
ENTREPRENEURSHIP FOR THE FORMERLY INCARCERATED: A RANDOMIZED CONTROL TRIAL OF THE PATHWAY TO ENTERPRISE FOR RETURNING CITIZENS (PERC) PROGRAM



ILLINOIS CRIMINAL JUSTICE INFORMATION AUTHORITY

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Abstract: Securing employment after exiting prison can be challenging, but some reentry programs seek to help formerly incarcerated individuals gain employment. One type of program provides entrepreneurship training to help individuals open their own small business. ICJIA researchers conducted an outcome evaluation of an entrepreneurship program in Cook County Illinois, Pathway to Enterprise for Returning Citizens (PERC) to examine recidivism outcomes. Researchers employed a randomized control trial to compare outcomes after prison release of 97 formerly incarcerated individuals—72 participants in the program and 25 in the comparison group. The study found no programmatic effects as there were no statistically significant differences between the treatment and control groups on the outcomes of rearrest, reincarceration, and employment

Introduction

Annually, approximately 27,000 individuals are released from Illinois state correctional facilities and about 48% return to a correctional facility within three years.¹ Individuals leaving prison may have difficulty securing employment and income; however, starting one's own business, although difficult, can be an alternative. Reentry entrepreneurship training programs are designed to improve the economic stability of individuals returning to communities after incarceration and subsequently reduce recidivism. These programs can help overcome barriers inherent in traditional reentry workforce development programs and services such as lack of education, work experience, qualifications, opportunities, and discrimination.² There is a lack of rigorous research on these programs, but some contend entrepreneurship programs can be a good way to help formerly incarcerated individuals.³

In 2017, the Pathway to Enterprise for Returning Citizen (PERC) program offered entrepreneurship training and assistance to individuals returning to Cook County from Illinois correctional facilities. To study this program, we employed a randomized control trial to explore three outcomes of a treatment group (PERC participants) and a control group (non-participants)—rearrest, readmission to state corrections, and employment outcomes.

PERC Program Description

In 2016, PERC began as an initiative of the Chicago Neighborhood Initiatives Microfinance Group (CNIMFG), a small business micro-lender serving low- to moderate-income neighborhoods in the Chicago area. CNIMFG convened stakeholders to plan the program including the Illinois Criminal Justice Information Authority (ICJIA), Illinois Department of Commerce and Opportunity (IDCO), and the Illinois Department of Corrections (IDOC). The program was funded through U.S. Small Business Administration, U.S. Department of Treasury, banking institutions, and private foundations.

In 2016, CNIMFG released a request for proposals for PERC entrepreneurship training partners in Cook County. In January 2017, the following three agencies were selected.

- **Bethel New Life** is a nonprofit, faith-based organization in Chicago with programming focusing on workforce development, small business development, entrepreneurship training, and senior housing.⁴
- **Safer Foundation** is one of the nation's largest providers of non-profit employment training services for those with criminal records. Safer also advocates for policy changes to support employment initiatives for people with criminal records.⁵
- **Sunshine Enterprises** is as a division of Sunshine Gospel Ministries, a faith-based youth services agency. Sunshine supports low and moderate-income entrepreneurs in developing their own businesses through its business academy.⁶

The agencies were to provide the following services, which included classroom instruction and homework:

- Business and entrepreneurial training and education
- Preparation for transition
- Skills development
- Business plan development
- Financial literacy
- Personal credit counseling
- Legal services
- Business mentoring

In 2019, ICJIA researchers published a [PERC process evaluation](#) report which further details the program's operations.⁷ The evaluation examined delivery of PERC's entrepreneurship training; views of the program by participants and training staff; and participants' program completion and knowledge gains. Methods included analysis of data from focus groups, surveys, interviews, and administrative records. The evaluation found that feedback from staff and participants were mostly positive and the program increased entrepreneurship knowledge. However, program engagement with returning citizens from prison was low—22% attended week one of class (16 of the 72 accepted and assigned to PERC) and 12 completed PERC training.

Methodology

The current study employed a randomized control trial, the scientific gold standard, to compare outcomes of a treatment and control group.⁸ Random assignment in program evaluation reduces bias and researchers can more confidently conclude that participant outcomes are due to the program, not other factors (e.g., education, pre-existing skills, intelligence). This is especially important for new programs being evaluated. The research was approved by ICJIA's Institutional Review Board.

Participants and Sample

In November 2017, stakeholders from ICJIA and CNIMFG conducted PERC informational sessions with incarcerated individuals at eight Illinois correctional facilities.⁹ Those who applied and submitted a completed application qualified for an initial review for eligibility. A total of 124 prisoners filled out applications for PERC and 97 were deemed eligible for the program. Twenty-seven applicants were excluded because of scheduling conflicts between official prison release dates and classroom training start dates, missing or non-Cook County addresses, convictions for specific financial crimes or class X sex offenses,¹⁰ or incomplete study consent forms.

Study Design and Procedure

Program Assignment

Prison release date and the distance between training agencies and applicant addresses upon release were factored into the assignment process before randomization. We assigned an alpha-

numeric code to each eligible applicant and sent a de-identified list of eligible applicants to external researchers at BetaGov for random assignment. BetaGov, at New York University's Marron Institute, is a collaborative team of researchers that help government organizations conduct randomized control trials at no cost. Researchers at BetaGov randomly assigned applicants to PERC or the control group.

Data Sources

Arrest Data

We obtained arrest data from the Criminal History Record Information (CHRI) database maintained by the Illinois State Police and used by ICJIA for research purposes. The CHRI contains information required by statute to be submitted on each arrested person by arresting agencies, state's attorney's offices, circuit courts, and state and county correctional institutions for the purpose of creating a cumulative history (or "rap sheet") of such events. Upon arrest, an individual is fingerprinted using a paper card or an electronic Livescan system this record is then forwarded to ISP for processing and posting in the individual's criminal history record. About 94% of all arrest cards in Illinois are submitted electronically via Livescan. ICJIA has access to most information in the CHRI System through ISP's off-line, ad hoc database, which allows extraction of complete CHRI records for research purposes.

PERC applications were matched on their first name, last name, and date of birth. Of the full sample ($N = 97$), 100% were found in the CHRI database. Arrest information was provided for the highest offense charge on an identified arresting event. Arrest data was pulled on May 6, 2020 and covered the time of release until December 31, 2019. The follow up time for the full sample from release from state corrections to December 31, 2019 was a minimum of 640 days and a maximum of 753 days. We analyzed arrest data using IBM SPSS Statistics, Version 23.0. For all outcome data sources, we performed descriptive statistics, chi-square statistics to test relationships between categorical variables, and t-tests to compare means.

State Corrections Data

We examined the sample's records of post-application incarcerations in IDOC. Each incarcerated individual is assigned a unique IDOC number upon initial admission to an IDOC facility and is kept for subsequent IDOC incarcerations. On May 6, 2020 researchers pulled IDOC data for incarcerations after individuals applied to PERC to June 30, 2019. The follow up time for the full sample from release from IDOC to June 30, 2019 was a minimum of 456 days and a maximum of 569 days. IDOC data were analyzed using IBM SPSS Statistics, Version 23.0.

Employment Data

ICJIA entered into an agreement with the Illinois Department of Employment Security (IDES) to obtain employment and earnings data for the sample. IDES's Wage Information System's Employment Tracking Database stores data for state-taxed employees including names of employers, wages, and employment periods (in four quarters per year). Social Security numbers provided by PERC applicants on their application forms were used to link the sample to their employment data. On November 20, 2019, we provided IDES with a password-protected Microsoft Excel file with the social security numbers and a unique case control number for 97

individuals in the sample group for cross-matching. IDES returned the response file to ICJIA researchers stripped of Social Security numbers and any personal identifiers. Researchers then analyzed employment data using IBM SPSS Statistics, Version 23.0. They provided data from April 1, 2018 to June 2019. The employers were categorized using the U.S. Department of Labor Statistics, Standard Occupational Classification System.¹¹

Study Limitations

There were limitations to the study. First, there was limited follow up time from the date of release to the date the recidivism data was pulled. Depending on release date and data pull date, the maximum follow-up time on arrest data was 753 days and IDOC data was 569 days. Second, we only examined three outcome measures—arrest, reincarceration, and employment records. There may be additional or confounding outcome measures such as morbidity, mortality, and leaving the state. Third, many in the treatment group did not complete all PERC trainings to get the full “dosage” of the PERC intervention. Finally, employment data included only official taxed employment, not untaxed or “under the table” employment.

Key Findings

Sample Characteristics

The full sample included 97 individuals who submitted applications for the PERC program who were randomly assigned to the treatment group (n=79) or control group (n=25). Applicants were admitted to a state corrections facility between December 1993 and March 2018 and released December 8, 2017 to March 24, 2018. PERC trainings started in March 2018 at the three training locations. In the sample, 11 individuals in the treatment group reported having previously been a business owner (15.3%) and 83.3% had not (one unknown). In the control group, four individuals (16%) reported previously having been a business owner; 84% had not. Table 1 indicates the characteristics of the sample’s treatment and control groups.

Table 1
Characteristics by Sample Group (N = 97)

	Treatment group (n=72)	Control group (n=25)
	n (%)	n (%)
Gender		
Male	58 (80.6)	21 (84.0)
Female	14 (19.4)	4 (16.0)
Age		
19-30	27 (37.5)	6 (24.0)
31-40	21 (29.2)	12 (48.0)
41-50	12 (16.7)	4 (16.0)
51-60+	12 (16.7)	3 (12.0)
Race		
Black, non-Latinx	50 (69.4)	20 (80.0)
White, non-Latinx	5 (6.9)	2 (8.0)
Latinx	14 (19.4)	2 (8.0)
Other	3 (4.2)	1 (4.0)
Education		
Less than high school graduate	23 (31.9)	7 (28.0)
High school diploma/GED	16 (22.2)	9 (36.0)
Some college	27 (37.5)	8 (32.0)
College graduate	6 (8.3)	0 (0.0)
Unknown	0 (0.0)	1 (4.0)
Time in Prison		
1 year or less	29 (40.3)	10 (40.0)
1-2 years	30 (41.7)	12 (48.0)
3-4 years	7 (9.7)	0 (0.0)
5+ years	6 (8.3)	3 (12.0)

Chi-square tests were performed to examine differences in characteristics between treatment and control groups. The two groups did not differ for those individuals who earned high school diploma or GED and those who did not, $\chi^2(1, N = 97) = .058, p = 0.810$. There was no significant difference on if those in the sample were Black individuals or non-Black individuals, $\chi^2(1, N = 97) = 1.029, p = 0.310$. There was also no significant difference in gender distribution between the two groups, $\chi^2(1, N = 97) = .146, p = 0.703$.

In the treatment group, the age range was age 19 to 61 years old with a mean age of 37.0 years old. In the control group, the age range was 21 to 54 years old with a mean age of 36.8 years old. A t-test revealed no statistically significant differences in mean age between the treatment and control groups, $t(95) = -0.087, p = .237$.

We calculated time in prison from the admission date of the most recent incarceration (nearest the time of application to PERC) to prison exit date. The treatment group had a mean number of 944 days (2.6 years), a median number of 426 days (1.2 years), and a range of 60 days to 8,807 days in prison (24.1 years) (one was unknown). The control group had a mean number of 647

days (1.8 years), a median number of 382 days, and a range of 155 days to 2,286 days in prison (6.3 years). A chi-square test revealed no statistically significant differences between groups on time spent in prison (more than one year or less than one year), $X^2(1, N = 97) = .001, p = 0.981$.

Arrest Outcomes

After release from prison, the treatment group had a mean number of 1.49 arrests, a median of 1.00, and a range of 1 to 57 arrests. The control group had a mean number of 2.28 arrests, a median of 2.0 arrests, and a range of 1 to 8 arrests. A t-test revealed no statistically significant differences in mean arrests between the treatment and control groups, $t(33.617) = 1.607, p = .154$. Table 2 offers rearrest data by sample groups.

Table 2
Number of Rearrests by Class, Type, and Sample Group (N = 97)

	Treatment	Control
	group (n=72)	group (n=25)
	n (%)	n (%)
Rearrests		
0	28 (38.9)	7 (28.0)
1	14 (19.4)	3 (12.0)
2	15 (20.8)	6 (24.0)
3+	15 (20.9)	9 (36.0)
Post arrest class		
Felony	24 (33.3)	11 (44.0)
Non-felony	32 (44.4)	16 (64.0)
Post arrest type		
Violent	8 (11.1)	5 (20.0)
Property	10 (13.9)	7 (28.0)
Drug	12 (19.4)	5 (20.0)
Weapon	5 (6.9)	3 (12.0)

Chi-square tests were performed to examine differences between the treatment and control groups on arrests after release from prison. There were no differences on rearrest, $X^2(1, N = 97) = .954, p = .329$, having a non-felony rearrest, $X^2(1, N = 97) = 2.839, p = .092$, or having a felony rearrest, $X^2(1, N = 97) = .915, p = .339$. In addition, there were no statistically significant differences among the groups on arrest type.

State Incarceration Outcomes

In the treatment group, 23.6% of individuals were readmitted to state corrections during the time period examined and 32% of those in the control group were readmitted during that time period. Table 3 indicates reincarceration data by sample group.

Table 3
Reincarcerations by Sample Group (N = 97)

	Treatment group (n=72)	Control group (n=25)
	n (%)	n (%)
Re-incarceration		
0	55 (76.4)	17 (68.0)
1	13 (18.1)	5 (20.0)
2	4 (5.6)	3 (12.0)
Prison admission type		
New sentence	2 (2.8)	1 (4.0)
Technical violator	23 (31.9)	6 (24.9)
New sentence offense type		
Person	4 (5.6)	3 (12.0)
Property	5 (6.9)	1 (4.0)
Drug	4 (5.6)	0 (0.0)
Weapons	1 (1.4)	3 (12.0)

A chi-square test was performed to examine the relationship between the groups and a new prison admission. No association was found between the treatment and control groups on reincarceration ($X^2(1, N = 97) = .683, p = 0.409$). Fisher's Exact tests found no statistically significant differences in new sentence offense type between treatment and control groups.

Employment Outcomes

Table 4 depicts employment outcomes by randomized groups. In the treatment group, 97.2% (n=70) had employment at some point during the time period examined (April 2018 to June 2019). In the control group, 92.0% were employed. A Fisher's Exact test was performed and revealed no statistically significant difference in employment status between treatment and control groups, $p = 0.229$.

During the time period examined, the treatment group earned between \$58.50 to \$99,913.42 and earned a cumulative total of \$613,789.31. The treatment group's mean earnings were \$6,671.62 and median earnings were \$2,147.03. The control group earned from \$72.00 to \$26,8775.25 and a cumulative \$118,443.00. The control group's mean earnings were \$4,230.11 and the median was \$559.13.

The most common job type among the treatment group was production work (e.g., metal workers, food processing workers, plant workers). The most common job among the control group was in a staffing/temporary agency.

Table 4
Employment by Sample Group (N = 97)

	Treatment group (n=72)	Control group (n=25)
	n (%)	n (%)
Employment status		
Employed	70 (97.2)	23 (92.0)
Unemployed	2 (2.77)	2 (8.0)
Job Categories^a		
Production	15 (16.1)	2 (7.1)
Food Prep and Serving	11 (11.8)	2 (7.1)
Sales	10 (10.8)	2 (7.1)
Transportation and Material Moving	6 (6.5)	5 (17.9)
Building, Ground Cleaning, Maintenance	5 (5.4)	2 (7.1)
Office and Administrative Support	4 (4.3)	0 (0.0)
Business and Financial	3 (3.2)	0 (0.0)
Installation, Maintenance, and Repair	2 (2.2)	1 (3.6)
Healthcare Support	1 (1.1)	0 (0.0)
Computer and Mathematical	1 (1.1)	0 (0.0)
Staffing/temporary agency	0 (0.0)	13 (46.4)
Construction	0 (0.0)	1 (3.6)
<i>Total</i>	<i>93 (100.0)</i>	<i>28 (100.0)</i>

^a Job categories from U.S. Bureau of Labor Statistics, Standard Occupational Classification

Discussion and Conclusion

The PERC program provided entrepreneurship training and assistance to 72 individuals returning to Cook County from Illinois prisons. Prior research on such programs are scant, but some indicate that they can be an effective way for the formerly incarcerated to gain employment and be their own boss.¹² We employed a randomized control trial to test the programs outcomes among a treatment and control group. We found no statistically significant differences between the treatment and control groups on the outcomes of rearrest, reincarceration, and employment.

There may be aspects of the program that contributed to the program having no effects on its participants. As noted in the PERC process evaluation, just 12 participants of 72 in the treatment group completed all of the PERC entrepreneurship classes offered to them.¹³ Therefore, low treatment engagement may have led to PERC participants having a less than optimum “dosage” of services. Some research has shown that length of services and engagement can affect desired outcomes.¹⁴ In addition, there is a lack of research and evidence indicating what components are needed for successful entrepreneurship programs, particularly for the formerly incarcerated. More research is needed on such programs including effective curriculums and program delivery methods.

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¹ The Illinois Department of Corrections (2018). *Fiscal year 2017 annual report*. Author. <https://www2.illinois.gov/idoc/reportsandstatistics/Documents/FY2017%20IDOC%20Annual%20Report%20FINAL.pdf>; Illinois Sentencing Policy Advisory Council (2015). *Illinois results first: The high cost of recidivism*. Author. https://spac.icjia-api.cloud/uploads/Illinois_Results_First_1015-20191106T19525474.pdf

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⁴ See <https://www.bethelnewlife.org/>

⁵ See <https://saferfoundation.org/>

⁶ See <https://www.sunshineenterprises.com/>

⁷ Escamilla, J., Reichert, J., Weisner, L., & Mayer, C. (2019). *Entrepreneurship for the formerly incarcerated: A process evaluation of the Pathway to Enterprise for Returning Citizens (PERC) program*. Illinois Criminal Justice Information Authority.

<http://www.icjia.state.il.us/assets/articles/Entrepreneurship%20for%20the%20Formerly%20Incarcerated%20-%20A%20Process%20Evaluation%20of%20PERC.pdf>

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⁹ The eight correctional facilities were Big Muddy, Hill, Kewanee, Lawrence, Logan, Pinckneyville, Robinson, and Sheridan.

¹⁰Offenses that determined if an applicant was ineligible included: 720 ILCS 5/17 et al. Deception and Fraud Offenses, 720 ILCS 5/29 et al. Bribery in Contests, 720 ILCS 5/29B-1 et al. Money Laundering, 720 ILCS 5/33 et al. Official Misconduct, 720 ILCS 5/33E et al. Public Contracting Offenses, 815 ILCS 515/3 et al. Home Repair Fraud, 720 ILCS 5/10-2 et al. Aggravated kidnapping, 720 ILCS 5/10-5 et al. Child luring, 720 ILCS 5/11-1 et al. Criminal sexual assault, 720 ILCS 5/11-6 et al. Indecent solicitation child, 720 ILCS 5/11-14 et al. Promoting juvenile prostitution, 720 ILCS 5/11-20 et al. Child pornography, and 720 ILCS 5/12-33 et al. Ritual abuse.

¹¹ See https://www.bls.gov/soc/2018/major_groups.htm

¹² Johnson, B., Wubbenhorst, W., & Schroeder, C. (2013). *Recidivism reduction and return on investment: An empirical assessment of the prison entrepreneurship program*. Baylor University.; Keena, L., & Simmons, C. (2015). rethink, reform, reenter: An entrepreneurial approach to prison programming. *International Journal of Offender Therapy and Comparative Criminology*, 59(8), 837-854.; Klein, J., & Mohan, L. (2017). *Prison to proprietor: Entrepreneurship as a re-entry strategy*. Asset Fund.

¹³ Escamilla, J., Reichert, J., Weisner, L., & Mayer, C. (2019). *Entrepreneurship for the formerly incarcerated: A process evaluation of the Pathway to Enterprise for Returning Citizens (PERC) program*. Illinois Criminal Justice Information Authority.

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