

Title Sector-Specific Adult Education for Screened Disadvantaged Workers: RCT Evidence on Employment, Earnings and Industry

Authors Matthew Baird (presenting and corresponding author), John Engberg, and Italo Gutierrez

Background Adult education programs offer significant promise in improving the labor market outcomes of disadvantaged populations through developing marketable human capital. The prior literature on job training programs – adult education programs that typically are shorter in duration and subsidized publicly – has shown promising effects on earnings and employment, but these benefits have largely been found to accrue for programs that are open generally. Job training programs for displaced workers have overall not been found to be very effective.

Research Questions *Do job training programs for disadvantaged workers that screen candidates improve employment and earnings? We hypothesize treatment increases employment rates and earnings. For which types of workers are the programs most successful? We hypothesize that the screening will lead to the program being effective generally, including for the population of those that enter without a job. What is the effect on job duration, and for which types of jobs? We hypothesize that treatment will lead to longer job duration in good jobs (higher paying, more stable) and shorter duration in bad jobs. What is the effect on industry of employment? We hypothesize that treatment will lead to higher employment in the industries that employ workers of the training they received and lower employment in low-skill industries.*

Setting We evaluate 20 cohorts of job training programs in New Orleans between 2017 and 2019. The training programs targeted low-income individuals with poor employment prospects.

Population The population consists of individuals who consented to participate in the study and entered a randomization pool for a training cohort. There were 429 total individuals across 20 training cohorts in our study (for 2,052 person/quarter year observations after the training period), with approximately half randomly assigned the treatment group and half in the control. Individuals were low-income and nearly half did not have any job at enrollment into the program.

Intervention Treatment is defined as participation in a training program. The programs were offered free-of-charge through public subsidization. The training programs were for human capital development in one of several target occupations within one of three industries: advanced manufacturing (seven cohorts), information technology (eight cohorts), and health care (five cohorts). Training was 20 hours per week for between two and four months, depending on the program. Training involved in-class lectures, text readings, and hands-on learning. As part of the program, individuals were able to test for at least one certification in each program.

Research Design We use a randomized controlled trial design to evaluate the impact of the program on labor outcomes. We use OLS regressions of the outcomes on treatment controlling for randomization strata (demographics and baseline employment characteristics) as well as cohort and time-after-training fixed effects. For job duration, we use Cox proportional hazard models.

Data Collection We collected data from the evaluation participants at the time of randomization, which data included their demographics and current employment status, as well as their social security number. We acquired employment and earnings data from the Louisiana Workforce Commission for each individual for every quarter between 2014 quarter 1 and 2019 quarter 1.

Results We find insignificant but reasonably-sized effects on employment. We also find statistically significant effects on quarterly earnings of around \$726 for ITT (around 25 percent increase over the control group) and \$914 for TOT. The effect is primarily driven by those who do not have a job at baseline, who had significant increases in both employment probabilities and earnings. We find that this is driven by individuals that, while not having a job at randomization, had held a job within a year prior to the program (i.e., not the chronically unemployed). We also find increased job duration from treatment, with odds ratios of ending a job in a quarter of 0.87 overall which is again most impactful for those without a job at enlistment. This effect is driven by staying longer in good jobs (higher paying and longer duration), with no difference between treatment and control groups for duration in low-paying jobs. We also find that the treatment group is more likely to work in the industries for which their training was intended, while also finding some evidence that they are less likely after training to be employed in low-skilled industries.

Conclusion Prior literature has had shown little effectiveness of job training programs aimed entirely at displaced workers. While the program we evaluate was open to individuals with any employment history, we find that the training was most effective for those with job at enrollment. This stands in contrast to the displaced worker findings. We argue that this may be driven by the screening which was part of the training, selecting individual that had sufficient literacy, numeracy, and dependability to participate in the training. We also find evidence that the treatment effect is operating through meaningful avenues, as workers are more able to work in target industries (suggesting potentially marketable increases in human capital) and stay longer in good jobs. Together, this provides encouraging evidence that job training programs targeting disadvantaged workers with no jobs can be successful in developing human capital and leading to improved labor outcomes.