Research Design Considerations for Recidivism Studies

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 Assessing Variations in Criminal History Data for Multi-Jurisdictional Recidivism Research
BJS Criminal History Record Collection Process

• In 2008, BJS entered into a data sharing agreement with the FBI to directly access criminal history records through the Interstate Identification Index (III) via Nlets for data analysis purposes.

• The FBI’s III is an automated pointer system that allows authorized agencies to determine whether any state repository has criminal history records on an individual.

• Nlets is a computer-based system that links together state, local and federal criminal justice agencies for the purpose of information exchange.
BJS Criminal History Research

BJS has worked to develop an automated system that:

1. Retrieves multi-state criminal history records on samples of offenders.
2. Restructures and standardizes the information into a common format.
3. Generates analytic databases that support recidivism research and assessments of criminal history record content nationwide.
# Criminal History Fields in BJS Relational Database

## Arrest table
- Date of arrest and offense
- Arresting agency
- Statute number/NCIC code
- Charge description
- Charge severity
- Arrest disposition and date

## Court/Sentencing table
- Court disposition date
- Court agency
- Statute number/NCIC code
- Offense description
- Type of court disposition
- Sentences (prison, fine, etc.)

## Prosecution table
- Prosecution disposition date
- Prosecutor agency
- Statute number/NCIC code
- Offense description
- Prosecution action

## Supervision/custody table
- Supervision date (admission, release, etc.)
- Supervision agency
- Supervision description
Examining State-Level Differences in Criminal History Data

When using multistate criminal history data for recidivism research, BJS needs to –

• Examine the differences in the content of the data it receives from the federal and state repositories.

• Understand the variations in the criminal history reporting policies and practices.

• Develop methods to compensate for these variations.
Criminal History Reporting
Practices Vary Across the States

Reporting practices and content of criminal history data vary among states, such as –

- Reporting of arrest, prosecution, court, and custody events.
- Reporting of modified dispositions and sentences.
- Use of structured versus unstructured text fields.
- Record sealing and expungement.
Methods to Standardize Criminal History Data for Multi-State Recidivism Analysis

• BJS worked with the states to identify administrative records embedded in the arrest records, such as –
  • Issuance of warrant
  • Criminal registration
  • Transferring a suspect to another jurisdiction.

• BJS excludes these administrative records from the recidivism analysis to help provide uniformity in the data at the national level.

• Traffic violations are also excluded from analysis due to wide variations in reporting practices across jurisdictions.
BJS Recidivism Research

• State departments of corrections provide prisoner records and state identification numbers to BJS’s National Corrections Reporting Program (NCRP).

• BJS selects random samples of released prisoners to represent all prisoners released in those states during a particular year.

• Criminal histories collected from the FBI and state repositories include arrests and dispositions from criminal justice agencies in all 50 states and the District of Columbia.
Assessing Criminal History Data Completeness

To examine the completeness of the criminal history data, BJS compares the information with external data sources, such as –

• State prison admissions for revocations and new sentences reported through BJS’s National Corrections Reporting Program.

• Federal prison admissions for revocations and new sentences reported through BJS’s Federal Justice Statistics Program.
External Validity Checks on Criminal History Data

• Demographic data in NCRP prisoner records used to verify demographic data in criminal history data on prisoners released in 2005.
  • 98% match on date of birth.
  • Nearly 100% match on gender.
  • Nearly 100% match on race.

• NCRP prison admission date for 2005 release used to verify completeness of incarceration data in criminal history records.
  • 81% of prisoners had incarceration sentence in criminal records within a year of NCRP admission date.
  • 93% had incarceration sentence in criminal records anytime prior to NCRP admission date.
Recidivism Measures

Measures based on criminal history data -
1. Arrest
2. Court adjudication (dismissed, acquitted, convicted)
3. Conviction
4. Incarceration sentence (prison or jail)
5. Prison sentence

Measures based on criminal history data supplemented with prison admission data from departments of corrections -
6. Return to prison for revocation or new sentence
The Costs and Benefits of Using Longer Follow-Up Periods to Measure Recidivism and Desistance
Recidivism of State Prisoners

• Departments of corrections in 30 states provided prison release records for 2015 and fingerprint-based state ID numbers to BJS.

• BJS sampled ~70,000 released prisoners to represent the more than 400,000 released in 30 states in 2005.

• Criminal history data collected in 2011 to examine offending patterns for 5 years following release.

• Recollected in 2016 to examine patterns for 9 years following release.
Of prisoners released in 2005:
2/3 arrested within 3 years
3/4 arrested within 5 years

Source: BJS Recidivism of State Prisoners Released in 30 States in 2005 data collection.
Longer follow-up periods of released prisoners

• What new outcomes and patterns can be examined when follow-up period is extended beyond 3 or 5 years?
  • Time between release and first arrest
  • Annual arrest percentage
  • Total number of arrests
  • Desistance
Costs and benefits to a longer follow-up period

• No standard follow-up period length in criminal career studies

• Costs:
  • Must use older cohort
  • Less up-to-date and timely information

• Benefits:
  • Gain a more complete picture of offending
  • Capture offending that would be missing in a short follow-up period
  • Can measure desistance vs. intermittency
Research questions

- Cumulatively, what percent of released prisoners were arrested during the first 3 years versus longer follow-up periods?
- Are those who are not arrested early on in the follow-up period arrested in later years?
- What percent of prisoners are arrested each year during the follow-up period?
- How do rates of desistance change with additional data?
Research questions

• How do arrest patterns of released prisoners differ based on the offense they were in prison for?
• Do out-of-state arrests become more common in later years after release?
• Do more arrests occur in the earlier years of the follow-up period?
• Do demographic differences in recidivism remain consistent over the follow-up period?
Percent of prisoners arrested in 30 states in 2005 who were arrested since release, by year after release

Annual arrest percentage of prisoners released in 30 states in 2005

Note: The denominator for annual percent is 401,288 (total state prisoners released in 2005).
### Post-release arrests of prisoners released in 30 states in 2005, by year after arrest

<table>
<thead>
<tr>
<th>Year after arrest</th>
<th>Number of arrests during year/period</th>
<th>Percent of arrests during year/period</th>
<th>Cumulative number of all arrests since release</th>
<th>Cumulative percent of all arrests since release</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>1,994,000</td>
<td>100%</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>Years 1–3</td>
<td>804,000</td>
<td>40.3%</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>1</td>
<td>306,000</td>
<td>15.4%</td>
<td>306,000</td>
<td>15.4</td>
</tr>
<tr>
<td>2</td>
<td>260,000</td>
<td>13.0%</td>
<td>567,000</td>
<td>28.4</td>
</tr>
<tr>
<td>3</td>
<td>238,000</td>
<td>11.9%</td>
<td>804,000</td>
<td>40.3</td>
</tr>
<tr>
<td>Years 4–6</td>
<td>620,000</td>
<td>31.1%</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>4</td>
<td>219,000</td>
<td>11.0%</td>
<td>1,024,000</td>
<td>51.3</td>
</tr>
<tr>
<td>5</td>
<td>210,000</td>
<td>10.6%</td>
<td>1,234,000</td>
<td>61.9</td>
</tr>
<tr>
<td>6</td>
<td>190,000</td>
<td>9.6%</td>
<td>1,425,000</td>
<td>71.4</td>
</tr>
<tr>
<td>Years 7–9</td>
<td>570,000</td>
<td>28.6%</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>7</td>
<td>196,000</td>
<td>9.8%</td>
<td>1,620,000</td>
<td>81.2</td>
</tr>
<tr>
<td>8</td>
<td>194,000</td>
<td>9.7%</td>
<td>1,814,000</td>
<td>91.0</td>
</tr>
<tr>
<td>9</td>
<td>180,000</td>
<td>9.0%</td>
<td>1,994,000</td>
<td>100</td>
</tr>
</tbody>
</table>

Note: Number of post-release arrests was rounded to the nearest 1,000. Detail may not sum to total due to rounding. See appendix table 6 for standard errors.

~Not applicable.

Percent of prisoners released in 30 states in 2005 who were arrested after release, by year after arrest and whether arrested during subsequent years.

Note: The denominator for annual percent is 401,288 (total state prisoners released in 2005).
Prisoners released in 30 states in 2005 who were not arrested in the remainder of the follow-up period, by year after release

Note: Estimates after year-6 are not presented as 3 years of subsequent arrests could not be measured.
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