be intensive to be effective.<sup>15</sup> The roughly 12 percent of enrollees who spent 100 or fewer hours on QOP activities during the entire demonstration reported that they were not interested in those activities or were involved in other after-school activities, such as athletics, working, or caring for family members.

However, although the levels of participation did not meet the target set by program developers, that target corresponds to a substantial number of hours. In 2000, the average number of instructional hours spent in public school by 15-year-old youth was 990 hours (U.S. Department of Education 2005; Table 26-2). Attaining QOP's goal of 750 hours per year would have meant that students would have spent the equivalent of an additional three-quarters of a school year on QOP activities. As it was, the average amount of time enrollees spent on QOP activities during the first four years—including summers—corresponds to about 72 percent of an extra school year, still a substantial investment of time.

We can also compare participation in QOP with participation in other extracurricular activities in which high school students may participate. To meet the target, QOP enrollees would have had to spend two hours per day, 365 days per year—14 hours per week, 52 weeks per year—in QOP activities. In comparison, in 2002, the average high school sophomore spent 4.6 hours per week on extracurricular activities. Students classified as “high-intensity participants”—the 25 percent of students who spent the most time on extracurricular activities—spent an average of 9 hours per week on extracurricular activities (Ingels et al. 2005). Thus, the QOP target level of participation is higher than the amount of time most students spend in extracurricular activities during high school.

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<sup>15</sup> 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 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.

**Table 2. Participation in QOP Activities by Site**

	Overall	Fort Worth	Cleveland	Washington, DC
<b>Average Number of Hours</b>				
Year 1	247	120	285	177
Year 4	103	23	49	77
Cumulative Years 1 through 4	708	273	603	611
<b>Cumulative Level of Participation, Years 1 through 4 (percent)</b>				
No Hours	1	1	0	1
Over 100 Hours	88	84	85	89
Over 375 Hours	62	23	58	66
Over 750 Hours	36	5	34	35
Over 1,500 Hours	13	0	8	4
	Houston	Memphis <sup>a</sup>	Philadelphia	Yakima
<b>Average Number of Hours</b>				
Year 1	148	331	369	302
Year 4	34	NA	89	348
Cumulative Years 1 through 4	409	NA	975	1,378
<b>Cumulative Level of Participation, Years 1 through 4 (percent)</b>				
No Hours	1	0	2	2
Over 100 Hours	77	94	96	92
Over 375 Hours	51	75	74	84
Over 750 Hours	14	38	54	74
Over 1,500 Hours	1	11	24	42

SOURCE: QOP Demonstration Management Information System (MIS).

<sup>a</sup>Year 4 data not available for Memphis; cumulative amounts scaled to account for that missing year.

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## ESTIMATING THE IMPACTS OF QOP

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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.<sup>16</sup> 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. Next, 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, DC 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.

As the final data collection activity of the evaluation, we conducted a third telephone survey a little more than two years after the start of the second telephone survey. Interviewing began nearly six years after most sample members were scheduled to graduate from high school, at a time when they were 23 to 25 years old (five years after most sample members were scheduled to graduate from high school in the Washington, DC site at a time when they were 22 to 24 years old). The third telephone survey covered the same topics as the second telephone survey, but collected more detailed information about sample members' employment activities and earnings.

The response rates for the in-person survey, the first telephone survey, and the second telephone survey were 84 percent, 84 percent, and 75 percent, respectively.<sup>17</sup> For each of these surveys, the response rate for the QOP group exceeded the response rate for the control group by about 7 to 10 percentage points. The response rate for the third telephone

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<sup>16</sup> Exhibit 1 presents key dates pertaining to our data collection activities.

<sup>17</sup> We collected complete transcript data for 74 percent of sample members and partial academic records for another 8 percent of sample members.

survey was 76 percent, and the response rate for the QOP group was 3 percentage points higher than the response rate for the control group.

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.<sup>18, 19</sup> For this report, we measured outcomes using only data from the third telephone survey, except in the case of outcomes pertaining to high school completion. For those outcomes, we used data from the first and second telephone surveys and school transcripts in addition to the data collected in the third telephone survey, as described in Appendix F.<sup>20</sup>

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<sup>18</sup> 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 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.

<sup>19</sup> 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, as well to an adjustment for the differential response rate between the QOP group and the control group, 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.

<sup>20</sup> For this evaluation, we are estimating impacts on many different outcomes, including, for example, several measures of postsecondary education or training activities, several measures of employment, several measures of substance abuse, and several measures of criminal activity. We are also estimating impacts for the demonstration as a whole, subgroups of sample members, and each demonstration site. When estimating impacts for multiple outcomes, there is a concern that some estimated impacts will be found to be significantly different from zero, even if there is actually no impact of QOP (a “Type 1” error). In fact, even if there were no differences between the QOP and control groups, five percent of estimated impacts would be expected to be significant at the five percent level just by chance. Likewise, 10 percent could be significant at the 10 percent level just by chance. A variety of procedures have been developed to address the concerns about this. To maintain a straightforward presentation of results, without introducing the complexities of and debate surrounding the details of the implementation of multiple comparisons adjustments, we have not included an adjustment for multiple comparisons in the tables of results presented in this report. However, we have applied two methods that adjust the significance levels of statistical tests to account for the number of tests being performed: the Bonferroni correction and a more powerful adjustment developed by Benjamini and Hochberg (1995). In particular, when we found significant impacts in the main analyses, we performed the multiple comparisons adjustments within outcome groups (for example, outcomes relating to four-year college attendance). It is important to note that we generally find few significant impacts in the main analyses, and any adjustment for multiple comparisons results in even fewer significant impacts. We discuss our findings from these adjustments for multiple comparisons when it appears that one or more significant impacts might be attributable to chance rather than the effects of QOP.

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

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All Sites except Washington, DC 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
Third Telephone Survey	January 2005–September 2005

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Washington, DC 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
Third Telephone Survey	January 2005–September 2005

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

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QOP did not significantly increase the likelihood of graduating from high school with a diploma (see Table 3). It also did not significantly increase the likelihood of completing high school by earning either a diploma or a GED.<sup>21,22,23,24</sup> As discussed in more detail below, the lack of an impact on high school completion is consistent with the demonstration sites' limited success in implementing the QOP model, and particularly the education component.

The National Education Longitudinal Study of 1988 (NELS) has followed a cohort of students who were eighth graders in 1998 (the 1997–1998 school year) and provides national data on high school completion to which our estimates can be compared. In 2000, eight years after scheduled high school graduation, 83 percent of the NELS cohort had earned a high school diploma, and 92 percent had earned either a high school diploma or GED (U.S. Department of Education 2002b). Graduation rates were lower for non-Hispanic blacks and Hispanics: 76 percent of non-Hispanic blacks and 75 percent of Hispanics received a high school diploma. Rates of completion by earning a diploma or GED were 90 and 85 percent for non-Hispanic blacks and Hispanics, respectively. While these rates are higher than the rates we observe for QOP enrollees, completion rates for enrollees are similar to rates for a subgroup that had exhibited similarly poor academic performance. Among NELS cohort

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<sup>21</sup> 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.

<sup>22</sup> These findings are consistent with the results reported in Schirm and Rodriguez-Planas (2004), based on information collected through the second telephone survey. However, they are inconsistent with the results based only on data obtained from the first telephone survey, the in-person survey, and transcripts and reported in Maxfield et al. (2003b). Those earlier results indicated that as of the first telephone survey, QOP increased by seven percentage points the likelihood of earning a diploma. Schirm and Rodriguez-Planas (2004) discuss in detail the differences between the estimated short-run impacts and the findings that also use information from the second telephone survey.

<sup>23</sup> 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 previous responses or their high school transcripts; or whether we use regression methods to adjust for random baseline differences between the QOP and control groups.

<sup>24</sup> One potential concern about estimates derived using data from the third telephone survey is that the estimated impacts for the Washington, DC, 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, DC, site (79 percent versus 67 percent, respectively) and by the fact that program operations began a year later and sample members are typically a year younger in the Washington, DC, 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, DC site. We found that they are generally not sensitive.

members who had scored in the bottom 25 percent on an eighth-grade mathematics achievement test, 67 percent received a high school diploma, and 79 percent received a diploma or GED.

**Table 3. Impacts on High School Completion (Percentages)**

Outcome	QOP Group Mean	Control Group Mean	Impact
Received HS diploma	60	60	0
Received HS diploma or GED	78	75	2

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, first, and second 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



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

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One of QOP's two primary objectives was to increase the likelihood that enrollees engage in postsecondary education or training. However, we find that QOP did not have an impact on such postsecondary activities (see Table 4). Within five to six years of scheduled high school graduation, 61 percent of QOP enrollees and 56 percent of control group members had engaged in some type of postsecondary education or training, including college attendance, vocational or technical school attendance, apprenticeship enrollment, and armed forces enlistment.<sup>25</sup> In the same time period, 38 percent of QOP enrollees and 34 percent of control group members had enrolled in a two- or four-year college, and 15 to 16 percent of both groups had enrolled in a four-year college. Although the percentages of QOP enrollees who had enrolled in a four-year college, a two- or four-year college, or engaged in any postsecondary education or training are higher than the percentages for control group members, the differences are not statistically significant.<sup>26</sup>

Although QOP enrollees and control group members engaged in postsecondary activities at similar rates, it is possible that the QOP enrollees were better prepared to undertake and persist in these activities, resulting in higher levels of attainment. However, this does not appear to be the case, with QOP enrollees and control group members completing postsecondary degrees at similar rates. Six percent of QOP enrollees earned a bachelor's or associate's degree within about five to six years of scheduled high school graduation, as compared with seven percent of control group members, and the difference in rates is not statistically significant. QOP also had no impact on the likelihood of enrollees completing a college or vocational degree, completing an apprenticeship, being enlisted in the military for more than two years, or being honorably discharged from the military: this rate was 22 percent among QOP enrollees and 25 percent among control group members.

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<sup>25</sup> 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 third telephone survey or had previously engaged in such activities.

<sup>26</sup> For comparison with our estimates, national data from NELS indicate that 76 percent of eighth graders in 1988 enrolled in postsecondary education (college, university, or vocational or technical school) within eight years of scheduled high school graduation (U.S. Department of Education 2002b). The rates for non-Hispanic blacks and Hispanics are 76 percent and 70 percent, respectively. These numbers are slightly higher than the 64 percent of QOP enrollees we observe as having been engaged in postsecondary activities. However, the sample members in this study had relatively low eighth-grade GPAs, and the rates of postsecondary engagement among the QOP enrollees are more similar to the rates for students who had similarly low academic performance: 58 percent of eighth-graders with mathematics achievement test scores in the bottom 25 percent enrolled in postsecondary education at some point within eight years of scheduled high school graduation (U.S. Department of Education 2002b). A similar pattern of differences is seen when examining current postsecondary activities. National data for 2004 showed that 26 percent of individuals age 22-24 (23 percent of non-Hispanic blacks and 18 percent of Hispanics) were currently enrolled in college ([www.census.gov](http://www.census.gov), accessed January 4, 2006), which is somewhat higher than the 13 percent of QOP enrollees enrolled in college at the time of the third telephone survey.

These postsecondary completion rates are likely to increase at least somewhat over time given that about 8 percent of sample members were enrolled in a four-year college at the time of the third telephone survey and about 23 percent were engaged in some form of postsecondary education or training. National data show that over 45 percent of 1999-2000 bachelor's degree recipients completed their degree more than five years after high school graduation (U.S. Department of Education 2003). Although no further data collection activities are planned, it is possible that either a beneficial or detrimental impact on the attainment of postsecondary education or training could emerge in the future.

As demonstrated in Appendix F, most of our findings pertaining to postsecondary education or training activities are not sensitive to whether we use regression methods to adjust for random baseline differences between the QOP and control groups. One exception is that, according to regression-adjusted impacts and impacts estimated using some of our other methods of assessing the robustness of our findings, QOP's impact on engagement in any postsecondary education or training is statistically significant according to our least-stringent criterion for assessing significance (see Appendix F).<sup>27</sup> However, when we adjust the significance levels of the regression-adjusted estimates to account for the many outcomes that are considered, we find that none of the impacts on postsecondary education or training are statistically significant. Thus, we do not find consistent evidence of an impact of QOP on the program's second primary outcome.

These findings differ from the beneficial impacts on postsecondary education and training estimated from data obtained in the first and second telephone surveys (Maxfield et al. 2003b and Schirm and Rodriguez-Planas 2004). In particular, Maxfield et al. (2003b) reported 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 within about one year of scheduled high school graduation. Similarly, Schirm and Rodriguez-Planas (2004) found that QOP enrollees were more likely to enroll in college or engage in any postsecondary education or training within about three years of scheduled high school graduation.

This departure from the findings from previous reports, with no impacts on postsecondary attainment using data from the third telephone survey, seems to be primarily due to a larger number of control group members than QOP enrollees engaging in postsecondary education in the two years between the second and third telephone surveys. While the percentage of QOP enrollees who were ever engaged in any postsecondary education or training increased by only one percentage point (to 62 percent) during this time, the control group percentage increased by three percentage points (to 56 percent). Similar differences are seen for four-year college enrollment and two- and four-year college enrollment, with the gap between the QOP enrollees and the control group narrowing by 2 to 3 percentage points between the two surveys. The changes seen over time are perhaps not surprising given that many students do not engage in postsecondary education directly after high school. For example, over 10 percent of 1999-2000 bachelor's degree recipients

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<sup>27</sup> The p-value on the regression-adjusted impact for engagement in any postsecondary education or training is 0.06. The p-value on the corresponding difference-of-means estimate is 0.14.

enrolled in college more than 2 years after high school graduation (U.S. Department of Education 2003).

**Table 4. Impacts on Postsecondary Attainment (Percentages)**

Outcome	QOP Group Mean	Control Group Mean	Impact
Ever attended or currently attending a 4-year college	16	15	1
Completed at least 1 year at a 4-year college	14	12	1
Completed at least 2 years at a 4-year college	11	10	1
Earned a bachelor's degree	3	2	1
Ever attended or currently attending a 2- or 4-year college	38	34	4
Completed at least 1 year at a 2- or 4-year college	29	27	2
Completed at least 2 years at a 2- or 4-year college	19	16	2
Earned a bachelor's or associate's degree	6	7	-1
Ever or currently in college, voc/tech school, an apprenticeship, or the military	61	56	6
Completed 2 years of college or military service, completed voc/tech school or an apprenticeship, or honorably discharged from the military	35	30	5
Completed an associate's or bachelor's degree, voc/tech school or an apprenticeship, in the military for more than 2 years, or honorably discharged from the military	25	22	2
Ever or currently in college, voc/tech school, an apprenticeship, the military, or Job Corps	64	59	6
Currently in a 4-year college	7	9	-2
Currently in a 2- or 4-year college	13	17	-4
Currently in college, voc/tech school, an apprenticeship, or the military	23	24	-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 and second telephone surveys, and outcomes measured in the in-person, first, and second 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

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## IMPACTS ON EMPLOYMENT AND EARNINGS

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Improving enrollees' prospects for having successful careers was a principal motivation for QOP's two primary objectives of increasing the rates of high school graduation and engagement in postsecondary education or training. Thus, improved employment outcomes were an implicit, long-run goal of the program. Although the final data available from the evaluation were collected when sample members were approaching their mid-twenties, we can assess whether QOP increased the likelihood of being employed and the amount earned early in enrollees' working lives.

QOP did not affect the likelihood of employment (see Table 5). At the time of the third telephone survey, about two-thirds of both QOP enrollees and control group members were employed, with just over half of each group working a full-time job (at least 35 hours per week). When we consider the employment experiences of sample members during the year preceding the survey, we do not find significant differences between QOP enrollees and control group members in the likelihood of employment or the fraction of time employed.<sup>28,29</sup>

Our findings of no impacts on the likelihood of employment or full-time employment at the time of the third telephone survey differ from our previous findings (Schirm and Rodriguez-Planas 2004). At the time of the second telephone survey two years earlier, control group members were more likely than QOP enrollees to have a job or a full-time job. The differences in findings stem from both an increase in the likelihood of employment or full-time employment among QOP enrollees and a decrease in the likelihood among control group members.

When we examine the compensation associated with jobs held by sample members, we find that QOP did not increase the earnings of QOP enrollees or the availability of benefits in the jobs held by enrollees. Total earnings in the year preceding the survey and hourly earnings at the time of the survey are higher among control group members than among QOP enrollees, but the differences are not statistically significant. Similarly, the percentages

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<sup>28</sup> As noted in Table 3, when we examine a broader measure of postsecondary activity that counts both employment and education or training, we find that QOP did not affect the likelihood of being employed or engaged in postsecondary education or training at the time of the third telephone survey. This lack of an impact is not surprising given that we do not find impacts on either employment or engagement in postsecondary education or training. About one-quarter of sample members were neither employed nor engaged in postsecondary education or training. The most commonly given reasons for not working among both QOP enrollees and control group members were that the sample member was looking for work or had to stay home with children.

<sup>29</sup> According to Current Population Survey data for the civilian noninstitutional population ([www.bls.gov/cps/home.htm](http://www.bls.gov/cps/home.htm), accessed January 11, 2006), 56 percent of blacks and 68 percent of Hispanics age 20 to 24 were employed in 2004, while 40 percent and 51 percent were employed full-time. Thus, the rates of employment and full-time employment among QOP enrollees are roughly similar to—and perhaps higher than—the rates among young adults of similar race and ethnicity; however, because most QOP enrollees were in the upper portion of the 20 to 24 age range, we might expect their employment rates to be higher.

of control group members with jobs that offer health insurance, paid time off, or pension or retirement benefits are not significantly different from the percentages of QOP enrollees with jobs offering such benefits.

Our finding of no impacts on earnings is consistent with our finding of no impacts on high school completion and postsecondary attainment. QOP sought to prepare enrollees for good jobs by helping them to graduate from high school and obtain postsecondary education or training. Individuals who delay employment to obtain further education or training may initially have lower earnings upon entering the labor force than similarly aged but less educated individuals who have accrued more work experience.<sup>30</sup> Had QOP enrollees achieved significantly higher rates of high school graduation and postsecondary education or training than control group members, the absence of a significant increase in the earnings of QOP enrollees might be attributable to QOP enrollees experiencing such a temporary period of relatively low earnings before their earnings surpass the earnings of less educated workers. However, since we do not find significant impacts on high school graduation and postsecondary education or training, the finding of no impact on earnings does not appear to be attributable to this effect of initially reduced earnings due to loss of work experience.

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<sup>30</sup> Jacob Mincer (1974) introduced this concept in his early work on human capital.

**Table 5. Impacts on Employment and Earnings (Percentages, Unless Stated Otherwise)**

Outcome	QOP Group Mean	Control Group Mean	Impact
Currently employed	67	68	-1
Currently unemployed	14	15	-1
Currently out of labor force	19	17	2
Currently employed or in college, voc/tech school, an apprenticeship, or the military	77	75	1
Ever employed	96	95	0
Employed in past 12 months	83	84	-1
Percentage of weeks employed in past 12 months (percentage of weeks)	59	61	-2
Number of jobs in past 12 months (number of jobs)	1.1	1.0	0.0
Tenure at current job (months)	15	16	-2
Usual number of hours worked per week in all current jobs (hours)	28	28	-0
Works at least 35 hours per week at main current job	53	53	-0
Total earnings in past 12 months (dollars)	12,676	13,198	-522
Hourly earnings at main current job (dollars)	7.93	9.14	-1.20
Has a job with health insurance	44	47	-3
Has a job with paid time off	43	45	-2
Has a job with a pension or retirement benefits	36	38	-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 and second telephone surveys, and outcomes measured in the in-person, first, and second 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

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

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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 (see Table 6).<sup>31</sup>

With respect to risky behaviors, Maxfield et al. (2003b) found that when most enrollees were in their late teens, 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 (see Table 7).<sup>32</sup> The only indication of a beneficial impact of QOP on risky behaviors was that, at a time when most sample members were in their early twenties, QOP enrollees were less likely to use illegal drugs in the 30 days before the survey. However, results based on the same survey found 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 (Schirm and Rodriguez-Planas 2004). These findings pertained when most sample members were in their early twenties and, in particular, over the age of 21. What were QOP's impacts on risky behaviors as sample members entered their mid-twenties?

We find that QOP did not reduce risky behaviors when QOP enrollees were entering their mid-twenties, and in fact increased criminal activities and arrests among enrollees during that time, although the evidence for these detrimental impacts is not consistent (see Table 8).<sup>33</sup> In particular, QOP did not decrease tobacco use, binge drinking, or illegal drug use, and it increased the percentage of sample members who committed a crime in the three months before the survey (from 2 percent to 5 percent) and the percentage who were arrested or charged with a crime in the prior two years (from 5 to 11 percent).<sup>34</sup> Although

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<sup>31</sup> We have not administered another round of achievement tests or collected additional transcript data, and, in the second and third telephone surveys, we did not attempt to obtain further information about academic performance while in high school, except to ascertain graduation status.

<sup>32</sup> 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.

<sup>33</sup> All information on risky behaviors based on sample member self-report.

<sup>34</sup> 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](http://www.oas.samhsa.gov),

*(continued)*



we also find an increase in the percentage committing a crime in the two years before the survey, the impact is not statistically significant.<sup>35,36</sup>

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. QOP did not achieve decreases in targeted risky behaviors—substance abuse, crime, and teen parenting—or an increase in high school graduation or postsecondary education and training. However, it is 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 8). We have also found that QOP has not decreased the likelihood of living in a household that receives public assistance or of being in poor health.<sup>37</sup> The lack of beneficial impacts on family life and the lack of beneficial impacts on risky behaviors is consistent with the lack of an impact on earnings, which could provide financial support for a family, and the lack of an impact on the likelihood of being either employed or engaged in postsecondary education or training, activities that could divert a young adult from engaging in risky behaviors.

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*(continued)*

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.)

<sup>35</sup> When we excluded the Washington, DC site, where sample members are typically one year younger than in the other sites, we find that QOP also increased the proportion of QOP enrollees who were frequent binge drinkers (8 or more days in the past month) and the proportion of enrollees who committed a crime in the past two years. When the significance levels are adjusted to account for the multiple hypothesis tests being performed, the impact on binge drinking and one of the impacts on criminal activity (arrested or charged in the past two years) remain significant.

<sup>36</sup> As demonstrated in Appendix F, our findings pertaining to risky behaviors, physical and mental well-being, and family life are generally not sensitive to whether we use regression methods to adjust for random baseline differences between the QOP and control groups. The exceptions are that the regression-adjusted impacts on whether individuals committed a crime in the past three months and whether individuals had been arrested or charged in the past two years are not statistically significant, whereas the difference-of-means estimates are significant.

<sup>37</sup> 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.

**Table 6. Selected Impacts on High School Performance**

Outcome <sup>a</sup>	QOP Group Mean	Control Group Mean	Impact
Mathematics achievement test score (percentile)	40.9	40.5	0.4
Reading achievement test score (percentile)	43.2	42.7	0.5
Cumulative GPA (four-point scale)	2.13	2.19	-0.06
Total credits (Carnegie units)	16.2	15.8	0.5
Suspended or expelled in past 12 months (percentage)	34	38	-4

SOURCE: Maxfield et al. (2003b), Table 3

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

<sup>a</sup> Achievement test scores are expressed as percentiles in the distribution of scores for tenth graders in the United States. Credits are expressed in Carnegie units that standardize for in-class time. One Carnegie unit corresponds to a class that meets for 45 to 60 minutes every day of the week for an entire academic year.

\* 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 7. Selected Impacts on Risky Behaviors When Enrollees Were In Their Late Teens and Early-Twenties (Percentages)**

Outcome	QOP Group Mean	Control Group Mean	Impact
<b>When Enrollees Were in Their Late Teens<sup>a</sup></b>			
Drinking in the past month	40	33	7**
Binge drinking in past month	24	20	4
Used an illegal drug in the past month	34	28	7**
Committed a crime in the past 12 months	31	28	3
Ever pregnant or get anyone pregnant	33	33	0
Have had a child	23	26	-3
<b>When Enrollees Were in Their Early Twenties<sup>b</sup></b>			
Binge drinking in past month	25	31	-6
Used an illegal drug in past month	12	18	-6**
Committed a crime in past 3 months	8	9	-2
Had first child before age 18	19	15	3
Currently receiving welfare or food stamps	24	20	4

SOURCES: <sup>a</sup> Maxfield et al. (2003b), Table 4  
<sup>b</sup> Schirm and Rodriguez-Planas (2004), Table 4

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. 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 8. Impacts on Risky Behaviors, Physical and Mental Well-Being, and Family Life (Percentages)**

Outcome	QOP Group Mean	Control Group Mean	Impact
Smoked cigarettes or used tobacco in past month	34	34	0
Smoked cigarettes or used tobacco daily in past month	22	24	-2
Binge drinking in past month	31	31	0
Binge drinking on 8 or more days in past month	8	6	3
Used an illegal drug in past month	12	13	-0
Committed a crime in past 3 months	5	2	3*
Committed a crime in past 2 years	16	11	5
Arrested or charged in past 2 years	11	5	6**
Convicted or pled guilty in past 2 years	5	3	2
Served time in jail, prison, or detention home in past 2 years	4	2	1
Self-reported health is fair, poor, or very poor	9	8	2
Physical or mental condition limited activities quite a lot or could not work because of these limitations	7	7	1
Had first child before age 18	18	16	2
Currently living with natural children, but no spouse	32	31	1
Have children with whom not currently living	18	17	1
Have child with whom not living and not providing any regular child support	6	8	-2
Currently receiving welfare	15	14	1
Currently receiving food stamps	26	24	2
Currently receiving welfare or food stamps	27	24	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, first, and second 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

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## IMPACTS ON SUBGROUPS

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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.<sup>38,39</sup> 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.<sup>40</sup>

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.

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<sup>38</sup> The subgroups examined are overlapping and not mutually exclusive because the baseline characteristics defining them are related. For example, males are more likely to be in the bottom third of the baseline grade distribution than are females. Furthermore, compared with sample members who were age 14 or younger when they entered ninth grade, those who were over age 14 are more likely to be male and in the bottom third of the grade distribution. Given such relationships, an impact on the older sample members, for instance, might be attributable to the 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. We note also that we do not find consistent patterns of impacts across subgroups that have substantial overlap, suggesting that such overlap does not help to explain the findings. This overlap also raises the question of what characteristics of enrollees are most important for identifying enrollees who will benefit from QOP. There is no way to obtain a definitive answer to this question, but some exploratory analyses suggest that an enrollee's age—whether the enrollee was over 14 when entering ninth grade—is the primary characteristic that determines whether the enrollee will benefit from QOP.

<sup>39</sup> To adjust for random differences that may exist between the treatment and control groups within each subgroup, we also obtained regression-adjusted subgroup estimates, using the method described in Appendix F. We generally found results very similar to those presented here; any differences are discussed below.

<sup>40</sup> Site and subgroup sample sizes are reported in Appendices C and D (Tables C.3 and D.2).

## Impacts by Sex

QOP registered some impacts for both males and females (see Tables 9-12). However, QOP does not seem to have consistently benefited one group more than the other.<sup>41</sup>

For females, QOP had detrimental impacts on engagement in postsecondary education or training at the time of the third telephone survey, but beneficial impacts on the positive attributes of jobs held.<sup>42,43,44</sup> QOP decreased by 6 percentage points the likelihood of being enrolled in a four-year college and by 11 percentage points the likelihood of being enrolled in either a two- or a four-year college. It also decreased by 8 percentage points the likelihood of females being engaged in any postsecondary education or training. However, QOP increased the likelihood of females having a job with health insurance (by 10 percentage points) or pension and retirement benefits (by 9 percentage points).<sup>45</sup> These impacts were significantly different from the impacts on males.

For males, QOP had one beneficial impact: a 7-percentage-point increase in the likelihood of receiving a high school diploma or GED, although the evidence for this impact is not consistent.<sup>46</sup> It also had some detrimental impacts. In contrast to our finding for females, we find a decrease in the likelihood of males having a job with positive attributes: QOP decreased by 15 percentage points the likelihood of males having a job with health insurance, by 11 percentage points the likelihood of having a job with paid time off, and by 11 percentage points the likelihood of having a job with pension or retirement benefits. QOP also possibly increased the likelihood of criminal activity among males. The likelihood that QOP enrollees committed a crime in the three months before the survey increased by 5 percentage points. When we consider activity in the two years before the survey, we find that QOP increased the likelihood of committing a crime by 10 percentage points, the likelihood of being arrested or charged with a crime by 12 percentage points, and the likelihood of being convicted of or pleading guilty to a crime by 4 percentage points. Some of these effects on criminal activity by males are sensitive to alternative estimation methods,

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<sup>41</sup> About half of QOP enrollees were male.

<sup>42</sup> We do not find evidence that QOP reduced postsecondary attainment for females. However, the lower rates of engagement among female QOP enrollees relative to female control group members at the time of the survey suggest that a detrimental impact on postsecondary attainment might emerge.

<sup>43</sup> We also find a beneficial impact for females on the likelihood of committing a crime in the two years before the survey. However, when we adjust significance levels for the multiple criminal activity outcomes that are considered, we find that the impact is not statistically significant.

<sup>44</sup> When we adjust for random baseline differences using regression methods, we find that QOP significantly decreased the percentage unemployed for females, by 6 percentage points, and also decreased criminal activity among females.

<sup>45</sup> This impact on having a job with retirement benefits is somewhat sensitive to regression-adjustment; the regression-adjusted impact of 9 percentage points is not statistically significant (p-value=0.11).

<sup>46</sup> The impact on the likelihood that a male enrollee earned a high school diploma or GED has a p-value of 0.099, and is, thus, just barely significant at the 0.10 level, our least stringent criterion. When we examine the alternative measures of high school completion discussed in Appendix F, we find that the impacts are not statistically significant.

but others are robust and we thus find strong evidence that QOP increased at least some types of criminal activity among males.<sup>47</sup>

How do these findings compare with the impacts estimated previously from the second telephone survey (Schirm and Rodriguez-Planas 2004)? As we observed for the sample as a whole, we no longer find beneficial impacts among males or females on postsecondary education and training.<sup>48</sup> Furthermore, while QOP reduced substance abuse by males when they were in their early twenties, we do not find this impact persisting as they enter their mid-twenties.<sup>49</sup> Finally, previously unobserved detrimental impacts have emerged on postsecondary engagement for females, on the availability of job benefits for males, and on criminal activity for males.

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<sup>47</sup> When we adjust significance levels for multiple comparisons using the Bonferroni correction or when we adjust for random baseline differences using regression methods, only the impact on the likelihood of being arrested or charged with a crime in the past two years remains statistically significant. However, when we use the more powerful adjustment developed by Benjamini and Hochberg, all four of these impacts on criminal activity remain statistically significant, providing strong evidence of an impact on criminal activity for males.

<sup>48</sup> We previously found that QOP increased by 9 percentage points the likelihood of males ever attending college and by 10 percentage points the likelihood of females ever engaging in any postsecondary education or training.

<sup>49</sup> We also found in our previous analysis a detrimental impact on frequent binge drinking among females. However, as discussed in Schirm and Rodriguez-Planas (2004), QOP may not have caused the estimated impact. In our current analysis, we find no impact on frequent binge drinking.

**Table 9. Impacts on High School Completion by Sex (Percentage Points)**

Outcome	Impacts		
	Male	Female	Total Sample
Received HS diploma	1	-1	0
Received HS diploma or GED	7*	-2	2

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, first, and second 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 Sex (Percentage Points)**

Outcome	Impacts		
	Male	Female	Total Sample
Ever attended or currently attending a 4-year college	0	2	1
Completed at least 1 year at a 4-year college	1	1	1
Completed at least 2 years at a 4-year college	3	0	1
Earned a bachelor's degree	-1	2	1
Ever attended or currently attending a 2- or 4-year college	6	-1	4
Completed at least 1 year at a 2- or 4-year college	3	-2	2
Completed at least 2 years at a 2- or 4-year college	4	-2	2
Earned a bachelor's or associate's degree	0	-2	-1
Ever or currently in college, voc/tech school, an apprenticeship, or the military	4	6	6
Completed 2 years of college or military service, completed voc/tech school or an apprenticeship, or honorably discharged from the military	4	4	5
Completed an associate's or bachelor's degree, voc/tech school or an apprenticeship, in the military for more than 2 years, or honorably discharged from the military	-0	4	2
Ever or currently in college, voc/tech school, an apprenticeship, the military, or Job Corps	3	6	6
Currently in a 4-year college	2 <sup>†</sup>	-6 <sup>*†</sup>	-2
Currently in a 2- or 4-year college	1 <sup>††</sup>	-11 <sup>***††</sup>	-4
Currently in college, voc/tech school, an apprenticeship, or the military	4 <sup>†</sup>	-8 <sup>*†</sup>	-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 and second telephone surveys, and outcomes measured in the in-person, first, and second 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 Employment and Earnings by Sex (Percentage Points, Unless Otherwise Indicated)**

Outcome	Impacts		
	Male	Female	Total Sample
Currently employed	-7	6	-1
Currently unemployed	3	-6	-1
Currently out of labor force	5	-1	2
Currently employed or in college, voc/tech school, an apprenticeship, or the military	-2	4	1
Ever employed	1	-0	0
Employed in past 12 months	-1	-1	-1
Percentage of weeks employed in past 12 months (percentage of weeks)	-7	5	-2
Number of jobs in past 12 months (number of jobs)	0.1	0.0	0.0
Tenure at current job (months)	-3	0	-2
Usual number of hours worked per week in all current jobs (hours)	-3 <sup>†</sup>	3 <sup>†</sup>	-0
Works at least 35 hours per week at main current job	-4	5	-0
Total earnings in past 12 months (dollars)	-1,479	862	-522
Hourly earnings at main current job (dollars)	-1.41	-0.68	-1.20
Has a job with health insurance	-15**†††	10*†††	-3
Has a job with paid time off	-11*††	8††	-2
Has a job with a pension or retirement benefits	-11*††	9*††	-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 and second telephone surveys, and outcomes measured in the in-person, first, and second 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, Physical and Mental Well-Being, and Family Life by Sex (Percentage Points)**

Outcome	Impacts			Total Sample
	Male	Female		
Smoked cigarettes or used tobacco in past month	-3	4		0
Smoked cigarettes or used tobacco daily in past month	-6	2		-2
Binge drinking in past month	-5	4		0
Binge drinking on 8 or more days in past month	1	3		3
Used an illegal drug in past month	-4	3		-0
Committed a crime in past 3 months	5*†	-1†		3*
Committed a crime in past 2 years	10**†††	-4*†††		5
Arrested or charged in past 2 years	12***†††	-2†††		6**
Convicted or pled guilty in past 2 years	4*†	-0†		2
Served time in jail, prison, or detention home in past 2 years	3	-1		1
Self-reported health is fair, poor, or very poor	4	-2		2
Physical or mental condition limited activities quite a lot or could not work because of these limitations	0	1		1
Had first child before age 18	3	0		2
Currently living with natural children, but no spouse	-3	3		1
Have children with whom not currently living	4	-2		1
Have child with whom not living and not providing any regular child support	-1	-2		-2
Currently receiving welfare	2	-1		1
Currently receiving food stamps	3	-1		2
Currently receiving welfare or food stamps	3	1		3

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 and second telephone surveys, and outcomes measured in the in-person, first, and second 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 increased rates of high school completion and engagement in postsecondary education and training for these younger enrollees but not for the older enrollees who were over age 14 when they entered the ninth grade. We do not find a consistent pattern of impacts on other categories of outcomes (see Tables 13-16).

For younger enrollees, QOP increased by 7 percentage points the likelihood of receiving a diploma and by 6 percentage points the likelihood of receiving a diploma or GED (see Table 13).<sup>50,51</sup> The first of these two beneficial impacts is significantly different from the impact on older enrollees.<sup>52</sup>

QOP's beneficial impact on younger enrollees' postsecondary attainment also contrasts with the lack of impact on older enrollees' postsecondary attainment. For younger enrollees, QOP increased by 10 percentage points both the likelihood of ever attending postsecondary education or training and the likelihood of completing at least two years of college or military service or completing vocational/technical school or an apprenticeship (see Table 14). There were no impacts on postsecondary attainment for older enrollees.

There are several employment and earnings outcomes for which the impacts for older and younger enrollees are significantly different from each other (see Table 15). However, there are only two impacts that are also significantly different from zero: the impact on the number of jobs in the year before the survey for younger enrollees (an increase of 0.2 jobs) and the impact on tenure at current job for older enrollees (a decrease of 6 months). The interpretation of these impacts is ambiguous. Having more jobs in the past year or a shorter tenure at the current job is a poor outcome if it reflects an inability to maintain employment. However, such an outcome is a good outcome if the enrollee left a job with poor attributes to begin a job with better attributes.

We find a few detrimental impacts on risky behaviors and family life for both younger and older enrollees (see Table 16).<sup>53</sup> However, when we adjust significance levels for

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<sup>50</sup> When we examine alternative measures of high school completion, the impacts on younger enrollees remain significant for all but the measure based only on sample members who responded to the third survey (the "First Alternative" described in Appendix F).

<sup>51</sup> There is also some evidence that QOP may have decreased the percentage unemployed among younger enrollees: the regression-adjusted impact is -5 percentage points and statistically significant at the 90 percent confidence level.

<sup>52</sup> Although we do not find impacts on high school completion or other outcomes for the population of all QOP enrollees, it is still possible that some enrollees did benefit from QOP services. For example, QOP may have been more effective for younger enrollees, who had not experienced such severe academic difficulties as having failed a grade prior to high school, which was much more common among older enrollees.

<sup>53</sup> Among younger enrollees, QOP appears to have increased the likelihood of being arrested or charged and the likelihood of being convicted of or pleading guilty to a crime in the two years before the survey. QOP also increased the likelihood of older enrollees being arrested or charged and the likelihood of having children

*(continued)*

multiple comparisons or obtain regression-adjusted impacts (see Appendix F), these impacts are no longer statistically significant. We thus do not find strong evidence of impacts on risky behaviors or family life for either group.

Comparing the impacts estimated from the third telephone survey and reported here with the impacts estimated from the second telephone survey and reported in Schirm and Rodriguez-Planas (2004), we find that the pattern across age groups is generally similar for impacts on postsecondary attainment, although we no longer find impacts on college attendance and completion for younger enrollees. Nonetheless, as before, we find more favorable impacts on postsecondary education or training for younger enrollees than for older enrollees. In contrast, we find somewhat different patterns of impacts on employment and on risky behaviors and family life. We no longer find detrimental impacts for younger enrollees on employment or full-time employment. Finally, while we found no impacts on high school completion before, we now find that QOP increased high school completion rates among younger enrollees.

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*(continued)*

with whom they are not currently living. For only the last of these outcomes is the impact on older enrollees significantly different from the impact on younger enrollees.

**Table 13. Impacts on High School Completion by Age When Entering Ninth Grade (Percentage Points)**

Outcome	Impacts		Total Sample
	Age > 14	Age ≤ 14	
Received HS diploma	-8	7*†	0
Received HS diploma or GED	0	6*	2

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, first, and second 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 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	2	1
Completed at least 1 year at a 4-year college	2	2	1
Completed at least 2 years at a 4-year college	0	2	1
Earned a bachelor's degree	2	0	1
Ever attended or currently attending a 2- or 4-year college	0	7	4
Completed at least 1 year at a 2- or 4-year college	-2	5	2
Completed at least 2 years at a 2- or 4-year college	-2	5	2
Earned a bachelor's or associate's degree	-2	0	-1
Ever or currently in college, voc/tech school, an apprenticeship, or the military	2	10**	6
Completed 2 years of college or military service, completed voc/tech school or an apprenticeship, or honorably discharged from the military	-3	10**	5
Completed an associate's or bachelor's degree, voc/tech school or an apprenticeship, in the military for more than 2 years, or honorably discharged from the military	-1	5	2
Ever or currently in college, voc/tech school, an apprenticeship, the military, or Job Corps	3	8*	6
Currently in a 4-year college	1	-3	-2
Currently in a 2- or 4-year college	-3	-4	-4
Currently in college, voc/tech school, an apprenticeship, or the military	0	-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 and second telephone surveys, and outcomes measured in the in-person, first, and second telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

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 †† 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 Employment and Earnings by Age When Entering Ninth Grade (Percentage Points, Unless Otherwise Indicated)**

Outcome	Impacts		
	Age > 14	Age ≤ 14	Total Sample
Currently employed	-4	3	-1
Currently unemployed	2	-6	-1
Currently out of labor force	2	3	2
Currently employed or in college, voc/tech school, an apprenticeship, or the military	-3	5	1
Ever employed	-1	2	0
Employed in past 12 months	-2	2	-1
Percentage of weeks employed in past 12 months (percentage of weeks)	-10 <sup>†</sup>	4 <sup>†</sup>	-2
Number of jobs in past 12 months (number of jobs)	-0.2 <sup>††</sup>	0.2 <sup>***†††</sup>	0.0
Tenure at current job (months)	-6 <sup>*††</sup>	2 <sup>††</sup>	-2
Usual number of hours worked per week in all current jobs (hours)	-3	2	-0
Works at least 35 hours per week at main current job	-2	1	-0
Total earnings in past 12 months (dollars)	-1,524	465	-522
Hourly earnings at main current job (dollars)	-4.24 <sup>†</sup>	0.99 <sup>†</sup>	-1.20
Has a job with health insurance	-8	1	-3
Has a job with paid time off	-11 <sup>†</sup>	4 <sup>†</sup>	-2
Has a job with a pension or retirement benefits	-7	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 and second telephone surveys, and outcomes measured in the in-person, first, and second 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  
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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 16. Impacts on Risky Behaviors, Physical and Mental Well-Being, and Family Life by Age When Entering Ninth Grade (Percentage Points)**

Outcome	Impacts			Total Sample
	Age > 14	Age ≤ 14	Age ≤ 14	
Smoked cigarettes or used tobacco in past month	4	-4	-4	0
Smoked cigarettes or used tobacco daily in past month	-2	-3	-3	-2
Binge drinking in past month	-7	5	5	0
Binge drinking on 8 or more days in past month	2	3	3	3
Used an illegal drug in past month	-2	-1	-1	-0
Committed a crime in past 3 months	3	2	2	3*
Committed a crime in past 2 years	7	4	4	5
Arrested or charged in past 2 years	9*	5**	5**	6**
Convicted or pled guilty in past 2 years	2	3*	3*	2
Served time in jail, prison, or detention home in past 2 years	2	2	2	1
Self-reported health is fair, poor, or very poor	2	1	1	2
Physical or mental condition limited activities quite a lot or could not work because of these limitations	0	-0	-0	1
Had first child before age 18	4	-1	-1	2
Currently living with natural children, but no spouse	-5	3	3	1
Have children with whom not currently living	11*††	-4††	-4††	1
Have child with whom not living and not providing any regular child support	2	-3	-3	-2
Currently receiving welfare	8	-1	-1	1
Currently receiving food stamps	5	1	1	2
Currently receiving welfare or food stamps	8	0	0	3

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 and second telephone surveys, and outcomes measured in the in-person, first, and second 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) 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 few significant impacts and, thus, no strong, consistent patterns of impacts (see Tables 17-20). For enrollees in the bottom third of the distribution, QOP increased by 12 percentage points the likelihood of completing at least two years of college or military service or completing vocational/technical school or an apprenticeship. We also find that QOP decreased by 7 percentage points the likelihood of being enrolled in college at the time of the third telephone survey. However, this impact on college enrollment was not statistically significant when we adjusted significance levels for the multiple outcomes considered. QOP had no other impacts on enrollees in the bottom third of the baseline grade distribution. Overall, we find only weak evidence of beneficial impacts on enrollees in the bottom third of the baseline grade distribution.

For enrollees in the middle third of the baseline grade distribution, QOP had no beneficial impacts and detrimental impacts on some outcomes pertaining to criminal activity.<sup>54</sup> It increased by 9 percentage points the likelihood of committing a crime in the three months before the third telephone survey. QOP also increased the likelihood of being arrested or charged (by 7 percentage points), being convicted of or pleading guilty to a crime (by 4 percentage points), and serving time (by 4 percentage points) in the two years before the survey. However, only the impact on the likelihood of having committed a crime in the past three months was significantly different from the impacts on all other enrollees (see Table 20). Thus we find strong evidence of a detrimental impact on criminal activity in the three months prior to the survey but weaker evidence of detrimental impacts on involvement with the criminal justice system in the two years before the survey.

Finally, for enrollees in the top third of the baseline grade distribution, QOP had one detrimental impact but no beneficial impacts.<sup>55</sup> QOP increased by 9 percentage points the

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<sup>54</sup> When we adjust for random baseline differences using regression methods, we find a statistically significant increase of nine percentage points in the completion of a high school diploma or GED among QOP enrollees in the middle third of the grade distribution (p-value=0.04). The non-regression-adjusted impact is seven percentage points and not statistically significant (p-value=0.23).

<sup>55</sup> There is some evidence of an increase in postsecondary activities and employment among enrollees in the top third of the grade distribution. When we adjust for random baseline differences using regression methods, we find that QOP increased by 10 percentage points the percentage of these enrollees who are currently out of the labor force (p-value=0.09). The non-regression-adjusted impact is 9 percentage points but not statistically significant (p-value=0.11). The regression-adjusted impact on the percentage ever employed is also statistically significant (an increase of 3 percentage points, p-value=0.07), while the non-regression-adjusted impact is of the same magnitude but not statistically significant (p-value=0.32). In both cases it is

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likelihood of living in a household receiving welfare. However, the evidence of an impact is weak because this impact is not significant when we adjust significance levels for multiple comparisons.

In our previous analyses of data collected when most sample members were in their late teens and data collected when most sample members were in their early twenties, we found, respectively, that QOP seemed to be most beneficial for enrollees in the middle third of the baseline grade distribution (Maxfield et al. 2003b) and for enrollees in the bottom two-thirds of the baseline grade distribution (Schirm and Rodriguez-Planas 2004).<sup>56</sup> In the current analysis of data collected when most sample members were entering their mid-twenties, however, we have not found convincing evidence of any such patterns.<sup>57</sup>

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*(continued)*

likely that the added precision gained through regression-adjustment decreases the variability in the estimates and thus leads to significant estimates.

<sup>56</sup> For enrollees in the bottom third of the distribution, Schirm and Rodriguez-Planas (2004) found that QOP 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, while decreasing the likelihood of illegal drug use by 10 percentage points. They found for enrollees in the middle third of the distribution that QOP increased by 7 percentage points the likelihood of completing at least two years of college. It also decreased enrollees' likelihood of illegal drug use (by 8 percentage points), their likelihood of committing a crime (by 6 percentage points), and their likelihood of having children with whom they were not living at the time of the second telephone survey (by 8 percentage points).

<sup>57</sup> Our current findings do not imply, however, that when sample members were younger, QOP did not have the beneficial impacts on risky behaviors described in the previous note.

**Table 17. Impacts on High School Completion by Rank in the Baseline Grade Distribution (Percentage Points)**

Outcome	Impacts				Total Sample
	Bottom Third	Middle Third	Top Third	Total Sample	
Received HS diploma	-1	6	-3	0	
Received HS diploma or GED	2	7	-4	2	

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, first, and second 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  
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 ††† 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 18. Impacts on Postsecondary Attainment by Rank in the Baseline Grade Distribution (Percentage Points)**

Outcome	Impacts					Total Sample
	Bottom Third	Middle Third	Top Third			
Ever attended or currently attending a 4-year college	4	1	-3			1
Completed at least 1 year at a 4-year college	3	1	-1			1
Completed at least 2 years at a 4-year college	5	-1	-1			1
Earned a bachelor's degree	0	1	2			1
Ever attended or currently attending a 2- or 4-year college	1	7	2			4
Completed at least 1 year at a 2- or 4-year college	-3	6	3			2
Completed at least 2 years at a 2- or 4-year college	5	-0	1			2
Earned a bachelor's or associate's degree	-1	-1	1			-1
Ever or currently in college, voc/tech school, an apprenticeship, or the military	5	6	5			6
Completed 2 years of college or military service, completed voc/tech school or an apprenticeship, or honorably discharged from the military	12**	-3	2			5
Completed an associate's or bachelor's degree, voc/tech school or an apprenticeship, in the military for more than 2 years, or honorably discharged from the military	8	-3	1			2
Ever or currently in college, voc/tech school, an apprenticeship, the military, or Job Corps	8	2	6			6
Currently in a 4-year college	0	-1	-6			-2
Currently in a 2- or 4-year college	-7*	-2	-3			-4
Currently in college, voc/tech school, an apprenticeship, or the military	-3	-3	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 and second telephone surveys, and outcomes measured in the in-person, first, and second 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 19. Impacts on Employment and Earnings by Rank in the Baseline Grade Distribution (Percentage Points, Unless Otherwise Indicated)**

Outcome	Impacts				Total Sample
	Bottom Third	Middle Third	Top Third		
Currently employed	1	3	-5		-1
Currently unemployed	4	-3	-5		-1
Currently out of labor force	-4	-1	9		2
Currently employed or in college, voc/tech school, an apprenticeship, or the military	-1	4	1		1
Ever employed	0	-2	3		0
Employed in past 12 months	1	4	-5		-1
Percentage of weeks employed in past 12 months (percentage of weeks)	-5	4	-4		-2
Number of jobs in past 12 months (number of jobs)	0.1	0.1	0.0		0.0
Tenure at current job (months)	2	-3	-3		-2
Usual number of hours worked per week in all current jobs (hours)	-0	2	-1		-0
Works at least 35 hours per week at main current job	2	3	-5		-0
Total earnings in past 12 months (dollars)	-1637	152	-571		-522
Hourly earnings at main current job (dollars)	-0.27	-3.11	0.34		-1.20
Has a job with health insurance	-5	2	-5		-3
Has a job with paid time off	-2	-2	-1		-2
Has a job with a pension or retirement benefits	-3	-5	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 and second telephone surveys, and outcomes measured in the in-person, first, and second 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 20. Impacts on Risky Behaviors, Physical and Mental Well-Being, and Family Life by Rank in the Baseline Grade Distribution (Percentage Points)**

Outcome	Impacts			Total Sample
	Bottom Third	Middle Third	Top Third	
Smoked cigarettes or used tobacco in past month	-9 <sup>†</sup>	6	3	0
Smoked cigarettes or used tobacco daily in past month	-6	4	-5	-2
Binge drinking in past month	-1	-5	3	0
Binge drinking on 8 or more days in past month	4	-1	2	3
Used an illegal drug in past month	6 <sup>†</sup>	-5	-0	-0
Committed a crime in past 3 months	1	9 <sup>**††</sup>	-2 <sup>††</sup>	3*
Committed a crime in past 2 years	7	5	3	5
Arrested or charged in past 2 years	5	7 <sup>**</sup>	5	6 <sup>**</sup>
Convicted or pled guilty in past 2 years	-0	4*	3	2
Served time in jail, prison, or detention home in past 2 years	-3 <sup>††</sup>	4 <sup>**</sup>	3	1
Self-reported health is fair, poor, or very poor	4	0	-3	2
Physical or mental condition limited activities quite a lot or could not work because of these limitations	0	1	1	1
Had first child before age 18	2	-1	5	2
Currently living with natural children, but no spouse	-1	1	3	1
Have children with whom not currently living	4	-3	2	1
Have child with whom not living and not providing any regular child support	-3	-2	1	-2
Currently receiving welfare	-5	3	9*	1
Currently receiving food stamps	2	-0	8	2
Currently receiving welfare or food stamps	0	3	9	3

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 and second telephone surveys, and outcomes measured in the in-person, first, and second 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

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## IMPACTS BY SITE

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Examining post-intervention impacts derived from data collected in the third telephone survey, we find that impacts appear to vary widely by site (see Tables 21-24). 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.<sup>58</sup>

Although, as noted, some seemingly large site impacts are not significant because of small sample sizes, many of the impacts that are significant should be interpreted cautiously, and regarded as suggestive rather than conclusive. In any evaluation, including this one, some impacts will be significant just by chance. In fact, even if there were no impacts, we would expect to find approximately 5 percent of the comparisons between treatment and control group members to imply significant differences at the 95 percent confidence level. When we adjust significance levels to account for the many comparisons that are being made when we derive site impacts in this evaluation, we find that most of the impacts become statistically insignificant. The ones that remain significant are those that are significant at the 99 percent confidence level.

The Cleveland site had the most consistent impacts, with statistically significant beneficial impacts on at least one outcome in each of the main categories, raising educational attainment and employment while lowering the prevalence of some risky behaviors. Cleveland was the only site to increase the percentage of enrollees who earned a high school diploma or GED, raising that percentage by 19 percentage points (to 77 percent). There is also some evidence that the Cleveland site increased by 20 percentage points the likelihood of earning a high school diploma, although the significance of that impact is sensitive to the way that we measure high school graduation (see Appendix F). The percentage of control group members who earned a high school diploma or GED was particularly low in Cleveland (55 percent)—approximately 10 percentage points lower than the next lowest site-level control group, and 20 percentage points lower than most of the other site's control groups (see below and Appendix H). The Cleveland site also increased postsecondary enrollment and completion, increasing the likelihood of enrolling in a 2- or 4-year college by 18 percentage points and of earning a bachelor's degree by 6 percentage points. In addition to these beneficial impacts on educational outcomes, the Cleveland site increased the likelihood of being employed, enrollees' hourly earnings, and the likelihood of enrollees having a job with paid time off. Finally, in Cleveland, QOP had beneficial impacts on outcomes relating to risky behaviors and family life, lowering smoking and binge drinking rates and lowering by 19 percentage points the likelihood of receiving welfare or food

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<sup>58</sup> To adjust for random differences that may exist between the treatment and control groups within each site, we also obtained regression-adjusted estimates, using the method described in Appendix F. We generally found very similar results to those presented here; important differences are discussed below.



stamps at the time of the third follow-up survey (to 24 percent). The only detrimental impact of QOP in Cleveland was a 13-percentage-point increase in the likelihood of committing a crime in the past two years (raising that to 25 percent), although the evidence for this impact is weak.<sup>59</sup> All of these impacts, except the detrimental impact on crime, were significantly different from the impacts for the other six sites combined.<sup>60</sup>

The Philadelphia site also had several beneficial impacts, particularly relating to postsecondary educational attainment. For example, the site increased by 18 percentage points the likelihood of ever attending a four-year college (to 20 percent), by 13 percentage points the likelihood of completing at least two years at a four-year college (to 13 percent), and by 7 percentage points the likelihood of attending a four-year college at the time of the third telephone survey (to 7 percent).<sup>61, 62</sup> We also found that the Philadelphia site decreased by 23 percentage points the likelihood of receiving welfare or food stamps at the time of the third follow-up survey (to 21 percent). All of these impacts were significantly different from the impacts for the other six sites combined. In contrast to these beneficial impacts, the Philadelphia site had detrimental impacts on the rate of frequent binge drinking and on the likelihood of enrollees having been arrested or charged with a crime in the two years before the third follow-up survey.

The only other site with a beneficial impact on educational attainment was Washington, DC, which increased by 15 points the percentage of enrollees who engaged in any postsecondary education or training (to 69 percent) as well as the percentage who completed at least two years of college or military service, completed vocational/technical school or an apprenticeship, or were honorably discharged from the military, raising that percentage by 19 points (to 39 percent).<sup>63</sup> The Washington, DC site also had beneficial impacts on the prevalence of risky behaviors, lowering the frequent binge drinking rate by 12 percentage points (to 2 percent) and the percentage of enrollees who have at least one child with whom they were not currently living by 13 percentage points (to 8 percent). All of these impacts, except the impact on engagement in any postsecondary education or training, are significantly different from the impacts in the other six sites. There were no detrimental impacts of QOP in Washington, DC.

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<sup>59</sup> This impact is sensitive to regression-adjustment as well as to adjustments for multiple comparisons.

<sup>60</sup> To provide some indication of how the site impacts vary and whether a site's impacts stand out from the impacts in the other sites, we compare each site's impact with the average impact for the other six sites combined. An alternative would be to compare each individual site's impact with the impact in every other site, but because of small sample sizes, such statistical tests would have even lower power to detect differences in impacts than the tests we have performed.

<sup>61</sup> No control group members in Philadelphia completed more than one year at a 4-year college, and none were currently enrolled in a 4-year college at the time of the third follow-up survey (see Appendix H).

<sup>62</sup> The impact on ever attending a four-year college is sensitive to regression-adjustment; when we obtain regression-adjusted impacts, the effect on that outcome in Philadelphia was 16 percentage points but not statistically significant. The impacts in Philadelphia on the other outcomes pertaining to enrollment and attainment at four-year colleges are not sensitive to regression-adjustment.

<sup>63</sup> There is also some evidence of an increase in the receipt of a high school diploma or GED in the Washington, DC site: the regression-adjusted impact is 14 percentage points and statistically significant.

In the other sites, most impact estimates were not significant, and those that were statistically significant were generally detrimental. The only beneficial impact that was significantly different from zero in a site other than Cleveland, Philadelphia, or Washington, DC, was a decrease in the proportion of QOP enrollees with poor self-reported health status in the Memphis site. All of the other significant impacts in Memphis, Houston, and Yakima were detrimental. These included detrimental impacts in Memphis on employment and job characteristics, with QOP lowering the likelihood of enrollees currently being employed by 15 percentage points and decreasing their job tenure and weeks and hours worked. The likelihood of being a single parent increased in Memphis by 26 percentage points (to 52 percent), while the likelihood of receiving welfare or food stamps increased by 13 percentage points (to 37 percent). The detrimental impacts in the Houston and Yakima sites mostly pertained to risky behaviors and family life. QOP increased binge drinking rates in both the Houston and Yakima sites. In Houston, QOP also increased tobacco use, illegal drug use, and the receipt of welfare or food stamps. None of the impacts in Fort Worth was significantly different from zero.<sup>64, 65</sup>

These impacts are broadly consistent with the pattern of impacts obtained before. Previously, Schirm and Rodriguez-Planas (2004) found that Cleveland and Philadelphia had beneficial impacts and no detrimental impacts. At that point in time, Washington, DC had mixed impacts, with a beneficial impact on illegal drug use but detrimental impacts on binge drinking and on the likelihoods of being a teen or single parent. The other sites had no significant impacts or mostly detrimental impacts, as we find here.

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<sup>64</sup> Grouping sites by funding source, we find that the five DOL-funded sites collectively had a combination of beneficial and detrimental impacts while the two Ford-funded sites had only insignificant or detrimental impacts. When we examine high school completion or employment and earnings we find no significant impacts in either the Ford- or DOL-funded sites. Considering impacts on postsecondary education or training, we find that the DOL-funded sites increased by 8 percentage points the likelihood of enrollees' ever engaging in any postsecondary education or training and increased by 7 percentage points the proportion of enrollees who completed at least two years of college or military service, completed vocational/technical school or an apprenticeship, or was honourably discharged from the military. However, these sites also increased some risky behaviors, increasing the percentage of enrollees who had been arrested or charged in the past two years by 4 percentage points and the percentage who had been convicted of a crime in the past two years by 3 percentage points. The DOL-funded sites also increased the rate of welfare receipt by 5 percentage points. The detrimental impacts in the two Ford-funded sites included an increase in frequent binge drinking of 14 percentage points, an increase in the percentage of enrollees who reported being in poor health of 10 percentage points, and an increase in the percentage of enrollees who had a child with whom they were not living of 14 percentage points. As was seen in the DOL-funded sites, the Ford-funded sites also increased criminal activity, raising the percentage of enrollees who had committed a crime in the past three months by 7 percentage points and the percentage who had been arrested or charged in the past two years by 12 percentage points. The impacts on self-reported poor health and on the percentage of enrollees who did not live with at least one of their children in the Ford-funded sites were significantly different from the impacts for the DOL-funded sites. Some of the differences in impacts between the DOL- and Ford-funded sites might be attributable to the differences in implementation discussed below 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.

<sup>65</sup> Some of these detrimental impacts, particularly those in Houston, are not statistically significant when we adjust for random baseline differences using regression methods.

To assess whether impacts might be related to fidelity to the QOP model, we examined whether the impacts are different for sites that were more or less successful at implementing the model.<sup>66</sup> As discussed above, Maxfield et al. (2003a) found that two sites—Fort Worth and Houston—implemented a version of QOP that deviated substantially from the QOP model, while the other five sites implemented versions that deviated moderately from the model.

Estimating impacts separately for these two groups of sites, we find that there are almost no differences in impacts (see Tables 25-28). Although the estimated impacts might tend to be more beneficial or less detrimental in the sites that deviated only moderately from the QOP model compared with the sites that deviated substantially from the model, neither group of sites had many beneficial impacts, and the impacts for the two groups of sites were generally not significantly different from each other. One exception is for employment in the past 12 months, on which the sites that deviated substantially from the QOP model had a significant 8-percentage-point beneficial impact whereas the other sites had a statistically insignificant 4-percentage-point detrimental impact. This may be partially due to an increase in postsecondary education and training in lieu of employment among enrollees in the latter group of sites, but the impacts on postsecondary education or training are not significant for either group of sites. The other outcomes on which the impacts are different between the two groups of sites are daily tobacco use and food stamp or welfare receipt, on which the sites that deviated moderately from the QOP model had detrimental impacts while the other sites had insignificant impacts. On balance, however, it does not appear that the observed variations in fidelity to the QOP model substantially influenced impacts. In the Discussion section, we review other potential explanations for differences in impacts.

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<sup>66</sup> Fidelity of implementation is not a baseline characteristic. It is, instead, an outcome, an outcome that might have influenced and been influenced by students' outcomes in a site. Thus, we should be cautious when interpreting impacts and making causal inferences pertaining to fidelity of implementation.

**Table 21. Impacts on High School Completion by Site (Percentage Points)**

Outcome	Impacts								Total Sample
	Fort Worth	Cleveland	DC	Houston	Memphis	Philadelphia	Yakima		
Received HS diploma	-8	20**††	8	2	-7	-6	-6	0	
Received HS diploma or GED	-4	19**†	12	-1	-8	-4	3	2	

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, first, and second 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 22. Impacts on Postsecondary Attainment by Site (Percentage Points)**

Outcome	Impacts										Total Sample
	Fort Worth	Cleveland	DC	Houston	Memphis	Philadelphia	Yakima				
Ever attended or currently attending a 4-year college	-2	6	-5	1	-5	18**††	-5			1	
Completed at least 1 year at a 4-year college	0	6	-6	1	-1	15**††	-6			1	
Completed at least 2 years at a 4-year college	-1	7	1	-1	-2	13**††	-6			1	
Earned a bachelor's degree	2	6**††	-4	-3	2	2	-1			1	
Ever attended or currently attending a 2- or 4-year college	4	18*	3	-5	1	-0	5			4	
Completed at least 1 year at a 2- or 4-year college	-5	7	-2	-5	8	3	6			2	
Completed at least 2 years at a 2- or 4-year college	-1	6	3	-4	-1	8	5			2	
Earned a bachelor's or associate's degree	3	6	-4	-5	-2	2	-5			-1	
Ever or currently in college, voc/tech school, an apprenticeship, or the military	7	12	15*	-6	10	12	-9			6	
Completed 2 years of college or military service, completed voc/tech school or an apprenticeship, or honorably discharged from the military	7	7	19**†	-3	7	2	-5			5	
Completed an associate's or bachelor's degree, voc/tech school or an apprenticeship, in the military for more than 2 years, or honorably discharged from the military	8	11	11	-5	4	-1	-12			2	
Ever or currently in college, voc/tech school, an apprenticeship, the military, or Job Corps	9	14	13	-9†	10	12	-9			6	
Currently in a 4-year college	-6	-2	-3	-2	1	7**††	-7			-2	
Currently in a 2- or 4-year college	-1	-4	0	-13*	-1	0	-7			-4	
Currently in college, voc/tech school, an apprenticeship, or the military	2	-0	2	-6	9	-1	-12			-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 and second telephone surveys, and outcomes measured in the in-person, first, and second 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 23. Impacts on Employment and Earnings by Site (Percentage Points, Unless Otherwise Indicated)**

Outcome	Impacts								Total Sample
	Fort Worth	Cleveland	DC	Houston	Memphis	Philadelphia	Yakima		
Currently employed	-5	18*†	-7	4	-15**†	3	-3	-1	
Currently unemployed	5	-16*†	5	1	2	-12	6	-1	
Currently out of labor force	0	-2	1	-4	12**	11	-2	2	
Currently employed or in college, voc/tech school, an apprenticeship, or the military	-4	15	6	1	-8	5	-7	1	
Ever employed	5	-5	2	4	-1	-0	-4	0	
Employed in past 12 months	8	2	0	8	-9	-3	-12	-1	
Percentage of weeks employed in past 12 months	2	11	-6	2	-14**†	3	-9	-2	
Number of jobs in past 12 months (number of jobs)	0.1	0.1	0.2	-0.0	-0.1	0.1	0.0	0.0	
Tenure at current job (months)	-1	4	-5*	2	-9***††	-2	-0	-2	
Usual number of hours worked per week in all current jobs (hours)	-1	6	-3	2	-7*†	2	-0	-0	
Works at least 35 hours per week at main current job	-10	8	-11	5	-0	11	-5	-0	
Total earnings in past 12 months (dollars)	2,259	2,240	-362	1549	-2,658	-2,464	-4,217	-522	
Hourly earnings at main current job (dollars)	-0.82	2.14*††	1.04	-0.40	-1.69	-4.96	-3.73	-1.20	
Has a job with health insurance	-5	14†	-15	-4	-6	-6	-1	-3	
Has a job with paid time off	-5	17*††	-13	-4	-17**†	10	-5	-2	
Has a job with a pension or retirement benefits	1	7	-9	-4	-0	2	-6	-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 and second telephone surveys, and outcomes measured in the in-person, fist, and second 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 24. Impacts on Risky Behaviors, Physical and Mental Well-Being, and Family Life by Site (Percentage Points)**

Outcome	Impacts								Total Sample
	Fort Worth	Cleveland	DC	Houston	Memphis	Philadelphia	Yakima		
Smoked cigarettes or used tobacco in past month	-0	-31***†††	1	15*†	-3	13	6	0	
Smoked cigarettes or used tobacco daily in past month	7	-27***†††	-5	9†	-0	5	0	-2	
Binge drinking in past month	-11	-17*†	-6	14*†	7	-2	17	0	
Binge drinking on 8 or more days in past month	-1	-0	-12*††	3	-0	8*	20***††	3	
Used an illegal drug in past month	-1	-1	3	9*†	-2	-12	0	-0	
Committed a crime in past 3 months	1	1	-3†	1	5	6	8	3*	
Committed a crime in past 2 years	2	13*	-2	-1	6	8	5	5	
Arrested or charged in past 2 years	1	9	2	4	4	16*	7	6**	
Convicted or pled guilty in past 2 years	2	4	1	-1	6*	4	-1	2	
Served time in jail, prison, or detention home in past 2 years	1	4	3	-3	4	4	-4	1	
Self-reported health is fair, poor, or very poor	-5	-4	5	3	-9***††	9	11*†	2	
Physical or mental condition limited activities quite a lot or could not work because of these limitations	4	6	-1	-3	7*	-7	-1	1	
Had first child before age 18	4	1	4	-2	9	2	-0	2	
Currently living with natural children, but no spouse	-5	-2	8	-5	26***†††	-15	1	1	
Have children with whom not currently living	-1	9	-13*†	-7	-9	13	16†	1	
Have child with whom not living and not providing any regular child support	1	2	-9	-3	-3	5	-7	-2	
Currently receiving welfare	7	4	4	6	7	-18†	-0	1	
Currently receiving food stamps	7	-20*††	12	15**†	13*	-22*††	9	2	
Currently receiving welfare or food stamps	7	-19*††	12	16**†	13*	-23*††	12	3	

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 and second telephone surveys, and outcomes measured in the in-person, first, and second 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 25. Impacts on High School Completion by Site's Deviation from QOP Model (Percentage Points)**

Outcome	Impacts		
	Sites that Deviated Substantially from QOP Model	Sites that Deviated Moderately from QOP Model	Total Sample
Received HS diploma	-3	2	0
Received HS diploma or GED	-3	4	2

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, first, and second 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 26. Impacts on Postsecondary Attainment by Site's Deviation from QOP Model (Percentage Points)**

Outcome	Impacts		Total Sample
	Sites that Deviated Substantially from QOP Model	Sites that Deviated Moderately from QOP Model	
Ever attended or currently attending a 4-year college	-0	2	1
Completed at least 1 year at a 4-year college	1	2	1
Completed at least 2 years at a 4-year college	-1	2	1
Earned a bachelor's degree	-1	1	1
Ever attended or currently attending a 2- or 4-year college	-1	6	4
Completed at least 1 year at a 2- or 4-year college	-5	4	2
Completed at least 2 years at a 2- or 4-year college	-3	4	2
Earned a bachelor's or associate's degree	-1	-1	-1
Ever or currently in college, voc/tech school, an apprenticeship, or the military	1	8	6
Completed 2 years of college or military service, completed voc/tech school or an apprenticeship, or honorably discharged from the military	2	6	5
Completed an associate's or bachelor's degree, voc/tech school or an apprenticeship, in the military for more than 2 years, or honorably discharged from the military	1	3	2
Ever or currently in college, voc/tech school, an apprenticeship, the military, or Job Corps	-0	8	6
Currently in a 4-year college	-4	-1	-2
Currently in a 2- or 4-year college	-7	-2	-4
Currently in college, voc/tech school, an apprenticeship, or the military	-2	-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 and second telephone surveys, and outcomes measured in the in-person, first, and second 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 27. Impacts on Employment and Earnings by Site's Deviation from QOP Model (Percentage Points, Unless Otherwise Indicated)**

Outcome	Impacts		Total Sample
	Sites that Deviated Substantially from QOP Model	Sites that Deviated Moderately from QOP Model	
Currently employed	-1	-1	-1
Currently unemployed	3	-3	-1
Currently out of labor force	-2	4	2
Currently employed or in college, voc/tech school, an apprenticeship, or the military	-1	2	1
Ever employed	5 <sup>†</sup>	-2 <sup>†</sup>	0
Employed in past 12 months	8 <sup>*††</sup>	-4 <sup>††</sup>	-1
Percentage of weeks employed in past 12 months (percentage of weeks)	2	-3	-2
Number of jobs in past 12 months (number of jobs)	0.0	0.1	0.0
Tenure at current job (months)	0	-2	-2
Usual number of hours worked per week in all current jobs (hours)	0	-0	-0
Works at least 35 hours per week at main current job	-3	0	-0
Total earnings in past 12 months (dollars)	1,904	-1,492	-522
Hourly earnings at main current job (dollars)	-0.61	-1.44	-1.20
Has a job with health insurance	-4	-3	-3
Has a job with paid time off	-4	-1	-2
Has a job with a pension or retirement benefits	-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 and second telephone surveys, and outcomes measured in the in-person, first, and second 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 28. Impacts on Risky Behaviors, Physical and Mental Well-Being, and Family Life by Site's Deviation from QOP Model (Percentage Points)**

Outcome	Impacts			Total Sample
	Sites that Deviated Substantially from QOP Model	Sites that Deviated Moderately from QOP Model	Sites that Deviated from QOP Model	
Smoked cigarettes or used tobacco in past month	7	-3	-3	0
Smoked cigarettes or used tobacco daily in past month	8*††	-5††	-5††	-2
Binge drinking in past month	1	-0	-0	0
Binge drinking on 8 or more days in past month	1	3	3	3
Used an illegal drug in past month	4	-2	-2	-0
Committed a crime in past 3 months	1	3	3	3*
Committed a crime in past 2 years	1	6*	6*	5
Arrested or charged in past 2 years	2	8**	8**	6**
Convicted or pled guilty in past 2 years	1	3	3	2
Served time in jail, prison, or detention home in past 2 years	-1	2	2	1
Self-reported health is fair, poor, or very poor	-1	3	3	2
Physical or mental condition limited activities quite a lot or could not work because of these limitations	1	1	1	1
Had first child before age 18	1	3	3	2
Currently living with natural children, but no spouse	-5	4	4	1
Have children with whom not currently living	-4	3	3	1
Have child with whom not living and not providing any regular child support	-1	-2	-2	-2
Currently receiving welfare	6*	-1	-1	1
Currently receiving food stamps	11***†	-2†	-2†	2
Currently receiving welfare or food stamps	12***†	-1†	-1†	3

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 and second telephone surveys, and outcomes measured in the in-person, first, and second 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

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## SUMMARY OF IMPACTS

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Several findings emerge from our analysis of the data collected in the final survey of the evaluation:

- QOP did not achieve its first primary objective. It did not increase the likelihood of graduation from high school with a diploma. It also did not increase the likelihood of high school completion by earning either a diploma or GED.
- QOP has not achieved its second primary objective. It has not increased the likelihood of ever engaging in postsecondary education or training, including college, vocational/technical school, an apprenticeship, or the military. Furthermore, QOP has not increased persistence in such activities and thus, attainment of postsecondary education or training. Although data collected earlier in the evaluation indicated that QOP was increasing rates of entry into postsecondary education or training when sample members were in their late teens and early twenties (Maxfield et al. 2003b; Schirm and Rodriguez-Planas 2004), the most recently collected data reveal that this impact was not sustained in the longer run as sample members entered their mid-twenties.
- QOP has not improved employment-related outcomes. Improving such outcomes was a principal motivation for QOP's two primary objectives and, thus, an implicit long-run goal of the program. However, when sample members were entering their mid-twenties, QOP had not increased their likelihood of being employed, the fraction of time employed, annual or hourly earnings, or the likelihood of having a job with benefits such as health insurance, paid time off, or pension and retirement benefits.
- QOP has not generally achieved its secondary objective of reducing the broad range of risky behaviors targeted by the program. When sample members were in their late teens, QOP did not reduce any risky behaviors, such as binge drinking, illegal drug use, crime, or teen parenting (Maxfield et al. 2003b). Although it still did not reduce binge drinking or crime when enrollees were in their early twenties, QOP did reduce illegal drug use (Schirm and Rodriguez-Planas 2004). More recently, according to data collected when sample members were entering their mid-twenties, QOP has not had any such beneficial effects in reducing substance abuse but has had detrimental effects on crime and involvement with the criminal justice system, increasing by 3 percentage points the likelihood of committing a crime in the three months before the most recent survey and by 6 percentage points the likelihood of being arrested for or charged with a crime in the two years before the survey.

However, some sites and subgroups of students showed some promising results.

- QOP seems to have been more effective for younger enrollees than for older enrollees. QOP increased rates of high school completion and engagement in postsecondary education or training among younger enrollees (the two-thirds of enrollees who were age 14 or younger when they entered the ninth grade), but it had no such impacts on

older enrollees (those age 14 or older when they entered the ninth grade). Although most differences between subgroup impacts are not statistically significant because of small sample sizes, we observed a significant difference between impacts for younger and older enrollees in the likelihood of receiving a high school diploma. Other findings pertaining to subgroup impacts include the following:

- QOP had some impacts on both females and males but does not seem to have consistently benefited one group more than the other. For females, QOP reduced the likelihood of engagement in postsecondary education or training at the time of the last survey but increased the likelihood of having a job with benefits such as health insurance or pension or retirement benefits. For males, QOP had one beneficial impact—it increased the likelihood of receiving a high school diploma or GED, although the evidence is not strong. QOP also had detrimental impacts on males. It decreased the likelihood of having a job with benefits and increased the likelihood of criminal activity and involvement with the criminal justice system.
- QOP increased rates of high school completion and engagement in postsecondary education or training among younger enrollees but not among older enrollees, as noted above. For younger enrollees, QOP increased by 7 percentage points the likelihood of receiving a diploma and by 6 percentage points the likelihood of receiving a diploma or GED. It also increased by 10 percentage points both the likelihood of ever engaging in postsecondary education or training and the likelihood of completing at least two years of college or the military, completing vocational/technical school or an apprenticeship, or being honorably discharged from the military. Only the impact on diploma receipt among younger enrollees is significantly different from the impact among older enrollees.
- QOP had few significant impacts and no strong, consistent pattern of impacts across subgroups defined by rank in the eligible baseline grade distribution. (The eligible grade distribution was based on grade point average in the eighth grade and excluded youth who were ineligible for QOP because their grades were too high.)
- 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. Findings pertaining to site impacts include the following:
  - The Cleveland, Philadelphia, and Washington, DC sites had mostly beneficial impacts.
  - With the exception of a decrease in the proportion of enrollees with poor self-reported health status in the Memphis site, none of the other four sites—Fort Worth, Houston, Memphis, or Yakima—had beneficial impacts while some had detrimental impacts.
  - The Cleveland site was the only site that increased high school completion, raising the likelihood of earning a diploma or GED by 19 percentage points. The Cleveland site also increased the likelihood of ever attending a two- or four-year college by 18 percentage points and the likelihood of earning a bachelors degree by 6 percentage points. In addition to beneficial impacts on some employment-related outcomes and on smoking and binge drinking rates, the Cleveland site reduced by 19 percentage

points the likelihood of receiving welfare or food stamps. A 13-percentage-point increase in the likelihood of committing a crime in the two years before the most recent survey was the Cleveland site's only detrimental impact.

- The Philadelphia site had beneficial impacts on postsecondary educational attainment, increasing by 18 percentage points the likelihood of ever attending a four-year college and by 13 percentage points the likelihood of completing at least two years at a four-year college. Although the Philadelphia site had detrimental impacts on the rate of frequent binge drinking and the likelihood of being arrested or charged with a crime in the two years before the most recent survey, it reduced by 23 percentage points the likelihood of receiving welfare or food stamps.
- The Washington, DC site increased postsecondary education or training, raising by 15 percentage points the likelihood of ever engaging in postsecondary education or training and by 19 percentage points the likelihood of completing at least two years of college or military service, completing vocational/technical school or an apprenticeship, or being honorably discharged from the military. The Washington, DC site also had beneficial impacts on the rate of frequent binge drinking and the likelihood of having a child with whom the enrollee was not living.

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## DISCUSSION

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Four questions motivate this discussion:

1. Why didn't QOP have larger impacts overall?
2. Why were the results in the demonstration different from those of the pilot study?
3. Why were there impacts for some groups but not for others?
4. What lessons does this provide for the future?

### **Why Didn't QOP Have Larger Impacts Overall?**

We might have expected QOP to have large impacts. One reason for high expectations is that some results from the pilot study were seen as promising, leading DOL and the Ford Foundation to initiate the larger-scale demonstration. Another reason is that although there were some potential problems, QOP avoided two design flaws that have been common to other programs for disadvantaged youth: (1) as a result of their recruiting and application procedures, most programs serve motivated students who are likely to do well even in the absence of a program, and (2) their program interventions are weak. Both flaws are often cited in explanations for why many youth programs have failed to achieve large impacts. However, with respect to the first flaw, QOP was designed to serve all eligible students or, with the evaluation, a random sample of eligible students. QOP did not have an application process that would “weed out” less motivated students or any other screening procedures—such as requiring recommendations—that would “cream” students likely to perform well without any assistance. With regard to the second flaw, QOP was more intensive and comprehensive than most programs, even when not implemented with full fidelity to the model.

Despite its promise, QOP achieved no success overall. Next, we speculate about why it was not more successful. We can only speculate because the evaluation did not control for the factors discussed below, such as variations in implementation and participation. Therefore, we cannot state conclusively or even with much confidence that QOP would have had large impacts had it done something differently. Thus, this discussion of our findings must be taken as suggestive rather than conclusive, motivated to prompt discussion and further research.

**Implementation Problems.** The demonstration sites had difficulty implementing the full QOP model, with five sites deviating from the model moderately and two sites deviating from it substantially, as discussed above. Every site had only limited success in implementing the education component of the model, which is consistent with the lack of impacts on education-related outcomes such as high school completion and postsecondary enrollment. 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 and sought to improve class attendance and course grades—activities that might have kept enrollees from failing some courses and enhanced enrollees' prospects for graduating—we found previously that QOP did not improve

enrollees' high school 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 the mentoring/case management component, which was much better implemented than the education component, was to keep enrollees focused on 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 distractions and responsibilities that would divert the enrollee's attention from school. However, these efforts were apparently not sufficient for the average enrollee.

The lack of beneficial impacts on risky behaviors might not be surprising given that QOP did not begin until enrollees were already in high school and engaging in risky behaviors. Even though QOP's developmental component was implemented much more successfully than some other components, it was geared to 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). At the beginning of the demonstration, sites underestimated enrollees' needs for supportive services such as child care, substance abuse treatment, and family counseling, and, later, they struggled to address those needs. Thus, QOP might not have been able to break, for example, an ongoing pattern of substance abuse. 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.

Despite sites' problems in implementing the QOP model, we did not find differences in impacts between sites that deviated moderately from the model and those that deviated substantially from the model. Though a fairly crude comparison, our finding suggests that implementation problems alone do not explain QOP's lack of success.

**Low Levels of Participation.** Another explanation for QOP's limited impacts could be the low levels of participation relative to the target set by program developers. The target was set as a standard of participation that would, presumably, enable enrollees to attain QOP's objectives.

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 in program activities during the first year by the average QOP enrollee fell substantially below the program goal. Over time, hours of participation fell for the average enrollee while the proportion of enrollees with little connection to the program grew steadily, as discussed above. Relative to enrollees' high school experiences, participation in QOP and, specifically, the program's educational activities, might have been insufficient to substantially affect educational outcomes. Furthermore, low participation during the last year or two of the demonstration may have meant that few enrollees were substantially engaged in QOP at precisely the time when those who had not dropped out of high school were nearing the end of high school and considering postsecondary activities. In the fourth year, when enrollees were scheduled to be in twelfth grade, average participation in QOP was 103 hours per enrollee—14 percent of the target—and about one-quarter of enrollees were not participating at all. The enrollees who were still participating actively at the end of the demonstration may have been the most motivated and likely to succeed even in the absence of



QOP. Under such conditions, it might have been difficult for QOP to influence the choices made by many enrollees regarding postsecondary activities.

These findings lead to the question of whether higher levels of participation cause larger impacts. However, it is difficult to answer that question conclusively. The only experimentally controlled factor in the demonstration was whether a student was enrolled in QOP. We could not control other factors, such as the level of enrollees' participation. Therefore, because we cannot construct appropriate comparison groups, we cannot estimate the impact for enrollees with high participation or the impact for enrollees with low participation.<sup>67</sup>

What we can do, however, is examine the average outcomes of QOP enrollees with higher and lower levels of participation; if we do not observe large differences, we might conclude that we would be unlikely to find differences in the impacts for these groups. However, we find that QOP enrollees with higher levels of participation do tend to have higher educational attainment and higher levels of employment and earnings than enrollees with lower levels of participation (see Table 29). Thus, it is possible that QOP had large impacts on the group of enrollees with higher participation. However, we also see that enrollees with higher levels of participation in QOP also had different baseline characteristics from those with lower participation levels. In particular, the enrollees with higher participation had higher grades than those with lower participation. We observed only a small set of baseline characteristics for our evaluation sample, and it is likely that these two groups also differ on unobserved characteristics such as motivation and parental support. We thus cannot identify whether the differences in outcomes are attributable to QOP or to differences in the pre-existing characteristics of the sample members with higher and lower participation levels.

**Limited Influence on Enrollees' Schools and Classroom Experiences.** QOP was not designed to influence the structure, policies, or operation of the high schools with which the local QOP programs were associated. The lack of influence on those schools might help explain the lack of impacts on education-related outcomes such as high school completion. QOP could not substantially influence what went on in the schools, which was where enrollees were supposed to spend most of their time and receive most of their academic instruction. The supplemental activities that QOP provided might not have been sufficient to overcome the problems in the schools and enable enrollees to graduate from high school and succeed in postsecondary education.

### **Why Were the Results in the Demonstration Different From Those of the Pilot Study?**

Carried out between 1989 and 1994, the pilot study operated in five sites (Milwaukee, Oklahoma City, Philadelphia, San Antonio, and Saginaw). In each site, 50 eligible rising ninth-grade students were selected to participate in the pilot study, with 25 initially assigned at random to the treatment group and 25 to the control group. The results of the study were based on surveys

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<sup>67</sup> To estimate impacts for enrollees with high levels of participation, for example, we would need to apply quasi-experimental methods to identify a comparison group of control group members who would have had high levels of participation had they been selected to enroll in QOP (Frangakis and Rubin 2002). However, we lack sufficient baseline data for that purpose.

**Table 29. Comparison of Higher Participation Enrollees with Other Enrollees (percentages)**

	Higher Participation	Lower Participation	Difference
<b>Outcomes</b>			
Received High School Diploma	88	51	37***
Received High School Diploma or GED	94	67	27***
Completed at Least 2 Years at a 4-Year College	32	5	27***
Completed at Least 2 Years at a 2- or 4-Year College	45	15	30***
Currently Employed	71	66	4
Works at Least 25 Hours per Week at Main Current Job	43	59	-16*
Binge Drinking in Past Month	28	39	-10
Committed a Crime in Past 2 Years	8	21	-13*
Currently Receiving Welfare or Food Stamps	24	31	-6
<b>Baseline Characteristics</b>			
Male	62	53	10
Grades in Bottom Third	19	43	-24***
Grades in Top Third	52	27	24**
Age ≤ 14	75	63	12

SOURCE: MIS data and telephone survey.

NOTE: Higher participation is defined as participating in more than 1,500 hours of QOP activities during the demonstration. Approximately 13 percent of all QOP enrollees participated at that level. All other enrollees were classified as having lower participation.

Because the higher and lower participants are nonrandom samples of the full set of enrollees, differences in means between the two groups cannot be interpreted as the causal effect of higher versus lower participation.

\* 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

conducted with students within the first four years after entry into the program, with the final survey conducted in fall 1993, a few months after the students' scheduled high school graduation. At the end of the four-year pilot, the study reported beneficial effects of QOP on a variety of outcomes, including reductions in the high school dropout rate and teen parenting and increases in high school completion and enrollment in two- and four-year postsecondary institutions (Hahn, Leavitt, and Aaron 1994). Results varied substantially across sites, however, with most of the pilot-wide impacts attributable to a single site (Philadelphia), and few significant impacts found in any of the other sites. In fact, the Milwaukee site was completely dropped from all analyses because of poor implementation.<sup>68</sup>

In addition to noting the problems of implementation and the variations in impacts across sites, technical reviewers raised concerns about the methods used by the pilot evaluation and the implications for the findings. Thus, while encouraged by some of the results from the pilot, DOL

<sup>68</sup> Inclusion of all of the sites originally participating in the pilot study (including Milwaukee) would likely have led to smaller estimated effects in the pilot study.

and the Ford Foundation began planning in spring 1995 a second test of the program—the QOP demonstration. As documented in this report, we have not found for the demonstration the large positive effects that were found in the pilot.

To understand why the results from the pilot and demonstration are seemingly so different requires an understanding of some key differences in the design and implementation of the two studies. One potentially important difference is that the high schools in the DOL-funded sites in the demonstration were required to have high dropout rates (over 40 percent). No such requirement pertained to the Ford-funded sites or the pilot. Another difference is that the demonstration added a fifth year to the program, both to assist enrollees who had not graduated from high school on time and to help with the transition to postsecondary education for those going on to further schooling.

A potentially critical difference was the type of students served by the program. The pilot targeted low-income students while the demonstration targeted low-performing students. In the pilot, students were eligible for QOP if their families received public assistance. In contrast, students were eligible for the demonstration if their eighth-grade GPA placed them in the bottom two-thirds of the grade distribution for entering ninth graders.

These differences in the program eligibility criteria are reflected in the baseline characteristics of students in the two studies. In the pilot, 42 percent of students had a B average or better in eighth grade, and 83 percent had a C average or better (Hahn, Leavitt, and Aaron 1994; Table 1989-A). In contrast, the median eighth-grade GPA among students in the demonstration was 1.8 (a C-average).<sup>69</sup> A similar difference was evident in the Philadelphia site. In the pilot, 52 percent of students in Philadelphia had a B average or better in eighth grade. In contrast, students in the demonstration in the Philadelphia site had a median eighth-grade GPA of 71, corresponding to a C-.<sup>70</sup> Based on their experiences working with the two sets of QOP enrollees, the staff in the Philadelphia site who were involved in both the pilot and the demonstration reported that the academic needs of QOP enrollees were much greater in the demonstration than in the pilot.

There were also some differences between the levels of participation by QOP enrollees in the pilot and demonstration, with average levels of participation higher in the pilot than in the demonstration. In the pilot, enrollees averaged 315 hours per year in the first two years. The average in Philadelphia, the pilot site with the highest level of implementation fidelity, was 542 hours while the other three sites in the analysis averaged 239 hours. In comparison, across all demonstration sites, the level of participation averaged 214 hours per year in the first two years. As in the pilot, the Philadelphia demonstration site had the highest level of participation, with an average of 323 hours per year in the first two years. The other sites in the demonstration averaged 195 hours per year during that same period.

Another potentially important difference between the two studies is their timing, with the pilot starting six years before the demonstration. During the period between the studies, there might have been substantial changes in schools, the economy, and other factors influencing students'

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<sup>69</sup> This average pertains to the five sites with GPAs calculated on a four-point scale. In the two sites with a 100-point scale—Fort Worth and Philadelphia—the median GPAs were 82 and 71, respectively.

<sup>70</sup> Information for converting from one scale to another was obtained from the NAEP High School Transcript Study (U.S. Department of Education, National Center for Education Statistics 2004).

success during and after high school. However, it is unknown what effect such changes might have had on the impacts of QOP. Although comparing the outcomes of control group members in the pilot and demonstration studies could, in principle, shed some light on this issue, differences in the timing of the follow-up surveys in the two studies, as well as differences in the precise definitions of high school completion and postsecondary engagement, make that comparison infeasible.<sup>71</sup>

Given the differences between the two studies, it is difficult to reconcile the differences in their impacts. The demonstration, however, builds on the pilot and addresses some of its limitations, such as the small sample size. The demonstration provides the best estimates of the fairly recent effects of QOP on a relatively large sample of low-performing students.

### **Why Were There Impacts for Some Groups but Not for Others?**

Despite the lack of overall impacts, we do find promising results for a few groups of enrollees, particularly younger enrollees—those who likely had not been held back a year before high school—and enrollees in Cleveland, Philadelphia, and Washington, DC. In interpreting the subgroup and site impacts, however, we must be cautious because, in deriving so many estimates, we will obtain some significant impacts just by chance. When we adjust significance levels to account for chance impacts, we find that most of the impacts become statistically insignificant. Thus, these impacts should be regarded as suggestive rather than conclusive. Nonetheless, examining them might help reveal when and for whom QOP is potentially effective.

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 some 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 model, especially the education component, and 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 did the management of other sites. For example, the Philadelphia site spent more than twice as much per enrollee as 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.<sup>72</sup> However, while the impacts in Philadelphia were different from the impacts in the

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<sup>71</sup> According to Maxfield et al. (2003b), a substantial fraction—nearly 10 percent of control group members—had earned a GED within approximately six months of their scheduled high school graduation. However, it is not clear whether Hahn, Leavitt, and Aaron (1994) included GED completion in their measure of high school completion.

<sup>72</sup> 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

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other six sites combined for outcomes pertaining to four-year college attendance and welfare or food stamp receipt, we do not find evidence of strong, broad relationships across all outcomes and all sites between the quality of implementation and the level of impacts, as discussed in detail above.

Another possible explanation for the differences in impacts across sites could be different levels of participation by enrollees. However, we find little evidence supporting such an explanation. The sites with the lowest levels of participation—Houston and Fort Worth—are also the sites that deviated substantially from the QOP model, and we did not find significant differences in impacts between those two sites and the remaining five sites. The two sites with the highest levels of participation—Philadelphia and Yakima—were the two sites funded by the Ford Foundation. As reported above, we found that the DOL-funded sites generally had more beneficial impacts than did the Ford-funded sites. Both analyses suggest a weak relationship between a site’s average level of participation and size of impacts.

It is also important to remember that impacts are affected by not only enrollees’ experiences with QOP but also the broader conditions in which the programs operate. In Cleveland, for example, where we found beneficial impacts on a variety of outcomes, the students in the control group had particularly poor academic and employment outcomes relative to control group members in the other sites. In Cleveland, just 35 percent of control group members earned a high school diploma, while the average in every other site was at least 44 percent and generally above 60 percent. Likewise, the fraction of the control group in Cleveland that was employed at the time of the survey was the lowest in the demonstration. Fewer than half of control group members in Cleveland were employed at the time of the most recent survey as compared with at least 58 percent in every other site. Showing a similar pattern, control group members in Cleveland were more likely to engage in risky behaviors such as smoking and binge drinking as compared with control group members in other sites. Thus, the conditions in Cleveland, where youth eligible for QOP were likely to experience especially poor outcomes without intervention, might have created an opportunity for QOP to have relatively large beneficial effects.

### **What Lessons Does This Provide for the Future?**

There are dramatic discrepancies in high school completion and college-going rates between more and less advantaged students. Among all eighth graders in 1988, 95 percent of those in the highest quartile of socioeconomic status graduated from high school within 12 years while only 64 percent of those in the lowest quartile did so. College completion rates are even more disparate, with 51 percent of students in the highest quartile of socioeconomic status earning a bachelor’s degree within 12 years after eighth grade as compared with just 7 percent of those in the lowest quartile (U.S. Department of Education 2002b).

If policymakers seek to narrow these discrepancies, there is clearly a need for further research into and development of programs to improve the educational outcomes of at-risk students. The results obtained from the QOP demonstration indicate that QOP as a whole did not succeed for the

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effects of such factors. In addition, quasi-experimental methods to separate out these effects and, more generally, explain variations in impacts across sites, cannot help much 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. For a discussion of how the impacts of mentoring programs might be associated with various indicators of mentoring style, see Rhodes et al. (2002).

broad range of youth targeted by the demonstration. Because the demonstration was not designed to test whether specific components of the model were effective, it cannot provide conclusive answers about how to modify the QOP model or how to create an entirely new program. Furthermore, as we have discussed, examining subgroup and site impacts does not provide clear guidance. Nevertheless, some of our implementation and impact findings are suggestive and provide some basis for speculation that might stimulate further research into programs designed to improve the educational and employment outcomes of at-risk youth.

**Start Earlier.** QOP was designed to start at the beginning of ninth grade. However, two factors prevented the demonstration sites from becoming operational and nearing the peaks of their learning curves until the middle of that school year or even the following year. First, obtaining from each school accurate enrollment lists and information on students' eighth-grade performance (used for determining QOP eligibility) proved difficult and led to delays in determining eligibility, contacting students, and initiating program activities. Second, as discussed above, many program staff admitted that they did not fully understand the program model until at least a year into the demonstration. Thus, QOP or another program might be more effective if it enrolled students and were fully operational at the beginning of ninth grade. Such an approach would require substantial investments in training and preparation before the start of the program, including, for example, summer training sessions for all case managers and program staff and procedures for rapidly identifying eligible students.

However, starting at the beginning of ninth grade may not even be early enough. Programs intended to assist disadvantaged students may need to start earlier, for example, in late elementary school or at the beginning of middle school. By the beginning of ninth grade, many youth face substantial barriers to academic success; they are already performing well below grade level and engaging in risky behaviors. As discussed above, QOP's developmental component was implemented more successfully than some other components of the program but was geared to preventing rather than remediating the effects of risky behaviors. Thus, intervening earlier, as was suggested by QOP case managers, might help prevent youth from engaging in risky behaviors (Maxfield et al. 2003a).

Recent research also reinforces the importance of early intervention, showing a strong relationship between performance early in high school and dropping out later. According to Hirschman, Pharris-Ciurej, and Willhoft (2006, p. 15), "Failing a class in the first semester of high school or having a GPA below 1.0 (almost the same thing) resembles a death sentence in terms of high school graduation." To prevent this "death sentence," a program might need to change behaviors starting at the beginning of ninth grade or even earlier. Our results, which suggest that QOP was more effective for students age 14 or younger at the beginning of ninth grade, might provide some support for early intervention. The younger students had likely not been previously held back a year (or more) and, at the beginning of ninth grade, might have had fewer barriers to success as compared with students over age 14 when they enter high school.

**Individualize More.** QOP was designed to provide comprehensive services to a broad set of enrollees. QOP enrollees in the demonstration included undocumented residents, youth in special education programs, youth with disabilities, teen parents, youth involved in the juvenile justice system, out-of-school youth, and youth who were one or more grades behind in basic skill levels (Maxfield et al. 2003a). Thus, their service needs were diverse. Many of the QOP services were to be provided to all enrollees while other services were to be made available to enrollees as needed. QOP's case management component was designed to identify each enrollee's needs. However, with

the case management component not fully implemented, sites may not have tailored services effectively for each enrollee.

While providing a breadth of services may be important, it may be equally important to target those services to each individual, according to individual needs. Thus, a program could offer a broad set of services, across all enrollees, but with each enrollee receiving fewer services—those deemed critical for that enrollee’s success. A program would need to place strong emphasis on carefully identifying each enrollee’s needs. Maxfield et al. (2003a) suggested different program services for four different types of enrollees: those who had not yet engaged in risky behaviors; those who were held back in high school for one or more years but had not dropped out; those who had dropped out of high school and could not be persuaded to return; and those who had a child, were engaged in substance abuse, or had already engaged in criminal activity. For example, enrollees who had been held back in high school for one or more years but who did not drop out could receive services targeted to high school graduation, such as remedial academic services, while enrollees who had already dropped out of high school and could not be persuaded to return could receive services focused on receipt of a GED and enrollment in community college or other vocational training programs.

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## **APPENDIX A**

### **OBTAINING AN EVALUATION SAMPLE AND CONDUCTING RANDOM ASSIGNMENT**

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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.

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### DEVELOPING LISTS OF ELIGIBLES

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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.

## **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.

EXHIBIT A.1 (continued)

**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.<sup>73</sup> 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.<sup>74</sup>

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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<sup>73</sup> 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.

<sup>74</sup> 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.<sup>75</sup>

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.<sup>76</sup>

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.<sup>77</sup> 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.<sup>78</sup>

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<sup>75</sup> 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.

<sup>76</sup> For another school, QOP staff entered GPAs from students’ transcripts into a database.

<sup>77</sup> 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.

<sup>78</sup> 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 than 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.<sup>79</sup> 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.<sup>80</sup>

We discovered many errors in some lists submitted to us and returned the lists to the schools for corrections.<sup>81</sup> 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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<sup>79</sup> 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.

<sup>80</sup> 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.

<sup>81</sup> 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.

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## INITIAL SAMPLING

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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 H 2 H 1.1) students for the first school and 88 (= 40 H 2 H 1.1) students for the second school.<sup>82</sup> There were two exceptions to this rule for setting the sample size. First, if (the number of QOP slots H 2 H 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.<sup>83</sup>

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.

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### OBTAINING CONSENT

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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.<sup>84</sup> 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.<sup>85</sup>

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<sup>82</sup> 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.

<sup>83</sup> 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.

<sup>84</sup> Spanish language materials were available.

<sup>85</sup> 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.

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 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.<sup>86</sup> 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.

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<sup>86</sup> 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.

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 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.

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### **RANDOM ASSIGNMENT**

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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.

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### SCHOOL-BY-SCHOOL SUMMARY OF SAMPLE DEVELOPMENT

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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.<sup>87</sup>

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

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<sup>87</sup> 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.



sampling without replacement. Students who were selected for QOP became QOP enrollees. Students who were not selected for QOP became the control group.<sup>88</sup>

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<sup>88</sup> 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, DC		Fort Worth		Houston		Memphis			Philadelphia		Yakima		All Sites	
	Collinwood	Anacostia	Eastern	Total	Paschal	Austin	Yates	Total	Carver	Hamilton	Hillcrest	Total	Franklin	Davis	Total	Total	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 <sup>a</sup>	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 <sup>b</sup>	63	56	49	52	56	54	53	54	50	50	51	50	53	50	54		

<sup>a</sup>100 × Consenters/Net Eligible Sample

<sup>b</sup>100 × QOP Enrollees/Consenters

**APPENDIX B**  
**THE BASELINE DATA**

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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.

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### **DATA SOURCES FOR THE BASELINE DATABASE**

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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.

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### **DEVELOPMENT OF THE BASELINE DATABASE**

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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).

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**APPENDIX C**

**FOLLOW-UP DATA FROM THE THIRD TELEPHONE SURVEY**

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Data on nearly all outcomes considered in our analysis of initial post-intervention impacts were obtained from our third telephone survey, which was administered more than nine years after sample members entered the ninth grade (more than four years after the end of the demonstration).<sup>89</sup> 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, second, and third telephone surveys and high school transcripts. The first telephone survey was conducted during the fifth year of the demonstration and the second telephone survey was conducted two years after the end of the demonstration—more than two years before the third telephone survey.

In this appendix, we describe the fielding procedures for the third telephone survey.<sup>90</sup> Then, after discussing the response rates to the third telephone survey, we examine the prevalence of missing values for outcomes, that is, item nonresponse.

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### **FIELDING PROCEDURES FOR THE THIRD TELEPHONE SURVEY**

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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 third telephone survey were conducted using computer-assisted telephone interviewing (CATI) followed by in-person follow-up of nonrespondents. The interview took about 20 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 \$25 for completing the interview.

Overall, 64 percent of the sample members who responded did so via telephone, 35 percent responded in-person, and 1 percent responded by mail.<sup>91</sup>

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<sup>89</sup> The program in the Washington, DC site started one year later than the programs in the other sites, and in that site, the third telephone survey was conducted more than eight years after sample members entered the ninth grade (more than three years after the end of the demonstration).

<sup>90</sup> The fielding procedures for the previous data collection activities are presented in Schirm et al. (2003) and Schirm and Rodriguez-Planas (2004).

<sup>91</sup> 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”).

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## RESPONSE RATES FOR THE THIRD TELEPHONE SURVEY

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Table C.3 displays the completion rates for the third telephone survey and prior data collection activities relative to all 1,069 sample members in the original sample. The figures are presented separately for QOP and control group members and are presented for the full sample and by school. Table C.4 shows survey response rates for each data collection activity, where for each activity, the rates exclude those sample members who were known to have died prior to the start of that data collection activity or who had been removed from the tracking database prior to the data collection activity.

According to Table C.5, which provides more detail on the survey response rates and the final disposition report for the third telephone survey, the overall response rate to the survey was 76 percent. The difference in response rates between the QOP and control groups was 3 percentage points overall (77 percent for the QOP group and 74 percent for the control group). As with the previous surveys, the differential varied across schools and sites. Across sites, the largest difference in response rates between the QOP and control groups was for the Washington, DC, site (12 percentage points). As indicated in Table C.5, most nonrespondents to the third telephone survey were sample members who could not be located.

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## MISSING VALUES

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Item nonresponse was uncommon—often less than one percent—for most outcome measures used in the impact analysis (see Tables C.6 and C.7).<sup>92,93</sup> Moreover, item nonresponse differed very little between the QOP and control groups.

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<sup>92</sup> At the beginning of the data collection period, a small number of employment questions were mistakenly skipped. We attempted to recontact about 500 affected sample members, and successfully reached 92 percent (93 percent of the QOP group and 90 percent of the control group). Item response rates listed in Tables C.6 and C.7 combine results of the original and recontact surveys.

<sup>93</sup> The lowest response rates are for outcomes pertaining to employment and earnings during the 12 months prior to the survey. Some respondents did not know their total earnings or number of weeks worked during the 12-month period. Nonresponse to the recontact survey also contributed to the lower response rates for these outcomes.

**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
Third Telephone Survey	January 2005 - September 2005

**Table C.3. Completion Rates for Data Collection Activities, Relative to Original Sample (Percentages, except for sample sizes)**

Sample size	Fort Worth		Cleveland		Washington, DC		Houston		Memphis			Philadelphia		Yakima		All Sites Total
	Paschal	Collinwood	Eastern	Anacostia	Total	Yates	Austin	Total	Hillcrest	Hamilton	Carver	Total	Franklin	Davis	Total	
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	
Third telephone survey																
Overall	82	72	76	65	71	69	76	73	84	80	76	80	64	70	74	
QOP	81	73	83	70	76	72	76	74	89	78	80	83	66	66	76	
Control	83	69	69	59	65	66	76	71	78	81	71	77	62	74	72	

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

**Table C.4. Response Rates for Data Collection Activities (Percentages)**

	Fort Worth	Cleveland	Washington, D.C.	Houston	Memphis	Philadelphia	Yakima	All Sites
<b>In-person survey</b>								
Overall	84	83	82	88	84	89	78	84
QOP	89	85	88	92	86	92	82	88
Control	77	79	77	84	83	87	73	80
<b>Achievement tests</b>								
<b>Reading</b>								
Overall	82	83	84	89	84	89	77	84
QOP	87	85	90	93	86	92	82	88
Control	77	79	77	85	83	87	71	80
<b>Mathematics</b>								
Overall	82	83	84	89	84	89	75	84
QOP	86	85	90	93	86	92	80	88
Control	77	79	77	85	83	87	69	80
<b>First telephone survey</b>								
Overall	84	87	79	89	83	82	85	84
QOP	86	87	90	91	87	84	84	87
Control	82	86	66	86	79	80	86	80
<b>Second telephone survey</b>								
Overall	80	75	76	71	73	63	83	75
QOP	84	80	90	73	74	64	84	80
Control	75	66	61	68	71	61	82	70
<b>Third telephone survey</b>								
Overall	82	72	73	73	82	67	71	76
QOP	82	75	79	74	86	69	67	77
Control	83	69	67	73	79	65	76	74

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

**Table C.5. Third Telephone Survey Dispositions, by Site and QOP/Control Status**

Disposition	Fort Worth			Cleveland			Washington, DC			Houston		
	Total N=177	QOP N=100	Control N=77	Total N=158	QOP N=100	Control N=58	Total N=154	QOP N=80	Control N=74	Total N=186	QOP N=100	Control N=86
<b>Complete<sup>a</sup></b>												
Total	145 (82%)	81 (82%)	64 (83%)	113 (72%)	73 (74%)	40 (69%)	109 (73%)	61 (79%)	48 (67%)	135 (73%)	74 (74%)	61 (73%)
Telephone	83 (47%)	49 (49%)	34 (45%)	81 (52%)	58 (59%)	23 (40%)	70 (47%)	39 (51%)	31 (44%)	85 (47%)	50 (50%)	35 (42%)
Field	61 (35%)	32 (32%)	29 (38%)	29 (19%)	14 (14%)	15 (26%)	39 (26%)	22 (29%)	17 (24%)	48 (26%)	23 (23%)	25 (30%)
Mail	1 (1%)	0 (0%)	1 (1%)	3 (2%)	1 (1%)	2 (3%)	0 (0%)	0 (0%)	0 (0%)	2 (1%)	1 (1%)	1 (1%)
<b>Not Complete<sup>a</sup></b>												
Total	31 (18%)	18 (18%)	13 (17%)	43 (28%)	25 (26%)	18 (31%)	40 (27%)	16 (21%)	24 (33%)	49 (27%)	26 (26%)	23 (27%)
Refused	7 (4%)	3 (3%)	4 (5%)	8 (5%)	6 (6%)	2 (3%)	5 (3%)	2 (3%)	3 (4%)	7 (4%)	5 (5%)	2 (2%)
Military	0 (0%)	0 (0%)	0 (0%)	2 (1%)	1 (1%)	1 (2%)	3 (2%)	0 (0%)	3 (4%)	0 (0%)	0 (0%)	0 (0%)
Incarcerated or institutionalized	0 (0%)	0 (0%)	0 (0%)	3 (2%)	3 (3%)	0 (0%)	1 (1%)	0 (0%)	1 (1%)	3 (2%)	1 (1%)	2 (2%)
Not located	12 (7%)	8 (8%)	4 (5%)	30 (19%)	15 (15%)	15 (26%)	25 (17%)	10 (13%)	15 (21%)	36 (20%)	18 (18%)	18 (21%)
Out of area	6 (3%)	4 (4%)	2 (3%)	0 (0%)	0 (0%)	0 (0%)	2 (1%)	1 (1%)	1 (1%)	3 (2%)	2 (2%)	1 (1%)
Located, not interviewed	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Unavailable or Retired at end of field period	6 (3%)	3 (3%)	3 (4%)	0 (0%)	0 (0%)	0 (0%)	4 (3%)	3 (4%)	1 (1%)	0 (0%)	0 (0%)	0 (0%)
Deceased	0	0	0	2	2	0	5	3	2	2	0	2
Ineligible	1	1	0	0	0	0	0	0	0	0	0	0

**Table C.5 (continued)**

Disposition	Memphis			Philadelphia			Yakima			All Sites		
	Total N=199	QOP N=100	Control N=99	Total N=95	QOP N=50	Control N=45	Total N=100	QOP N=50	Control N=50	Total N=1,069	QOP N=580	Control N=489
Complete <sup>a</sup>												
Total	160 (82%)	83 (86%)	77 (79%)	61 (67%)	33 (69%)	28 (65%)	70 (71%)	33 (67%)	37 (76%)	793 (76%)	438 (77%)	355 (74%)
Telephone	98 (50%)	50 (52%)	48 (49%)	39 (43%)	22 (46%)	17 (40%)	48 (49%)	22 (45%)	26 (53%)	504 (48%)	290 (51%)	214 (44%)
Field	61 (31%)	32 (33%)	29 (30%)	21 (23%)	10 (21%)	11 (26%)	22 (22%)	11 (22%)	11 (22%)	281 (27%)	144 (25%)	137 (29%)
Mail	1 (1%)	1 (1%)	0 (0%)	1 (1%)	1 (2%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	8 (1%)	4 (1%)	4 (1%)
Not Complete <sup>a</sup>												
Total	35 (18%)	14 (14%)	21 (21%)	30 (33%)	15 (31%)	15 (35%)	28 (29%)	16 (33%)	12 (24%)	256 (24%)	130 (23%)	126 (26%)
Refused	1 (1%)	0 (0%)	1 (1%)	1 (1%)	0 (0%)	1 (2%)	3 (3%)	1 (2%)	2 (4%)	32 (3%)	17 (3%)	15 (3%)
Military	2 (1%)	0 (0%)	2 (0%)	2 (2%)	0 (0%)	2 (5%)	0 (0%)	0 (0%)	0 (0%)	9 (1%)	1 (0%)	8 (2%)
Incarcerated or institutionalized	4 (2%)	0 (0%)	4 (4%)	2 (2%)	1 (2%)	1 (2%)	0 (0%)	0 (0%)	0 (0%)	13 (1%)	5 (1%)	8 (2%)
Not located	16 (8%)	9 (9%)	7 (7%)	21 (23%)	10 (21%)	11 (26%)	15 (15%)	8 (16%)	7 (14%)	155 (15%)	78 (14%)	77 (16%)
Out of area	3 (2%)	2 (2%)	1 (1%)	2 (2%)	2 (4%)	0 (0%)	7 (7%)	4 (8%)	3 (6%)	23 (2%)	15 (3%)	8 (2%)
Located, not interviewed	0 (0%)	0 (0%)	0 (0%)	1 (1%)	1 (2%)	0 (0%)	2 (2%)	2 (4%)	0 (0%)	3 (0%)	3 (0%)	0 (0%)
Unavailable or Retired at end of field period	9 (5%)	3 (3%)	6 (6%)	1 (1%)	1 (2%)	0 (0%)	1 (1%)	1 (1%)	0 (0%)	21 (3%)	11 (2%)	10 (2%)
Deceased	4	3	1	4	2	2	2	1	1	19	11	8
Ineligible	0	0	0	0	0	0	0	0	0	1	1	0

<sup>a</sup> Percentages exclude 19 deceased cases and 1 ineligible case.

**Table C.6. Item Response Rates for Outcomes Pertaining to High School Completion, Postsecondary Education and Training, and Employment and Earnings (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	99.8	99.7	99.7
Completed at least 1 year at a 4-year college	99.3	99.7	99.5
Completed at least 2 years at a 4-year college	99.3	99.7	99.5
Earned a bachelor's degree	99.8	99.7	99.7
Ever attended or currently attending a 2- or 4-year college	99.8	99.7	99.7
Completed at least 1 year at a 2- or 4-year college	99.3	99.2	99.2
Completed at least 2 years at a 2- or 4-year college	99.3	99.2	99.2
Earned a bachelor's or associate's degree	99.8	99.7	99.7
Ever or currently in college, voc/tech school, apprenticeship, or military	100.0	99.7	99.9
Completed 2 years of college or military service, completed voc/tech school or an apprenticeship, or honorably discharged from the military	99.3	98.6	99.0
Completed an associate's or bachelor's degree, voc/tech school or an apprenticeship, in military for more than 2 years, or honorably discharged from the military	99.8	99.2	99.5
Ever or currently in college, voc/tech school, an apprenticeship, the military, or Job Corps	100.0	99.7	99.9
Currently in a 4-year college	99.8	99.7	99.7
Currently in a 2- or 4-year college	99.8	99.7	99.7
Currently in college, voc/tech school, an apprenticeship, or the military	99.8	99.2	99.5
Currently employed	100.0	99.2	99.6
Currently unemployed	99.8	98.9	99.4
Currently out of labor force	99.8	98.9	99.4
Currently employed or in college, voc/tech school, an apprenticeship, or the military	99.8	98.9	99.4
Ever employed	100.0	99.2	99.6
Employed in past 12 months	99.8	99.2	99.5
Percentage of weeks employed in past 12 months	89.5	87.6	88.6
Number of jobs in past 12 months	92.7	91.5	92.2
Tenure at current job	99.8	98.6	99.2
Usual number of hours worked per week in all current jobs	99.5	98.9	99.2
Works at least 35 hours per week at main current job	100.0	99.2	99.6
Total earnings in past 12 months	79.7	79.9	79.8
Hourly earnings at main current job	96.1	94.9	95.6
Has a job with health insurance	99.3	98.3	98.9
Has a job with paid time off	99.5	98.6	99.1
Has a job with pension or retirement benefits	98.6	97.7	98.2

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



**Table C.7. Item Response Rates for Outcomes Pertaining to Risky Behaviors, Physical and Mental Well-Being, and Family Life (Percentages)**

Outcome	QOP Group	Control Group	Total Sample
Smoked cigarettes or used tobacco in past month	99.5	98.9	99.2
Smoked cigarettes or used tobacco daily in past month	99.3	98.9	99.1
Binge drinking in past month	99.5	98.9	99.2
Binge drinking on 8 or more days in past month	99.5	98.9	99.2
Used an illegal drug in past month	99.5	98.6	99.1
Committed a crime in past 3 months	99.5	98.9	99.2
Committed a crime in past 2 years	99.5	98.9	99.2
Arrested or charged in past 2 years	99.5	98.9	99.2
Convicted or pled guilty in past 2 years	99.5	98.9	99.2
Served time in jail, prison, or detention home in past 2 years	99.5	98.9	99.2
Self-reported health is fair, poor, or very poor	99.5	99.2	99.4
Physical or mental condition limited activities quite a lot or could not work because of these limitations	99.5	99.2	99.4
Had first child before age 18	98.6	99.2	98.9
Currently living with natural children, but no spouse	99.5	98.6	99.1
Have children with whom not currently living	99.5	98.9	99.2
Have child with whom not living and not providing any regular child support	99.5	98.9	99.2
Currently receiving welfare	99.5	98.9	99.2
Currently receiving food stamps	99.5	98.9	99.2
Currently receiving welfare or food stamps	99.5	98.9	99.2

SOURCE: Third telephone survey.

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## **APPENDIX D**

### **OUTCOMES AND SUBGROUPS**

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

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## OUTCOMES

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The outcomes fall into four broad categories:

5. *High School Completion.* The outcomes in this category measure receipt of a high school diploma or receipt of a general educational development (GED) certificate.
6. *Postsecondary Education or Training.* The outcomes in this category measure engagement in postsecondary education or training through college, vocational/technical schools, certified apprenticeship programs, and the armed forces.
7. *Employment and Earnings.* The outcomes in this category measure employment status, percentage of weeks employed, number of jobs held, job tenure, number of hours worked, total earnings, hourly earnings, and availability of job benefits.
8. *Risky Behaviors, Physical and Mental Well-Being and Family Life.* The outcomes in this category measure substance abuse, criminal activity, involvement with the criminal justice system, health status, teen pregnancy, single parenting, noncustodial parenting, child support provision, 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, second, and third telephone surveys and from transcripts. Appendix F explains how we measured high school completion using these data.<sup>94</sup>

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<sup>94</sup> All other outcomes considered in this report were measured using data from the third 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 outcomes “committed any crime in the past 3 months” and “committed a crime in the past 2 years” indicate 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.

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## SUBGROUPS

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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 22<sup>nd</sup> 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 22<sup>nd</sup> and 44<sup>th</sup> percentiles and between the 44<sup>th</sup> and 66<sup>th</sup> percentiles, respectively, in the grade distribution for all youth.

**Table D.1. Outcomes**

Category
High School Completion
Received HS diploma <sup>a</sup>
Received HS diploma or GED <sup>a</sup>
Postsecondary Education or Training
Ever attended or currently attending a 4-year college
Completed at least 1 year at a 4-year college
Completed at least 2 years at a 4-year college
Earned a bachelor's degree
Ever attended or currently attending 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
Earned a bachelor's or associate's degree
Ever or currently in college, voc/tech school, apprenticeship, or military
Completed 2 years of college or military service, completed voc/tech school or an apprenticeship, or honorably discharged from the military
Completed an associate's or bachelor's degree, voc/tech school or an apprenticeship, in military for more than 2 years, or honorably discharged from the military
Ever or currently in college, voc/tech school, an apprenticeship, the military, or Job Corps
Currently in a 4-year college
Currently in a 2- or 4-year college
Currently in college, voc/tech school, an apprenticeship, or the military
Employment and Earnings
Currently employed
Currently unemployed
Currently out of labor force
Currently employed or in college, voc/tech school, an apprenticeship, or the military
Ever employed
Employed in past 12 months
Percentage of weeks employed in past 12 months
Number of jobs in past 12 months
Tenure at current job
Usual number of hours worked per week in all current jobs

**Table D.1.1. (continued)**

Category
Works at least 35 hours per week at main current job
Total earnings in past 12 months
Hourly earnings at main current job
Has a job with health insurance
Has a job with paid time off
Has a job with pension or retirement benefits
<b>Risky Behaviors, Physical and Mental Well-Being, and Family Life</b>
Smoked cigarettes or used tobacco in past month
Smoked cigarettes or used tobacco daily in past month
Binge drinking in past month <sup>a</sup>
Binge drinking on 8 or more days in past month <sup>a</sup>
Used an illegal drug in past month <sup>a</sup>
Committed a crime in past 3 months <sup>a</sup>
Committed a crime in past 2 years
Arrested or charged in past 2 years
Convicted or pled guilty in past 2 years
Served time in jail, prison, or detention home in past 2 years
Self-reported health is fair, poor, or very poor
Physical or mental condition limited activities quite a lot or could not work because of these limitations
Had first child before age 18
Currently living with natural children, but no spouse
Have children with whom not currently living
Have child with whom not living and not providing any regular child support
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 third telephone survey. We measured the high school completion outcomes using data from the first, second, and third telephone surveys and high school transcripts, as described in Appendix F.

<sup>a</sup> 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

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## **APPENDIX E**

### **WEIGHTING, IMPACT ESTIMATION, AND VARIANCE ESTIMATION**

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## WEIGHTING TO ADJUST FOR NONRESPONSE

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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 third telephone survey, that is, the sample member did not answer any questions on the survey.<sup>95</sup> About 24 percent of sample members did not respond to the third 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 3 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.<sup>96</sup> 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 two different sets of weights to adjust for nonresponse: (1) weights for the outcomes measuring high school completion; and (2) weights for all of the other outcomes.

To derive the second set of weights, we estimated two separate logit regression models to predict the probability that each sample member responded to the third telephone survey—one for the QOP group and one for the control group. To derive the other set 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 or GED.<sup>97</sup> Then, we estimated the impact on an outcome using the appropriate set of weights.

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<sup>95</sup> 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.

<sup>96</sup> As described in detail below, we evaluated resemblance using response propensity scores.

<sup>97</sup> 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, second, and third telephone  
(continued)

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.<sup>98</sup> The predictors forced into the model were an intercept, 10 school indicators, an indicator for whether the sample member responded to the second telephone survey, and the 10 interactions between the second telephone survey response indicator and the 10 school indicators. Additional potential predictors included baseline characteristics and outcomes measured in the in-person, first, and second telephone surveys.<sup>99</sup>

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*(continued)*

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 third 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 their last response. 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 third telephone survey after previously reporting having earned a diploma, we classify that person as a graduate and respondent. Alternatively, if a sample member did not respond to the third telephone survey after previously reporting having earned a GED, we classify that person as a respondent who did not graduate from high school but did earn a GED (see Appendix F). The sample sizes are thus the same for both high school completion measures and so we can use the same set of weights for both. However, because some third telephone survey nonrespondents’ high school completion status is considered known (and thus not missing), a different set of weights must be used for the high school outcomes and all other outcomes. (We also derived additional sets of weights for two of the alternative measures considered in Appendix F, using the same methods as described here.)

<sup>98</sup> 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. We examined alternative model selection procedures and determined that this procedure led to the best model.

<sup>99</sup> 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 the interaction between the two 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 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 and second telephone surveys include indicators for attending college at the time of each survey; indicators for attending postsecondary training at the time of each survey; indicators for attending having a job with health insurance at the time of each survey;

*(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.<sup>100</sup> 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.<sup>101</sup>

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(continued)

indicators for having a full-time job at the time of each survey; indicators for being in postsecondary training or in a job with health insurance at the time of each survey; indicators for attending or being accepted into college at the time of each survey; indicators for having one or more children at the time of each survey; indicators for binge drinking in the 30 days before each survey; indicators for frequent binge drinking in the 30 days before each survey; indicator for using illegal drugs in the 30 days before each survey; indicators for having committed a crime in the 30 days before each survey; indicators for having been arrested or charged in the 30 days before each survey; and indicators for being on welfare at the time of each survey. Additional outcomes measured in just the first telephone survey are an indicator for still being in high school at the time of the survey; an indicator for having a high school diploma or GED or still being in high school at the time of the survey; an indicator for having been suspended from school; and an indicator for speaking English at home. Finally, additional outcomes measured only in the second telephone survey include an indicator for having a high school diploma; an indicator for having a high school diploma or GED; and an indicator for having completed at least two years of college.

<sup>100</sup> This resulted in the trimming of 9 of the weights for the outcomes measuring high school completion, and 22 of the weights for all of the other outcomes.

<sup>101</sup> 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.

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## ESTIMATING IMPACTS AND VARIANCES OF IMPACTS

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### 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  $i$ .<sup>102</sup> 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:<sup>103</sup>

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

---

<sup>102</sup> 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.

<sup>103</sup> 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:<sup>104</sup>

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

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.<sup>105</sup>

### Impacts for Sites

We estimated the impact for a site according to:

$$\text{impact}_{site} = \sum_{school \in H_{site}} W_{school} \text{impact}_{school}$$

where  $H_{site}$  is the set of schools from which youth were selected for the QOP program operated at the site in question.<sup>106</sup> 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, DC), Eastern (Washington, DC), 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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<sup>104</sup> A similar expression pertains for the variance of the control group mean.

<sup>105</sup> For all outcomes except those measuring high school completion, sample members who did not respond at all to the third 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.

<sup>106</sup>  $H_{site}$  consists of one school for Cleveland, Fort Worth, Philadelphia, and Yakima; two schools for Washington, DC, 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:

$$\text{var}(impact_{site}) = \sum_{school \in H_{site}} W_{school}^2 \text{var}(impact_{school})$$

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, DC, and Ford-funded programs in the demonstration were due to circumstances that we do not think would be replicated in a regular program.<sup>107</sup>

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<sup>107</sup> 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, DC, 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:

$$\text{var}(\textit{impact}_{demo}) = \sum_{site=1}^7 A_{site}^2 \text{var}(\textit{impact}_{site})$$

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.

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## **APPENDIX F**

### **SENSITIVITY ANALYSES**

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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 and GED completion 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 methods 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, DC site. We undertook this assessment for two reasons. First, the difference between the treatment and control group response rates in the Washington, DC site was relatively large (12 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, DC site than in the other six sites. As in the other sensitivity analyses, this sensitivity analysis revealed that our conclusions are generally robust.

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**THE SENSITIVITY OF IMPACT ESTIMATES TO ALTERNATIVE APPROACHES TO  
DEFINING HIGH SCHOOL GRADUATION AND GED COMPLETION STATUS**

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We determined a sample member's high school graduation and GED completion status based primarily on that person's responses to questions asked during the first, second, and third telephone surveys, supplemented in a few cases by information from high school

transcripts.<sup>108</sup> Such an approach to measuring these outcomes—the same basic approach taken with the National Education Longitudinal Study—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.<sup>109</sup> 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 and GED completion status based on certain assumptions that we have made when the available data are incomplete or seemingly inconsistent.

The high school and GED completion measures presented in the main text of the report use information on third telephone survey respondents obtained in that survey as well as some nonrespondents who had reported earning a high school diploma or GED in a previous survey. In particular, individuals who had reported earning a diploma are classified as graduates. Individuals who had reported earning a GED are classified as not having earned a high school diploma but as having earned a GED.<sup>110</sup>

Our first sensitivity analysis of high school completion (the “First Alternative” in Tables F.1 to F.3) uses just the sample members who responded to the third telephone survey, the same sample on which all other outcomes reported in the main text are based. All sample members’ responses to the third telephone survey regarding their high school completion status are assumed to be accurate.

The second and third sensitivity analysis measures incorporate additional information from previous surveys and do not necessarily treat all third telephone survey responses as fully accurate. There are two types of individuals whose measured outcomes are affected for the second sensitivity analysis (resulting impacts shown as the “Second Alternative” in Tables F.1 to F.3). The first are sample members whose third telephone survey responses are inconsistent with previous responses. These individuals were classified according to a case-by-case examination of all of the available data. The second set of individuals whose classifications were modified are sample members whose available transcript data contradicted their report of having earned a high school diploma or strongly suggested that

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<sup>108</sup> 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.

<sup>109</sup> We describe our method for deriving weights in Appendix E. Later in this appendix, we assess the sensitivity of estimates to alternative approaches for obtaining weights.

<sup>110</sup> This may underestimate high school graduation rates if some individuals earned a high school diploma after earning a GED. We believe that behavior is sufficiently rare to justify the assumption that individuals who had earned a GED at one point in time did not later earn a high school diploma.



the person had not graduated. These individuals are classified as nongraduates. Their GED status is assumed to be missing since some may have obtained a GED after their last survey response.

The final sensitivity measure (the “Third Alternative” in Tables F.1 to F.3) is the same as the second alternative, and does not further modify the measure of whether sample members received a GED, but classifies individuals who were very unlikely to have earned a high school diploma as nongraduates.<sup>111</sup> This measure assumes that individuals who had not earned a high school diploma within about three years of scheduled high school graduation, around age 21, are unlikely to go back and receive a high school diploma. However, obtaining a GED after that point in time is plausible and so the measure of GED completion for these sample members is treated as missing.

According to Table F.1, the estimated impacts of QOP on high school graduation and GED completion are not sensitive to how we measure graduation and GED completion. All of the estimates imply that QOP did not significantly increase the likelihood of graduating from high school or the likelihood of graduating from high school or earning a GED.<sup>112</sup> Similarly, the site-specific impact estimates are also generally not sensitive to how we measure high school completion (see Table F.2). Cleveland is the only site to show a significant impact on high school completion, and although the impact on completion of a high school diploma is somewhat sensitive to how that completion is measured, the impact on completion of a diploma or GED is not sensitive. Table F.3 indicates that the impact on high school completion for younger enrollees is moderately sensitive to how we measure that completion, with some of the sensitivity analysis measures leading to larger and more significant impacts than in the main analysis but one measure yielding a non-significant impact.

The alternative estimates in Table F.1 imply the same conclusion and are consistent with results reported in Schirm and Rodriguez-Planas (2004). However, these results do differ from those in 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 for the different findings 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 Schirm and Rodriguez-Planas (2004), however, estimates based on all of the data collected up to about three years after sample members’ scheduled high school graduation (the time of the second telephone

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<sup>111</sup> This group consists of two types of sample members. The first are individuals who last responded to the first telephone survey and at that time had been out of school for one entire academic year and part of another, had not progressed beyond tenth grade, or were not on a pace to graduate from high school in five years based on credits received. The second type are individuals who did not respond to the third telephone survey and had reported not having graduated from high school in the second telephone survey.

<sup>112</sup> 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.

survey), reveal that QOP did not significantly increase the likelihood of graduating on time or in less than five years.<sup>113</sup>

**Table F.1. Impacts on High School Completion Using Alternative Approaches to Measuring Graduation and GED Completion**

Outcome	QOP Group Mean (percentage)	Control Group Mean (percentage)	Impact (percentage points)
<b>Primary Measures</b>			
Received HS diploma	60	60	0
Received HS diploma or GED	78	75	2
<b>First Alternative Measures</b>			
Received HS diploma	58	57	1
Received HS diploma or GED	73	71	2
<b>Second Alternative Measures</b>			
Received HS diploma	54	53	1
Received HS diploma or GED	74	70	4
<b>Third Alternative Measures</b>			
Received HS diploma	52	48	4

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, first, and second telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

NOTE: The third alternative measure does not change any sample members' classification of having received a high school diploma or GED, and thus only the high school diploma measure is reported.

\* 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

<sup>113</sup> See Schirm and Rodriguez-Planas (2004) for a full comparison of the results in that report and those in Maxfield et al. (2003b).

**Table F.2. Impacts on High School Completion Using Alternative Approaches to Measuring Graduation and GED Completion by Site (Percentage Points)**

Outcome	Impacts								Total Sample
	Fort Worth	Cleveland	DC	Houston	Memphis	Philadelphia	Yakima		
<b>Primary Measures</b>									
Received HS diploma	-8	20**	8	2	-7	-6	-6	0	
Received HS diploma or GED	-4	19**	12	-1	-8	-4	3	2	
<b>First Alternative Measures</b>									
Received HS diploma	-12	14	11	2	0	-11	6	1	
Received HS diploma or GED	-7	20**	12	-1	-7	-8	3	2	
<b>Second Alternative Measures</b>									
Received HS diploma	-2	12	2	7	1	-7	-8	1	
Received HS diploma or GED	1	20**	12	-3	-3	-1	1	4	
<b>Third Alternative Measures</b>									
Received HS diploma	2	13	6	6	6	-3	-3	4	

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, first, and second telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

NOTE: The third alternative measure does not change any sample members' classification of having received a high school diploma or GED, and thus only the high school diploma measure is reported.

- \* 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 High School Completion Using Alternative Approaches to Measuring Graduation and GED Completion, Students 14 or Younger When Entering Ninth Grade**

Outcome	QOP Group Mean (percentage)	Control Group Mean (percentage)	Impact (percentage points)
Primary Measures			
Received HS diploma	70	63	7*
Received HS diploma or GED	87	81	6*
First Alternative Measures			
Received HS diploma	68	61	7
Received HS diploma or GED	83	78	6
Second Alternative Measures			
Received HS diploma	66	56	9**
Received HS diploma or GED	85	77	8**
Third Alternative Measures			
Received HS diploma	63	51	11***

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, first, and second telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

NOTE The third alternative measure does not change any sample members' classification of having received a high school diploma or GED, and thus only the high school diploma measure is reported.

\* 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

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

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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.<sup>114</sup> Tables F.4 through F.7 present the impact estimates that we obtained using two alternative methods of assessing the effects of nonresponse and, particularly, of differential nonresponse between the QOP and control groups. Our preferred estimates, which are those presented in the tables in the main part of the report, are also presented in Tables F.4 through F.7. Our preferred estimates were derived using 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, first, and second telephone surveys. The construction of those weights is described in Appendix E.

The first alternative results presented are unweighted estimates, presented for comparison purposes. The second alternative results can be examined to assess the effects of differential nonresponse between the QOP and control groups. They were derived by making the response rate for the QOP group equal to the response rate for the control group within 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 impacts on engagement in any postsecondary education or training or on completion of two years of postsecondary education or training. The two alternative estimates imply impacts of 7 percentage points on both of these outcomes. The second is that QOP increased the likelihood that enrollees had committed a crime in the past three months. The two alternative estimates are not statistically significant. However, the significant impact on the likelihood of having been arrested or charged in the past two years is statistically significant using all three approaches.<sup>115</sup>

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<sup>114</sup> Appendix E describes the methodology we followed to develop person-level weights to adjust for the potential effects of unit nonresponse.

<sup>115</sup> When significance levels are adjusted for the multiple comparisons that are being performed simultaneously, the significant impacts on postsecondary attainment seen in the unweighted analyses are no longer statistically significant. Likewise, when such adjustments are done for the outcomes measuring criminal activity, the weighted impact on having committed a crime in the past three months is no longer statistically significant, although the impact on having been arrested or charged in the past two years remains significant.

**Table F.4. Impacts on High School Completion Obtained With Alternative Approaches to Adjusting for Nonresponse (Percentage Points)**

Outcome	Unweighted Estimate	Unweighted Estimate <sup>a</sup>	Weighted estimates
Received HS diploma	2	2	0
Received HS diploma or GED	3	2	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 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, first, and second telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

<sup>a</sup> 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 Postsecondary Attainment Obtained With Alternative Approaches to Adjusting for Nonresponse (Percentage Points)**

Outcome	Unweighted Estimates	Unweighted Estimates <sup>a</sup>	Weighted Estimates
Ever attended or currently attending a 4-year college	3	3	1
Completed at least 1 year at a 4-year college	3	2	1
Completed at least 2 years at a 4-year college	3	3	1
Earned a bachelor's degree	1	1	1
Ever attended or currently attending a 2- or 4-year college	4	4	4
Completed at least 1 year at a 2- or 4-year college	2	2	2
Completed at least 2 years at a 2- or 4-year college	3	4	2
Earned a bachelor's or associate's degree	-0	1	-1
Ever or currently in college, voc/tech school, an apprenticeship, or the military	7*	7*	6
Completed 2 years of college or military service, completed voc/tech school or an apprenticeship, or honorably discharged from the military	7*	7*	5
Completed an associate's or bachelor's degree, voc/tech school or an apprenticeship, in the military for more than 2 years, or honorably discharged from the military	4	4	2
Ever or currently in college, voc/tech school, an apprenticeship, the military, or Job Corps	6*	6	6
Currently in a 4-year college	-1	-1	-2
Currently in a 2- or 4-year college	-3	-3	-4
Currently in college, voc/tech school, an apprenticeship, or the military	-0	0	-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 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, first, and second telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

<sup>a</sup> 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.6. Impacts On Employment and Earnings Obtained With Alternative Approaches To Adjusting For Nonresponse (Percentage Points)**

Outcome	Unweighted Estimates	Unweighted Estimates <sup>a</sup>	Weighted Estimates
Currently employed	1	-0	-1
Currently unemployed	-2	-2	-1
Currently out of labor force	2	2	2
Currently employed or in college, voc/tech school, an apprenticeship, or the military	3	2	1
Ever employed	-0	0	0
Employed in past 12 months	-1	-1	-1
Percentage of weeks employed in past 12 months (percentage of weeks)	0	-1	-2
Number of jobs in past 12 months (number of jobs)	0.1	0.0	0.0
Tenure at current job (months)	-0	-1	-2
Usual number of hours worked per week in all current jobs (hours)	1	1	-0
Works at least 35 hours per week at main current job	-0	-1	-0
Total earnings in past 12 months (dollars)	-66	-349	-522
Hourly earnings at main current job (dollars)	-1.24	-0.95	-1.20
Has a job with health insurance	-0	-1	-3
Has a job with paid time off	2	1	-2
Has a job with a pension or retirement benefits	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 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, first, and second telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

<sup>a</sup> 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% Outcome 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.7. Impacts On Risky Behaviors, Physical and Mental Well-Being, and Family Life Obtained With Alternative Approaches To Adjusting For Nonresponse (Percentage Points)**

Outcome	Unweighted Estimates	Unweighted Estimates <sup>a</sup>	Weighted Estimates
Smoked cigarettes or used tobacco in past Outcome month	-1	1	0
Smoked cigarettes or used tobacco daily in past month	-2	-2	-2
Binge drinking in past month	0	1	0
Binge drinking on 8 or more days in past month	3	3	3
Used an illegal drug in past month	-1	-1	-0
Committed a crime in past 3 months	2	1	3*
Committed a crime in past 2 years	2	1	5
Arrested or charged in past 2 years	5**	5**	6**
Convicted or pled guilty in past 2 years	2	2	2
Served time in jail, prison, or detention home in past 2 years	1	1	1
Self-reported health is fair, poor, or very poor	1	1	2
Physical or mental condition limited activities quite a lot or could not work because of these limitations	-1	-0	1
Had first child before age 18	2	2	2
Currently living with natural children, but no spouse	2	3	1
Have children with whom not currently living	-0	-0	1
Have child with whom not living and not providing any regular child support	-2	-2	-2
Currently receiving welfare	2	3	1
Currently receiving food stamps	2	3	2
Currently receiving welfare or food stamps	3	4	3

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 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, first, and second telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

<sup>a</sup> 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

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## THE SENSITIVITY OF IMPACT ESTIMATES TO REGRESSION ADJUSTMENT

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### Baseline Differences Between the QOP and Control Groups

According to Table F.8, 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.8). 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 eighth-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.<sup>116</sup> We estimated the parameters of this regression model for each outcome considered. For binary outcomes we used logit regression models and for continuous outcomes we used linear regression models. For the continuous outcomes we obtained impact and variance estimates for schools from the estimated distribution of the coefficients on the QOP/control indicator and school interaction terms. For the binary outcomes we obtained impact and variance estimates for schools from probabilities predicted by the logit model for the outcome under consideration.<sup>117</sup> After deriving school-level estimates, we derived site- and demonstration-level estimates using the expressions in Appendix E.

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<sup>116</sup> The 11 school indicators and interactions between a QOP/control indicator and the 11 school indicators were included to allow the estimation of school-level impacts (see Appendix E). All baseline characteristics available, as well as interactions between those characteristics, were also included. The last six variables were included to adjust for significant differences between the QOP and control groups in some of the QOP schools.

<sup>117</sup> 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  
*(continued)*

## Regression-Adjusted Impact Estimates

Tables F.9 through F.12 present difference-of-means and regression-adjusted impact estimates. Comparing the alternative impact estimates suggests that regression adjustment affects only three of our conclusions—that QOP had no impact on enrollment in postsecondary education or training, and that it increased the likelihoods of committing a crime in the three months before the survey and of being arrested or charged in the previous two years. Table F.10 shows that regression adjustment increased by one percentage point—from an insignificant six to a significant seven percentage points—the impact on ever being engaged in postsecondary education or training of any type. A similar change is seen on the measure of postsecondary engagement that includes enrollment in Job Corps.<sup>118</sup> Table F.12 shows that the regression-adjusted impacts on the likelihoods of having committed a crime in the past three months or of having been arrested or charged in the past two years are not statistically significant, in contrast to the difference-of-means estimates, which showed significant impacts on these outcomes. All other impacts that were insignificant according to difference-of-means estimates are also insignificant according to regression-adjusted estimates.

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*(continued)*

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 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.

<sup>118</sup> When significance levels are adjusted for the multiple comparisons that are being performed simultaneously, the significant impacts on postsecondary attainment seen in the regression adjusted analyses are no longer statistically significant.

**Table F.8. 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 <sup>†</sup>	36 <sup>†</sup>
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.9. Difference-of-Means Versus Regression-Adjusted Impacts on High School Completion (Percentage Points)**

Outcome	Difference of Means	Regression Adjusted
Received HS diploma	0	3
Received HS diploma or GED	2	4

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, first, and second 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 Postsecondary Attainment (Percentage Points)**

Outcome	Difference of Means	Regression Adjusted
Ever attended or currently attending a 4-year college	1	2
Completed at least 1 year at a 4-year college	1	2
Completed at least 2 years at a 4-year college	1	2
Earned a bachelor's degree	1	1
Ever attended or currently attending a 2- or 4-year college	4	5
Completed at least 1 year at a 2- or 4-year college	2	3
Completed at least 2 years at a 2- or 4-year college	2	3
Earned a bachelor's or associate's degree	-1	0
Ever or currently in college, voc/tech school, an apprenticeship, or the military	6	7*
Completed 2 years of college or military service, completed voc/tech school or an apprenticeship, or honorably discharged from the military	5	6
Completed an associate's or bachelor's degree, voc/tech school or an apprenticeship, in the military for more than 2 years, or honorably discharged from the military	2	3
Ever or currently in college, voc/tech school, an apprenticeship, the military, or Job Corps	6	7*
Currently in a 4-year college	-2	-1
Currently in a 2- or 4-year college	-4	-3
Currently in college, voc/tech school, an apprenticeship, or the military	-1	-0

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 and second telephone surveys, and outcomes measured in the in-person, first, and second 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.11. Difference-of-Means Versus Regression-Adjusted Impacts on Employment and Earnings (Percentage Points, Unless Stated Otherwise)**

Outcome	Difference of Means	Regression Adjusted
Currently employed	-1	-0
Currently unemployed	-1	-1
Currently out of labor force	2	2
Currently employed or in college, voc/tech school, an apprenticeship, or the military	1	1
Ever employed	0	0
Employed in past 12 months	-1	-1
Percentage of weeks employed in past 12 months (percentage of weeks)	-2	-2
Number of jobs in past 12 months (number of jobs)	0.0	0.0
Tenure at current job (months)	-2	-1
Usual number of hours worked per week in all current jobs (hours)	-0	0
Works at least 35 hours per week at main current job	0	0
Total earnings in past 12 months (dollars)	-522	-211
Hourly earnings at main current job (dollars)	-1.20	-1.15
Has a job with health insurance	-3	-3
Has a job with paid time off	-2	-2
Has a job with a pension or retirement benefits	-1	-1

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 and second telephone surveys, and outcomes measured in the in-person, first, and second 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. Difference-of-Means Versus Regression-Adjusted Impacts on Risky Behaviors, Physical and Mental Well-Being, and Family Life (Percentage Points)**

Outcome	Difference of Means	Regression Adjusted
Smoked cigarettes or used tobacco in past month	0	-0
Smoked cigarettes or used tobacco daily in past month	-2	-2
Binge drinking in past month	0	0
Binge drinking on 8 or more days in past month	3	3
Used an illegal drug in past month	-0	-1
Committed a crime in past 3 months	3*	2
Committed a crime in past 2 years	5	4
Arrested or charged in past 2 years	6**	6
Convicted or pled guilty in past 2 years	2	2
Served time in jail, prison, or detention home in past 2 years	1	1
Self-reported health is fair, poor, or very poor	2	1
Physical or mental condition limited activities quite a lot or could not work because of these limitations	1	0
Had first child before age 18	2	2
Currently living with natural children, but no spouse	1	0
Have children with whom not currently living	1	1
Have child with whom not living and not providing any regular child support	-2	-2
Currently receiving welfare	1	1
Currently receiving food stamps	2	1
Currently receiving welfare or food stamps	3	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 and second telephone surveys, and outcomes measured in the in-person, first, and second 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



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## THE SENSITIVITY OF IMPACT ESTIMATES TO INCLUDING AND EXCLUDING THE WASHINGTON, DC SITE

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Tables F.13 through F.16 present two sets of impact estimates: (1) the estimates obtained when the Washington, DC 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.

As noted above, one reason for undertaking this sensitivity analysis is that program operations began a year later in the Washington, DC site than in the other sites and sample members are typically a year younger in the Washington, DC site. This does not threaten the internal validity of the impact estimates for the Washington, DC 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.<sup>119</sup> 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.

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.13 through F.16, we obtain for most outcomes essentially the same results when the Washington, DC 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 tend to be in the direction of showing larger detrimental impacts when the Washington, DC site is excluded. For example, excluding the Washington, DC site increases the impact on frequent binge drinking from an insignificant 3-percentage-point increase to a significant 5-percentage-point increase and also increases the detrimental impacts on criminal activity. Despite our previous conjecture, we find that excluding the Washington, DC 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 or training.

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<sup>119</sup> The third telephone survey was conducted from January 2005 to September 2005 in all sites. Thus, it began three years after the end of the demonstration and nearly five years after scheduled graduation in the Washington, DC site. In the other sites, the survey began four years after the end of the demonstration and nearly six years after scheduled graduation.

**Table F.13. Impacts on High School Completion When the Washington, DC Site is Included and When it is Excluded (Percentage Points)**

Outcome	Washington, DC Site	
	Included	Excluded
Received HS diploma	0	-1
Received HS diploma or GED	2	1

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, first, and second 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 F.14. Impacts on Postsecondary Attainment When the Washington, DC Site is Included and When it is Excluded (Percentage Points)**

Outcome	Washington, DC Site	
	Included	Excluded
Ever attended or currently attending a 4-year college	1	2
Completed at least 1 year at a 4-year college	1	3
Completed at least 2 years at a 4-year college	1	2
Earned a bachelor's degree	1	1
Ever attended or currently attending a 2- or 4-year college	4	4
Completed at least 1 year at a 2- or 4-year college	2	2
Completed at least 2 years at a 2- or 4-year college	2	2
Earned a bachelor's or associate's degree	-1	-0
Ever or currently in college, voc/tech school, an apprenticeship, or the military	6	4
Completed 2 years of college or military service, completed voc/tech school or an apprenticeship, or honorably discharged from the military	5	3 <sup>†</sup>
Completed an associate's or bachelor's degree, voc/tech school or an apprenticeship, in the military for more than 2 years, or honorably discharged from the military	2	1
Ever or currently in college, voc/tech school, an apprenticeship, the military, or Job Corps	6	4
Currently in a 4-year college	-2	-2
Currently in a 2- or 4-year college	-4	-4
Currently in college, voc/tech school, an apprenticeship, or the military	-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 and second telephone surveys, and outcomes measured in the in-person, first, and second 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 F.15. Impacts on Employment and Earnings When the Washington, DC Site is Included and When it is Excluded (Percentage Points, Unless Otherwise Indicated)**

Outcome	Washington, DC Site	
	Included	Excluded
Currently employed	-1	0
Currently unemployed	-1	-2
Currently out of labor force	2	2
Currently employed or in college, voc/tech school, an apprenticeship, or the military	1	0
Ever employed	0	-0
Employed in past 12 months	-1	-1
Percentage of weeks employed in past 12 months (percentage of weeks)	-2	-1
Number of jobs in past 12 months (number of jobs)	0.0	0.0
Tenure at current job (months)	-2	-1
Usual number of hours worked per week in all current jobs (hours)	-0	0
Works at least 35 hours per week at main current job	-0	0
Total earnings in past 12 months (dollars)	-522	-549
Hourly earnings at main current job (dollars)	-1.20	-1.57
Has a job with health insurance	-3	-1
Has a job with paid time off	-2	-0
Has a job with a pension or retirement benefits	-1	0

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 and second telephone surveys, and outcomes measured in the in-person, first, and second 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 F.16. Impacts on Risky Behaviors, Physical and Mental Well-Being, and Family Life When the Washington, DC Site is Included and When it is Excluded (Percentage Points)**

Outcome	Washington, DC Site	
	Included	Excluded
Smoked cigarettes or used tobacco in past month	0	-0
Smoked cigarettes or used tobacco daily in past month	-2	-1
Binge drinking in past month	0	1
Binge drinking on 8 or more days in past month	3	5**††
Used an illegal drug in past month	-0	-1
Committed a crime in past 3 months	3*	4**†
Committed a crime in past 2 years	5	6*
Arrested or charged in past 2 years	6**	7***
Convicted or pled guilty in past 2 years	2	2
Served time in jail, prison, or detention home in past 2 years	1	1
Self-reported health is fair, poor, or very poor	2	1
Physical or mental condition limited activities quite a lot or could not work because of these limitations	1	1
Had first child before age 18	2	2
Currently living with natural children, but no spouse	1	-0
Have children with whom not currently living	1	3†
Have child with whom not living and not providing any regular child support	-2	-1
Currently receiving welfare	1	1
Currently receiving food stamps	2	0
Currently receiving welfare or food stamps	3	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 and second telephone surveys, and outcomes measured in the in-person and first two 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

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**APPENDIX G**

**QOP AND CONTROL GROUP MEANS FOR SUBGROUPS**

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

Outcome	Means		
	Male	Female	Total Sample
Received HS diploma	56	65	60
Received HS diploma or GED	78	77	78

SOURCE: Telephone surveys and transcripts.

NOTE: Means were estimated 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, first, and second 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)**

Outcome	Means		
	Male	Female	Total Sample
Received HS diploma	54	66	60
Received HS diploma or GED	71	79	75

SOURCE: Telephone surveys and transcripts.

NOTE: Means were estimated 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, first, and second 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)**

Outcome	Means		Total Sample
	Male	Female	
Ever attended or currently attending a 4-year college	13	20	16
Completed at least 1 year at a 4-year college	12	16	14
Completed at least 2 years at a 4-year college	10	13	11
Earned a bachelor's degree	1	4	3
Ever attended or currently attending a 2- or 4-year college	34	42	38
Completed at least 1 year at a 2- or 4-year college	24	33	29
Completed at least 2 years at a 2- or 4-year college	17	20	19
Earned a bachelor's or associate's degree	4	8	6
Ever or currently in college, voc/tech school, an apprenticeship, or the military	57	66	61
Completed 2 years of college or military service, completed voc/tech school or an apprenticeship, or honorably discharged from the military	32	38	35
Completed an associate's or bachelor's degree, voc/tech school or an apprenticeship, in the military for more than 2 years, or honorably discharged from the military	21	29	25
Ever or currently in college, voc/tech school, an apprenticeship, the military, or Job Corps	59	70	64
Currently in a 4-year college	8	6	7
Currently in a 2- or 4-year college	12	12	13
Currently in college, voc/tech school, an apprenticeship, or the military	24	21	23

SOURCE: Telephone survey.

NOTE: Means were estimated 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, first, and second 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)**

Outcome	Means		
	Male	Female	Total Sample
Ever attended or currently attending a 4-year college	13	17	15
Completed at least 1 year at a 4-year college	10	15	12
Completed at least 2 years at a 4-year college	7	13	10
Earned a bachelor's degree	2	2	2
Ever attended or currently attending a 2- or 4-year college	27	44	34
Completed at least 1 year at a 2- or 4-year college	21	35	27
Completed at least 2 years at a 2- or 4-year college	12	22	16
Earned a bachelor's or associate's degree	4	11	7
Ever or currently in college, voc/tech school, an apprenticeship, or the military	53	61	56
Completed 2 years of college or military service, completed voc/tech school or an apprenticeship, or honorably discharged from the military	28	34	30
Completed an associate's or bachelor's degree, voc/tech school or an apprenticeship, in the military for more than 2 years, or honorably discharged from the military	21	24	22
Ever or currently in college, voc/tech school, an apprenticeship, the military, or Job Corps	57	64	59
Currently in a 4-year college	6	12	9
Currently in a 2- or 4-year college	11	23	17
Currently in college, voc/tech school, an apprenticeship, or the military	20	29	24

SOURCE: Telephone survey.

NOTE: Means were estimated 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, first, and second telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

**Table G.5. QOP Group Means Pertaining to Employment and Earnings by Sex (Percentages, Unless Stated Otherwise)**

Outcome	Means		
	Male	Female	Total Sample
Currently employed	69	65	67
Currently unemployed	16	11	14
Currently out of labor force	15	24	19
Currently employed or in college, voc/tech school, an apprenticeship, or the military	79	73	77
Ever employed	95	96	96
Employed in past 12 months	83	82	83
Percentage of weeks employed in past 12 months (percentage of weeks)	59	59	59
Number of jobs in past 12 months (number of jobs)	1.1	1.0	1.1
Tenure at current job (months)	15	14	15
Usual number of hours worked per week in all current jobs (hours)	30	25	28
Works at least 35 hours per week at main current job	60	46	53
Total earnings in past 12 months (dollars)	14,533	10,898	12,676
Hourly earnings at main current job (dollars)	8.71	6.91	7.93
Has a job with health insurance	41	49	44
Has a job with paid time off	38	49	43
Has a job with a pension or retirement benefits	34	39	36

SOURCE: Telephone survey.

NOTE: Means were estimated 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, first, and second telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

**Table G.6. Control Group Means Pertaining to Employment and Earnings by Sex (Percentages, Unless Stated Otherwise)**

Outcome	Means		
	Male	Female	Total Sample
Currently employed	75	58	68
Currently unemployed	13	16	15
Currently out of labor force	10	25	17
Currently employed or in college, voc/tech school, an apprenticeship, or the military	81	70	75
Ever employed	94	96	95
Employed in past 12 months	84	82	84
Percentage of weeks employed in past 12 months (percentage of weeks)	65	54	61
Number of jobs in past 12 months (number of jobs)	1.0	1.0	1.0
Tenure at current job (months)	19	13	16
Usual number of hours worked per week in all current jobs (hours)	33	22	28
Works at least 35 hours per week at main current job	64	41	53
Total earnings in past 12 months (dollars)	16,012	10,035	13,198
Hourly earnings at main current job (dollars)	10.13	7.59	9.14
Has a job with health insurance	55	38	47
Has a job with paid time off	49	40	45
Has a job with a pension or retirement benefits	45	30	38

SOURCE: Telephone survey.

NOTE: Means were estimated 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, first, and second telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

**Table G.7. QOP Group Means Pertaining to Risky Behaviors, Physical and Mental Well-Being, and Family Life by Sex (Percentages)**

Outcome	Means		
	Male	Female	Total Sample
Smoked cigarettes or used tobacco in past month	42	24	34
Smoked cigarettes or used tobacco daily in past month	27	16	22
Binge drinking in past month	41	19	31
Binge drinking on 8 or more days in past month	12	4	8
Used an illegal drug in past month	17	7	12
Committed a crime in past 3 months	7	1	5
Committed a crime in past 2 years	27	2	16
Arrested or charged in past 2 years	19	1	11
Convicted or pled guilty in past 2 years	8	1	5
Served time in jail, prison, or detention home in past 2 years	6	1	4
Self-reported health is fair, poor, or very poor	11	7	9
Physical or mental condition limited activities quite a lot or could not work because of these limitations	6	9	7
Had first child before age 18	9	27	18
Currently living with natural children, but no spouse	11	53	32
Have children with whom not currently living	31	3	18
Have child with whom not living and not providing any regular child support	10	3	6
Currently receiving welfare	8	23	15
Currently receiving food stamps	15	38	26
Currently receiving welfare or food stamps	16	40	27

SOURCE: Telephone survey.

NOTE: Means were estimated 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, first, and second telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

**Table G.8. Control Group Means Pertaining to Risky Behaviors, Physical and Mental Well-Being, and Family Life by Sex (Percentages)**

Outcome	Means		
	Male	Female	Total Sample
Smoked cigarettes or used tobacco in past month	46	20	34
Smoked cigarettes or used tobacco daily in past month	33	14	24
Binge drinking in past month	46	15	31
Binge drinking on 8 or more days in past month	10	1	6
Used an illegal drug in past month	20	4	13
Committed a crime in past 3 months	2	2	2
Committed a crime in past 2 years	16	6	11
Arrested or charged in past 2 years	7	3	5
Convicted or pled guilty in past 2 years	3	1	3
Served time in jail, prison, or detention home in past 2 years	3	1	2
Self-reported health is fair, poor, or very poor	7	9	8
Physical or mental condition limited activities quite a lot or could not work because of these limitations	5	8	7
Had first child before age 18	6	27	16
Currently living with natural children, but no spouse	14	50	31
Have children with whom not currently living	27	6	17
Have child with whom not living and not providing any regular child support	11	5	8
Currently receiving welfare	6	24	14
Currently receiving food stamps	12	39	24
Currently receiving welfare or food stamps	13	39	24

SOURCE: Telephone survey.

NOTE: Means were estimated 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, first, and second 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)**

Outcome	Means		
	Age > 14	Age ≤ 14	Total Sample
Received HS diploma	43	70	60
Received HS diploma or GED	61	87	78

SOURCE: Telephone surveys and transcripts.

NOTE: Means were estimated 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, first, and second 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)**

Outcome	Means		
	Age > 14	Age ≤ 14	Total Sample
Received HS diploma	51	63	60
Received HS diploma or GED	61	81	75

SOURCE: Telephone surveys and transcripts.

NOTE: Means were estimated 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, first, and second 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)**

Outcome	Means			Total Sample
	Age > 14	Age ≤ 14		
Ever attended or currently attending a 4-year college	8	21		16
Completed at least 1 year at a 4-year college	7	18		14
Completed at least 2 years at a 4-year college	5	15		11
Earned a bachelor's degree	2	3		3
Ever attended or currently attending a 2- or 4-year college	20	48		38
Completed at least 1 year at a 2- or 4-year college	15	37		29
Completed at least 2 years at a 2- or 4-year college	10	24		19
Earned a bachelor's or associate's degree	4	7		6
Ever or currently in college, voc/tech school, an apprenticeship, or the military	45	70		61
Completed 2 years of college or military service, completed voc/tech school or an apprenticeship, or honorably discharged from the military	24	42		35
Completed an associate's or bachelor's degree, voc/tech school or an apprenticeship, in the military for more than 2 years, or honorably discharged from the military	20	27		25
Ever or currently in college, voc/tech school, an apprenticeship, the military, or Job Corps	51	72		64
Currently in a 4-year college	3	10		7
Currently in a 2- or 4-year college	5	17		13
Currently in college, voc/tech school, an apprenticeship, or the military	15	27		23

SOURCE: Telephone survey.

NOTE: Means were estimated 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, first, and second 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			Total Sample
	Age > 14	Age ≤ 14		
Ever attended or currently attending a 4-year college	5	20		15
Completed at least 1 year at a 4-year college	5	16		12
Completed at least 2 years at a 4-year college	5	13		10
Earned a bachelor's degree	0	2		2
Ever attended or currently attending a 2- or 4-year college	20	41		34
Completed at least 1 year at a 2- or 4-year college	17	33		27
Completed at least 2 years at a 2- or 4-year college	12	19		16
Earned a bachelor's or associate's degree	5	7		7
Ever or currently in college, voc/tech school, an apprenticeship, or the military	43	61		56
Completed 2 years of college or military service, completed voc/tech school or an apprenticeship, or honorably discharged from the military	27	32		30
Completed an associate's or bachelor's degree, voc/tech school or an apprenticeship, in the military for more than 2 years, or honorably discharged from the military	20	22		22
Ever or currently in college, voc/tech school, an apprenticeship, the military, or Job Corps	47	64		59
Currently in a 4-year college	2	12		9
Currently in a 2- or 4-year college	8	20		17
Currently in college, voc/tech school, an apprenticeship, or the military	15	28		24

SOURCE: Telephone survey.

NOTE: Means were estimated 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, first, and second telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

**Table G.13. QOP Group Means Pertaining to Employment and Earnings by Age When Entering Ninth Grade (Percentages, Unless Otherwise Indicated)**

Outcome	Means			Total Sample
	Age > 14	Age ≤ 14		
Currently employed	63	69		67
Currently unemployed	18	10		14
Currently out of labor force	19	20		19
Currently employed or in college, voc/tech school, an apprenticeship, or the military	70	80		77
Ever employed	95	97		96
Employed in past 12 months	81	84		83
Percentage of weeks employed in past 12 months (percentage of weeks)	52	63		59
Number of jobs in past 12 months (number of jobs)	0.9	1.1		1.1
Tenure at current job (months)	13	16		15
Usual number of hours worked per week in all current jobs (hours)	26	29		28
Works at least 35 hours per week at main current job	52	53		53
Total earnings in past 12 months (dollars)	10,468	13,664		12,676
Hourly earnings at main current job (dollars)	7.22	8.63		7.93
Has a job with health insurance	38	47		44
Has a job with paid time off	32	48		43
Has a job with a pension or retirement benefits	26	40		36

SOURCE: Telephone survey.

NOTE: Means were estimated 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, first, and second telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

**Table G.14. Control Group Means Pertaining to Employment and Earnings by Age When Entering Ninth Grade (Percentages, Unless Otherwise Indicated)**

Outcome	Means		
	Age > 14	Age ≤ 14	Total Sample
Currently employed	67	66	68
Currently unemployed	16	16	15
Currently out of labor force	17	17	17
Currently employed or in college, voc/tech school, an apprenticeship, or the military	73	76	75
Ever employed	96	95	95
Employed in past 12 months	84	82	84
Percentage of weeks employed in past 12 months (percentage of weeks)	63	59	61
Number of jobs in past 12 months (number of jobs)	1.1	0.9	1.0
Tenure at current job (months)	19	15	16
Usual number of hours worked per week in all current jobs (hours)	29	26	28
Works at least 35 hours per week at main current job	54	52	53
Total earnings in past 12 months (dollars)	11,993	13,199	13,198
Hourly earnings at main current job (dollars)	11.46	7.63	9.14
Has a job with health insurance	46	46	47
Has a job with paid time off	43	44	45
Has a job with a pension or retirement benefits	33	38	38

SOURCE: Telephone survey.

NOTE: Means were estimated 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, first, and second telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

**Table G.15. QOP Group Means Pertaining to Risky Behaviors, Physical and Mental Well-Being, and Family Life by Age When Entering Ninth Grade (Percentages)**

Outcome	Means		
	Age > 14	Age ≤ 14	Total Sample
Smoked cigarettes or used tobacco in past month	39	31	34
Smoked cigarettes or used tobacco daily in past month	24	21	22
Binge drinking in past month	33	32	31
Binge drinking on 8 or more days in past month	6	10	8
Used an illegal drug in past month	13	11	12
Committed a crime in past 3 months	5	5	5
Committed a crime in past 2 years	18	15	16
Arrested or charged in past 2 years	16	10	11
Convicted or pled guilty in past 2 years	4	6	5
Served time in jail, prison, or detention home in past 2 years	4	4	4
Self-reported health is fair, poor, or very poor	13	7	9
Physical or mental condition limited activities quite a lot or could not work because of these limitations	10	6	7
Had first child before age 18	19	17	18
Currently living with natural children, but no spouse	26	34	32
Have children with whom not currently living	29	13	18
Have child with whom not living and not providing any regular child support	10	5	6
Currently receiving welfare	20	13	15
Currently receiving food stamps	30	24	26
Currently receiving welfare or food stamps	33	25	27

SOURCE: Telephone survey.

NOTE: Means were estimated 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, first, and second telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

**Table G.16. Control Group Means Pertaining to Risky Behaviors, Physical and Mental Well-Being, and Family Life by Age When Entering Ninth Grade (Percentages)**

Outcome	Means			Total Sample
	Age > 14	Age ≤ 14		
Smoked cigarettes or used tobacco in past month	35	34		34
Smoked cigarettes or used tobacco daily in past month	26	25		24
Binge drinking in past month	40	27		31
Binge drinking on 8 or more days in past month	4	7		6
Used an illegal drug in past month	16	12		13
Committed a crime in past 3 months	2	3		2
Committed a crime in past 2 years	12	12		11
Arrested or charged in past 2 years	7	5		5
Convicted or pled guilty in past 2 years	2	2		3
Served time in jail, prison, or detention home in past 2 years	2	2		2
Self-reported health is fair, poor, or very poor	11	6		8
Physical or mental condition limited activities quite a lot or could not work because of these limitations	10	6		7
Had first child before age 18	15	18		16
Currently living with natural children, but no spouse	31	31		31
Have children with whom not currently living	18	17		17
Have child with whom not living and not providing any regular child support	8	8		8
Currently receiving welfare	11	15		14
Currently receiving food stamps	25	24		24
Currently receiving welfare or food stamps	25	24		24

SOURCE: Telephone survey.

NOTE: Means were estimated 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, first, and second 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)**

Outcome	Means			
	Bottom Third	Middle Third	Top Third	Total Sample
Received HS diploma	44	64	74	60
Received HS diploma or GED	69	80	86	78

SOURCE: Telephone surveys and transcripts.

NOTE: Means were estimated 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, first, and second 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)**

Outcome	Means			
	Bottom Third	Middle Third	Top Third	Total Sample
Received HS diploma	46	57	78	60
Received HS diploma or GED	67	72	90	75

SOURCE: Telephone surveys and transcripts.

NOTE: Means were estimated 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, first, and second 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)**

Outcome	Means					Total Sample
	Bottom Third	Middle Third	Top Third			
Ever attended or currently attending a 4-year college	10	16	23			16
Completed at least 1 year at a 4-year college	9	13	20			14
Completed at least 2 years at a 4-year college	8	9	17			11
Earned a bachelor's degree	0	3	5			3
Ever attended or currently attending a 2- or 4-year college	26	40	49			38
Completed at least 1 year at a 2- or 4-year college	16	31	41			29
Completed at least 2 years at a 2- or 4-year college	13	16	27			19
Earned a bachelor's or associate's degree	1	7	11			6
Ever or currently in college, voc/tech school, an apprenticeship, or the military	51	63	70			61
Completed 2 years of college or military service, completed voc/tech school or an apprenticeship, or honorably discharged from the military	30	30	45			35
Completed an associate's or bachelor's degree, voc/tech school or an apprenticeship, in the military for more than 2 years, or honorably discharged from the military	20	23	31			25
Ever or currently in college, voc/tech school, an apprenticeship, the military, or Job Corps	55	65	73			64
Currently in a 4-year college	5	6	11			7
Currently in a 2- or 4-year college	8	12	19			13
Currently in college, voc/tech school, an apprenticeship, or the military	19	21	28			23

SOURCE: Telephone survey.

NOTE: Means were estimated 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, first, and second 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)**

Outcome	Means				Total Sample
	Bottom Third	Middle Third	Top Third	Total Sample	
Ever attended or currently attending a 4-year college	6	16	27	15	
Completed at least 1 year at a 4-year college	6	12	21	12	
Completed at least 2 years at a 4-year college	4	10	18	10	
Earned a bachelor's degree	0	2	3	2	
Ever attended or currently attending a 2- or 4-year college	25	33	47	34	
Completed at least 1 year at a 2- or 4-year college	19	26	38	27	
Completed at least 2 years at a 2- or 4-year college	8	16	26	16	
Earned a bachelor's or associate's degree	2	8	10	7	
Ever or currently in college, voc/tech school, an apprenticeship, or the military	46	57	66	56	
Completed 2 years of college or military service, completed voc/tech school or an apprenticeship, or honorably discharged from the military	17	32	43	30	
Completed an associate's or bachelor's degree, voc/tech school or an apprenticeship, in the military for more than 2 years, or honorably discharged from the military	12	26	30	22	
Ever or currently in college, voc/tech school, an apprenticeship, the military, or Job Corps	48	63	67	59	
Currently in a 4-year college	5	7	17	9	
Currently in a 2- or 4-year college	15	14	22	17	
Currently in college, voc/tech school, an apprenticeship, or the military	22	24	26	24	

SOURCE: Telephone survey.

NOTE: Means were estimated 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, first, and second telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

**Table G.21. QOP Group Means Pertaining to Employment and Earnings by Rank in the Baseline Grade Distribution When Entering Ninth Grade (Percentages, Unless Otherwise Indicated)**

Outcome	Means					Total Sample
	Bottom Third	Middle Third	Top Third			
Currently employed	64	73	66			67
Currently unemployed	16	13	12			14
Currently out of labor force	20	14	22			19
Currently employed or in college, voc/tech school, an apprenticeship, or the military	73	81	77			77
Ever employed	95	94	97			96
Employed in past 12 months	79	89	82			83
Percentage of weeks employed in past 12 months (percentage of weeks)	53	65	61			59
Number of jobs in past 12 months (number of jobs)	1.0	1.2	1.1			1.1
Tenure at current job (months)	16	14	14			15
Usual number of hours worked per week in all current jobs (hours)	26	30	28			28
Works at least 35 hours per week at main current job	51	60	50			53
Total earnings in past 12 months (dollars)	11,365	13,246	13,700			12,676
Hourly earnings at main current job (dollars)	7.04	8.02	9.17			7.93
Has a job with health insurance	40	47	45			44
Has a job with paid time off	37	45	47			43
Has a job with a pension or retirement benefits	35	32	39			36

SOURCE: Telephone survey.

NOTE: Means were estimated 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, first, and second telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

**Table G.22. Control Group Means Pertaining to Employment and Earnings by Rank in the Baseline Grade Distribution When Entering Ninth Grade (Percentages, Unless Otherwise Indicated)**

Outcome	Means				
	Bottom Third	Middle Third	Top Third	Total Sample	
Currently employed	64	69	70	68	
Currently unemployed	12	16	17	15	
Currently out of labor force	24	15	13	17	
Currently employed or in college, voc/tech school, an apprenticeship, or the military	74	78	76	75	
Ever employed	95	96	94	95	
Employed in past 12 months	78	85	87	84	
Percentage of weeks employed in past 12 months (percentage of weeks)	58	60	65	61	
Number of jobs in past 12 months (number of jobs)	0.9	1.1	1.0	1.0	
Tenure at current job (months)	14	17	17	16	
Usual number of hours worked per week in all current jobs (hours)	26	29	29	28	
Works at least 35 hours per week at main current job	49	57	55	53	
Total earnings in past 12 months (dollars)	13,001	13,095	14,272	13,198	
Hourly earnings at main current job (dollars)	7.31	11.13	8.84	9.14	
Has a job with health insurance	45	46	50	47	
Has a job with paid time off	40	47	48	45	
Has a job with a pension or retirement benefits	39	38	35	38	

SOURCE: Telephone survey.

NOTE: Means were estimated 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, first, and second telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

**Table G.23. QOP Group Means Pertaining to Risky Behaviors, Physical and Mental Well-Being, and Family Life by Rank in the Baseline Grade Distribution (Percentages)**

Outcome	Means				Total Sample
	Bottom Third	Middle Third	Top Third		
Smoked cigarettes or used tobacco in past month	36	32	32	34	
Smoked cigarettes or used tobacco daily in past month	25	24	17	22	
Binge drinking in past month	33	25	33	31	
Binge drinking on 8 or more days in past month	9	6	8	8	
Used an illegal drug in past month	13	13	11	12	
Committed a crime in past 3 months	4	9	2	5	
Committed a crime in past 2 years	19	18	11	16	
Arrested or charged in past 2 years	12	11	9	11	
Convicted or pled guilty in past 2 years	5	5	4	5	
Served time in jail, prison, or detention home in past 2 years	3	4	4	4	
Self-reported health is fair, poor, or very poor	15	5	8	9	
Physical or mental condition limited activities quite a lot or could not work because of these limitations	7	7	8	7	
Had first child before age 18	19	16	18	18	
Currently living with natural children, but no spouse	30	27	38	32	
Have children with whom not currently living	27	16	12	18	
Have child with whom not living and not providing any regular child support	8	6	5	6	
Currently receiving welfare	13	16	18	15	
Currently receiving food stamps	28	22	29	26	
Currently receiving welfare or food stamps	28	25	30	27	

SOURCE: Telephone survey.

NOTE: Means were estimated 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, first, and second 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				Total Sample
	Bottom Third	Middle Third	Top Third	Total Sample	
Smoked cigarettes or used tobacco in past month	46	26	29	34	
Smoked cigarettes or used tobacco daily in past month	31	20	22	24	
Binge drinking in past month	34	30	29	31	
Binge drinking on 8 or more days in past month	6	7	6	6	
Used an illegal drug in past month	7	18	12	13	
Committed a crime in past 3 months	3	0	3	2	
Committed a crime in past 2 years	12	14	8	11	
Arrested or charged in past 2 years	7	4	4	5	
Convicted or pled guilty in past 2 years	5	1	1	3	
Served time in jail, prison, or detention home in past 2 years	5	0	1	2	
Self-reported health is fair, poor, or very poor	11	4	10	8	
Physical or mental condition limited activities quite a lot or could not work because of these limitations	7	6	7	7	
Had first child before age 18	17	16	13	16	
Currently living with natural children, but no spouse	31	26	35	31	
Have children with whom not currently living	23	18	10	17	
Have child with whom not living and not providing any regular child support	11	8	4	8	
Currently receiving welfare	18	13	9	14	
Currently receiving food stamps	26	22	21	24	
Currently receiving welfare or food stamps	28	22	21	24	

SOURCE: Telephone survey.

NOTE: Means were estimated 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, first, and second telephone surveys. The evaluation sample had 580 GOP enrollees and 489 controls.

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**APPENDIX H**

**QOP AND CONTROL GROUP MEANS FOR SITES AND SITE SUBGROUPS**

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

Outcome	Means								Total Sample
	Fort Worth	Cleveland	DC	Houston	Memphis	Philadelphia	Yakima		
Received HS diploma	69	54	66	46	55	75	55		60
Received HS diploma or GED	80	77	83	68	71	81	85		78

Source: Telephone surveys and transcripts.

Note: Means were estimated 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, first, and second 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)**

Outcome	Means								Total Sample
	Fort Worth	Cleveland	DC	Houston	Memphis	Philadelphia	Yakima		
Received HS diploma	77	35	58	44	62	80	61		60
Received HS diploma or GED	84	58	71	69	79	85	82		75

SOURCE: Telephone surveys and transcripts.

NOTE: Means were estimated 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, first, and second 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)**

Outcome	Means										Total Sample
	Fort Worth	Cleveland	DC	Houston	Memphis	Philadelphia	Yakima				
Ever attended or currently attending a 4-year college	16	17	21	12	11	20	17				16
Completed at least 1 year at a 4-year college	10	17	20	12	11	15	12				14
Completed at least 2 years at a 4-year college	7	15	17	9	7	13	12				11
Earned a bachelor's degree	3	6	1	1	2	2	2				3
Ever attended or currently attending a 2- or 4-year college	41	46	33	28	41	25	53				38
Completed at least 1 year at a 2- or 4-year college	24	32	26	21	33	20	45				29
Completed at least 2 years at a 2- or 4-year college	17	23	19	11	15	13	33				19
Earned a bachelor's or associate's degree	9	13	1	2	4	2	10				6
Ever or currently in college, voc/tech school, an apprenticeship, or the military	52	71	69	49	64	67	58				61
Completed 2 years of college or military service, completed voc/tech school or an apprenticeship, or honorably discharged from the military	34	42	39	27	34	34	37				35
Completed an associate's or bachelor's degree, voc/tech school or an apprenticeship, in the military for more than 2 years, or honorably discharged from the military	26	37	22	20	24	25	17				25
Ever or currently in college, voc/tech school, an apprenticeship, the military, or Job Corps	55	73	75	52	69	69	58				64
Currently in a 4-year college	5	6	11	7	5	7	10				7
Currently in a 2- or 4-year college	16	13	16	11	8	10	17				13
Currently in college, voc/tech school, an apprenticeship, or the military	24	26	30	23	24	15	19				23

Source: Telephone survey.

Note: Means were estimated 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, first, and second 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								Total Sample
	Fort Worth	Cleveland	DC	Houston	Memphis	Philadelphia	Yakima		
Ever attended or currently attending a 4-year college	17	11	26	10	16	3	22		15
Completed at least 1 year at a 4-year college	10	11	26	10	12	0	18		12
Completed at least 2 years at a 4-year college	8	9	16	10	9	0	18		10
Earned a bachelor's degree	1	0	5	4	0	0	3		2
Ever attended or currently attending a 2- or 4-year college	36	29	30	33	39	25	48		34
Completed at least 1 year at a 2- or 4-year college	29	25	28	26	26	17	39		27
Completed at least 2 years at a 2- or 4-year college	18	16	16	16	16	5	28		16
Earned a bachelor's or associate's degree	6	8	5	8	6	0	15		7
Ever or currently in college, voc/tech school, an apprenticeship, or the military	45	59	55	55	54	55	67		56
Completed 2 years of college or military service, completed voc/tech school or an apprenticeship, or honorably discharged from the military	28	35	20	30	26	31	42		30
Completed an associate's or bachelor's degree, voc/tech school or an apprenticeship, in the military for more than 2 years, or honorably discharged from the military	18	26	11	26	20	26	29		22
Ever or currently in college, voc/tech school, an apprenticeship, the military, or Job Corps	46	59	61	61	59	57	67		59
Currently in a 4-year college	11	9	14	9	4	0	17		9
Currently in a 2- or 4-year college	17	17	16	24	9	10	24		17
Currently in college, voc/tech school, an apprenticeship, or the military	23	26	28	30	15	16	31		24

Source: Telephone survey.

Note: Means were estimated 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, first, and second telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

**Table H.5. QOP Group Means Pertaining to Employment and Earnings by Site (Percentages, Unless Stated Otherwise)**

Outcome	Means								Total Sample
	Fort Worth	Cleveland	DC	Houston	Memphis	Philadelphia	Yakima		
Currently employed	74	65	58	75	66	61	69		67
Currently unemployed	11	13	21	10	12	16	13		14
Currently out of labor force	15	23	21	15	21	22	18		19
Currently employed or in college, voc/tech school, an apprenticeship, or the military	81	75	77	83	76	66	78		77
Ever employed	97	93	94	99	97	97	92		96
Employed in past 12 months	91	80	80	88	83	81	79		83
Percentage of weeks employed in past 12 months (percentage of weeks)	71	57	53	58	52	64	60		59
Number of jobs in past 12 months (number of jobs)	1.2	1.0	1.1	1.0	1.0	1.1	1.1		1.1
Tenure at current job (months)	16	16	9	19	12	13	17		15
Usual number of hours worked per week in all current jobs (hours)	30	26	24	33	28	25	28		28
Works at least 35 hours per week at main current job	54	45	47	61	58	53	52		53
Total earnings in past 12 months (dollars)	19,536	10,089	12,158	14,208	10,605	10,446	11,692		12,676
Hourly earnings at main current job (dollars)	10.32	6.41	7.72	10.45	6.36	6.48	7.79		7.93
Has a job with health insurance	49	44	43	41	52	35	44		44
Has a job with paid time off	51	44	42	44	42	38	40		43
Has a job with a pension or retirement benefits	45	33	34	38	41	33	32		36

SOURCE: Telephone survey.

NOTE: Means were estimated 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, first, and second telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

**Table H.6. Control Group Means Pertaining to Employment and Earnings by Site (Percentages, Unless Stated Otherwise)**

Outcome	Means								Total Sample
	Fort Worth	Cleveland	DC	Houston	Memphis	Philadelphia	Yakima		
Currently employed	79	47	65	71	81	58	72		68
Currently unemployed	6	29	16	9	10	28	7		15
Currently out of labor force	15	25	19	20	9	12	21		17
Currently employed or in college, voc/tech school, an apprenticeship, or the military	84	60	72	82	84	61	85		75
Ever employed	92	98	92	95	98	97	96		95
Employed in past 12 months	83	79	79	80	91	83	91		84
Percentage of weeks employed in past 12 months (percentage of weeks)	69	46	59	57	66	62	69		61
Number of jobs in past 12 months (number of jobs)	1.1	0.9	0.9	1.0	1.2	1.0	1.1		1.0
Tenure at current job (months)	18	12	14	17	21	15	18		16
Usual number of hours worked per week in all current jobs (hours)	31	19	27	31	35	22	28		28
Works at least 35 hours per week at main current job	63	37	58	56	58	42	57		53
Total earnings in past 12 months (dollars)	17,278	7,849	12,520	12,659	13,263	12,910	15,909		13,198
Hourly earnings at main current job (dollars)	11.14	4.27	6.68	10.85	8.05	11.44	11.52		9.14
Has a job with health insurance	54	30	58	45	57	41	45		47
Has a job with paid time off	56	27	55	47	59	28	44		45
Has a job with a pension or retirement benefits	44	26	43	41	41	30	38		38

Source: Telephone survey.

Note: Means were estimated 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, first, and second telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

**Table H.7. QOP Group Means Pertaining to Risky Behaviors, Physical and Mental Well-Being, and Family Life by Site (Percentages)**

Outcome	Means								Total Sample
	Fort Worth	Cleveland	DC	Houston	Memphis	Philadelphia	Yakima		
Smoked cigarettes or used tobacco in past month	33	34	38	37	32	27	34	34	
Smoked cigarettes or used tobacco daily in past month	18	29	27	21	25	20	18	22	
Binge drinking in past month	28	22	24	40	24	21	60	31	
Binge drinking on 8 or more days in past month	8	3	2	11	5	8	20	8	
Used an illegal drug in past month	4	20	17	15	11	9	10	12	
Committed a crime in past 3 months	1	4	1	3	8	6	11	5	
Committed a crime in past 2 years	12	25	11	12	18	13	21	16	
Arrested or charged in past 2 years	5	16	8	10	9	19	12	11	
Convicted or pled guilty in past 2 years	5	6	3	5	7	4	3	5	
Served time in jail, prison, or detention home in past 2 years	4	6	3	2	5	4	0	4	
Self-reported health is fair, poor, or very poor	7	5	14	14	3	12	11	9	
Physical or mental condition limited activities quite a lot or could not work because of these limitations	6	8	9	7	10	4	8	7	
Had first child before age 18	11	14	19	17	29	26	11	18	
Currently living with natural children, but no spouse	16	38	30	22	52	42	21	32	
Have children with whom not currently living	9	28	8	14	18	30	23	18	
Have child with whom not living and not providing any regular child support	7	9	5	3	7	12	0	6	
Currently receiving welfare	9	17	16	11	24	18	11	15	
Currently receiving food stamps	19	23	28	30	37	18	27	26	
Currently receiving welfare or food stamps	19	24	28	31	37	21	30	27	

Source: Telephone survey.

Note: Means were estimated 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, first, and second telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

**Table H.8. Control Group Means Pertaining to Risky Behaviors, Physical and Mental Well-Being, and Family Life by Site (Percentages)**

Outcome	Means								Total Sample
	Fort Worth	Cleveland	DC	Houston	Memphis	Philadelphia	Yakima		
Smoked cigarettes or used tobacco in past month	34	65	37	22	35	15	28		34
Smoked cigarettes or used tobacco daily in past month	11	56	32	12	26	15	18		24
Binge drinking in past month	39	39	30	26	17	23	42		31
Binge drinking on 8 or more days in past month	9	4	14	8	5	0	0		6
Used an illegal drug in past month	5	20	14	6	14	21	10		13
Committed a crime in past 3 months	0	3	4	2	3	0	2		2
Committed a crime in past 2 years	10	12	13	12	12	5	16		11
Arrested or charged in past 2 years	4	7	7	6	5	3	4		5
Convicted or pled guilty in past 2 years	3	2	2	6	1	0	4		3
Served time in jail, prison, or detention home in past 2 years	3	2	0	6	1	0	4		2
Self-reported health is fair, poor, or very poor	12	8	9	11	12	3	0		8
Physical or mental condition limited activities quite a lot or could not work because of these limitations	1	2	10	10	3	11	9		7
Had first child before age 18	7	13	16	20	20	24	11		16
Currently living with natural children, but no spouse	21	41	22	27	26	57	20		31
Have children with whom not currently living	10	18	21	22	26	17	7		17
Have child with whom not living and not providing any regular child support	6	7	13	6	11	7	7		8
Currently receiving welfare	3	13	12	5	17	37	11		14
Currently receiving food stamps	12	43	16	15	24	40	18		24
Currently receiving welfare or food stamps	12	43	16	15	24	44	18		24

Source: Telephone survey.

Note: Means were estimated 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, first, and second telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

**Table H.9 QOP Group Means Pertaining to High School Completion by Site's Deviation from QOP Model (Percentages)**

Outcome	Means		Total Sample
	Sites that Deviated Substantially from QOP Model	Sites that Deviated Moderately from QOP Model	
Received HS diploma	58	61	60
Received HS diploma or GED	74	79	78

SOURCE: Telephone surveys and transcripts.

NOTE: Means were estimated 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, first, and second telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

**Table H.10. Control Group Means Pertaining to High School Completion by Site's Deviation from QOP Model (Percentages)**

Outcome	Means		Total Sample
	Sites that Deviated Substantially from QOP Model	Sites that Deviated Moderately from QOP Model	
Received HS diploma	61	59	60
Received HS diploma or GED	76	75	75

SOURCE: Telephone surveys and transcripts.

NOTE: Means were estimated 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, first, and second telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.



**Table H.11. QOP Group Means Pertaining to Postsecondary Attainment by Site's Deviation from QOP Model (Percentages)**

Outcome	Means		
	Sites that Deviated Substantially from QOP Model	Sites that Deviated Moderately from QOP Model	Total Sample
Ever attended or currently attending a 4-year college	14	17	16
Completed at least 1 year at a 4-year college	11	15	14
Completed at least 2 years at a 4-year college	8	13	11
Earned a bachelor's degree	2	3	3
Ever attended or currently attending a 2- or 4-year college	34	40	38
Completed at least 1 year at a 2- or 4-year college	22	31	29
Completed at least 2 years at a 2- or 4-year college	14	20	19
Earned a bachelor's or associate's degree	6	6	6
Ever or currently in college, voc/tech school, an apprenticeship, or the military	51	66	61
Completed 2 years of college or military service, completed voc/tech school or an apprenticeship, or honorably discharged from the military	31	37	35
Completed an associate's or bachelor's degree, voc/tech school or an apprenticeship, in the military for more than 2 years, or honorably discharged from the military	23	25	25
Ever or currently in college, voc/tech school, an apprenticeship, the military, or Job Corps	53	69	64
Currently in a 4-year college	6	8	7
Currently in a 2- or 4-year college	14	13	13
Currently in college, voc/tech school, an apprenticeship, or the military	24	23	23

SOURCE: Telephone survey.

NOTE: Means were estimated 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, first, and second telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

**Table H.12. Control Group Means Pertaining to Postsecondary Attainment by Site's Deviation from QOP Model (Percentages)**

Outcome	Means			Total Sample
	Sites that Deviated Substantially from QOP Model	Sites that Deviated Moderately from QOP Model		
Ever attended or currently attending a 4-year college	14	16		15
Completed at least 1 year at a 4-year college	10	13		12
Completed at least 2 years at a 4-year college	9	10		10
Earned a bachelor's degree	3	2		2
Ever attended or currently attending a 2- or 4-year college	35	34		34
Completed at least 1 year at a 2- or 4-year college	28	27		27
Completed at least 2 years at a 2- or 4-year college	17	16		16
Earned a bachelor's or associate's degree	7	7		7
Ever or currently in college, voc/tech school, an apprenticeship, or the military	50	58		56
Completed 2 years of college or military service, completed voc/tech school or an apprenticeship, or honorably discharged from the military	29	31		30
Completed an associate's or bachelor's degree, voc/tech school or an apprenticeship, in the military for more than 2 years, or honorably discharged from the military	22	22		22
Ever or currently in college, voc/tech school, an apprenticeship, the military, or Job Corps	54	61		59
Currently in a 4-year college	10	9		9
Currently in a 2- or 4-year college	21	15		17
Currently in college, voc/tech school, an apprenticeship, or the military	26	23		24

SOURCE: Telephone survey.

NOTE: Means were estimated 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, first, and second telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

**Table H.13. QOP Group Means Pertaining to Employment and Earnings by Site's Deviation from QOP Model (Percentages, Unless Stated Otherwise)**

Outcome	Means			Total Sample
	Sites that Deviated Substantially from QOP Model	Sites that Deviated Moderately from QOP Model	Sites that Deviated from QOP Model	
Currently employed	75	64	67	
Currently unemployed	10	15	14	
Currently out of labor force	15	21	19	
Currently employed or in college, voc/tech school, an apprenticeship, or the military	82	75	77	
Ever employed	98	95	96	
Employed in past 12 months	90	80	83	
Percentage of weeks employed in past 12 months (percentage of weeks)	65	57	59	
Number of jobs in past 12 months (number of jobs)	1.1	1.1	1.1	
Tenure at current job (months)	18	14	15	
Usual number of hours worked per week in all current jobs (hours)	32	26	28	
Works at least 35 hours per week at main current job	57	51	53	
Total earnings in past 12 months (dollars)	16,872	10,998	12,676	
Hourly earnings at main current job (dollars)	10.38	6.95	7.93	
Has a job with health insurance	45	44	44	
Has a job with paid time off	47	41	43	
Has a job with a pension or retirement benefits	41	35	36	

SOURCE: Telephone survey.

NOTE: Means were estimated 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, first, and second telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

**Table H.14. Control Group Means Pertaining to Employment and Earnings by Site's Deviation from QOP Model (Percentages, Unless Stated Otherwise)**

Outcome	Means			Total Sample
	Sites that Deviated Substantially from QOP Model	Sites that Deviated Moderately from QOP Model	Sites that Deviated from QOP Model	
Currently employed	75	65	68	
Currently unemployed	8	18	15	
Currently out of labor force	17	17	17	
Currently employed or in college, voc/tech school, an apprenticeship, or the military	83	72	75	
Ever employed	93	96	95	
Employed in past 12 months	82	85	84	
Percentage of weeks employed in past 12 months (percentage of weeks)	63	60	61	
Number of jobs in past 12 months (number of jobs)	1.0	1.0	1.0	
Tenure at current job (months)	17	16	16	
Usual number of hours worked per week in all current jobs (hours)	31	26	28	
Works at least 35 hours per week at main current job	60	51	53	
Total earnings in past 12 months (dollars)	14,968	12,490	13,198	
Hourly earnings at main current job (dollars)	10.99	8.39	9.14	
Has a job with health insurance	50	46	47	
Has a job with paid time off	51	43	45	
Has a job with a pension or retirement benefits	43	36	38	

SOURCE: Telephone survey.

NOTE: Means were estimated 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, first, and second telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

**Table H.15. QOP Group Means Pertaining to Risky Behaviors, Physical and Mental Well-Being, and Family Life by Site's Deviation from QOP Model (Percentages)**

Outcome	Means			Total Sample
	Sites that Deviated Substantially from QOP Model	Sites that Deviated Moderately from QOP Model	Sites that Deviated from QOP Model	
Smoked cigarettes or used tobacco in past month	35	33	34	34
Smoked cigarettes or used tobacco daily in past month	19	24	22	22
Binge drinking in past month	34	30	31	31
Binge drinking on 8 or more days in past month	9	8	8	8
Used an illegal drug in past month	10	13	12	12
Committed a crime in past 3 months	2	6	5	5
Committed a crime in past 2 years	12	18	16	16
Arrested or charged in past 2 years	7	13	11	11
Convicted or pled guilty in past 2 years	5	5	5	5
Served time in jail, prison, or detention home in past 2 years	3	4	4	4
Self-reported health is fair, poor, or very poor	10	9	9	9
Physical or mental condition limited activities quite a lot or could not work because of these limitations	6	8	7	7
Had first child before age 18	14	20	18	18
Currently living with natural children, but no spouse	19	37	32	32
Have children with whom not currently living	11	21	18	18
Have child with whom not living and not providing any regular child support	5	7	6	6
Currently receiving welfare	10	17	15	15
Currently receiving food stamps	24	27	26	26
Currently receiving welfare or food stamps	25	28	27	27

SOURCE: Telephone survey.

NOTE: Means were estimated 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, first, and second telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.

**Table H.16. Control Group Means Pertaining to Risky Behaviors, Physical and Mental Well-Being, and Family Life by Site's Deviation from QOP Model (Percentages)**

Outcome	Means			Total Sample
	Sites that Deviated Substantially from QOP Model	Sites that Deviated Moderately from QOP Model	Sites that Deviated from QOP Model	
Smoked cigarettes or used tobacco in past month	28	36	34	
Smoked cigarettes or used tobacco daily in past month	11	29	24	
Binge drinking in past month	33	30	31	
Binge drinking on 8 or more days in past month	9	5	6	
Used an illegal drug in past month	5	16	13	
Committed a crime in past 3 months	1	3	2	
Committed a crime in past 2 years	11	11	11	
Arrested or charged in past 2 years	5	5	5	
Convicted or pled guilty in past 2 years	4	2	3	
Served time in jail, prison, or detention home in past 2 years	4	2	2	
Self-reported health is fair, poor, or very poor	11	6	8	
Physical or mental condition limited activities quite a lot or could not work because of these limitations	6	7	7	
Had first child before age 18	14	17	16	
Currently living with natural children, but no spouse	24	33	31	
Have children with whom not currently living	16	18	17	
Have child with whom not living and not providing any regular child support	6	9	8	
Currently receiving welfare	4	18	14	
Currently receiving food stamps	13	28	24	
Currently receiving welfare or food stamps	13	29	24	

SOURCE: Telephone survey.

NOTE: Means were estimated 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, first, and second telephone surveys. The evaluation sample had 580 QOP enrollees and 489 controls.