

Prison education and recidivism

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Motivation

Why Recidivism Needs a Closer Look

Over 60% of formerly incarcerated people return within 3 years.

Prison education is known to reduce recidivism but data on it is limited.

I wanted to explore how post-release employment (as a proxy for education) connects to staying out of prison.

If getting a job after release signals program participation, then we can still study what works even without perfect data.



Project Overview

Research Question:

What's the relationship between prison education (proxied by employment), offense type, time served, and recidivism?:

Based on BJS 2010 report on post-release employment

Built a simulated dataset modeled on national stats

No education variable so I used employment in Q2 after release instead



Methodology

Approach:

- Modeled recidivism as binary outcome (1 = reoffended, 0 = didn't)
- Predictors: Employed (yes/no), Offense type (violent vs. drug). Time served (in years)

Code:

```
model = sm.Logit(y, X).fit()
```

Tools: Python 3.10, statsmodels, CookieCutter DS structure

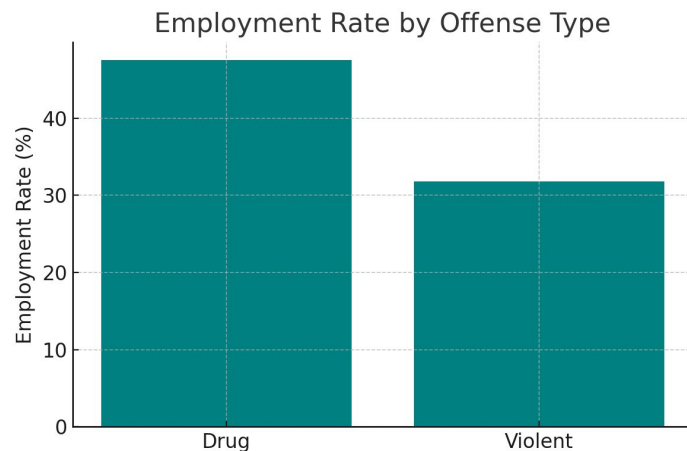
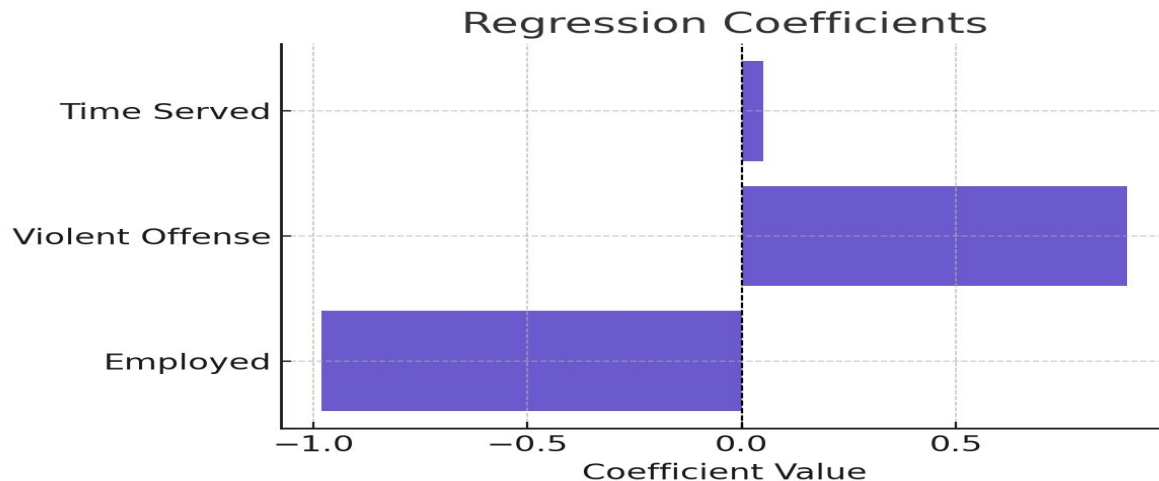


Results

Employed = much less likely to reoffend

Violent offense = more likely to return

Time served = not statistically significant



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Implications

For Policy and Practice:

- Even without education data, we can measure impact using employment
- Focus should shift from sentence length to what happens *during* the sentence
- Programs that lead to employment = fewer people returning = better outcomes for everyone

My next step:

- Add real education participation data
- Try with state/local records
- Include variables like parole, support systems, or demographics

