Title Does Job Training Reduce Arrests? Evidence from a Disadvantaged Worker RCT
Authors Shamena Anwar, Matthew Baird (presenting and corresponding author), John Engberg, and Rosanna Smart

Background The research on adult education, such as job training programs, has thoroughly examined the impact on employment and earnings. Meanwhile, research on reducing adult criminal activity has primarily focused on the impact of changing the cost of committing crimes, i.e. through changes in risk by increased police forces or increased penalties and incarceration terms. The literature that does examine the impact of adult education on outcomes in the criminal justice system has focused on improving post-incarceration outcomes through specific rehabilitation programs and reducing recidivism through skill development.

Research Question Do job training programs reduce arrests for training participants, and if so, for which populations and through which mechanisms? We hypothesize that participation in job training will reduce arrests. We hypothesize further that the primary avenue through which participation reduces arrest would be through human capital development leading to improved employment and earnings, while also seeing impact from other mechanisms, including peer group effects in the training and favorable interactions with government agencies.

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 455 total individuals across 20 training cohorts in our study, 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 arrests. We use a Cox proportional hazard model for evaluation of the treatment effects, to reflect the time-nature of the analysis, to account for the substantial

amount of right-censoring of the data with most individuals not arrested after training, and to account for the differing amounts of possible time after the end of training (depending on which cohort they were in) until the end of our data frame. In addition to treatment status, we control for randomization strata (on demographics and employment history) and cohort fixed effects, as well as arrest history before training. We also do several subset regressions of populations or outcomes of interest, including by gender, by age, by baseline income, for those with arrest histories, and for outcomes of arrests for more severe crimes. We additionally do panel OLS regressions with arrest status and employment status of each quarter to examine timing differences in outcomes--whether reduced arrests precede favorable employment outcomes, or favorable employment outcomes precede reduce arrests likelihood. We also employ a new mediation analysis tool which leverages across-cohort differences in mediators and their relationship with the outcome of interest.

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. We acquired arrest history for each individual from the New Orleans Police Department for their entire lives up until April 2019, and scraped online arrest records from Jefferson Parish over a similar period.

Results Individuals invited to the training had significantly lower rates of arrests, with odds ratios around 0.5. The results were even stronger in reducing time to arrest for specific subpopulations, including for men and for individuals with arrest histories. There is suggestive evidence that the large treatment effect of higher earnings subsequently leads to reductions in arrest likelihood, as well as some evidence that the treatment effect directly reduces arrests which increases employment and earnings in subsequent quarters. There is also strong evidence for peer effects, with individuals placed in cohorts with a smaller fraction of peers with prior arrests having smaller odds ratios for arrest post-training.

Conclusion Human capital development through adult training programs is an important poverty-reduction tool through improved employment and earnings. However, we demonstrate that it plays an additionally important role in reducing arrests. This is only partly driven through increased earnings and employment, and is primarily driven by a direct effect of the training on arrest likelihood. This suggests the importance of adult education in the set of policy tools that government should examine when considering programs to improve employment outcomes and reduce criminal activity.