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ABSTRACT

The Quantum Opportunities Project (QOP) was a multisite youth development demonstration project funded by the Ford Foundation in San Antonio (Texas), Philadelphia (Pennsylvania), Milwaukee (Wisconsin), Saginaw (Michigan), and Oklahoma City (Oklahoma). The programs, organized around educational activities, guaranteed up to 250 hours of education, 250 hours of development activities, and 250 hours of service each full year from the ninth grade through high school for in-school youth or youth who had dropped out or left their original schools or neighborhoods. Students received hourly stipends between \$1 and \$1.33 with eventual bonuses. Twenty-five youths were enrolled in each program. Program evaluation undertaken by Brandeis University's Center for Human Resource included respondent surveys and subgroup comparisons for four sites, excluding Milwaukee, where data were not complete. Analysis indicates that QOP members, when compared to control groups, were more likely to graduate from high school, more likely to enroll in college, less likely to drop out, more likely to have received awards, and less likely to have children. Although QOP members were not immune from the many hazards of inner city life, the benefits of the program were made apparent by the evaluation. Seventeen figures, 16 tables, and newspaper clippings illustrate the discussion at the end of the document. (SLD)

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EVALUATION OF THE QUANTUM OPPORTUNITIES PROGRAM (QOP)

DID THE PROGRAM WORK?

**A Report on the Post Secondary Outcomes and
Cost-Effectiveness of the QOP Program
(1989 - 1993)**

Prepared by

**Brandeis University
Heller Graduate School
Center for Human Resources
Waltham, MA 02254**

Andrew Hahn

with

**Tom Leavitt
Paul Aaron**

June 1994

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THE QUANTUM OPPORTUNITIES PROJECT DEMONSTRATION

The Quantum Opportunities Project (QOP) was a multi-site youth development demonstration project, funded by the Ford Foundation, in five communities: San Antonio, Philadelphia, Milwaukee, Saginaw, and Oklahoma City. Each program was run by an affiliate of the community-based organization, OIC, except Milwaukee where the service provider was Learning Enterprise, an alternative education program.

The program design called for a multi-year effort starting in ninth grade which was to continue through the high school years. The programs were organized around education activities (e.g., participation in computer-assisted instruction, peer tutoring, homework assistance, etc.), service activity (e.g., community service projects, helping on public events, regular jobs), and development activities (e.g., curricula focused on life/family skills, college and job planning).

Specifically, QOP guaranteed up to 250 hours of education, 250 hours of development activities, and 250 hours of service each full year from the ninth grade through high school graduation for in-school youth or anytime for youth who may have dropped out, transferred, or even left their original neighborhoods. Students received hourly stipends starting at \$1.00 per hour and rising to \$1.33. After completing 100 hours of programming, a \$100 bonus was received and an equal amount of funds was put into an interest-bearing Quantum Opportunity Account for approved use, usually college or training. Staff also received bonus payments and incentives, although administration of this component varied from site to site.

Programs delivered services in different settings. All programs provided services in the community agencies during the after-school hours. In several cases, the public schools provided space and time for services to be provided in school settings. In some sites, individuals pursued a self-paced set of activities in their homes, along with occasional group activities.

Only 25 youth were enrolled in each program, a feature which allowed for a club-like identity to evolve. OIC received funding for the programs at the start of the demonstration; the forward funding allowed for continuous service from ninth to twelfth grades. The philosophy of the program was "once in QOP, always in QOP," suggesting that even youth who temporarily dropped out should be served through appropriate services.

Six specific demonstration goals were identified by planners and funders: (1) to serve very disadvantaged youth, such as youth from families receiving public assistance; (2) to test the rate of "take-up" when a rich and continuous set of services is offered; (3) to learn not only about the dynamics of recruitment and retention, but also the relative impacts of diverse program components; (4) to assess the capacity of a community-based organization to manage a complex demonstration over several years; (5) to test a financial incentive structure that rewards youth and program staff for sticking with the programs; (6) to use the QOP experience to increase basic understanding of the barriers and the pathways for serving poor, largely minority youth in year-round multi-year continuing programs offering both tangible services and relationships with caring adults.

A rigorous evaluation involving random assignment was conducted by Brandeis University's Center for Human Resource, Heller Graduate School, under the direction of Andrew Hahn.

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I. INTRODUCTION

The Quantum Opportunities Program (QOP) was designed to test the ability of community-based organizations to foster achievement of academic and social competencies among high school students from families receiving public assistance. The demonstration was a multi-year, multi-service year-round program of assistance and coaching. Encouragement and training were to be provided by local Opportunities Industrial Centers (OIC) of America in five sites -- Philadelphia, Oklahoma City, San Antonio, Saginaw, and Milwaukee.¹ Among the "quantum opportunities" to be offered to students were *educational activities* (tutoring, computer-based instruction, and other educational services), *community service activities* aimed at improving conditions in the communities, and *development activities* to learn more about health, alcohol, drug abuse, sex, family planning, arts, career, and college planning. Both students and OIC staff received financial encouragements to meet program participation goals. Students, for example, received small stipends for participating in approved services, as well as bonus payments for completing segments of program activities. They also received a matching amount of funds in an accrual account which could be used for an approved activity in the post-high school period.²

QOP began in the summer of 1989 with the recruitment of disadvantaged students entering the ninth grade. In each of the five sites, 25 students were randomly assigned to an experimental and control group (a total of 50 students in each site). Sites were urged to retain contact with both experimental and control groups members so that their progress could be compared using the results of periodic questionnaires. See Table "A-1989" for information on the characteristics of young people assigned to QOP in 1989. By any reasonable standard, young people in QOP were highly disadvantaged.

SOCIAL EXPERIMENT

All students (the 25 in the QOP group and the 25 controls) were randomly selected from lists of eighth grade students from families receiving public assistance. In a departure from other social experiments, QOP directors were not allowed to recruit students who had

¹ In the second year of the project, the Milwaukee site changed providers, from OIC to a community-based alternative school and social service program.

² Specifically, QOP guaranteed up to 250 hours of education, 250 hours of development activities, and 250 hours of service each full year from the 9th grade through high school graduation for in school youth or anytime for out-of-school youth. Students received hourly stipends starting at \$1.00 per hour and rising to \$1.33. After completing 100 hours of programming, a \$100 bonus was received and an equal amount of funds was put into an interest bearing Quantum Opportunity Account for approved use, usually college or training. Staff also received bonus payments and incentives, although administration of this component varied from site to site.

pre-screened themselves into the program. In most studies, for example, program operators have been allowed to over-recruit students and then the researchers select students randomly from among the equally motivated students who volunteer for the programs. In the QOP demonstration, however, the researchers randomly selected students from a paper list and then handed the OIC project directors this listing of the 25 "potential" QOP youth. Directors were told to see how many of the 25 youth assigned to the "experimental" group could be encouraged to join the promised program of services and incentives. The project administrators were not allowed to pre-screen the youth, and they were told that any young person from the original list of 25 could and should be encouraged to join the program at any time.³ The knowledge development goal was to learn about "take-up," that is, a community-based group's ability to serve and sustain young people from very poor backgrounds in a structured program of services over a relatively long period. The questions asked in the QOP experiment, and the design implemented to answer them, are rather unique in the history of youth program evaluations.

At the beginning of the program in September 1989, experimental and control group members were asked to fill out a questionnaire that included questions about demographic characteristics, work experience, school experiences, health knowledge, and personal attitudes and opinions. In addition, participants were asked to take tests assessing their academic skill levels (Test of Adult Basic Education Form 5 Level) and functional skill levels (APL 40 Item Version Survey -CCP Tier Mastery Test).

These tests, along with similar questionnaires, were given to the same experimental and control group members in the Fall of 1990 and 1991. In the Fall of 1992, similar questionnaires (with the addition of some questions on future plans) were administered. However, academic and functional skill testing was postponed until the Spring of 1993 in order to capture skill levels at a time when most sample members were preparing to leave high school. In addition, a different type of questionnaire, one that focused on future plans was given to experimental and control group members in the Spring of 1993.

The purpose of these periodic questionnaires was twofold: (1) to compare experimental and control group members along a number of dimensions, as experimental group members accrued more time in QOP activities; and (2) to gauge the amount of positive change that experimental group members may have experienced over time.

³ There were some replacements (always randomly selected) allowed in the original lists supplied to the QOP sites up to a deadline date of November. These replacements were justified because some young people listed were deceased or had moved. In no case did the researchers allow sites to make substitutions based on the motivation or interests of students. Consider the following story: One young person told the researchers that "I was picked out of class and asked to go downstairs ... I looked scared and thought Mr. ___ would be kicking me out of school. He looked at me and said "Relax, you'll be okay. I'd like to tell you about a new program called QOP..."

In the late Fall of 1993, a "follow-up" questionnaire was administered to experimental and control group members. The primary purposes of this questionnaire were to find out what members were doing several months after their "scheduled" departure from high school and to examine experimental group attitudes toward the QOP. *The present report mostly focuses on the results of our analysis of this Fall 1993 post-high school questionnaire.*⁴

To summarize, QOP was a multi-site demonstration supported by the Ford Foundation and run by a national community-based organization, and its local affiliates, the OICs. It stressed *community* through the service components, *responsibility* through the pedagogy and program requirements, *opportunity* through the promise of a steady stream of offerings spanning the entire high school experience, and *investment* through earned stipends and college savings, not to mention the unusual method used to fund the entire demonstration, an "upfront" program related grant from the Ford Foundation. In contrast to most youth programs in the "add-on" or "second-chance" tradition, QOP was designed to encourage long-term involvement through an array of services. Meaningful relationships with adults would be encouraged without fear of having bonds abruptly severed when the programs ended. All of this would be provided in friendly, often family-like, environments by community groups with deep ties to the neighborhoods. The national office of OIC would provide guidance, technical assistance as needed, and other replication interventions. Modern learning technologies would be utilized such as individualized computer-based literacy instruction delivered in high tech learning labs.⁵

⁴ This report is not a comprehensive review of the entire QOP experience. Other reports in this series include: QOP Research Guide, August 1989; The QOP Project: Interim Research Report, July 1990; Evaluation of QOP: The First Year of Program Operations, June 1991; QOP: Report on Site Visits, 1991, June 1991; QOP: An Analysis of Enrollments and Budget Assumptions, April 1991; Evaluation of the QOP: Interim Impacts covering the 9th-10th Grades, June 1992; What Does It Take? Forging Long-Term Allegiance Among Youth From Public Assistance Households: An Interim Report for QOP, March 1993; Quantum Opportunities Program Report: Site Visit Results As Students Approached Graduation and Survey Results from the Spring 1993, (October 1993). All are available from Brandeis University, Center for Human Resources, Waltham, MA 02254, Attention: Andrew Hahn.

⁵ The QOP demonstration was designed by national OIC's Ben Lattimore and Robert Taggart of the Remediation and Training Institute. Taggart had also run the US BASICS organization in Alexandria, Virginia and before that, youth programs in the Labor Dept. during the Carter administration. He was interested in learning whether a comprehensive, year-round, multi-year program of hands-on learning, "tough love" and good youth development principles would make a difference in even a small number of young people from the poorest families in high poverty neighborhoods. He had experience developing a national network of learning laboratories featuring computer-based instruction in basic skills, life skills, and vocational training. He sought to build on this "Comprehensive Competencies Program (CCP)" experience. Thus QOP was designed to be located in OICs with US BASICS CCP learning labs.

Taggart has written an interesting and lively evaluation report on QOP using his own follow-up survey data. Although there are very small discrepancies between his "internal" study for OIC and our

The design of QOP was described as "a quantum leap" in opportunities because it built on lessons from the past, and best practices from the present. But, would it work? Would youth participate? Would they stick with it? Would they improve their lives in ways that wouldn't occur without QOP?

The Ford Foundation made an initial grant of \$1,050,000, followed by another grant of \$130,000. The national OIC office was allowed to use the interest payments on administration of the national program activities, as well as on other program-related expenses.

Consider the Philadelphia program which, as implemented and described in previous reports, corresponds most closely to the original QOP design:

Average per participant direct payments in Philadelphia were \$3,000 for stipends, \$900 for completion-bonuses, and \$4,100 for the "opportunity account" accrual to be used in the post-high school period. Another \$7,000 per person was spent in Philadelphia over the four years on staff, agency and program delivery, for a total of \$15,000 per individual. Since average QOP hours on various Philadelphia programmatic activities reached 2,300 hours over the four years, the average per hour cost was approximately \$6.50. About half of this figure results in direct payments to the young participants.

On a program-wide basis, with the less intensive sites added in, the total QOP cost per participant was roughly \$10,600. About half of this figure is for program activities; the rest is for stipends/bonuses, opportunity accrual accounts, and payments to QOP coordinators. Under a third of all QOPers spent less than 500 hours participating in the program over the four years. However, the remaining 70 percent enjoyed anywhere from 500 to 3000 or more hours in the program over the four years. The average number of hours was 1,286.⁶ The average accrual account with interest reached approximately \$2,300.

official one for the Ford Foundation, the key findings do correspond. Both studies use the same information from the program on costs and hours of participation in various program activities. Robert Taggart's study is entitled, Quantum Opportunities Program: Promise for the Future (December 1993) and is available from its author.

⁶ We have described in other reports how the data on hours of participation must be interpreted cautiously. Some youth in QOP sites received credit for doing homework, reading TIME magazine, visiting a museum, or attending a ball game. Although these payments were in line with program rules, there were differences in philosophies and reporting at the various sites. On the other hand, even allowing for considerable inflation in counting hours, the total number of hours adds up to what might be thought of as an extra school year for participating youth!

II. SAMPLE EVOLUTION

As described in earlier reports, the five sites have had varying success in maintaining contact with their experimental and control group members. Potentially, sample attrition can invalidate comparisons between the experimental and control groups. Analysis problems occur when those who leave the sample are substantially and systematically different from those who stay. As demonstrated in earlier analyses, with the exception of Milwaukee, sample attrition has not been of sufficient magnitude to cause analysis problems. Moreover, where attrition has occurred, "leavers" have not been systematically different from "stayers."

As Table 1 indicates, there was no sample attrition between the Spring (when many people in the sample were getting ready to graduate high school) and the Fall follow-up survey of 1993. In fact, Oklahoma City reestablished contact with three of its control group members and Saginaw reestablished contact with one control group member. In addition, Milwaukee "found" three experimental group members and two control group members that it was not in contact with in the Spring of 1993.⁷ However, when we compare the original baseline sample from four years ago in the four sites that we will use in the following analysis, there has been some attrition: interviewers reached 88 of the 100 QOP experimental group members in the follow-up and 82 of the original 100 controls. Since our previous work found no evidence for response bias, we have confidence in the following report on post-QOP impacts.

III. PRIOR FINDINGS COVERING QOP DURING THE HIGH SCHOOL YEARS

Several conclusions stand out from our previous reports. *First, the rate of differentiation between the experimental and control groups accelerated after the first two years of high school.* Analysis of the two groups at sample entry indicated that groups were largely free of systematic differences. After one year (freshman year in high school) we concluded that evidence to support a hypothesis of positive influence on the experimental group was not present. Test scores for many of the academic and functional skill levels tested actually

⁷ Despite the small increase in the Milwaukee sample, we decided to continue our policy of not including the Milwaukee results in our overall tabulations. Our reasons for this decision are twofold. First, there is no evidence that the Milwaukee QOP members had received a substantial amount of services. In fact, some QOP members were reminded on their most recent surveys that they were QOP members. Thus, any experimental-control group differences cannot be attributed to QOP activities. Second, at this point we cannot determine whether the 75 percent of the Milwaukee sample that we no longer have contact with are significantly different from those we still have contact with. In other words, we do not know if there is a sample attrition effect. For the record, among QOP members in Milwaukee surveyed in the Fall of 1993 (after high school for a typical young person,) one was a high school graduate, two were still in high school, and two were high school dropouts. In the control group, three were high school graduates, one was still in high school, and two were high school dropouts.

declined for both the experimental and control groups. And, for a number of dimensions, the experimental group decline was greater.

After two years, however, the positive QOP effect was readily apparent. Experimental group average scores for all 11 academic and functional skills were higher than control group scores and five of these differences were statistically significant.⁸ This finding, in and of itself, is interesting for the field of youth programming: apparently it takes over two years for a program to find its legs, work out daily implementation issues and to begin to show statistical impacts. Funders, practitioners, and policymakers should be cautious about rushing to judgement.

Skills: By the time most of the sample were leaving high school in the Spring of 1993, average experimental group scores on all 11 skills were much higher than control group scores and all of these differences were statistically significant. Average academic skill levels had increased more than three grade levels for 27 percent of the experimental group compared to 14 percent of the control group. Similarly, average functional skill levels had increased by 20 percent or more for 38 percent of the experimental group compared to 16 percent of the control group.

Expectations: There were also accelerating differences between the experimental and control groups with regard to their orientation toward and expectations for post-secondary education. After one year, there were no significant differences in educational goals and expectations between the two groups. After two years, however, experimental group educational expectations were much higher than control group expectations and this difference was statistically significant. Interestingly, the divergence between the two groups resulted from both an increase in experimental group educational expectations and a decrease in control group expectations. By the time most sample members were preparing to leave high school, these differences had expanded even further. Answers to questions regarding primary activity twelve months from now, plans to go to college, and expected educational achievement all showed a much higher proportion of QOP members oriented toward post-secondary education than control group members. These differences were all highly statistically significant.⁹

⁸ In the text of this report, we use the term "statistically significant" if there is a 10 percent or less chance that experimental and control group distributions come from the same population. The Tables in this report identify three levels of statistical significance: 10 percent or less; 5 percent or less; and 1 percent or less.

⁹ In Pelavin and Kane's 1990 study for the College Entrance Examination Board, Changing the Odds, the researchers find strong evidence, using the High School and Beyond longitudinal database, that college aspirations are associated with actual college attendance. For example, more than 85 percent of the students who suggested that they expected to get a bachelor's degree did attend college within 4 years of high school graduation. Comparing high school sophomores who expected to go to college to those who didn't, 55 percent of the former went to college compared to only 11 percent of

Postulated effects on other characteristics never came to pass using the surveys *during the high school years*. There were *no statistically significant* differences (although there were differences in a positive direction) *between the two groups on the likelihood of being a reported school dropout, the likelihood of having children, or on self reported school grades (verified in some instances by the research team)*.¹⁰ Similarly, experimental group members were *not significantly more likely to improve their contraceptive knowledge and AIDS knowledge than control group members*.

The second important conclusion to come out of our previous reports is that there were large differences in the QOP effect in the four sites that we focused on. This is not at all surprising given the organizational differences among the sites. As reported in the October 1993 report, Philadelphia stood apart from the other sites by virtue of its ability to create a group identity among QOP members, by its reliable menu of program offerings, and by its success in providing stable, consistent relationships between QOP youth and program staff. As a result, experimental group members in Philadelphia have been able to forge supportive relationships with their QOP peers as well as with their site coordinators. Group morale has remained strong and attendance has stayed at high levels. In contrast, programs in Saginaw and Oklahoma City, by the senior year, evolved to a point where institutional ties and structured activities between youth and the programs were minimal. Attendance had declined greatly. Yet, even in one of these sites, *personal* ties between some QOP members and their program coordinator often remained strong, and these ties have often been of significant value to a number of individuals. In Oklahoma City, for example, the local coordinator has been the same since the program's inception. San Antonio, in contrast, has lost contact with nearly half of its QOP members. Moreover, it has provided relatively fewer opportunities for QOP members to accrue educational, service, and developmental activity hours.

In view of these differences, it is not surprising that QOP members in Philadelphia have been far more successful relative to control group members than QOP members in other sites. In the evaluations that we have carried out since 1990, this has been a consistent pattern. The experimental group in Philadelphia has strongly differentiated itself from the control group. There were statistically significant differences in all academic and functional skill levels and in educational goals and expectations. In contrast, there has been a slightly positive QOP effect in Oklahoma City and Saginaw. In San Antonio, there has

the latter. It should be mentioned, however, that nationally in 1992 only 5.3 percent of sophomores report that they would not attend some kind of school after high school.

¹⁰ There is some evidence that sample attrition overall was higher among dropouts and those with children, leading to the possibility that group differences may have been greater if they had been counted. However, it is unlikely that this would have led to a statistically significant experimental-control group difference. In those sites where attrition was low or nonexistent (Philadelphia, Oklahoma City, and Saginaw), there were no statistically significant differences between the two groups on these characteristics.

been no positive effect during the high school years; in many cases control group members have appeared to do slightly better than evaluation group members.

All of the preceding findings cover the high school years. We turn next to the post-high school period.

IV. NET OUTCOMES IN THE POST-HIGH SCHOOL PERIOD

Educational, Demographic, and Behavioral Variables

Analysis of data from the follow-up telephone and mailed surveys in the fall following scheduled high school graduation shows a much more significant differentiation between the experimental and control groups than previous data analyses.¹¹ Table 2 shows experimental-control group comparisons of educational, demographic, and behavioral variables. Tables 3-6 portray these same comparisons for the four individual sites that we have analyzed.

Education. Experimental group members are much more likely to have graduated from high school and to be in a post-secondary school (Table 2 and Figure 1). They are much less likely to be high school dropouts. Sixty-three percent of the QOP members have graduated from high school compared to 42 percent of the control group members. Forty-two percent of the experimental group is in some type of post-secondary school compared to 16 percent of the control group.¹² And 23 percent of QOP members are high school dropouts compared to 50 percent of the control group. All these group differences are statistically significant.

The statistical difference in the dropout percentage contrasts with findings from the Spring of 1993 survey. This is because the question in the Spring survey is a little different than the questions used to obtain the dropout tally we made from the Fall 1993 data. In the Spring survey, we asked whether each individual had ever dropped out of school. Thus, an individual did not have to be a dropout at the time of the survey to answer the question

¹¹ The QOP sites conducted the follow-up surveys following a training protocol designed by the Brandeis researchers. We verified 10-15 percent of survey responses to all sites for both treatment and control groups. There was not one discrepancy in responses.

¹² Sol Pelavin and Michael Kane (Changing the Odds, College Board, N.Y., 1990) report college attendance rates from the High School and Beyond database using the high school graduation class of 1982. They found in a survey in the Fall following high school graduation (like our study) that the African-American rate of attendance at "some" college (4 or 2 year) was 32 percent. This was for Blacks enrolled in any kind of high school and from all income and socio-economic status groups. A decade later, the QOP young people -- all from very poor families on public assistance -- have exceeded this rate by 10 percentage points.

affirmatively. In fact, many of the "dropouts" were back in school at the time of the survey. In the Fall survey, we counted as a dropout anyone who was not a high school graduate and who was not presently in school. We think this more accurately pinpoints those who permanently dropped out of high school.

Most encouraging is the evidence that QOP had some positive effect on educational goals and dropout rates in all four sites (Tables 3-6). As expected, the differences are most dramatic in Philadelphia (Table 3 and Figure 2). Seventy-six percent of Philadelphia QOP members are high school graduates compared to 48 percent of control group members. The dropout rate among control group members is more than five times greater among QOP members (44 percent compared to 8 percent). And the percentage of experimental group members who are in a post-secondary school is three times higher than the percentage for control group members (72 percent versus 24 percent). All these differences are statistically significant. The college-going rate in Philadelphia is nothing short of remarkable.

In Oklahoma City, the experimental-control group differences in the dropout rate and percentage in post-secondary school are statistically significant (Table 4 and Figure 3). The difference in high school graduation rate is not statistically significant, but QOP members are nearly twice as likely to be high school graduates (50 percent versus 26 percent).

In San Antonio, experimental group members are more likely than control group members to be high school graduates and to be in post-secondary schools (Table 5 and Figure 4). While these differences are not large enough to be statistically significant, the differences are substantial.¹³

The results in Saginaw are similar to those in San Antonio (Table 6 and Figure 5). Experimental-control group differences are substantial, but not large enough to be statistically significant. Nevertheless, the high school dropout rate is only slightly more than half as high for the experimental group as for the control group (21 percent versus 39 percent).

There are statistically significant differences between the experimental and control groups in both 4-year and 2-year college attendance (Figures 6 and 7). The experimental group rate of 4-year college attendance is more than three times higher than the control group rate (18 percent versus 5 percent) and their rate of 2-year college attendance is more than twice as high (19 percent versus 9 percent). Figures 6 and 7 graphically portray the comparative success of the Philadelphia site in "pushing" QOP members toward 4-year colleges. The rate of 4-year college attendance in Philadelphia is nearly three times higher than the rate in San Antonio, five times higher than the rate in Oklahoma City, and eight times higher than the rate in Saginaw.

¹³ It is extremely difficult to have statistically significant differences when sample sizes are as small as they are in San Antonio.

Children. *There is also evidence that QOP members are less likely to have children than control group members.* Twenty-four percent of experimental group have children compared to 38 percent of control group members. This is a statistically significant difference. It is also a very important finding: the GPO reports that low income families begun by teenage mothers costs the nation \$34 billion a year in health and welfare benefits. Nearly half of all single mothers in AFDC today had their first child as a teenager.

There is substantial site variation in the likelihood of having children between the experimental and control groups (Figure 8). Unlike most other variables, the QOP effect in Philadelphia appears to be less than in the other three sites. The QOP group likelihood of having children is 32 percent versus 36 percent for the control group. The largest difference between the experimental and control groups is in San Antonio (7 percent versus 30 percent). The differences in Oklahoma City and Saginaw are smaller than in San Antonio, but substantially larger than in Philadelphia. None of the single site differences in the likelihood of having children are statistically significant.

Honors/Awards in Past Year. Experimental and control group participants were asked whether they had received any honors or awards during the past 12 months. *The proportion of QOP members receiving honors or awards was nearly three times higher than the proportion of control group members (34 percent versus 12 percent).* This is a statistically significant difference.

QOP members had a greater likelihood of receiving an award or honor in all four sites (Figure 9). The greatest differences were in Philadelphia, where the rate for QOP members was five times higher than for control group members (60 percent versus 12 percent), and in San Antonio, where no control group member had received an award (compared to 21 percent of experimental group members).

Community Service. *Given the service component in the QOP plan, it is perhaps not surprising that they are very large differences between the experimental and control groups in the proportion of individuals who have performed some sort of community service.* During the 6 months since finishing QOP, 21 percent of experimental group members had taken part in a community project, 28 percent had been a volunteer tutor, counselor, or mentor, and 41 percent had given time to non-profit, charitable, school or community group. The corresponding percentages for the control group were 12 percent, 8 percent, and 11 percent.¹⁴

As with other variables, site differences are noteworthy. As expected, the greatest difference in the likelihood of being a volunteer counselor or tutor between the experimental and control groups occurred in Philadelphia (Figure 10) -- fifty-two percent

¹⁴ These are the first results we know of to use random assignment to assess the impact of community service during the high school years.

of QOP members versus 16 percent for control group members. There was also a large difference in Saginaw (35 percent of the experimental group versus six percent of the control group), but there was no difference between the two groups in Oklahoma City. It is also worth noting that in addition to having the largest experimental-control group differences, experimental group members in Philadelphia and Saginaw were far more likely to be volunteer counselors and tutors than experimental group members in other cities.

With respect to those who donated time to a non-profit, charitable, school, or community group in the prior six months, experimental-control group differences are substantial in all four sites (Figure 11). Again, the biggest difference (76 percent of the experimental group versus 20 percent of the control group) is in Philadelphia. This is the only site difference that is statistically significant.

Attitudes and Opinions

The Fall 1993 survey asked a number of questions aimed at gauging respondents' state of mind, sense of the future, and self-assessed need for various types of help. Respondents were asked to note their level of agreement or disagreement with (or say they were not sure about) six statements:

- My family life is happy
- I am hopeful about the future
- I am depressed about life
- I am bothered about things
- I am lonely
- My family life has been a success

In addition, they were asked about the extent to which they knew what steps to take in their futures and about their need for help in improving reading/math skills, in training for a good job, in finding a job, and in getting alcohol or drug treatment. Tabulations of their responses are shown in Table 7 (all sites together) and Tables 8-11 (the four individual sites). Our hypothesis was that QOP members would be more upbeat about their lives, would have a clearer sense about their futures, and would express less need for special academic and training help.¹⁵

On most of these dimensions, experimental group members were at least a little more positive than control group member. There were statistically significant differences between

¹⁵ We recognized that an alternative hypothesis regarding the expression of need for academic and training help also made sense -- namely that QOP members who were more familiar with the "culture" of help through their QOP activities might be more willing to express their need for further help.

the two groups with respect to their agreement or disagreement with two statements -- "I am hopeful about the future" and "my life has been a success." Despite these differences, a large proportion of *both* experimental and control group members gave a remarkably upbeat assessment of their lives. Ninety-eight percent of QOP members and 86 percent of control group members "strongly agreed" or "agreed" with the statement that they were hopeful about the future while 74 percent of QOP members and 51 percent of control group members strongly agreed or agreed with the statement that their life has been a success. The positive self-assessment by members of both groups are also noteworthy where experimental-control group differences are not statistically significant. Ninety-three percent of experimental group members and 82 percent of control group members strongly agreed or agreed with the statement that their family life is happy. Only nine percent of QOP members and 17 percent of control group members strongly agreed or agreed with the assertion that they were lonely. More than half of both groups disagreed with the statement that they were bothered about things.

Differences between the two groups with respect to their knowledge of what steps to take in the future were not statistically significant. A lower percentage of QOP members (five percent) than control group members (13 percent) did not know what steps to take in the future, but a slightly higher percentage of control group members professed to know their future steps *exactly*.¹⁶

There were also no significant differences between the experimental and control group assessments of their need for reading/math help, help in training for a good job, and help in finding a good job. Control group members were significantly more likely to express a need for help with an alcohol or drug problem (no QOP members expressed such a need), but the actual number saying they had this need was very small.

As with other variables we have looked at, there are some notable site differences in attitudes and opinions. Figure 12 compares the percentages of experimental and control group members who strongly agreed that they were hopeful about the future. *The clearest QOP effect is in Philadelphia where the percentage of QOP members who strongly agree that they are hopeful about the future is more than twice the percentage of control group members.* There also appears to be a strong QOP effect in Saginaw, but very little effect in Oklahoma City.

In contrast, experimental-control group differences in the percentage who say that they need help with reading/math skills are small in all four sites (Figure 13). More noteworthy

¹⁶ In unpublished tabulations of the National Education Longitudinal Survey (NELS), we found that only half of all African-American 8th graders discuss the planning of their high school programs with counselors and teachers. Even less -- a third -- discuss jobs or careers with teachers or counselors. Since students and their families can easily make the wrong choices about high school courses and curricula, these findings are alarming. They support the need for programs like QOP which bring resources into the middle school-to-high school transition point.

is the fact that the expressed need for such help is lower in Philadelphia and San Antonio than in the other two sites.

Subgroup comparisons

We divided both the experimental and control groups into four subgroups: those in some kind of post-secondary schools; those still in high school; those not in school (they could be graduates or dropouts) and working (full or part-time); and those not in any school and not working. The last group is of interest, in particular, because it signals "inactivity" among a group of young "at-risk" people. All of these distributions are compared in Figure 14. Those in post-secondary school (of any level) make up a much larger proportion of the experimental group than of the control group (55 percent compared to 24 percent). A somewhat higher percentage of the control group is not in school but working (26 percent versus 15 percent). *Turning next to the most "at-risk" group, a substantially larger percentage of the control group is neither in school nor working (50 percent versus 30 percent) compared to the QOP group. The difference between these two distributions is statistically significant.*

Table 12 describes selected characteristics of those who are high school graduates and are enrolled in post-secondary schools; this is our group of high achievers. Nearly half of the experimental group and one-third of the control group in this category are in 4-year colleges. Three-quarters of both groups are full-time students and nearly all receive some form of financial aid. Only small percentages (9 percent of the experimental group and 17 percent of the control group) work full-time while going to school.¹⁷

Among those who graduated from high school but are not in school (Table 13), nearly all plan to go back to school at some point in the future. Relatively small percentages of both groups are working full-time (6 percent of the experimental group and 30 percent of the control group). Even when part-time work and apprenticeship/on-the-job training categories are included, approximately half of this subgroup is not working.

Of the small number of youth still in high school (Table 14), nearly all are in the 12th grade. All expect to complete high school. Only three of the 17 people in this subgroup are working while going to school.

Fifty-six members of the experimental and control groups are not high school graduates and are not working (Table 15). Nine of these individuals are full-time homemakers, which probably goes a long way toward explaining both why these individuals are no longer in school. Only 12 of the 56 individuals are working full-time or part-time, which reflects the difficulty of getting jobs for those without a high school degree.

¹⁷ The American Council on Education reports that by 1992 33.8 percent of black high school students and 37.1 percent of Hispanic students went to college, while 42.2 percent of white high school students went to college. Thus QOP young people exceeded the national rate for all ethnic groups.

V. STUDENT EVALUATIONS OF QOP

QOP members were asked to evaluate the QOP program. There were three elements to the evaluation. QOP members were asked how important QOP was in helping them to do what they do now, how satisfied they were with QOP, and how important QOP accrual funds (or the promise of future payment) were in helping with present activities.

Figure 15 shows the percentage of QOP members in each site who think QOP was very important in helping them do what they do now. A very high proportion of QOP members in Philadelphia, Oklahoma City, and San Antonio reported that QOP was "very important."¹⁸ A much lower percentage (but still more than half) of Saginaw QOP members were very satisfied. This lower percentage probably reflects the instability that has existed at the Saginaw site.

Similar answers were given to the question of how satisfied QOP members were with the QOP experience (Figure 16). High percentages of QOP members in Philadelphia, Oklahoma City, and San Antonio were "very satisfied" with the QOP experience, but only 31 percent of Saginaw QOP members were so positive.

Lastly, Figure 17 shows the percent of QOP members who believed that the QOP payment was very important. Here, the variation between the sites was more significant. The highest level of satisfaction with QOP payments was in San Antonio, where over 90 percent of QOP members were very satisfied.¹⁹ More than 70 percent of Philadelphia QOP members were very satisfied. However, satisfaction levels with QOP payments were much lower in both Oklahoma City and Saginaw.

In previous reports in this series, we have shown that student opinions about the financial incentives are highly uneven. Our field work and observations has led us to conclude that the promise of financial aid during the post-secondary period is an important but rarely decisive feature of student behavior in the programs. More often, it is the personal contact and skill of the project coordinators and staff that makes the largest difference in student motivation, persistence, and success. Funding is an incentive -- icing -- but to be effective, financial incentives must be part of a well-run program.

¹⁸ It should be kept in mind that these questions were asked in telephone surveys by people associated with the OICs. It is possible that respondents would tend to answer positively under these conditions. On the other hand, we verified responses in all the study sites and found that the answers provided on the follow-up surveys were consistent. We found no evidence of "social-desirability" bias.

¹⁹ It should be kept in mind that San Antonio "lost" or was not able to serve 11 of its original 25 potential QOP members over the four years of QOP. It is possible that those who attrited had a lower level of satisfaction with the program.

VI. CONCLUSIONS

The analysis clearly shows that the accelerating differentiation between the experimental and control group that we documented in our analysis of the Spring 1993 data has continued into the post-QOP period. Looking at the results for all four sites together, we found that there are numerous *statistically significant* differences between QOP members and control group members.

Significant Differences Overall and Positive Differences In Each Site:

- QOP members are more likely to be high school graduates
- QOP members are more likely to be in post-secondary schools
- QOP members are less likely to be high school dropouts
- QOP members are more likely to have received an honor or award in the past year
- QOP members are less likely to have children

Significant Differences Overall:

- QOP members are more likely to be involved in community service
- QOP members are more likely to be hopeful about the future
- QOP members are more likely to consider their life a success.

Taken together with significantly higher academic and functional skill levels we found in our analysis of the Spring 1993 data, we have a picture of a QOP population that has been considerably aided by its participation in QOP.²⁰

Perhaps the most encouraging finding of this analysis is that QOP members are significantly better off in all four sites. As mentioned earlier in the report, it is more difficult to find statistically significant differences between the experimental and control groups in individual sites because of the small sample sizes. Nevertheless, there are clearly positive QOP effects in all the sites. The first five comparisons listed above (high school graduation rates, post-secondary school attendance rates, dropout rates, receipt of an honor or award, and the likelihood of having children) all hold true in each site, even though not all the differences are statistically significant.

The implications from these site differences in all four sites are far-reaching. It is, of course, most beneficial to have a site like Philadelphia, where project administrators have

²⁰ These findings stand in sharp contract to the many negative or very modest results found in other youth employment and training programs. See, for example, reviews in Dilemmas in Youth Employment Programming: Findings from the Youth Research and Technical Assistance Project, Volume 1-2, by Brandeis University and P/PV for the U.S. Department of Labor, GPO, Washington, D.C., 1992.

successfully created a group identity and designed tangible program services to support QOP members throughout their high school years. The positive effects of such a program are readily apparent.

However, it appears that there is a substantial positive effect even when programs have been unable to achieve a consistent group identity or to deliver a steady stream of program services like that in Philadelphia. Why? This has often been achieved by the caring and concern shown by coordinators who visit and call students, frequently on a weekly basis. Even when group activities in these sites dwindled, a "case management" and youth development approach was used by staff throughout the entire high school period. The most optimistic finding of this study is that teenagers are able to benefit significantly even when formal group services provided to them are modest. If young people are connected with caring adults for sustained periods of time, year-round, positive results do emerge. The program motto "once in QOP, always in QOP" was taken to heart by enough counselors as to have made a real difference.

This is a finding we have also found in the evaluation literature on mentoring programs. Although this report shows that even a little adult attention for sustained periods of time can produce impressive effects on participating youth from very poor backgrounds, it should not obscure the importance of leadership, skill, talent, motivation and organization in project sites. The differences, for example, between San Antonio and Philadelphia cannot be attributed to the neighborhood setting, the characteristics of participants, or to the program model.²¹ What distinguishes these sites is the degree of buy-in from the host organizations and the commitment of staff at all levels. A central lesson from the past decade of evaluations is that in multi-site demonstrations, the differences among sites is often greater (and more interesting) than the differences between the aggregated results for the treatment group and the average results for the control group. QOP supports this observation well.

Another conclusion is one that is easily lost in the stream of data and reports: in a well-run project, such as the Philadelphia "story," the *take-up rate and pattern of program persistence from the 9th grade through the senior year defies the usual generalizations about poor youth, three-quarters from minority backgrounds*. Simply put, when a quantum opportunity was offered, young people from public assistance backgrounds -- African American males, females, whites, Asians, others -- took it! They joined the programs and many stayed with the programs or the staff associated with the initiatives, for long periods.

Philadelphia had a near perfect record of involving young people for a sustained period of time (one youth in the treatment group was jailed; Philadelphia served all other youth

²¹ One possible "structural" explanation for Philadelphia's success may have to do with the close geographic proximity of the OIC QOP site to the participating school, and the fact that OIC/QOP negotiated a presence in the high school for some QOP activities.

assigned to it over the four years), all the more remarkable considering the artificial method devised by the researchers which required the program to "sell" its approach to a list of unscreened potential recruits. The social science literature on the "underclass," not to mention lurid headlines in daily newspapers, predicts that some inner city youth are so estranged as to defy or to reject invitations to participate in programs like QOP. The policy and program management literature can also be found to predict that staff would not and could not work with the same group of young people year-round for four years. These predictions were not supported in the unfolding of the QOP project in Philadelphia and, to a lesser extent, in the other sites as well.

We believe that there are many reasons for QOP's overall success. The demonstration was designed intelligently. It was led by caring staff. We further believe that conventional theories which predict failure have not been formulated on the basis of "street-level" experiences with true, enriched "cadillac" program models of engagement and youth development. QOP did not operate close to the ideal in several sites but when it did in others, the results followed.

Still another explanation is surely the early intervention one: programs which engage adolescents early in their training and education will experience more success than programs which attempt a quick fix in the later adolescent years.

Finally, it must be noted that QOP was not immune from the sad headlines and quiet disasters that strike routinely in the nation's inner cities. Consider some of the reasons that the Brandeis team did not receive follow-up surveys from the small program in Saginaw, Michigan:

- One student was shot by the police and died in the incident.
- For three students, counselors wrote: "Made on-site visits to last known addresses . . . many calls . . . families no longer there . . . contacted high school counselors . . . no forwarding addresses given for school records. Disappeared."
- Staff wrote: "Reputed drug dealer . . . new residence is known as crack house; Interviewer refused to enter residence."
- "Made on-site visit only to find house condemned . . . no forwarding address . . ."

In other sites there were accidents, beatings, incidents of drug dealings. A number of children were lost; they just disappeared despite extraordinary efforts to monitor and track them anywhere in the country. Some of these young people may reappear in another city, in another program, in a shelter or in a college graduation line. We won't know; poor

families have a high degree of geographical mobility. Since QOP works, the dream might be to have a network of well run QOP projects with interlocking supports across America's cities and neighborhoods.

Finally, in our unpublished tabulations using the National Education Longitudinal Study (NELS), we found that among African American eighth graders, only one fifth are involved in programs organized by community groups like OIC. Religious programs reach perhaps 44 percent of African American eighth graders, as do sports programs. The frequency of contacts with organized activities goes down from there. Put differently, over half of African-American youth from *all* backgrounds are not involved in any outside activities. The potential for QOP-like programs is enormous!

VII. COST-BENEFIT ANALYSIS

It has been asked whether the costs of cost-benefit analysis are worth the benefits? Putting together a cost/benefit assessment of a program like QOP is a straightforward endeavor. But beneath the figures and often buried in footnotes, are assumptions and imputations that can shake even the most dedicated fan of this kind of analysis.

This much can be said, relatively safely: QOP cost roughly \$1,118,000 and served approximately 100 youth who participated anywhere from zero hours over 4 years, to over 3,000 hours in the same period. In return, the following accomplishments were noted by our evaluation:²²

²² We use Andrew Sum's estimates of the differential in earnings between African-American groups ages 18 to 40 with different education levels. All data are for people whose major activity was not school. Recall that 83 percent of QOP youth were from minority backgrounds. Andrew Sum of Northeastern University, Center for Labor Market Analysis, uses the March 1993 CPS to estimate the following differentials: (a) high school dropouts/graduates, (b) two year college degree holders/high school graduates, (c) 4 year college degree holders/high school graduates. The mean earnings of 18 to 40 year olds is discounted at 5 percent. The estimates include zero earners and exclude people whose full-time activity is schooling.

VALUE OF IMPACTS				
	Impact per 100	Payoff for each	Payoff per 100	
More high school graduates compared to high school dropouts	21	\$63,253	\$1,328,313	
More 2-year degrees compared to high school graduates	10	\$69,161	\$691,610	
More 4-year degrees compared to high school graduates	13	\$134,140	\$1,743,820	\$3,763,743 Total Benefit per 100 in earnings
Fewer Children ²³	14	\$10,000	\$140,000	\$3,903,743 Total Public Benefit per 100
Total Benefit Per Person \$39,037 Total Cost: \$10,600 Net Benefit: (Benefit minus cost) \$28,437 ²⁴ Benefit-cost ratio: 3.68 or \$3.68 in benefits for each dollar spent.				

This exercise shows that QOP will pay large dividends, *assuming college students finish their education*, even when the results are aggregated across a mix of programs with different performance levels. In fact, the return on investment for QOP will be as high as many of America's most highly regarded programs -- Head Start, Job Corps, WIC, and so on.²⁵ Now consider a more conservative lower bound estimate. Assume that only one-third of the 2-year and 4-year college students attain degrees; the rest of the college students would still benefit at least as much as high school graduates did from the QOP program.

²³ This figure is from The Children's Defense Fund and covers the public costs associated with the first year of life for a child born to a Medicaid household.

²⁴ Net benefits would be even higher if we included the value of reduced involvement in the criminal justice system; reduction in welfare; and, the added value of performing community service. Since imputation of these values generally invites criticism, we leave them out here. For the record, 6 fewer youth per 100 have been arrested, charged, or booked at least once in the post-QOP period.

²⁵ In a separate analysis, we looked at the return on investment for all races, not just African-American, and found little difference in the above benefits.

VALUE OF IMPACTS Lower Bound Estimate				
	Impact per 100	Payoff for each	Payoff per 100	
More high school graduates compared to high school dropouts	21	\$63,253	\$1,328,313	
More 2-year degrees attained	3	\$69,161	\$207,483	
Remainder of group receive benefits equal to high school graduates	7	\$63,253	\$442,771	
More 4-year degrees attained	4	\$134,140	\$536,560	\$3,084,404
Remainder of group receives benefits equal to high school graduates	9	\$63,253	\$569,277	Total lower bound estimate per 100 in earnings
Fewer Children	14	\$10,000	\$140,000	\$3,224,404 Total lower bound estimate per 100
Total Benefit Per Person \$32,244 Total Cost: \$10,600 Net Benefit: \$21,644 in earnings Benefit-cost ratio: 3.04 or \$3.04 in benefits for each dollar spent.				

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TABLE 1

EVOLUTION OF THE SAMPLE

Site	Original Sample		Initial Test (Fall 89)		1990 Test		1991 Test		Fall 1992 Questionnaire		Spring 1993 Questionnaire		Fall 1993 Questionnaire	
	Exp	Cont	Exp	Cont	Exp	Cont	Exp	Cont	Exp	Cont	Exp	Cont	Exp	Cont
Philadelphia	25	25	25	25	25	25	25	25	25	25	25	25	25	25
Oklahoma City	25	25	21	21	22	24	22	24	25	25	24	20	24	23
San Antonio	25	25	23	22	17	15	24	13	15	11	14	10	14	10
Saginaw	25	25	23	23	24	21	24	21	21	17	20	17	20	18
Milwaukee	25	25	16	20	8	17	7	5	2	4	2	4	5	6
All Sites	125	125	108	111	96	102	92	88	88	79	85	76	88	82

SOURCE: Brandeis tabulations of QOP data.



TABLE 2

CHARACTERISTICS IN FALL 1993, BY RESEARCH GROUP					
Characteristic and Subgroup	Sample Size ^a	Experimental (%) ^b	Control (%) ^b	Both Groups (%) ^b	p ^c
Living Arrangements					
With parent(s)	94	56	63	60	.20
With other relatives	21	10	17	13	
With spouse	5	5	1	3	
With friends/roommates	20	16	9	13	
Alone	12	7	8	8	
Other	6	6	1	4	
Marital Status					
Married	9	6	5	6	.82
Single	149	94	95	94	
Have children					
Yes	49	24	38	31	.09*
No	109	76	62	69	
Driver's license					
Yes	69	46	41	44	.48
No	89	54	59	56	
Honors/awards in past 12 months					
Yes	37	34	12	23	.00***
No	121	66	88	77	
Trouble with police in past 12 months					
No	143	94	87	91	.09*
Once	11	6	8	7	
More than once	4	0	5	3	
Welfare, AFDC, food stamps, etc.					
Yes	76	45	52	48	.49
No	83	55	48	52	
Community Project in past 6 months					
Yes	26	21	12	16	.21
No	133	80	88	84	
Volunteer counselor, mentor, tutor in past 6 months					
Yes	29	28	8	18	.00***
No	130	72	92	82	
Donated time to non-profit, charitable, school, or community group in past 6 months					
Yes	42	41	11	26	.00***
No	117	59	90	74	

CHARACTERISTICS IN FALL 1993, BY RESEARCH GROUP

Characteristic and Subgroup	Sample Size^a	Experimental (%)^b	Control (%)^b	Both Groups (%)^b	p^c
Started business or been self-employed					
Yes	16	12	8	10	.53
No	140	88	92	90	
Graduated from high school					
Yes	84	63	42	53	.01***
No	74	37	58	47	
Graduated from high school/ In post-secondary school					
Yes	46	42	16	29	.00***
No	112	59	84	71	
Attending high school					
Yes	17	13	8	11	.39
No	141	87	92	89	
High school dropout					
Yes	57	23	50	36	.00***
No	101	77	50	64	

SOURCE: Brandeis tabulations of QOP questionnaire data.

^aReported sample sizes for some characteristics are not equal to total sample sizes because of missing data on respondent questionnaires.

^bSubgroup percentages may not add to 100 due to rounding.

^cp is the probability that the difference in experimental and control group distributions is due solely to random error. A chi-square test used to test the hypothesis of equal distributions. Statistical significance levels are indicated as *** = 1 percent or less; ** = 5 percent or less; * = 10 percent or less.

TABLE 3

CHARACTERISTICS IN FALL 1993, BY RESEARCH GROUP: PHILADELPHIA					
Characteristic and Subgroup	Sample Size ^a	Experimental (%) ^b	Control (%) ^b	Both Groups (%) ^b	p ^c
Living Arrangements					
With parent(s)	28	44	68	56	.10*
With other relatives	7	12	16	14	
With spouse	0	0	0	0	
With friends/roommates	11	32	12	22	
Alone	1	0	4	2	
Other	3	12	0	6	
Marital Status					
Married	1	0	4	2	.31
Single	49	100	96	98	
Have children					
Yes	17	32	36	34	.77
No	33	68	64	66	
Driver's license					
Yes	5	8	12	10	.64
No	45	92	88	90	
Honors/awards in past 12 months					
Yes	18	60	12	36	.00***
No	32	40	88	64	
Trouble with police in past 12 months					
No	44	96	80	88	.21
Once	5	4	16	10	
More than once	1	0	4	2	
Welfare, AFDC, food stamps, etc.					
Yes	22	40	48	44	.57
No	28	60	52	56	
Community Project in past 6 months					
Yes	12	36	12	24	.10*
No	38	64	88	76	
Volunteer counselor, mentor, tutor in past 6 months					
Yes	17	52	16	34	.02**
No	33	48	84	66	
Donated time to non-profit, charitable, school, or community group in past 6 months					
Yes	24	76	20	48	.00***
No	26	24	80	52	

CHARACTERISTICS IN FALL 1993, BY RESEARCH GROUP: PHILADELPHIA					
Characteristic and Subgroup	Sample Size ^a	Experimental (%) ^b	Control (%) ^b	Both Groups (%) ^b	p ^c
Started business or been self-employed					
Yes	6	21	4	12	.17
No	43	79	96	88	
Graduated from high school					
Yes	31	76	48	62	.08*
No	19	24	52	38	
Graduated from high school/ In post-secondary school					
Yes	24	72	24	48	.00***
No	26	28	76	52	
Attending high school					
Yes	6	16	84	12	.66
No	44	8	92	88	
High school dropout					
Yes	13	8	44	26	.01***
No	37	92	56	74	
SOURCE: Brandeis tabulations of QOP questionnaire data.					
*Reported sample sizes for some characteristics are not equal to total sample sizes because of missing data on respondent questionnaires.					
^b Subgroup percentages may not add to 100 due to rounding.					
^c p is the probability that the difference in experimental and control group distributions is due solely to random error. A chi-square test used to test the hypothesis of equal distributions. Statistical significance levels are indicated as *** = 1 percent or less; ** = 5 percent or less; * = 10 percent or less.					

TABLE 4

CHARACTERISTICS IN FALL 1993, BY RESEARCH GROUP: OKLAHOMA CITY					
Characteristic and Subgroup	Sample Size ^a	Experimental (%) ^b	Control (%) ^b	Both Groups (%) ^b	p ^c
Living Arrangements					
With parent(s)	20	42	44	43	.88
With other relatives	8	17	17	17	
With spouse	4	13	4	9	
With friends/roommates	6	8	17	13	
Alone	7	17	13	15	
Other	2	4	4	4	
Marital Status					
Married	6	17	9	13	.41
Single	41	83	91	87	
Have children					
Yes	18	29	48	38	.19
No	29	71	52	62	
Driver's license					
Yes	27	62	52	57	.47
No	20	38	48	43	
Honors/awards in past 12 months					
Yes	8	21	13	17	.48
No	39	79	87	83	
Trouble with police in past 12 months					
No	41	88	87	87	.22
Once	4	13	4	9	
More than once	2	0	9	4	
Welfare, AFDC, food stamps, etc.					
Yes	14	21	39	30	.17
No	33	79	61	70	
Community Project in past 6 months					
Yes	4	17	0	9	.13
No	43	83	100	92	
Volunteer counselor, mentor, tutor in past 6 months					
Yes	2	4	4	4	1.00
No	45	96	96	96	
Donated time to non-profit, charitable, school, or community group in past 6 months					
Yes	6	21	4	13	.21
No	41	79	96	87	

CHARACTERISTICS IN FALL 1993, BY RESEARCH GROUP: OKLAHOMA CITY					
Characteristic and Subgroup	Sample Size ^a	Experimental (%) ^b	Control (%) ^b	Both Groups (%) ^b	p ^c
Started business or been self-employed					
Yes	3	4	9	6	.97
No	44	96	91	94	
Graduated from high school					
Yes	18	50	26	38	.17
No	29	50	74	62	
Graduated from high school/ In post-secondary school					
Yes	8	29	4	7	.06*
No	39	71	96	83	
Attending high school					
Yes	3	8	4	6	.58
No	44	92	96	94	
High school dropout					
Yes	26	42	70	55	.10*
No	21	58	30	45	
SOURCE: Brandeis tabulations of QOP questionnaire data.					
*Reported sample sizes for some characteristics are not equal to total sample sizes because of missing data on respondent questionnaires.					
^b Subgroup percentages may not add to 100 due to rounding.					
^c p is the probability that the difference in experimental and control group distributions is due solely to random error. A chi-square test used to test the hypothesis of equal distributions. Statistical significance levels are indicated as *** = 1 percent or less; ** = 5 percent or less; * = 10 percent or less.					

TABLE 5

CHARACTERISTICS IN FALL 1993, BY RESEARCH GROUP: SAN ANTONIO					
Characteristic and Subgroup	Sample Size ^a	Experimental (%) ^b	Control (%) ^b	Both Groups (%) ^b	p ^c
Living Arrangements					
With parent(s)	23	93	100	96	1.00
With other relatives	0	0	0	0	
With spouse	0	0	0	0	
With friends/roommates	0	0	0	0	
Alone	0	0	0	0	
Other	1	7	0	4	
Marital Status					
Married	1	0	10	4	.86
Single	23	100	90	96	
Have children					
Yes	4	7	30	17	.35
No	20	93	70	83	
Driver's license					
Yes	9	43	30	38	.83
No	15	57	70	63	
Honors/awards in past 12 months					
Yes	3	21	0	13	.35
No	21	79	100	88	
Trouble with police in past 12 months					
No	23	93	100	96	1.00
Once	1	7	0	4	
More than once	0	0	0	0	
Welfare, AFDC, food stamps, etc.					
Yes	24	100	100	100	1.00
No	0	0	0	0	
Community Project in past 6 months					
Yes	1	7	0	4	1.00
No	23	93	100	96	
Volunteer counselor, mentor, tutor in past 6 months					
Yes	2	14	0	8	.62
No	22	86	100	92	
Donated time to non-profit, charitable, school, or community group in past 6 months					
Yes	4	29	0	17	.19
No	20	71	100	83	

CHARACTERISTICS IN FALL 1993, BY RESEARCH GROUP: SAN ANTONIO					
Characteristic and Subgroup	Sample Size ^a	Experimental (%) ^b	Control (%) ^b	Both Groups (%) ^b	p ^c
Started business or been self-employed					
Yes	2	14	0	8	.62
No	22	86	100	92	
Graduated from high school					
Yes	16	71	60	67	.88
No	8	29	40	33	
Graduated from high school/ In post-secondary school					
Yes	5	29	10	21	.55
No	19	71	90	79	
Attending high school					
Yes	1	7	0	4	1.00
No	23	93	100	96	
High school dropout					
Yes	7	21	40	29	.60
No	17	79	60	71	
SOURCE: Brandeis tabulations of QOP questionnaire data.					
*Reported sample sizes for some characteristics are not equal to total sample sizes because of missing data on respondent questionnaires.					
^b Subgroup percentages may not add to 100 due to rounding.					
^c p is the probability that the difference in experimental and control group distributions is due solely to random error. A chi-square test used to test the hypothesis of equal distributions. Statistical significance levels are indicated as *** = 1 percent or less; ** = 5 percent or less; * = 10 percent or less.					

TABLE 6

CHARACTERISTICS IN FALL 1993, BY RESEARCH GROUP: SAGINAW					
Characteristic and Subgroup	Sample Size ^a	Experimental (%) ^b	Control (%) ^b	Both Groups (%) ^b	p ^c
Living Arrangements					
With parent(s)	23	60	61	62	.15
With other relatives	6	5	28	16	
With spouse	1	5	0	3	
With friends/roommates	3	15	0	8	
Alone	4	10	11	11	
Other	0	0	0	0	
Marital Status					
Married	1	5	0	3	.32
Single	36	95	100	97	
Have children					
Yes	10	21	33	27	.64
No	27	79	67	73	
Driver's license					
Yes	28	79	72	76	.93
No	9	21	78	24	
Honors/awards in past 12 months					
Yes	8	26	17	22	.75
No	29	74	83	78	
Trouble with police in past 12 months					
No	35	100	89	95	.33
Once	1	0	6	3	
More than once	1	0	6	3	
Welfare, AFDC, food stamps, etc.					
Yes	16	40	44	42	1.00
No	22	60	56	58	
Community Project in past 6 months					
Yes	9	15	33	24	.34
No	29	85	67	76	
Volunteer counselor, mentor, tutor in past 6 months					
Yes	8	35	6	21	.07*
No	30	65	94	79	
Donated time to non-profit, charitable, school, or community group in past 6 months					
Yes	8	30	11	21	.15
No	30	70	89	79	

CHARACTERISTICS IN FALL 1993, BY RESEARCH GROUP: SAGINAW

Characteristic and Subgroup	Sample Size ^a	Experimental (%) ^b	Control (%) ^b	Both Groups (%) ^b	p ^c
Started business or been self-employed					
Yes	5	11	18	14	.89
No	31	90	82	86	
Graduated from high school					
Yes	20	60	44	53	.53
No	18	40	56	47	
Graduated from high school/ In post-secondary school					
Yes	9	26	22	24	.77
No	28	74	78	76	
Attending high school					
Yes	7	20	17	18	1.00
No	31	80	83	82	
High school dropout					
Yes	11	21	39	30	.41
No	26	79	61	70	

SOURCE: Brandeis tabulations of QOP questionnaire data.

^aReported sample sizes for some characteristics are not equal to total sample sizes because of missing data on respondent questionnaires.

^bSubgroup percentages may not add to 100 due to rounding.

^cp is the probability that the difference in experimental and control group distributions is due solely to random error. A chi-square test used to test the hypothesis of equal distributions. Statistical significance levels are indicated as *** = 1 percent or less; ** = 5 percent or less; * = 10 percent or less.

TABLE 7

ATTITUDES AND OPINIONS IN FALL 1993, BY RESEARCH GROUP					
Characteristic and Subgroup	Sample Size ^a	Experimental (%) ^b	Control (%) ^b	Both Groups (%) ^b	p ^c
My family life is happy					.20
Strongly agree	60	44	32	39	
Agree	77	49	50	49	
Not sure	9	5	7	6	
Disagree	9	2	10	6	
Strongly disagree	1	0	1	1	
I am hopeful about future					.01***
Strongly agree	87	66	45	56	
Agree	56	32	41	36	
Not sure	11	1	14	7	
Disagree	1	0	1	^d	
Strongly disagree	1	1	0	^d	
I am depressed about life					.12
Strongly agree	4	2	3	3	
Agree	20	9	18	13	
Not sure	13	6	11	8	
Disagree	55	44	26	35	
Strongly disagree	64	39	43	41	
I am bothered about things					.63
Strongly agree	6	5	3	4	
Agree	52	37	30	33	
Not sure	16	7	14	10	
Disagree	44	28	28	28	
Strongly disagree	38	23	26	24	
I am lonely					.70
Strongly agree	4	2	3	3	
Agree	16	7	14	10	
Not sure	6	5	3	4	
Disagree	69	44	45	44	
Strongly disagree	61	42	37	39	
My life has been a success					.00***
Strongly agree	32	18	23	21	
Agree	67	56	28	43	
Not sure	29	11	27	19	
Disagree	23	13	16	15	
Strongly disagree	5	1	5	3	
Future Plans					.15
Don't know steps to take	14	5	13	9	
Have some idea about steps to take	87	60	50	55	
Know exactly steps to take	57	35	37	36	

ATTITUDES AND OPINIONS IN FALL 1993, BY RESEARCH GROUP

Characteristic and Subgroup	Sample Size^a	Experimental (%)^b	Control (%)^b	Both Groups (%)^b	p^c
Need reading/math skill Improvements					
Yes, a lot	26	17	16	17	.13
Yes, a little	69	44	44	44	
No	56	38	33	36	
Don't know	5	0	7	7	
Need training for a good job					
Yes, a lot	55	33	37	35	.27
Yes, a little	52	35	32	33	
No	43	31	24	28	
Don't know	6	1	7	4	
Need help finding a job					
Yes, a lot	63	44	36	40	.56
Yes, a little	44	27	29	28	
No	45	27	31	29	
Don't know	4	1	4	3	
Need help with alcohol/drug problem					
Yes, a lot	2	0	3	1	.00***
Yes, a little	4	0	5	3	
No	143	100	84	92	
Don't know	6	0	8	4	

SOURCE: Brandeis tabulations of QOP questionnaire data.

^aReported sample sizes for some characteristics are not equal to total sample sizes because of missing data on respondent questionnaires.

^bSubgroup percentages may not add to 100 due to rounding.

^cp is the probability that the difference in experimental and control group distributions is due solely to random error. A chi-square test used to test the hypothesis of equal distributions. Statistical significance levels are indicated as *** = 1 percent or less; ** = 5 percent or less; * = 10 percent or less.

^dLess than 1 percent.

TABLE 8

ATTITUDES AND OPINIONS IN FALL 1993, BY RESEARCH GROUP: PHILADELPHIA					
Characteristic and Subgroup	Sample Size ^a	Experimental (%) ^b	Control (%) ^b	Both Groups (%) ^b	p ^c
My family life is happy					.92
Strongly agree	20	44	39	42	
Agree	18	36	39	38	
Not sure	5	12	9	10	
Disagree	5	8	13	10	
Strongly disagree	0	0	0	0	
I am hopeful about future					.03**
Strongly agree	26	72	35	54	
Agree	17	24	48	35	
Not sure	5	4	17	10	
Disagree	0	0	0	0	
Strongly disagree	0	0	0	0	
I am depressed about life					.14
Strongly agree	1	4	0	2	
Agree	8	8	26	17	
Not sure	6	8	17	13	
Disagree	15	44	17	31	
Strongly disagree	18	36	39	38	
I am bothered about things					.44
Strongly agree	1	4	0	2	
Agree	17	44	26	35	
Not sure	7	8	22	15	
Disagree	14	28	30	29	
Strongly disagree	9	16	22	19	
I am lonely					.64
Strongly agree	0	0	0	0	
Agree	8	12	22	17	
Not sure	1	4	0	2	
Disagree	19	40	39	40	
Strongly disagree	20	44	39	42	
My life has been a success					.58
Strongly agree	11	24	22	23	
Agree	18	44	30	38	
Not sure	11	16	30	23	
Disagree	7	16	13	15	
Strongly disagree	1	0	4	2	
Future Plans					.12
Don't know steps to take	3	0	12	6	
Have some idea about steps to take	25	60	40	50	
Know exactly steps to take	22	40	48	44	

ATTITUDES AND OPINIONS IN FALL 1993, BY RESEARCH GROUP: PHILADELPHIA					
Characteristic and Subgroup	Sample Size ^a	Experimental (%) ^b	Control (%) ^b	Both Groups (%) ^b	p ^c
Need reading/math skill improvements					
Yes, a lot	6	16	8	12	.16
Yes, a little	17	32	36	34	
No	23	52	40	46	
Don't know	4	0	16	8	
Need training for a good job					
Yes, a lot	10	28	12	20	.11
Yes, a little	14	24	32	28	
No	22	48	40	44	
Don't know	4	0	16	8	
Need help finding a job					
Yes, a lot	12	32	16	24	.48
Yes, a little	21	40	44	42	
No	13	24	28	26	
Don't know	4	4	12	8	
Need help with alcohol/drug problem					
Yes, a lot	1	0	4	2	.01***
Yes, a little	4	0	16	8	
No	40	100	60	80	
Don't know	5	0	20	10	

SOURCE: Brandeis tabulations of QOP questionnaire data.

^aReported sample sizes for some characteristics are not equal to total sample sizes because of missing data on respondent questionnaires.

^bSubgroup percentages may not add to 100 due to rounding.

^cp is the probability that the difference in experimental and control group distributions is due solely to random error. A chi-square test used to test the hypothesis of equal distributions. Statistical significance levels are indicated as *** = 1 percent or less; ** = 5 percent or less; * = 10 percent or less.

TABLE 9

ATTITUDES AND OPINIONS IN FALL 1993, BY RESEARCH GROUP: OKLAHOMA CITY					
Characteristic and Subgroup	Sample Size ^a	Experimental (%) ^b	Control (%) ^b	Both Groups (%) ^b	p ^c
My family life is happy					
Strongly agree	12	25	26	26	.38
Agree	32	71	65	68	
Not sure	1	4	0	2	
Disagree	2	0	9	4	
Strongly disagree	0	0	0	0	
I am hopeful about future					
Strongly agree	23	50	48	49	.24
Agree	19	46	35	40	
Not sure	3	0	13	6	
Disagree	1	0	4	2	
Strongly disagree	1	4	0	2	
I am depressed about life					
Strongly agree	0	0	0	0	.59
Agree	7	13	17	15	
Not sure	1	0	4	2	
Disagree	22	54	39	47	
Strongly disagree	17	33	39	36	
I am bothered about things					
Strongly agree	4	13	4	9	.27
Agree	21	54	35	45	
Not sure	2	0	9	4	
Disagree	16	25	44	34	
Strongly disagree	4	8	9	9	
I am lonely					
Strongly agree	2	4	4	4	.99
Agree	7	13	17	15	
Not sure	4	8	9	9	
Disagree	26	58	52	55	
Strongly disagree	8	17	17	17	
My life has been a success					
Strongly agree	6	13	13	13	.16
Agree	19	54	26	40	
Not sure	10	8	35	21	
Disagree	9	21	17	19	
Strongly disagree	3	4	9	6	
Future Plans					
Don't know steps to take	9	13	26	19	.49
Have some idea about steps to take	23	54	44	49	
Know exactly steps to take	15	33	30	32	

ATTITUDES AND OPINIONS IN FALL 1993, BY RESEARCH GROUP: OKLAHOMA CITY					
Characteristic and Subgroup	Sample Size ^a	Experimental (%) ^b	Control (%) ^b	Both Groups (%) ^b	p ^c
Need reading/math skill improvements					
Yes, a lot	12	29	22	26	.82
Yes, a little	24	50	52	51	
No	11	21	26	23	
Don't know	0	0	0	0	
Need training for a good job					
Yes, a lot	24	38	65	51	.10*
Yes, a little	17	42	30	36	
No	6	21	4	13	
Don't know	0	0	0	0	
Need help finding a job					
Yes, a lot	24	38	65	51	.10*
Yes, a little	17	42	30	36	
No	6	21	4	13	
Don't know	0	0	0	0	
Need help with alcohol/drug problem					
Yes, a lot	24	54	48	51	.90
Yes, a little	8	17	17	17	
No	15	29	35	32	
Don't know	0	0	0	0	

SOURCE: Brandeis tabulations of QOP questionnaire data.

^aReported sample sizes for some characteristics are not equal to total sample sizes because of missing data on respondent questionnaires.

^bSubgroup percentages may not add to 100 due to rounding.

^cp is the probability that the difference in experimental and control group distributions is due solely to random error. A chi-square test used to test the hypothesis of equal distributions. Statistical significance levels are indicated as *** = 1 percent or less; ** = 5 percent or less; * = 10 percent or less.

TABLE 10

ATTITUDES AND OPINIONS IN FALL 1993, BY RESEARCH GROUP: SAN ANTONIO					
Characteristic and Subgroup	Sample Size ^a	Experimental (%) ^b	Control (%) ^b	Both Groups (%) ^b	p ^c
My family life is happy					
Strongly agree	19	79	80	79	.39
Agree	4	21	10	17	
Not sure	1	0	10	4	
Disagree	0	0	0	0	
Strongly disagree	0	0	0	0	
I am hopeful about future					
Strongly agree	19	86	70	79	.22
Agree	37	14	10	13	
Not sure	2	0	20	8	
Disagree	0	0	0	0	
Strongly disagree	0	0	0	0	
I am depressed about life					
Strongly agree	1	7	0	4	.16
Agree	2	0	20	8	
Not sure	2	7	10	8	
Disagree	4	29	0	17	
Strongly disagree	15	57	70	63	
I am bothered about things					
Strongly agree	0	0	0	0	.43
Agree	3	14	10	13	
Not sure	2	7	10	8	
Disagree	3	21	0	13	
Strongly disagree	16	57	80	67	
I am lonely					
Strongly agree	1	0	10	4	.38
Agree	0	0	0	0	
Not sure	0	0	0	0	
Disagree	7	36	20	29	
Strongly disagree	16	64	70	67	
My life has been a success					
Strongly agree	12	36	70	50	.22
Agree	11	57	30	46	
Not sure	1	7	0	4	
Disagree	0	0	0	0	
Strongly disagree	0	0	0	0	
Future Plans					
Don't know steps to take	0	0	0	0	.56
Have some idea about steps to take	16	71	60	67	
Know exactly steps to take	8	29	40	33	

ATTITUDES AND OPINIONS IN FALL 1993, BY RESEARCH GROUP: SAN ANTONIO					
Characteristic and Subgroup	Sample Size ^a	Experimental (%) ^b	Control (%) ^b	Both Groups (%) ^b	p ^c
Need reading/math skill improvements					
Yes, a lot	3	14	10	13	.65
Yes, a little	9	36	40	38	
No	11	50	40	46	
Don't know	1	0	10	4	
Need training for a good job					
Yes, a lot	7	29	30	29	.86
Yes, a little	11	50	40	46	
No	6	21	30	25	
Don't know	0	0	0	0	
Need help finding a job					
Yes, a lot	8	43	20	33	.43
Yes, a little	11	43	50	46	
No	5	14	30	21	
Don't know	0	0	0	0	
Need help with alcohol/drug problem					
Yes, a lot	0	0	0	0	.23
Yes, a little	0	0	0	0	
No	23	100	90	96	
Don't know	1	0	10	4	

SOURCE: Brandeis tabulations of QOP questionnaire data.

^aReported sample sizes for some characteristics are not equal to total sample sizes because of missing data on respondent questionnaires.

^bSubgroup percentages may not add to 100 due to rounding.

^cp is the probability that the difference in experimental and control group distributions is due solely to random error. A chi-square test used to test the hypothesis of equal distributions. Statistical significance levels are indicated as *** = 1 percent or less; ** = 5 percent or less; * = 10 percent or less.

TABLE 11

ATTITUDES AND OPINIONS IN FALL 1993, BY RESEARCH GROUP: SAGINAW					
Characteristic and Subgroup	Sample Size ^a	Experimental (%) ^b	Control (%) ^b	Both Groups (%) ^b	p ^c
My family life is happy					.03
Strongly agree	9	42	6	24	
Agree	23	58	67	62	
Not sure	2	0	11	5	
Disagree	2	0	11	5	
Strongly disagree	1	0	6	3	
I am hopeful about future					.34
Strongly agree	19	63	39	51	
Agree	17	37	56	46	
Not sure	1	0	6	3	
Disagree	0	0	0	0	
Strongly disagree	0	0	0	0	
I am depressed about life					.63
Strongly agree	2	0	11	5	
Agree	3	11	6	8	
Not sure	4	11	11	11	
Disagree	14	42	33	38	
Strongly disagree	14	37	39	38	
I am bothered about things					.57
Strongly agree	1	0	6	3	
Agree	11	21	39	30	
Not sure	5	16	11	14	
Disagree	11	37	22	30	
Strongly disagree	9	26	22	24	
I am lonely					.40
Strongly agree	1	5	0	3	
Agree	1	0	6	3	
Not sure	1	5	0	3	
Disagree	17	37	56	46	
Strongly disagree	17	53	39	46	
My life has been a success					.09*
Strongly agree	3	5	11	8	
Agree	19	74	28	51	
Not sure	7	11	28	19	
Disagree	7	11	28	19	
Strongly disagree	1	0	6	3	
Future Plans					.83
Don't know steps to take	2	5	6	5	
Have some idea about steps to take	23	58	67	62	
Know exactly steps to take	12	37	28	32	

ATTITUDES AND OPINIONS IN FALL 1993, BY RESEARCH GROUP: SAGINAW

Characteristic and Subgroup	Sample Size^a	Experimental (%)^b	Control (%)^b	Both Groups (%)^b	p^c
Need reading/math skill improvements					
Yes, a lot	5	6	24	14	.31
Yes, a little	19	61	47	54	
No	11	33	29	31	
Don't know	0	0	0	0	
Need training for a good job					
Yes, a lot	14	39	41	40	.99
Yes, a little	10	28	29	29	
No	9	28	24	26	
Don't know	2	6	6	6	
Need help finding a job					
Yes, a lot	19	50	59	54	.84
Yes, a little	4	11	12	11	
No	12	39	29	34	
Don't know	0	0	0	0	
Need help with alcohol/drug problem					
Yes, a lot	1	0	6	3	.30
Yes, a little	0	0	0	0	
No	34	100	94	97	
Don't know	0	0	0	0	

SOURCE: Brandeis tabulations of QOP questionnaire data.

^aReported sample sizes for some characteristics are not equal to total sample sizes because of missing data on respondent questionnaires.

^bSubgroup percentages may not add to 100 due to rounding.

^cp is the probability that the difference in experimental and control group distributions is due solely to random error. A chi-square test used to test the hypothesis of equal distributions. Statistical significance levels are indicated as *** = 1 percent or less; ** = 5 percent or less; * = 10 percent or less.

TABLE 12

SELECTED CHARACTERISTICS OF HIGH SCHOOL GRADUATES WHO ARE STILL IN SCHOOL					
Characteristic and Subgroup	Sample Size ^a	Experimental (%) ^b	Control (%) ^b	Both Groups (%) ^b	p ^c
Type of School					
4-year college	19	44	33	41	.62
Junior/community college	23	47	58	50	
Trade/business school	2	3	8	4	
Other	2	6	0	4	
Full-time/part-time student					
Full-time	35	76	75	76	1.00
Part-time	11	24	25	24	
Receive Financial aid?					
Yes	42	88	100	91	.52
No	4	12	0	9	
Working full-time					
Yes	5	9	17	11	.45
No	41	91	83	89	

SOURCE: Brandeis tabulations of QOP questionnaire data.

^aReported sample sizes for some characteristics are not equal to total sample sizes because of missing data on respondent questionnaires.

^bSubgroup percentages may not add to 100 due to rounding.

^cp is the probability that the difference in experimental and control group distributions is due solely to random error. A chi-square test used to test the hypothesis of equal distributions. Statistical significance levels are indicated as *** = 1 percent or less; ** = 5 percent or less; * = 10 percent or less.

^dStatistic cannot be computed when the number of non-empty rows is one.

TABLE 13

SELECTED CHARACTERISTICS OF HIGH SCHOOL GRADUATES WHO ARE NO LONGER IN SCHOOL					
Characteristic and Subgroup	Sample Size ^a	Experimental (%) ^b	Control (%) ^b	Both Groups (%) ^b	p ^c
Plan to go back to school					
Yes	36	100	90	95	.52
No	2	0	10	5	
Working full-time					
Yes	7	6	30	18	.13
No	31	94	70	82	
Working part-time					
Yes	12	39	25	32	.57
No	26	61	75	68	
Apprenticeship/on-the-job training					
Yes	1	0	5	3	1.00
No	37	100	95	97	
Military					
Yes	2	6	5	5	1.00
No	36	94	95	95	

SOURCE: Brandeis tabulations of QOP questionnaire data.

^aReported sample sizes for some characteristics are not equal to total sample sizes because of missing data on respondent questionnaires.

^bSubgroup percentages may not add to 100 due to rounding.

^cp is the probability that the difference in experimental and control group distributions is due solely to random error. A chi-square test used to test the hypothesis of equal distributions. Statistical significance levels are indicated as *** = 1 percent or less; ** = 5 percent or less; * = 10 percent or less.

TABLE 14

SELECTED CHARACTERISTICS OF THOSE STILL IN HIGH SCHOOL IN FALL 1993					
Characteristic and Subgroup	Sample Size ^a	Experimental (%) ^b	Control (%) ^b	Both Groups (%) ^b	p ^c
Grade					
11	1	0	17	6	.75
12	16	100	83	94	
Expect to complete high school					d
Yes	17	100	100	100	
No	0	0	0	0	
Working full-time					.45
Yes	1	9	0	6	
No	16	91	100	94	
Working part-time					.45
Yes	1	9	0	6	
No	16	91	100	94	
In apprenticeship/on-the-job training program					.45
Yes	1	9	0	6	
No	16	91	100	94	

SOURCE: Brandeis tabulations of QOP questionnaire data.

^aReported sample sizes for some characteristics are not equal to total sample sizes because of missing data on respondent questionnaires.

^bSubgroup percentages may not add to 100 due to rounding.

^cp is the probability that the difference in experimental and control group distributions is due solely to random error. A chi-square test used to test the hypothesis of equal distributions. Statistical significance levels are indicated as *** = 1 percent or less; ** = 5 percent or less; * = 10 percent or less.

^dStatistic cannot be computed when the number of non-empty rows is one.

TABLE 15-

SELECTED CHARACTERISTICS OF THOSE WHO ARE NOT HIGH SCHOOL GRADUATES AND ARE NOT IN SCHOOL					
Characteristic and Subgroup	Sample Size ^a	Experimental (%) ^b	Control (%) ^b	Both Groups (%) ^b	p ^c
Working full-time					
Yes	9	16	16	16	1.00
No	47	84	84	84	
Working part-time					
Yes	3	5	5	5	1.00
No	53	95	95	95	
In apprenticeship or on-the-job training program					
Yes	5	11	8	9	.76
No	51	90	92	91	
In the military					
Yes	2	11	0	4	.21
No	54	90	100	96	
Full-time homemaker					
Yes	9	26	11	16	.13
No	47	74	89	84	
Unemployed ^d					
Yes	33	57	89	79	.05**
No	9	43	11	21	
Looking for work ^d					
Yes	33	79	79	79	1.00
No	9	21	21	21	

SOURCE: Brandeis tabulations of QOP questionnaire data.

^aReported sample sizes for some characteristics are not equal to total sample sizes because of missing data on respondent questionnaires.

^bSubgroup percentages may not add to 100 due to rounding.

^cp is the probability that the difference in experimental and control-group distributions is due solely to random error. A chi-square test used to test the hypothesis of equal distributions. Statistical significance levels are indicated as *** = 1 percent or less; ** = 5 percent or less; * = 10 percent or less.

^dQuestion limited to those who are not working or in the military.

**TABLE 1989-A
CHARACTERISTICS AT SAMPLE ENTRY, BY RESEARCH GROUP**

Characteristic and Subgroup	Sample Size^a	Experimental (%)^b	Control (%)^b	Both Groups (%)^b	p^c
Sex					
Female	91	52	53	53	.83
Male	82	48	47	47	
Age					.54
13	6	3	5	4	
14	71	56	40	47	
15	53	32	39	35	
16	12	6	10	8	
17	8	4	6	5	
Ethnic					.61
White	25	13	16	15	
Black	130	76	75	76	
Hispanic	12	6	8	7	
Asian	1	1	0	1	
Other	4	4	1	2	
Number of children					.35
0	201	94	94	94	
1	11	6	5	5	
2	2	0	1	1	
Living arrangements					.37
Both parents	41	22	17	9	
One parent	148	64	75	70	
Relatives	22	12	8	10	
Spouse	1	1	0	1	
On own	1	1	0	1	
Mother or father graduated from high school					.94
Yes	164	77	78	77	
No	48	23	22	23	
Spanish spoken at home					.25
Yes	25	14	9	12	
No	191	86	91	88	
Trouble with English					.74
Yes	16	8	7	7	
No	200	92	93	93	
Dropped out of school					.18
Yes	9	2	6	4	
No	205	98	94	96	

**TABLE 1989-A
CHARACTERISTICS AT SAMPLE ENTRY, BY RESEARCH GROUP**

Characteristic and Subgroup	Sample Size ^a	Experimental (%) ^b	Control (%) ^b	Both Groups (%) ^b	p ^c
Repeated a grade					
Yes	98	47	44	45	.70
No	118	53	56	55	
AFDC, welfare, or general assistance					
Yes	179	88	80	84	.17
No	35	12	20	16	
Live in public/subsidized housing					
Yes	97	42	48	45	.40
No	119	58	52	55	
Food Stamps					
Yes	143	60	72	67*	.08
No	72	40	28	33	
High School Curriculum					
College Prep	28	14	12	13	.54
Business/vocational	14	5	8	7	
General	57	30	24	27	
Other/do not know	116	51	56	54	
Weeks on job last month					
0	183	85	88	86	.49
1	3	2	1	1	
2	8	2	6	4	
3	5	~	2	2	
4	13	9	4	6	
Grade Point Average					
A	18	10	8	9	.43
B	67	34	32	33	
C	83	43	39	41	
D	22	7	15	11	
F	13	6	7	6	

SOURCE: Brandeis tabulations of QOP questionnaire data.

^aReported sample sizes for some characteristics are not equal to total sample sizes because of missing data on respondent questionnaires.

^bSubgroup percentages may not add to 100 due to rounding.

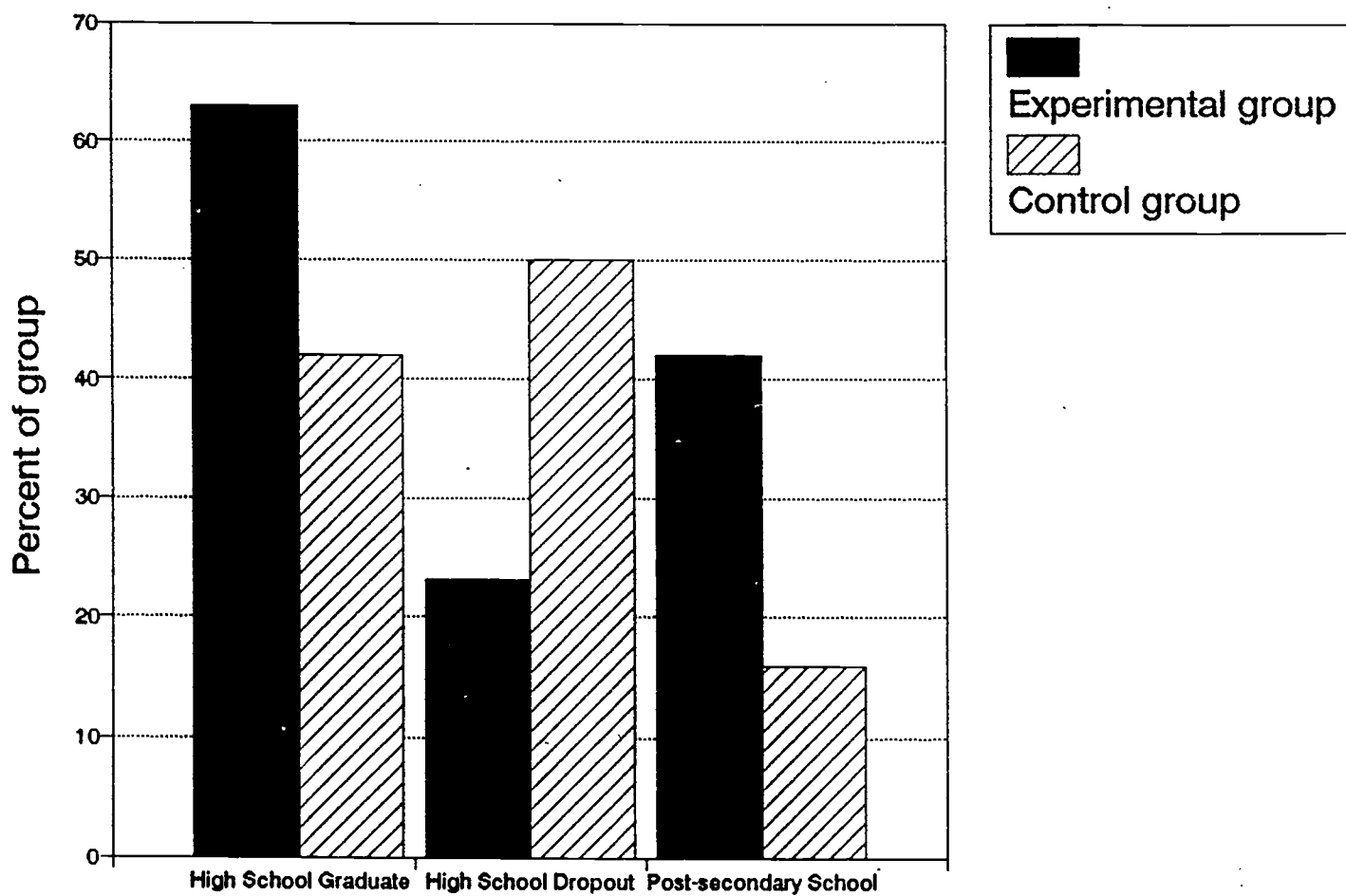
^cp is the probability that the difference in experimental and control group distributions is due solely to random error. A Pearson chi-square test used to test the hypothesis of equal distributions. Statistical significance levels are indicated as *** = 1 percent or less; ** = 5 percent or less; * = 10 percent or less.

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FIGURE 1: EXPERIMENTAL/CONTROL GROUP EDUCATION COMPARISONS



**FIGURE 2: EXPERIMENTAL/CONTROL GROUP
EDUCATION COMPARISONS: PHILADELPHIA**

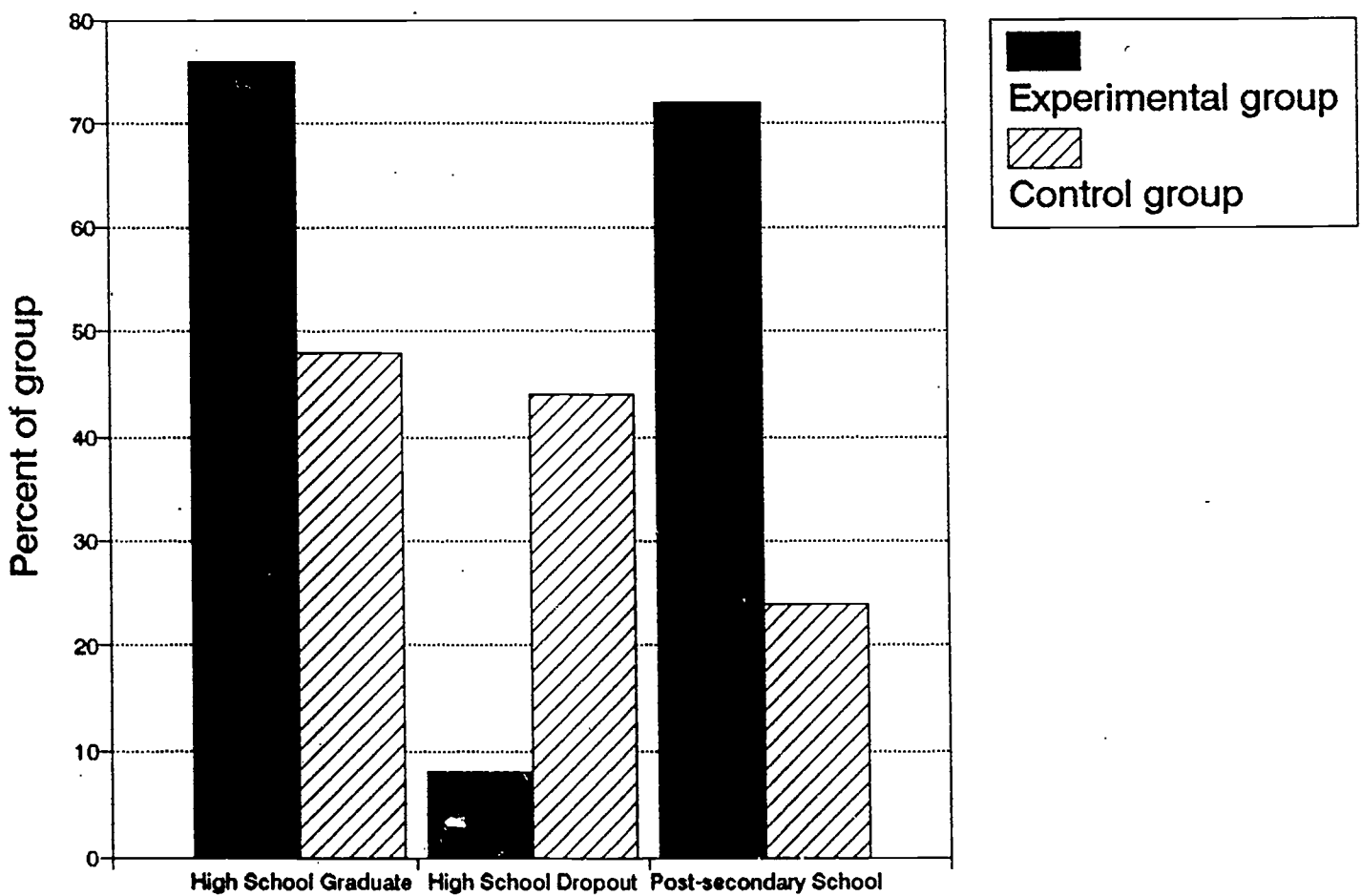
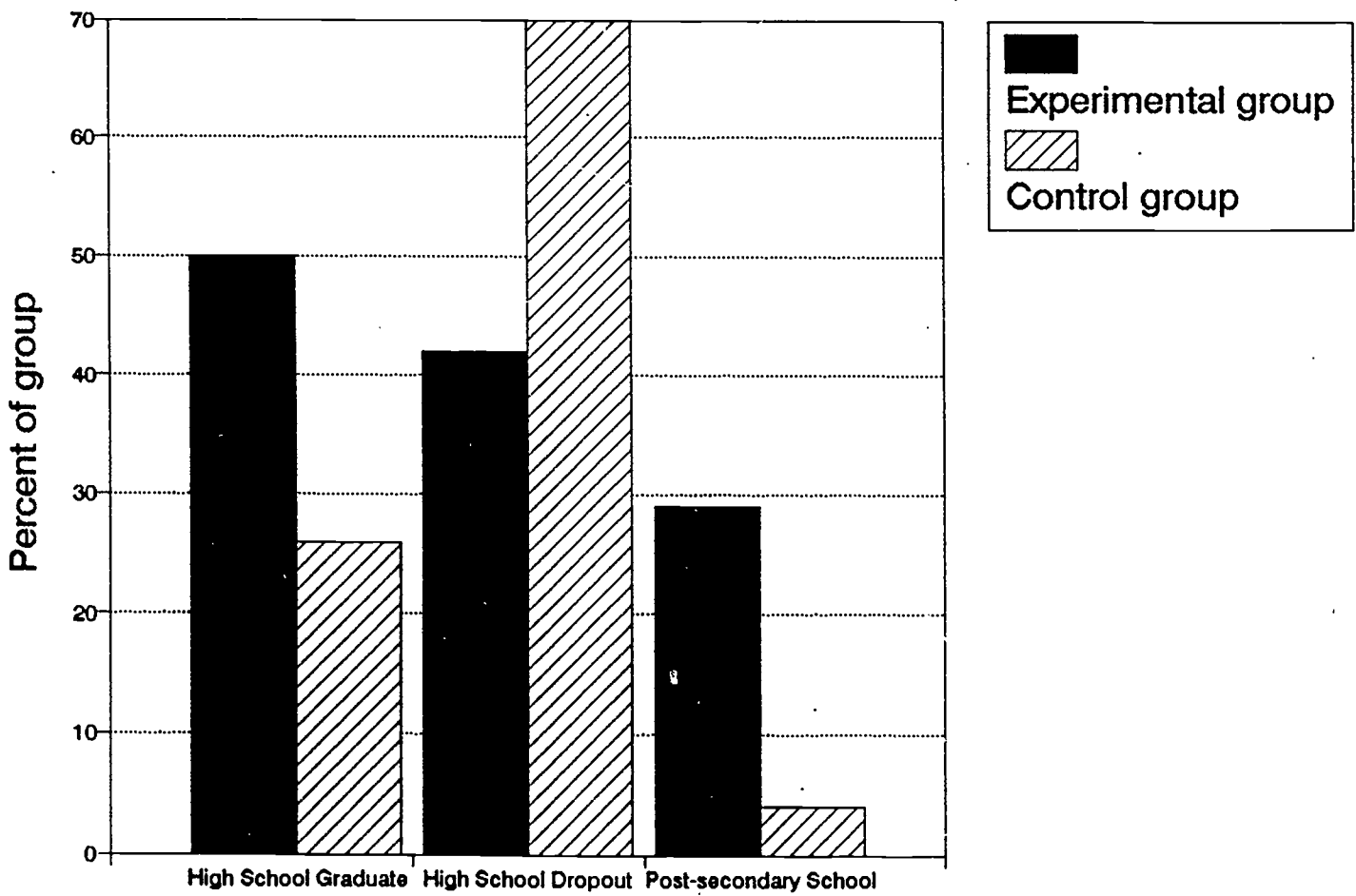
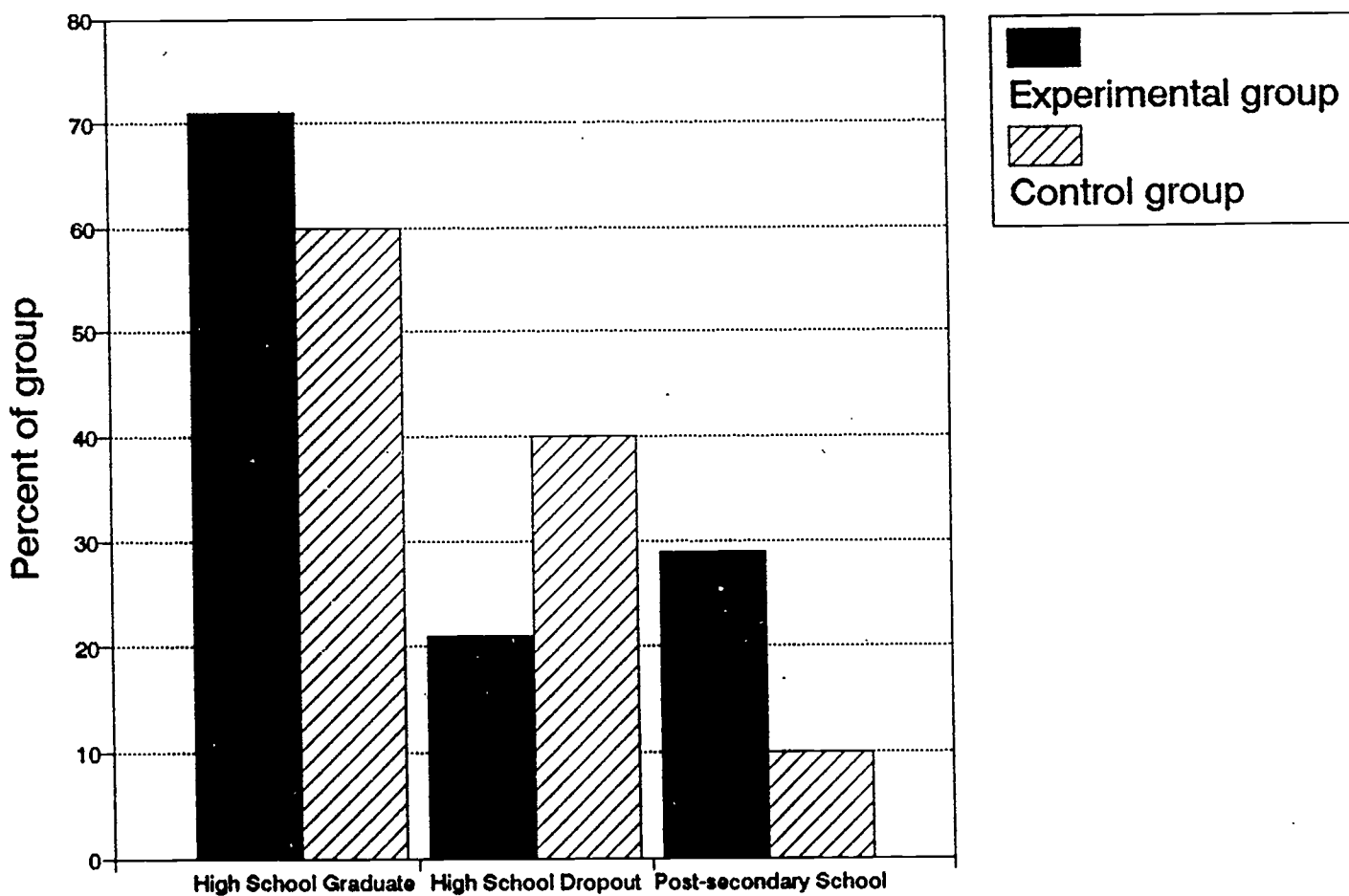


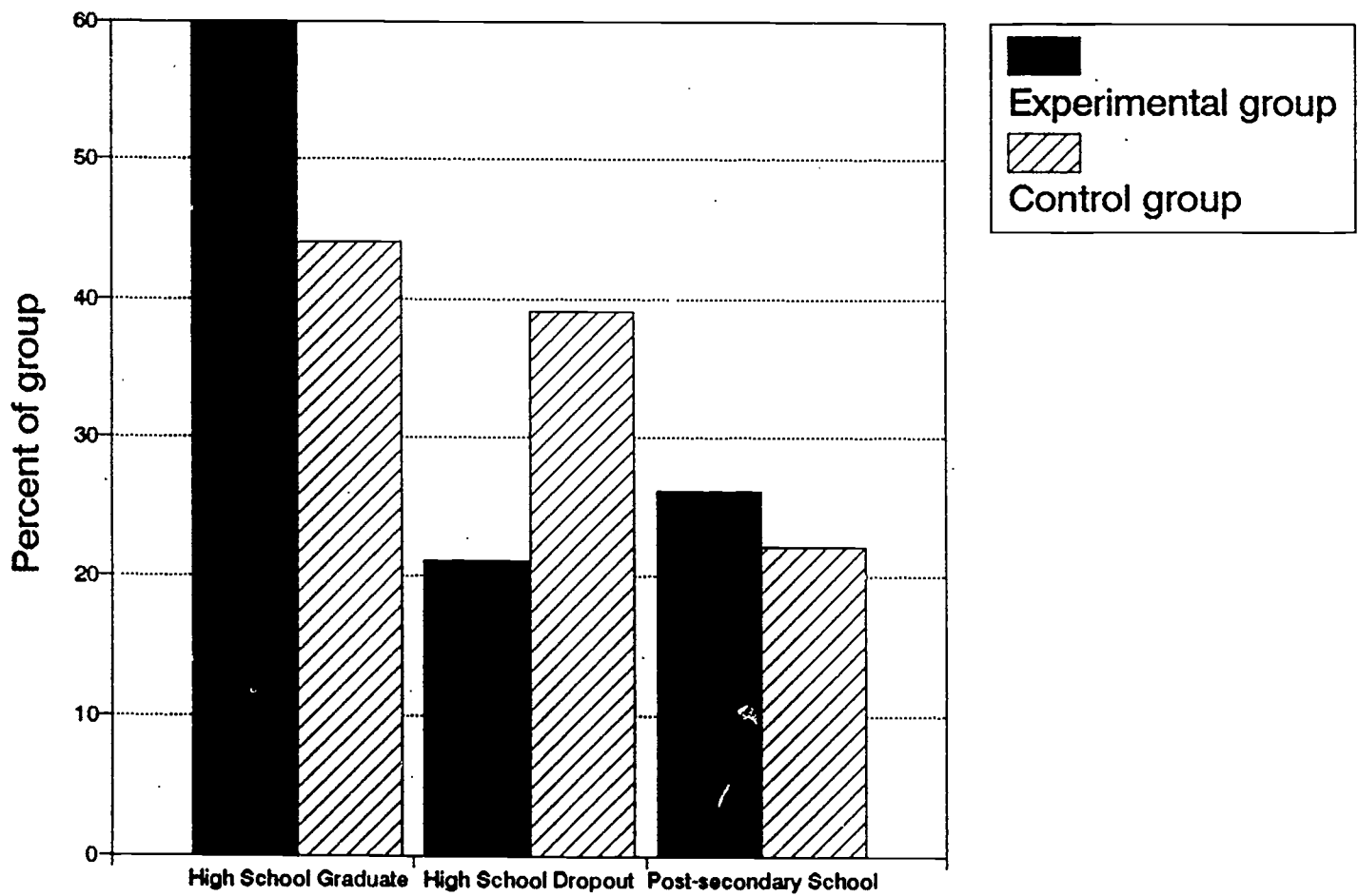
FIGURE 3: EXPERIMENTAL/CONTROL GROUP EDUCATION COMPARISONS: OKLAHOMA CITY



**FIGURE 4: EXPERIMENTAL/CONTROL GROUP
EDUCATION COMPARISONS: SAN ANTONIO**



**FIGURE 5: EXPERIMENTAL/CONTROL GROUP
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**FIGURE 6: 4-YEAR COLLEGE ATTENDANCE,
BY RESEARCH GROUP AND SITE**

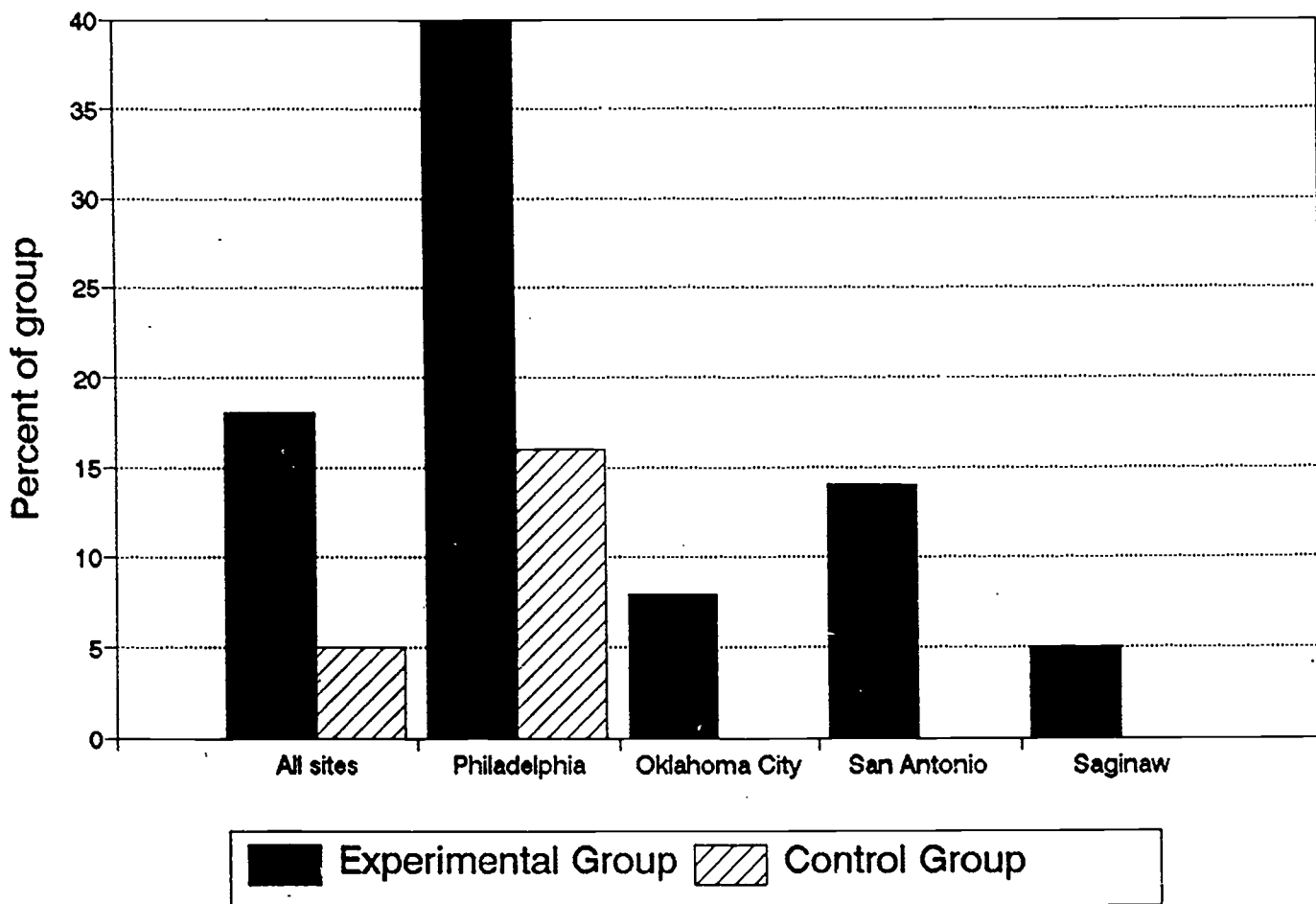
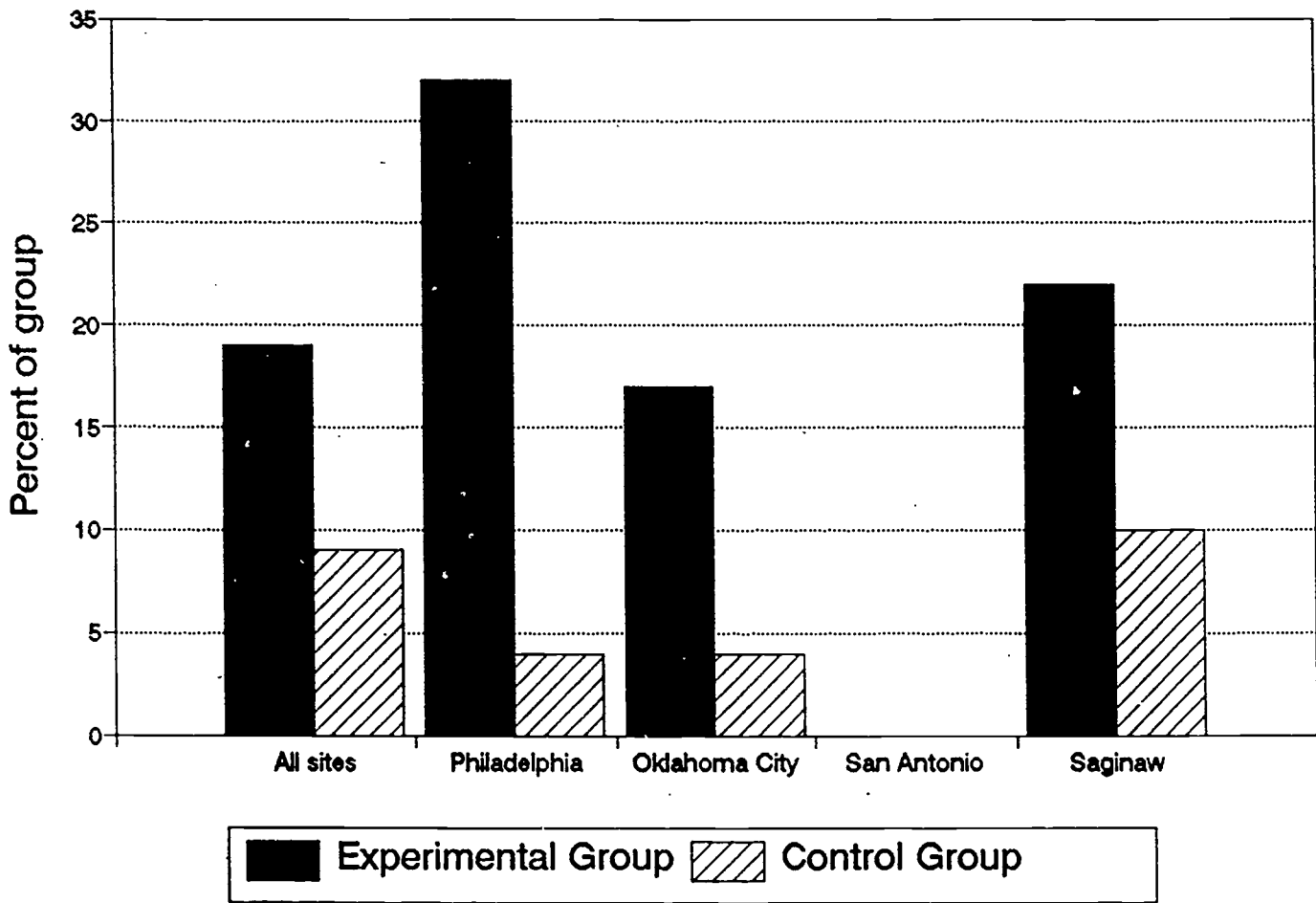
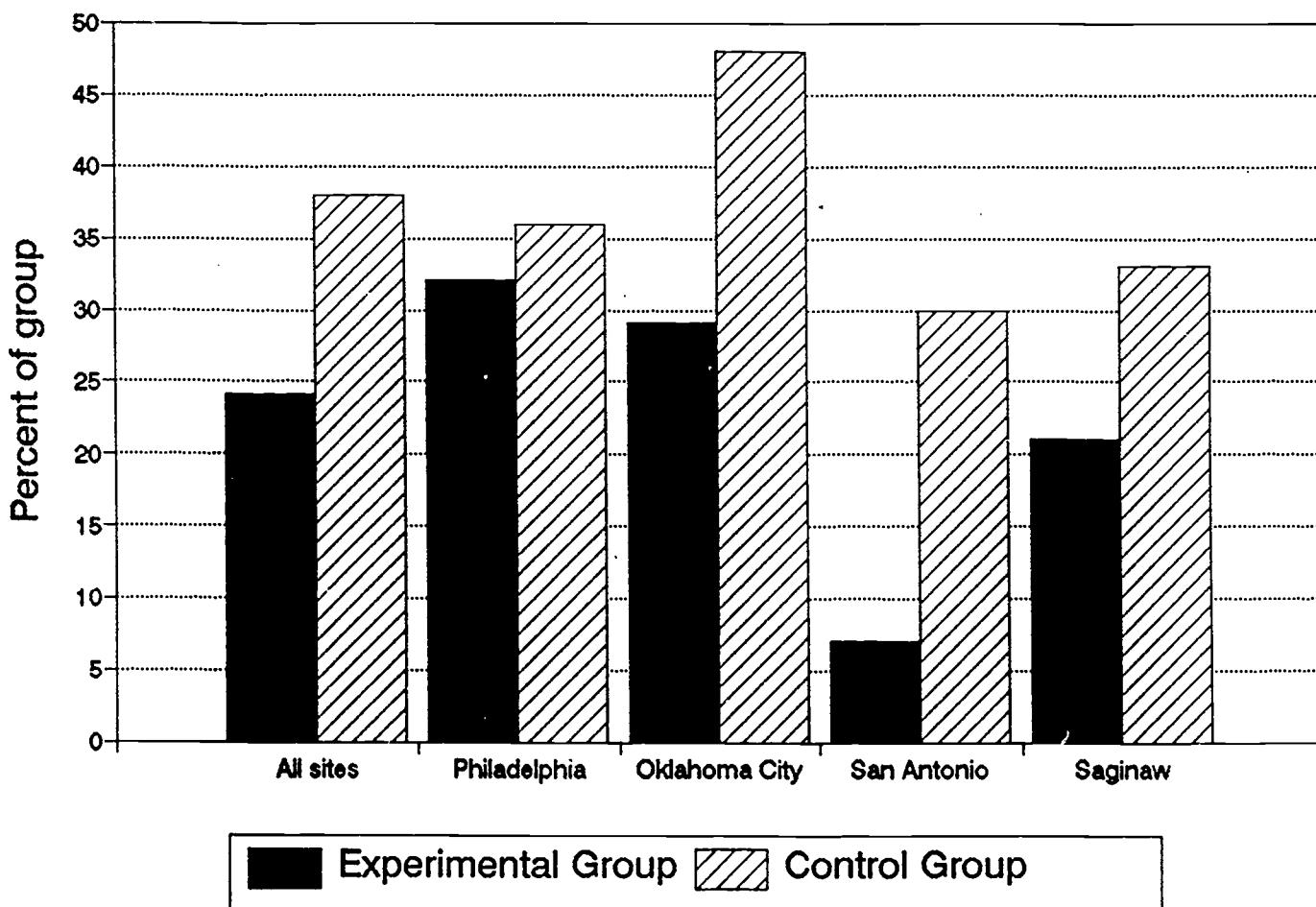


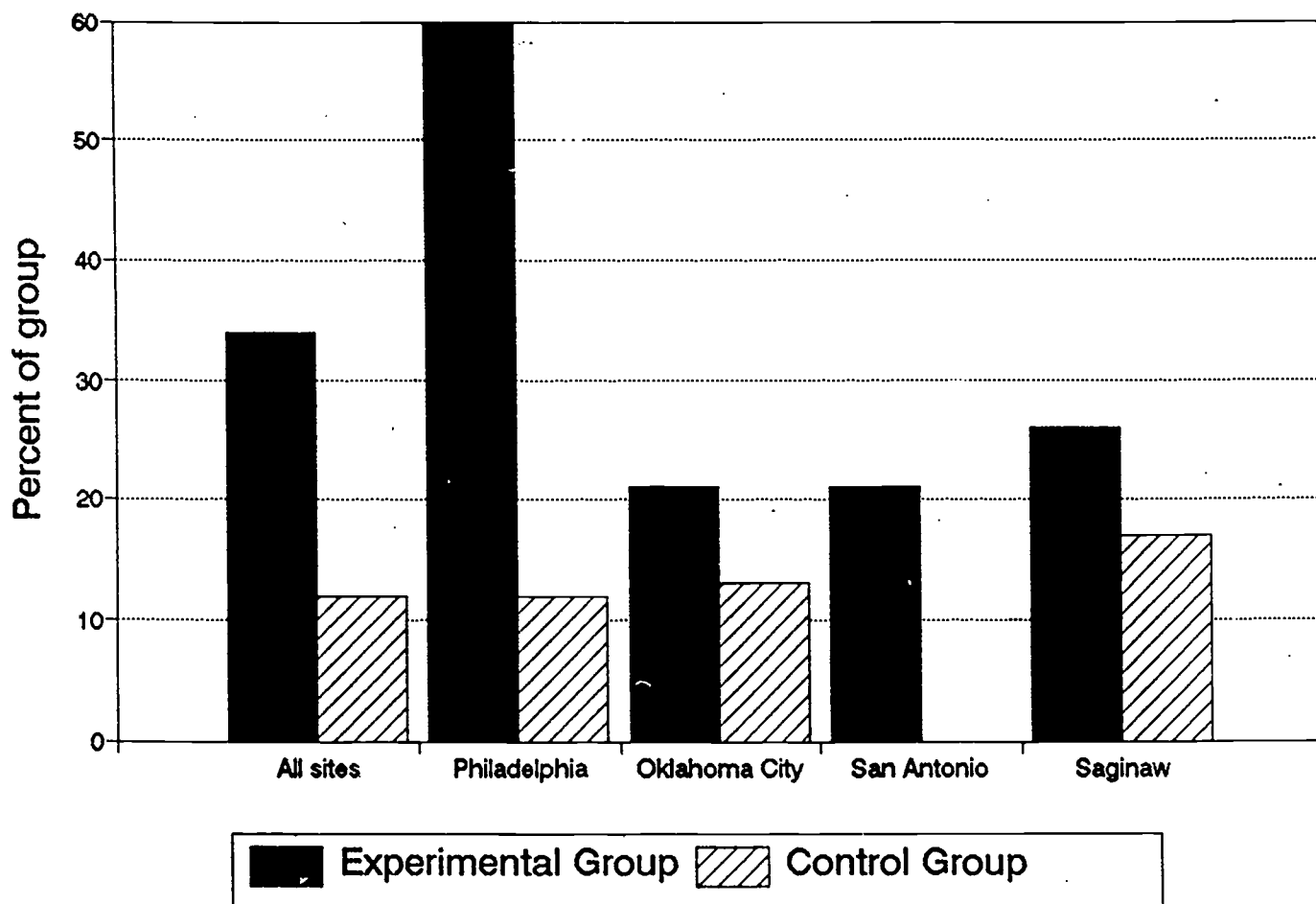
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**FIGURE 9: PERCENT WITH RECENT HONORS/
AWARDS, BY RESEARCH GROUP AND SITE**



**FIGURE 10: RECENT VOLUNTEER COUNSELING,
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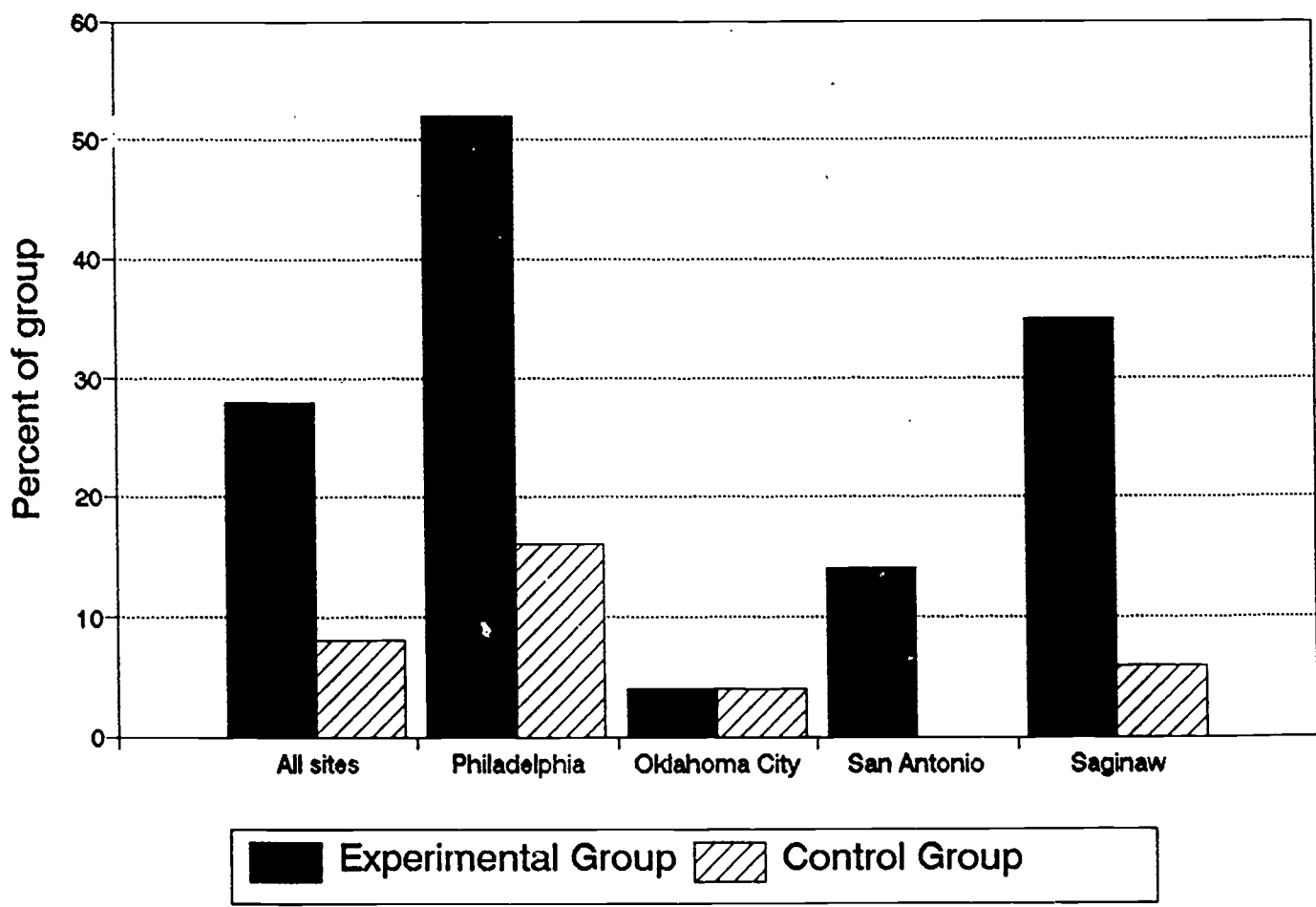


FIGURE 11: RECENT DONATION OF TIME TO NON-PROFIT, SCHOOL, OR COMMUNITY GROUP

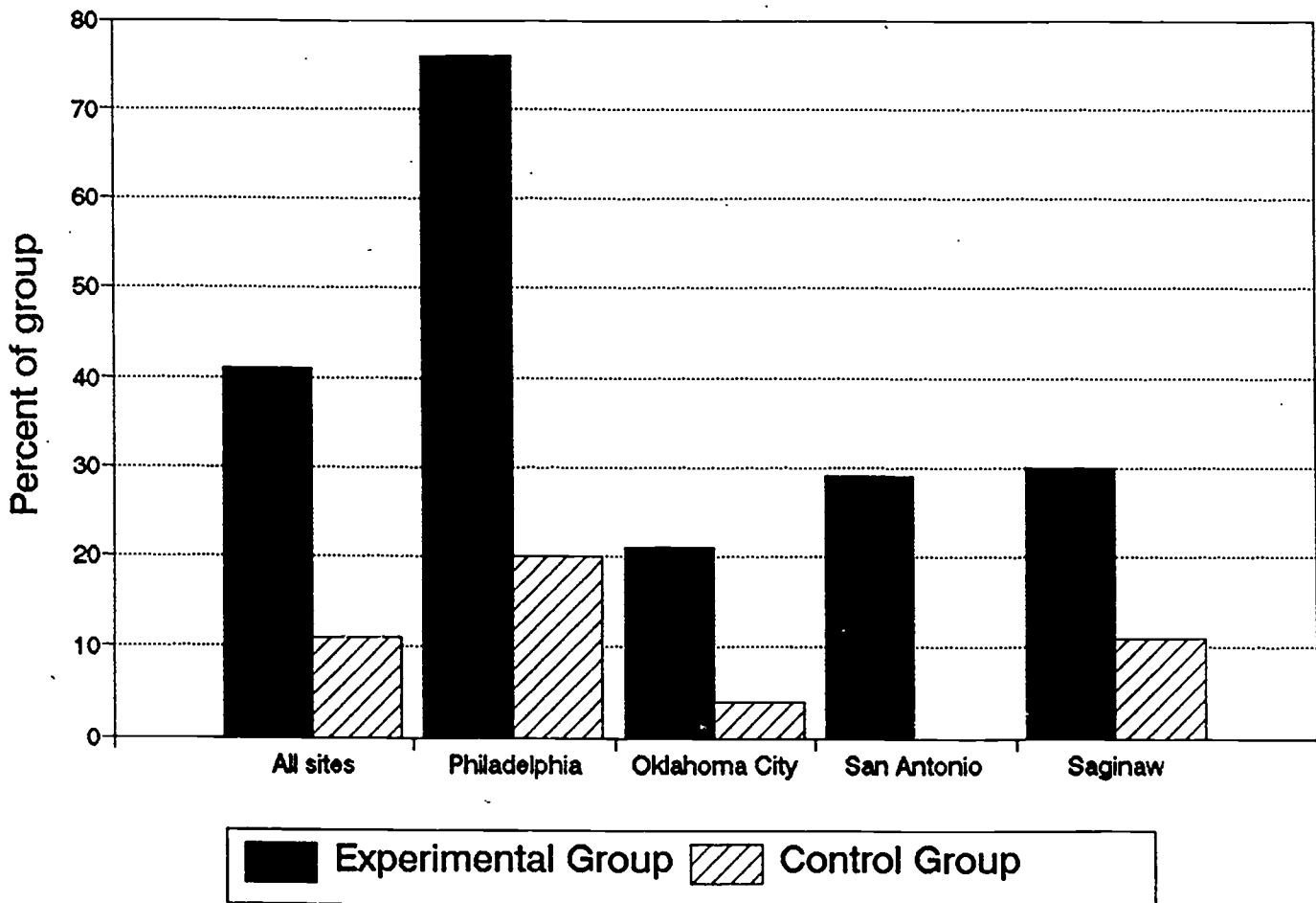


FIGURE 12: THOSE WHO STRONGLY AGREE THAT THEY ARE HOPEFUL ABOUT FUTURE

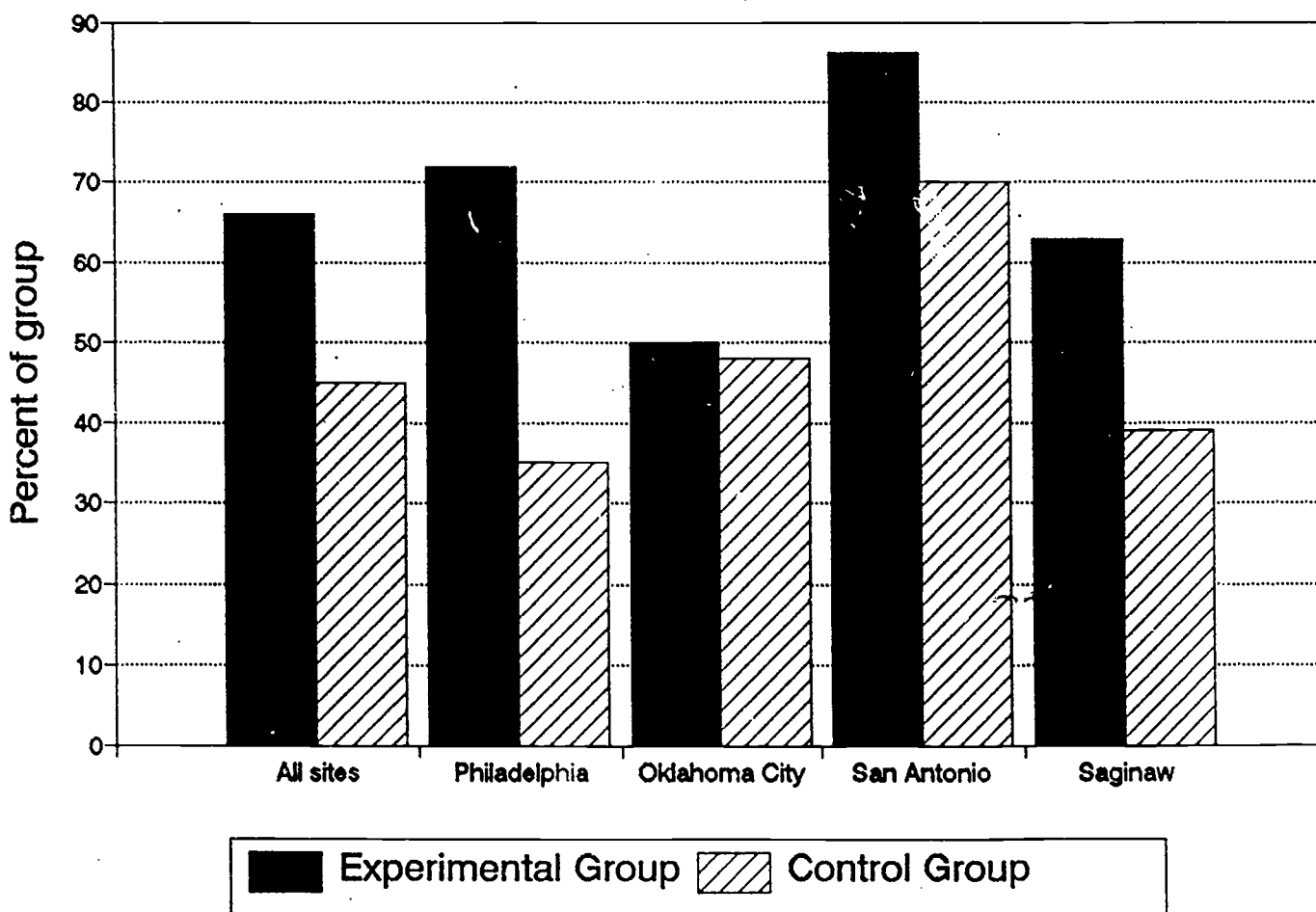
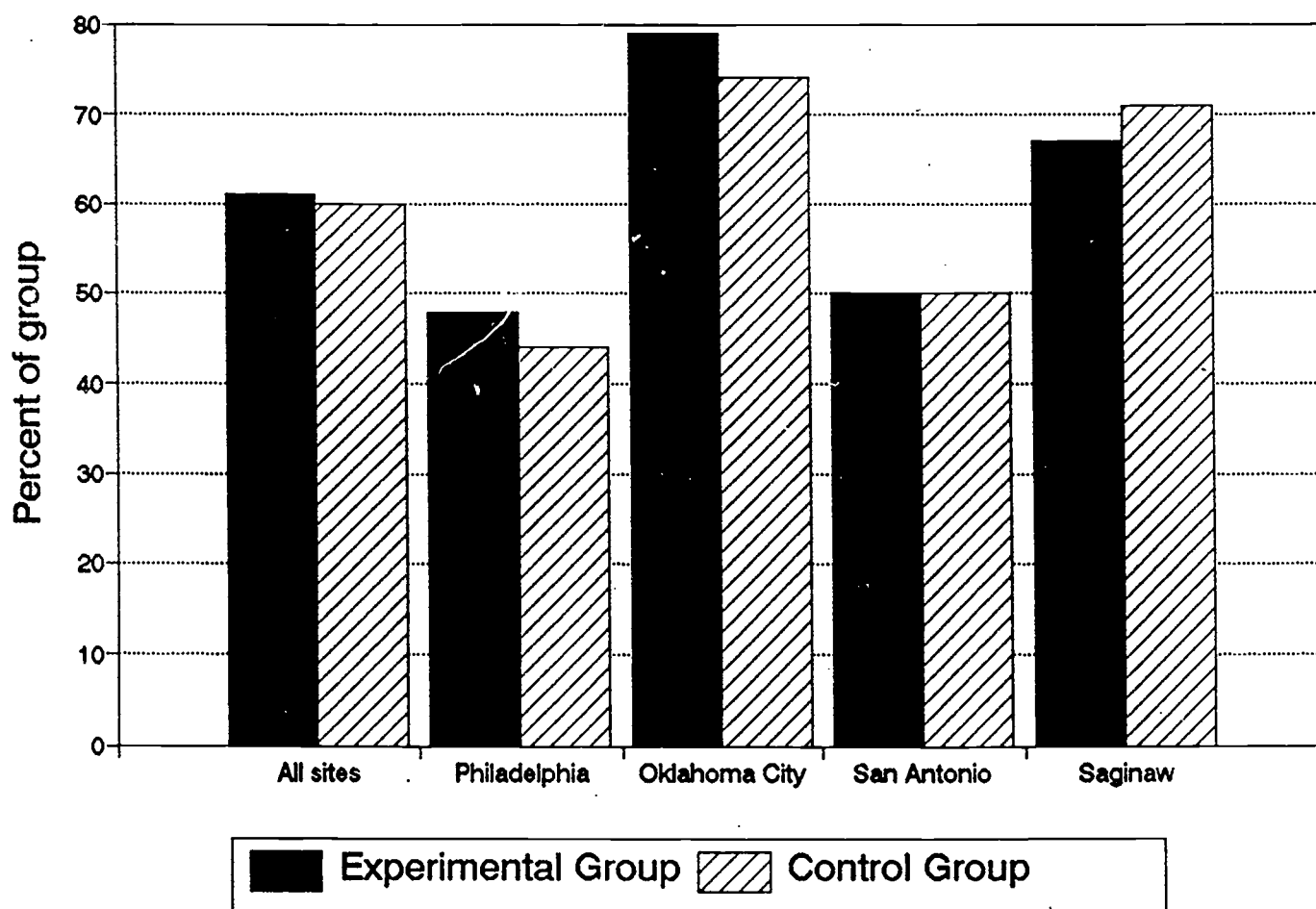


FIGURE 13: THOSE WHO EXPRESS A NEED FOR READING/MATH SKILL HELP, BY SITE



**FIGURE 14: SCHOOL/WORK STATUS,
BY RESEARCH GROUP**

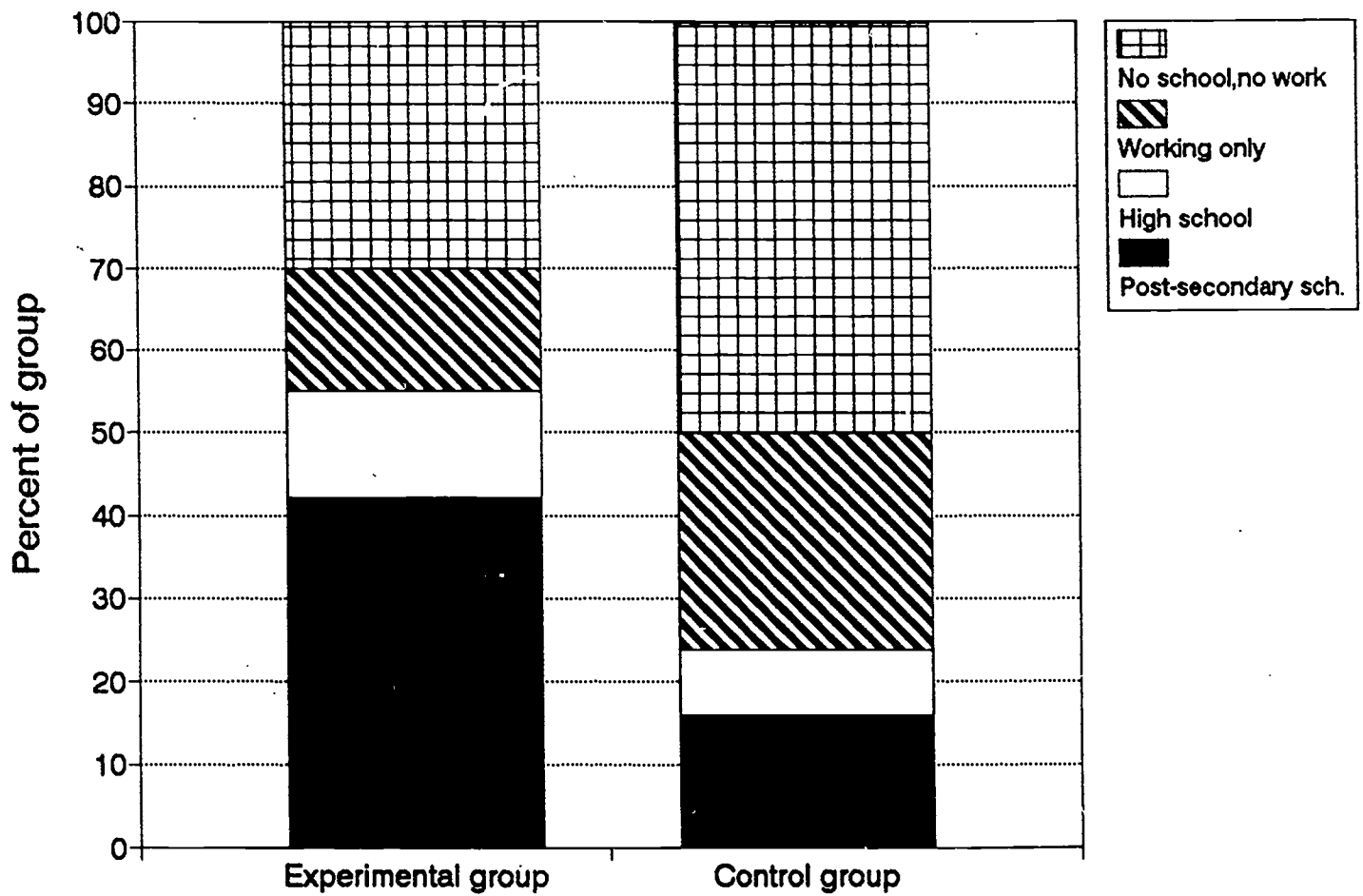


FIGURE 15: PERCENT OF QUOP STUDENTS WHO THINK QUOP WAS "VERY IMPORTANT"

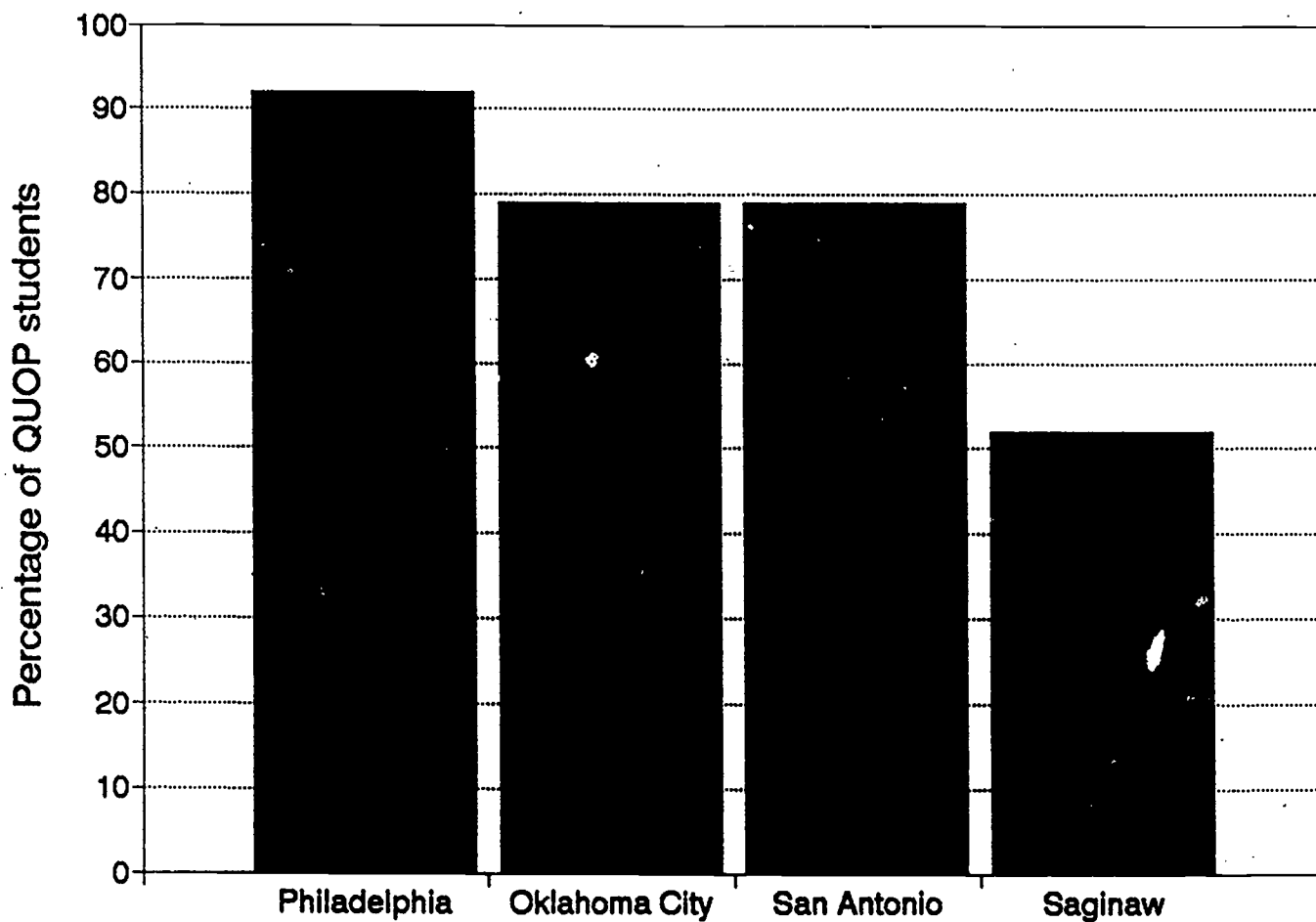


FIGURE 16: PERCENT OF QUOP STUDENTS WHO WERE "VERY SATISFIED" WITH QUOP

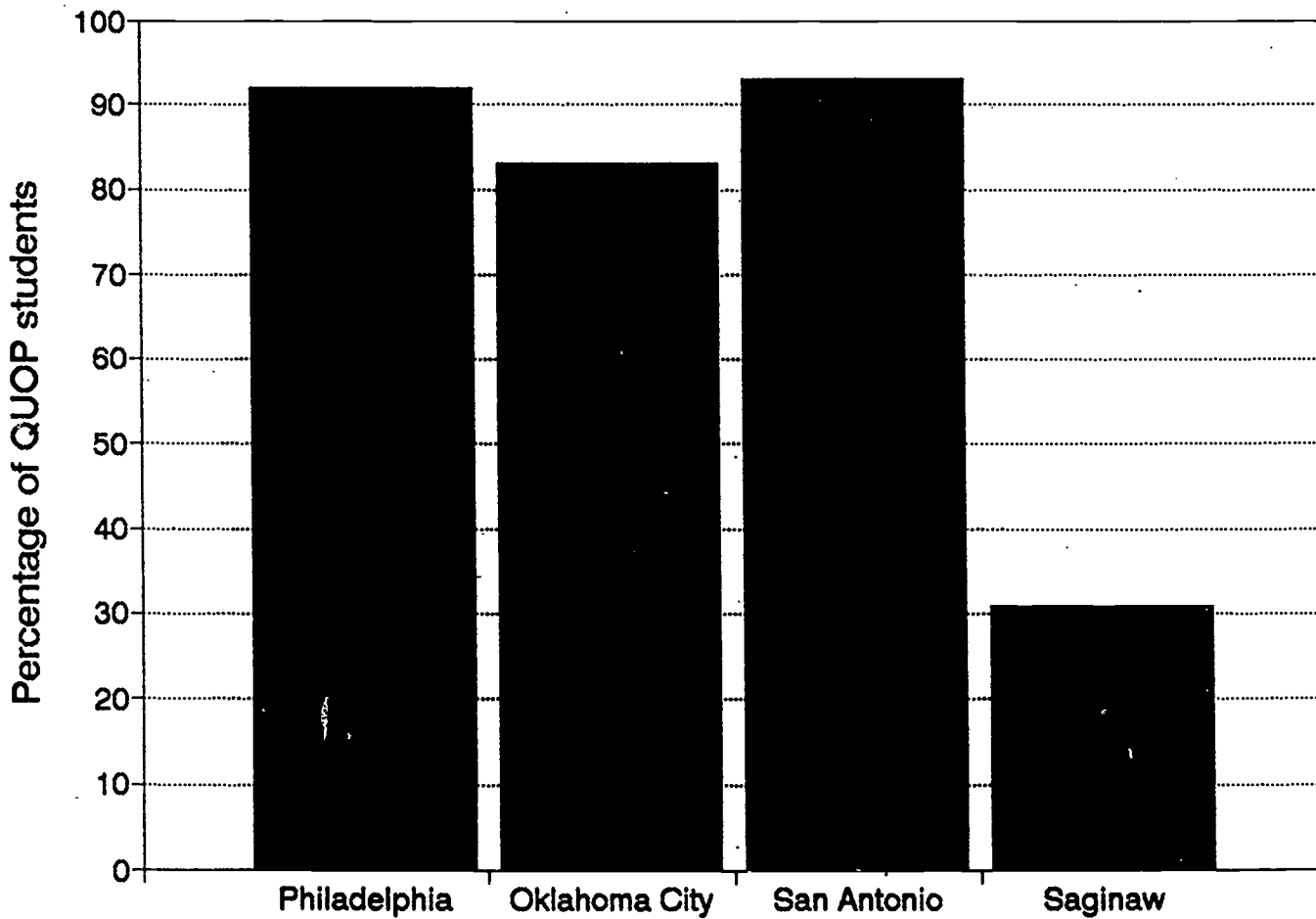
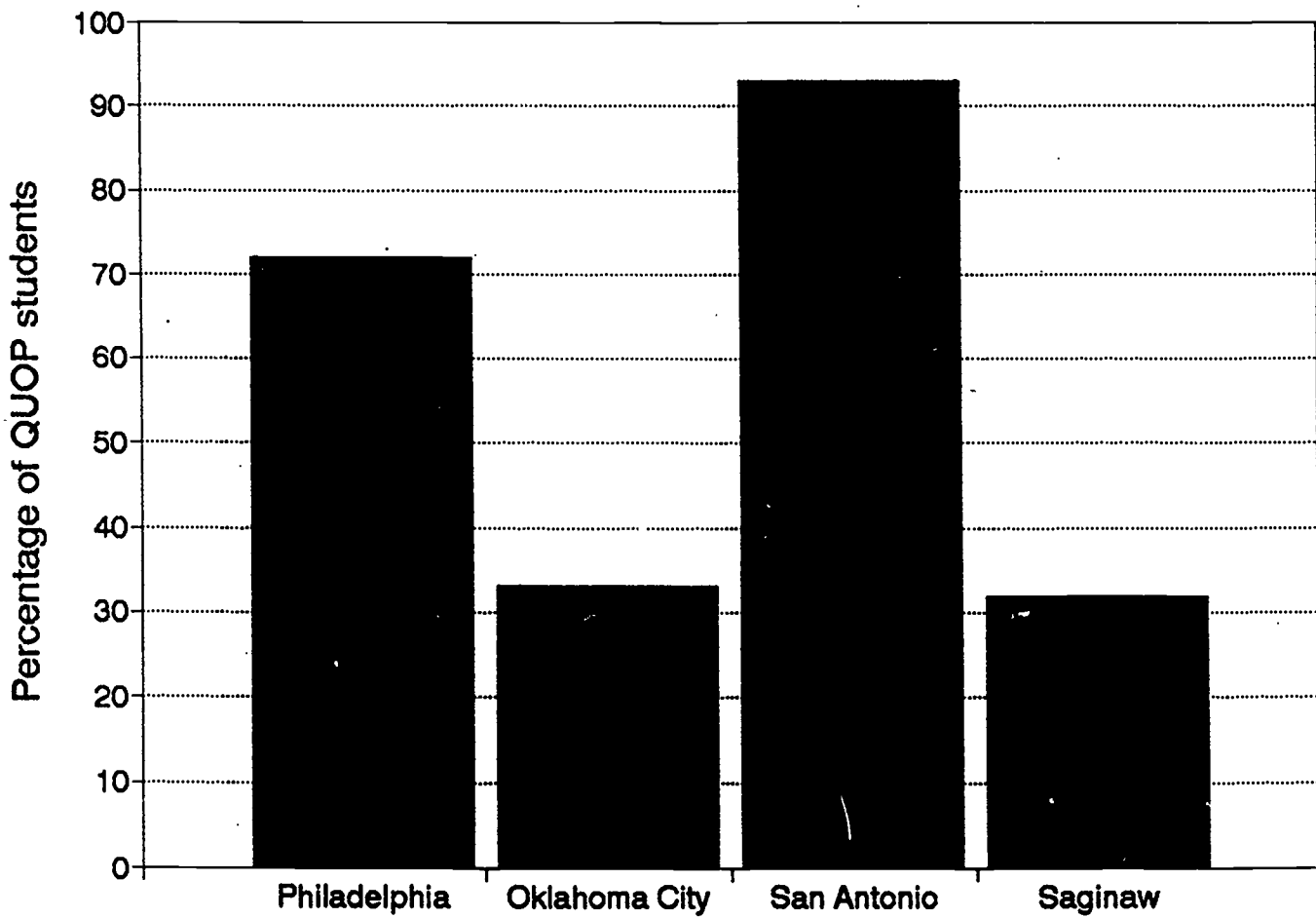


FIGURE 17: PERCENT OF QUOP STUDENTS WHO BELIEVED QUOP PAYMENT "VERY IMPORTANT"



NEWSPAPER CLIPPINGS

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\$1 beyond the greater New York metrop-



Keith Meyers/The New York Times

Two graduates of a program to help youths out of the ghetto, Sherice Woolfalk, left, and Nashema Jeffers, at a recent reunion with their mentor, Reuben Mills, holding Ms. Jeffers's son, Branschum, 1.

For Young, a Guiding Hand Out of Ghetto

By CELIA W. DUGGER

PHILADELPHIA — Reuben Mills, a brash, 22-year-old youth worker fresh out of college, sat behind his battered desk at Benjamin Franklin High School and nervously considered the type-written list of 25 students.

They were just names to him then, in the fall of 1989, randomly picked from the incoming class of ninth graders. All were from the same ghetto where he had been reared by a single mother. Beyond that, he knew nothing about them, except that their lives were in his

Experiment With Success

A special report.

inexperienced hands for the rest of their high school years.

Mr. Mills was about to embark on a four-year odyssey with these teen-agers as part of a small, innovative social experiment. He would serve as their father, big brother or friend, a role that was needed to keep them in a high

school, out of trouble and on the road to college.

This \$1 million experiment, financed by the Ford Foundation in four American cities, has now produced some of the most remarkable results for poor youths since the test runs for Head Start and Job Corps, the most widely copied programs of the Great Society era.

Of the 100 teen-agers in the experiment, many more improved their basic skills, graduated from high school and went on to college.

than a randomly selected control group of their peers. And fewer had babies.

The experiment, known as the Quantum Opportunities Program, broke sharply with a generation of strategies that aimed programs at the particular problems of poor youths — teen-age pregnancy, delinquency, failure at school and unemployment. Generally, such programs last no more than a year, the length of government's budget cycle, reaching young people only after they are in deep trouble, and often producing disappointing results.

The Quantum program, in contrast, which will resume in the fall, enrolled them at age 13, 14 or 15, usually before they dropped out of school, had babies or turned to crime and drugs. And it was able to stay with them for four years.

In a social policy landscape littered with the disappointing remains of other experiments, the Quantum program stands out for its common sense: What poor children from crumbled families and neighborhoods need most is an adult who cares about them and sticks with them for years.

But the program not only put people like Mr. Mills in place, it gave them the tools they needed to guide teen-agers.

The young people on Mr. Mills's list, most of them fatherless and on welfare, were paid small stipends — matched in a college fund for them — for the hours they spent studying math and vocabulary on computers in the program office, being tutored, doing volunteer work, going to plays, ballets and museums, visiting college campuses and listening to guest speakers.

Over the years, Mr. Mills, compact and dapper in starched shirt, tasseled loafers and wire-rimmed glasses, became the center of their universe. Each day, they gathered around him in his small cement-block office, confiding in him about their love interests and family problems. He, in turn, gave them advice and affection, rubbing their heads, admiring their new hairdos, kidding them.

He hung out with them after school, on weekends and in summer. He gave them his home phone number. "I did get sick of them a little bit," he admitted, "but if I didn't see them for a day or two, I'd get nervous."

And he let them get away with nothing. Each day for four years, he checked up on them in their English classes to be sure they were in school. On pretty spring days he looked in on them in both the first and last periods. If they came late or skipped out early, he docked their stipend payments for the hours missed.

When students missed school, Mr. Mills combed their neighborhood haunts and ventured into their homes. "If he didn't see me for two days," Ray Holmes said, "Mr. Mills would go all over the neighborhood looking for me."

And after the last school bell rang, Mr. Mills was the Pied Piper, leading a trail of the students on the four-block walk to the offices of the Opportunities Industrialization Center, a 30-year-old community-based organization that ran the program.

There, he and Phyllis Lawrence, the center's director of youth programs who hired him, looked over the stu-

dents' shoulders, correcting grammar and helping them with math problems.

Because Mr. Mills was always with them, the students listened to him.

When Kenyatta Clark became pregnant at 15 and quit school in shame, Mr. Mills went to the dilapidated row house where she lived and talked her into coming back.

When Sherice Woolfalk was failing geometry and wanted to drop out in her senior year, Mr. Mills convinced her that she had come too far to give up.

When Ray Holmes dropped out after his older brother was murdered, Mr. Mills coaxed him back into the program, though not to school. Ray is now close to obtaining his license to be a barber.

"My brother used to wake me in the morning, smacking me in the face," Ray said. "We'd walk to school together. I started sleeping the whole day after he was killed. But Mr. Mills was always on my back, encouraging me."

Nineteen of Mr. Mills's 25 students graduated from high school and 18 went on to college or training schools, compared with only 12 graduates and 7 college-bound students in a control group of youths from the same school who did not participate.

Social policy researchers say the Quantum program has provided the first strong evidence that long-term approaches work.

But despite its promising results, the Quantum experiment has arrived at an inauspicious moment for new anti-poverty initiatives. At every level of government, financing for such efforts is being slashed.

Still, Robert Taggart, a research professor at Howard University and a principal architect of the Quantum program, said advocates for youth should push for an immediate and large-scale expansion of the model.

"It is the only thing that any of us have seen that works for this age group with statistical validity," said Mr. Taggart, who himself shaped a generation of employment programs while running a \$4 billion Federal initiative in the Carter Administration to learn what works for poor youth.

While encouraged by the Quantum results, other researchers caution against exaggerated hopes. Will a small, intensively monitored experiment, staffed by extremely committed people, work if expanded on a large scale?

"Will the findings last?" asked Gordon Berlin, a social policy expert who was with the Ford Foundation when it financed the Quantum experiment. "We've gotten a lot of kids in college. Will they stay and will they get jobs when they get out?"

To help answer these and other questions, the Ford Foundation will continue following the Quantum participants who finished the program in 1993. After an evaluation, it is planning another round of Quantum experiments this fall.

Even with the caveats, the results of the Quantum program, commonly called Quop, have inspired a restrained excitement in the normally staid world of social policy research. The lead researcher on the project, Andrew B. Hahn, a Brandeis University professor, wrote in his evaluation, "The potential for Quop-like programs is enormous!"

The Odds

Knowing the Need, Tailoring the Help

In the fall of 1989, the organizers of the Quantum experiment in Philadelphia were wondering what they had got themselves into. The 25 students on their list were not motivated, hand-picked volunteers, but poor teen-agers whose names had been selected by computer. Half had already been held back a year in school.

The success of the experiment depended on persuading them to join. But would they be enticed by \$1 an hour to play checkers with old people in nursing homes, to log on to learning computers, to go to concerts of the Philadelphia Orchestra?

Mr. Mills took on the project in addition to his main job as a dropout prevention worker at Benjamin Franklin High School because he believed he could do some good. He, too, had attended Franklin, which serves the predominantly black and poor neighborhood of North Central Philadelphia in the shadow of City Hall. He, too, had grown up without a father. His family immigrated from Antigua and his mother struggled to support her children on the small income of a mail clerk.

But he had made it, graduating from Cheyney University in Cheyney, Pa., and he believed he could help others do it, too. "I was serving a community I was a product of," he said. "I felt like I had to see this program succeed."

The odds seemed long. So many young people drop out of Franklin that the number of students in a class shrinks to 250 in the 10th grade

When Kenyatta Clark, center, graduated from high school in Philadelphia, with the aid of a program helping youths climb out of poverty, her mother

Karen, right, was so inspired that she returned to high school and graduated at the age of 42. Kenyatta Clark's son, son, Kareem, 3, is beside her.

from about 500 in the 9th grade, school officials say. The students are drawn from narrow, pocked streets near the school that are lined with decaying row houses, many of them abandoned and boarded up.

"During the springtime, you throw bread crumbs on the ground and the birds snatch the crumbs and fly back to the trees," said Joe Hodges, one of the Quantum youths. "That's what this neighborhood is like. Everybody's trying to take from each other."

As it turned out, the 25 youths from this hard-luck neighborhood leaped at the chance to join the program. And Mr. Mills convinced them that he was not trying to use them, but to help them. His pay rose the more hours the Quantum students put in, but that amounted to only \$5,000 to \$6,000 over his annual salary, which started at \$18,000.

"It was good to know someone was there looking out for you, not just for the money but because you were special to him," Joe said.

Indeed, Mr. Mills tried to understand Joe and tailored his approach to fit Joe's needs. When he joined the program, Joe said, he was making D's and F's. His parents held solid religious values, but Joe chafed at the rules.

"Joe yearns for freedom," Mr. Mills said. "He comes from a neighborhood where most kids can do what they want. But his mother believed in disciplining her children. She reared Joe right.

"He was always a challenge to me. I was very hard on him. He was the kind who disrespected everyone, who spoke back. No matter how much you told Joe to go left, Joe would definitely go right. If you told Joe the workshop today is at 2, he'd straggle in at 3."

What Joe had trouble accepting from his parents, he took from his idol Mr. Mills. "He'd help me with my homework," Joe said. "And he told me to check with him every day. He wanted to make sure I was in school. I had perfect attendance."

On report card days, Mr. Mills played the father who knows that his son can do better. "I remember one time I had a D," Joe said, "and he was like, 'You got to bring that up, man.' Then it was a C, and he said, 'You got to bring that up.' He was always pushing me to be my best."

By the time Joe graduated, he had solid grades and won the high school's \$100 prize for most improved student. He is now attending Philadelphia Community College and still talks to Mr. Mills every day.

The Successes

Good Time Is Had By All? Not Quite

Mr. Mills never gave up on anyone, even students who went completely off track. A 10th grader, Charles Corbitt, was sent away to prison for 7 to 17 years for fatally shooting a young man who Charles said had been threatening his baby daughter. He said it was Mr. Mills's encouragement that gave him the hope he needed to continue his education. He earned a general equivalence degree in prison.

"Even though the program has been over for some time, I still get a piece of mail from Mr. Mills at least three times a month to keep me on my toes," he wrote recently in a letter from prison.

Most students did graduate, though, often despite daunting obstacles. Dawn Clark, a shy, round-faced girl, said she had to mother her five younger brothers and sisters after her own mother became hooked on crack and smoked up half the family's welfare check each month.

In the 10th grade, Dawn left her mother's house and moved in with her grandmother around the corner. Every morning she still ran home to make sure her youngest brothers and sisters were out of bed and dressed.

the strength to make it to school. The program office also gave her a place to do homework in peace.

"Mr. Mills was determined to see us succeed," said Dawn, who is now a sophomore at West Chester University in West Chester, Pa. "But he wasn't just a serious person. He made everything fun. He would joke with us. He's not an old, old person."

The Future

Word Gets Out, And Many Want In

The other 75 students the Quantum program served were in Oklahoma City, San Antonio and Saginaw, Mich. In Philadelphia, the most successful of the sites, students each put in an average of 2,300 hours during the four years, on top of 3,600 hours in school itself.

The average four-year cost of the program was \$10,600 for each student, two-thirds the annual cost of Job Corps, a residential training program that serves mainly high school dropouts.

The students were paid a stipend of \$1.33 for each hour they spent on extra academic study, volunteer work or cultural and educational events, plus a \$100 bonus for each 100 hours completed. Their earnings were matched in accounts that they could draw from only if they went to college or trade school. The Philadelphia students each accumulated about \$4,000 in those accounts.

As word spread through Benjamin Franklin High School about the program, many students tried to get in.

"My little sister, she wanted something like that for her," said Kenyatta Clark, whose father was slain when she was a toddler and whose mother was so inspired by her daughter's graduation that she herself returned to Franklin at the age of 42 and will graduate this year.

"A lot of kids wanted to know how to get in," Kenyatta said. "I didn't know what to tell them because I was picked out of a hat. There's a lot of kids out here that want the chance to go to college, but their parents don't have that kind of money."