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FROM DEGREES TO DOLLARS

A Supplement to Six-Year Findings from the ASAP Ohio Demonstration

mdrc

BUILDING KNOWLEDGE
TO IMPROVE SOCIAL POLICY

SUPPLEMENTARY TABLE S.1
BASELINE CHARACTERISTICS

CHARACTERISTIC	PROGRAM GROUP	CONTROL GROUP	DIFFERENCE	P-VALUE
Gender (%)				
Female	62.3	66.0	-3.7	0.140
Male	37.7	34.0	3.7	0.140
Age (%)				
19 years or younger	46.9	47.8	-0.9	0.726
20 to 23 years	22.4	21.4	1.0	0.634
24 years or older	30.7	30.8	-0.1	0.951
Average age (years)	23.0	23.3	-0.3	0.406
Race/ethnicity[a] (%)				
Hispanic	8.8	10.6	-1.8	0.230
White	46.9	44.9	2.0	0.404
Black	35.5	34.0	1.5	0.511
Asian or Pacific Islander	0.7	1.6	-0.8	0.125
American Indian or Alaska Native	2.3	2.9	-0.6	0.491
More than one race	6.6	7.5	-0.9	0.517
Other	1.2	1.1	0.1	0.856
Nontraditional student[b] (%)	46.1	47.9	-1.8	0.481
Marital status (%)				
Married and living with a spouse	7.1	6.6	0.4	0.751
Married and living apart from a spouse	2.4	1.1	1.2*	0.084
Unmarried and living with a partner	14.1	16.3	-2.2	0.255
Unmarried and not living with a partner	76.5	76.0	0.5	0.815
Living with parents (%)	58.7	56.8	1.9	0.447
Parents pay more than half of expenses (%)	29.0	25.0	4.0*	0.078
Missing	7.6	7.2	0.5	0.732
Number of children (%)				
0	73.6	72.1	1.4	0.531
1	10.9	12.5	-1.6	0.346
2	8.1	7.5	0.6	0.670
3 or more	7.5	7.9	-0.5	0.739

(continued)

SUPPLEMENTARY TABLE S.1 (CONTINUED)

CHARACTERISTIC	PROGRAM GROUP	CONTROL GROUP	DIFFERENCE	P-VALUE
Mode of transportation to campus (%)				
Driving	72.3	68.5	3.7	0.110
Carpooling	1.9	1.8	0.1	0.875
Public transportation	14.5	16.0	-1.5	0.394
Drop-off from family or friend	9.5	11.9	-2.4	0.136
Biking or walking	1.8	1.7	0.1	0.941
Currently employed (%)	57.6	61.7	-4.1	0.110
Among those currently employed, hours worked per week (%)				
1-34	74.2	74.0	—	—
35 or more	25.8	26.0	—	—
Highest grade completed (%)				
10th or lower	4.2	5.0	-0.8	0.465
11th	5.5	4.0	1.4	0.204
12th[c]	90.3	90.9	-0.6	0.683
Diplomas/degrees earned[d] (%)				
High school diploma	87.4	86.9	0.5	0.787
High school equivalency	12.3	11.9	0.5	0.782
Occupational/technical certificate	9.7	13.0	-3.3**	0.047
Other	2.3	1.4	0.9	0.226
Date of high school graduation/ equivalency receipt (%)				
Within the past two years	57.4	58.6	—	—
More than two years ago	42.6	41.4	—	—
Has no developmental education requirements (%)	25.9	24.9	1.0	0.647
Highest degree student plans to attain (%)				
Associate's	19.4	19.5	-0.1	0.951
Bachelor's	42.3	39.9	2.5	0.350
Master's	25.7	27.2	-1.5	0.514
Professional or doctorate	12.6	13.4	-0.8	0.658
First person in family to attend college (%)	34.8	33.0	1.8	0.469
Language other than English spoken regularly in the home (%)	8.5	8.9	-0.4	0.778
Sample size (total = 1,501)	806	695		

(continued)

SUPPLEMENTARY TABLE S.1 (CONTINUED)

SOURCES: MDRC calculations using baseline information form data and placement test data from the study colleges.

NOTES: Distributions may not add to 100 percent because of rounding.

Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

Italics indicate statistics calculated only for a subset of respondents. For these subsets, differences and p-values are not calculated because such measures are considered nonexperimental.

Missing values are included in variable distributions only for characteristics with more than 6 percent of the full sample missing.

To analyze whether program and control group survey respondents differed from each other on average, an omnibus F-test was performed, which yielded a p-value of 0.407. This finding suggests that relative to the baseline characteristics shown above, program and control group survey respondents do not differ from one another.

[a]Respondents who said they were Hispanic and chose a race are included only in the "Hispanic" category.

[b]Nontraditional students are defined as those who were 24 years or older, worked 35 or more hours per week, had children, or did not receive a high school diploma and were not enrolled in high school at the time of random assignment. Students are listed as nontraditional if they fit any of these characteristics. Students are considered to be missing data in the nontraditional category if they were missing data on two or more of these variables and have no other nontraditional characteristic; however, since less than 6 percent of the study sample is missing data, this percentage is not listed in the table.

[c]This category includes students who were enrolled in high school at the time of random assignment.

[d]Distributions may not add to 100 percent because categories are not mutually exclusive.

SUPPLEMENTARY TABLE S.2

ACADEMIC OUTCOMES BY SEMESTER

OUTCOME (%)	PROGRAM GROUP	CONTROL GROUP	DIFFERENCE	STANDARD ERROR	P-VALUE
Enrollment					
Enrolled at any institution					
Semester 1	94.8	90.3	4.5***	1.3	0.001
Semester 2	80.5	68.4	12.1***	2.2	0.000
Semester 3	68.3	57.2	11.1***	2.5	0.000
Semester 4	61.0	49.8	11.2***	2.5	0.000
Semester 5	50.2	45.1	5.0**	2.6	0.050
Semester 6	43.1	37.6	5.4**	2.5	0.031
Semester 7	38.2	32.6	5.6**	2.5	0.024
Semester 8	32.8	27.9	4.9**	2.4	0.038
Semester 9	30.2	24.5	5.6**	2.3	0.014
Semester 10	24.0	22.4	1.6	2.2	0.454
Semester 11	20.5	19.7	0.8	2.1	0.710
Semester 12	21.1	16.4	4.7**	2.0	0.020
Any time during Year 6	26.2	25.4	0.8	2.3	0.720
Enrolled at a two-year institution					
Semester 1	94.4	89.9	4.6***	1.4	0.001
Semester 2	78.7	66.2	12.5***	2.2	0.000
Semester 3	64.9	53.3	11.5***	2.5	0.000
Semester 4	54.4	43.3	11.1***	2.5	0.000
Semester 5	39.0	36.3	2.7	2.5	0.276
Semester 6	27.5	28.0	-0.4	2.3	0.850
Semester 7	21.0	20.7	0.3	2.1	0.896
Semester 8	16.7	15.4	1.3	1.9	0.506
Semester 9	14.3	13.5	0.8	1.8	0.635
Semester 10	11.5	12.4	-0.9	1.7	0.580
Semester 11	8.5	10.7	-2.1	1.5	0.160
Semester 12	9.5	7.8	1.8	1.5	0.222
Any time during Year 6	12.7	14.2	-1.5	1.8	0.400

(continued)

SUPPLEMENTARY TABLE S.2 (CONTINUED)

OUTCOME (%)	PROGRAM GROUP	CONTROL GROUP	DIFFERENCE	STANDARD ERROR	P-VALUE
Enrolled at a four-year institution					
Semester 1	0.6	0.5	0.1	0.4	0.740
Semester 2	1.9	2.9	-1.0	0.8	0.228
Semester 3	4.1	4.6	-0.5	1.1	0.628
Semester 4	7.7	7.7	0.0	1.4	0.976
Semester 5	13.3	10.6	2.7	1.7	0.109
Semester 6	17.1	11.7	5.5***	1.8	0.003
Semester 7	19.0	13.5	5.4***	1.9	0.004
Semester 8	17.7	13.2	4.5**	1.9	0.016
Semester 9	16.6	12.3	4.3**	1.8	0.019
Semester 10	13.6	11.0	2.6	1.7	0.135
Semester 11	13.0	9.6	3.3**	1.7	0.044
Semester 12	12.5	8.9	3.6**	1.6	0.026
Any time during Year 6	15.3	11.9	3.3*	1.8	0.062
Degrees					
Earned any degree					
Semester 1	0.1	0.0	0.1	0.1	0.325
Semester 2	1.3	0.4	0.8*	0.5	0.086
Semester 3	6.7	2.2	4.6***	1.1	0.000
Semester 4	17.6	7.0	10.6***	1.7	0.000
Semester 5	26.2	11.7	14.5***	2.0	0.000
Semester 6	33.6	17.2	16.4***	2.2	0.000
Semester 7	36.1	19.8	16.3***	2.3	0.000
Semester 8	38.2	22.9	15.3***	2.3	0.000
Semester 9	40.3	25.2	15.2***	2.4	0.000
Semester 10	42.8	26.8	16.0***	2.4	0.000
Semester 11	43.3	27.6	15.7***	2.4	0.000
Semester 12	43.7	28.6	15.1***	2.4	0.000

(continued)

SUPPLEMENTARY TABLE S.2 (CONTINUED)

OUTCOME (%)	PROGRAM GROUP	CONTROL GROUP	DIFFERENCE	STANDARD ERROR	P-VALUE
Earned a certificate					
Semester 1	0.1	0.0	0.1	0.1	0.349
Semester 2	0.2	0.3	-0.1	0.3	0.853
Semester 3	0.6	0.4	0.2	0.4	0.661
Semester 4	2.2	1.4	0.7	0.7	0.306
Semester 5	3.9	2.2	1.7*	0.9	0.057
Semester 6	5.6	4.0	1.7	1.1	0.132
Semester 7	6.4	4.7	1.7	1.2	0.150
Semester 8	7.0	4.9	2.1*	1.2	0.094
Semester 9	7.7	5.3	2.4*	1.3	0.059
Semester 10	8.3	5.6	2.7**	1.3	0.042
Semester 11	8.7	6.5	2.2	1.4	0.113
Semester 12	9.2	6.7	2.5*	1.4	0.082
Earned an associate's degree					
Semester 1	0.1	0.0	0.1	0.1	0.325
Semester 2	1.3	0.4	0.8*	0.5	0.086
Semester 3	6.7	2.2	4.6***	1.1	0.000
Semester 4	17.6	7.0	10.6***	1.7	0.000
Semester 5	26.2	11.7	14.5***	2.0	0.000
Semester 6	33.4	16.9	16.5***	2.2	0.000
Semester 7	35.5	19.4	16.1***	2.3	0.000
Semester 8	37.0	21.6	15.5***	2.3	0.000
Semester 9	38.8	23.5	15.4***	2.3	0.000
Semester 10	40.9	25.0	16.0***	2.4	0.000
Semester 11	41.4	25.7	15.8***	2.4	0.000
Semester 12	41.8	26.4	15.4***	2.4	0.000

(continued)

SUPPLEMENTARY TABLE S.2 (CONTINUED)

OUTCOME (%)	PROGRAM GROUP	CONTROL GROUP	DIFFERENCE	STANDARD ERROR	P-VALUE
Earned a bachelor's degree[a]					
Semester 1	0.0	0.0	0.0	0.0	—
Semester 2	0.0	0.0	0.0	0.0	—
Semester 3	0.0	0.0	0.0	0.0	—
Semester 4	0.0	0.0	0.0	0.0	—
Semester 5	0.0	0.0	0.0	0.0	—
Semester 6	0.2	0.2	-0.1	0.2	0.699
Semester 7	2.4	1.0	1.4**	0.7	0.036
Semester 8	4.9	2.9	2.0**	1.0	0.046
Semester 9	8.1	4.0	4.1***	1.2	0.001
Semester 10	10.3	5.9	4.5***	1.4	0.002
Semester 11	11.5	7.1	4.3***	1.5	0.004
Semester 12	13.6	8.6	5.0***	1.6	0.002
Highest degree earned is a certificate					
Semester 1	0.1	0.0	0.1	0.1	0.349
Semester 2	0.2	0.3	-0.1	0.3	0.853
Semester 3	0.5	0.3	0.2	0.3	0.506
Semester 4	0.5	0.8	-0.3	0.4	0.541
Semester 5	1.0	1.0	0.0	0.5	0.993
Semester 6	1.0	1.9	-0.9	0.6	0.163
Semester 7	0.9	2.3	-1.4**	0.6	0.027
Semester 8	1.1	2.3	-1.2*	0.7	0.081
Semester 9	1.0	2.3	-1.4**	0.7	0.039
Semester 10	0.7	2.6	-1.8***	0.7	0.006
Semester 11	0.9	2.8	-2.0***	0.7	0.004
Semester 12	1.0	2.7	-1.8**	0.7	0.011

(continued)

SUPPLEMENTARY TABLE S.2 (CONTINUED)

OUTCOME (%)	PROGRAM GROUP	CONTROL GROUP	DIFFERENCE	STANDARD ERROR	P-VALUE
Highest degree earned is an associate's degree					
Semester 1	0.1	0.0	0.1	0.1	0.325
Semester 2	1.3	0.4	0.8*	0.5	0.086
Semester 3	6.7	2.2	4.6***	1.1	0.000
Semester 4	17.6	7.0	10.6***	1.7	0.000
Semester 5	26.2	11.7	14.5***	2.0	0.000
Semester 6	33.4	16.9	16.5***	2.2	0.000
Semester 7	33.7	18.8	14.9***	2.2	0.000
Semester 8	33.3	20.0	13.3***	2.3	0.000
Semester 9	32.3	21.2	11.1***	2.3	0.000
Semester 10	32.5	20.9	11.6***	2.3	0.000
Semester 11	31.9	20.5	11.3***	2.3	0.000
Semester 12	30.1	20.0	10.1***	2.2	0.000
Highest degree earned is a bachelor's degree[a]					
Semester 1	0.0	0.0	0.0	0.0	—
Semester 2	0.0	0.0	0.0	0.0	—
Semester 3	0.0	0.0	0.0	0.0	—
Semester 4	0.0	0.0	0.0	0.0	—
Semester 5	0.0	0.0	0.0	0.0	—
Semester 6	0.2	0.2	-0.1	0.2	0.699
Semester 7	2.4	1.0	1.4**	0.7	0.036
Semester 8	4.9	2.9	2.0**	1.0	0.046
Semester 9	8.0	4.0	4.0***	1.2	0.001
Semester 10	10.0	5.6	4.4***	1.4	0.001
Semester 11	11.0	6.6	4.4***	1.5	0.002
Semester 12	12.8	8.0	4.7***	1.6	0.003
Sample size (total = 1,501)	806	695			

SOURCE: Data obtained from the National Student Clearinghouse.

NOTES: Estimates are adjusted by gender, race/ethnicity, age, parental status, weekly hours worked, financial dependence on parents, receipt of high school diploma, first-generation college student status, planned enrollment intensity at the time of random assignment, the number of developmental education requirements, institution of random assignment, cohort, and earnings in the two quarters before random assignment.

Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

The p-value indicates the likelihood that the estimated impact (or larger) would have been generated by a program with zero true impact.

[a]For semesters where no students earned a bachelor's degree, it is not possible to calculate a p-value.

SUPPLEMENTARY TABLE S.3

DEGREE OR CERTIFICATE RECEIPT SIX YEARS AFTER RANDOM ASSIGNMENT, BY SUBGROUP

BASELINE CHARACTERISTIC	SAMPLE SIZE	PROGRAM GROUP (%)	CONTROL GROUP (%)	DIFFERENCE	STANDARD ERROR	P-VALUE	P-VALUE, DIFFERENTIAL ESTIMATED IMPACTS	
College at the time of random assignment							0.124	
College 1	521	48.8	28.4	20.4***	4.2	0.000		
College 2	467	38.1	30.1	7.9*	4.4	0.075		
College 3	513	43.1	27.7	15.3***	4.4	0.000		
Developmental education needs							0.471	
Student with developmental education needs	1,060	41.2	24.9	16.3***	2.9	0.000		
Student without developmental education needs	366	52.4	40.6	11.8**	5.6	0.035		
Gender							0.007	†††
Male	534	37.4	31.5	6.0	4.2	0.151		
Female	945	47.4	27.5	19.9***	3.1	0.000		
Race/ethnicity[a]							0.487	
Black	507	33.6	22.5	11.1***	4.1	0.007		
Hispanic	139	47.0	30.8	16.2*	9.1	0.077		
White	667	52.2	32.9	19.3***	3.8	0.000		
Other	142	36.9	26.4	10.5	8.9	0.238		
Age							0.320	
19 years or younger	705	46.6	28.9	17.7***	3.6	0.000		
20 to 23 years	324	39.5	31.3	8.2	5.3	0.127		
24 years or older	461	40.8	27.8	13.1***	4.5	0.004		

(continued)

SUPPLEMENTARY TABLE S.3 (CONTINUED)

BASELINE CHARACTERISTIC	SAMPLE SIZE	PROGRAM GROUP (%)	CONTROL GROUP (%)	DIFFERENCE	STANDARD ERROR	P-VALUE	P-VALUE, DIFFERENTIAL ESTIMATED IMPACTS
High school diploma or equivalency							0.186
High school diploma	1,268	44.2	30.0	14.2***	2.7	0.000	
High school equivalency	163	38.4	13.9	24.5***	7.3	0.001	
Traditional or nontraditional student[b]							0.846
Traditional	789	45.5	30.6	14.9***	3.4	0.000	
Nontraditional	698	41.9	26.1	15.9***	3.5	0.000	
Cohort starting semester							0.409
Spring	652	42.9	25.3	17.7***	3.8	0.000	
Fall	849	44.1	30.6	13.6***	3.2	0.000	
Sample size (total = 1,501)		806	695				

SOURCE: Data obtained from the National Student Clearinghouse.

NOTES: Estimates are adjusted by gender, race/ethnicity, age, parental status, weekly hours worked, financial dependence on parents, receipt of high school diploma, first-generation college student status, planned enrollment intensity at the time of random assignment, the number of developmental education requirements, institution of random assignment, cohort, and earnings in the two quarters before random assignment.

    Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

    Statistical significance levels for differential estimated impacts are indicated as: ††† = 1 percent; †† = 5 percent; † = 10 percent.

    The p-value indicates the likelihood that the estimated impact (or larger) would have been generated by a program with zero true impact.

    [a]Respondents who said they were Hispanic and chose a race are included only in the "Hispanic" category.

    [b]Nontraditional students are defined as those who were 24 years or older, worked 35 or more hours per week, had children, or did not receive a high school diploma and were not enrolled in high school at the time of random assignment. Students are listed as nontraditional if they fit any of these characteristics. Students are considered to be missing data in the nontraditional category if they were missing data on two or more of these variables and have no other nontraditional characteristic; however, since less than 6 percent of the study sample is missing data, this percentage is not listed in the table.

SUPPLEMENTARY TABLE S.4

EARNINGS AND EMPLOYMENT OUTCOMES BY RELATIVE QUARTER

OUTCOME	PROGRAM GROUP		CONTROL GROUP		DIFFERENCE	STANDARD ERROR	P-VALUE
	OUTCOME	SD	OUTCOME	SD			
Annual and quarterly earnings ($)							
Year 1	8,241	8,859	8,635	8,854	-394	303	0.193
Quarter 1	1,800	2,214	1,832	2,169	-32	64	0.617
Quarter 2	2,021	2,490	2,168	2,500	-147	93	0.115
Quarter 3	2,055	2,385	2,188	2,476	-133	96	0.164
Quarter 4	2,365	2,611	2,447	2,660	-82	112	0.463
Year 2	10,513	10,270	11,577	11,036	-1,064**	468	0.023
Quarter 1	2,461	2,682	2,674	2,853	-213*	120	0.077
Quarter 2	2,631	2,798	2,888	3,007	-257**	129	0.047
Quarter 3	2,590	2,779	2,912	2,980	-322**	133	0.016
Quarter 4	2,830	3,112	3,103	3,194	-273*	148	0.065
Year 3	13,096	12,723	13,181	12,534	-85	606	0.888
Quarter 1	2,925	3,080	3,121	3,301	-197	152	0.198
Quarter 2	3,162	3,383	3,388	3,485	-226	165	0.172
Quarter 3	3,307	3,477	3,222	3,285	85	166	0.610
Quarter 4	3,702	3,822	3,450	3,520	252	182	0.167
Year 4	15,503	14,945	15,411	14,417	92	728	0.900
Quarter 1	3,661	3,750	3,575	3,794	87	188	0.646
Quarter 2	3,887	4,077	3,929	3,901	-42	199	0.832
Quarter 3	3,800	3,868	3,788	3,780	12	191	0.950
Quarter 4	4,155	4,362	4,119	4,161	36	214	0.868
Year 5	17,088	17,044	15,975	15,879	1,113	830	0.180
Quarter 1	4,229	4,367	4,066	4,118	163	213	0.444
Quarter 2	4,150	4,613	4,031	4,394	119	227	0.599
Quarter 3	4,234	4,500	3,912	4,162	322	221	0.145
Quarter 4	4,475	5,082	3,967	4,569	508**	246	0.039
Year 6	19,573	20,156	17,626	18,395	1,948**	981	0.047
Quarter 1	4,395	4,945	3,857	4,447	538**	240	0.025
Quarter 2	4,992	5,428	4,462	5,002	530**	267	0.047
Quarter 3	4,863	5,282	4,401	4,817	462*	258	0.073
Quarter 4	5,323	5,751	4,905	5,547	418	289	0.148

(continued)

SUPPLEMENTARY TABLE S.4 (CONTINUED)

OUTCOME	PROGRAM GROUP		CONTROL GROUP		DIFFERENCE	STANDARD ERROR	P-VALUE
	OUTCOME	SD	OUTCOME	SD			
Annual and quarterly employment[a] (%)							
Year 1	78.2	41.5	78.4	41.1	-0.3	1.9	0.887
Quarter 1	62.5	48.6	60.9	48.7	1.6	1.9	0.393
Quarter 2	62.9	48.4	63.1	48.2	-0.1	2.1	0.949
Quarter 3	64.7	47.9	64.9	47.7	-0.2	2.2	0.941
Quarter 4	66.7	47.3	69.0	46.2	-2.4	2.2	0.286
Year 2	79.0	40.8	79.9	40.0	-0.9	2.0	0.653
Quarter 1	66.8	47.2	69.4	46.1	-2.5	2.2	0.252
Quarter 2	68.5	46.6	68.4	46.4	0.1	2.3	0.959
Quarter 3	67.1	47.1	69.5	46.0	-2.4	2.3	0.296
Quarter 4	69.7	46.1	70.6	45.5	-0.9	2.3	0.693
Year 3	79.7	40.3	78.8	40.8	0.9	2.1	0.647
Quarter 1	69.6	46.1	70.0	45.8	-0.4	2.3	0.854
Quarter 2	70.3	45.9	69.7	45.9	0.6	2.3	0.792
Quarter 3	69.6	46.1	67.7	46.8	2.0	2.3	0.400
Quarter 4	70.2	45.8	69.1	46.3	1.1	2.3	0.634
Year 4	78.3	41.2	77.4	41.9	0.9	2.1	0.662
Quarter 1	70.1	45.8	68.7	46.4	1.5	2.4	0.531
Quarter 2	69.6	46.0	70.1	45.8	-0.5	2.4	0.826
Quarter 3	67.5	46.8	69.7	46.0	-2.1	2.4	0.373
Quarter 4	66.7	47.1	69.6	46.1	-2.9	2.4	0.227
Year 5	75.9	42.7	76.5	42.5	-0.7	2.2	0.766
Quarter 1	68.9	46.3	69.7	46.0	-0.8	2.4	0.753
Quarter 2	65.8	47.5	65.8	47.5	-0.1	2.4	0.971
Quarter 3	64.6	47.9	65.0	47.7	-0.5	2.5	0.852
Quarter 4	64.5	48.0	60.7	48.8	3.8	2.5	0.127
Year 6	70.5	45.7	70.8	45.5	-0.3	2.4	0.902
Quarter 1	62.8	48.4	60.5	48.8	2.3	2.5	0.349
Quarter 2	62.8	48.4	60.7	48.9	2.1	2.5	0.403
Quarter 3	62.7	48.4	62.5	48.5	0.2	2.5	0.937
Quarter 4	63.0	48.3	61.5	48.7	1.5	2.5	0.557
Sample size (total = 1,482)	795		687				

(continued)

SUPPLEMENTARY TABLE S.4 (CONTINUED)

SOURCE: Ohio unemployment insurance wage records.

NOTES: Estimates are adjusted by gender, race/ethnicity, age, parental status, weekly hours worked, financial dependence on parents, receipt of high school diploma, first-generation college student status, planned enrollment intensity at the time of random assignment, the number of developmental education requirements, institution of random assignment, cohort, and earnings in the two quarters before random assignment.

SD = standard deviation.

Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

The p-value indicates the likelihood that the estimated impact (or larger) would have been generated by a program with zero true impact.

Out of 1,501 students in the analysis, 19 did not provide a Social Security number, and therefore were not included in the wage records request. These students have missing data for all labor market outcomes.

[a]Yearly employment rates are calculated as the percentage of participants who were employed for at least one quarter during that year.

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SUPPLEMENTARY TABLE S.5

EARNINGS AND EMPLOYMENT OUTCOMES BY CALENDAR QUARTER

</div>

OUTCOME	PROGRAM GROUP		CONTROL GROUP		DIFFERENCE	STANDARD ERROR	P-VALUE
	OUTCOME	SD	OUTCOME	SD			
Annual and quarterly earnings ($)							
2015	6,976	8,252	7,137	8,220	-162	171	0.344
Quarter 1	1,507	2,250	1,485	2,162	22	62	0.722
Quarter 2	1,639	2,253	1,721	2,294	-82	62	0.189
Quarter 3	1,845	2,266	1,864	2,232	-20	62	0.753
Quarter 4	1,984	2,474	2,066	2,433	-82	76	0.278
2016	8,957	9,217	9,716	9,595	-759**	365	0.038
Quarter 1	1,806	2,191	1,928	2,250	-123	80	0.124
Quarter 2	2,181	2,493	2,359	2,666	-179*	106	0.093
Quarter 3	2,416	2,662	2,722	2,880	-305**	120	0.011
Quarter 4	2,555	2,792	2,706	2,845	-152	123	0.218
2017	11,173	10,778	12,009	11,441	-836*	508	0.100
Quarter 1	2,479	2,716	2,658	2,851	-179	125	0.151
Quarter 2	2,739	2,884	2,961	3,112	-222	139	0.110
Quarter 3	2,871	2,915	3,101	3,176	-230	146	0.116
Quarter 4	3,084	3,342	3,289	3,347	-205	160	0.201
2018	13,996	13,367	14,077	13,163	-82	643	0.899
Quarter 1	3,102	3,243	3,079	3,252	23	158	0.885
Quarter 2	3,455	3,516	3,458	3,521	-4	171	0.982
Quarter 3	3,588	3,698	3,660	3,834	-72	187	0.699
Quarter 4	3,851	4,078	3,880	3,877	-28	197	0.886
2019	16,337	15,756	16,223	15,270	115	774	0.882
Quarter 1	3,713	3,851	3,635	3,723	77	190	0.684
Quarter 2	4,057	4,285	4,035	4,047	22	210	0.917
Quarter 3	4,145	4,212	4,114	4,052	31	207	0.881
Quarter 4	4,423	4,606	4,438	4,454	-15	228	0.946
2020	17,581	18,022	15,882	16,704	1,699*	881	0.054
Quarter 1	4,327	4,500	4,039	4,201	288	221	0.193
Quarter 2	3,904	4,693	3,574	4,426	330	232	0.155
Quarter 3	4,270	4,788	3,814	4,389	456*	235	0.053
Quarter 4	5,080	5,479	4,455	5,014	625**	269	0.020
2021	20,884	20,971	18,837	19,581	2,047**	1,033	0.048
Quarter 1	4,535	5,090	4,052	4,626	482*	247	0.051
Quarter 2	5,118	5,439	4,636	5,270	482*	273	0.078
Quarter 3	5,356	5,552	4,861	5,311	495*	278	0.075
Quarter 4	5,876	6,497	5,288	5,978	588*	321	0.067

SUPPLEMENTARY TABLE S.5 (CONTINUED)

OUTCOME	PROGRAM GROUP		CONTROL GROUP		DIFFERENCE	STANDARD ERROR	P-VALUE
	OUTCOME	SD	OUTCOME	SD			
Annual and quarterly employment[a] (%)							
2015	75.0	43.6	73.2	44.2	1.8	1.9	0.357
Quarter 1	55.3	49.8	51.4	50.0	3.9*	2.0	0.055
Quarter 2	58.3	49.4	59.3	49.1	-1.0	2.0	0.609
Quarter 3	63.0	48.4	63.6	48.1	-0.6	1.9	0.742
Quarter 4	62.8	48.5	61.9	48.5	0.9	2.0	0.639
2016	77.8	41.7	78.9	40.8	-1.1	2.0	0.582
Quarter 1	62.7	48.5	62.1	48.5	0.6	2.1	0.775
Quarter 2	64.9	47.8	67.4	46.9	-2.5	2.2	0.262
Quarter 3	67.2	47.0	69.5	46.1	-2.2	2.2	0.315
Quarter 4	68.2	46.7	68.6	46.4	-0.4	2.2	0.865
2017	79.7	40.3	79.7	40.1	0.0	2.0	0.994
Quarter 1	66.2	47.4	68.8	46.3	-2.6	2.3	0.253
Quarter 2	70.0	45.9	69.1	46.2	0.9	2.3	0.703
Quarter 3	69.4	46.2	70.1	45.7	-0.7	2.3	0.772
Quarter 4	69.9	46.1	69.9	45.7	0.0	2.3	0.999
2018	79.5	40.4	78.8	40.8	0.7	2.1	0.733
Quarter 1	70.0	45.9	68.1	46.5	1.9	2.3	0.419
Quarter 2	71.0	45.4	71.1	45.3	-0.1	2.3	0.960
Quarter 3	70.2	45.8	69.1	46.2	1.1	2.3	0.637
Quarter 4	68.9	46.3	70.0	45.9	-1.1	2.4	0.655
2019	77.5	41.7	76.9	42.2	0.6	2.2	0.787
Quarter 1	67.4	46.9	69.1	46.2	-1.7	2.4	0.481
Quarter 2	68.2	46.5	69.7	46.1	-1.5	2.4	0.539
Quarter 3	69.3	46.1	70.1	45.9	-0.9	2.4	0.713
Quarter 4	66.7	47.1	69.4	46.2	-2.7	2.4	0.262
2020	73.3	44.3	74.2	43.7	-0.9	2.3	0.679
Quarter 1	67.0	47.0	68.0	46.7	-0.9	2.4	0.697
Quarter 2	64.1	48.0	60.0	49.0	4.1*	2.5	0.100
Quarter 3	62.4	48.5	60.1	48.9	2.3	2.5	0.363
Quarter 4	62.8	48.4	60.5	48.9	2.3	2.5	0.364
2021	72.2	44.8	70.3	45.7	1.9	2.4	0.419
Quarter 1	62.3	48.5	61.3	48.7	0.9	2.5	0.713
Quarter 2	64.2	48.0	60.8	48.8	3.4	2.5	0.178
Quarter 3	64.3	48.0	62.1	48.5	2.3	2.5	0.365
Quarter 4	63.8	48.1	61.0	48.8	2.8	2.5	0.275
Sample size (total = 1,482)	795		687				

(continued)

SUPPLEMENTARY TABLE S.5 (CONTINUED)

SOURCE: Ohio unemployment insurance wage records.

NOTES: Estimates are adjusted by gender, race/ethnicity, age, parental status, weekly hours worked, financial dependence on parents, receipt of high school diploma, first-generation college student status, planned enrollment intensity at the time of random assignment, the number of developmental education requirements, institution of random assignment, cohort, and earnings in the two quarters before random assignment.

    SD = standard deviation.

    Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

    The p-value indicates the likelihood that the estimated impact (or larger) would have been generated by a program with zero true impact.

    Out of 1,501 students in the analysis, 19 did not provide a Social Security number, and therefore were not included in the wage records request. These students have missing data for all labor market outcomes.

    [a]Yearly employment rates are calculated as the percentage of participants who were employed for at least one quarter during that year.

ANNUAL EARNINGS SIX YEARS AFTER RANDOM ASSIGNMENT, BY SUBGROUP

BASELINE CHARACTERISTIC	SAMPLE SIZE	PROGRAM GROUP ($)		CONTROL GROUP ($)		DIFFERENCE	STANDARD ERROR	P-VALUE	P-VALUE FOR DIFFERENTIAL ESTIMATED EFFECTS	
		OUTCOME	SD	OUTCOME	SD					
College at the time of random assignment									0.630	
College 1	519	19,804	21,292	19,224	19,131	580	1,760.6	0.742		
College 2	467	18,268	21,028	15,752	18,368	2,515	1,846.6	0.174		
College 3	496	20,771	18,240	18,035	17,647	2,736	1,660.6	0.100		
Developmental education needs									0.061	†
Student with developmental education needs	1,050	18,741	18,735	18,143	18,723	598	1,131.1	0.597		
Student without developmental education needs	360	22,669	23,518	17,235	18,346	5,433**	2,323.5	0.020		
Gender									0.154	
Male	522	21,302	22,472	17,127	19,937	4,175**	1,887.6	0.027		
Female	938	19,003	18,803	17,997	17,814	1,005	1,179.9	0.395		
Race/ethnicity[a]									0.728	
Black	505	16,869	18,407	16,324	17,122	545	1,584.5	0.731		
Hispanic	136	21,338	19,745	19,456	18,679	1,881	3,599.8	0.602		
White	656	21,546	21,123	18,445	18,909	3,101*	1,586.8	0.051		
Other	139	20,959	22,686	19,359	21,343	1,600	3,705.5	0.667		
Age									0.149	
19 years or younger	686	19,025	18,015	18,186	17,226	839	1,365.8	0.539		
20 to 23 years	324	22,764	22,823	17,163	18,099	5,601**	2,294.6	0.015		
24 years or older	461	18,192	21,152	17,927	20,626	265	1,983.7	0.894		

(continued)

SUPPLEMENTARY TABLE S.6 (CONTINUED)

BASELINE CHARACTERISTIC	SAMPLE SIZE	PROGRAM GROUP ($)		CONTROL GROUP ($)		DIFFERENCE	STANDARD ERROR	P-VALUE	P-VALUE FOR DIFFERENTIAL ESTIMATED EFFECTS
		OUTCOME	SD	OUTCOME	SD				
High school diploma or equivalency									0.518
High school diploma	1,250	20,043	19,867	17,713	18,374	2,330**	1,064.1	0.029	
High school equivalency	163	15,854	21,663	15,756	18,734	98	3,282.5	0.976	
Traditional or nontraditional student[b]									0.227
Traditional	773	19,583	17,969	16,437	16,434	3,146**	1,246.4	0.012	
Nontraditional	695	19,879	22,586	19,203	20,464	676	1,617.4	0.676	
Cohort starting semester									0.072 †
Spring	644	21,510	20,308	17,434	18,116	4,076***	1,524.5	0.008	
Fall	838	18,223	19,950	17,772	18,769	451	1,318.6	0.732	
Sample size (total = 1,482)		795		687					

SOURCE: Ohio unemployment insurance wage records.

NOTES: Estimates are adjusted by gender, race/ethnicity, age, parental status, weekly hours worked, financial dependence on parents, receipt of high school diploma, first-generation college student status, planned enrollment intensity at the time of random assignment, the number of developmental education requirements, institution of random assignment, cohort, and earnings in the two quarters before random assignment.
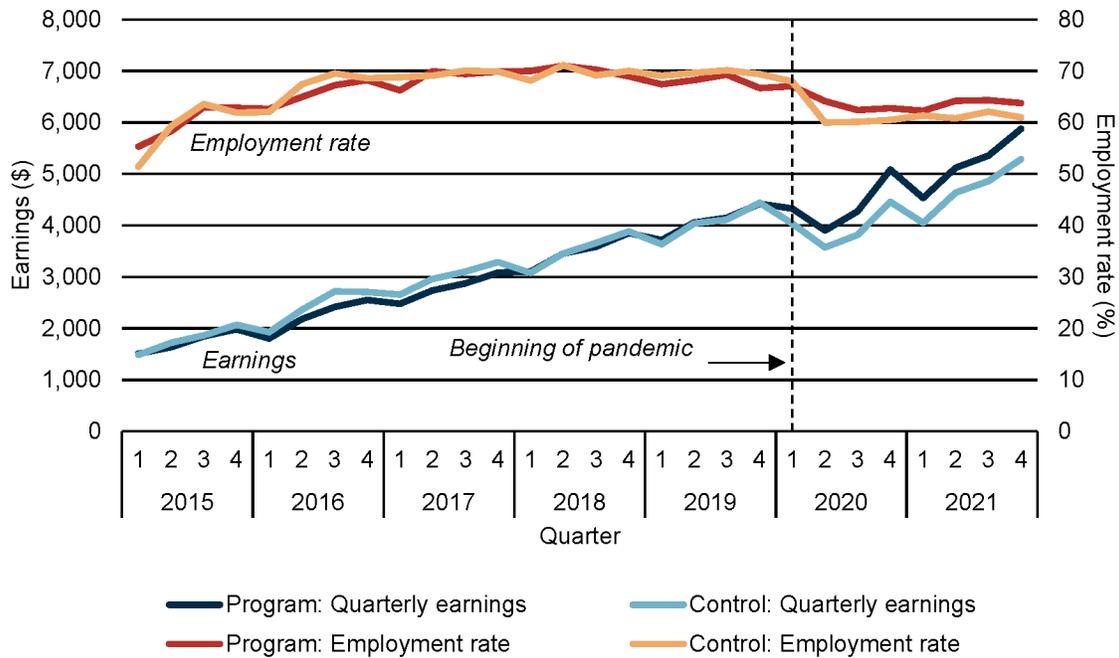
SD = standard deviation.

Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

Statistical significance levels for differential estimated impacts are indicated as: ††† = 1 percent; †† = 5 percent; † = 10 percent.

The p-value indicates the likelihood that the estimated impact (or larger) would have been generated by a program with zero true impact.

Out of 1,501 students in the analysis, 19 did not provide a Social Security number, and therefore were not included in the wage records request. These students have missing data for all labor market outcomes.

[a]Respondents who said they were Hispanic and chose a race are included only in the "Hispanic" category.

[b]Nontraditional students are defined as those who were 24 years or older, worked 35 or more hours per week, had children, or did not receive a high school diploma and were not enrolled in high school at the time of random assignment. Students are listed as nontraditional if they fit any of these characteristics. Students are considered to be missing data in the nontraditional category if they were missing data on two or more of these variables and have no other nontraditional characteristic; however, since less than 6 percent of the study sample is missing data, this percentage is not listed in the table.

SUPPLEMENTARY TABLE S.7

SIX-YEAR IMPACTS ON CONFIRMATORY OUTCOMES WITH WESTFALL-YOUNG ADJUSTED P-VALUES

OUTCOME	SAMPLE SIZE	PROGRAM GROUP	CONTROL GROUP	DIFFERENCE	P-VALUE	ADJUSTED P-VALUE
Ever earned a degree (%)	1,501	43.7	28.6	15.1***	0.000	0.000
Annual earnings ($)	1,482	19,573	17,626	1,948**	0.047	0.059

SOURCES: Ohio unemployment insurance wage records and National Student Clearinghouse data.

NOTES: Estimates are adjusted by gender, race/ethnicity, age, parental status, weekly hours worked, financial de-pendence on parents, receipt of high school diploma, first-generation college student status, planned enrollment intensity at the time of random assignment, the number of developmental education requirements, institution of random assignment, cohort, and earnings in the two quarters before random assignment.

Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

The p-value indicates the likelihood that the estimated impact (or larger) would have been generated by a program with zero true impact.

The adjusted p-value was calculated using the Westfall-Young method. See Peter H. Westfall, Randall D. Tobias, and Russell D. Wolfinger, *Multiple Comparisons and Multiple Tests Using SAS*, 2nd ed. (Cary, NC: SAS Institute, 2011).

Out of 1,501 students in the analysis, 19 did not provide a Social Security number, and therefore were not included in the wage records request. These students have missing data for all labor market outcomes.

SUPPLEMENTARY FIGURE S.1

EARNINGS AND EMPLOYMENT BY CALENDAR QUARTER

SOURCE: MDRC calculations using Ohio unemployment insurance wage records.

NOTES: Estimates are for a sample of 1,482 students. Out of 1,501 students in the analysis, 19 did not provide a Social Security number, and therefore were not included in the wage records request. These students have missing data for all labor market outcomes.

   Estimates are adjusted by gender, race/ethnicity, age, parental status, weekly hours worked, financial dependence on parents, receipt of high school diploma, first-generation college student status, planned enrollment intensity at the time of random assignment, the number of developmental education requirements, institution of random assignment, cohort, and earnings in the two quarters before random assignment.

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