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Young and hungry? Employment levels for young people during Spring 2021

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Abstract

This article examines employment rates in the United States for persons in their teens and early 20s during April and May 2021 compared to April and May 2019. Teen employment rates are significantly higher in Spring 2021 than in Spring 2019. However, individuals ages 20-24 experienced significantly lower employment rates during this time. Differing employment patterns for these two age groups are unlikely to reflect childcare issues or lingering COVID-19 concerns. Restaurant employment rates suggest that weak labor demand is likely not the predominant factor. One plausible explanation is that teenagers are less influenced by generous unemployment insurance benefits.

The author received no funding related to this work and has no conflict of interest to declare. The primary data analyzed in this study are publicly available. The author will share code and processed data with interested researchers.

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1. Introduction

COVID-19 dramatically disrupted labor markets, and employment levels had yet to fully recover by May 2021 (BLS 2021). The incomplete employment recovery in the United States through May 2021 has been attributed to a combination of factors related to labor demand, labor supply, and labor market frictions. Labor demand stories posit that some employers were still reluctant to hire workers because of weak or uncertain demand for their products. Labor supply stories suggest that some workers were reluctant or unable to return to the labor force because of lingering concerns about the virus, poor access to childcare, and generous unemployment benefits that reduce incentives for paid employment. Expanded federal pandemic unemployment insurance benefits made it such that many individuals could receive higher incomes from not working than from working (Ganong et al. 2020; Petrosky-Nadeau and Valletta 2021). Discussions about labor market frictions suggest that employment recoveries after recessions are typically slow and gradual because it takes time for workers and firms to find good matches (Hall and Kudlyak 2021).

One group that experienced notable success in this labor market is teenagers. In May 2021, the seasonally adjusted employment-population ratio for ages 16-19 reached a 13-year high (Thomas 2021). This may partially reflect strong labor demand in the restaurant industry and other sectors that traditionally employ teens. It may also reflect increased opportunities for teenagers due to reduced labor supply among older adults. Finally, teenagers are likely less influenced by lingering concerns about the virus, poor access to childcare, and generous unemployment insurance benefits.

This article examines employment rates for persons in their teens and early 20s during April and May 2021 compared to April and May 2019. Employment rates for teens were significantly higher in April-May 2021 than in 2019. However, individuals ages 20-24 experienced significantly lower employment rates in April-May 2021 than in 2019. This pattern also holds for restaurant employment. I document and examine these important facts.

2. Empirical Analysis

Table I presents employment rates by age for April-May 2019 and April-May 2021.² An individual is defined as employed if they worked at all for pay or profit during the survey week

¹ During April – May 2021, the federal government provided a \$300 per week supplemental unemployment insurance benefit that was paid above and beyond regular state unemployment benefits. Thus, an unemployed worker receiving only modest state unemployment benefits of \$100 per week, could be paid \$400 per week from not working, the same amount that would be earned from working 40 hours per week at \$10 per hour. Individuals making the federal minimum wage of \$7.25 per hour working 40 hours per week would only earn \$290, less than the amount of the federal supplement alone. Fueled by concerns about discouraging work, 25 states ended expanded federal pandemic unemployment insurance benefits early beginning in June 2021 (Picchi 2021). Expanded federal benefits expired in the remaining states in September 2021 (Tankersley and Casselman 2021).

² Active-duty military personnel are excluded from the sample. I pool April and May to increase sample sizes and estimate precision. I compare 2021 to 2019 because 2019 is the most recent year before the pandemic. The data are extracted from IPUMS (Flood et al. 2021). IPUMS combines and harmonizes individual-level data from the monthly Current Population Survey (CPS) to simplify the process for researchers making comparisons over time. The CPS is conducted jointly by the U.S. Census Bureau and the U.S. Bureau of Labor Statistics. It includes

or worked at least 15 hours unpaid for a family business. Panel A reports estimates for age ranges 15-19 and 20-24. Panel B reports separate estimates by single age. The first two columns report employment rates for 2019 and 2021, while the third reports the simple difference between the two years. The fourth column reports regression adjusted differences for the two years using multivariate linear regression to control for individual characteristics, and the fifth column reports regression standard errors. Specifically, the last two columns present results from the following linear regression model estimated separately by age group:

$$Y_{iat} = \gamma_a Year 2021 Dummy_t + \beta_a X_{iat} + \varepsilon_{iat},$$

where Y_{iat} is a binary dependent variable equal to 100 if individual i in age group a in period t is employed and zero if the individual is not employed. $Year2021Dummy_t$ is a dummy explanatory variable equal to one for 2021, X_{iat} is a set of control variables listed in the table notes, and ε_{iat} is an error term. The regression adjusted differences reported in the fourth column of Table I are γ_a , the age-group-specific changes in the rate of employment between 2019 and 2021 holding individual characteristics constant between the two years.

Table I: April-May Employment Rates by Year and Age

| Tuole I. ripin mu | 2019 | 2021 | 2019-2021 Simple Difference | Regression Adjusted Difference | Regression Adj. Diff. St. Error |
|-------------------|-----------|-------|-----------------------------|--------------------------------------|---------------------------------------|
| A. Five-Year Age | e Groups | | | | |
| Ages 15-19 | 23.27 | 25.43 | 2.16 | 2.03 | (0.53)** |
| Ages 20-24 | 65.57 | 59.63 | -5.94 | -6.17 | (0.68)** |
| B. Single-Year A | ge Groups | 3 | | | |
| Age 15 | 4.45 | 5.69 | 1.24 | 0.91 | (0.59) |
| Age 16 | 13.33 | 16.68 | 3.35 | 3.33 | (1.03)** |
| Age 17 | 21.62 | 26.36 | 4.74 | 3.11 | (1.27)* |
| Age 18 | 33.17 | 34.98 | 1.81 | 4.23 | (1.44)** |
| Age 19 | 46.23 | 45.82 | -0.41 | -1.86 | (1.61) |
| Age 20 | 55.50 | 50.62 | -4.88 | -5.25 | (1.67)** |
| Age 21 | 59.52 | 53.04 | -6.48 | -6.89 | (1.63)** |
| Age 22 | 66.67 | 59.52 | -7.15 | -7.48 | (1.65)** |
| Age 23 | 70.80 | 65.95 | -4.85 | -6.42 | (1.55)** |
| Age 24 | 74.45 | 69.75 | -4.70 | -6.23 | (1.47)** |

Notes: Employment rates are computed via the combined April and May Current Population Survey. Estimates in the two far right columns use multivariate linear regression analysis to control for individual characteristics via indicator variables for sex, race, ethnicity, citizenship status, education level, marital status, number of children in the household, survey month, and local area; Panel A regressions also include indicator variable controls for age. The regression dependent variable is coded as zero or 100 to facilitate comparison with employment rates. Standard errors are heteroskedasticity robust.

individual-level information on employment, demographic, socioeconomic characteristics, and numerous other variables.

^{*} Statistically significant at five percent level; ** Significant at one percent level.

Panel A of Table I indicates that the employment rate for ages 15-19 increased from 23.27% in April-May 2019 to 25.43% in April-May 2021. However, the employment rate for ages 20-24 decreased from 65.57% to 59.63% during the same time period. Thus, these two groups of young people had very different labor market experiences with a 2.2 percentage point increase for teens and a 5.9 percentage point decrease for the early 20s. The fourth column indicates that employment change estimates are only slightly affected by regression controls, and the fifth column indicates that the employment increase for teens and the employment decrease for ages 20-24 are both statistically significant.³ Panel B indicates that the positive employment effect for teens is concentrated among ages 16-18. The negative effect is widespread among ages 20-24.

Table II: April-May Employment Rates by Year and Age for Non-Parents

| | 2019 | 2021 | 2019-2021 Simple Difference | Regression Adjusted Difference | Regression Adj. Diff. St. Error |
|------------------|-----------|-------|-----------------------------------|--------------------------------------|---------------------------------------|
| A. Five-Year Age | e Groups | | | | |
| Ages 15-19 | 23.13 | 25.40 | 2.27 | 2.15 | (0.54)** |
| Ages 20-24 | 65.87 | 59.82 | -6.05 | -6.11 | (0.71)** |
| B. Single-Year A | ge Groups | | | | |
| Age 15 | 4.35 | 5.68 | 1.33 | 0.97 | (0.59) |
| Age 16 | 13.29 | 16.65 | 3.36 | 3.25 | (1.03)** |
| Age 17 | 21.59 | 26.33 | 4.74 | 3.19 | (1.27)* |
| Age 18 | 33.31 | 34.99 | 1.68 | 4.17 | (1.45)** |
| Age 19 | 46.19 | 46.24 | 0.05 | -1.37 | (1.63) |
| Age 20 | 55.72 | 50.31 | -5.41 | -5.68 | (1.71)** |
| Age 21 | 59.24 | 53.49 | -5.75 | -6.12 | (1.70)** |
| Age 22 | 66.12 | 59.92 | -6.20 | -6.08 | (1.74)** |
| Age 23 | 72.79 | 66.25 | -6.54 | -7.95 | (1.65)** |
| Age 24 | 76.38 | 71.41 | -4.97 | -6.33 | (1.58)** |

Notes: The analysis is the same as Table I except the sample excludes parents with one or more own children in their household.

Table II provides a simple test of whether Table I results are driven by parental childcare issues. Specifically, the analysis is the same as Table I except the Table II sample excludes parents with

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^{*} Statistically significant at five percent level; ** Significant at one percent level.

³ Appendix Table A1 reports additional results for regression-adjusted employment changes for April-May 2021 relative to April-May 2016-2019. Estimates are similar indicating that the results are not driven by 2019 anomalies. Appendix Table A2 reports selected control variable results corresponding to Columns (4) and (5) of Table I. The relatively small sample sizes for individual ages leads to some noisy estimated differences for individual variables by age. Also, these coefficients are for the pooled sample in 2019 and 2021 and do not strongly reflect either particular period. Finally, these variables are included as controls, some may be correlated with unobservable factors, and the coefficient estimates for the control variables may be biased. Thus, the Table A2 results are not easy to interpret and should likely not be taken literally. Still, they are included for the sake of transparency and with the encouragement of a reviewer.

one or more own children in their household. Table II results are very similar to Table I. Childcare is likely an important issue for many potential workers in both 2019 and 2021. However, childcare does not explain differing employment changes for persons in their teens vs. early 20s in Table I.

Table III looks at employment in the restaurant industry, which is a major employer of young people and an industry reported to be experiencing labor shortages during Spring 2021. Specifically, the outcome is now the percentage of individuals employed in the restaurant industry among the age-specific civilian population; thus, the sample is the same as Table I and not restricted to just workers. Panel A indicates that the restaurant employment rate for ages 15-19 increased from 8.45% to 9.28%, while the restaurant employment rate for ages 20-24 decreased from 9.87% to 7.64%.

Figure 1 illustrates monthly restaurant employment rates from January 2019 to May 2021 for ages 15-19 and 20-24 (not adjusted for seasonality nor individual characteristics). Single-month estimates are somewhat noisy. Restaurant employment rates before the pandemic were typically higher for ages 20-24. Both groups saw large decreases in April 2020 and some subsequent recovery. Teen restaurant employment more than fully recovered by May 2021. For ages 20-24, restaurant employment did not fully recover and instead largely plateaued after October 2020. From May 2020 to May 2021, teen restaurant employment rates exceeded ages 20-24 rates in every month but December 2020.

Table III: April-May Restaurant Employment Rates by Year and Age

| | 2019 | 2021 | 2019-2021 Simple Difference | Regression Adjusted Difference | Regression Adj. Diff. St. Error |
|------------------|----------|-----------|-----------------------------------|--------------------------------------|---------------------------------------|
| A. Five-Year Ag | e Groups | | | | |
| Ages 15-19 | 8.45 | 9.28 | 0.83 | 0.83 | (0.38)* |
| Ages 20-24 | 9.87 | 7.64 | -2.23 | -2.15 | (0.41)** |
| B. Single-Year A | ge Group | <u>os</u> | | | |
| Age 15 | 1.41 | 1.88 | 0.47 | 0.47 | (0.36) |
| Age 16 | 6.55 | 7.92 | 1.37 | 1.56 | (0.79)* |
| Age 17 | 10.41 | 13.07 | 2.66 | 2.05 | (0.98)* |
| Age 18 | 11.82 | 12.85 | 1.03 | 2.13 | (1.03)* |
| Age 19 | 12.43 | 10.94 | -1.49 | -1.78 | (1.05) |
| Age 20 | 11.87 | 8.93 | -2.94 | -2.38 | (1.04)* |
| Age 21 | 10.65 | 7.81 | -2.84 | -3.26 | (0.99)** |
| Age 22 | 9.76 | 7.94 | -1.82 | -1.61 | (0.94) |
| Age 23 | 7.92 | 6.79 | -1.13 | -1.59 | (0.89) |
| Age 24 | 9.27 | 6.67 | -2.60 | -2.03 | (0.90)* |

Notes: The analysis is the same as Table I except the outcome is restaurant employment; the restaurant employment rates is computed as the percentage of the age-specific civilian population employed in restaurants.

^{*} Statistically significant at five percent level; ** Significant at one percent level.

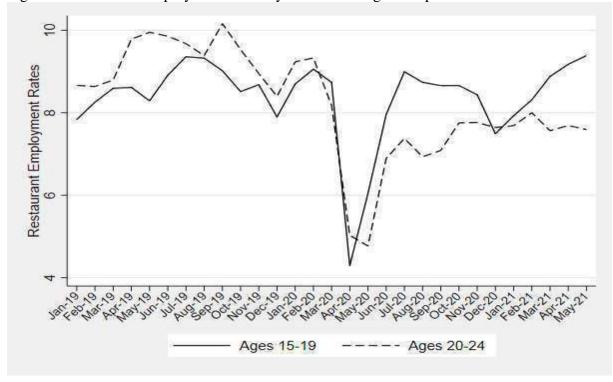


Figure 1: Restaurant Employment Rates by Month and Age Group

While one cannot be certain, the results for restaurant employment appear to suggest that labor demand issues are not the predominant factor keeping ages 20-24 out of employment.

One final possible explanation I explore is that ages 20-24 were more influenced by generous unemployment insurance benefits. Teenagers are less likely to have sufficient work history to qualify for unemployment benefits. Ages 20-24 are more likely to qualify for unemployment benefits including expanded federal pandemic unemployment insurance benefits. The potential benefits were especially lucrative for previous low-wage workers who could receive more pay from not working than from working. Data on unemployment benefit receipt in Spring 2021 by age were not available at the time of the analysis, so examine data for calendar year 2020 from the CPS Annual Social and Economic Supplement (ASEC) conducted in March 2021.

Figure 2 reports the percentage of each age who received any unemployment insurance benefits during the 2020 calendar year. As expected, the youngest ages have near zero rates of receiving unemployment benefits. Furthermore, the unemployment benefit receipt rate increases rapidly with age, indicating that labor market experience is an important factor for benefit eligibility. The unemployment benefit receipt rate is more than 10 percent for all ages 21-24, and more than 14 percent of persons age 24 received unemployment benefits during 2020. While receiving unemployment benefits will not keep all workers out of the labor market for an extended period of time, the generosity of benefits plausibly reduces employment rates for at least some potential workers ages 20-24, especially among those who would likely earn low market wages.

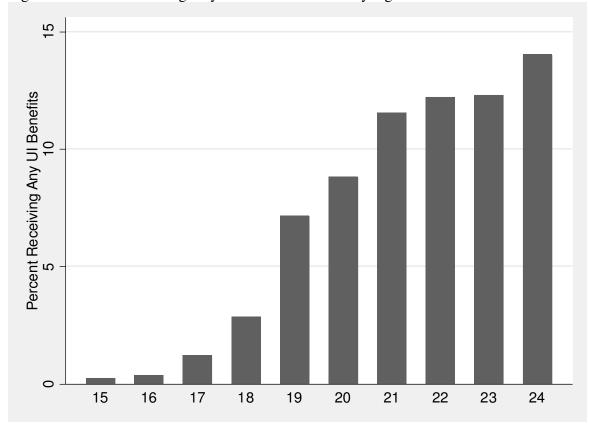


Figure 2: Percent Receiving Any UI Benefits in 2020 by Age

3. Discussion

Teen employment rates in April-May 2021 were significantly higher than in April-May 2019, but employment rates for ages 20-24 were significantly lower in Spring 2021 than Spring 2019. The difference is not due to childcare issues. Restaurant employment rates suggest that weak labor demand is likely not the predominant factor. It also seems unlikely that virus concerns would be sufficiently different among the two age groups to explain the large differences in employment trends.

Unemployment insurance benefits are a plausible partial explanation for the differing employment outcomes for teens and young adults during Spring 2021. Young teens have limited work experience and were typically ineligible for unemployment insurance benefits. Less than one percent of teens ages 15-17 received any unemployment benefits during 2020, while more than 10 percent of persons ages 21-24 received unemployment benefits.

Expiration of expanded federal benefits is expected to increase the employment rate for young adults, but full recovery is unlikely to occur immediately after benefits expire. It takes time for workers and firms to find good matches. Some individuals have been out of work for more than a year and may have trouble transitioning back to the labor market. Their skills may be rusty and

expectations may have to adjust. It will also be interesting for future research to track the ongoing employment recovery in the U.S. and other countries.

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Table A1: April-May 2021 Employment Changes Relative to 2016-2019

| Outcome: | Emplo | yment | Restaurant Employment | | | |
|-------------------|--------------------------------------|---|--------------------------------------|---|--|--|
| | Regression Adjusted Difference | Regression Adjusted Diff. St. Error | Regression Adjusted Difference | Regression Adjusted Diff. St. Error | | |
| A. Five-Year Age | <u>Groups</u> | | | | | |
| Ages 15-19 | 1.82 | (0.43)** | 1.14 | (0.31)** | | |
| Ages 20-24 | -5.06 | (0.54)** -2.24 | | (0.31)** | | |
| B. Single-Year Ag | e Groups | | | | | |
| Age 15 | 0.96 | (0.50) | 0.25 | (0.32) | | |
| Age 16 | 3.41 | (0.82)** | 2.30 | (0.63)** | | |
| Age 17 | 3.92 | (1.00)** | 2.94 | (0.78)** | | |
| Age 18 | 2.19 | (1.14) | 1.00 | (0.81) | | |
| Age 19 | -1.38 | (1.23) | -1.04 | (0.79) | | |
| Age 20 | -3.93 | (1.26)** | -2.62 | (0.74)** | | |
| Age 21 | -6.79 | (1.25)** | -3.57 | (0.73)** | | |
| Age 22 | -4.97 | (1.26)** | -1.86 | (0.71)** | | |
| Age 23 | -5.19 | (1.21)** | -2.09 | (0.67)** | | |
| Age 24 | -4.01 | (1.17)** | -1.64 | (0.66)* | | |

Notes: The analysis is identical to the two far right columns of Tables I and III except that the sample includes years 2016-2019 and 2021.

^{*} Statistically significant at five percent level; ** Significant at one percent level.

Table A2: Selected Control Variable Regression Results

| | Ages | Ages | A a a 15 | A a a 16 | A a a 17 | A a a 10 | A as 10 | A as 20 | A as 21 | A as 22 | A as 22 | A == 24 |
|----------------------------------|----------|--------------------|----------|----------|-------------------|----------|-----------------|----------|-----------|-----------|--------------------|--------------------|
| Female | 15-19 | 20-24 | Age 15 | Age 16 | Age 17 | Age 18 | Age 19 0.990 | Age 20 | Age 21 | Age 22 | Age 23 | Age 24 |
| remaie | 0.910 | -2.940 (0.69)** | -1.010 | -0.240 | 1.000 | 4.990 | (1.630) | -2.620 | 0.310 | 1.020 | -6.910 (1.59)** | -5.330 (1.50)** |
| DII- | (0.540) | | (0.620) | (1.030) | (1.270) | (1.44)** | | (1.690) | (1.660) | (1.640) | , , | . , |
| Black | -7.360 | -6.310 | -4.290 | -7.150 | -4.730 (2.15)* | -15.820 | -0.900 | -6.780 | -6.480 | -2.460 | -8.610 | -7.640 |
| NI C. A | (0.86)** | (1.18)** | (0.87)** | (1.61)** | (2.15)* | (2.34)** | (2.700) | (2.81)* | (2.87)* | (2.710) | (2.84)** | (2.55)** |
| Native American | -11.780 | -16.120 | -3.470 | -3.680 | -23.540 | -13.690 | -23.190 | -28.390 | -8.990 | -13.480 | -13.250 | -23.900 |
| | (2.89)** | (3.67)** | (2.340) | (6.940) | (5.27)** | (8.510) | (8.48)** | (7.40)** | (8.360) | (7.320) | (9.720) | (8.95)** |
| Asian | -10.610 | -18.340 | -1.750 | -6.100 | -8.160 | -19.940 | -16.390 | -26.340 | -14.590 | -5.930 | -19.310 | -20.720 |
| | (1.13)** | (1.63)** | (1.210) | (2.11)** | (2.62)** | (2.88)** | (3.61)** | (3.57)** | (4.16)** | (3.860) | (3.85)** | (3.51)** |
| Hawaiian/Pacific Islander | -2.420 | 5.740 | -5.320 | -10.450 | 12.880 | -15.570 | 5.350 | -21.650 | -5.720 | 35.240 | 4.020 | 21.640 |
| | (3.690) | (5.110) | (3.740) | (3.66)** | (11.040) | (6.96)* | (13.650) | (11.570) | (11.540) | (8.46)** | (9.780) | (6.04)** |
| Multi-Racial | -1.810 | -1.850 | -1.530 | -0.240 | 2.760 | -5.840 | 2.040 | 13.640 | -7.290 | -2.690 | -7.830 | -5.810 |
| | (1.600) | (2.280) | (1.730) | (2.980) | (4.120) | (4.440) | (5.800) | (5.10)** | (5.150) | (5.180) | (4.630) | (5.840) |
| Hispanic | -5.310 | 3.680 | -2.960 | -4.190 | -7.410 | -8.500 | -2.300 | 3.260 | 2.280 | 9.200 | 4.590 | -0.840 |
| | (0.74)** | (1.01)** | (0.84)** | (1.47)** | (1.84)** | (2.07)** | (2.300) | (2.450) | (2.370) | (2.46)** | (2.350) | (2.280) |
| Born in U.S. Outlying Area | -3.640 | -13.560 | 12.980 | -8.050 | -8.390 | 2.990 | -13.580 | 0.230 | -14.660 | -7.150 | -26.670 | -24.240 |
| | (3.740) | (5.72)* | (10.590) | (3.57)* | (6.520) | (10.000) | (9.480) | (10.320) | (10.260) | (17.500) | (17.160) | (17.290) |
| Born Abroad of American Parents | -5.180 | 8.540 | 4.110 | -5.360 | -20.310 | 10.790 | -18.890 | 23.630 | -9.060 | 19.110 | 10.180 | 1.670 |
| | (3.260) | (3.93)* | (5.600) | (4.820) | (3.46)** | (10.480) | (12.120) | (7.16)** | (9.260) | (8.59)* | (9.980) | (7.510) |
| Naturalized Citizen | -3.390 | 0.780 | -2.550 | 3.510 | -3.060 | -2.730 | -2.700 | 1.860 | -8.570 | 2.620 | 0.690 | 4.680 |
| | (1.900) | (2.140) | (1.370) | (3.780) | (4.220) | (4.540) | (5.230) | (5.140) | (6.050) | (4.990) | (5.230) | (4.000) |
| Non-Citizen | -4.550 | -0.770 | -2.910 | -4.180 | -5.260 | -3.690 | -5.960 | 4.070 | 6.770 | -8.230 | -7.250 | 1.420 |
| | (1.26)** | (1.510) | (0.75)** | (2.230) | (2.60)* | (3.130) | (4.030) | (3.800) | (3.620) | (3.49)* | (3.48)* | (3.080) |
| Completed 1st-4th grade | 6.190 | 22.060 | 25.010 | 23.280 | -28.520 | 38.460 | -1.170 | 27.130 | 55.520 | 0.360 | 14.770 | 44.420 |
| | (9.430) | (11.290) | (26.450) | (14.450) | (14.620) | (20.460) | (16.690) | (21.260) | (20.03)** | (16.730) | (16.070) | (18.78)* |
| Completed 5th-8th grade | -2.850 | 18.170 | -6.010 | 0.900 | -20.730 | 15.180 | 30.550 | 18.460 | 16.140 | 62.280 | 34.470 | -10.580 |
| | (6.860) | (7.77)* | (11.530) | (5.500) | (13.150) | (17.500) | (12.42)* | (13.480) | (13.740) | (15.86)** | (11.54)** | (20.010) |
| Completed 9th grade | -2.410 | 25.570 | -5.760 | 3.030 | -20.250 | 4.750 | 12.490 | 1.730 | 33.300 | 60.730 | 51.450 | 6.700 |
| | (6.850) | (7.75)** | (11.540) | (5.210) | (12.570) | (16.000) | (11.390) | (13.950) | (15.35)* | (14.56)** | (10.40)** | (20.380) |
| Completed 10th grade | 3.300 | 14.650 | -4.500 | 8.770 | -10.270 | -3.040 | 32.820 | -10.110 | 34.540 | 33.980 | 50.850 | 3.090 |
| | (6.860) | (7.26)* | (11.540) | (5.210) | (12.430) | (15.000) | (10.97)** | (12.620) | (13.26)** | (14.78)* | (8.42)** | (19.600) |
| Completed 11th grade | 6.500 | 16.280 | -1.470 | 10.500 | -6.800 | 5.230 | 15.440 | 10.890 | 30.460 | 34.830 | 33.320 | 6.280 |
| | (6.860) | (7.02)* | (11.840) | (5.440) | (12.450) | (14.840) | (9.530) | (11.490) | (12.20)* | (13.59)* | (8.02)** | (19.250) |
| Completed 12th grade, no diploma | 3.700 | 24.700 | -8.020 | 9.420 | -6.960 | 0.480 | 20.190 | 5.770 | 34.160 | 38.420 | 57.290 | 19.350 |
| - - | (6.930) | (7.01)** | (11.660) | (6.820) | (12.540) | (14.900) | (9.79)* | (11.330) | (12.10)** | (14.21)** | (8.33)** | (19.270) |
| High school graduate, or GED | 20.910 | 37.400 | 22.300 | 34.340 | 2.750 | 13.020 | 42.350 | 24.800 | 51.330 | 57.260 | 62.750 | 24.070 |
| | (6.90)** | (6.56)** | (13.320) | (8.27)** | (12.890) | (14.890) | (9.22)** | (10.35)* | (10.99)** | (12.39)** | (5.57)** | (18.150) |
| | . / | 29.750 | 20.010 | 33.610 | / | / | 33.000 | . / | | 45.860 | . / | 24.610 |

| | (6.91)* | (6.55)** | (14.370) | (8.00)** | (13.360) | (14.890) | (9.17)** | (10.310) | (10.99)** | (12.37)** | (5.64)** | (18.190) |
|---------------------------------|----------|-----------|----------|-----------|-----------|----------|-----------|-----------|-----------|-----------|-----------|----------|
| Associate degree, occ. program | 22.960 | 47.440 | -35.450 | 91.990 | -26.190 | 23.890 | 43.980 | 36.340 | 64.120 | 68.690 | 73.300 | 33.560 |
| | (8.92)* | (6.74)** | (15.77)* | (6.86)** | (13.14)* | (19.820) | (11.73)** | (12.04)** | (11.51)** | (12.80)** | (5.97)** | (18.500) |
| Associate degree, acad. program | 30.950 | 39.880 | 48.720 | 45.590 | 65.200 | 3.480 | 45.760 | 24.810 | 53.550 | 55.460 | 61.310 | 36.180 |
| | (8.86)** | (6.69)** | (33.220) | (20.00)* | (15.24)** | (18.820) | (11.75)** | (11.39)* | (11.46)** | (12.64)** | (6.33)** | (18.33)* |
| Bachelor's degree | 38.420 | 43.230 | -5.450 | 60.400 | 16.540 | 28.230 | 56.350 | 23.210 | 54.090 | 58.430 | 69.990 | 33.350 |
| | (8.93)** | (6.60)** | (12.180) | (11.38)** | (18.300) | (19.740) | (14.21)** | (12.190) | (11.72)** | (12.45)** | (5.56)** | (18.150) |
| Master's degree | 77.250 | 48.080 | 50.200 | 85.100 | 59.490 | 51.920 | 83.030 | 63.560 | 62.170 | 58.390 | 68.620 | 39.710 |
| | (8.67)** | (7.18)** | (21.56)* | (8.51)** | (14.02)** | (20.33)* | (18.66)** | (13.51)** | (17.38)** | (16.05)** | (7.86)** | (18.53)* |
| Professional degree | | 39.810 | | | | | | 12.260 | 82.960 | 49.360 | 56.570 | 26.330 |
| | | (13.28)** | | | | | | (11.800) | (16.67)** | (33.050) | (23.72)* | (26.920) |
| Doctorate degree | 77.030 | 27.760 | | | 66.780 | | | 13.570 | 26.450 | -3.990 | 71.350 | 18.620 |
| | (7.78)** | (11.30)* | | | (14.66)** | | | (13.220) | (25.580) | (13.760) | (15.70)** | (27.100) |
| Married | 5.990 | 1.660 | 19.920 | 8.560 | -1.420 | 2.670 | 1.160 | 3.400 | 4.120 | -0.380 | 1.790 | 0.210 |
| | (3.660) | (1.260) | (7.91)* | (7.580) | (7.990) | (8.410) | (6.850) | (5.680) | (3.680) | (2.990) | (2.560) | (2.260) |
| Has a Child | -3.380 | -6.400 | 14.940 | 5.160 | 2.980 | -9.450 | -5.530 | -3.330 | -4.710 | -2.060 | -8.040 | -8.820 |
| | (3.300) | (1.31)** | (11.720) | (8.650) | (9.450) | (6.190) | (5.540) | (4.580) | (3.600) | (3.020) | (2.77)** | (2.45)** |
| R^2 | 0.18 | 0.10 | 0.16 | 0.18 | 0.15 | 0.15 | 0.15 | 0.16 | 0.15 | 0.16 | 0.15 | 0.15 |
| N | 28,220 | 24,860 | 5,892 | 5,823 | 5,812 | 5,548 | 5,062 | 4,868 | 5,029 | 4,823 | 4,946 | 5,117 |

Notes: Control variable results in this table correspond to the two far right columns of Table I. Regressions also control for local area fixed effects, but these are not reported. Panel A regressions also include indicator variable controls for age (not reported). The regression dependent variable is coded as zero or 100 to facilitate comparison with employment rates. Standard errors are heteroskedasticity robust.

* Statistically significant at five percent level; ** Significant at one percent level.