Technical Resources

for

Career Academies

Long-Term Impacts on Labor Market Outcomes, Educational Attainment, and Transitions to Adulthood

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Unit 1

Survey Response Rates, Sample Characteristics, and Analysis Issues

Eight-Year Post-High School Survey Data and Analysis Issues

The Career Academies Eight-Year Post-High School Follow-Up Survey, which was administered to students in the study sample approximately 96 months after their scheduled graduation from high school, constitutes the primary data source for this report.[1] The survey sample of 1,428 students represents 81 percent of the full study sample — 82 percent of the Academy group and 80 percent of the non-Academy group. The overall response rate and the similarity between the response rates for the Academy and non-Academy groups are very high by the standards of survey research.

Whenever survey response rates are less than 100 percent, however, it is important to investigate two factors that may confound interpretation of the findings. The first part of this unit focuses on whether the respondent sample systematically differs from the nonrespondent sample. It concludes that there are a number of differences between respondents and nonrespondents. Most notably, young men and high-risk students are somewhat underrepresented in the respondent sample, while young women and low-risk students are slightly overrepresented. As a result, caution should be exercised in generalizing the impact findings from the respondent sample to the full report sample.

A second and more serious concern is whether respondents in the Academy group differ systematically from respondents in the non-Academy group. The second part of this unit concludes that there are no systematic differences in background characteristics between the Academy and non-Academy group members who responded to the survey, affording a high degree of confidence that differences in outcomes between the two groups reflect impacts of the Career Academies rather than preexisting differences in background characteristics between Academy and non-Academy sample members who responded to the survey.

Eight-Year Post-High School Survey Response Rates

The evaluation team attempted to obtain information about eight-year post-high school education and employment experiences for the full sample of 1,764 students in all nine sites participating in the Career Academies Evaluation.[2] For the present purpose, this group of stu-

[1]The Four-Year Post-High School Follow-Up Survey was also used as a data source for this report. For response rates and sample characteristics for the four-year survey, see James J. Kemple and Judith Scott-Clayton, *Career Academies: Impacts on Labor Market Outcomes and Educational Attainment,* Technical Resources (New York: MDRC, 2004; Web site: http://www.mdrc.org/publications/366/techresources.pdf).

[2]Details about site selection can be found in the following previous report from the evaluation: James J. Kemple and JoAnn Leah Rock, *Career Academies: Early Implementation Lessons from a 10-Site Evaluation* (New York: MDRC, 1996). Since one of the initial ten sites was disbanded after two years, its students are not included in the follow-up study sample.

dents — all of whom applied for a place in an Academy — is referred to as the *study sample.* Of the students in the study sample, 959 (54 percent) were randomly selected to enroll in an Academy (the *Academy group*). The remaining 805 students (46 percent of the study sample) were not invited to participate in the Academies but could choose other options available in their high school or school district (the *non-Academy group*).

Each student entered the study at the end of the 1992-1993, 1993-1994, or 1994-1995 school year, at which point he or she was at the end of the eighth- or ninth-grade year. Whether students were in the eighth grade or the ninth grade at the point of application depended on the Academy program to which they applied; two of the Academies began in the ninth grade, and the remaining seven began in the tenth grade. Students applied for admission to the programs at the end of the school year before expected enrollment. This report follows sample members through the 96th month after their scheduled graduation date — that is, through June 2004, 2005, or 2006, depending on the year during which sample members entered the study and the grade level at which they entered.

A key question for interpreting the findings presented in this report is whether students for whom survey data are available are representative of the full study sample. Exhibit 1.1 lists the percentages of students in the full study sample, and in key subgroups of interest, who responded to the Eight-Year Post-High School Follow-Up Survey. The second column in the table shows the overall response rates for the full sample and various subgroups, and the third and fourth columns show the rates for the Academy and non-Academy groups, respectively.

Overall, the survey achieved an 81 percent response rate, and response rates were at or above 80 percent for most subgroups. A response rate of 80 percent is considered high by survey research standards. This table also indicates, however, that there are some substantial differences in the response rate across different subgroup categories. For example, those at low risk of dropping out responded at a rate 11 percentage points higher than those at high risk (85 percent, compared with 74 percent), and young women responded at a rate 9 percentage points higher than young men (85 percent, compared with 76 percent).

At the same time, Exhibit 1.1 indicates that, in general, there are only modest differences in response rates between Academy and non-Academy group members within subgroup categories. The first line of the table shows that the very small difference in response rates between the Academy and non-Academy groups is not statistically significant. This means that, overall, there is no systematic difference in the response rates of Academy and non-Academy groups. The table also shows that most differences in response rates between Academy and non-Academy students across the various subgroups shown in Exhibit 1.1 are not statistically significant. Differences in response rates between Academy and non-Academy group are statistically significant in one of the sites, for young women, and for African-American sample members. In

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Exhibit 1.1

Response Rates for the Eight-Year Post-High School Follow-Up Survey for the Full Sample and Selected Subgroups

Subgroup	Sample Size	Total (%)	Academy Group (%)	Non-Academy Group (%)	Chi-Square P-Value
Full sample	1,764	81.0	81.5	80.2	0.490
Site					
Anacostia	114	78.9	82.5	74.5	0.296
L.C./Eastern	259	81.1	85.0	76.5 *	0.081
Socorro	199	85.4	84.1	87.0	0.571
Miami Beach	265	82.6	81.1	84.4	0.479
Westinghouse	66	69.7	72.2	66.7	0.625
Independence	119	83.2	80.0	87.0	0.307
Silver Creek	169	76.9	75.3	78.9	0.572
Valley	279	81.0	84.2	77.2	0.135
Watsonville	294	81.0	80.6	81.3	0.876
Graduation cohort					
1996	441	81.0	79.8	82.4	0.479
1997	632	82.8	83.2	82.2	0.751
1998	691	79.3	81.2	77.1	0.188
Risk subgroup[a]					
High risk	461	74.4	75.7	72.9	0.487
Medium risk	877	82.2	81.6	83.0	0.598
Low risk	426	85.4	87.8	82.7	0.131
Gender					
Male	773	75.9	75.2	76.8	0.610
Female	991	84.9	86.6	82.8 *	0.096
Ethnicity					
Hispanic	972	81.8	81.7	81.9	0.923
Black	523	79.5	82.9	75.3 **	0.033
White	111	85.6	80.7	90.7	0.132
Asian/Native American	124	75.0	74.6	75.5	0.917
Educational expectations					
Does not expect to graduate from college	614	79.3	80.2	78.2	0.542
Graduate from college	671	81.2	80.2	82.6	0.415
Attend higher level of school after college	448	83.3	85.7	80.7	0.163

(continued)

Exhibit 1.1 (continued)

SOURCES: MDRC calculations from the Career Academies Evaluation Student School Records Database, Baseline Student Questionnaire, and Eight-Year Post-High School Follow-Up Survey.

NOTES: A chi-square test was used to evaluate differences between Academy and non-Academy group response rates. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

[a]The definition of risk subgroups is based on analyses using background characteristics to predict dropping out of high school among students in the non-Academy group. These analyses yielded an index that expresses dropout risk as the weighted average of selected background characteristics: attendance rate and grade point average in the year of random assignment, credits earned in ninth grade (for those who applied to the Career Academy at the end of their ninth-grade year), being overage for the grade level, having transferred schools two or more times, and having a sibling who dropped out of high school. High-risk students have a combination of these characteristics that is associated with the highest likelihood of dropping out; low-risk students have a combination of these characteristics that is associated with the lowest likelihood of dropping out; and medium-risk students represent the remaining students with neither a particularly high nor a particularly low likelihood of dropping out.

each case, non-Academy group members were somewhat less likely to respond to the eight-year post-high school survey than Academy group members were.

Exhibit 1.2 further illustrates the differences between those who responded to the survey and those who did not (regardless of Academy or non-Academy status). It shows that there are a number of significant differences in baseline demographic, family, and educational characteristics between those who responded and those who did not. While the differences between respondents and nonrespondents are noteworthy, the high response rate helps ensure that the respondents are still reasonably representative of the full sample. In fact, one might expect that the higher the response rate, the greater the difference would be between those who responded and those who did not.

In short, the analysis of response rates indicates that the sample of students for whom eight-year follow-up data are available is not perfectly representative of the full study sample of 1,764 students. Thus, caution should be exercised when attempting to generalize the findings beyond the students who are included in the analyses. Nevertheless, the overall response rates show that data are available for the vast majority of students in the study sample, making the findings fairly representative.

Comparison of Respondents in the Academy and Non-Academy Groups

The main strength of a random assignment research design is that it ensures that there are no systematic differences between the research groups in measured or unmeasured background characteristics when sample members enter the study. As a result, any differences that emerge after that point can be attributed with confidence to the fact that one group had access to

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Exhibit 1.2

Differences Between Respondents' and Nonrespondents' Background Characteristics

Characteristic	Full Sample (%)	Respondents (%)	Nonrespondents (%)		Chi-Square P-Value
Demographic and family characteristics					
Gender				***	0.000
Male	43.8	41.1	55.4		
Female	56.2	58.9	44.6		
Age of student at time of application				**	0.013
13 or younger	8.6	9.1	6.3		
14	35.6	35.6	35.5		
15	46.1	46.5	44.2		
16 or older	9.7	8.7	14.0		
Race/ethnicity					0.140
Hispanic	56.2	56.8	53.5		
Black	30.2	29.7	32.3		
White	6.4	6.8	4.8		
Asian or Native American	7.2	6.6	9.4		
Student speaks limited English[a]	7.6	7.3	8.9		0.330
Student lives with				*	0.059
Mother and father	61.7	62.9	57.0		
Mother only	28.6	28.3	29.7		
Father only	4.6	4.1	6.7		
Other family/nonrelative	5.1	4.7	6.7		
Student lives in single-parent household	38.3	37.1	43.0	**	0.048
Father's education level					0.414
Did not finish high school	39.8	39.4	41.5		
High school graduate/GED recipient	32.4	32.5	31.7		
Completed some postsecondary education	15.1	15.8	12.1		
College graduate	12.7	12.2	14.7		
Mother's education level					0.131
Did not finish high school	36.1	37.3	30.9		
High school graduate/GED recipient	34.8	33.6	40.6		
Completed some postsecondary education	18.2	18.5	17.2		
College graduate	10.8	10.7	11.3		
Neither parent has high school diploma	28.6	29.5	24.7		0.116

(continued)

Exhibit 1.2 (continued)

Characteristic	Full Sample (%)	Respondents (%)	Nonrespondents (%)		Chi-Square P-Value
Parental work				*	0.052
Both parents work	47.3	48.5	42.3		
Father works	23.8	23.9	23.2		
Mother works	17.8	17.4	19.7		
Neither parent works	11.1	10.2	14.8		
Family receives welfare or food stamps	24.2	23.3	28.5	*	0.066
Family mobility in past two years				**	0.038
Have not moved	59.4	60.4	55.5		
Moved 1 or 2 times	33.6	33.4	34.5		
Moved 3 or more times	7.0	6.3	10.0		
Student is home alone more than 3 hours per day	13.5	13.8	12.3		0.488
Educational characteristics					
8th-grade math test score[b]					0.826
75th percentile or higher	8.5	8.4	8.8		
50th to 74th percentile	20.4	20.9	18.1		
25th to 49th percentile	32.2	32.0	33.3		
24th percentile or lower	38.9	38.7	39.8		
8th-grade reading test score[c]					0.717
75th percentile or higher	9.8	10.1	8.3		
50th to 74th percentile	19.4	19.7	17.9		
25th to 49th percentile	36.3	35.8	38.5		
24th percentile or lower	34.5	34.4	35.3		
Student does not feel safe at school	23.2	23.0	24.4		0.581
Frequency of cutting classes				**	0.042
Never	78.9	79.9	74.6		
At least 1 time a week	19.7	18.9	23.0		
Daily	1.4	1.1	2.4		
Sent to office for misbehavior				*	0.070
Never	81.3	82.3	77.0		
1-2 times	15.7	14.7	19.9		
3 times or more	3.0	3.0	3.1		
Educational expectations					0.267
Does not expect to graduate from college	35.4	34.7	38.7		
Expects to graduate from college	38.7	38.8	38.4		
Expects to attend higher level of school after college	25.9	26.5	22.9		

(continued)

Exhibit 1.2 (continued)

Characteristic	Full Sample (%)	Respondents (%)	Nonrespondents (%)		Chi-Square P-Value
Hours per week spent on homework					0.769
1 hour or less	28.8	29.0	28.2		
2-3 hours	38.2	38.3	37.7		
4-6 hours	17.4	16.9	19.3		
7 hours or more	15.6	15.8	14.7		
Hours per day spent watching TV					0.716
Less than an hour	12.3	12.1	13.2		
1-2 hours	27.1	26.7	28.5		
2-3 hours	26.8	26.7	27.0		
Over 3 hours	33.8	34.4	31.3		
Student has worked for pay	36.3	36.1	36.9		0.799
Characteristics associated with dropping out of school					
Attendance rate, year of random assignment				**	0.011
96-100%	54.1	55.0	50.6		
91-95%	24.1	24.7	21.4		
86-90%	11.0	10.6	12.7		
85% or lower	10.8	9.7	15.4		
Credits earned in 9th grade[d]				***	0.001
5 or more credits	80.9	82.6	73.9		
3-4 credits	13.7	13.0	16.2		
2 or fewer credits	5.5	4.4	9.9		
Grade point average, year of random assignment[e]				***	0.001
3.1 or higher	36.1	37.8	28.8		
2.1-3.0	38.1	38.2	37.9		
2.0 or lower	25.7	24.0	33.3		
Student is overage for grade level[f]	21.1	19.4	28.4	***	0.000
Student transferred schools 2 or more times	27.4	25.8	34.2	***	0.002
Student has sibling who dropped out of high school	20.2	19.6	22.5		0.238
Risk of dropping out of high school[g]				***	0.000
High risk	26.1	24.0	35.1		
Medium risk	49.7	50.5	46.4		
Low risk	24.1	25.5	18.5		
Sample size	1,764	1,428	336		

(continued)

Exhibit 1.2 (continued)

SOURCES: MDRC calculations from the Career Academies Evaluation Student School Records Database and Student Baseline Questionnaire.

NOTES: All characteristics were measured at the time students applied to the Career Academy program and prior to being randomly assigned to the Academy and non-Academy groups.

Invalid or missing values are not included in individual variable distributions. Rounding may cause slight discrepancies in calculating sums and differences.

A chi-square test was applied to differences in the distribution of characteristics between respondents and nonrespondents. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; and * = 10 percent.

[a]These are students who responded that they spoke English "not well" or "not at all."

[b]Several different standardized, nationally normalized math tests were administered to students, depending on the district where their school was located and the year they entered the study. National percentile scores were used because they were the only standardized scores available across tests.

[c]Several different standardized, nationally normalized reading tests were administered to students, depending on the district where their school was located and the year they entered the study. National percentile scores were used because they were the only standardized scores available across tests.

[d]This was applicable only to students who applied to the Career Academy at the end of their ninth-grade year.

[e]Grade point averages were converted to a standard 4.0 scale from 100-point or 5-point scales for some sites.

[f]A student is defined as overage for grade at the time of random assignment if she or he turns 15 before the start of the ninth grade, or 16 before the start of the tenth grade. This indicates that the student was likely to have been held back in a previous grade.

[g]The definition of risk subgroups is based on analyses using background characteristics to predict dropping out of high school among students in the non-Academy group. These analyses yielded an index that expresses dropout risk as the weighted average of selected background characteristics: attendance rate and grade point average in the year of random assignment, credits earned in ninth grade (for those who applied to the Career Academy at the end of their ninth-grade year), being overage for the grade level, having transferred schools two or more times, and having a sibling who dropped out of high school. High-risk students have a combination of these characteristics that is associated with the highest likelihood of dropping out; low-risk students have a combination of these characteristics that is associated with the lowest likelihood of dropping out; and medium-risk students represent the remaining students with neither a particularly high nor particularly low likelihood of dropping out.

an Academy and the other group did not. Previous reports from the Career Academies Evaluation demonstrate that there are indeed no systematic differences in background characteristics between Academy and non-Academy students in the full study sample.

Nonetheless, when response rates on a follow-up survey are less than 100 percent, impact estimates may be biased if there are systematic differences in the background characteristics or the pre-random assignment experiences of Academy and non-Academy students who responded. A key question underlying the analyses presented in this report is thus: Do the Eight-Year Post-High School Follow-Up Survey response patterns preserve the lack of systematic differences between the research groups that is ensured by the random assignment design? In other words, does this survey sample exhibit the same lack of systematic differences between Academy and non-Academy students, both overall and for each of the risk and gender subgroups? Exhibit 1.3 presents the average characteristics of Academy and non-Academy students

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Exhibit 1.3

Differences Between Academy and Non-Academy Respondents' Background Characteristics

Characteristic	Full Sample (%)	Academy Group (%)	Non-Academy Group (%)	Chi-Square P-Value
Demographic and family characteristics				
Gender				0.953
Male	41.1	41.2	41.0	
Female	58.9	58.8	59.0	
Age of student at time of application				0.403
13 or younger	9.1	7.9	10.6	
14	35.6	36.1	35.1	
15	46.5	47.1	45.8	
16 or older	8.7	8.8	8.5	
Race/ethnicity				0.268
Hispanic	56.8	55.7	58.3	
Black	29.7	31.5	27.6	
White	6.8	6.0	7.8	
Asian or Native American	6.6	6.9	6.3	
Student speaks limited English[a]	7.3	6.2	8.6 *	0.094
Student lives with				0.726
Mother and father	62.9	61.8	64.1	
Mother only	28.3	28.6	27.9	
Father only	4.1	4.4	3.7	
Other family/nonrelative	4.7	5.1	4.3	
Student lives in single-parent household	37.1	38.2	35.9	0.380
Father's education level				0.235
Did not finish high school	39.4	38.4	40.6	
High school graduate/GED recipient	32.5	31.9	33.3	
Completed some postsecondary education	15.8	15.5	16.2	
College graduate	12.2	14.2	9.9	
Mother's education level				0.429
Did not finish high school	37.3	35.6	39.2	
High school graduate/GED recipient	33.6	33.9	33.1	
Completed some postsecondary education	18.5	19.9	16.7	
College graduate	10.7	10.5	11.0	
Neither parent has high school diploma	29.5	29.1	30.0	0.732

(continued)

Exhibit 1.3 (continued)

Characteristic	Full Sample (%)	Academy Group (%)	Non-Academy Group (%)	Chi-Square P-Value
Parental work				0.564
Both parents work	48.5	47.8	49.4	
Father works	23.9	23.4	24.5	
Mother works	17.4	18.7	15.7	
Neither parent works	10.2	10.1	10.4	
Family receives welfare or food stamps	23.3	23.3	23.3	0.989
Family mobility in past two years				0.332
Have not moved	60.4	59.7	61.2	
Moved 1 or 2 times	33.4	34.7	31.8	
Moved 3 or more times	6.3	5.6	7.1	
Student is home alone more than 3 hours per day	13.8	14.4	13.1	0.513
Educational characteristics				
8th-grade math test score[b]				0.845
75th percentile or higher	8.4	8.3	8.5	
50th to 74th percentile	20.9	21.2	20.5	
25th to 49th percentile	32.0	30.9	33.4	
24th percentile or lower	38.7	39.6	37.6	
8th-grade reading test score[c]				0.207
75th percentile or higher	10.1	10.3	9.9	
50th to 74th percentile	19.7	21.6	17.3	
25th to 49th percentile	35.8	33.3	38.9	
24th percentile or lower	34.4	34.8	33.9	
Student does not feel safe at school	23.0	22.7	23.3	0.802
Frequency of cutting classes				0.377
Never	79.9	80.4	79.4	
At least 1 time a week	18.9	18.9	19.0	
Daily	1.1	0.8	1.6	
Sent to office for misbehavior				0.621
Never	82.3	81.4	83.4	
1-2 times	14.7	15.5	13.7	
3 times or more	3.0	3.1	2.9	
Educational expectations				0.558
Does not expect to graduate from college	34.7	34.4	35.0	
Expects to graduate from college	38.8	40.0	37.4	
Expects to attend higher level of school after college	26.5	25.7	27.6	

(continued)

Exhibit 1.3 (continued)

Characteristic	Full Sample (%)	Academy Group (%)	Non-Academy Group (%)		Chi-Square P-Value
Hours per week spent on homework				*	0.092
1 hour or less	29.0	26.7	31.7		
2-3 hours	38.3	39.9	36.4		
4-6 hours	16.9	18.3	15.3		
7 hours or more	15.8	15.1	16.6		
Hours per day spent watching TV				**	0.033
Less than an hour	12.1	11.4	12.9		
1-2 hours	26.7	26.7	26.8		
2-3 hours	26.7	24.4	29.6		
Over 3 hours	34.4	37.5	30.7		
Student has worked for pay	36.1	35.9	36.5		0.823
Characteristics associated with dropping out of school					
Attendance rate, year of random assignment				*	0.086
96-100%	55.0	53.9	56.2		
91-95%	24.7	23.6	26.0		
86-90%	10.6	12.4	8.4		
85% or lower	9.7	10.1	9.3		
Credits earned in 9th grade[d]					0.991
5 or more credits	82.6	82.6	82.5		
3-4 credits	13.0	12.9	13.2		
2 or fewer credits	4.4	4.4	4.3		
Grade point average, year of random assignment[e]					0.236
3.1 or higher	37.8	36.0	40.0		
2.1-3.0	38.2	40.1	35.8		
2.0 or lower	24.0	23.9	24.2		
Student is overage for grade level[f]	19.4	19.7	19.1		0.769
Student transferred schools 2 or more times	25.8	25.2	26.4		0.605
Student has sibling who dropped out of high school	19.6	19.7	19.5		0.896
Risk of dropping out of high school[g]					0.876
High risk	24.0	24.3	23.7		
Medium risk	50.5	49.9	51.2		
Low risk	25.5	25.8	25.1		
Sample size	1,428	782	646		

(continued)

Exhibit 1.3 (continued)

SOURCES: MDRC calculations from the Career Academies Evaluation Student School Records Database and Student Baseline Questionnaire.

NOTES: All characteristics were measured at the time students applied to the Career Academy program and prior to being randomly assigned to the Academy and non-Academy groups.

Invalid or missing values are not included in individual variable distributions. Rounding may cause slight discrepancies in calculating sums and differences.

A chi-square test was applied to differences in the distribution of characteristics between the Academy and non-Academy groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

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[b]Several different standardized, nationally normalized math tests were administered to students, depending on the district where their school was located and the year they entered the study. National percentile scores were used because they were the only standardized scores available across tests.

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[d]This was applicable only to students who applied to the Career Academy at the end of their ninth-grade year.

[e]Grade point averages were converted to a standard 4.0 scale from 100-point or 5-point scales for some sites.

[f]A student is defined as overage for grade at the time of random assignment if she or he turns 15 before the start of the ninth grade, or 16 before the start of the tenth grade. This indicates that the student was likely to have been held back in a previous grade.

[g]The definition of risk subgroups is based on analyses using background characteristics to predict dropping out of high school among students in the non-Academy group. These analyses yielded an index that expresses dropout risk as the weighted average of selected background characteristics: attendance rate and grade point average in the year of random assignment, credits earned in ninth grade (for those who applied to the Career Academy at the end of their ninth-grade year), being overage for the grade level, having transferred schools two or more times, and having a sibling who dropped out of high school. High-risk students have a combination of these characteristics that is associated with the highest likelihood of dropping out; low-risk students have a combination of these characteristics that is associated with the lowest likelihood of dropping out; and medium-risk students represent the remaining students with neither a particularly high nor particularly low likelihood of dropping out.

in the survey sample. This table shows a high degree of similarity between Academy and non-Academy group members, with statistically significant differences on only four of the characteristics presented.

A more rigorous way to test for such differences is to use multiple regression analysis. Exhibit 1.4 presents linear regression estimates and statistical tests of whether there are any systematic differences between Academy and non-Academy students in the survey sample and in the two gender subgroups. The final row in the exhibit shows the p-value of the F-statistic, which is a test of overall differences between Academy and non-Academy groups, for the full study sample and for young men and young women. A p-value of 0.10 or lower is typically considered a "high" likelihood that there are systematic differences between groups. In each case, the p-value is larger than 0.70, providing strong evidence that there is no overall pattern of differences between Academy and non-Academy students in the full survey sample or in the subgroups of young men and young women.

Career Academies Evaluation

Exhibit 1.4

Regression Coefficients for the Probability of Being in the Program Group for the Full Sample and Gender Subgroups (Eight-Year Post-High School Follow-Up Survey Sample, N = 1,428)

Variable	Full Sample Parameter Estimate (Standard Error)	Young Men Parameter Estimate (Standard Error)	Young Women Parameter Estimate (Standard Error)
Intercept	0.270	0.593	0.053
	(0.434)	(0.706)	(0.566)
Site 1	-0.041	-0.148	-0.011
	(0.081)	(0.139)	(0.102)
Site 2	-0.058	-0.032	-0.095
	(0.090)	(0.158)	(0.112)
Site 3	0.037	-0.010	0.052
	(0.103)	(0.180)	(0.127)
Site 4	-0.079	-0.078	-0.079
	(0.103)	(0.160)	(0.141)
Site 5	-0.011	-0.094	0.048
	(0.067)	(0.103)	(0.091)
Site 6	-0.003	-0.120	0.075
	(0.061)	(0.091)	(0.085)
Site 7	0.039	-0.006	0.054
	(0.053)	(0.087)	(0.068)
Site 8	0.036	-0.034	0.089
	(0.051)	(0.080)	(0.067)
Graduation cohort 1996	0.010	0.053	-0.014
	(0.043)	(0.065)	(0.057)
Graduation cohort 1997	0.013	0.109 *	-0.051
	(0.036)	(0.058)	(0.047)
In 8th grade at application to Academy	0.041	0.035	0.043
	(0.084)	(0.151)	(0.102)
Female	-0.009	0.000	0.000
	(0.028)	(0.000)	(0.000)

(continued)

Exhibit 1.4 (continued)

Variable	Full Sample Parameter Estimate (Standard Error)	Young Men Parameter Estimate (Standard Error)	Young Women Parameter Estimate (Standard Error)
Age at application to Academy	0.033	0.002	0.050
	(0.025)	(0.040)	(0.033)
Hispanic	0.050	-0.050	0.197 **
	(0.058)	(0.078)	(0.089)
Black	0.143 *	0.019	0.308 ***
	(0.076)	(0.110)	(0.111)
Asian/Native American	0.100	0.014	0.223 *
	(0.078)	(0.108)	(0.118)
75th percentile or higher in 8th-grade math[a]	0.007	0.105	-0.082
	(0.066)	(0.094)	(0.095)
25th percentile or lower in 8th-grade math	0.014	0.103 *	-0.040
	(0.037)	(0.060)	(0.048)
Missing 8th-grade math test score	0.123	0.072	0.147
	(0.147)	(0.367)	(0.164)
75th percentile or higher in 8th-grade reading[b]	0.030	-0.079	0.110
	(0.059)	(0.090)	(0.078)
25th percentile or lower in 8th-grade reading	0.009	0.003	0.002
	(0.038)	(0.060)	(0.050)
Missing 8th-grade reading percentile	-0.149	-0.089	-0.184
	(0.149)	(0.369)	(0.166)
Has sibling who dropped out	-0.005	0.022	-0.007
	(0.034)	(0.059)	(0.043)
Is overage for grade level[c]	-0.025	0.015	-0.040
	(0.043)	(0.065)	(0.059)
Transferred schools 2 or more times	-0.021	-0.027	-0.002
	(0.032)	(0.050)	(0.042)
Attendance rate, year of random assignment	-0.003	-0.004	-0.004
	(0.002)	(0.004)	(0.003)
Credits earned in 9th grade[d]	0.003	0.055 **	-0.034
	(0.017)	(0.027)	(0.023)
Grade point average, year of random assignment[e]	0.004	-0.026	0.032
	(0.026)	(0.041)	(0.036)

(continued)

Exhibit 1.4 (continued)

Statistic	Full Sample	Young Men	Young Women
Sample size	1,428	587	841
Degrees of freedom	28	27	27
Mean of dependent variable	0.548	0.549	0.547
R-square	0.009	0.033	0.027
F-statistic	0.456	0.715	0.830
P-value of F-statistic	0.994	0.855	0.715

SOURCES: MDRC calculations from the Career Academies Evaluation Student School Records Database and Baseline Student Questionnaire.

NOTES: The statistical significance of parameter estimates is indicated as: *** = 1 percent; ** = 5 percent; and * = 10 percent.

[a]Several different standardized, nationally normalized math tests were administered to students, depending on the district where their school was located and the year they entered the study. National percentile scores were used because they were the only standardized scores available across tests.

[b]Several different standardized, nationally normalized reading tests were administered to students, depending on the district where their school was located and the year they entered the study. National percentile scores were used because they were the only standardized scores available across tests.

[c]A student is defined as overage for grade at the time of random assignment if she or he turns 15 before the start of the ninth grade, or 16 before the start of the tenth grade. This indicates that the student was likely to have been held back in a previous grade.

[d]Credits earned in ninth grade applies only to students who applied to the Career Academy at the end of their ninth-grade year.

[e]Grade point averages were converted to a standard 4.0 scale from 100-point or 5-point scales for some sites.

Exhibit 1.5 repeats this analysis for the risk subgroups. Again, while there are slight differences on a few individual characteristics, there is no overall pattern of differences between Academy and non-Academy groups within any of the risk subgroups. The p-values of the F-statistics for the subgroups range from 0.703 to 0.985.

In summary, the random assignment design resulted in Academy and non-Academy group samples that do not differ systematically with respect to background characteristics or prior school experiences. The pattern of survey response rates for the full sample and for each of the gender and risk subgroups preserves this feature of the research design, affording confidence that any differences in the outcome measures found are the result of the Academy group's enrollment in the Career Academies.

Impact Estimation and Statistical Significance

Statistical Model for Estimating Impacts

The impact estimates presented in this report were derived from the following statistical model:

$$Y_i = \sum_n \gamma_{0n} S_{ni} + \sum_S \gamma_{2s} X_{si} + \beta_0 T_i + \varepsilon_i \qquad (1)$$

Where:

Y_i = an outcome measure for student *i*

$\sum_n S_{ni}$ = school and cohort indicator variable; one if student *i* is in school cohort *n* and zero otherwise

$\sum_s X_{si}$ = pre-random assignment characteristics for student *i*

T_i = treatment group indicator; one if student *i* was assigned to the Academy group and zero if student i was assigned to the non-Academy group

ε_i = student-level random error term

In this model, β_0 represents the estimated impact of the Career Academy programs on the outcome of interest (Y_i). β_0 is a fixed-effect impact estimate that addresses the question: What is the impact of the Career Academy programs for the average student in the follow-up respondent sample? This approach is taken because this study most closely reflects an efficacy study of the effects of Career Academy programs that were selected specifically for this study. The sites and students were not selected to be a random sample of a larger population of sites.

Career Academies Evaluation

Exhibit 1.5

Regression Coefficients for the Probability of Being in the Program Group for the Full Sample and Risk Subgroups (Eight-Year Post-High School Follow-Up Survey Sample, N = 1,428)

Variable	Full Sample Parameter Estimate (Standard Error)	High-Risk Subgroup Parameter Estimate (Standard Error)	Medium-Risk Subgroup Parameter Estimate (Standard Error)	Low-Risk Subgroup Parameter Estimate (Standard Error)
Intercept	0.270	-0.963	0.913	2.781 *
	(0.434)	(0.834)	(0.780)	(1.562)
Site 1	-0.041	-0.265 *	0.056	-0.057
	(0.081)	(0.159)	(0.120)	(0.189)
Site 2	-0.058	-0.138	-0.034	-0.041
	(0.090)	(0.183)	(0.132)	(0.209)
Site 3	0.037	0.008	-0.025	0.120
	(0.103)	(0.370)	(0.147)	(0.237)
Site 4	-0.079	-0.077	-0.106	0.001
	(0.103)	(0.193)	(0.145)	(0.289)
Site 5	-0.011	0.087	-0.080	-0.036
	(0.067)	(0.114)	(0.105)	(0.169)
Site 6	-0.003	0.017	0.081	-0.220
	(0.061)	(0.106)	(0.098)	(0.141)
Site 7	0.039	-0.049	0.161 **	-0.051
	(0.053)	(0.102)	(0.077)	(0.119)
Site 8	0.036	0.041	0.075	-0.065
	(0.051)	(0.099)	(0.074)	(0.120)
Graduation cohort 1996	0.010	-0.062	0.003	0.031
	(0.043)	(0.093)	(0.062)	(0.090)
Graduation cohort 1997	0.013	-0.083	0.013	0.030
	(0.036)	(0.090)	(0.051)	(0.070)
In 8th grade at application to Academy	0.041	0.135	0.034	0.059
	(0.084)	(0.202)	(0.119)	(0.195)
Female	-0.009	0.082	-0.042	0.000
	(0.028)	(0.061)	(0.040)	(0.057)
Age at application to Academy	0.033	0.094 *	0.005	0.001
	(0.025)	(0.051)	(0.036)	(0.053)

(continued)

Exhibit 1.5 (continued)

Variable	Full Sample Parameter Estimate (Standard Error)	High-Risk Subgroup Parameter Estimate (Standard Error)	Medium-Risk Subgroup Parameter Estimate (Standard Error)	Low-Risk Subgroup Parameter Estimate (Standard Error)
Hispanic	0.050	0.059	-0.025	0.178
	(0.058)	(0.127)	(0.079)	(0.126)
Black	0.143 *	0.207	0.061	0.201
	(0.076)	(0.151)	(0.107)	(0.178)
Asian/Native American	0.100	0.070	0.083	0.324 **
	(0.078)	(0.164)	(0.119)	(0.161)
75th percentile or higher in 8th-grade math[a]	0.007	0.072	0.023	-0.058
	(0.066)	(0.209)	(0.095)	(0.112)
25th percentile or lower in 8th-grade math	0.014	0.113	-0.011	-0.091
	(0.037)	(0.075)	(0.052)	(0.085)
Missing 8th grade math test score	0.123	0.139	0.073	0.052
	(0.147)	(0.235)	(0.299)	(0.268)
75th percentile or higher in 8th grade reading[b]	0.030	0.032	0.003	0.131
	(0.059)	(0.167)	(0.080)	(0.110)
25th percentile or lower in 8th grade reading	0.009	-0.019	0.025	0.014
	(0.038)	(0.075)	(0.053)	(0.083)
Missing 8th grade reading percentile	-0.149	-0.169	-0.021	-0.225
	(0.149)	(0.237)	(0.303)	(0.276)
Has sibling who dropped out of high school	-0.005	0.022	-0.004	-0.176
	(0.034)	(0.063)	(0.055)	(0.182)
Is overage for grade level[c]	-0.025	-0.041	-0.024	0.197
	(0.043)	(0.079)	(0.064)	(0.148)
Transferred schools 2 or more times	-0.021	0.007	-0.004	-0.056
	(0.032)	(0.061)	(0.048)	(0.112)
Attendance rate, year of random assignment	-0.003	0.000	-0.005	-0.018
	(0.002)	(0.004)	(0.005)	(0.012)
Credits earned in 9th grade[d]	0.003	-0.012	0.000	-0.006
	(0.017)	(0.026)	(0.052)	(0.088)
Grade point average, year of random assignment[e]	0.004	0.036	-0.023	-0.177 *
	(0.026)	(0.061)	(0.055)	(0.093)

(continued)

Exhibit 1.5 (continued)

Statistic	Full Sample	High-Risk Subgroup	Medium-Risk Subgroup	Low-Risk Subgroup
Sample size	1,428	343	721	364
Degrees of freedom	28	28	28	28
Mean of dependent variable	0.548	0.554	0.541	0.555
R-square	0.009	0.062	0.020	0.066
F-statistic	0.456	0.747	0.505	0.840
P-value of F-statistic	0.994	0.822	0.985	0.703

SOURCES: MDRC calculations from the Career Academies Evaluation Student School Records Database and Baseline Student Questionnaire.

NOTES: The statistical significance of parameter estimates is indicated as: *** = 1 percent; ** = 5 percent; and * = 10 percent.

The definition of risk subgroups is based on analyses using background characteristics to predict dropping out of high school among students in the non-Academy group. These analyses yielded an index that expresses dropout risk as the weighted average of selected background characteristics: attendance rate and grade point average in the year of random assignment, credits earned in ninth grade (for those who applied to the Career Academy at the end of their ninth-grade year), being overage for the grade level, having transferred schools two or more times, and having a sibling who dropped out of high school. High-risk students have a combination of these characteristics that is associated with the highest likelihood of dropping out; low-risk students have a combination of these characteristics that is associated with the lowest likelihood of dropping out; and medium-risk students represent the remaining students with neither a particularly high nor particularly low likelihood of dropping out.

[a]Several different standardized, nationally normed math tests were administered to students, depending on the district where their school was located and the year they entered the study. National percentile scores were used because they were the only standardized scores available across tests.

[b]Several different standardized, nationally normed reading tests were administered to students, depending on the district where their school was located and the year they entered the study. National percentile scores were used because they were the only standardized scores available across tests.

[c]A student is defined as overage for grade at the time of random assignment if she or he turns 15 before the start of the ninth grade, or 16 before the start of the tenth grade. This indicates that the student was likely to have been held back in a previous grade.

[d]Credits earned in ninth grade applies only to students who applied to the Career Academy at the end of their ninth-grade year.

[e]Grade point averages were converted to a standard 4.0 scale from 100-point or 5-point scales for some sites.

Instead, sites were selected purposively with the goal of ensuring that the Career Academy programs had reached a threshold level of implementation as they entered the study. In short, the impact estimates are not statistically generalizable to a larger population of districts, high schools, or students. As discussed in previous reports from the study, however, on average, the participating schools share characteristics of other low-performing urban high schools across the country.

Equation 1 includes indicator variables for each of the participating Career Academies and for each cohort of students who entered the study sample in 1993, 1994, and 1995. In all, there are 20 site-cohort combinations, with four sites having three cohorts of students, three sites having two cohorts, and two sites having one cohort. These covariates capture a central feature of the study design, in which random assignment was conducted within each of the participating high schools over the course of three years. These covariates are included to account for variation in the mean value of the dependent variable across the participating sites and cohorts.

Equation 1 also includes covariates for several pre-random assignment background characteristics, including gender, race/ethnicity, age of the student upon entering the study (a proxy for whether the student was held back in a prior grade), eighth-grade attendance rate, and a composite index indicating the probability of dropping out of high school. These covariates are included to improve the precision of the impact estimates.

Statistical Significance

Equation 1 is estimated using ordinary least squares (OLS) regression, and a two-tailed t-test is used to assess the statistical significance of the impact estimate (β_0). *Statistical significance* is a measure of the degree of certainty one may have that some nonzero impact actually occurred. If an impact estimate is statistically significant, then one may conclude with some confidence that the program really had an effect on the outcome being assessed. If an impact estimate is not statistically significant, then the nonzero estimate is more likely to be a product of chance. For the purposes of this report, statistical significance is indicated in the tables by three asterisks (***) when the p-value of the impact estimate is less than or equal to 1 percent, by two asterisks (**) when it is less than or equal to 5 percent, and by one asterisk (*) when it is less than or equal to 10 percent.

Finally, statistical significance does not directly indicate the magnitude or importance of an impact estimate — only the probability that an impact may have occurred by chance. Some statistically significant impacts may not be seen as policy relevant or as justifying the additional costs and effort to operate the programs under study. As a result, it is sometimes useful to frame the impact estimates in terms of other benchmarks and contexts (such as improvements found for related constructs or interventions, cost-effectiveness indicators, achievement gaps, or per-

formance standards) that can help policymakers, practitioners, and researchers gauge the importance or relevance of the findings. By the same token, lack of statistical significance for an impact estimate does not mean that the impact being estimated equals zero. It only means that the estimate cannot be distinguished from zero reliably. This can be due to the small magnitude of the impact estimate, the limited statistical power of the study, or some combination of both.

Impacts and Program Participation

Another analysis issue concerns the relationship between students' actual exposure to the Career Academies and the impacts that the programs had on students' success in high school and beyond. As discussed in the text of this report and more extensively in previous reports, student attrition is a naturally occurring feature of Career Academies and, in fact, of high schools in general. About 10 percent of the sample members in the eight-year follow-up survey sample who were initially assigned to the Academy group never enrolled in a Career Academy program. An additional 30 percent of these sample members enrolled in an Academy for one or more semesters but eventually left the program in which they enrolled before the end of high school. In addition, a small percentage of students in the non-Academy group were inadvertently allowed to enroll in an Academy. It is important to note that the background characteristics of students who remained enrolled in the Academies differ from those of students who enrolled for a time and then left, making it difficult to make an unbiased estimate of the impacts that the Academies had for students who remained in their programs.

For example, high-risk students in the Academy group were less likely than medium- and low-risk students to enroll in a Career Academy and were more likely to have left the programs if they did enroll. If high-risk students (including those who dropped out of high school altogether) were excluded from the Academy group but were included in the non-Academy group, then comparisons between the groups would systematically overestimate the impacts of the Academy programs. In other words, if the high-risk (and less engaged) Academy students were excluded from the analysis, then it would appear that the Academies increased student engagement more than they actually had. However, there were also students who left the Academies and who were highly engaged in school but who wished to move on to a school environment that was better suited to their evolving needs and interests. If this type of student were excluded from the Academy group but included in the non-Academy group, then it would appear that the Academies reduced student engagement.

In order to produce unbiased estimates of the Academies' impacts, therefore, the primary analysis conducted for the evaluation includes all students in the Academy and non-Academy groups, regardless of their Academy enrollment status at any point after random assignment. Since voluntary programs often encounter student attrition, the findings reflect the impact of

Career Academies under real-world conditions. Studying Career Academies under these conditions is arguably the most policy-relevant approach.

Of course, it is highly unlikely that the Career Academies affected students in the Academy group who never enrolled in the programs. Conversely, it should not be assumed that the Academies had no effect on students in the study's non-Academy group who were allowed to enroll in the programs inadvertently. From this perspective, the impact estimates may be perceived as being diluted by the inclusion of some students in the Academy group who never enrolled in the programs and by the inclusion of the small proportion of non-Academy group members who were inadvertently allowed to enroll. It is therefore useful to examine impact estimates that account for these "crossovers" in research status, particularly estimates that indicate the *impact per enrollee* on each outcome. The impact per enrollee can be interpreted as the impact from actually enrolling in an Academy as opposed to simply being recruited and selected for admission.[3]

Adjusting for crossovers does not substantially change the overall pattern of impacts discussed in this report. For students who completed the Eight-Year Post-High School Follow-Up Survey, 90 percent of the Academy group enrolled in an Academy for at least one semester during high school, and 7 percent of the non-Academy group did so. The impact per enrollee adjustment is obtained by dividing the observed impact estimates by the difference between these rates, 0.83, which is equivalent to multiplying each impact estimate by 1.20. (If the percentage of students who enrolled in an Academy had been 100 percent in the Academy group and 0 percent in the non-Academy group, then the difference between the rates would be 1.0, and no adjustment would be necessary.) As discussed in the report, most of the impact estimates are not sufficiently large to have this adjustment make them much larger or more policy-relevant.

Exhibits 3.7, 4.7, and 5.7 of the Technical Resources for this report present the Academy enrollment rates for the full study sample, for each gender subgroup (young men, young women), and for each risk subgroup (high, medium, low), respectively. These rates can be used to calculate the *impact per enrollee* adjustment, which is defined as the observed impact divided

[3]This adjustment, which was proposed by Bloom (1984), is based on two important assumptions: (1) that selection for the Academy group had no effect on students who did not enroll in an Academy and (2) that the average outcome levels for non-Academy students who were inadvertently allowed to enroll would have been the same if they had been assigned to the Academy group initially. Thus, the adjustment can be seen as discounting both the zero impact for the Academy group members who did not enroll in the program and the non-zero impact for the non-Academy group members who got the same treatment as the Academy enrollees. See Howard S. Bloom, "Accounting for No-Shows in Experimental Evaluation Designs," *Evaluation Review* 8 (2): 225-246 (1984); and Larry Orr, Howard Bloom, Stephen Bell, Fred Doolittle, Winston Lin, and George Cave, *Does Training for the Disadvantaged Work?* (Washington, DC: Urban Institute Press, 1996).

by the difference between the percentages of Academy and non-Academy students who ever enrolled in an Academy.

Comparison of Estimated Impacts on Monthly Earnings for Separate and Overlapping Survey Samples

This report presents information on students' employment and earnings during the entire eight-year period following their scheduled graduation from high school. Findings for the first four years following scheduled graduation are drawn from the Four-Year Post-High School Follow-Up Survey, and findings for the second four years are drawn from Eight-Year Post-High School Follow-Up Survey. Because the findings are based on the full sample of respondents from each survey wave, they represent the most robust estimates of outcomes and impacts for each follow-up period. While both survey administrations achieved response rates above 80 percent and preserved comparability between the Academy and non-Academy groups, the two survey samples are somewhat different. Thus, direct comparisons of findings from each of the two segments of the eight-year follow-up period include any differences in the characteristics of the two samples as well as differences in the patterns of labor market outcomes. In addition, with the two overlapping but somewhat different samples, it is not possible to conduct a direct test of the statistical significance of the cumulative impact on labor market outcomes over the full eight-year follow-up period. As a result, additional sensitivity analyses were conducted to determine whether the pattern of impacts on monthly earnings differs for an overlapping sample that responded to both surveys and to test the statistical significance of the cumulative eight-year impact on monthly earnings.

In all, 1,275 sample members responded to both the Four-Year and the Eight-Year Post-High School Follow-Up Surveys. This represents 72 percent of the original full study sample of 1,764 students and 87 percent and 89 percent of the Four-Year and Eight-Year Post-High School Follow-Up Surveys, respectively. Exhibit 1.6 presents monthly earnings impacts for the full sample and for the gender and risk subgroups. The first three columns of the exhibit give the impact estimates that are obtained from the separate survey samples. Values in the first column ("Years 1 to 4") are based on the Four-Year Post-High Follow-Up School Survey sample, whereas those in the second column ("Years 5 to 8") are based on the Eight-Year Post-High School Follow-Up Survey sample. Values in the third column ("Years 1 to 8") were calculated by averaging the impacts for the first and second four-year periods. As mentioned above, tests of the statistical significance of this impact estimate cannot be performed because it is based on two different samples.

The last three columns in Exhibit 1.6 present monthly earnings impacts over the same time periods using the overlapping sample of respondents. The exhibit reveals that there are slight differences in the impact estimates depending on which sample is used. Most notably, the

Career Academies Evaluation

Exhibit 1.6

Impacts on Average Monthly Earnings for the Four-Year and Eight-Year Post-High School Follow-Up Survey Samples and the Overlapping Sample of Respondents

	Impact Estimates Using Separate Survey Samples			Impact Estimates Using the Overlapping Sample of Respondents		
Subgroup	Years 1 to 4	Years 5 to 8	Years 1 to 8[a]	Years 1 to 4	Years 5 to 8	Years 1 to 8
Full sample	$132.30 ***	$216.21 ***	$174.26	$104.28 **	$212.06 ***	$158.17 ***
	(p = 0.005)	(p = 0.005)	NA	(p = 0.038)	(p = 0.008)	(p = 0.004)
	(N = 1,458)	(N = 1,404)	NA	(N = 1,254)	(N = 1,254)	(N = 1,254)
Young men	$260.46 ***	$361.37 **	$310.91	$196.13 *	$302.04 *	$249.09 **
	(p = 0.004)	(p = 0.014)	NA	(p = 0.053)	(p = 0.054)	(p = 0.022)
	(N = 604)	(N = 579)	NA	(N = 506)	(N = 506)	(N = 506)
Young women	$53.14	$118.07	$85.60	$37.00	$149.14 *	$93.07 *
	(p = 0.267)	(p = 0.142)	NA	(p = 0.454)	(p = 0.082)	(p = 0.093)
	(N = 854)	(N = 825)	NA	(N = 748)	(N = 748)	(N = 748)
High risk	$189.55 *	$284.91 *	$237.23	$143.26	$313.82 *	$228.54 *
	(p = 0.065)	(p = 0.066)	NA	(p = 0.219)	(p = 0.061)	(p = 0.055)
	(N = 360)	(N = 336)	NA	(N = 298)	(N = 298)	(N = 298)
Medium risk	$174.78 **	$158.49	$166.63	$153.16 **	$172.18	$162.67 **
	(p = 0.010)	(p = 0.140)	NA	(p = 0.033)	(p = 0.136)	(p = 0.040)
	(N = 722)	(N = 706)	NA	(N = 621)	(N = 621)	(N = 621)
Low risk	$28.08	$275.72 *	$151.90	-$23.49	$207.56	$92.03
	(p = 0.746)	(p = 0.080)	NA	(p = 0.801)	(p = 0.191)	(p = 0.369)
	(N = 376)	(N = 362)	NA	(N = 335)	(N = 335)	(N = 335)

SOURCES: MDRC calculations from the Career Academies Evaluation Four-Year and Eight-Year Post-High School Follow-Up Surveys.

NOTES: Impacts for Years 1 to 4 reflect the first four years following sample members' scheduled graduation from high school and are derived from the Four-Year Post-High School Follow-Up Survey. Impacts for Years 5 to 8 reflect the second four years and are derived from the Eight-Year Post-High School Follow-Up Survey. All earnings impacts are reported in 2006 dollars.

Impacts for "separate survey samples" are calculated using the full sample of respondents for each survey wave. The "separate survey samples" impacts for Years 1 to 8 are calculated as the average of the impacts from the two survey waves.

Impacts for the "overlapping sample of respondents" are calculated using the subsample who responded to both the four-year and the eight-year post-high school surveys.

Impact estimates are regression-adjusted to control for background characteristics of the sample and for the clustering of students within schools and random assignment years. A two-tailed t-test was applied to all impact estimates for Years 1 to 4 and Years 5 to 8 and to the impact estimate for Years 1 to 8 using the overlapping sample. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; and * = 10 percent.

[a]The impact estimates for Years 1 to 8 using separate survey samples cannot be tested for statistical significance.

impact estimates for young men in all three time periods are slightly smaller for the overlapping sample, although the impacts are statistically significant for each time period regardless of the sample. By contrast, the impact estimate for young women in Years 5 to 8 is somewhat larger for the overlapping sample and is statistically significant. In general, however, the overall pattern of findings remains the same.

Finally, the last column in Exhibit 1.6 shows that the cumulative impact on average monthly earnings over all eight years is statistically significant for the full sample and for every subgroup except the low-risk subgroup.

Unit 2

Comparing Outcomes for Students in the Academy and Non-Academy Groups with National Data

In an effort to provide further context for assessing the performance of students in the study sample, the report compares outcomes for students in the study's Academy and non-Academy groups with those of a nationally representative group of similar students. For this comparison, the evaluation drew on data collected from a sample of students in the National Education Longitudinal Study (NELS) of 1988 through 2000. This section describes the NELS dataset and explains how outcomes for the NELS sample were estimated for this comparison.

NELS, which is sponsored by the U.S. Department of Education, followed a nationally representative sample of nearly 25,000 students from the eighth grade through the eighth year following their scheduled graduation from high school. The first round of NELS surveys was administered to students in the eighth grade in 1988, and follow-up surveys were administered in 1990, 1992, 1994, and 2000. The study collected detailed demographic information as well as data on high school experiences and outcomes, postsecondary education, and employment. These data are publicly available through the National Center for Education Statistics.[1]

The goal of the analysis presented in the current report was to estimate outcomes for students in the NELS sample in a way that reflected the background characteristics of students in the Career Academies evaluation sample as well as the types of high schools they attended and the types of educational programs in which they were enrolled during high school. Thus, only a subset of the full NELS sample was used in the analysis. Following is an overview of the specific criteria and the strategy used to identify a comparison sample in the NELS data and of how outcomes for this group were estimated.

First, in order to maintain comparability with the schools in the Career Academies Evaluation, the comparison includes only NELS sample members from public, nonselective, comprehensive high schools located in urban school districts. The NELS variables specifying which were urban public schools were straightforward to interpret; however, in order to identify which high schools were comprehensive, it was necessary to rely on several different variables describing the types of schools that students attended. The following were excluded from the analysis: schools that never or rarely admitted students based on where they resided, schools that always admitted students based on admission tests or auditions, schools that always admitted students on the basis of some other admission criteria, and students enrolled in special education programs for the physically and/or learning disabled.

Second, the analyses focused on three subsamples of students in the NELS database: (1) students who reported being enrolled in an academic honors or college preparatory program in

[1]For NELS data products and a list of publications, see the National Center for Education Statistics Web site: nces.ed.gov/surveys/nels88/.

their high school, (2) students who reported being enrolled in the high school's general curriculum program, and (3) students who reported being enrolled in a career, technical, or vocational program. In general, Career Academies tend to be a mix of these three types of high school programs or curriculum tracks, although they are less comparable to the academic honors or college preparatory programs than to the other two types of programs. Also, based on information from student transcripts, it appears that non-Academy students in the study sample tended to be enrolled in their high school's general curriculum program and that many of them took at least one career, vocational, or technical course.

Third, because virtually all the students in the Career Academies Evaluation sample completed the ninth grade, the analyses presented here focus on students in the NELS sample who were tenth-graders in 1990 (rather than all students who were eighth-graders in 1988).

Once a comparison group was identified, it was necessary to create a set of equivalent outcome measures. In general, the outcomes used by NELS were very similar to those measured in the Career Academies Evaluation. Both the NELS study and the Career Academies Evaluation were able to follow students through approximately eight years after their scheduled graduation from high school. Specifically, interviews for the Career Academies Evaluation sample were conducted between 96 and 102 months following sample members' scheduled high school graduation. The final wave of the NELS survey was administered between January and September 2000, which equates to 91 to 99 months following sample members' scheduled high school graduation in June 1992.

Finally, the outcomes for the NELS sample were regression-adjusted and mean-centered based on the distribution of background characteristics and prior school experiences among the non-Academy students in the Career Academies Evaluation sample. This means that the numbers presented from the NELS dataset in this report do not represent outcomes for an actual subsample of NELS students. Rather, these adjustments allowed for a closer approximation of what the NELS outcome levels would have looked like if the NELS sample had a distribution of characteristics more like those in the Career Academies Evaluation sample. All estimates for the NELS sample in Exhibit 2.1 are adjusted in this way.

The background characteristics measured by NELS were very similar to those measured for students in the Career Academies Evaluation at the start of the study. In fact, many of the questions used in the Career Academies Evaluation Baseline Questionnaire were drawn from the NELS surveys. Following is a list of the characteristics — all measured at baseline — that were used in the estimation of outcomes for the NELS sample:

- Gender
- Ethnicity

Career Academies Evaluation

Exhibit 2.1

Educational Attainment, Labor Market, and Family Formation Outcomes for the Career Academies (CA) Evaluation Sample and the NELS Sample Eight Years After Scheduled High School Graduation

	CA Evaluation Sample		NELS Sample of Urban Public Schools			
Outcome	Academy Group	Non-Academy Group	All Urban, Public, Nonselective High Schools	Career/ Technical Curriculum	General Curriculum	Academic Curriculum
Educational attainment (%)						
Earned a high school diploma	83.7	83.6	75.6	79.8	67.1	80.3
On-time graduate[a]	74.7	73.3	65.0	64.9	55.1	76.5
Late graduate	9.0	10.3	10.6	14.9	12.0	3.8
Earned a GED	12.1	10.0	9.1	11.3	12.6	6.2
Highest postsecondary credential						
Bachelor's or graduate degree	15.9	17.8	11.6	7.9	8.4	21.2
Associate's degree	12.3	11.6	5.7	4.1	6.5	3.6
Skills training certificate or license	21.5	20.6	10.5	9.2	11.6	9.1
Earnings						
Total annual earnings in prior year ($)[b]	28,803.59	26,042.80	25,231.15	24,796.18	27,172.46	26,132.02
Family formation (%)						
Marital status						
Married and living together	38.0	33.7	34.7	31.3	39.1	37.1
Single	55.6	60.0	58.7	60.1	54.8	55.3
Divorced, separated, or widowed	6.4	6.3	6.6	8.6	6.1	7.7
Parental status						
Custodial parent	50.8	43.9	55.1	52.5	57.1	55.6
Noncustodial parent	5.1	7.8	5.9	9.4	4.1	4.8
Not a parent	43.9	48.0	38.4	38.4	37.7	39.1
Sample size	782	646	2,042	230	807	633

SOURCES: MDRC calculations from the Career Academies Evaluation Eight-Year Post-High School Follow-Up Survey and the National Education Longitudinal Study (NELS), 1988-2000, public-use data files.

NOTES: The NELS estimates incorporate weights that account for nonresponse and project to the population of students who were enrolled in tenth grade in 1990 (the reported sample sizes are unweighted). In addition, the NELS estimates are adjusted to reflect a sample of students with the same distribution of background characteristics as the non-Academy eight-year follow-up evaluation sample. No tests of statistical significance were performed on differences between the evaluation sample and the NELS sample.

The sample for all urban, public, nonselective high schools includes some students who either did not report a specific high school curriculum or reported a type of curriculum other than the three shown.

(continued)

Exhibit 2.1 (continued)

Values shown for the Academy group are unadjusted mean values; values shown for the non-Academy group are calculated by subtracting the impact estimate from the Academy group's unadjusted mean values. Impact estimates for the evaluation sample are regression-adjusted to control for background characteristics of the sample and for the clustering of students within schools and random assignment years.

Rounding may cause slight discrepancies in calculating sums and differences.

[a]Students were considered on-time high school graduates if they received their diploma by the end of June in the year they were scheduled to graduate.

[b]The "prior year" is the year prior to the interview. For the NELS sample, this refers to January to December of 1999, which reflects Months 79 to 90 following sample members' scheduled high school graduation (assuming a June graduation). The "prior year" for the evaluation sample reflects Months 85 to 96 following sample members' scheduled high school graduation. Measures for both samples include zero values for respondents who were not employed during the prior year and are adjusted for inflation and reported in 2006 dollars.

- Lives in a single-parent household
- Has an older sibling who dropped out of high school
- Is overage for his/her grade
- Has parents who did not finish high school
- Limited English proficiency
- Unsupervised for three or more hours per day
- Sixth- to eighth-grade English grades
- Sixth- to eighth-grade math grades
- Baseline year attendance rate (eighth grade in NELS, eighth or ninth grade in the Career Academies Evaluation)

Adjusting the NELS outcomes to reflect the distribution of background characteristics in the Career Academy Evaluation sample entailed three steps: (1) using multiple regression to identify the relationship between each outcome and the above characteristics for the full NELS sample of urban public school students, (2) calculating the mean for the non-Academy group in the Career Academies Evaluation on each of the above characteristics, and (3) multiplying the non-Academy group means by the parameter estimates from the regression and adding them to the intercept. Outcome estimates for the NELS subsamples of students who were enrolled in specific curricular programs during high school were derived by including additional covariates for each of the curricular programs in the multiple regression model and, in Step 3, adding the parameter estimate for the specific curricular program.

All these estimates incorporate analysis weights calculated by NELS researchers to account for both intentional oversampling of certain groups (for example, Hispanic students) as well as survey nonresponse (the 2000 survey achieved a 78 percent unweighted response rate, or an 83 percent weighted response rate).[2]

[2]See Thomas R. Curtin, Steven J. Ingels, Shiying Wu, Ruth Heuer, and Jeffrey Owings, *National Education Longitudinal Study of 1988: Base-Year to Fourth Follow-Up Data File User's Manual* (NCES 2002-323; Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement, 2002). See, in particular, Chapter III, "Sample Design, Weighting, and Design Effects."

Unit 3

Impacts for the Full Sample

Career Academies Evaluation

Exhibit 3.1.A

Year-by-Year Impacts on Employment and Earnings During Follow-Up Years 1 to 4 for the Full Sample

Outcome	Academy Group	Non-Academy Group	Impact	P-Value	Percentage Change
Years 1-4					
Ever employed (%)	98.5	97.0	1.5 **	0.043	1.6
Ever employed full time (%)[a]	95.1	92.4	2.7 **	0.032	2.9
Months employed	36.5	35.1	1.4 **	0.044	3.9
Months employed full time	29.4	27.4	2.0 **	0.014	7.3
Average monthly earnings ($)	1,357.78	1,225.48	132.30 ***	0.005	10.8
Average hours worked per week	29.9	28.1	1.8 **	0.018	6.5
Average hourly wage ($)	10.83	10.26	0.57 ***	0.003	5.6
Total number of jobs held	3.1	3.1	0.0	0.857	0.5
Average job duration, in months	16.0	15.7	0.3	0.563	2.1
Year 1					
Ever employed (%)	85.0	82.1	2.9	0.129	3.6
Ever employed full time (%)	69.2	65.9	3.3	0.182	5.0
Months employed	8.0	7.5	0.4 *	0.062	5.9
Months employed full time	5.9	5.5	0.4	0.168	6.6
Average monthly earnings ($)	999.11	886.72	112.39 **	0.014	12.7
Average hours worked per week	24.7	23.0	1.8 *	0.062	7.7
Average hourly wage ($)	8.37	7.68	0.69 ***	0.006	9.0
Year 2					
Ever employed (%)	90.6	89.8	0.8	0.618	0.9
Ever employed full time (%)	77.6	75.8	1.8	0.416	2.4
Months employed	9.2	8.9	0.3	0.185	3.2
Months employed full time	7.3	6.8	0.4	0.106	6.2
Average monthly earnings ($)	1,301.68	1,181.07	120.61 **	0.018	10.2
Average hours worked per week	30.1	28.5	1.6 *	0.081	5.8
Average hourly wage ($)	9.51	9.29	0.22	0.398	2.4
Year 3					
Ever employed (%)	93.2	89.8	3.5 **	0.016	3.9
Ever employed full time (%)	83.0	78.4	4.6 **	0.026	5.9
Months employed	9.5	9.2	0.3	0.189	3.0
Months employed full time	8.0	7.4	0.6 **	0.018	8.3
Average monthly earnings ($)	1,486.10	1,355.45	130.65 **	0.029	9.6
Average hours worked per week	32.1	30.2	1.9 *	0.058	6.2
Average hourly wage ($)	10.49	9.80	0.70 ***	0.006	7.1

(continued)

Exhibit 3.1.A (continued)

Outcome	Academy Group	Non-Academy Group	Impact	P-Value	Percentage Change
Year 4					
Ever employed (%)	91.5	90.6	0.9	0.528	1.0
Ever employed full time (%)	83.4	79.4	4.0 **	0.049	5.0
Months employed	9.7	9.4	0.3	0.103	3.6
Months employed full time	8.3	7.7	0.6 **	0.018	7.8
Average monthly earnings ($)	1,644.24	1,478.66	165.57 ***	0.007	11.2
Average hours worked per week	32.7	30.7	2.0 **	0.029	6.7
Average hourly wage ($)	11.17	10.64	0.53 *	0.076	5.0
Sample size (N = 1,458)	799	659			

SOURCE: MDRC calculations from the Career Academies Evaluation Four-Year Post-High School Follow-Up Survey.

NOTES: All measures reflect the first four years following scheduled high school graduation for each sample member. All earnings and wages are adjusted for inflation and reported in 2006 dollars.

Impact estimates are regression-adjusted to control for background characteristics of the sample and for the clustering of students within schools and random assignment years. Values shown for the Academy group are unadjusted mean values; values shown for the non-Academy group are calculated by subtracting the impact estimate from the Academy group's unadjusted mean values. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; and * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

"Percentage change" is the impact divided by the non-Academy group average.

Earnings are calculated from respondents' reports of their hourly wages, hours worked per week, weeks worked per month, and duration of employment (measured in months) at each job. For any given period of time, "average monthly earnings" are calculated as the total estimated earnings from all jobs held during the time period divided by the total number of months in that period; "hours worked per week" are calculated as the total number of hours worked at all jobs in the time period divided by the total number of weeks in that period (assuming four weeks per month); and the "average hourly wage" is calculated as the total estimated earnings from all jobs held in the time period divided by the total number of hours worked during that period. Estimates of earnings, hours, and wages include zero values for months in which respondents were not employed.

For all jobs except the current or most recent job held as of the interview date, respondents reported wages, hours, and weeks for the *conclusion* of the job and these values are applied to the full duration of the job. Thus, if wages or hours increased or decreased during the job, these measures may over- or underestimate true monthly earnings. For the current or most recent job, respondents reported wages, hours, and weeks for both the start and the end of the job. Monthly earnings over the course of the job are calculated assuming that all three components increase or decrease linearly from start to end.

[a]Students were considered to be employed full time if they reported working 30 or more hours per week.

Career Academies Evaluation

Exhibit 3.1.B

Year-by-Year Impacts on Employment and Earnings During Follow-Up Years 5 to 8 for the Full Sample

Outcome	Academy Group	Non-Academy Group	Impact	P-Value	Percentage Change
Years 5-8					
Ever employed (%)	97.3	98.3	-1.0	0.207	-1.0
Ever employed full time (%)[a]	94.5	94.5	0.1	0.944	0.1
Months employed	38.5	37.6	0.9	0.200	2.5
Months employed full time	34.3	32.6	1.6 *	0.060	5.0
Average monthly earnings ($)	2,111.98	1,895.77	216.21 ***	0.005	11.4
Average hours worked per week	33.3	31.6	1.7 **	0.027	5.4
Average hourly wage ($)	14.99	14.30	0.70 *	0.095	4.9
Total number of jobs held	2.0	2.1	-0.1 **	0.042	-6.6
Average job duration, in months	25.6	23.6	2.0 **	0.016	8.4
Year 5					
Ever employed (%)	84.5	83.9	0.6	0.749	0.7
Ever employed full time (%)	73.5	72.5	1.0	0.683	1.3
Months employed	9.0	8.6	0.4 *	0.076	5.2
Months employed full time	7.6	7.3	0.3	0.248	4.5
Average monthly earnings ($)	1,806.96	1,578.47	228.48 ***	0.003	14.5
Average hours worked per week	30.2	28.4	1.8 *	0.071	6.4
Average hourly wage ($)	12.64	11.49	1.16 **	0.028	10.1
Year 6					
Ever employed (%)	88.6	86.6	2.0	0.260	2.3
Ever employed full time (%)	80.8	77.5	3.2	0.135	4.2
Months employed	9.7	9.3	0.4	0.110	3.9
Months employed full time	8.5	8.0	0.5 *	0.057	6.4
Average monthly earnings ($)	2,032.46	1,816.54	215.92 ***	0.007	11.9
Average hours worked per week	33.4	31.2	2.2 **	0.020	7.1
Average hourly wage ($)	13.33	12.65	0.69	0.185	5.4
Year 7					
Ever employed (%)	90.8	89.5	1.3	0.425	1.4
Ever employed full time (%)	84.3	81.1	3.1	0.122	3.9
Months employed	9.8	9.7	0.1	0.641	1.0
Months employed full time	8.9	8.5	0.4	0.106	4.9
Average monthly earnings ($)	2,208.20	2,017.83	190.36 **	0.036	9.4
Average hours worked per week	34.5	32.6	1.9 **	0.041	5.8
Average hourly wage ($)	14.24	13.79	0.44	0.428	3.2

(continued)

Exhibit 3.1.B (continued)

Outcome	Academy Group	Non-Academy Group	Impact	P-Value	Percentage Change
Year 8					
Ever employed (%)	90.6	92.3	-1.6	0.279	-1.8
Ever employed full time (%)	86.0	86.4	-0.4	0.837	-0.4
Months employed	10.0	10.0	0.0	0.959	0.1
Months employed full time	9.2	8.8	0.4	0.131	4.2
Average monthly earnings ($)	2,400.30	2,170.23	230.07 **	0.019	10.6
Average hours worked per week	35.2	34.3	0.9	0.293	2.7
Average hourly wage ($)	15.09	14.20	0.89 *	0.088	6.3
Total annual earnings ($)	28,803.59	26,042.80	2,760.79 **	0.019	10.6
Last Quarter					
Ever employed (%)	85.1	86.8	-1.8	0.338	-2.0
Ever employed full time (%)	79.4	79.1	0.3	0.903	0.3
Months employed	2.5	2.5	0.0	0.680	-0.9
Months employed full time	2.3	2.3	0.0	0.508	1.9
Average monthly earnings ($)	2,500.83	2,238.55	262.28 **	0.018	11.7
Average hours worked per week	35.3	35.0	0.3	0.790	0.7
Average hourly wage ($)	14.78	13.71	1.07 *	0.069	7.8
Sample size (N = 1,404)	770	634			

SOURCE: MDRC calculations from the Career Academies Evaluation Eight-Year Post-High School Follow-Up Survey.

NOTES: All measures reflect the fifth through eighth years following scheduled high school graduation for each sample member. All earnings and wages are adjusted for inflation and reported in 2006 dollars.

Impact estimates are regression-adjusted to control for background characteristics of the sample and for the clustering of students within schools and random assignment years. Values shown for the Academy group are unadjusted mean values; values shown for the non-Academy group are calculated by subtracting the impact estimate from the Academy group's unadjusted mean values. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; and * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

"Percentage change" is the impact divided by the non-Academy group average.

Earnings are calculated from respondents' reports of their hourly wages, hours worked per week, weeks worked per month, and duration of employment (measured in months) at each job. For any given period of time, "average monthly earnings" are calculated as the total estimated earnings from all jobs held during the time period divided by the total number of months in that period; "hours worked per week" are calculated as the total number of hours worked at all jobs in the time period divided by the total number of weeks in that period (assuming four weeks per month); and the "average hourly wage" is calculated as the total estimated earnings from all jobs held in the time period divided by the total number of hours worked during that period. Estimates of earnings, hours, and wages include zero values for months in which respondents were not employed.

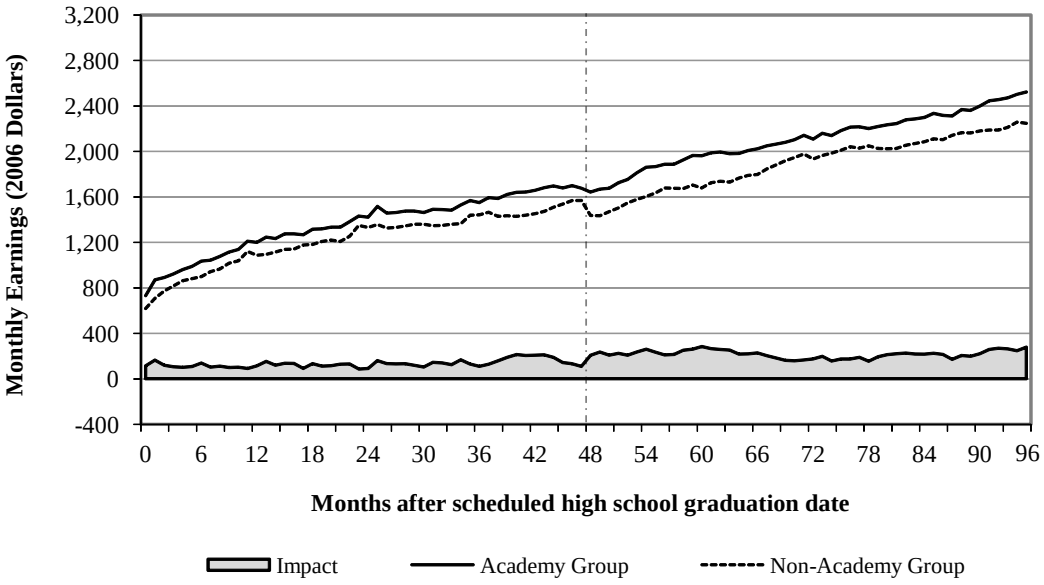
For all jobs except the current or most recent job held as of the interview date, respondents reported wages, hours, and weeks for the *conclusion* of the job and these values are applied to the full duration of the job. Thus, if wages or hours increased or decreased during the job, these measures may over- or underestimate true monthly earnings. For the current or most recent job, respondents reported wages, hours, and weeks for both the start and the end of the job. Monthly earnings over the course of the job are calculated assuming that all three components increase or decrease linearly from start to end.

[a]Students were considered to be employed full time if they reported working 30 or more hours per week.

Career Academies Evaluation

Exhibit 3.2

Month-by-Month Impacts on Total Monthly Earnings for the Full Sample



SOURCES: MDRC calculations from the Career Academies Evaluation Four-Year and Eight-Year Post-High School Follow-Up Surveys.

NOTES: Earnings are reported in 2006 dollars.

Measures reflect the 96-month period following scheduled high school graduation for each sample member (Month 0 is June of the scheduled graduation year). Measures for Months 1 to 48 are derived from the Four-Year Post-High School Follow-Up Survey sample (N = 1,458). Measures for Months 49 to 96 are derived from the Eight-Year Post-High School Follow-Up Survey sample (N = 1,428). The vertical dotted line at Month 48 illustrates the cutpoint between the Four-Year and Eight-Year Post-High School Follow-Up Survey samples.

Impact estimates are regression-adjusted to control for background characteristics of the sample and for the clustering of students within schools and random assignment years. Values shown for the Academy group are unadjusted mean values; values shown for the non-Academy group are calculated by subtracting the impact estimate from the Academy group's unadjusted mean values. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Differences in monthly earnings are significant at a level of 10 percent or less in 87 of the 96 months.

Career Academies Evaluation

Exhibit 3.3

Differences in Characteristics of the Current or Most Recent Job Held Eight Years After Scheduled High School Graduation for the Full Sample

Outcome	Academy Group	Non-Academy Group	Difference		P-Value
Job duration (months)	*26.6*	*23.6*	*3.0*	***	*0.003*
Month last worked at job (relative to high school graduation)	*95.2*	*95.3*	*-0.1*		*0.806*
Employed at job in the last quarter of Year 8 (%)	*89.1*	*89.9*	*-0.8*		*0.613*
Occupational sector (%) [a]					
Management/business & financial operations	*19.2*	*16.0*	*3.2*		*0.120*
Computer, engineering, & media technology	*6.9*	*3.5*	*3.4*	***	*0.005*
Education, social services, law, & science	*8.0*	*10.6*	*-2.6*		*0.103*
Healthcare/medical support & technology	*9.2*	*10.9*	*-1.7*		*0.278*
Sales, food, & personal services	*11.7*	*14.4*	*-2.7*		*0.144*
Office and administrative support	*23.9*	*25.4*	*-1.6*		*0.497*
Construction, production, maintenance, transportation	*15.3*	*14.9*	*0.5*		*0.795*
Other/unknown	*5.5*	*4.2*	*1.3*		*0.268*
Average monthly earnings ($) [b]	*2,533.24*	*2,326.93*	*206.32*	**	*0.019*
At start of job	*2,271.59*	*2,105.53*	*166.05*	**	*0.036*
At end of job	*2,797.66*	*2,547.09*	*250.57*	**	*0.021*
Difference	*526.08*	*441.56*	*84.51*		*0.229*
Average hours per week	*39.4*	*38.5*	*0.9*	*	*0.096*
At start of job	*38.6*	*37.7*	*0.9*	*	*0.098*
At end of job	*40.5*	*39.6*	*1.0*	*	*0.075*
Difference	*1.9*	*1.9*	*0.0*		*0.952*
Average hourly wage ($)	*15.84*	*14.82*	*1.03*	**	*0.034*
At start of job	*14.75*	*13.74*	*1.01*	**	*0.028*
At end of job	*16.94*	*15.91*	*1.03*	*	*0.074*
Difference	*2.19*	*2.17*	*0.02*		*0.962*
Job offers a health plan (%)	*74.3*	*75.2*	*-1.0*		*0.687*
Job offers any other benefits (%) [c]	*81.0*	*82.0*	*-1.0*		*0.640*
Very satisfied at job (%)	*44.0*	*41.5*	*2.5*		*0.349*
Very likely to be working in the same field in two years (%) [d]	*60.0*	*55.7*	*4.2*		*0.142*
Very likely to be promoted in the next year (%) [d]	*39.8*	*39.7*	*0.1*		*0.980*
Job is/was directly related to high school studies (%)	*38.6*	*30.6*	*8.0*	***	*0.002*
Choice of field was influenced by high school experiences (%)	*46.3*	*35.7*	*10.6*	***	*0.000*
Sample size (N = 1,366)	*750*	*616*			

(continued)

Exhibit 3.3 (continued)

SOURCE: MDRC calculations from the Career Academies Evaluation Eight-Year Post-High School Follow-Up Survey.

NOTES: All measures reflect the job held by the survey respondent at the time of the eight-year post-high school interview or, if the respondent was unemployed at the time of the interview, the job held most recently in the four years prior to the interview. Measures are italicized because the sample includes only those survey respondents who were employed at any time during the fifth through eighth year following their scheduled graduation from high school and thus do not represent an experimental comparison of Academy and non-Academy students.

A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; and * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

[a]Occupational sectors are based on the U.S. Department of Labor's 2000 Standard Occupational Classification (SOC) system. Jobs are coded from respondents' reports of the industry they worked in and the major tasks they performed at the job.

[b]Respondents reported hourly wages, hours worked per week, and weeks worked per month for both the start and the end of the job. Average monthly earnings over the course of the job are calculated assuming that all three components increase or decrease linearly from start to end.

[c]Other benefits include sick leave, paid vacation days, tuition reimbursement, a retirement or pension plan, and stock options or signing bonuses.

[d]The likelihood of working in the same field in two years and of being promoted in the next year were only asked of those who were employed at the time of the interview (N = 1,180).

Career Academies Evaluation

Exhibit 3.4

Impacts on Educational Attainment Eight Years After Scheduled High School Graduation for the Full Sample

Outcome	Academy Group	Non-Academy Group	Impact	P-Value	Percentage Change
High school completion status (%)					
Earned high school diploma	83.7	83.6	0.1	0.941	0.2
On-time graduate[a]	74.7	73.3	1.4	0.512	1.9
Late graduate	9.0	10.3	-1.3	0.411	-12.5
Earned a GED	12.1	10.0	2.0	0.198	20.1
Postsecondary educational attainment (%)					
Completed any postsecondary credential	49.7	50.0	-0.2	0.935	-0.4
Highest credential completed					
Bachelor's or graduate degree	15.9	17.8	-1.9	0.337	-10.4
Associate's degree	12.3	11.6	0.7	0.690	6.0
Skills training certificate or license	21.5	20.6	0.9	0.659	4.6
Postsecondary education enrollment					
Months enrolled in postsecondary education[b]					
Years 1-4	21.0	21.2	-0.2	0.833	-0.9
Years 5-8	10.7	11.0	-0.3	0.687	-2.8
Currently enrolled in any postsecondary program (%)[c]	19.6	18.6	1.0	0.631	5.4
Currently working toward highest postsecondary credential (%)[d]	15.1	14.9	0.2	0.908	1.5
Bachelor's or graduate degree	8.1	7.7	0.4	0.805	4.6
Associate's degree	5.6	5.1	0.6	0.645	11.0
Skills training certificate or license	1.4	2.1	-0.7	0.326	-32.9
Sample size (N = 1,428)	782	646			

SOURCES: MDRC calculations from the Career Academies Evaluation Four-Year and Eight-Year Post-High School Follow-Up Surveys.

NOTES: High school completion, postsecondary educational attainment, and current postsecondary enrollment reflect respondents' status as of the interview date eight years following their scheduled high school graduation.

Impact estimates are regression-adjusted to control for background characteristics of the sample and for the clustering of students within schools and random assignment years. Values shown for the Academy group are unadjusted mean values; values shown for the non-Academy group are calculated by subtracting the impact estimate from the Academy group's unadjusted mean values. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; and * = 10 percent.

"Percentage change" is the impact divided by the non-Academy group average.

Rounding may cause slight discrepancies in calculating sums and differences.

[a]Respondents are considered on-time graduates if they graduated in June or earlier of the year in which they were scheduled to graduate high school.

(continued)

Exhibit 3.4 (continued)

[b]The measure of months enrolled in postsecondary education during the first through fourth year following scheduled high school graduation is derived from the Four-Year Post-High School Follow-Up Survey sample (N = 1,458). The measure of months enrolled in postsecondary education during the fifth through eighth year following scheduled high school graduation is derived from the Eight-Year Post-High School Follow-Up Survey sample (N = 1,428).

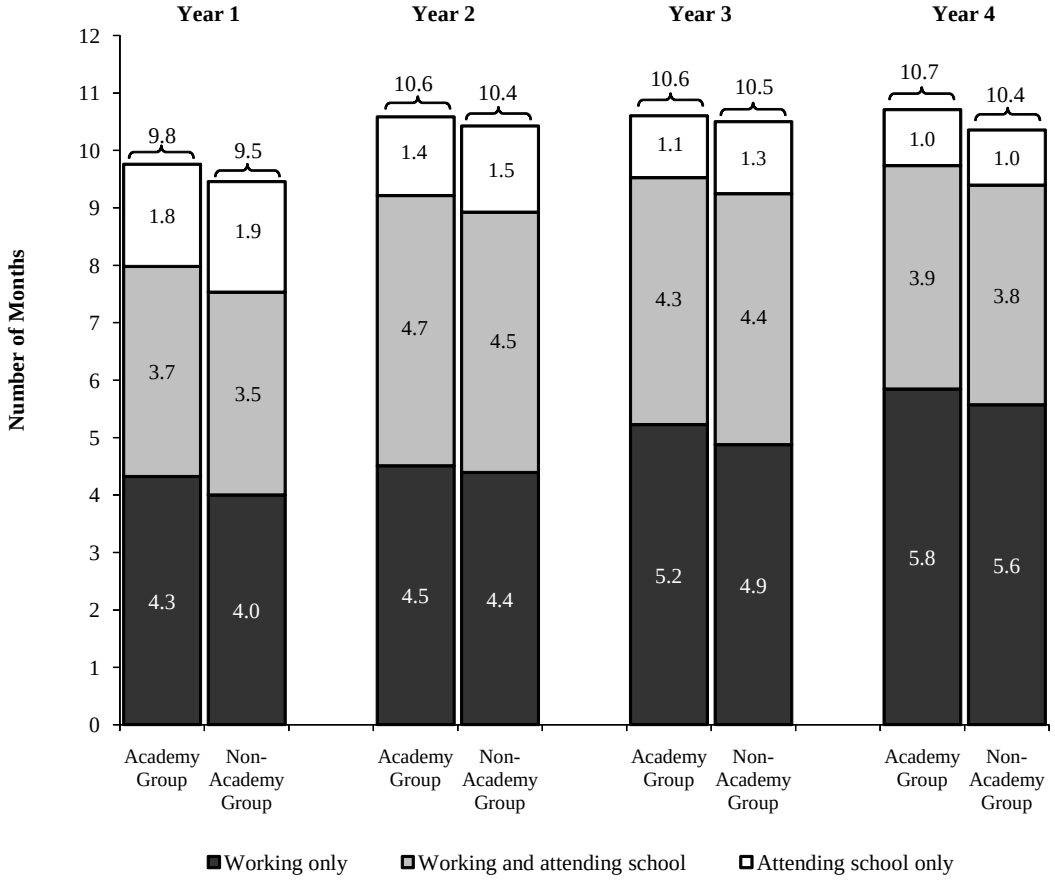
[c]Respondents are considered to be "currently enrolled" in a postsecondary education program if they reported that they were still attending the program and that they expected to complete the program.

[d]Respondents are considered to be working toward their highest postsecondary credential if they are currently enrolled in a program from which they expect to receive either their first postsecondary credential or a credential that is higher than any credential they have already earned (for example, if they have completed an associate's degree and are enrolled in a program that will award a bachelor's degree).

Career Academies Evaluation

Exhibit 3.5.A

Year-by-Year Impacts on Months Spent Attending School or Working During Follow-Up Years 1 to 4 for the Full Sample



SOURCE: MDRC calculations from the Career Academies Evaluation Four-Year Post-High School Follow-Up Survey.

NOTES: Measures reflect the average number of months spent in each status during each of the first four years following scheduled high school graduation.

Impact estimates are regression-adjusted to control for background characteristics of the sample and for the clustering of students within schools and random assignment years. Values shown for the Academy group are unadjusted mean values; values shown for the non-Academy group are calculated by subtracting the impact estimate from the Academy group's unadjusted mean values.

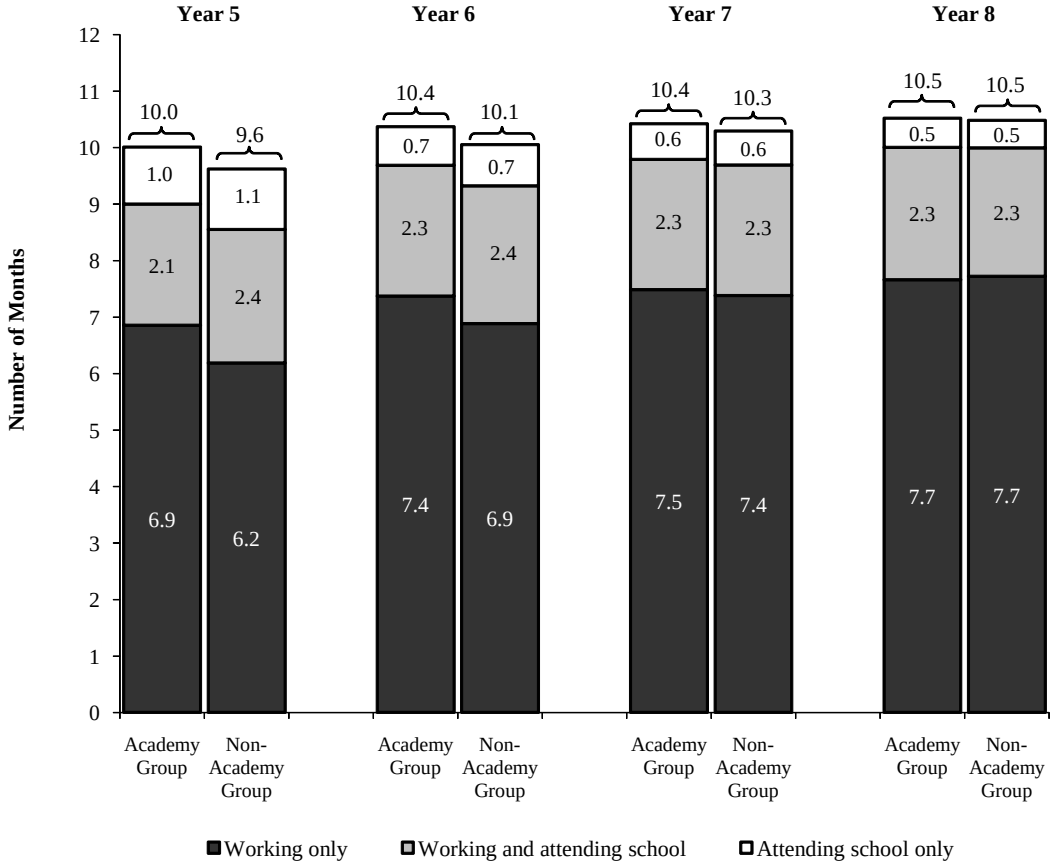
Rounding may cause slight discrepancies in calculating sums and differences.

A two-tailed t-test was applied to differences between the Academy and non-Academy groups in the cumulative number of months spent in each status across all four years. The difference in the total number of months spent working and/or attending school (0.9 month) is significant at the 10 percent level or lower.

Career Academies Evaluation

Exhibit 3.5.B

Year-by-Year Impacts on Months Spent Attending School or Working During Follow-Up Years 5 to 8 for the Full Sample



SOURCE: MDRC calculations from the Career Academies Evaluation Eight-Year Post-High School Follow-Up Survey.

NOTES: Measures reflect the average number of months spent in each status during the fifth through eighth year following scheduled high school graduation.

Impact estimates are regression-adjusted to control for background characteristics of the sample and for the clustering of students within schools and random assignment years. Values shown for the Academy group are unadjusted mean values; values shown for the non-Academy group are calculated by subtracting the impact estimate from the Academy group's unadjusted mean values.

Rounding may cause slight discrepancies in calculating sums and differences.

A two-tailed t-test was applied to differences between the Academy and non-Academy groups in the cumulative number of months spent in each status across all four years. None of these differences is significant at the 10 percent level or lower.

Career Academies Evaluation

Exhibit 3.6

Impacts on Family Formation and Other Social Adjustment Outcomes Eight Years After Scheduled High School Graduation for the Full Sample

Outcome (%)	Academy Group	Non-Academy Group	Impact	P-Value	Percentage Change
Marital status					
Married and living together	38.0	33.7	4.3 *	0.081	12.8
Single	55.6	60.0	-4.5 *	0.076	-7.4
Divorced, separated, or widowed	6.4	6.3	0.1	0.914	2.3
Parental status					
Custodial parent	50.8	43.9	6.9 ***	0.006	15.7
Noncustodial parent	5.1	7.8	-2.7 **	0.026	-34.5
Not a parent	43.9	48.0	-4.1	0.112	-8.5
Living situation					
Lives independently with child/children and partner	33.1	26.9	6.2 **	0.010	23.1
Lives independently with no children	30.0	32.4	-2.4	0.319	-7.5
Lives independently with child/children but not partner	10.1	9.4	0.7	0.647	7.2
Lives with parent(s) or guardian(s), with or without children	26.8	31.3	-4.5 *	0.062	-14.3
Ever gone without health insurance in past year	29.1	31.7	-2.6	0.296	-8.1
Received TANF or cash assistance in past year	6.8	6.6	0.2	0.851	3.7
Received food stamps in past year	12.2	12.2	0.0	0.987	0.2
Registered to vote	73.7	72.4	1.3	0.565	1.8
Any recent illegal or drug-related activity[a]	10.3	9.7	0.5	0.733	5.5
Any recent illegal activity, excluding drug use	5.6	5.4	0.3	0.809	5.5
Sample size (N = 1,424)	781	643			

SOURCE: MDRC calculations from the Career Academies Evaluation Eight-Year Post-High School Follow-Up Survey.

NOTES: Impact estimates are regression-adjusted to control for background characteristics of the sample and for the clustering of students within schools and random assignment years. Values shown for the Academy group are unadjusted mean values; values shown for the non-Academy group are calculated by subtracting the impact estimate from the Academy group's unadjusted mean values. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; and * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

[a]This measure includes illegal drug use, breaking the law (other than traffic violations), and any arrests or convictions in the past year.

Career Academies Evaluation

Exhibit 3.7

Impacts on High School Experiences for the Full Sample

Outcome	Academy Group	Non-Academy Group	Impact	P-Value	Percentage Change
Ever enrolled in a Career Academy during high school (%)	89.9	7.2	82.6 ***	0.000	---
Was enrolled in a Career Academy at the end of scheduled grade 12 (%)	60.3	4.3	56.0 ***	0.000	---
Average attendance, grades 9-12 (% of school days)	88.4	87.9	0.5	0.493	0.5
Credits earned					
Total course credits	22.4	22.0	0.4	0.127	1.9
Total course credits meet the graduation requirement (%)	65.8	59.1	6.7 ***	0.007	11.3
Course-taking (%)[a]					
Basic core curriculum: English (4), Social Studies (3), Math (2), Science (2)	66.1	64.2	1.8	0.499	2.9
College prep core curriculum: English (4), Social Studies (3), Math (3), Science (3)	41.0	42.5	-1.5	0.592	-3.4
Earned 3 or more career/vocational credits	70.0	46.6	23.4 ***	0.000	50.1
Basic core curriculum plus 3 career/vocational credits	46.6	27.1	19.5 ***	0.000	71.8
Career awareness and development activities (%)					
In school[b]					
Ever participated	81.0	76.4	4.6 *	0.051	6.1
Participated intensively	49.3	41.2	8.1 ***	0.005	19.7
Outside of school[c]					
Ever participated	70.6	42.8	27.8 ***	0.000	65.0
Participated intensively	39.3	13.1	26.2 ***	0.000	199.1
Employment and work-based learning (%)					
Ever employed during high school (%)	80.7	77.8	3.0	0.204	3.8
Ever employed in a paid job during high school (%)	77.8	74.9	2.9	0.241	3.8
Ever had a job connected to school[d]	36.9	25.2	11.6 ***	0.000	46.1
Ever had a job with high work-based learning content[e]	22.2	16.1	6.2 ***	0.007	38.2
Sample size (N = 1,209)	670	539			

(continued)

Exhibit 3.7 (continued)

SOURCES: MDRC calculations from the Career Academies Evaluation Student School Records Database and 12th Grade Survey.

NOTES: All measures are derived from the sample of Eight-Year Post-High School Follow-Up Survey respondents who are also in the Student School Records Database and the 12th Grade Survey sample.

Measures of attendance rate and credits earned include zero values for grades in which sample members were identified as school dropouts. The measures of credits earned and course-taking include all credits earned through the end of the twelfth-grade year (that is, the year that students were projected to reach the twelfth grade when they initially entered the study sample).

Impact estimates are regression-adjusted to control for background characteristics of the sample and for the clustering of students within schools and random assignment years. Values shown for the Academy group are unadjusted mean values; values shown for the non-Academy group are calculated by subtracting the impact estimate from the Academy group's unadjusted mean values. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; and * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

[a]One of the nine study sites was unable to provide data on the specific courses students completed during high school. Thus, course-taking measures are derived from a sample of eight sites with a total of 1,002 students. The measure of earning three or more career/vocational credits is derived from a sample of 904 students.

[b]In-school career awareness and development activities include learning about jobs in class or through in-school activities, receiving instruction or counseling on how to find a job or how to act on the job, and having discussions with students and adults about careers and work. Respondents are considered to have participated intensively in in-school career awareness and development activities if they reported participating in at least three of these activities per month.

[c]Outside-of-school career awareness and development activities include career-related field trips, job shadowing, and mentoring programs. Respondents are considered to have participated intensively in outside-of-school career awareness and development activities if they reported participating in two or more of these activities.

[d]Jobs that are "connected to school" are sponsored or supported by the school (they may also be called "work-based learning experiences"). These include jobs that a teacher helped the student find, that are part of a school program or class or for which the student receives course credit, and in which a supervisor at work and an adult from the school communicate about the student's progress.

[e]To assess the level of "work-based learning content" in students' jobs, respondents were asked to rate their jobs on a series of characteristics, including how often they were asked to read, write, and use the computer on the job; how much advice they received on the job; whether they felt bored on the job; whether they learned new things on the job; and whether the job influenced their career choice. For a complete list of the survey items composing this measure and for a description of how the cutpoint for "high work-based learning content" was set, see Kemple, Poglinco, and Snipes, *Career Academies: Building Career Awareness and Work-Based Learning Activities Through Employer Partnerships* (New York: MDRC, 1999).

Unit 4

Impacts for Gender Subgroups

Career Academies Evaluation

Exhibit 4.1.A - YM

Year-by-Year Impacts on Employment and Earnings During Follow-Up Years 1 to 4 for Young Men

Outcome	Academy Group	Non-Academy Group	Impact	P-Value	Percentage Change
Years 1-4					
Ever employed (%)	99.4	95.8	3.6 ***	0.002	3.7
Ever employed full time (%)[a]	96.7	92.0	4.7 **	0.011	5.1
Months employed	38.5	35.7	2.9 ***	0.004	8.0
Months employed full time	32.5	28.4	4.2 ***	0.001	14.7
Average monthly earnings ($)	1,646.76	1,386.30	260.46 ***	0.004	18.8
Average hours worked per week	34.0	30.0	4.0 ***	0.004	13.4
Average hourly wage ($)	11.71	10.75	0.96 ***	0.006	8.9
Total number of jobs held	3.2	3.2	0.0	0.877	0.6
Average job duration, in months	16.7	15.9	0.9	0.359	5.4
Year 1					
Ever employed (%)	88.5	83.3	5.2 *	0.066	6.2
Ever employed full time (%)	77.0	68.7	8.3 **	0.023	12.1
Months employed	8.5	7.7	0.9 **	0.017	11.3
Months employed full time	6.9	5.7	1.2 ***	0.005	20.4
Average monthly earnings ($)	1,240.47	963.20	277.28 ***	0.001	28.8
Average hours worked per week	28.5	24.4	4.1 **	0.011	16.6
Average hourly wage ($)	9.37	8.11	1.26 ***	0.003	15.5
Year 2					
Ever employed (%)	94.0	89.1	4.9 **	0.031	5.4
Ever employed full time (%)	82.5	76.3	6.2 *	0.060	8.1
Months employed	9.9	9.0	0.9 ***	0.004	10.2
Months employed full time	8.3	7.1	1.1 ***	0.004	16.1
Average monthly earnings ($)	1,578.07	1,322.97	255.10 ***	0.005	19.3
Average hours worked per week	34.5	30.4	4.1 ***	0.009	13.4
Average hourly wage ($)	10.50	9.87	0.63	0.188	6.4
Year 3					
Ever employed (%)	96.7	89.9	6.7 ***	0.001	7.5
Ever employed full time (%)	87.0	76.4	10.6 ***	0.001	13.8
Months employed	10.0	9.6	0.4	0.189	4.3
Months employed full time	8.5	7.8	0.8 *	0.054	9.8
Average monthly earnings ($)	1,776.94	1,580.15	196.79 *	0.091	12.5
Average hours worked per week	36.1	32.7	3.4 *	0.053	10.5
Average hourly wage ($)	11.51	10.48	1.03 **	0.014	9.8

(continued)

Exhibit 4.1.A - YM (continued)

Outcome	Academy Group	Non-Academy Group	Impact	P-Value	Percentage Change
Year 4					
Ever employed (%)	93.1	89.8	3.3	0.138	3.7
Ever employed full time (%)	86.7	80.5	6.2 **	0.040	7.6
Months employed	10.1	9.4	0.7 **	0.032	7.1
Months employed full time	8.9	7.8	1.1 ***	0.004	14.0
Average monthly earnings ($)	1,991.57	1,678.89	312.68 **	0.010	18.6
Average hours worked per week	36.8	32.3	4.5 ***	0.007	13.8
Average hourly wage ($)	12.29	11.40	0.89	0.106	7.8
Sample size (N = 604)	331	273			

SOURCE: MDRC calculations from the Career Academies Evaluation Four-Year Post-High School Follow-Up Survey.

NOTES: All measures reflect the first four years following scheduled high school graduation for each sample member. All earnings and wages are adjusted for inflation and reported in 2006 dollars.

Impact estimates are regression-adjusted to control for background characteristics of the sample and for the clustering of students within schools and random assignment years. Values shown for the Academy group are unadjusted mean values; values shown for the non-Academy group are calculated by subtracting the impact estimate from the Academy group's unadjusted mean values. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; and * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

"Percentage change" is the impact divided by the non-Academy group average.

Earnings are calculated from respondents' reports of their hourly wages, hours worked per week, weeks worked per month, and duration of employment (measured in months) at each job. For any given period of time, "average monthly earnings" are calculated as the total estimated earnings from all jobs held during the time period divided by the total number of months in that period; "hours worked per week" are calculated as the total number of hours worked at all jobs in the time period divided by the total number of weeks in that period (assuming four weeks per month); and the "average hourly wage" is calculated as the total estimated earnings from all jobs held in the time period divided by the total number of hours worked during that period. Estimates of earnings, hours, and wages include zero values for months in which respondents were not employed.

For all jobs except the current or most recent job held as of the interview date, respondents reported wages, hours, and weeks for the *conclusion* of the job and these values are applied to the full duration of the job. Thus, if wages or hours increased or decreased during the job, these measures may over- or underestimate true monthly earnings. For the current or most recent job, respondents reported wages, hours, and weeks for both the start and the end of the job. Monthly earnings over the course of the job are calculated assuming that all three components increase or decrease linearly from start to end.

[a]Students were considered to be employed full time if they reported working 30 or more hours per week.

Career Academies Evaluation

Exhibit 4.1.B - YM

Year-by-Year Impacts on Employment and Earnings During Follow-Up Years 5 to 8 for Young Men

Outcome	Academy Group	Non-Academy Group	Impact	P-Value	Percentage Change
Years 5-8					
Ever employed (%)	98.8	99.1	-0.3	0.693	-0.3
Ever employed full time (%)[a]	97.5	97.7	-0.2	0.862	-0.2
Months employed	41.0	38.2	2.8 ***	0.005	7.3
Months employed full time	36.9	34.1	2.8 **	0.026	8.3
Average monthly earnings ($)	2,558.07	2,196.71	361.37 **	0.014	16.5
Average hours worked per week	37.6	33.5	4.1 ***	0.001	12.4
Average hourly wage ($)	16.54	15.95	0.59	0.464	3.7
Total number of jobs held	2.1	2.3	-0.1	0.265	-6.3
Average job duration, in months	27.0	23.7	3.4 ***	0.009	14.2
Year 5					
Ever employed (%)	88.8	85.0	3.7	0.183	4.4
Ever employed full time (%)	79.4	76.0	3.4	0.339	4.4
Months employed	9.7	8.5	1.2 ***	0.002	13.9
Months employed full time	8.6	7.5	1.1 **	0.013	14.2
Average monthly earnings ($)	2,240.42	1,780.81	459.61 ***	0.001	25.8
Average hours worked per week	35.1	29.5	5.6 ***	0.001	19.1
Average hourly wage ($)	14.53	12.35	2.18 **	0.040	17.7
Year 6					
Ever employed (%)	92.8	88.8	4.0 *	0.087	4.5
Ever employed full time (%)	86.6	81.6	5.0	0.100	6.1
Months employed	10.4	9.4	0.9 ***	0.004	10.0
Months employed full time	9.2	8.4	0.8 **	0.035	9.9
Average monthly earnings ($)	2,427.17	2,089.41	337.77 **	0.022	16.2
Average hours worked per week	37.7	32.7	5.0 ***	0.001	15.3
Average hourly wage ($)	14.71	13.99	0.72	0.386	5.1
Year 7					
Ever employed (%)	95.3	90.6	4.7 **	0.023	5.2
Ever employed full time (%)	87.5	82.8	4.7	0.116	5.6
Months employed	10.3	10.0	0.3	0.282	3.3
Months employed full time	9.4	9.0	0.4	0.338	4.1
Average monthly earnings ($)	2,622.74	2,373.13	249.61	0.151	10.5
Average hours worked per week	38.3	35.3	3.0 *	0.051	8.5
Average hourly wage ($)	15.96	15.56	0.40	0.692	2.5

(continued)

Exhibit 4.1.B - YM (continued)

Outcome	Academy Group	Non-Academy Group	Impact	P-Value	Percentage Change
Year 8					
Ever employed (%)	95.9	94.9	1.0	0.555	1.1
Ever employed full time (%)	90.9	91.4	-0.4	0.857	-0.5
Months employed	10.7	10.3	0.3	0.215	3.3
Months employed full time	9.7	9.2	0.6	0.108	6.1
Average monthly earnings ($)	2,941.96	2,543.49	398.47 **	0.038	15.7
Average hours worked per week	39.5	36.5	3.0 **	0.034	8.1
Average hourly wage ($)	17.53	16.26	1.28	0.209	7.9
Total annual earnings ($)	35,303.56	30,521.91	4,781.65 **	0.038	15.7
Last Quarter					
Ever employed (%)	90.9	91.0	0.0	0.989	0.0
Ever employed full time (%)	84.7	84.3	0.4	0.906	0.4
Months employed	2.7	2.6	0.0	0.701	1.1
Months employed full time	2.5	2.4	0.1	0.533	2.4
Average monthly earnings ($)	3,164.38	2,670.86	493.52 **	0.027	18.5
Average hours worked per week	40.3	38.2	2.1	0.165	5.5
Average hourly wage ($)	17.46	16.02	1.44	0.203	9.0
Sample size (N = 579)	320	259			

SOURCE: MDRC calculations from the Career Academies Evaluation Eight-Year Post-High School Follow-Up Survey.

NOTES: All measures reflect the fifth through eighth years following scheduled high school graduation for each sample member. All earnings and wages are adjusted for inflation and reported in 2006 dollars.

Impact estimates are regression-adjusted to control for background characteristics of the sample and for the clustering of students within schools and random assignment years. Values shown for the Academy group are unadjusted mean values; values shown for the non-Academy group are calculated by subtracting the impact estimate from the Academy group's unadjusted mean values. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; and * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

"Percentage change" is the impact divided by the non-Academy group average.

Earnings are calculated from respondents' reports of their hourly wages, hours worked per week, weeks worked per month, and duration of employment (measured in months) at each job. For any given period of time, "average monthly earnings" are calculated as the total estimated earnings from all jobs held during the time period divided by the total number of months in that period; "hours worked per week" are calculated as the total number of hours worked at all jobs in the time period divided by the total number of weeks in that period (assuming four weeks per month); and the "average hourly wage" is calculated as the total estimated earnings from all jobs held in the time period divided by the total number of hours worked during that period. Estimates of earnings, hours, and wages include zero values for months in which respondents were not employed.

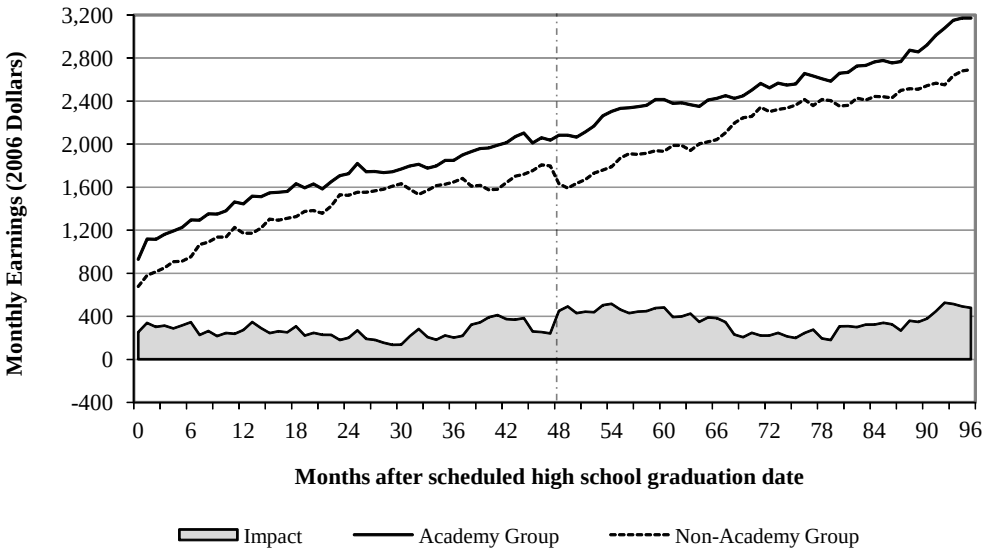
For all jobs except the current or most recent job held as of the interview date, respondents reported wages, hours, and weeks for the *conclusion* of the job and these values are applied to the full duration of the job. Thus, if wages or hours increased or decreased during the job, these measures may over- or underestimate true monthly earnings. For the current or most recent job, respondents reported wages, hours, and weeks for both the start and the end of the job. Monthly earnings over the course of the job are calculated assuming that all three components increase or decrease linearly from start to end.

[a]Students were considered to be employed full time if they reported working 30 or more hours per week.

Career Academies Evaluation

Exhibit 4.2 - YM

Month-by-Month Impacts on Total Monthly Earnings for Young Men



SOURCES: MDRC calculations from the Career Academies Evaluation Four-Year and Eight-Year Post-High School Follow-Up Surveys.

NOTES: Earnings are reported in 2006 dollars.

Measures reflect the 96-month period following scheduled high school graduation for each sample member (Month 0 is June of the scheduled graduation year). Measures for Months 1 to 48 are derived from the Four-Year Post-High School Follow-Up Survey sample of young men (N = 604). Measures for Months 49 to 96 are derived from the Eight-Year Post-High School Follow-Up Survey sample of young men (N = 587). The vertical dotted line at Month 48 illustrates the cutpoint between the Four-Year and Eight-Year Post-High School Follow-Up Survey samples.

Impact estimates are regression-adjusted to control for background characteristics of the sample and for the clustering of students within schools and random assignment years. Values shown for the Academy group are unadjusted mean values; values shown for the non-Academy group are calculated by subtracting the impact estimate from the Academy group's unadjusted mean values. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Differences in monthly earnings are significant at a level of 10 percent or less in 73 of the 96 months.

Career Academies Evaluation

Exhibit 4.3 - YM

Differences in Characteristics of the Current or Most Recent Job Held Eight Years After Scheduled High School Graduation for Young Men

Outcome	Academy Group	Non-Academy Group	Difference		P-Value
Job duration (months)	*27.5*	*23.0*	*4.5*	***	*0.005*
Month last worked at job (relative to high school graduation)	*96.3*	*95.8*	*0.5*		*0.287*
Employed at job in the last quarter of Year 8 (%)	*93.4*	*93.5*	*-0.1*		*0.967*
Occupational sector (%) [a]					
Management/business & financial operations	*19.2*	*17.0*	*2.3*		*0.499*
Computer, engineering, & media technology	*12.0*	*5.8*	*6.2*	**	*0.010*
Education, social services, law, & science	*4.7*	*5.9*	*-1.1*		*0.559*
Healthcare/medical support & technology	*4.4*	*4.5*	*-0.1*		*0.972*
Sales, food, & personal services	*10.7*	*16.0*	*-5.3*	*	*0.067*
Office and administrative support	*10.7*	*15.2*	*-4.4*		*0.123*
Construction, production, maintenance, transportation	*30.9*	*29.3*	*1.6*		*0.678*
Other/unknown	*6.9*	*6.3*	*0.7*		*0.752*
Average monthly earnings ($) [b]	*2,955.18*	*2,690.50*	*264.68*		*0.153*
At start of job	*2,602.80*	*2,394.73*	*208.06*		*0.201*
At end of job	*3,312.77*	*2,977.95*	*334.82*		*0.149*
Difference	*709.97*	*583.22*	*126.76*		*0.394*
Average hours per week	*41.4*	*40.1*	*1.2*		*0.174*
At start of job	*40.5*	*39.3*	*1.2*		*0.214*
At end of job	*42.8*	*41.0*	*1.8*	*	*0.063*
Difference	*2.3*	*1.7*	*0.6*		*0.438*
Average hourly wage ($)	*17.44*	*16.51*	*0.94*		*0.335*
At start of job	*16.02*	*14.90*	*1.12*		*0.211*
At end of job	*18.86*	*18.16*	*0.70*		*0.548*
Difference	*2.84*	*3.26*	*-0.41*		*0.575*
Job offers a health plan (%)	*72.2*	*73.3*	*-1.1*		*0.777*
Job offers any other benefits (%) [c]	*77.8*	*80.1*	*-2.3*		*0.508*
Very satisfied at job (%)	*45.1*	*42.9*	*2.2*		*0.600*
Very likely to be working in the same field in two years (%) [d]	*60.3*	*58.7*	*1.6*		*0.714*
Very likely to be promoted in the next year (%) [d]	*41.8*	*44.5*	*-2.8*		*0.540*
Job is/was directly related to high school studies (%)	*38.3*	*28.2*	*10.1*	**	*0.011*
Choice of field was influenced by high school experiences (%)	*44.8*	*33.8*	*11.0*	***	*0.008*
Sample size (N = 571)	*317*	*254*			

(continued)

Exhibit 4.3 - YM (continued)

SOURCE: MDRC calculations from the Career Academies Evaluation Eight-Year Post-High School Follow-Up Survey.

NOTES: All measures reflect the job held by the survey respondent at the time of the eight-year post-high school interview or, if the respondent was unemployed at the time of the interview, the job held most recently in the four years prior to the interview. Measures are italicized because the sample includes only those survey respondents who were employed at any time during the fifth through eighth year following their scheduled graduation from high school and thus do not represent an experimental comparison of Academy and non-Academy students.

A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; and * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

[a]Occupational sectors are based on the U.S. Department of Labor's 2000 Standard Occupational Classification (SOC) system. Jobs are coded from respondents' reports of the industry they worked in and the major tasks they performed at the job.

[b]Respondents reported hourly wages, hours worked per week, and weeks worked per month for both the start and the end of the job. Average monthly earnings over the course of the job are calculated assuming that all three components increase or decrease linearly from start to end.

[c]Other benefits include sick leave, paid vacation days, tuition reimbursement, a retirement or pension plan, and stock options or signing bonuses.

[d]The likelihood of working in the same field in two years and of being promoted in the next year were only asked of those who were employed at the time of the interview (N = 518).

Career Academies Evaluation

Exhibit 4.4 - YM

Impacts on Educational Attainment Eight Years After Scheduled High School Graduation for Young Men

Outcome	Academy Group	Non-Academy Group	Impact	P-Value	Percentage Change
High school completion status (%)					
Earned high school diploma	81.1	81.5	-0.5	0.871	-0.6
On-time graduate[a]	73.3	70.2	3.1	0.385	4.4
Late graduate	7.8	11.3	-3.6	0.148	-31.5
Earned a GED	15.2	11.6	3.7	0.182	31.6
Postsecondary educational attainment (%)					
Completed any postsecondary credential	48.4	49.6	-1.1	0.784	-2.3
Highest credential completed					
Bachelor's or graduate degree	14.0	16.2	-2.2	0.455	-13.6
Associate's degree	12.7	13.7	-0.9	0.743	-6.9
Skills training certificate or license	21.7	19.7	2.0	0.560	10.1
Postsecondary education enrollment					
Months enrolled in postsecondary education[b]					
Years 1-4	20.4	21.2	-0.8	0.575	-3.7
Years 5-8	10.2	10.0	0.2	0.866	2.0
Currently enrolled in any postsecondary program (%)[c]	18.1	15.3	2.8	0.372	18.4
Currently working toward highest postsecondary credential (%)[d]	13.4	12.6	0.7	0.798	5.7
Bachelor's or graduate degree	7.5	5.1	2.4	0.245	47.5
Associate's degree	4.3	4.2	0.2	0.922	3.9
Skills training certificate or license	1.6	3.4	-1.8	0.157	-54.2
Sample size (N = 587)	322	265			

SOURCES: MDRC calculations from the Career Academies Evaluation Four-Year and Eight-Year Post-High School Follow-Up Surveys.

NOTES: High school completion, postsecondary educational attainment, and current postsecondary enrollment reflect respondents' status as of the interview date eight years following their scheduled high school graduation.

Impact estimates are regression-adjusted to control for background characteristics of the sample and for the clustering of students within schools and random assignment years. Values shown for the Academy group are unadjusted mean values; values shown for the non-Academy group are calculated by subtracting the impact estimate from the Academy group's unadjusted mean values. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; and * = 10 percent.

"Percentage change" is the impact divided by the non-Academy group average.

Rounding may cause slight discrepancies in calculating sums and differences.

[a]Respondents are considered on-time graduates if they graduated in June or earlier of the year in which they were scheduled to graduate high school.

(continued)

Exhibit 4.4 - YM (continued)

[b]The measure of months enrolled in postsecondary education during the first through fourth year following scheduled high school graduation is derived from the Four-Year Post-High School Follow-Up Survey sample of young men (N = 604). The measure of months enrolled in postsecondary education during the fifth through eighth year following scheduled high school graduation is derived from the Eight-Year Post-High School Follow-Up Survey sample of young men (N = 587).

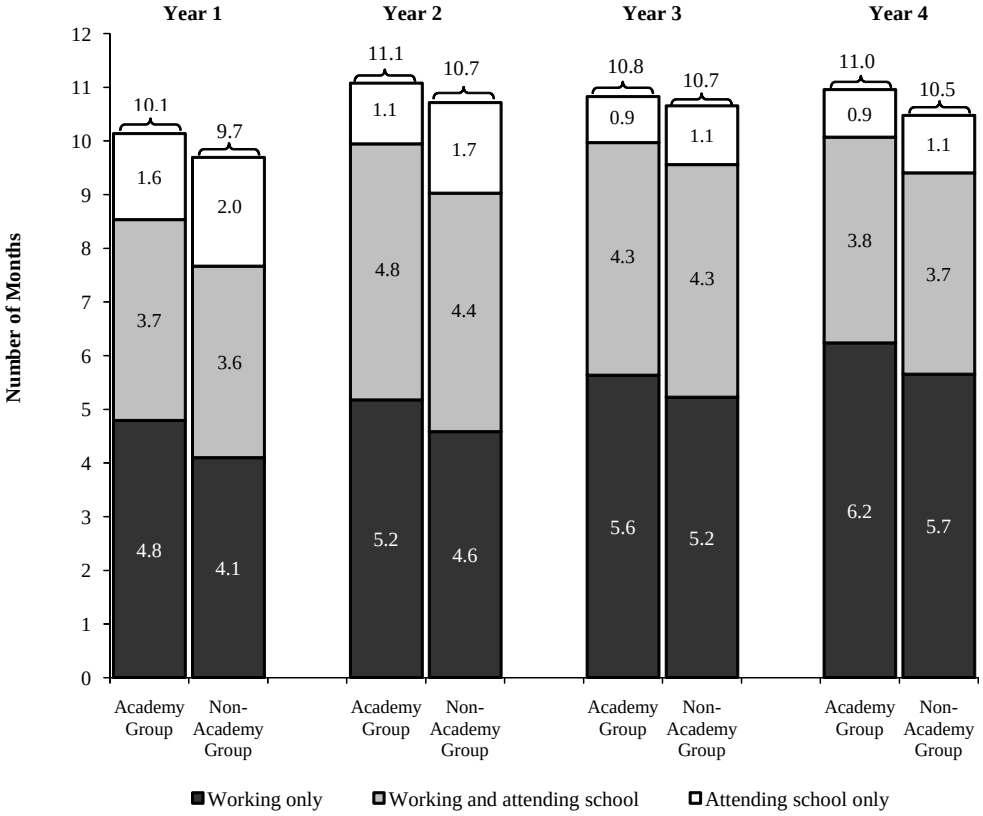
[c]Respondents are considered to be "currently enrolled" in a postsecondary education program if they reported that they were still attending the program and that they expected to complete the program.

[d]Respondents are considered to be working toward their highest postsecondary credential if they are currently enrolled in a program from which they expect to receive either their first postsecondary credential or a credential that is higher than any credential they have already earned (for example, if they have completed an associate's degree and are enrolled in a program that will award a bachelor's degree).

Career Academies Evaluation

Exhibit 4.5.A - YM

Year-by-Year Impacts on Months Spent Attending School or Working During Follow-Up Years 1 to 4 for Young Men



SOURCE: MDRC calculations from the Career Academies Evaluation Four-Year Post-High School Follow-Up Survey.

NOTES: Measures reflect the average number of months spent in each status during each of the first four years following scheduled high school graduation.

Impact estimates are regression-adjusted to control for background characteristics of the sample and for the clustering of students within schools and random assignment years. Values shown for the Academy group are unadjusted mean values; values shown for the non-Academy group are calculated by subtracting the impact estimate from the Academy group's unadjusted mean values.

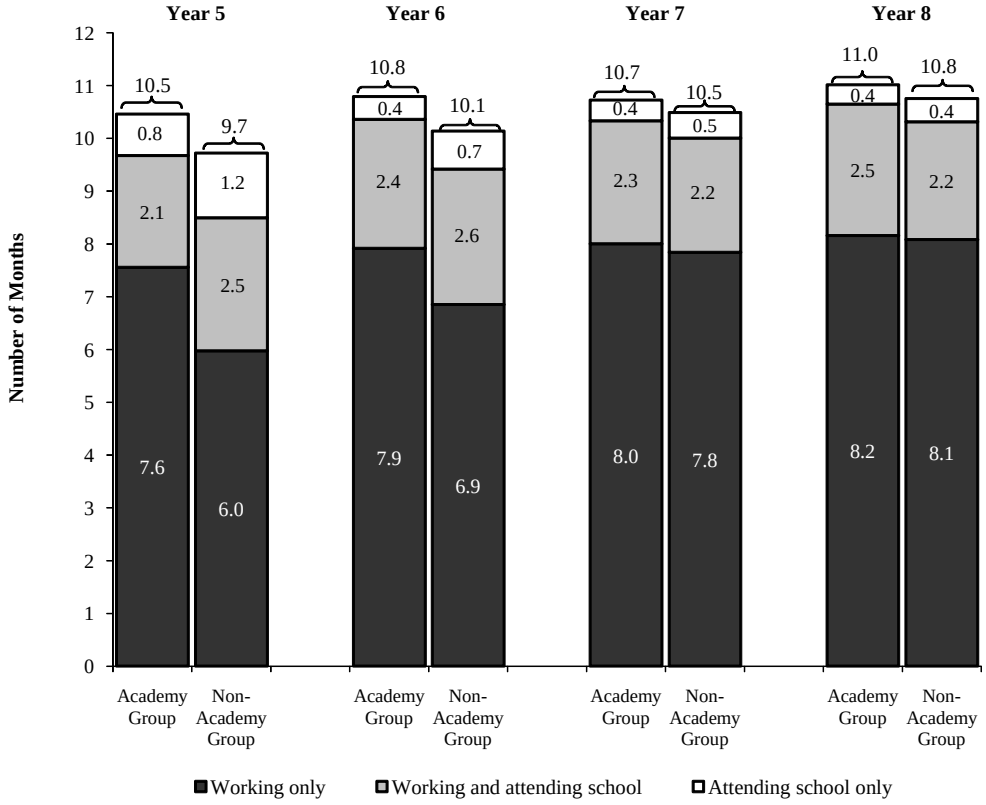
Rounding may cause slight discrepancies in calculating sums and differences.

A two-tailed t-test was applied to differences between the Academy and non-Academy groups in the cumulative number of months spent in each status across all four years. The differences in the number of months spent working only (2.3 months), the number of months spent attending school only (-1.4 months), and the total number of months spent working and/or attending school (1.5 months) are significant at the 10 percent level or lower.

Career Academies Evaluation

Exhibit 4.5.B - YM

Year-by-Year Impacts on Months Spent Attending School or Working During Follow-Up Years 5 to 8 for Young Men



SOURCE: MDRC calculations from the Career Academies Evaluation Eight-Year Post-High School Follow-Up Survey.

NOTES: Measures reflect the average number of months spent in each status during the fifth through eighth year following scheduled high school graduation.

Impact estimates are regression-adjusted to control for background characteristics of the sample and for the clustering of students within schools and random assignment years. Values shown for the Academy group are unadjusted mean values; values shown for the non-Academy group are calculated by subtracting the impact estimate from the Academy group's unadjusted mean values.

Rounding may cause slight discrepancies in calculating sums and differences.

A two-tailed t-test was applied to differences between the Academy and non-Academy groups in the cumulative number of months spent in each status across all four years. The differences in the number of months spent working only (2.9 months), the number of months spent attending school only (-0.9 month), and the total number of months spent working and/or attending school (1.9 months) are significant at the 10 percent level or lower.

Career Academies Evaluation

Exhibit 4.6 - YM

Impacts on Family Formation and Other Social Adjustment Outcomes Eight Years After Scheduled High School Graduation for Young Men

Outcome (%)	Academy Group	Non-Academy Group	Impact	P-Value	Percentage Change
Marital status					
Married and living together	36.0	27.0	9.0 **	0.020	33.4
Single	59.3	65.6	-6.3	0.114	-9.6
Divorced, separated, or widowed	4.7	7.4	-2.7	0.157	-36.8
Parental status					
Custodial parent	36.6	25.2	11.5 ***	0.003	45.6
Noncustodial parent	11.5	17.9	-6.4 **	0.023	-35.9
Not a parent	51.9	56.6	-4.7	0.242	-8.3
Living situation					
Lives independently with child/children and partner	30.2	23.2	7.0 *	0.058	30.4
Lives independently with no children	35.8	45.7	-9.9 **	0.015	-21.6
Lives independently with child/children but not partner	2.8	1.9	0.9	0.476	44.6
Lives with parent(s) or guardian(s), with or without children	31.2	29.2	2.0	0.609	6.7
Ever gone without health insurance in past year	35.8	37.7	-1.9	0.646	-5.0
Received TANF or cash assistance in past year	3.5	1.5	1.9	0.160	125.0
Received food stamps in past year	6.0	4.1	1.9	0.321	45.2
Registered to vote	66.8	71.5	-4.7	0.215	-6.6
Any recent illegal or drug-related activity[a]	17.4	19.1	-1.7	0.596	-8.8
Any recent illegal activity, excluding drug use	9.0	10.9	-1.9	0.453	-17.2
Sample size (N = 586)	322	264			

SOURCE: MDRC calculations from the Career Academies Evaluation Eight-Year Post-High School Follow-Up Survey.

NOTES: Impact estimates are regression-adjusted to control for background characteristics of the sample and for the clustering of students within schools and random assignment years. Values shown for the Academy group are unadjusted mean values; values shown for the non-Academy group are calculated by subtracting the impact estimate from the Academy group's unadjusted mean values. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; and * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

[a]This measure includes illegal drug use, breaking the law (other than traffic violations), and any arrests or convictions in the past year.

Career Academies Evaluation

Exhibit 4.7 - YM

Impacts on High School Experiences for Young Men

Outcome	Academy Group	Non-Academy Group	Impact	P-Value	Percentage Change
Ever enrolled in a Career Academy during high school (%)	90.3	3.1	87.2 ***	0.000	---
Was enrolled in a Career Academy at the end of scheduled grade 12 (%)	58.3	0.8	57.4 ***	0.000	---
Average attendance, grades 9-12 (% of school days)	89.1	88.6	0.5	0.656	0.6
Credits earned					
Total course credits	22.1	21.5	0.5	0.228	2.5
Total course credits meet the graduation requirement (%)	62.1	55.3	6.8	0.107	12.3
Course-taking (%)[a]					
Basic core curriculum: English (4), Social Studies (3), Math (2), Science (2)	61.1	61.1	0.1	0.986	0.1
College prep core curriculum: English (4), Social Studies (3), Math (3), Science (3)	37.1	38.3	-1.2	0.781	-3.2
Earned 3 or more career/vocational credits	71.1	43.2	27.9 ***	0.000	64.6
Basic core curriculum plus 3 career/vocational credits	43.7	21.4	22.3 ***	0.000	104.0
Career awareness and development activities (%)					
In school[b]					
Ever participated	81.5	76.6	4.9	0.208	6.4
Participated intensively	47.1	37.0	10.1 **	0.030	27.2
Outside of school[c]					
Ever participated	70.1	37.6	32.5 ***	0.000	86.4
Participated intensively	38.8	8.8	30.1 ***	0.000	342.3
Employment and work-based learning (%)					
Ever employed during high school (%)	80.6	79.5	1.1	0.772	1.4
Ever employed in a paid job during high school (%)	77.3	77.5	-0.1	0.973	-0.2
Ever had a job connected to school[d]	30.2	22.8	7.4 *	0.075	32.3
Ever had a job with high work-based learning content[e]	18.7	10.5	8.2 **	0.016	78.7
Sample size (N = 486)	278	208			

(continued)

Exhibit 4.7 - YM (continued)

SOURCES: MDRC calculations from the Career Academies Evaluation Student School Records Database and 12th Grade Survey.

NOTES: All measures are derived from the sample of Eight-Year Post-High School Follow-Up Survey respondents who are also in the Student School Records Database and the 12th Grade Survey sample.

Measures of attendance rate and credits earned include zero values for grades in which sample members were identified as school dropouts. The measures of credits earned and course-taking include all credits earned through the end of the twelfth-grade year (that is, the year that students were projected to reach the twelfth grade when they initially entered the study sample).

Impact estimates are regression-adjusted to control for background characteristics of the sample and for the clustering of students within schools and random assignment years. Values shown for the Academy group are unadjusted mean values; values shown for the non-Academy group are calculated by subtracting the impact estimate from the Academy group's unadjusted mean values. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; and * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

[a]One of the nine study sites was unable to provide data on the specific courses students completed during high school. Thus, course-taking measures are derived from a sample of eight sites with a total of 411 young men. The measure of earning three or more career/vocational credits is derived from a sample of 372 young men.

[b]In-school career awareness and development activities include learning about jobs in class or through in-school activities, receiving instruction or counseling on how to find a job or how to act on the job, and having discussions with students and adults about careers and work. Respondents are considered to have participated intensively in in-school career awareness and development activities if they reported participating in at least three of these activities per month.

[c]Outside-of-school career awareness and development activities include career-related field trips, job shadowing, and mentoring programs. Respondents are considered to have participated intensively in outside-of-school career awareness and development activities if they reported participating in two or more of these activities.

[d]Jobs that are "connected to school" are sponsored or supported by the school (they may also be called "work-based learning experiences"). These include jobs that a teacher helped the student find, that are part of a school program or class or for which the student receives course credit, and in which a supervisor at work and an adult from the school communicate about the student's progress.

[e]To assess the level of "work-based learning content" in students' jobs, respondents were asked to rate their jobs on a series of characteristics, including how often they were asked to read, write, and use the computer on the job; how much advice they received on the job; whether they felt bored on the job; whether they learned new things on the job; and whether the job influenced their career choice. For a complete list of the survey items composing this measure and for a description of how the cutpoint for "high work-based learning content" was set, see Kemple, Poglinco, and Snipes, *Career Academies: Building Career Awareness and Work-Based Learning Activities Through Employer Partnerships* (New York: MDRC, 1999).

Career Academies Evaluation

Exhibit 4.1.A - YW

Year-by-Year Impacts on Employment and Earnings During Follow-Up Years 1 to 4 for Young Women

Outcome	Academy Group	Non-Academy Group	Impact	P-Value	Percentage Change
Years 1-4					
Ever employed (%)	97.9	97.6	0.3	0.806	0.3
Ever employed full time (%)[a]	94.0	92.5	1.6	0.369	1.7
Months employed	35.0	34.7	0.3	0.746	0.8
Months employed full time	27.2	26.5	0.7	0.512	2.6
Average monthly earnings ($)	1,153.39	1,100.25	53.14	0.267	4.8
Average hours worked per week	27.1	26.6	0.5	0.600	1.8
Average hourly wage ($)	10.20	9.87	0.33	0.147	3.3
Total number of jobs held	3.0	3.0	0.0	0.968	0.1
Average job duration, in months	15.5	15.6	-0.1	0.899	-0.6
Year 1					
Ever employed (%)	82.5	81.2	1.2	0.641	1.5
Ever employed full time (%)	63.7	63.7	-0.1	0.987	-0.1
Months employed	7.6	7.4	0.1	0.651	2.0
Months employed full time	5.2	5.4	-0.1	0.691	-2.6
Average monthly earnings ($)	828.40	815.16	13.25	0.796	1.6
Average hours worked per week	22.1	21.8	0.3	0.775	1.5
Average hourly wage ($)	7.67	7.33	0.33	0.280	4.5
Year 2					
Ever employed (%)	88.2	90.4	-2.2	0.305	-2.4
Ever employed full time (%)	74.1	75.0	-0.8	0.788	-1.1
Months employed	8.7	8.9	-0.2	0.536	-2.1
Months employed full time	6.5	6.5	0.0	0.984	0.1
Average monthly earnings ($)	1,106.19	1,064.90	41.29	0.478	3.9
Average hours worked per week	27.1	27.0	0.1	0.952	0.3
Average hourly wage ($)	8.80	8.82	-0.02	0.950	-0.2
Year 3					
Ever employed (%)	90.8	89.2	1.6	0.423	1.8
Ever employed full time (%)	80.1	79.2	0.9	0.737	1.2
Months employed	9.2	9.0	0.2	0.499	2.2
Months employed full time	7.6	7.0	0.5	0.109	7.8
Average monthly earnings ($)	1,280.39	1,195.96	84.43	0.169	7.1
Average hours worked per week	29.3	28.4	0.9	0.440	3.1
Average hourly wage ($)	9.77	9.29	0.48	0.131	5.2

(continued)

Exhibit 4.1.A - YW (continued)

Outcome	Academy Group	Non-Academy Group	Impact	P-Value	Percentage Change
Year 4					
Ever employed (%)	90.4	90.6	-0.2	0.905	-0.3
Ever employed full time (%)	81.0	78.1	2.9	0.296	3.7
Months employed	9.5	9.4	0.1	0.633	1.4
Months employed full time	7.8	7.5	0.3	0.409	3.8
Average monthly earnings ($)	1,398.58	1,325.00	73.59	0.232	5.6
Average hours worked per week	29.9	29.3	0.6	0.596	2.0
Average hourly wage ($)	10.38	10.00	0.38	0.269	3.8
Sample size (N = 854)	468	386			

SOURCE: MDRC calculations from the Career Academies Evaluation Four-Year Post-High School Follow-Up Survey.

NOTES: All measures reflect the first four years following scheduled high school graduation for each sample member. All earnings and wages are adjusted for inflation and reported in 2006 dollars.

Impact estimates are regression-adjusted to control for background characteristics of the sample and for the clustering of students within schools and random assignment years. Values shown for the Academy group are unadjusted mean values; values shown for the non-Academy group are calculated by subtracting the impact estimate from the Academy group's unadjusted mean values. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; and * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

"Percentage change" is the impact divided by the non-Academy group average.

Earnings are calculated from respondents' reports of their hourly wages, hours worked per week, weeks worked per month, and duration of employment (measured in months) at each job. For any given period of time, "average monthly earnings" are calculated as the total estimated earnings from all jobs held during the time period divided by the total number of months in that period; "hours worked per week" are calculated as the total number of hours worked at all jobs in the time period divided by the total number of weeks in that period (assuming four weeks per month); and the "average hourly wage" is calculated as the total estimated earnings from all jobs held in the time period divided by the total number of hours worked during that period. Estimates of earnings, hours, and wages include zero values for months in which respondents were not employed.

For all jobs except the current or most recent job held as of the interview date, respondents reported wages, hours, and weeks for the *conclusion* of the job and these values are applied to the full duration of the job. Thus, if wages or hours increased or decreased during the job, these measures may over- or underestimate true monthly earnings. For the current or most recent job, respondents reported wages, hours, and weeks for both the start and the end of the job. Monthly earnings over the course of the job are calculated assuming that all three components increase or decrease linearly from start to end.

[a]Students were considered to be employed full time if they reported working 30 or more hours per week.

Career Academies Evaluation

Exhibit 4.1.B - YW

Year-by-Year Impacts on Employment and Earnings During Follow-Up Years 5 to 8 for Young Women

Outcome	Academy Group	Non-Academy Group	Impact	P-Value	Percentage Change
Years 5-8					
Ever employed (%)	96.2	97.7	-1.5	0.229	-1.5
Ever employed full time (%)[a]	92.4	92.3	0.1	0.944	0.1
Months employed	36.7	37.0	-0.3	0.738	-0.9
Months employed full time	32.4	31.5	0.9	0.449	2.8
Average monthly earnings ($)	1,794.75	1,676.69	118.07	0.142	7.0
Average hours worked per week	30.3	30.0	0.2	0.807	0.8
Average hourly wage ($)	13.89	13.24	0.65	0.142	4.9
Total number of jobs held	1.9	2.1	-0.1 *	0.063	-7.2
Average job duration, in months	24.5	23.4	1.1	0.306	4.8
Year 5					
Ever employed (%)	81.6	83.5	-1.9	0.481	-2.3
Ever employed full time (%)	69.3	70.3	-0.9	0.775	-1.3
Months employed	8.5	8.6	-0.1	0.797	-1.0
Months employed full time	6.9	7.1	-0.2	0.589	-2.9
Average monthly earnings ($)	1,498.72	1,446.30	52.41	0.550	3.6
Average hours worked per week	26.7	27.5	-0.8	0.530	-3.0
Average hourly wage ($)	11.30	10.80	0.50	0.337	4.6
Year 6					
Ever employed (%)	85.6	84.2	1.3	0.595	1.6
Ever employed full time (%)	76.7	73.6	3.1	0.304	4.2
Months employed	9.2	9.2	0.0	0.974	0.1
Months employed full time	8.0	7.7	0.4	0.300	5.0
Average monthly earnings ($)	1,751.77	1,606.53	145.24	0.107	9.0
Average hours worked per week	30.3	29.6	0.6	0.600	2.2
Average hourly wage ($)	12.35	11.67	0.69	0.308	5.9
Year 7					
Ever employed (%)	87.6	88.7	-1.1	0.622	-1.3
Ever employed full time (%)	82.0	79.6	2.4	0.381	3.0
Months employed	9.4	9.4	0.0	0.957	-0.2
Months employed full time	8.6	8.1	0.5	0.121	6.6
Average monthly earnings ($)	1,913.41	1,746.90	166.51 *	0.085	9.5
Average hours worked per week	31.9	30.4	1.5	0.198	5.0
Average hourly wage ($)	13.01	12.73	0.28	0.675	2.2

(continued)

Exhibit 4.1.B - YW (continued)

Outcome	Academy Group	Non-Academy Group	Impact	P-Value	Percentage Change
Year 8					
Ever employed (%)	86.9	90.3	-3.4	0.126	-3.8
Ever employed full time (%)	82.4	83.4	-0.9	0.733	-1.1
Months employed	9.5	9.8	-0.2	0.415	-2.5
Months employed full time	8.8	8.7	0.2	0.595	2.1
Average monthly earnings ($)	2,015.12	1,907.01	108.11	0.278	5.7
Average hours worked per week	32.1	32.5	-0.4	0.746	-1.2
Average hourly wage ($)	13.36	12.86	0.50	0.361	3.9
Total annual earnings ($)	24,181.38	22,884.10	1,297.28	0.278	5.7
Last Quarter					
Ever employed (%)	80.9	84.1	-3.3	0.227	-3.9
Ever employed full time (%)	75.6	76.5	-0.9	0.765	-1.2
Months employed	2.4	2.4	-0.1	0.415	-2.8
Months employed full time	2.2	2.2	0.0	0.951	0.3
Average monthly earnings ($)	2,028.98	1,949.03	79.94	0.453	4.1
Average hours worked per week	31.8	32.8	-1.1	0.401	-3.3
Average hourly wage ($)	12.88	12.23	0.65	0.301	5.3
Sample size (N = 825)	450	375			

SOURCE: MDRC calculations from the Career Academies Evaluation Eight-Year Post-High School Follow-Up Survey.

NOTES: All measures reflect the fifth through eighth years following scheduled high school graduation for each sample member. All earnings and wages are adjusted for inflation and reported in 2006 dollars.

Impact estimates are regression-adjusted to control for background characteristics of the sample and for the clustering of students within schools and random assignment years. Values shown for the Academy group are unadjusted mean values; values shown for the non-Academy group are calculated by subtracting the impact estimate from the Academy group's unadjusted mean values. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; and * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

"Percentage change" is the impact divided by the non-Academy group average.

Earnings are calculated from respondents' reports of their hourly wages, hours worked per week, weeks worked per month, and duration of employment (measured in months) at each job. For any given period of time, "average monthly earnings" are calculated as the total estimated earnings from all jobs held during the time period divided by the total number of months in that period; "hours worked per week" are calculated as the total number of hours worked at all jobs in the time period divided by the total number of weeks in that period (assuming four weeks per month); and the "average hourly wage" is calculated as the total estimated earnings from all jobs held in the time period divided by the total number of hours worked during that period. Estimates of earnings, hours, and wages include zero values for months in which respondents were not employed.

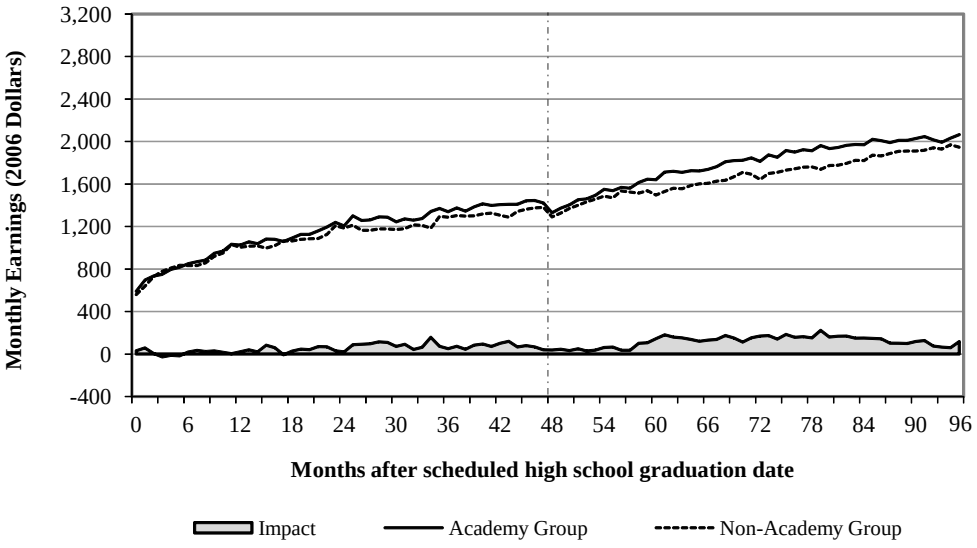
For all jobs except the current or most recent job held as of the interview date, respondents reported wages, hours, and weeks for the *conclusion* of the job and these values are applied to the full duration of the job. Thus, if wages or hours increased or decreased during the job, these measures may over- or underestimate true monthly earnings. For the current or most recent job, respondents reported wages, hours, and weeks for both the start and the end of the job. Monthly earnings over the course of the job are calculated assuming that all three components increase or decrease linearly from start to end.

[a]Students were considered to be employed full time if they reported working 30 or more hours per week.

Career Academies Evaluation

Exhibit 4.2 - YW

Month-by-Month Impacts on Total Monthly Earnings for Young Women



SOURCES: MDRC calculations from the Career Academies Evaluation Four-Year and Eight-Year Post-High School Follow-Up Surveys.

NOTES: Earnings are reported in 2006 dollars.

Measures reflect the 96-month period following scheduled high school graduation for each sample member (Month 0 is June of the scheduled graduation year). Measures for Months 1 to 48 are derived from the Four-Year Post-High School Follow-Up Survey sample of young women (N = 854). Measures for Months 49 to 96 are derived from the Eight-Year Post-High School Follow-Up Survey sample of young women (N = 841). The vertical dotted line at Month 48 illustrates the cutpoint between the Four-Year and Eight-Year Post-High School Follow-Up Survey samples.

Impact estimates are regression-adjusted to control for background characteristics of the sample and for the clustering of students within schools and random assignment years. Values shown for the Academy group are unadjusted mean values; values shown for the non-Academy group are calculated by subtracting the impact estimate from the Academy group's unadjusted mean values. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Differences in monthly earnings are significant at a level of 10 percent or less in 6 of the 96 months.

Career Academies Evaluation

Exhibit 4.3 - YW

Differences in Characteristics of the Current or Most Recent Job Held Eight Years After Scheduled High School Graduation for Young Women

Outcome	Academy Group	Non-Academy Group	Difference		P-Value
Job duration (months)	*26.0*	*24.0*	*1.9*		*0.141*
Month last worked at job (relative to high school graduation)	*94.4*	*95.0*	*-0.5*		*0.358*
Employed at job in the last quarter of Year 8 (%)	*85.9*	*87.5*	*-1.6*		*0.508*
Occupational sector (%) [a]					
Management/business & financial operations	*19.2*	*15.1*	*4.1*		*0.131*
Computer, engineering, & media technology	*3.2*	*1.9*	*1.3*		*0.251*
Education, social services, law, & science	*10.4*	*13.5*	*-3.1*		*0.180*
Healthcare/medical support & technology	*12.7*	*15.9*	*-3.2*		*0.200*
Sales, food, & personal services	*12.5*	*13.7*	*-1.2*		*0.621*
Office and administrative support	*33.5*	*32.8*	*0.6*		*0.849*
Construction, production, maintenance, transportation	*3.9*	*4.3*	*-0.4*		*0.781*
Other/unknown	*4.4*	*2.7*	*1.7*		*0.191*
Average monthly earnings ($) [b]	*2,224.35*	*2,083.98*	*140.36*	*	*0.061*
At start of job	*2,029.11*	*1,917.96*	*111.15*		*0.118*
At end of job	*2,420.55*	*2,253.81*	*166.74*	*	*0.060*
Difference	*391.45*	*335.86*	*55.59*		*0.358*
Average hours per week	*37.9*	*37.3*	*0.6*		*0.356*
At start of job	*37.2*	*36.5*	*0.7*		*0.300*
At end of job	*38.9*	*38.5*	*0.3*		*0.591*
Difference	*1.7*	*2.0*	*-0.4*		*0.446*
Average hourly wage ($)	*14.67*	*13.73*	*0.94*	**	*0.045*
At start of job	*13.81*	*13.05*	*0.76*		*0.105*
At end of job	*15.53*	*14.41*	*1.12*	**	*0.038*
Difference	*1.71*	*1.36*	*0.36*		*0.344*
Job offers a health plan (%)	*75.8*	*76.4*	*-0.6*		*0.836*
Job offers any other benefits (%) [c]	*83.3*	*83.4*	*-0.1*		*0.980*
Very satisfied at job (%)	*43.2*	*41.0*	*2.1*		*0.546*
Very likely to be working in the same field in two years (%) [d]	*59.7*	*53.7*	*6.0*		*0.124*
Very likely to be promoted in the next year (%) [d]	*38.2*	*37.1*	*1.1*		*0.782*
Job is/was directly related to high school studies (%)	*38.7*	*31.1*	*7.7*	**	*0.025*
Choice of field was influenced by high school experiences (%)	*47.4*	*36.4*	*11.1*	***	*0.002*
Sample size (N = 795)	*433*	*362*			

(continued)

Exhibit 4.3 - YW (continued)

SOURCE: MDRC calculations from the Career Academies Evaluation Eight-Year Post-High School Follow-Up Survey.

NOTES: All measures reflect the job held by the survey respondent at the time of the eight-year post-high school interview or, if the respondent was unemployed at the time of the interview, the job held most recently in the four years prior to the interview. Measures are italicized because the sample includes only those survey respondents who were employed at any time during the fifth through eighth year following their scheduled graduation from high school and thus do not represent an experimental comparison of Academy and non-Academy students.

A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; and * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

[a]Occupational sectors are based on the U.S. Department of Labor's 2000 Standard Occupational Classification (SOC) system. Jobs are coded from respondents' reports of the industry they worked in and the major tasks they performed at the job.

[b]Respondents reported hourly wages, hours worked per week, and weeks worked per month for both the start and the end of the job. Average monthly earnings over the course of the job are calculated assuming that all three components increase or decrease linearly from start to end.

[c]Other benefits include sick leave, paid vacation days, tuition reimbursement, a retirement or pension plan, and stock options or signing bonuses.

[d]The likelihood of working in the same field in two years and of being promoted in the next year were only asked of those who were employed at the time of the interview (N = 662).

Career Academies Evaluation

Exhibit 4.4 - YW

Impacts on Educational Attainment Eight Years After Scheduled High School Graduation for Young Women

Outcome	Academy Group	Non-Academy Group	Impact	P-Value	Percentage Change
High school completion status (%)					
Earned high school diploma	85.6	85.4	0.2	0.936	0.2
On-time graduate[a]	75.8	76.1	-0.3	0.899	-0.5
Late graduate	9.8	9.3	0.5	0.793	5.7
Earned a GED	9.8	8.5	1.4	0.462	16.3
Postsecondary educational attainment (%)					
Completed any postsecondary credential	50.7	50.4	0.3	0.937	0.5
Highest credential completed					
Bachelor's or graduate degree	17.2	18.8	-1.6	0.540	-8.5
Associate's degree	12.0	10.2	1.8	0.414	17.7
Skills training certificate or license	21.4	21.3	0.1	0.982	0.3
Postsecondary education enrollment					
Months enrolled in postsecondary education[b]					
Years 1-4	21.4	21.1	0.3	0.800	1.4
Years 5-8	11.1	11.8	-0.7	0.475	-6.2
Currently enrolled in any postsecondary program (%)[c]	20.7	21.3	-0.6	0.829	-2.9
Currently working toward highest postsecondary credential (%)[d]	16.4	16.9	-0.5	0.835	-3.2
Bachelor's or graduate degree	8.5	9.7	-1.2	0.556	-12.1
Associate's degree	6.6	6.2	0.4	0.818	6.4
Skills training certificate or license	1.3	1.1	0.2	0.764	22.4
Sample size (N = 841)	460	381			

SOURCES: MDRC calculations from the Career Academies Evaluation Four-Year and Eight-Year Post-High School Follow-Up Surveys.

NOTES: High school completion, postsecondary educational attainment, and current postsecondary enrollment reflect respondents' status as of the interview date eight years following their scheduled high school graduation.

Impact estimates are regression-adjusted to control for background characteristics of the sample and for the clustering of students within schools and random assignment years. Values shown for the Academy group are unadjusted mean values; values shown for the non-Academy group are calculated by subtracting the impact estimate from the Academy group's unadjusted mean values. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; and * = 10 percent.

"Percentage change" is the impact divided by the non-Academy group average.

Rounding may cause slight discrepancies in calculating sums and differences.

[a]Respondents are considered on-time graduates if they graduated in June or earlier of the year in which they were scheduled to graduate high school.

(continued)

Exhibit 4.4 - YW (continued)

[b]The measure of months enrolled in postsecondary education during the first through fourth year following scheduled high school graduation is derived from the Four-Year Post-High School Follow-Up Survey sample of young women (N = 854). The measure of months enrolled in postsecondary education during the fifth through eighth year following scheduled high school graduation is derived from the Eight-Year Post-High School Follow-Up Survey sample of young women (N = 841).

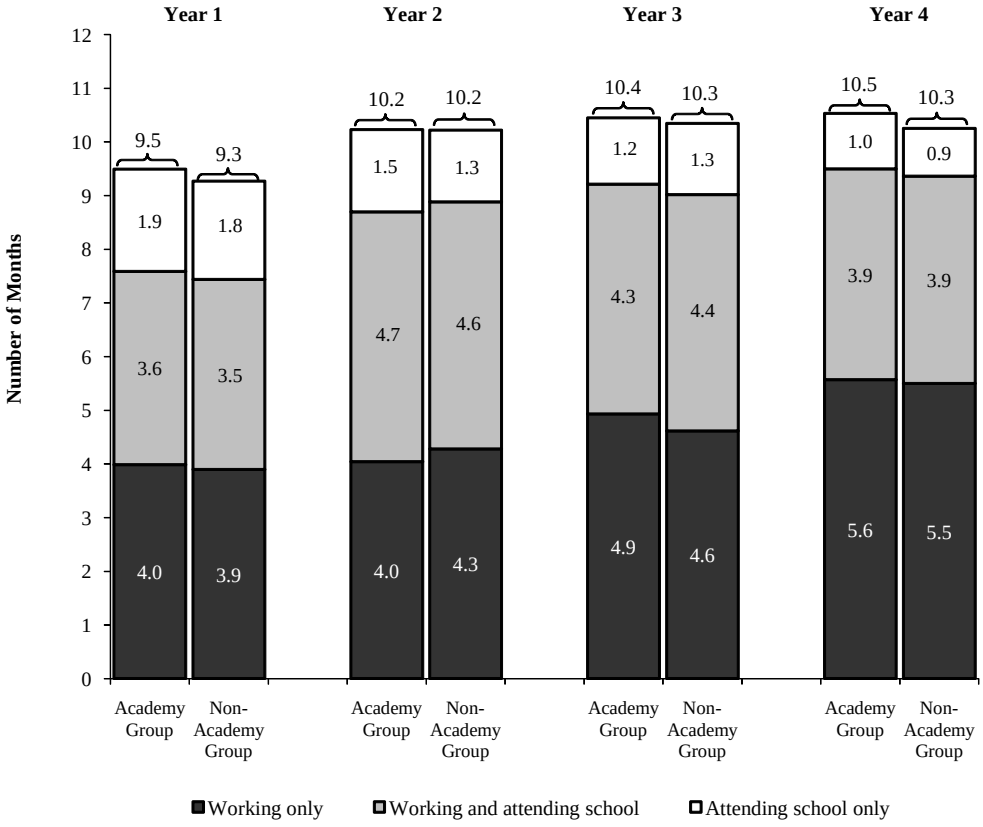
[c]Respondents are considered to be "currently enrolled" in a postsecondary education program if they reported that they were still attending the program and that they expected to complete the program.

[d]Respondents are considered to be working toward their highest postsecondary credential if they are currently enrolled in a program from which they expect to receive either their first postsecondary credential or a credential that is higher than any credential they have already earned (for example, if they have completed an associate's degree and are enrolled in a program that will award a bachelor's degree).

Career Academies Evaluation

Exhibit 4.5.A - YW

Year-by-Year Impacts on Months Spent Attending School or Working During Follow-Up Years 1 to 4 for Young Women



SOURCE: MDRC calculations from the Career Academies Evaluation Four-Year Post-High School Follow-Up Survey.

NOTES: Measures reflect the average number of months spent in each status during each of the first four years following scheduled high school graduation.

Impact estimates are regression-adjusted to control for background characteristics of the sample and for the clustering of students within schools and random assignment years. Values shown for the Academy group are unadjusted mean values; values shown for the non-Academy group are calculated by subtracting the impact estimate from the Academy group's unadjusted mean values.

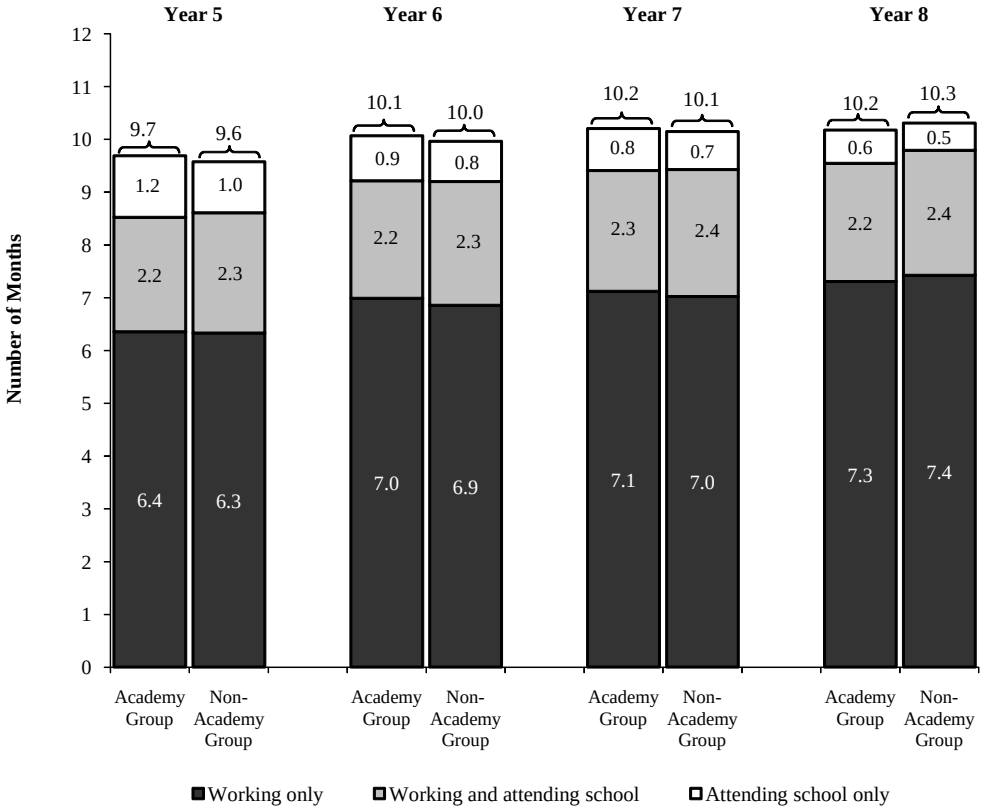
Rounding may cause slight discrepancies in calculating sums and differences.

A two-tailed t-test was applied to differences between the Academy and non-Academy groups in the cumulative number of months spent in each status across all four years. None of these differences is significant at the 10 percent level or lower.

Career Academies Evaluation

Exhibit 4.5.B - YW

Year-by-Year Impacts on Months Spent Attending School or Working During Follow-Up Years 5 to 8 for Young Women



SOURCE: MDRC calculations from the Career Academies Evaluation Eight-Year Post-High School Follow-Up Survey.

NOTES: Measures reflect the average number of months spent in each status during the fifth through eighth year following scheduled high school graduation.

Impact estimates are regression-adjusted to control for background characteristics of the sample and for the clustering of students within schools and random assignment years. Values shown for the Academy group are unadjusted mean values; values shown for the non-Academy group are calculated by subtracting the impact estimate from the Academy group's unadjusted mean values.

Rounding may cause slight discrepancies in calculating sums and differences.

A two-tailed t-test was applied to differences between the Academy and non-Academy groups in the cumulative number of months spent in each status across all four years. None of these differences is significant at the 10 percent level or lower.

Career Academies Evaluation

Exhibit 4.6 - YW

Impacts on Family Formation and Other Social Adjustment Outcomes Eight Years After Scheduled High School Graduation for Young Women

Outcome (%)	Academy Group	Non-Academy Group	Impact	P-Value	Percentage Change
Marital status					
Married and living together	39.4	38.0	1.5	0.655	3.9
Single	52.9	56.5	-3.5	0.284	-6.2
Divorced, separated, or widowed	7.6	5.6	2.1	0.250	36.9
Parental status					
Custodial parent	60.8	57.1	3.7	0.279	6.5
Noncustodial parent	0.7	0.4	0.2	0.681	51.3
Not a parent	38.3	42.4	-4.0	0.238	-9.5
Living situation					
Lives independently with child/children and partner	35.1	29.0	6.0 *	0.064	20.8
Lives independently with no children	25.9	23.3	2.6	0.387	11.3
Lives independently with child/children but not partner	15.3	15.1	0.1	0.956	0.9
Lives with parent(s) or guardian(s), with or without children	23.7	32.5	-8.8 ***	0.005	-27.0
Ever gone without health insurance in past year	24.5	27.3	-2.8	0.355	-10.4
Received TANF or cash assistance in past year	9.2	10.1	-1.0	0.620	-9.8
Received food stamps in past year	16.6	18.1	-1.5	0.548	-8.3
Registered to vote	78.6	73.4	5.2 *	0.073	7.1
Any recent illegal or drug-related activity[a]	5.3	3.3	1.9	0.189	58.0
Any recent illegal activity, excluding drug use	3.3	1.6	1.7	0.137	104.1
Sample size (N = 838)	459	379			

SOURCE: MDRC calculations from the Career Academies Evaluation Eight-Year Post-High School Follow-Up Survey.

NOTES: Impact estimates are regression-adjusted to control for background characteristics of the sample and for the clustering of students within schools and random assignment years. Values shown for the Academy group are unadjusted mean values; values shown for the non-Academy group are calculated by subtracting the impact estimate from the Academy group's unadjusted mean values. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; and * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

[a]This measure includes illegal drug use, breaking the law (other than traffic violations), and any arrests or convictions in the past year.

Career Academies Evaluation

Exhibit 4.7 - YW

Impacts on High School Experiences for Young Women

Outcome	Academy Group	Non-Academy Group	Impact	P-Value	Percentage Change
Ever enrolled in a Career Academy during high school (%)	89.5	9.8	79.7 ***	0.000	---
Was enrolled in a Career Academy at the end of scheduled grade 12 (%)	61.7	6.7	55.0 ***	0.000	---
Average attendance, grades 9-12 (% of school days)	87.9	87.4	0.5	0.580	0.6
Credits earned					
Total course credits	22.6	22.3	0.3	0.377	1.4
Total course credits meet the graduation requirement (%)	68.4	62.5	5.9 *	0.063	9.4
Course-taking (%)[a]					
Basic core curriculum: English (4), Social Studies (3), Math (2), Science (2)	69.6	67.5	2.0	0.560	3.0
College prep core curriculum: English (4), Social Studies (3), Math (3), Science (3)	43.8	45.4	-1.6	0.660	-3.4
Earned 3 or more career/vocational credits	69.2	47.9	21.2 ***	0.000	44.3
Basic core curriculum plus 3 career/vocational credits	48.8	31.6	17.2 ***	0.000	54.5
Career awareness and development activities (%)					
In school[b]					
Ever participated	80.6	76.3	4.3	0.161	5.7
Participated intensively	50.9	44.8	6.1 *	0.100	13.7
Outside of school[c]					
Ever participated	70.8	44.2	26.6 ***	0.000	60.1
Participated intensively	39.6	15.4	24.2 ***	0.000	157.1
Employment and work-based learning (%)					
Ever employed during high school (%)	80.9	77.6	3.3	0.274	4.2
Ever employed in a paid job during high school (%)	78.1	74.1	3.9	0.212	5.3
Ever had a job connected to school[d]	41.6	27.7	13.9 ***	0.000	50.1
Ever had a job with high work-based learning content[e]	24.7	20.4	4.4	0.161	21.4
Sample size (N = 723)	392	331			

(continued)

Exhibit 4.7 - YW (continued)

SOURCES: MDRC calculations from the Career Academies Evaluation Student School Records Database and 12th Grade Survey.

NOTES: All measures are derived from the sample of Eight-Year Post-High School Follow-Up Survey respondents who are also in the Student School Records Database and the 12th Grade Survey sample.

Measures of attendance rate and credits earned include zero values for grades in which sample members were identified as school dropouts. The measures of credits earned and course-taking include all credits earned through the end of the twelfth-grade year (that is, the year that students were projected to reach the twelfth grade when they initially entered the study sample).

Impact estimates are regression-adjusted to control for background characteristics of the sample and for the clustering of students within schools and random assignment years. Values shown for the Academy group are unadjusted mean values; values shown for the non-Academy group are calculated by subtracting the impact estimate from the Academy group's unadjusted mean values. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; and * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

[a]One of the nine study sites was unable to provide data on the specific courses students completed during high school. Thus, course-taking measures are derived from a sample of eight sites with a total of 591 young women. The measure of earning three or more career/vocational credits is derived from a sample of 532 young women.

[b]In-school career awareness and development activities include learning about jobs in class or through in-school activities, receiving instruction or counseling on how to find a job or how to act on the job, and having discussions with students and adults about careers and work. Respondents are considered to have participated intensively in in-school career awareness and development activities if they reported participating in at least three of these activities per month.

[c]Outside-of-school career awareness and development activities include career-related field trips, job shadowing, and mentoring programs. Respondents are considered to have participated intensively in outside-of-school career awareness and development activities if they reported participating in two or more of these activities.

[d]Jobs that are "connected to school" are sponsored or supported by the school (they may also be called "work-based learning experiences"). These include jobs that a teacher helped the student find, that are part of a school program or class or for which the student receives course credit, and in which a supervisor at work and an adult from the school communicate about the student's progress.

[e]To assess the level of "work-based learning content" in students' jobs, respondents were asked to rate their jobs on a series of characteristics, including how often they were asked to read, write, and use the computer on the job; how much advice they received on the job; whether they felt bored on the job; whether they learned new things on the job; and whether the job influenced their career choice. For a complete list of the survey items composing this measure and for a description of how the cutpoint for "high work-based learning content" was set, see Kemple, Poglinco, and Snipes, *Career Academies: Building Career Awareness and Work-Based Learning Activities Through Employer Partnerships* (New York: MDRC, 1999).

Career Academies Evaluation

Exhibit 4.8

Differences in Impacts on Key Outcomes Between Young Men and Young Women

Outcome	Impact		Difference in Impacts
	Young Men	Young Women	
Employment and earnings: Years 1 to 4			
Months employed	2.9 ***	0.3	2.6 *
	(p = 0.004)	(p = 0.746)	(p = 0.058)
Average monthly earnings ($)	260.46 ***	53.14	207.32 **
	(p = 0.004)	(p = 0.267)	(p = 0.043)
Employment and earnings: Years 5 to 8			
Months employed	2.8 ***	-0.3	3.1 **
	(p = 0.005)	(p = 0.738)	(p = 0.028)
Average monthly earnings ($)	361.37 **	118.07	243.30
	(p = 0.014)	(p = 0.142)	(p = 0.145)
Educational attainment (%)			
Earned a high school diploma	-0.5	0.2	-0.7
	(p = 0.871)	(p = 0.936)	(p = 0.859)
Completed any postsecondary credential	-1.1	0.3	-1.4
	(p = 0.784)	(p = 0.937)	(p = 0.794)
Family formation (%)			
Lives independently with child/children and partner	7.0 *	6.0 *	1.0
	(p = 0.058)	(p = 0.064)	(p = 0.838)

SOURCES: MDRC calculations from the Career Academies Evaluation Four-Year and Eight-Year Post-High School Follow-Up Surveys.

NOTES: Employment and earnings impacts for Years 1 to 4 reflect the first four years following sample members' scheduled graduation from high school and are derived from the Four-Year Post-High School Follow-Up Survey sample (N = 1,458). Employment and earnings impacts for Years 5 to 8 reflect the second four years following sample members' scheduled high school graduation and are derived from the Eight-Year Post-High School Follow-Up Survey sample (N = 1,428). All earnings impacts are reported in 2006 dollars.

Educational attainment and family formation impacts reflect sample members' status eight years following scheduled high school graduation.

Impact estimates are regression-adjusted to control for background characteristics of the sample and for the clustering of students within schools and random assignment years. A two-tailed t-test was applied to the impact estimates and to differences in impact estimates between young men and young women. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; and * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

Unit 5

Impacts for Risk Subgroups

Career Academies Evaluation

Exhibit 5.1.A - HR

Year-by-Year Impacts on Employment and Earnings During Follow-Up Years 1 to 4 for the High-Risk Subgroup

Outcome	Academy Group	Non-Academy Group	Impact	P-Value	Percentage Change
Years 1-4					
Ever employed (%)	98.5	96.4	2.2	0.201	2.2
Ever employed full time (%)[a]	96.1	95.4	0.7	0.739	0.8
Months employed	35.3	33.0	2.3	0.109	7.1
Months employed full time	30.4	27.7	2.7 *	0.095	9.8
Average monthly earnings ($)	1,402.29	1,212.74	189.55 *	0.065	15.6
Average hours worked per week	29.6	27.7	1.9	0.252	6.7
Average hourly wage ($)	10.97	10.33	0.65	0.150	6.3
Total number of jobs held	3.0	2.8	0.2	0.216	7.5
Average job duration, in months	15.8	15.7	0.1	0.936	0.7
Year 1					
Ever employed (%)	81.6	79.7	1.9	0.656	2.4
Ever employed full time (%)	68.9	65.1	3.9	0.450	5.9
Months employed	7.7	7.0	0.7	0.142	10.7
Months employed full time	6.2	5.3	0.9 *	0.100	17.0
Average monthly earnings ($)	1,027.37	859.80	167.58 *	0.098	19.5
Average hours worked per week	24.7	21.8	2.8	0.153	13.0
Average hourly wage ($)	8.07	7.71	0.36	0.508	4.7
Year 2					
Ever employed (%)	87.9	84.7	3.2	0.401	3.7
Ever employed full time (%)	77.7	74.1	3.6	0.438	4.8
Months employed	8.8	8.5	0.3	0.519	3.6
Months employed full time	7.5	6.9	0.6	0.295	8.1
Average monthly earnings ($)	1,344.87	1,184.69	160.18	0.161	13.5
Average hours worked per week	30.1	28.3	1.7	0.392	6.2
Average hourly wage ($)	9.36	9.20	0.16	0.829	1.7
Year 3					
Ever employed (%)	92.7	85.3	7.5 **	0.025	8.8
Ever employed full time (%)	84.5	79.2	5.3	0.212	6.7
Months employed	9.2	8.6	0.6	0.191	7.1
Months employed full time	8.1	7.5	0.6	0.269	7.6
Average monthly earnings ($)	1,519.35	1,346.18	173.17	0.155	12.9
Average hours worked per week	31.2	29.8	1.4	0.488	4.7
Average hourly wage ($)	10.80	9.60	1.20 **	0.048	12.5

(continued)

Exhibit 5.1.A - HR (continued)

Outcome	Academy Group	Non-Academy Group	Impact	P-Value	Percentage Change
Year 4					
Ever employed (%)	90.8	84.7	6.1 *	0.085	7.2
Ever employed full time (%)	84.5	80.0	4.5	0.272	5.6
Months employed	9.5	8.8	0.7	0.149	7.5
Months employed full time	8.6	7.9	0.7	0.181	8.6
Average monthly earnings ($)	1,717.56	1,460.28	257.29 *	0.057	17.6
Average hours worked per week	32.4	30.9	1.5	0.455	4.8
Average hourly wage ($)	11.44	9.95	1.50 *	0.067	15.1
Sample size (N = 360)	206	154			

SOURCE: MDRC calculations from the Career Academies Evaluation Four-Year Post-High School Follow-Up Survey.

NOTES: All measures reflect the first four years following scheduled high school graduation for each sample member. All earnings and wages are adjusted for inflation and reported in 2006 dollars.

Impact estimates are regression-adjusted to control for background characteristics of the sample and for the clustering of students within schools and random assignment years. Values shown for the Academy group are unadjusted mean values; values shown for the non-Academy group are calculated by subtracting the impact estimate from the Academy group's unadjusted mean values. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; and * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

"Percentage change" is the impact divided by the non-Academy group average.

Earnings are calculated from respondents' reports of their hourly wages, hours worked per week, weeks worked per month, and duration of employment (measured in months) at each job. For any given period of time, "average monthly earnings" are calculated as the total estimated earnings from all jobs held during the time period divided by the total number of months in that period; "hours worked per week" are calculated as the total number of hours worked at all jobs in the time period divided by the total number of weeks in that period (assuming four weeks per month); and the "average hourly wage" is calculated as the total estimated earnings from all jobs held in the time period divided by the total number of hours worked during that period. Estimates of earnings, hours, and wages include zero values for months in which respondents were not employed.

For all jobs except the current or most recent job held as of the interview date, respondents reported wages, hours, and weeks for the *conclusion* of the job and these values are applied to the full duration of the job. Thus, if wages or hours increased or decreased during the job, these measures may over- or underestimate true monthly earnings. For the current or most recent job, respondents reported wages, hours, and weeks for both the start and the end of the job. Monthly earnings over the course of the job are calculated assuming that all three components increase or decrease linearly from start to end.

[a]Students were considered to be employed full time if they reported working 30 or more hours per week.

Career Academies Evaluation

Exhibit 5.1.B - HR

Year-by-Year Impacts on Employment and Earnings During Follow-Up Years 5 to 8 for the High-Risk Subgroup

Outcome	Academy Group	Non-Academy Group	Impact	P-Value	Percentage Change
Years 5-8					
Ever employed (%)	94.7	97.6	-2.9	0.198	-2.9
Ever employed full time (%)[a]	93.1	92.7	0.4	0.892	0.4
Months employed	36.5	34.5	2.0	0.260	5.7
Months employed full time	32.8	31.0	1.9	0.336	6.0
Average monthly earnings ($)	1,944.48	1,659.56	284.91 *	0.066	17.2
Average hours worked per week	31.7	29.2	2.5	0.156	8.5
Average hourly wage ($)	13.69	13.75	-0.06	0.948	-0.4
Total number of jobs held	1.9	1.9	-0.1	0.682	-2.7
Average job duration, in months	24.2	23.4	0.9	0.640	3.6
Year 5					
Ever employed (%)	80.4	81.5	-1.1	0.810	-1.3
Ever employed full time (%)	70.9	72.6	-1.7	0.732	-2.4
Months employed	8.4	7.9	0.5	0.369	6.7
Months employed full time	7.2	7.1	0.1	0.854	1.6
Average monthly earnings ($)	1,688.11	1,409.06	279.04 *	0.075	19.8
Average hours worked per week	28.6	26.4	2.2	0.326	8.4
Average hourly wage ($)	11.60	10.92	0.67	0.491	6.2
Year 6					
Ever employed (%)	83.1	82.6	0.5	0.906	0.6
Ever employed full time (%)	77.2	77.5	-0.2	0.958	-0.3
Months employed	9.2	8.5	0.7	0.217	7.7
Months employed full time	8.2	7.8	0.3	0.583	4.0
Average monthly earnings ($)	1,889.14	1,621.61	267.53 *	0.094	16.5
Average hours worked per week	31.7	29.4	2.3	0.276	8.0
Average hourly wage ($)	12.08	12.64	-0.56	0.714	-4.4
Year 7					
Ever employed (%)	87.3	82.4	4.9	0.213	6.0
Ever employed full time (%)	80.4	76.4	4.0	0.386	5.3
Months employed	9.2	9.0	0.2	0.654	2.6
Months employed full time	8.4	8.1	0.3	0.617	3.5
Average monthly earnings ($)	1,987.89	1,776.61	211.28	0.265	11.9
Average hours worked per week	31.9	30.4	1.6	0.437	5.2
Average hourly wage ($)	13.07	12.77	0.30	0.839	2.4

(continued)

Exhibit 5.1.B - HR (continued)

Outcome	Academy Group	Non-Academy Group	Impact	P-Value	Percentage Change
Year 8					
Ever employed (%)	88.9	86.3	2.6	0.485	3.0
Ever employed full time (%)	84.7	79.7	5.0	0.240	6.3
Months employed	9.8	9.2	0.6	0.240	6.2
Months employed full time	9.1	8.0	1.1 **	0.034	14.4
Average monthly earnings ($)	2,212.77	1,830.98	381.79 *	0.059	20.9
Average hours worked per week	34.5	30.7	3.8 **	0.046	12.5
Average hourly wage ($)	13.56	12.86	0.70	0.536	5.5
Total annual earnings ($)	26,553.22	21,971.78	4,581.44 *	0.059	20.9
Last Quarter					
Ever employed (%)	80.4	80.3	0.1	0.984	0.1
Ever employed full time (%)	76.2	70.6	5.6	0.263	7.9
Months employed	2.4	2.3	0.1	0.539	3.7
Months employed full time	2.2	2.0	0.2	0.108	11.8
Average monthly earnings ($)	2,212.97	1,848.95	364.02 *	0.095	19.7
Average hours worked per week	34.2	31.0	3.2	0.132	10.4
Average hourly wage ($)	12.57	12.29	0.28	0.819	2.3
Sample size (N = 336)	189	147			

SOURCE: MDRC calculations from the Career Academies Evaluation Eight-Year Post-High School Follow-Up Survey.

NOTES: All measures reflect the fifth through eighth years following scheduled high school graduation for each sample member. All earnings and wages are adjusted for inflation and reported in 2006 dollars.

Impact estimates are regression-adjusted to control for background characteristics of the sample and for the clustering of students within schools and random assignment years. Values shown for the Academy group are unadjusted mean values; values shown for the non-Academy group are calculated by subtracting the impact estimate from the Academy group's unadjusted mean values. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; and * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

"Percentage change" is the impact divided by the non-Academy group average.

Earnings are calculated from respondents' reports of their hourly wages, hours worked per week, weeks worked per month, and duration of employment (measured in months) at each job. For any given period of time, "average monthly earnings" are calculated as the total estimated earnings from all jobs held during the time period divided by the total number of months in that period; "hours worked per week" are calculated as the total number of hours worked at all jobs in the time period divided by the total number of weeks in that period (assuming four weeks per month); and the "average hourly wage" is calculated as the total estimated earnings from all jobs held in the time period divided by the total number of hours worked during that period. Estimates of earnings, hours, and wages include zero values for months in which respondents were not employed.

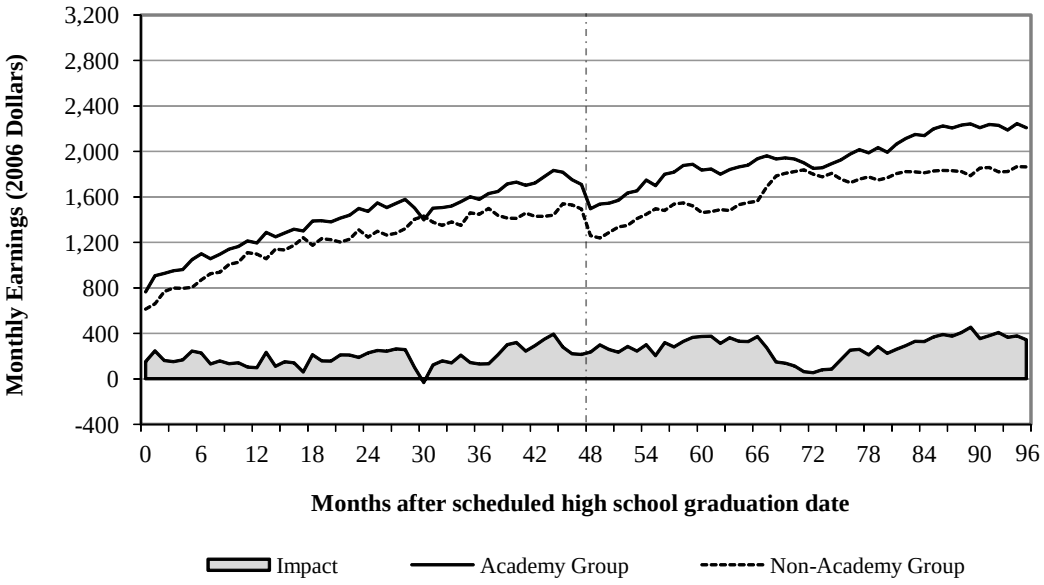
For all jobs except the current or most recent job held as of the interview date, respondents reported wages, hours, and weeks for the *conclusion* of the job and these values are applied to the full duration of the job. Thus, if wages or hours increased or decreased during the job, these measures may over- or underestimate true monthly earnings. For the current or most recent job, respondents reported wages, hours, and weeks for both the start and the end of the job. Monthly earnings over the course of the job are calculated assuming that all three components increase or decrease linearly from start to end.

[a]Students were considered to be employed full time if they reported working 30 or more hours per week.

Career Academies Evaluation

Exhibit 5.2 - HR

Month-by-Month Impacts on Total Monthly Earnings for the High-Risk Subgroup



SOURCES: MDRC calculations from the Career Academies Evaluation Four-Year and Eight-Year Post-High School Follow-Up Surveys.

NOTES: Earnings are reported in 2006 dollars.

Measures reflect the 96-month period following scheduled high school graduation for each sample member (Month 0 is June of the scheduled graduation year). Measures for Months 1 to 48 are derived from the Four-Year Post-High School Follow-Up Survey sample of high-risk youth (N = 360). Measures for Months 49 to 96 are derived from the Eight-Year Post-High School Follow-Up Survey sample of high-risk youth (N = 343). The vertical dotted line at Month 48 illustrates the cutpoint between the Four-Year and Eight-Year Post-High School Follow-Up Survey samples.

Impact estimates are regression-adjusted to control for background characteristics of the sample and for the clustering of students within schools and random assignment years. Values shown for the Academy group are unadjusted mean values; values shown for the non-Academy group are calculated by subtracting the impact estimate from the Academy group's unadjusted mean values. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Differences in monthly earnings are significant at a level of 10 percent or less in 37 of the 96 months.

Career Academies Evaluation

Exhibit 5.3 - HR

Differences in Characteristics of the Current or Most Recent Job Held Eight Years After Scheduled High School Graduation for the High-Risk Subgroup

Outcome	Academy Group	Non-Academy Group	Difference		P-Value
Job duration (months)	*24.4*	*23.6*	*0.8*		*0.726*
Month last worked at job (relative to high school graduation)	*95.3*	*93.6*	*1.7*		*0.111*
Employed at job in the last quarter of Year 8 (%)	*87.3*	*85.2*	*2.0*		*0.614*
Occupational sector (%) [a]					
Management/business & financial operations	*17.7*	*15.4*	*2.3*		*0.603*
Computer, engineering, & media technology	*5.0*	*2.6*	*2.3*		*0.336*
Education, social services, law, & science	*3.3*	*4.9*	*-1.6*		*0.464*
Healthcare/medical support & technology	*7.7*	*14.1*	*-6.3*	*	*0.061*
Sales, food, & personal services	*16.0*	*18.3*	*-2.3*		*0.600*
Office and administrative support	*27.1*	*25.3*	*1.8*		*0.713*
Construction, production, maintenance, transportation	*17.7*	*18.3*	*-0.7*		*0.870*
Other/unknown	*5.5*	*1.0*	*4.5*	**	*0.028*
Average monthly earnings ($) [b]	*2,249.79*	*2,131.66*	*118.13*		*0.505*
At start of job	*2,035.55*	*1,982.98*	*52.57*		*0.762*
At end of job	*2,473.60*	*2,254.83*	*218.76*		*0.296*
Difference	*438.04*	*271.85*	*166.19*		*0.253*
Average hours per week	*39.2*	*37.1*	*2.1*	*	*0.057*
At start of job	*38.5*	*36.3*	*2.2*	*	*0.060*
At end of job	*40.3*	*38.4*	*1.8*		*0.105*
Difference	*1.8*	*2.1*	*-0.4*		*0.647*
Average hourly wage ($)	*13.80*	*14.19*	*-0.39*		*0.692*
At start of job	*12.97*	*13.36*	*-0.39*		*0.686*
At end of job	*14.61*	*15.15*	*-0.53*		*0.647*
Difference	*1.64*	*1.78*	*-0.14*		*0.859*
Job offers a health plan (%)	*73.5*	*71.6*	*1.9*		*0.710*
Job offers any other benefits (%) [c]	*79.4*	*75.7*	*3.8*		*0.432*
Very satisfied at job (%)	*42.2*	*33.9*	*8.4*		*0.141*
Very likely to be working in the same field in two years (%) [d]	*58.3*	*51.8*	*6.5*		*0.305*
Very likely to be promoted in the next year (%) [d]	*34.4*	*43.2*	*-8.7*		*0.170*
Job is/was directly related to high school studies (%)	*37.6*	*24.3*	*13.3*	**	*0.015*
Choice of field was influenced by high school experiences (%)	*45.9*	*27.6*	*18.3*	***	*0.001*
Sample size (N = 323)	*181*	*142*			

(continued)

Exhibit 5.3 - HR (continued)

SOURCE: MDRC calculations from the Career Academies Evaluation Eight-Year Post-High School Follow-Up Survey.

NOTES: All measures reflect the job held by the survey respondent at the time of the eight-year post-high school interview or, if the respondent was unemployed at the time of the interview, the job held most recently in the four years prior to the interview. Measures are italicized because the sample includes only those survey respondents who were employed at any time during the fifth through eighth year following their scheduled graduation from high school and thus do not represent an experimental comparison of Academy and non-Academy students.

A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; and * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

[a]Occupational sectors are based on the U.S. Department of Labor's 2000 Standard Occupational Classification (SOC) system. Jobs are coded from respondents' reports of the industry they worked in and the major tasks they performed at the job.

[b]Respondents reported hourly wages, hours worked per week, and weeks worked per month for both the start and the end of the job. Average monthly earnings over the course of the job are calculated assuming that all three components increase or decrease linearly from start to end.

[c]Other benefits include sick leave, paid vacation days, tuition reimbursement, a retirement or pension plan, and stock options or signing bonuses.

[d]The likelihood of working in the same field in two years and of being promoted in the next year were only asked of those who were employed at the time of the interview (N = 266).

Career Academies Evaluation

Exhibit 5.4 - HR

Impacts on Educational Attainment Eight Years After Scheduled High School Graduation for the High-Risk Subgroup

Outcome	Academy Group	Non-Academy Group	Impact	P-Value	Percentage Change
High school completion status (%)					
Earned high school diploma	69.5	68.2	1.3	0.794	1.9
On-time graduate[a]	55.8	53.6	2.2	0.687	4.2
Late graduate	13.7	14.6	-0.9	0.820	-6.3
Earned a GED	24.2	17.4	6.8	0.124	39.3
Postsecondary educational attainment (%)					
Completed any postsecondary credential	38.4	38.6	-0.2	0.971	-0.5
Highest credential completed					
Bachelor's or graduate degree	3.7	8.7	-5.0 *	0.043	-57.6
Associate's degree	8.4	7.5	0.9	0.770	12.7
Skills training certificate or license	26.3	22.5	3.9	0.433	17.2
Postsecondary education enrollment					
Months enrolled in postsecondary education[b]					
Years 1-4	10.8	14.4	-3.5 *	0.029	-24.6
Years 5-8	6.1	7.3	-1.3	0.358	-17.2
Currently enrolled in any postsecondary program (%)[c]	14.2	13.5	0.7	0.860	5.3
Currently working toward highest postsecondary credential (%)[d]	9.5	11.8	-2.3	0.519	-19.5
Bachelor's or graduate degree	2.1	4.3	-2.2	0.281	-51.2
Associate's degree	4.7	6.5	-1.8	0.488	-27.3
Skills training certificate or license	2.6	0.9	1.7	0.323	181.1
Sample size (N = 343)	190	153			

SOURCES: MDRC calculations from the Career Academies Evaluation Four-Year and Eight-Year Post-High School Follow-Up Surveys.

NOTES: High school completion, postsecondary educational attainment, and current postsecondary enrollment reflect respondents' status as of the interview date eight years following their scheduled high school graduation.

Impact estimates are regression-adjusted to control for background characteristics of the sample and for the clustering of students within schools and random assignment years. Values shown for the Academy group are unadjusted mean values; values shown for the non-Academy group are calculated by subtracting the impact estimate from the Academy group's unadjusted mean values. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; and * = 10 percent.

"Percentage change" is the impact divided by the non-Academy group average.

Rounding may cause slight discrepancies in calculating sums and differences.

[a]Respondents are considered on-time graduates if they graduated in June or earlier of the year in which they were scheduled to graduate high school.

(continued)

Exhibit 5.4 - HR (continued)

[b]The measure of months enrolled in postsecondary education during the first through fourth year following scheduled high school graduation is derived from the Four-Year Post-High School Follow-Up Survey sample of high-risk youth (N = 360). The measure of months enrolled in postsecondary education during the fifth through eighth year following scheduled high school graduation is derived from the Eight-Year Post-High School Follow-Up Survey sample of high-risk youth (N = 343).

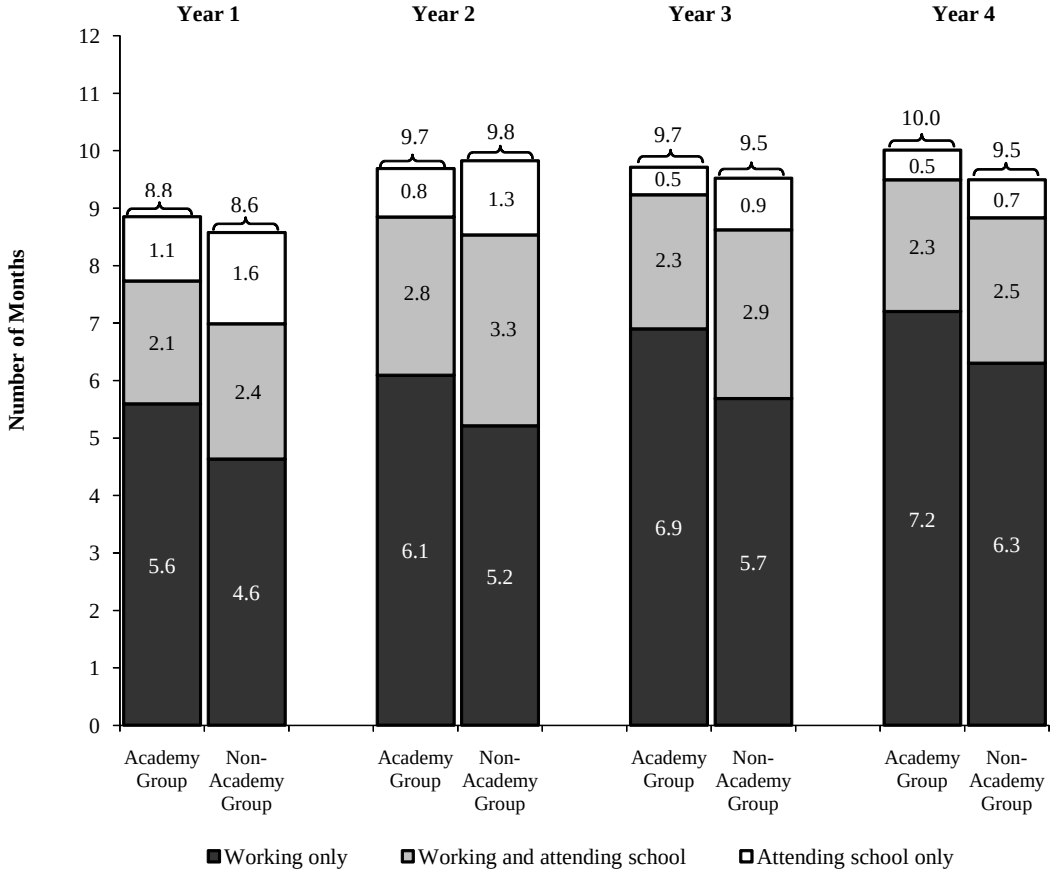
[c]Respondents are considered to be "currently enrolled" in a postsecondary education program if they reported that they were still attending the program and that they expected to complete the program.

[d]Respondents are considered to be working toward their highest postsecondary credential if they are currently enrolled in a program from which they expect to receive either their first postsecondary credential or a credential that is higher than any credential they have already earned (for example, if they have completed an associate's degree and are enrolled in a program that will award a bachelor's degree).

Career Academies Evaluation

Exhibit 5.5.A - HR

Year-by-Year Impacts on Months Spent Attending School or Working During Follow-Up Years 1 to 4 for the High-Risk Subgroup



SOURCE: MDRC calculations from the Career Academies Evaluation Four-Year Post-High School Follow-Up Survey.

NOTES: Measures reflect the average number of months spent in each status during each of the first four years following scheduled high school graduation.

Impact estimates are regression-adjusted to control for background characteristics of the sample and for the clustering of students within schools and random assignment years. Values shown for the Academy group are unadjusted mean values; values shown for the non-Academy group are calculated by subtracting the impact estimate from the Academy group's unadjusted mean values.

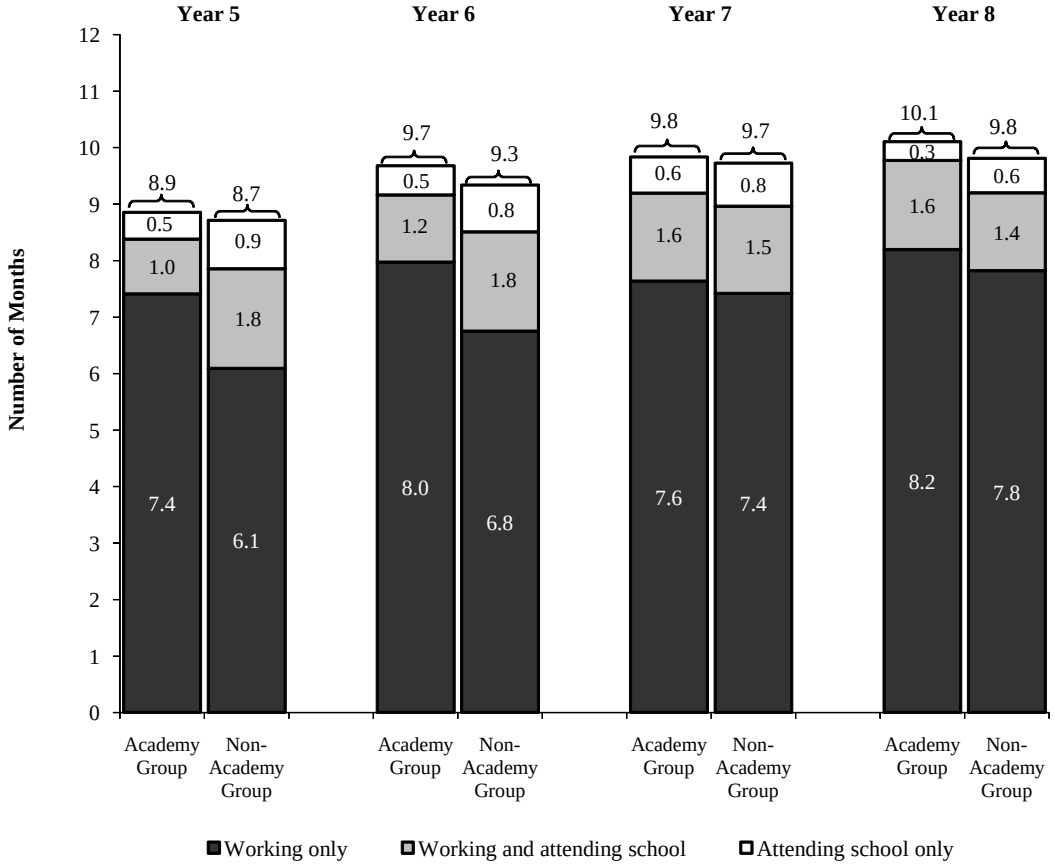
Rounding may cause slight discrepancies in calculating sums and differences.

A two-tailed t-test was applied to differences between the Academy and non-Academy groups in the cumulative number of months spent in each status across all four years. The differences in the number of months spent working only (3.9 months) and the number of months spent attending school only (-1.5 months) are significant at the 10 percent level or lower.

Career Academies Evaluation

Exhibit 5.5.B - HR

Year-by-Year Impacts on Months Spent Attending School or Working During Follow-Up Years 5 to 8 for the High-Risk Subgroup



SOURCE: MDRC calculations from the Career Academies Evaluation Eight-Year Post-High School Follow-Up Survey.

NOTES: Measures reflect the average number of months spent in each status during the fifth through eighth year following scheduled high school graduation.

Impact estimates are regression-adjusted to control for background characteristics of the sample and for the clustering of students within schools and random assignment years. Values shown for the Academy group are unadjusted mean values; values shown for the non-Academy group are calculated by subtracting the impact estimate from the Academy group's unadjusted mean values.

Rounding may cause slight discrepancies in calculating sums and differences.

A two-tailed t-test was applied to differences between the Academy and non-Academy groups in the cumulative number of months spent in each status across all four years. None of these differences is significant at the 10 percent level or lower.

Career Academies Evaluation

Exhibit 5.6 - HR

Impacts on Family Formation and Other Social Adjustment Outcomes Eight Years After Scheduled High School Graduation for the High-Risk Subgroup

Outcome (%)	Academy Group	Non-Academy Group	Impact	P-Value	Percentage Change
Marital status					
Married and living together	37.9	34.1	3.8	0.467	11.0
Single	55.3	60.8	-5.5	0.291	-9.1
Divorced, separated, or widowed	6.8	5.1	1.8	0.515	34.8
Parental status					
Custodial parent	61.4	49.5	11.8 **	0.033	23.9
Noncustodial parent	5.3	9.3	-4.0	0.155	-42.9
Not a parent	33.2	41.2	-8.0	0.147	-19.5
Living situation					
Lives independently with child/children and partner	39.5	28.8	10.7 **	0.048	37.1
Lives independently with no children	21.6	30.1	-8.5 *	0.084	-28.2
Lives independently with child/children but not partner	14.2	10.4	3.8	0.273	36.7
Lives with parent(s) or guardian(s), with or without children	24.7	30.8	-6.0	0.241	-19.6
Ever gone without health insurance in past year	31.1	29.6	1.4	0.782	4.9
Received TANF or cash assistance in past year	11.1	7.9	3.2	0.317	40.4
Received food stamps in past year	18.9	15.7	3.3	0.409	21.0
Registered to vote	70.5	66.3	4.2	0.414	6.4
Any recent illegal or drug-related activity[a]	8.9	10.2	-1.3	0.708	-12.6
Any recent illegal activity, excluding drug use	5.8	5.7	0.1	0.983	1.0
Sample size (N = 341)	190	151			

SOURCE: MDRC calculations from the Career Academies Evaluation Eight-Year Post-High School Follow-Up Survey.

NOTES: Impact estimates are regression-adjusted to control for background characteristics of the sample and for the clustering of students within schools and random assignment years. Values shown for the Academy group are unadjusted mean values; values shown for the non-Academy group are calculated by subtracting the impact estimate from the Academy group's unadjusted mean values. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; and * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

[a]This measure includes illegal drug use, breaking the law (other than traffic violations), and any arrests or convictions in the past year.

Career Academies Evaluation

Exhibit 5.7 - HR

Impacts on High School Experiences for the High-Risk Subgroup

Outcome	Academy Group	Non-Academy Group	Impact	P-Value	Percentage Change
Ever enrolled in a Career Academy during high school (%)	88.9	1.5	87.4 ***	0.000	---
Was enrolled in a Career Academy at the end of scheduled grade 12 (%)	42.5	1.3	41.2 ***	0.000	---
Average attendance, grades 9-12 (% of school days)	80.2	78.7	1.6	0.472	2.0
Credits earned					
Total course credits	19.2	18.0	1.2	0.142	6.5
Total course credits meet the graduation requirement (%)	36.0	28.0	8.0	0.165	28.4
Course-taking (%)[a]					
Basic core curriculum: English (4), Social Studies (3), Math (2), Science (2)	40.5	27.1	13.5 **	0.050	49.7
College prep core curriculum: English (4), Social Studies (3), Math (3), Science (3)	14.4	2.8	11.6 ***	0.005	413.3
Earned 3 or more career/vocational credits	62.0	50.2	11.8	0.127	23.6
Basic core curriculum plus 3 career/vocational credits	33.3	13.3	20.0 ***	0.001	150.4
Career awareness and development activities (%)					
In school[b]					
Ever participated	82.0	72.8	9.2 *	0.085	12.6
Participated intensively	46.7	37.0	9.7	0.127	26.2
Outside of school[c]					
Ever participated	66.0	37.8	28.2 ***	0.000	74.8
Participated intensively	34.0	10.8	23.2 ***	0.000	215.5
Employment and work-based learning (%)					
Ever employed during high school (%)	77.8	77.8	-0.1	0.992	-0.1
Ever employed in a paid job during high school (%)	76.5	75.9	0.5	0.922	0.7
Ever had a job connected to school[d]	32.0	21.6	10.5 *	0.063	48.5
Ever had a job with high work-based learning content[e]	17.6	11.5	6.1	0.183	53.4
Sample size (N = 280)	153	127			

(continued)

Exhibit 5.7 - HR (continued)

SOURCES: MDRC calculations from the Career Academies Evaluation Student School Records Database and 12th Grade Survey.

NOTES: All measures are derived from the sample of Eight-Year Post-High School Follow-Up Survey respondents who are also in the Student School Records Database and the 12th Grade Survey sample.

Measures of attendance rate and credits earned include zero values for grades in which sample members were identified as school dropouts. The measures of credits earned and course-taking include all credits earned through the end of the twelfth-grade year (that is, the year that students were projected to reach the twelfth grade when they initially entered the study sample).

Impact estimates are regression-adjusted to control for background characteristics of the sample and for the clustering of students within schools and random assignment years. Values shown for the Academy group are unadjusted mean values; values shown for the non-Academy group are calculated by subtracting the impact estimate from the Academy group's unadjusted mean values. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; and * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

[a]One of the nine study sites was unable to provide data on the specific courses students completed during high school. Thus, course-taking measures are derived from a sample of eight sites with a total of 209 high-risk students. The measure of earning three or more career/vocational credits is derived from a sample of 184 high-risk students.

[b]In-school career awareness and development activities include learning about jobs in class or through in-school activities, receiving instruction or counseling on how to find a job or how to act on the job, and having discussions with students and adults about careers and work. Respondents are considered to have participated intensively in in-school career awareness and development activities if they reported participating in at least three of these activities per month.

[c]Outside-of-school career awareness and development activities include career-related field trips, job shadowing, and mentoring programs. Respondents are considered to have participated intensively in outside-of-school career awareness and development activities if they reported participating in two or more of these activities.

[d]Jobs that are "connected to school" are sponsored or supported by the school (they may also be called "work-based learning experiences"). These include jobs that a teacher helped the student find, that are part of a school program or class or for which the student receives course credit, and in which a supervisor at work and an adult from the school communicate about the student's progress.

[e]To assess the level of "work-based learning content" in students' jobs, respondents were asked to rate their jobs on a series of characteristics, including how often they were asked to read, write, and use the computer on the job; how much advice they received on the job; whether they felt bored on the job; whether they learned new things on the job; and whether the job influenced their career choice. For a complete list of the survey items composing this measure and for a description of how the cutpoint for "high work-based learning content" was set, see Kemple, Poglinco, and Snipes, *Career Academies: Building Career Awareness and Work-Based Learning Activities Through Employer Partnerships* (New York: MDRC, 1999).

Career Academies Evaluation

Exhibit 5.1.A - MR

Year-by-Year Impacts on Employment and Earnings During Follow-Up Years 1 to 4 for the Medium-Risk Subgroup

Outcome	Academy Group	Non-Academy Group	Impact	P-Value	Percentage Change
Years 1-4					
Ever employed (%)	98.7	97.5	1.2	0.246	1.2
Ever employed full time (%)[a]	95.8	94.6	1.2	0.442	1.3
Months employed	37.4	35.4	2.0 **	0.037	5.5
Months employed full time	30.5	28.3	2.2 *	0.056	7.7
Average monthly earnings ($)	1,413.01	1,238.23	174.78 **	0.010	14.1
Average hours worked per week	31.2	28.7	2.5 **	0.025	8.7
Average hourly wage ($)	10.91	10.26	0.65 **	0.017	6.3
Total number of jobs held	3.1	3.2	0.0	0.889	-0.5
Average job duration, in months	16.0	15.5	0.5	0.523	3.3
Year 1					
Ever employed (%)	89.1	81.0	8.1 ***	0.002	9.9
Ever employed full time (%)	74.3	67.2	7.1 **	0.040	10.5
Months employed	8.4	7.5	0.9 ***	0.007	12.1
Months employed full time	6.2	5.7	0.5	0.152	9.5
Average monthly earnings ($)	1,078.48	871.52	206.96 ***	0.001	23.7
Average hours worked per week	26.4	23.1	3.3 **	0.015	14.4
Average hourly wage ($)	8.89	7.47	1.42 ***	0.000	19.0
Year 2					
Ever employed (%)	91.9	91.7	0.3	0.903	0.3
Ever employed full time (%)	81.0	78.1	2.9	0.336	3.7
Months employed	9.5	9.0	0.5 *	0.081	5.9
Months employed full time	7.6	7.0	0.6	0.113	8.3
Average monthly earnings ($)	1,379.90	1,170.60	209.30 ***	0.004	17.9
Average hours worked per week	31.4	28.9	2.5 *	0.055	8.7
Average hourly wage ($)	9.81	9.18	0.62 *	0.058	6.8
Year 3					
Ever employed (%)	94.0	91.6	2.4	0.221	2.6
Ever employed full time (%)	84.2	80.0	4.1	0.151	5.1
Months employed	9.6	9.4	0.2	0.515	2.1
Months employed full time	8.2	7.6	0.6 *	0.100	7.8
Average monthly earnings ($)	1,533.46	1,387.82	145.64	0.111	10.5
Average hours worked per week	33.2	31.2	2.1	0.160	6.6
Average hourly wage ($)	10.50	9.86	0.64 *	0.059	6.5

(continued)

Exhibit 5.1.A - MR (continued)

Outcome	Academy Group	Non-Academy Group	Impact	P-Value	Percentage Change
Year 4					
Ever employed (%)	91.4	92.0	-0.6	0.765	-0.7
Ever employed full time (%)	85.5	82.8	2.7	0.322	3.2
Months employed	9.8	9.5	0.3	0.259	3.5
Months employed full time	8.4	8.0	0.4	0.207	5.6
Average monthly earnings ($)	1,660.20	1,522.97	137.22	0.132	9.0
Average hours worked per week	33.7	31.6	2.1	0.129	6.6
Average hourly wage ($)	11.02	10.77	0.25	0.519	2.3
Sample size (N = 722)	385	337			

SOURCE: MDRC calculations from the Career Academies Evaluation Four-Year Post-High School Follow-Up Survey.

NOTES: All measures reflect the first four years following scheduled high school graduation for each sample member. All earnings and wages are adjusted for inflation and reported in 2006 dollars.

Impact estimates are regression-adjusted to control for background characteristics of the sample and for the clustering of students within schools and random assignment years. Values shown for the Academy group are unadjusted mean values; values shown for the non-Academy group are calculated by subtracting the impact estimate from the Academy group's unadjusted mean values. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; and * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

"Percentage change" is the impact divided by the non-Academy group average.

Earnings are calculated from respondents' reports of their hourly wages, hours worked per week, weeks worked per month, and duration of employment (measured in months) at each job. For any given period of time, "average monthly earnings" are calculated as the total estimated earnings from all jobs held during the time period divided by the total number of months in that period; "hours worked per week" are calculated as the total number of hours worked at all jobs in the time period divided by the total number of weeks in that period (assuming four weeks per month); and the "average hourly wage" is calculated as the total estimated earnings from all jobs held in the time period divided by the total number of hours worked during that period. Estimates of earnings, hours, and wages include zero values for months in which respondents were not employed.

For all jobs except the current or most recent job held as of the interview date, respondents reported wages, hours, and weeks for the *conclusion* of the job and these values are applied to the full duration of the job. Thus, if wages or hours increased or decreased during the job, these measures may over- or underestimate true monthly earnings. For the current or most recent job, respondents reported wages, hours, and weeks for both the start and the end of the job. Monthly earnings over the course of the job are calculated assuming that all three components increase or decrease linearly from start to end.

[a]Students were considered to be employed full time if they reported working 30 or more hours per week.

Career Academies Evaluation

Exhibit 5.1.B - MR

Year-by-Year Impacts on Employment and Earnings During Follow-Up Years 5 to 8 for the Medium-Risk Subgroup

Outcome	Academy Group	Non-Academy Group	Impact	P-Value	Percentage Change
Years 5-8					
Ever employed (%)	98.2	98.8	-0.6	0.519	-0.6
Ever employed full time (%)[a]	94.8	96.0	-1.3	0.433	-1.3
Months employed	39.2	38.2	1.0	0.293	2.7
Months employed full time	35.1	33.4	1.8	0.147	5.3
Average monthly earnings ($)	2,138.53	1,980.04	158.49	0.140	8.0
Average hours worked per week	34.2	32.7	1.6	0.162	4.8
Average hourly wage ($)	15.32	14.41	0.91	0.137	6.3
Total number of jobs held	2.1	2.3	-0.2 **	0.041	-9.0
Average job duration, in months	25.7	23.5	2.2 *	0.061	9.3
Year 5					
Ever employed (%)	86.1	83.3	2.7	0.320	3.3
Ever employed full time (%)	75.1	72.6	2.5	0.464	3.4
Months employed	9.3	8.6	0.7 **	0.048	8.1
Months employed full time	7.9	7.3	0.5	0.197	7.1
Average monthly earnings ($)	1,842.82	1,637.73	205.08 *	0.075	12.5
Average hours worked per week	31.2	29.2	2.1	0.165	7.0
Average hourly wage ($)	12.96	11.28	1.67 **	0.049	14.8
Year 6					
Ever employed (%)	90.0	88.0	2.0	0.405	2.3
Ever employed full time (%)	81.1	78.1	3.0	0.331	3.9
Months employed	9.8	9.5	0.3	0.316	3.3
Months employed full time	8.7	8.2	0.5	0.180	6.3
Average monthly earnings ($)	2,020.21	1,888.70	131.51	0.248	7.0
Average hours worked per week	34.0	32.0	2.0	0.147	6.2
Average hourly wage ($)	13.40	12.47	0.93	0.126	7.5
Year 7					
Ever employed (%)	91.9	90.4	1.5	0.489	1.6
Ever employed full time (%)	85.0	82.6	2.5	0.383	3.0
Months employed	9.9	9.9	0.0	0.991	0.0
Months employed full time	9.1	8.8	0.4	0.329	4.0
Average monthly earnings ($)	2,224.82	2,115.86	108.96	0.382	5.1
Average hours worked per week	35.5	34.0	1.5	0.271	4.4
Average hourly wage ($)	14.39	13.92	0.47	0.539	3.4

(continued)

Exhibit 5.1.B - MR (continued)

Outcome	Academy Group	Non-Academy Group	Impact	P-Value	Percentage Change
Year 8					
Ever employed (%)	92.1	94.7	-2.6	0.176	-2.7
Ever employed full time (%)	88.7	89.4	-0.7	0.784	-0.7
Months employed	10.2	10.1	0.0	0.945	0.2
Months employed full time	9.4	9.1	0.4	0.260	4.2
Average monthly earnings ($)	2,466.27	2,277.86	188.40	0.168	8.3
Average hours worked per week	36.2	35.4	0.7	0.552	2.1
Average hourly wage ($)	15.63	14.62	1.02	0.166	7.0
Total annual earnings ($)	29,595.20	27,334.36	2,260.83	0.168	8.3
Last Quarter					
Ever employed (%)	87.1	89.4	-2.2	0.362	-2.5
Ever employed full time (%)	82.4	82.6	-0.2	0.959	-0.2
Months employed	2.6	2.6	0.0	0.745	-1.0
Months employed full time	2.4	2.4	0.0	0.719	1.3
Average monthly earnings ($)	2,637.95	2,364.97	272.98 *	0.095	11.5
Average hours worked per week	36.4	36.4	-0.1	0.962	-0.2
Average hourly wage ($)	15.55	14.18	1.37	0.105	9.7
Sample size (N = 706)	381	325			

SOURCE: MDRC calculations from the Career Academies Evaluation Eight-Year Post-High School Follow-Up Survey.

NOTES: All measures reflect the fifth through eighth years following scheduled high school graduation for each sample member. All earnings and wages are adjusted for inflation and reported in 2006 dollars.

Impact estimates are regression-adjusted to control for background characteristics of the sample and for the clustering of students within schools and random assignment years. Values shown for the Academy group are unadjusted mean values; values shown for the non-Academy group are calculated by subtracting the impact estimate from the Academy group's unadjusted mean values. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; and * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

"Percentage change" is the impact divided by the non-Academy group average.

Earnings are calculated from respondents' reports of their hourly wages, hours worked per week, weeks worked per month, and duration of employment (measured in months) at each job. For any given period of time, "average monthly earnings" are calculated as the total estimated earnings from all jobs held during the time period divided by the total number of months in that period; "hours worked per week" are calculated as the total number of hours worked at all jobs in the time period divided by the total number of weeks in that period (assuming four weeks per month); and the "average hourly wage" is calculated as the total estimated earnings from all jobs held in the time period divided by the total number of hours worked during that period. Estimates of earnings, hours, and wages include zero values for months in which respondents were not employed.

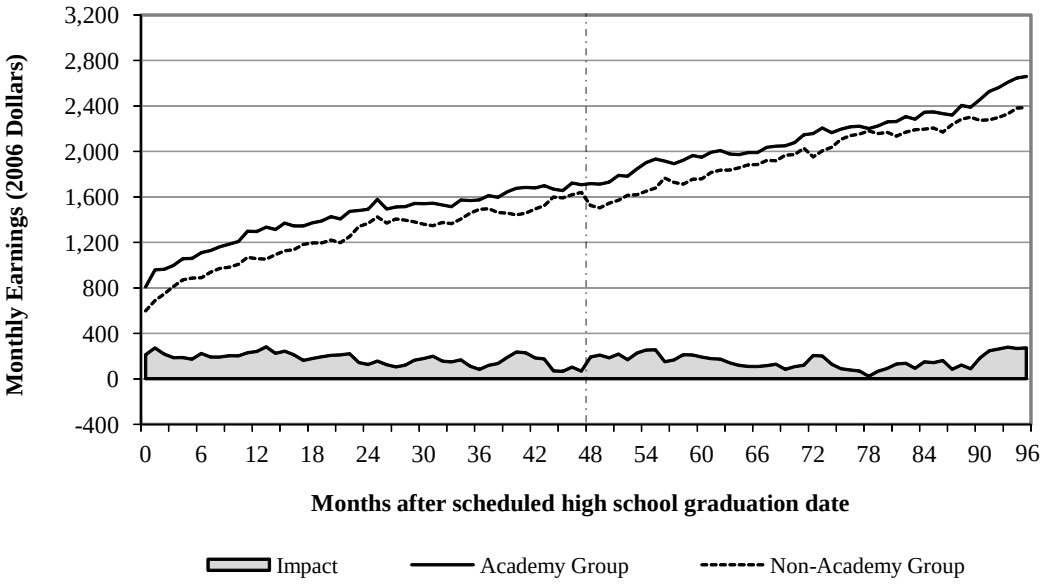
For all jobs except the current or most recent job held as of the interview date, respondents reported wages, hours, and weeks for the *conclusion* of the job and these values are applied to the full duration of the job. Thus, if wages or hours increased or decreased during the job, these measures may over- or underestimate true monthly earnings. For the current or most recent job, respondents reported wages, hours, and weeks for both the start and the end of the job. Monthly earnings over the course of the job are calculated assuming that all three components increase or decrease linearly from start to end.

[a]Students were considered to be employed full time if they reported working 30 or more hours per week.

Career Academies Evaluation

Exhibit 5.2 - MR

Month-by-Month Impacts on Total Monthly Earnings for the Medium-Risk Subgroup



SOURCES: MDRC calculations from the Career Academies Evaluation Four-Year and Eight-Year Post-High School Follow-Up Surveys.

NOTES: Earnings are reported in 2006 dollars.

Measures reflect the 96-month period following scheduled high school graduation for each sample member (Month 0 is June of the scheduled graduation year). Measures for Months 1 to 48 are derived from the Four-Year Post-High School Follow-Up Survey sample of medium-risk youth (N = 722). Measures for Months 49 to 96 are derived from the Eight-Year Post-High School Follow-Up Survey sample of medium-risk youth (N = 721). The vertical dotted line at Month 48 illustrates the cutpoint between the Four-Year and Eight-Year Post-High School Follow-Up Survey samples.

Impact estimates are regression-adjusted to control for background characteristics of the sample and for the clustering of students within schools and random assignment years. Values shown for the Academy group are unadjusted mean values; values shown for the non-Academy group are calculated by subtracting the impact estimate from the Academy group's unadjusted mean values. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Differences in monthly earnings are significant at a level of 10 percent or less in 39 of the 96 months.

Career Academies Evaluation

Exhibit 5.3 - MR

Differences in Characteristics of the Current or Most Recent Job Held Eight Years After Scheduled High School Graduation for the Medium-Risk Subgroup

Outcome	Academy Group	Non-Academy Group	Difference		P-Value
Job duration (months)	*27.6*	*23.4*	*4.2*	***	*0.003*
Month last worked at job (relative to high school graduation)	*95.3*	*95.9*	*-0.6*		*0.234*
Employed at job in the last quarter of Year 8 (%)	*89.6*	*92.2*	*-2.6*		*0.251*
Occupational sector (%) [a]					
Management/business & financial operations	*18.7*	*15.5*	*3.2*		*0.268*
Computer, engineering, & media technology	*7.8*	*3.8*	*4.0*	**	*0.023*
Education, social services, law, & science	*7.8*	*8.5*	*-0.7*		*0.730*
Healthcare/medical support & technology	*9.4*	*10.4*	*-1.1*		*0.645*
Sales, food, & personal services	*10.7*	*16.8*	*-6.1*	**	*0.020*
Office and administrative support	*22.7*	*24.9*	*-2.1*		*0.510*
Construction, production, maintenance, transportation	*16.8*	*16.4*	*0.5*		*0.854*
Other/unknown	*5.9*	*3.5*	*2.3*		*0.153*
Average monthly earnings ($) [b]	*2,610.74*	*2,428.93*	*181.81*		*0.179*
At start of job	*2,318.59*	*2,167.87*	*150.71*		*0.200*
At end of job	*2,900.21*	*2,698.24*	*201.97*		*0.233*
Difference	*581.63*	*530.37*	*51.26*		*0.638*
Average hours per week	*39.3*	*39.5*	*-0.2*		*0.827*
At start of job	*38.5*	*38.6*	*-0.2*		*0.836*
At end of job	*40.7*	*40.5*	*0.3*		*0.740*
Difference	*2.3*	*1.8*	*0.4*		*0.464*
Average hourly wage ($)	*16.42*	*14.94*	*1.47*	**	*0.042*
At start of job	*15.21*	*13.65*	*1.56*	**	*0.020*
At end of job	*17.63*	*16.20*	*1.42*		*0.101*
Difference	*2.41*	*2.55*	*-0.14*		*0.807*
Job offers a health plan (%)	*73.0*	*75.3*	*-2.3*		*0.495*
Job offers any other benefits (%) [c]	*81.8*	*84.0*	*-2.3*		*0.441*
Very satisfied at job (%)	*44.0*	*44.5*	*-0.5*		*0.895*
Very likely to be working in the same field in two years (%) [d]	*61.0*	*57.1*	*3.9*		*0.340*
Very likely to be promoted in the next year (%) [d]	*42.3*	*38.3*	*4.0*		*0.327*
Job is/was directly related to high school studies (%)	*37.5*	*31.8*	*5.8*		*0.113*
Choice of field was influenced by high school experiences (%)	*44.5*	*36.8*	*7.7*	**	*0.043*
Sample size (N = 689)	*374*	*315*			

(continued)

Exhibit 5.3 - MR (continued)

SOURCE: MDRC calculations from the Career Academies Evaluation Eight-Year Post-High School Follow-Up Survey.

NOTES: All measures reflect the job held by the survey respondent at the time of the eight-year post-high school interview or, if the respondent was unemployed at the time of the interview, the job held most recently in the four years prior to the interview. Measures are italicized because the sample includes only those survey respondents who were employed at any time during the fifth through eighth year following their scheduled graduation from high school and thus do not represent an experimental comparison of Academy and non-Academy students.

A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; and * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

[a]Occupational sectors are based on the U.S. Department of Labor's 2000 Standard Occupational Classification (SOC) system. Jobs are coded from respondents' reports of the industry they worked in and the major tasks they performed at the job.

[b]Respondents reported hourly wages, hours worked per week, and weeks worked per month for both the start and the end of the job. Average monthly earnings over the course of the job are calculated assuming that all three components increase or decrease linearly from start to end.

[c]Other benefits include sick leave, paid vacation days, tuition reimbursement, a retirement or pension plan, and stock options or signing bonuses.

[d]The likelihood of working in the same field in two years and of being promoted in the next year were only asked of those who were employed at the time of the interview (N = 602).

Career Academies Evaluation

Exhibit 5.4 - MR

Impacts on Educational Attainment Eight Years After Scheduled High School Graduation for the Medium-Risk Subgroup

Outcome	Academy Group	Non-Academy Group	Impact	P-Value	Percentage Change
High school completion status (%)					
Earned high school diploma	83.8	85.4	-1.7	0.538	-1.9
On-time graduate[a]	76.3	75.3	0.9	0.765	1.3
Late graduate	7.5	10.1	-2.6	0.220	-25.9
Earned a GED	11.1	9.0	2.0	0.362	22.6
Postsecondary educational attainment (%)					
Completed any postsecondary credential	49.5	50.5	-1.0	0.796	-1.9
Highest credential completed					
Bachelor's or graduate degree	13.7	14.4	-0.7	0.779	-5.1
Associate's degree	12.1	13.3	-1.2	0.619	-9.3
Skills training certificate or license	23.7	22.7	1.0	0.756	4.4
Postsecondary education enrollment					
Months enrolled in postsecondary education[b]					
Years 1-4	21.8	19.9	1.9	0.142	9.5
Years 5-8	10.7	10.7	0.0	0.985	-0.2
Currently enrolled in any postsecondary program (%)[c]	18.3	17.5	0.8	0.789	4.4
Currently working toward highest postsecondary credential (%)[d]	14.7	13.5	1.2	0.660	8.6
Bachelor's or graduate degree	8.0	6.9	1.1	0.587	15.8
Associate's degree	5.9	3.8	2.1	0.199	56.2
Skills training certificate or license	0.8	2.8	-2.1 *	0.035	-72.7
Sample size (N = 721)	390	331			

SOURCES: MDRC calculations from the Career Academies Evaluation Four-Year and Eight-Year Post-High School Follow-Up Surveys.

NOTES: High school completion, postsecondary educational attainment, and current postsecondary enrollment reflect respondents' status as of the interview date eight years following their scheduled high school graduation.

Impact estimates are regression-adjusted to control for background characteristics of the sample and for the clustering of students within schools and random assignment years. Values shown for the Academy group are unadjusted mean values; values shown for the non-Academy group are calculated by subtracting the impact estimate from the Academy group's unadjusted mean values. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; and * = 10 percent.

"Percentage change" is the impact divided by the non-Academy group average.

Rounding may cause slight discrepancies in calculating sums and differences.

[a]Respondents are considered on-time graduates if they graduated in June or earlier of the year in which they were scheduled to graduate high school.

(continued)

Exhibit 5.4 - MR (continued)

[b]The measure of months enrolled in postsecondary education during the first through fourth year following scheduled high school graduation is derived from the Four-Year Post-High School Follow-Up Survey sample of medium-risk youth (N = 722). The measure of months enrolled in postsecondary education during the fifth through eighth year following scheduled high school graduation is derived from the Eight-Year Post-High School Follow-Up Survey sample of medium-risk youth (N = 721).

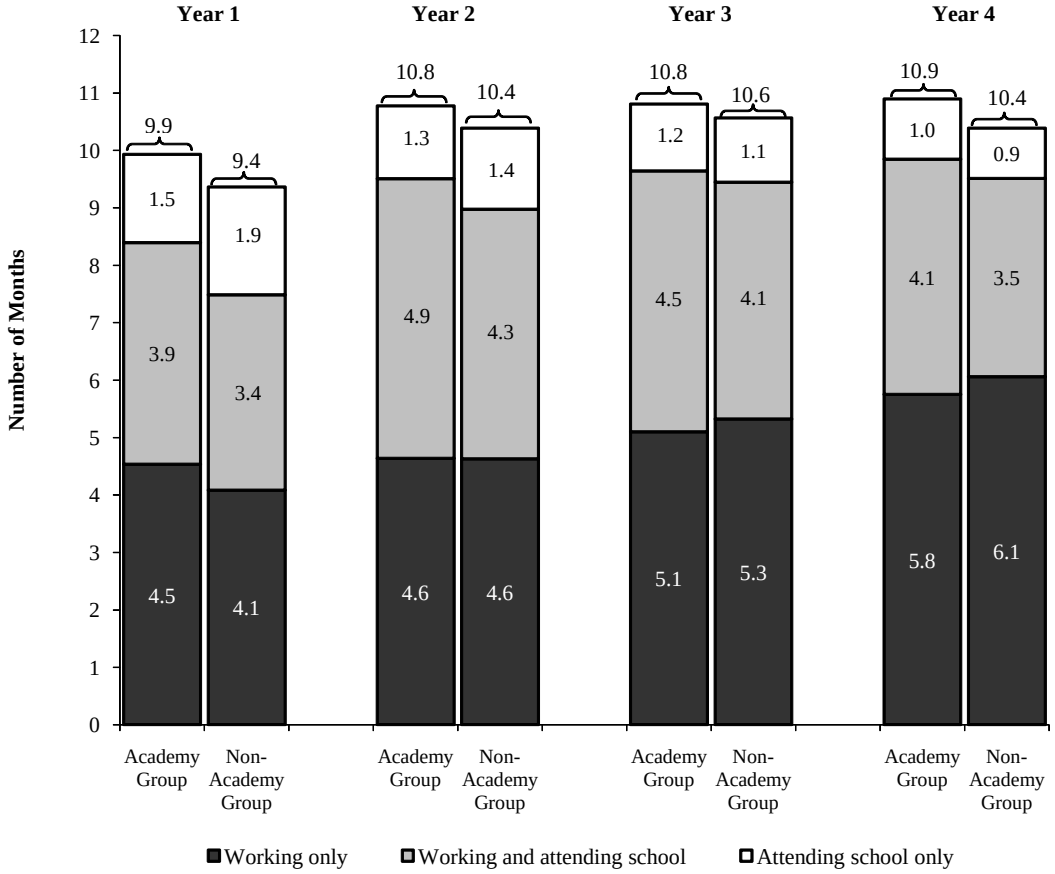
[c]Respondents are considered to be "currently enrolled" in a postsecondary education program if they reported that they were still attending the program and that they expected to complete the program.

[d]Respondents are considered to be working toward their highest postsecondary credential if they are currently enrolled in a program from which they expect to receive either their first postsecondary credential or a credential that is higher than any credential they have already earned (for example, if they have completed an associate's degree and are enrolled in a program that will award a bachelor's degree).

Career Academies Evaluation

Exhibit 5.5.A - MR

Year-by-Year Impacts on Months Spent Attending School or Working During Follow-Up Years 1 to 4 for the Medium-Risk Subgroup



SOURCE: MDRC calculations from the Career Academies Evaluation Four-Year Post-High School Follow-Up Survey.

NOTES: Measures reflect the average number of months spent in each status during each of the first four years following scheduled high school graduation.

Impact estimates are regression-adjusted to control for background characteristics of the sample and for the clustering of students within schools and random assignment years. Values shown for the Academy group are unadjusted mean values; values shown for the non-Academy group are calculated by subtracting the impact estimate from the Academy group's unadjusted mean values.

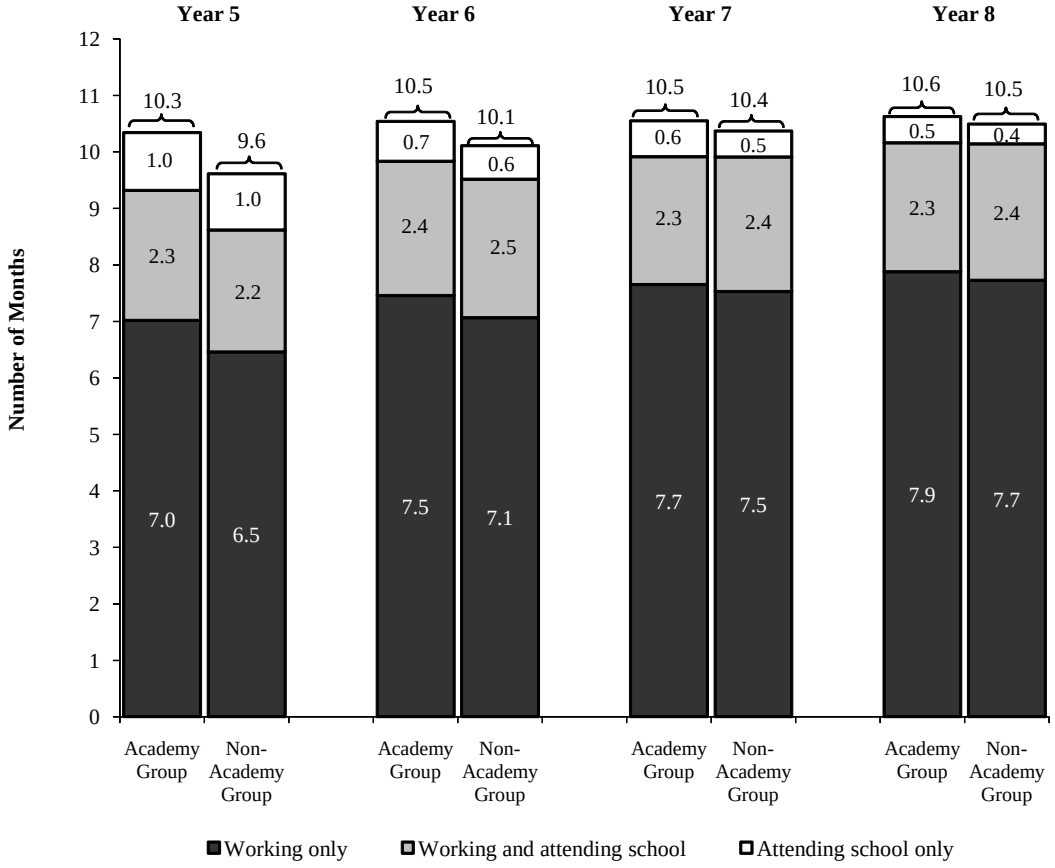
Rounding may cause slight discrepancies in calculating sums and differences.

A two-tailed t-test was applied to differences between the Academy and non-Academy groups in the cumulative number of months spent in each status across all four years. The differences in the number of months spent combining work and school (2.0 months) and the total number of months spent working and/or attending school (1.7 months) are significant at the 10 percent level or lower.

Career Academies Evaluation

Exhibit 5.5.B - MR

Year-by-Year Impacts on Months Spent Attending School or Working During Follow-Up Years 5 to 8 for the Medium-Risk Subgroup



SOURCE: MDRC calculations from the Career Academies Evaluation Eight-Year Post-High School Follow-Up Survey.

NOTES: Measures reflect the average number of months spent in each status during the fifth through eighth year following scheduled high school graduation.

Impact estimates are regression-adjusted to control for background characteristics of the sample and for the clustering of students within schools and random assignment years. Values shown for the Academy group are unadjusted mean values; values shown for the non-Academy group are calculated by subtracting the impact estimate from the Academy group's unadjusted mean values.

Rounding may cause slight discrepancies in calculating sums and differences.

A two-tailed t-test was applied to differences between the Academy and non-Academy groups in the cumulative number of months spent in each status across all four years. The difference in the total number of months spent working and/or attending school (1.5 months) is significant at the 10 percent level or lower.

Career Academies Evaluation

Exhibit 5.6 - MR

Impacts on Family Formation and Other Social Adjustment Outcomes Eight Years After Scheduled High School Graduation for the Medium-Risk Subgroup

Outcome (%)	Academy Group	Non-Academy Group	Impact	P-Value	Percentage Change
Marital status					
Married and living together	36.8	33.0	3.8	0.276	11.5
Single	55.8	60.1	-4.3	0.225	-7.2
Divorced, separated, or widowed	7.5	6.9	0.5	0.797	7.3
Parental status					
Custodial parent	48.8	45.5	3.3	0.345	7.3
Noncustodial parent	5.7	8.4	-2.7	0.125	-32.6
Not a parent	45.5	45.7	-0.2	0.966	-0.3
Living situation					
Lives independently with child/children and partner	30.7	27.3	3.4	0.316	12.5
Lives independently with no children	31.4	32.2	-0.7	0.827	-2.3
Lives independently with child/children but not partner	10.6	10.2	0.3	0.881	3.3
Lives with parent(s) or guardian(s), with or without children	27.3	30.3	-3.0	0.377	-9.9
Ever gone without health insurance in past year	29.5	33.6	-4.1	0.238	-12.3
Received TANF or cash assistance in past year	5.7	5.7	0.0	0.995	0.2
Received food stamps in past year	10.9	11.7	-0.9	0.710	-7.4
Registered to vote	72.4	74.0	-1.6	0.613	-2.2
Any recent illegal or drug-related activity[a]	12.4	11.7	0.7	0.770	5.9
Any recent illegal activity, excluding drug use	6.2	6.0	0.1	0.937	2.3
Sample size (N = 719)	389	330			

SOURCE: MDRC calculations from the Career Academies Evaluation Eight-Year Post-High School Follow-Up Survey.

NOTES: Impact estimates are regression-adjusted to control for background characteristics of the sample and for the clustering of students within schools and random assignment years. Values shown for the Academy group are unadjusted mean values; values shown for the non-Academy group are calculated by subtracting the impact estimate from the Academy group's unadjusted mean values. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; and * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

[a]This measure includes illegal drug use, breaking the law (other than traffic violations), and any arrests or convictions in the past year.

Career Academies Evaluation

Exhibit 5.7 - MR

Impacts on High School Experiences for the Medium-Risk Subgroup

Outcome	Academy Group	Non-Academy Group	Impact	P-Value	Percentage Change
Ever enrolled in a Career Academy during high school (%)	90.1	5.8	84.3 ***	0.000	---
Was enrolled in a Career Academy at the end of scheduled grade 12 (%)	62.5	1.7	60.7 ***	0.000	---
Average attendance, grades 9-12 (% of school days)	89.1	89.2	-0.1	0.920	-0.1
Credits earned					
Total course credits	22.5	22.3	0.2	0.591	1.0
Total course credits meet the graduation requirement (%)	68.4	62.2	6.1	0.108	9.9
Course-taking (%)[a]					
Basic core curriculum: English (4), Social Studies (3), Math (2), Science (2)	65.5	66.6	-1.2	0.783	-1.7
College prep core curriculum: English (4), Social Studies (3), Math (3), Science (3)	39.9	42.6	-2.8	0.500	-6.5
Earned 3 or more career/vocational credits	69.6	44.7	24.9 ***	0.000	55.6
Basic core curriculum plus 3 career/vocational credits	43.8	25.9	17.9 ***	0.000	69.2
Career awareness and development activities (%)					
In school[b]					
Ever participated	80.0	74.3	5.7 *	0.098	7.7
Participated intensively	48.2	42.0	6.2	0.133	14.8
Outside of school[c]					
Ever participated	69.6	44.0	25.5 ***	0.000	58.0
Participated intensively	38.3	14.5	23.8 ***	0.000	164.6
Employment and work-based learning (%)					
Ever employed during high school (%)	82.6	82.1	0.5	0.870	0.6
Ever employed in a paid job during high school (%)	79.9	79.3	0.6	0.866	0.7
Ever had a job connected to school[d]	33.9	27.9	6.1	0.117	21.7
Ever had a job with high work-based learning content[e]	22.8	19.2	3.6	0.298	18.8
Sample size (N = 599)	333	266			

(continued)

Exhibit 5.7 - MR (continued)

SOURCES: MDRC calculations from the Career Academies Evaluation Student School Records Database and 12th Grade Survey.

NOTES: All measures are derived from the sample of Eight-Year Post-High School Follow-Up Survey respondents who are also in the Student School Records Database and the 12th Grade Survey sample.

Measures of attendance rate and credits earned include zero values for grades in which sample members were identified as school dropouts. The measures of credits earned and course-taking include all credits earned through the end of the twelfth-grade year (that is, the year that students were projected to reach the twelfth grade when they initially entered the study sample).

Impact estimates are regression-adjusted to control for background characteristics of the sample and for the clustering of students within schools and random assignment years. Values shown for the Academy group are unadjusted mean values; values shown for the non-Academy group are calculated by subtracting the impact estimate from the Academy group's unadjusted mean values. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; and * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

[a]One of the nine study sites was unable to provide data on the specific courses students completed during high school. Thus, course-taking measures are derived from a sample of eight sites with a total of 504 medium-risk students. The measure of earning three or more career/vocational credits is derived from a sample of 445 medium-risk students.

[b]In-school career awareness and development activities include learning about jobs in class or through in-school activities, receiving instruction or counseling on how to find a job or how to act on the job, and having discussions with students and adults about careers and work. Respondents are considered to have participated intensively in in-school career awareness and development activities if they reported participating in at least three of these activities per month.

[c]Outside-of-school career awareness and development activities include career-related field trips, job shadowing, and mentoring programs. Respondents are considered to have participated intensively in outside-of-school career awareness and development activities if they reported participating in two or more of these activities.

[d]Jobs that are "connected to school" are sponsored or supported by the school (they may also be called "work-based learning experiences"). These include jobs that a teacher helped the student find, that are part of a school program or class or for which the student receives course credit, and in which a supervisor at work and an adult from the school communicate about the student's progress.

[e]To assess the level of "work-based learning content" in students' jobs, respondents were asked to rate their jobs on a series of characteristics, including how often they were asked to read, write, and use the computer on the job; how much advice they received on the job; whether they felt bored on the job; whether they learned new things on the job; and whether the job influenced their career choice. For a complete list of the survey items composing this measure and for a description of how the cutpoint for "high work-based learning content" was set, see Kemple, Poglinco, and Snipes, *Career Academies: Building Career Awareness and Work-Based Learning Activities Through Employer Partnerships* (New York: MDRC, 1999).

Career Academies Evaluation

Exhibit 5.1.A - LR

Year-by-Year Impacts on Employment and Earnings During Follow-Up Years 1 to 4 for the Low-Risk Subgroup

Outcome	Academy Group	Non-Academy Group	Impact	P-Value	Percentage Change
Years 1-4					
Ever employed (%)	98.1	96.3	1.8	0.277	1.9
Ever employed full time (%)[a]	92.8	86.5	6.3 *	0.050	7.3
Months employed	35.9	36.2	-0.3	0.833	-0.8
Months employed full time	26.4	25.1	1.3	0.453	5.1
Average monthly earnings ($)	1,211.47	1,183.39	28.08	0.746	2.4
Average hours worked per week	28.0	27.1	0.9	0.521	3.5
Average hourly wage ($)	10.54	10.11	0.43	0.252	4.2
Total number of jobs held	3.1	3.1	0.0	0.908	-0.6
Average job duration, in months	16.1	16.0	0.2	0.876	1.1
Year 1					
Ever employed (%)	80.8	85.1	-4.4	0.276	-5.1
Ever employed full time (%)	60.1	64.0	-3.9	0.435	-6.1
Months employed	7.5	8.1	-0.7	0.162	-8.3
Months employed full time	5.0	5.4	-0.4	0.400	-8.0
Average monthly earnings ($)	824.20	927.00	-102.80	0.243	-11.1
Average hours worked per week	21.7	23.4	-1.7	0.355	-7.1
Average hourly wage ($)	7.71	7.94	-0.23	0.667	-2.9
Year 2					
Ever employed (%)	90.9	90.5	0.3	0.913	0.4
Ever employed full time (%)	71.2	71.7	-0.5	0.910	-0.8
Months employed	9.0	9.0	0.0	0.960	0.2
Months employed full time	6.4	6.2	0.1	0.782	2.4
Average monthly earnings ($)	1,114.10	1,135.96	-21.86	0.821	-1.9
Average hours worked per week	27.9	27.2	0.7	0.694	2.7
Average hourly wage ($)	9.10	9.25	-0.15	0.748	-1.6
Year 3					
Ever employed (%)	92.3	89.9	2.4	0.412	2.7
Ever employed full time (%)	79.3	74.1	5.2	0.242	7.1
Months employed	9.6	9.2	0.4	0.369	4.3
Months employed full time	7.4	6.5	0.9 *	0.094	13.9
Average monthly earnings ($)	1,365.50	1,249.88	115.62	0.282	9.3
Average hours worked per week	30.9	28.2	2.7	0.151	9.7
Average hourly wage ($)	10.18	9.71	0.47	0.346	4.8

(continued)

Exhibit 5.1.A - LR (continued)

Outcome	Academy Group	Non-Academy Group	Impact	P-Value	Percentage Change
Year 4					
Ever employed (%)	92.3	91.4	0.9	0.736	1.0
Ever employed full time (%)	78.4	71.4	7.0	0.119	9.8
Months employed	9.8	9.8	0.0	0.953	-0.2
Months employed full time	7.6	6.9	0.7	0.222	9.4
Average monthly earnings ($)	1,542.08	1,420.71	121.37	0.259	8.5
Average hours worked per week	31.4	29.5	1.9	0.264	6.6
Average hourly wage ($)	11.19	10.56	0.63	0.221	6.0
Sample size (N = 376)	208	168			

SOURCE: MDRC calculations from the Career Academies Evaluation Four-Year Post-High School Follow-Up Survey.

NOTES: All measures reflect the first four years following scheduled high school graduation for each sample member. All earnings and wages are adjusted for inflation and reported in 2006 dollars.

Impact estimates are regression-adjusted to control for background characteristics of the sample and for the clustering of students within schools and random assignment years. Values shown for the Academy group are unadjusted mean values; values shown for the non-Academy group are calculated by subtracting the impact estimate from the Academy group's unadjusted mean values. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; and * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

"Percentage change" is the impact divided by the non-Academy group average.

Earnings are calculated from respondents' reports of their hourly wages, hours worked per week, weeks worked per month, and duration of employment (measured in months) at each job. For any given period of time, "average monthly earnings" are calculated as the total estimated earnings from all jobs held during the time period divided by the total number of months in that period; "hours worked per week" are calculated as the total number of hours worked at all jobs in the time period divided by the total number of weeks in that period (assuming four weeks per month); and the "average hourly wage" is calculated as the total estimated earnings from all jobs held in the time period divided by the total number of hours worked during that period. Estimates of earnings, hours, and wages include zero values for months in which respondents were not employed.

For all jobs except the current or most recent job held as of the interview date, respondents reported wages, hours, and weeks for the *conclusion* of the job and these values are applied to the full duration of the job. Thus, if wages or hours increased or decreased during the job, these measures may over- or underestimate true monthly earnings. For the current or most recent job, respondents reported wages, hours, and weeks for both the start and the end of the job. Monthly earnings over the course of the job are calculated assuming that all three components increase or decrease linearly from start to end.

[a]Students were considered to be employed full time if they reported working 30 or more hours per week.

Career Academies Evaluation

Exhibit 5.1.B - LR

Year-by-Year Impacts on Employment and Earnings During Follow-Up Years 5 to 8 for the Low-Risk Subgroup

Outcome	Academy Group	Non-Academy Group	Impact	P-Value	Percentage Change
Years 5-8					
Ever employed (%)	98.0	97.8	0.2	0.899	0.2
Ever employed full time (%)[a]	95.5	92.2	3.3	0.200	3.6
Months employed	38.9	38.7	0.3	0.848	0.7
Months employed full time	34.0	32.8	1.1	0.505	3.5
Average monthly earnings ($)	2,219.68	1,943.96	275.72 *	0.080	14.2
Average hours worked per week	33.2	32.0	1.2	0.407	3.7
Average hourly wage ($)	15.61	14.42	1.19	0.111	8.3
Total number of jobs held	2.0	2.0	0.0	0.787	-2.0
Average job duration, in months	26.5	24.1	2.5	0.117	10.3
Year 5					
Ever employed (%)	85.5	87.0	-1.5	0.676	-1.8
Ever employed full time (%)	73.0	72.6	0.4	0.930	0.6
Months employed	9.0	9.0	-0.1	0.893	-0.7
Months employed full time	7.4	7.3	0.1	0.880	1.2
Average monthly earnings ($)	1,850.95	1,608.29	242.66 *	0.092	15.1
Average hours worked per week	29.8	28.9	0.9	0.618	3.2
Average hourly wage ($)	13.03	11.94	1.08	0.184	9.1
Year 6					
Ever employed (%)	91.0	86.2	4.8	0.141	5.6
Ever employed full time (%)	83.5	76.9	6.6	0.112	8.6
Months employed	9.9	9.5	0.4	0.345	4.4
Months employed full time	8.6	7.9	0.7	0.205	8.6
Average monthly earnings ($)	2,191.22	1,839.52	351.70 **	0.034	19.1
Average hours worked per week	33.8	31.3	2.5	0.169	7.9
Average hourly wage ($)	14.39	12.39	2.00 **	0.020	16.1
Year 7					
Ever employed (%)	92.0	91.9	0.1	0.972	0.1
Ever employed full time (%)	86.5	80.6	5.9	0.133	7.3
Months employed	10.1	9.8	0.3	0.410	3.3
Months employed full time	9.1	8.5	0.6	0.234	7.1
Average monthly earnings ($)	2,384.71	2,041.23	343.49 *	0.069	16.8
Average hours worked per week	35.1	32.4	2.8	0.107	8.6
Average hourly wage ($)	15.05	13.86	1.19	0.171	8.6

(continued)

Exhibit 5.1.B - LR (continued)

Outcome	Academy Group	Non-Academy Group	Impact	P-Value	Percentage Change
Year 8					
Ever employed (%)	89.5	92.4	-2.9	0.345	-3.1
Ever employed full time (%)	82.0	85.4	-3.4	0.395	-4.0
Months employed	9.9	10.3	-0.4	0.311	-4.0
Months employed full time	8.9	9.1	-0.2	0.651	-2.6
Average monthly earnings ($)	2,451.85	2,286.80	165.04	0.414	7.2
Average hours worked per week	34.0	35.4	-1.4	0.435	-4.0
Average hourly wage ($)	15.51	14.65	0.86	0.410	5.9
Total annual earnings ($)	29,422.17	27,441.64	1,980.52	0.414	7.2
Last Quarter					
Ever employed (%)	85.5	88.0	-2.5	0.477	-2.9
Ever employed full time (%)	76.5	79.2	-2.7	0.558	-3.4
Months employed	2.5	2.6	-0.1	0.326	-4.2
Months employed full time	2.2	2.3	-0.1	0.571	-3.3
Average monthly earnings ($)	2,511.65	2,394.61	117.03	0.582	4.9
Average hours worked per week	34.3	36.2	-1.9	0.329	-5.3
Average hourly wage ($)	15.40	14.28	1.12	0.331	7.8
Sample size (N = 362)	200	162			

SOURCE: MDRC calculations from the Career Academies Evaluation Eight-Year Post-High School Follow-Up Survey.

NOTES: All measures reflect the fifth through eighth years following scheduled high school graduation for each sample member. All earnings and wages are adjusted for inflation and reported in 2006 dollars.

Impact estimates are regression-adjusted to control for background characteristics of the sample and for the clustering of students within schools and random assignment years. Values shown for the Academy group are unadjusted mean values; values shown for the non-Academy group are calculated by subtracting the impact estimate from the Academy group's unadjusted mean values. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; and * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

"Percentage change" is the impact divided by the non-Academy group average.

Earnings are calculated from respondents' reports of their hourly wages, hours worked per week, weeks worked per month, and duration of employment (measured in months) at each job. For any given period of time, "average monthly earnings" are calculated as the total estimated earnings from all jobs held during the time period divided by the total number of months in that period; "hours worked per week" are calculated as the total number of hours worked at all jobs in the time period divided by the total number of weeks in that period (assuming four weeks per month); and the "average hourly wage" is calculated as the total estimated earnings from all jobs held in the time period divided by the total number of hours worked during that period. Estimates of earnings, hours, and wages include zero values for months in which respondents were not employed.

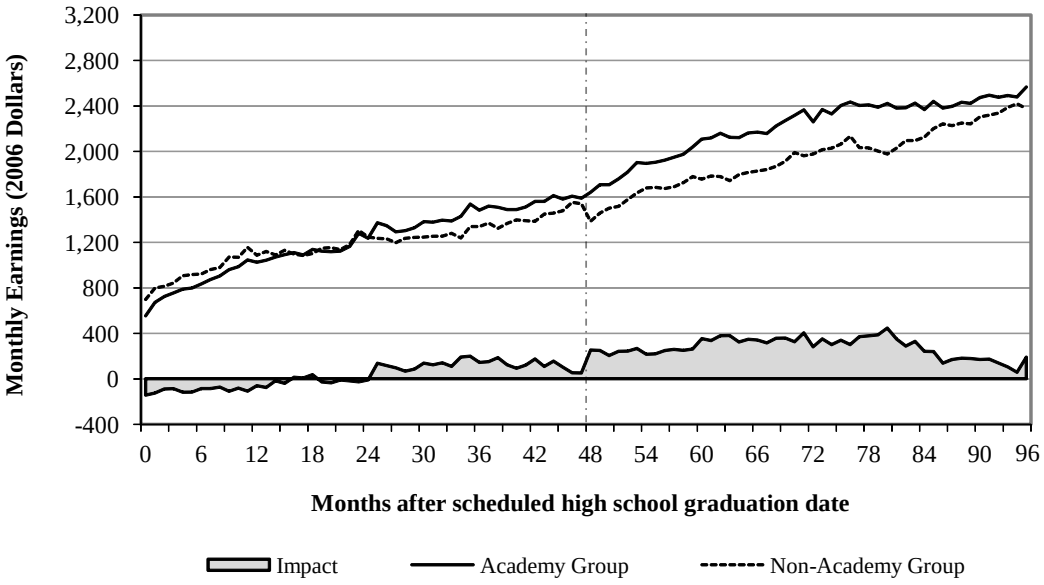
For all jobs except the current or most recent job held as of the interview date, respondents reported wages, hours, and weeks for the *conclusion* of the job and these values are applied to the full duration of the job. Thus, if wages or hours increased or decreased during the job, these measures may over- or underestimate true monthly earnings. For the current or most recent job, respondents reported wages, hours, and weeks for both the start and the end of the job. Monthly earnings over the course of the job are calculated assuming that all three components increase or decrease linearly from start to end.

[a]Students were considered to be employed full time if they reported working 30 or more hours per week.

Career Academies Evaluation

Exhibit 5.2 - LR

Month-by-Month Impacts on Total Monthly Earnings for the Low-Risk Subgroup



SOURCES: MDRC calculations from the Career Academies Evaluation Four-Year and Eight-Year Post-High School Follow-Up Surveys.

NOTES: Earnings are reported in 2006 dollars.

Measures reflect the 96-month period following scheduled high school graduation for each sample member (Month 0 is June of the scheduled graduation year). Measures for Months 1 to 48 are derived from the Four-Year Post-High School Follow-Up Survey sample of low-risk youth (N = 376). Measures for Months 49 to 96 are derived from the Eight-Year Post-High School Follow-Up Survey sample of low-risk youth (N = 364). The vertical dotted line at Month 48 illustrates the cutpoint between the Four-Year and Eight-Year Post-High School Follow-Up Survey samples.

Impact estimates are regression-adjusted to control for background characteristics of the sample and for the clustering of students within schools and random assignment years. Values shown for the Academy group are unadjusted mean values; values shown for the non-Academy group are calculated by subtracting the impact estimate from the Academy group's unadjusted mean values. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Differences in monthly earnings are significant at a level of 10 percent or less in 22 of the 96 months.

Career Academies Evaluation

Exhibit 5.3 - LR

Differences in Characteristics of the Current or Most Recent Job Held Eight Years After Scheduled High School Graduation for the Low-Risk Subgroup

Outcome	Academy Group	Non-Academy Group	Difference		P-Value
Job duration (months)	*26.7*	*24.0*	*2.7*		*0.163*
Month last worked at job (relative to high school graduation)	*95.0*	*95.3*	*-0.3*		*0.699*
Employed at job in the last quarter of Year 8 (%)	*89.7*	*90.1*	*-0.4*		*0.911*
Occupational sector (%) [a]					
Management/business & financial operations	*21.5*	*16.5*	*5.1*		*0.241*
Computer, engineering, & media technology	*7.2*	*2.8*	*4.4*	*	*0.069*
Education, social services, law, & science	*12.8*	*18.0*	*-5.2*		*0.192*
Healthcare/medical support & technology	*10.3*	*9.4*	*0.9*		*0.777*
Sales, food, & personal services	*9.7*	*5.9*	*3.9*		*0.188*
Office and administrative support	*23.1*	*30.8*	*-7.8*		*0.102*
Construction, production, maintenance, transportation	*10.3*	*8.0*	*2.2*		*0.462*
Other/unknown	*4.6*	*8.5*	*-3.9*		*0.132*
Average monthly earnings ($) [b]	*2,647.71*	*2,377.46*	*270.25*	*	*0.085*
At start of job	*2,400.54*	*2,146.48*	*254.05*	*	*0.072*
At end of job	*2,901.78*	*2,608.40*	*293.38*		*0.123*
Difference	*501.24*	*461.91*	*39.33*		*0.735*
Average hours per week	*39.6*	*38.2*	*1.4*		*0.190*
At start of job	*38.9*	*37.4*	*1.6*		*0.168*
At end of job	*40.4*	*39.4*	*1.1*		*0.352*
Difference	*1.5*	*2.0*	*-0.5*		*0.536*
Average hourly wage ($)	*16.64*	*15.30*	*1.34*		*0.144*
At start of job	*15.50*	*14.30*	*1.20*		*0.169*
At end of job	*17.77*	*16.31*	*1.46*		*0.168*
Difference	*2.27*	*2.01*	*0.26*		*0.666*
Job offers a health plan (%)	*77.4*	*77.1*	*0.3*		*0.940*
Job offers any other benefits (%) [c]	*81.0*	*82.2*	*-1.2*		*0.781*
Very satisfied at job (%)	*45.6*	*43.4*	*2.3*		*0.679*
Very likely to be working in the same field in two years (%) [d]	*59.4*	*58.3*	*1.1*		*0.844*
Very likely to be promoted in the next year (%) [d]	*39.8*	*39.4*	*0.4*		*0.948*
Job is/was directly related to high school studies (%)	*41.5*	*32.9*	*8.5*		*0.111*
Choice of field was influenced by high school experiences (%)	*50.3*	*37.8*	*12.5*	**	*0.024*
Sample size (N = 354)	*195*	*159*			

(continued)

Exhibit 5.3 - LR (continued)

SOURCE: MDRC calculations from the Career Academies Evaluation Eight-Year Post-High School Follow-Up Survey.

NOTES: All measures reflect the job held by the survey respondent at the time of the eight-year post-high school interview or, if the respondent was unemployed at the time of the interview, the job held most recently in the four years prior to the interview. Measures are italicized because the sample includes only those survey respondents who were employed at any time during the fifth through eighth year following their scheduled graduation from high school and thus do not represent an experimental comparison of Academy and non-Academy students.

A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; and * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

[a]Occupational sectors are based on the U.S. Department of Labor's 2000 Standard Occupational Classification (SOC) system. Jobs are coded from respondents' reports of the industry they worked in and the major tasks they performed at the job.

[b]Respondents reported hourly wages, hours worked per week, and weeks worked per month for both the start and the end of the job. Average monthly earnings over the course of the job are calculated assuming that all three components increase or decrease linearly from start to end.

[c]Other benefits include sick leave, paid vacation days, tuition reimbursement, a retirement or pension plan, and stock options or signing bonuses.

[d]The likelihood of working in the same field in two years and of being promoted in the next year were only asked of those who were employed at the time of the interview (N = 312).

Career Academies Evaluation

Exhibit 5.4 - LR

Impacts on Educational Attainment Eight Years After Scheduled High School Graduation for the Low-Risk Subgroup

Outcome	Academy Group	Non-Academy Group	Impact	P-Value	Percentage Change
High school completion status (%)					
Earned high school diploma	97.0	98.5	-1.4	0.393	-1.5
On-time graduate[a]	89.6	91.5	-1.9	0.545	-2.1
Late graduate	7.4	7.0	0.4	0.870	6.2
Earned a GED	2.5	1.5	1.0	0.516	65.1
Postsecondary educational attainment (%)					
Completed any postsecondary credential	60.9	56.7	4.2	0.423	7.4
Highest credential completed					
Bachelor's or graduate degree	31.7	32.6	-0.9	0.857	-2.8
Associate's degree	16.3	10.9	5.4	0.159	49.3
Skills training certificate or license	12.9	13.2	-0.3	0.933	-2.3
Postsecondary education enrollment					
Months enrolled in postsecondary education[b]					
Years 1-4	29.6	30.2	-0.6	0.730	-1.9
Years 5-8	15.1	13.9	1.2	0.465	8.7
Currently enrolled in any postsecondary program (%)[c]	27.2	21.7	5.5	0.246	25.2
Currently working toward highest postsecondary credential (%)[d]	21.3	18.9	2.4	0.584	12.6
Bachelor's or graduate degree	13.9	11.8	2.1	0.558	17.7
Associate's degree	5.9	6.1	-0.2	0.938	-3.3
Skills training certificate or license	1.5	1.0	0.5	0.688	50.7
Sample size (N = 364)	202	162			

SOURCES: MDRC calculations from the Career Academies Evaluation Four-Year and Eight-Year Post-High School Follow-Up Surveys.

NOTES: High school completion, postsecondary educational attainment, and current postsecondary enrollment reflect respondents' status as of the interview date eight years following their scheduled high school graduation.

Impact estimates are regression-adjusted to control for background characteristics of the sample and for the clustering of students within schools and random assignment years. Values shown for the Academy group are unadjusted mean values; values shown for the non-Academy group are calculated by subtracting the impact estimate from the Academy group's unadjusted mean values. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; and * = 10 percent.

"Percentage change" is the impact divided by the non-Academy group average.

Rounding may cause slight discrepancies in calculating sums and differences.

[a]Respondents are considered on-time graduates if they graduated in June or earlier of the year in which they were scheduled to graduate high school.

(continued)

Exhibit 5.4 - LR (continued)

[b]The measure of months enrolled in postsecondary education during the first through fourth year following scheduled high school graduation is derived from the Four-Year Post-High School Follow-Up Survey sample of low-risk youth (N = 376). The measure of months enrolled in postsecondary education during the fifth through eighth year following scheduled high school graduation is derived from the Eight-Year Post-High School Follow-Up Survey sample of low-risk youth (N = 364).

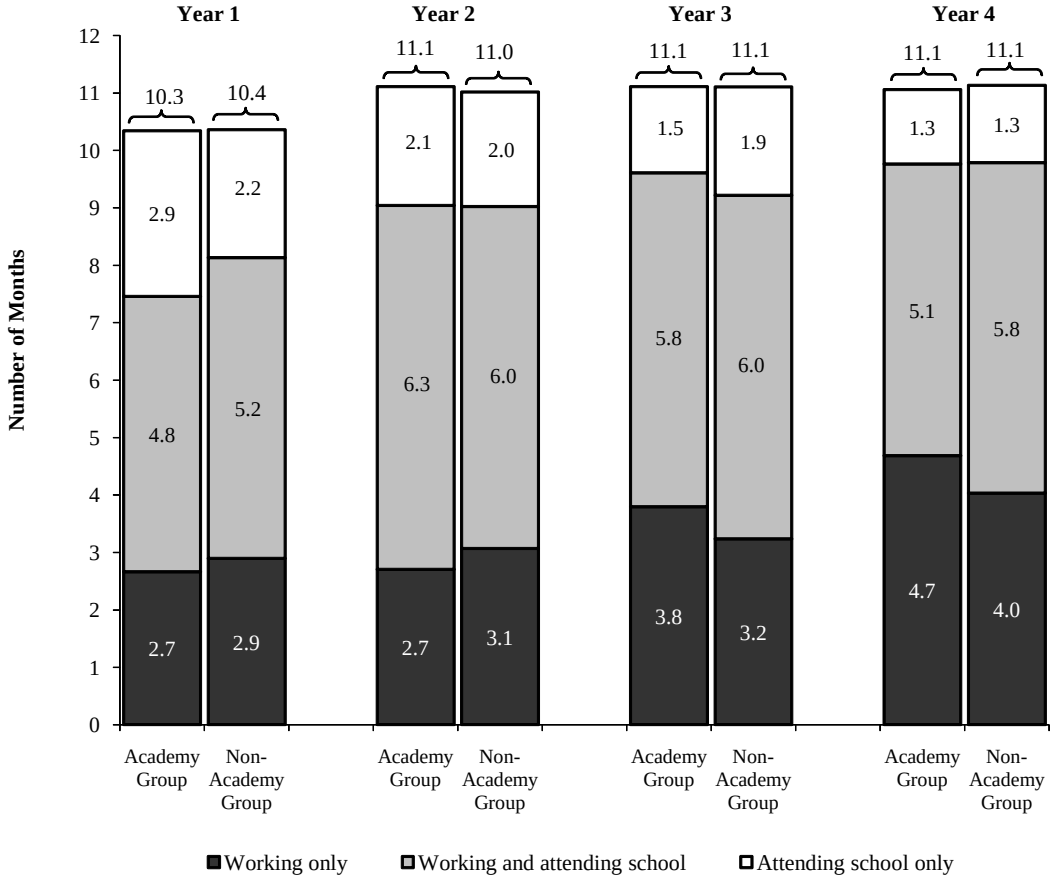
[c]Respondents are considered to be "currently enrolled" in a postsecondary education program if they reported that they were still attending the program and that they expected to complete the program.

[d]Respondents are considered to be working toward their highest postsecondary credential if they are currently enrolled in a program from which they expect to receive either their first postsecondary credential or a credential that is higher than any credential they have already earned (for example, if they have completed an associate's degree and are enrolled in a program that will award a bachelor's degree).

Career Academies Evaluation

Exhibit 5.5.A - LR

Year-by-Year Impacts on Months Spent Attending School or Working During Follow-Up Years 1 to 4 for the Low-Risk Subgroup



SOURCE: MDRC calculations from the Career Academies Evaluation Four-Year Post-High School Follow-Up Survey.

NOTES: Measures reflect the average number of months spent in each status during each of the first four years following scheduled high school graduation.

Impact estimates are regression-adjusted to control for background characteristics of the sample and for the clustering of students within schools and random assignment years. Values shown for the Academy group are unadjusted mean values; values shown for the non-Academy group are calculated by subtracting the impact estimate from the Academy group's unadjusted mean values.

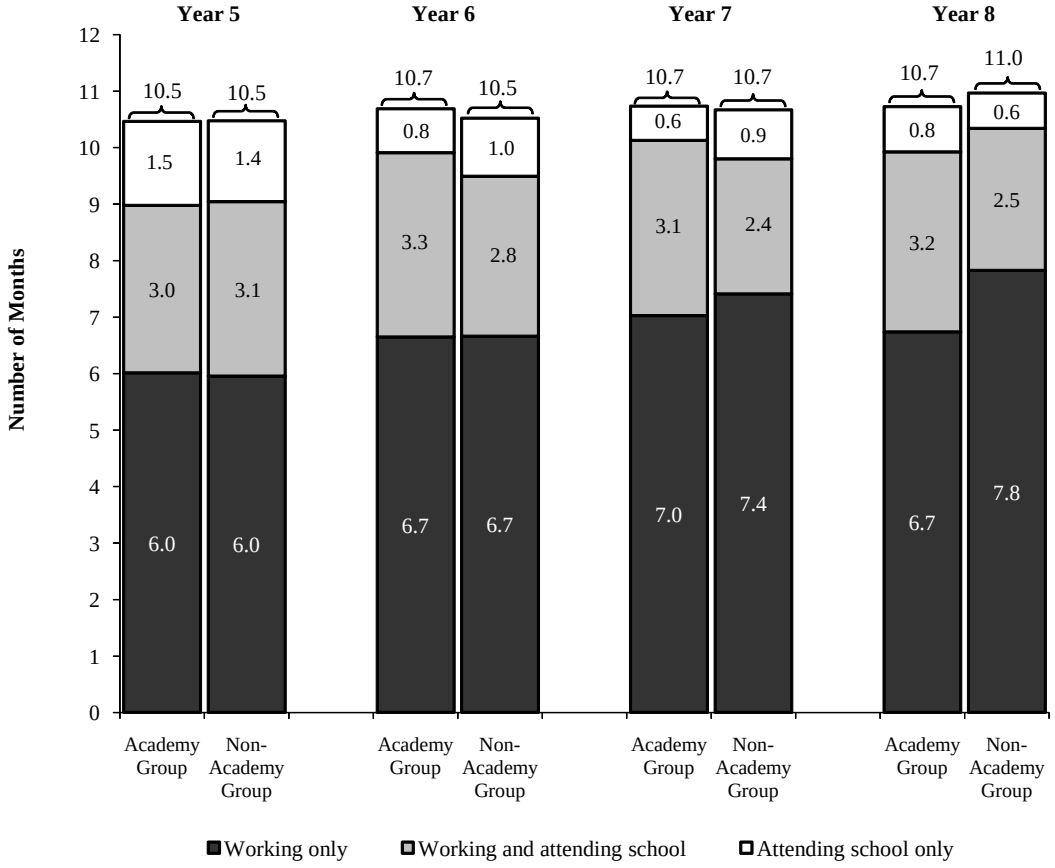
Rounding may cause slight discrepancies in calculating sums and differences.

A two-tailed t-test was applied to differences between the Academy and non-Academy groups in the cumulative number of months spent in each status across all four years. None of these differences is significant at the 10 percent level or lower.

Career Academies Evaluation

Exhibit 5.5.B - LR

Year-by-Year Impacts on Months Spent Attending School or Working During Follow-Up Years 5 to 8 for the Low-Risk Subgroup



SOURCE: MDRC calculations from the Career Academies Evaluation Eight-Year Post-High School Follow-Up Survey.

NOTES: Measures reflect the average number of months spent in each status during the fifth through eighth year following scheduled high school graduation.

Impact estimates are regression-adjusted to control for background characteristics of the sample and for the clustering of students within schools and random assignment years. Values shown for the Academy group are unadjusted mean values; values shown for the non-Academy group are calculated by subtracting the impact estimate from the Academy group's unadjusted mean values.

Rounding may cause slight discrepancies in calculating sums and differences.

A two-tailed t-test was applied to differences between the Academy and non-Academy groups in the cumulative number of months spent in each status across all four years. None of these differences is significant at the 10 percent level or lower.

Career Academies Evaluation

Exhibit 5.6 - LR

Impacts on Family Formation and Other Social Adjustment Outcomes Eight Years After Scheduled High School Graduation for the Low-Risk Subgroup

Outcome (%)	Academy Group	Non-Academy Group	Impact	P-Value	Percentage Change
Marital status					
Married and living together	40.6	35.1	5.5	0.278	15.7
Single	55.4	58.3	-2.8	0.585	-4.8
Divorced, separated, or widowed	4.0	6.7	-2.7	0.250	-40.5
Parental status					
Custodial parent	44.8	36.3	8.4 *	0.090	23.2
Noncustodial parent	4.0	5.1	-1.2	0.577	-22.5
Not a parent	51.0	58.7	-7.7	0.126	-13.1
Living situation					
Lives independently with child/children and partner	31.7	23.1	8.6 *	0.070	37.3
Lives independently with no children	35.1	35.8	-0.6	0.905	-1.7
Lives independently with child/children but not partner	5.4	6.3	-0.8	0.716	-13.1
Lives with parent(s) or guardian(s), with or without children	27.7	34.9	-7.2	0.138	-20.6
Ever gone without health insurance in past year	26.7	30.9	-4.2	0.374	-13.6
Received TANF or cash assistance in past year	5.0	6.6	-1.6	0.515	-23.9
Received food stamps in past year	8.5	9.8	-1.3	0.645	-13.7
Registered to vote	79.1	74.5	4.6	0.297	6.2
Any recent illegal or drug-related activity[a]	7.5	4.9	2.6	0.308	53.0
Any recent illegal activity, excluding drug use	4.5	2.8	1.6	0.431	57.4
Sample size (N = 364)	202	162			

SOURCE: MDRC calculations from the Career Academies Evaluation Eight-Year Post-High School Follow-Up Survey.

NOTES: Impact estimates are regression-adjusted to control for background characteristics of the sample and for the clustering of students within schools and random assignment years. Values shown for the Academy group are unadjusted mean values; values shown for the non-Academy group are calculated by subtracting the impact estimate from the Academy group's unadjusted mean values. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; and * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

[a]This measure includes illegal drug use, breaking the law (other than traffic violations), and any arrests or convictions in the past year.

Career Academies Evaluation

Exhibit 5.7 - LR

Impacts on High School Experiences for the Low-Risk Subgroup

Outcome	Academy Group	Non-Academy Group	Impact	P-Value	Percentage Change
Ever enrolled in a Career Academy during high school (%)	90.2	14.9	75.3 ***	0.000	---
Was enrolled in a Career Academy at the end of scheduled grade 12 (%)	71.2	10.8	60.4 ***	0.000	---
Average attendance, grades 9-12 (% of school days)	94.1	94.8	-0.7	0.368	-0.8
Credits earned					
Total course credits	24.8	24.9	-0.1	0.801	-0.4
Total course credits meet the graduation requirement (%)	85.3	81.4	3.9	0.308	4.8
Course-taking (%)[a]					
Basic core curriculum: English (4), Social Studies (3), Math (2), Science (2)	84.9	89.3	-4.4	0.268	-4.9
College prep core curriculum: English (4), Social Studies (3), Math (3), Science (3)	61.6	66.6	-5.0	0.366	-7.5
Earned 3 or more career/vocational credits	75.8	49.2	26.6 ***	0.000	54.1
Basic core curriculum plus 3 career/vocational credits	61.0	39.7	21.3 ***	0.000	53.7
Career awareness and development activities (%)					
In school[b]					
Ever participated	82.0	80.1	1.8	0.673	2.3
Participated intensively	53.6	41.7	11.9 **	0.033	28.5
Outside of school[c]					
Ever participated	76.1	45.2	30.9 ***	0.000	68.2
Participated intensively	45.7	14.8	30.8 ***	0.000	208.2
Employment and work-based learning (%)					
Ever employed during high school (%)	79.9	71.5	8.4 *	0.081	11.7
Ever employed in a paid job during high school (%)	75.0	67.6	7.4	0.143	10.9
Ever had a job connected to school[d]	46.2	24.5	21.7 ***	0.000	88.5
Ever had a job with high work-based learning content[e]	25.0	16.0	9.0 **	0.040	56.2
Sample size (N = 330)	184	146			

(continued)

Exhibit 5.7 - LR (continued)

SOURCES: MDRC calculations from the Career Academies Evaluation Student School Records Database and 12th Grade Survey.

NOTES: All measures are derived from the sample of Eight-Year Post-High School Follow-Up Survey respondents who are also in the Student School Records Database and the 12th Grade Survey sample.

Measures of attendance rate and credits earned include zero values for grades in which sample members were identified as school dropouts. The measures of credits earned and course-taking include all credits earned through the end of the twelfth-grade year (that is, the year that students were projected to reach the twelfth grade when they initially entered the study sample).

Impact estimates are regression-adjusted to control for background characteristics of the sample and for the clustering of students within schools and random assignment years. Values shown for the Academy group are unadjusted mean values; values shown for the non-Academy group are calculated by subtracting the impact estimate from the Academy group's unadjusted mean values. A two-tailed t-test was applied to differences between the Academy and non-Academy groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; and * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.

[a]One of the nine study sites was unable to provide data on the specific courses students completed during high school. Thus, course-taking measures are derived from a sample of eight sites with a total of 289 low-risk students. The measure of earning three or more career/vocational credits is derived from a sample of 275 low-risk students.

[b]In-school career awareness and development activities include learning about jobs in class or through in-school activities, receiving instruction or counseling on how to find a job or how to act on the job, and having discussions with students and adults about careers and work. Respondents are considered to have participated intensively in in-school career awareness and development activities if they reported participating in at least three of these activities per month.

[c]Outside-of-school career awareness and development activities include career-related field trips, job shadowing, and mentoring programs. Respondents are considered to have participated intensively in outside-of-school career awareness and development activities if they reported participating in two or more of these activities.

[d]Jobs that are "connected to school" are sponsored or supported by the school (they may also be called "work-based learning experiences"). These include jobs that a teacher helped the student find, that are part of a school program or class or for which the student receives course credit, and in which a supervisor at work and an adult from the school communicate about the student's progress.

[e]To assess the level of "work-based learning content" in students' jobs, respondents were asked to rate their jobs on a series of characteristics, including how often they were asked to read, write, and use the computer on the job; how much advice they received on the job; whether they felt bored on the job; whether they learned new things on the job; and whether the job influenced their career choice. For a complete list of the survey items composing this measure and for a description of how the cutpoint for "high work-based learning content" was set, see Kemple, Poglinco, and Snipes, *Career Academies: Building Career Awareness and Work-Based Learning Activities Through Employer Partnerships* (New York: MDRC, 1999).

Career Academies Evaluation

Exhibit 5.8

Differences in Impacts on Key Outcomes Among Risk Subgroups

Outcome	Impact			Difference in Impacts		
	High Risk	Medium Risk	Low Risk	High vs. Medium Risk	High vs. Low Risk	Medium vs. Low Risk
Employment and earnings: Years 1 to 4						
Months employed	2.3	2.0 **	-0.3	0.4	2.6	2.2
	(p = 0.109)	(p = 0.037)	(p = 0.833)	(p = 0.834)	(p = 0.187)	(p = 0.171)
Average monthly earnings ($)	189.55 *	174.78 **	28.08	14.77	161.47	146.70
	(p = 0.065)	(p = 0.010)	(p = 0.746)	(p = 0.904)	(p = 0.229)	(p = 0.182)
Employment and earnings: Years 5 to 8						
Months employed	2.0	1.0	0.3	0.9	1.7	0.8
	(p = 0.260)	(p = 0.293)	(p = 0.848)	(p = 0.640)	(p = 0.434)	(p = 0.636)
Average monthly earnings ($)	284.91 *	158.49	275.72 *	126.42	9.19	-117.24
	(p = 0.066)	(p = 0.140)	(p = 0.080)	(p = 0.502)	(p = 0.967)	(p = 0.537)
Educational attainment (%)						
Earned a high school diploma	1.3	-1.7	-1.4	3.0	2.8	-0.2
	(p = 0.794)	(p = 0.538)	(p = 0.393)	(p = 0.602)	(p = 0.603)	(p = 0.946)
Completed any postsecondary credential	-0.2	-1.0	4.2	0.8	-4.4	-5.2
	(p = 0.971)	(p = 0.796)	(p = 0.423)	(p = 0.907)	(p = 0.561)	(p = 0.423)
Family formation (%)						
Lives independently with child/children and partner	10.7 **	3.4	8.6 *	7.3	2.1	-5.2
	(p = 0.048)	(p = 0.316)	(p = 0.070)	(p = 0.254)	(p = 0.772)	(p = 0.373)

SOURCES: MDRC calculations from the Career Academies Evaluation Four-Year and Eight-Year Post-High School Follow-Up Surveys.

(continued)

Exhibit 5.8 (continued)

NOTES: Employment and earnings impacts for Years 1 to 4 reflect the first four years following sample members' scheduled graduation from high school and are derived from the Four-Year Post-High School Follow-Up Survey sample (N = 1,458). Employment and earnings impacts for Years 5 to 8 reflect the second four years following sample members' scheduled high school graduation and are derived from the Eight-Year Post-High School Follow-Up Survey sample (N = 1,428). All earnings impacts are reported in 2006 dollars.

Educational attainment and family formation impacts reflect sample members' status eight years following scheduled high school graduation.

Impact estimates are regression-adjusted to control for background characteristics of the sample and for the clustering of students within schools and random assignment years. A two-tailed t-test was applied to the impact estimates and and to differences in impact estimates between the risk subgroups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; and * = 10 percent.

Rounding may cause slight discrepancies in calculating sums and differences.