

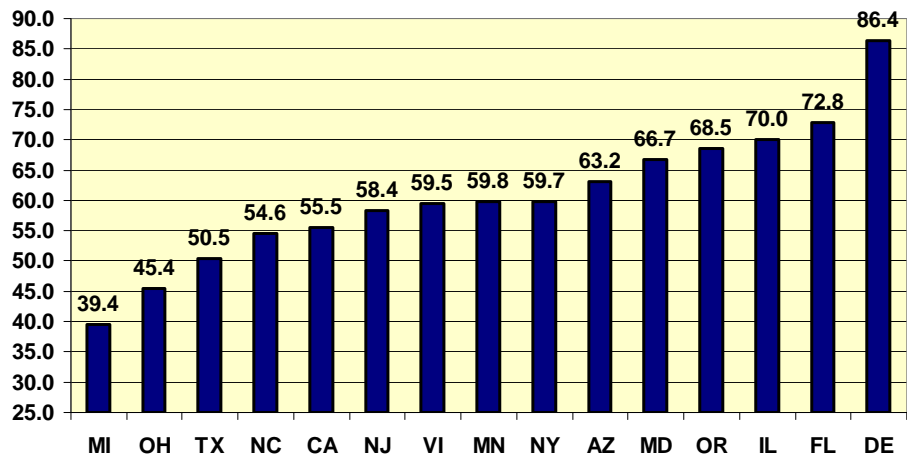
Individual and State-Level Effects on Recidivism : An Analysis of the BJS Prisoners Released in 1994 Database

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THE BJS PRISONERS RELEASED DATASET

- In 1994, the Bureau of Justice Statistics collected data on 38,624 inmates released from 15 states. These inmates were a representative sample of 272,111 inmates released that year. This represented two-thirds of the prisoners released in the United States. In 2002, Langan & Levin's 2002 publication *Recidivism of Prisoners Released in 1994* highlighted the important finding that two-thirds of the inmates released from prison in 1994 were rearrested within three years of their release.

THREE-YEAR REARREST PERCENTAGES BY STATE



Their findings, however, failed to address that the three year rearrest rates varied widely among the 15 states in their study, from 39.4 percent in Michigan to 86.4 percent in Delaware.

RESEARCH QUESTIONS

- Do individual-level factors have different impacts on recidivism rates across states?
- Do recidivism rates vary across states after controlling for state-level differences in the individual characteristics that predict recidivism?
- Are the state-level factors known to be associated with increased incarceration also associated with recidivism?

OVERVIEW

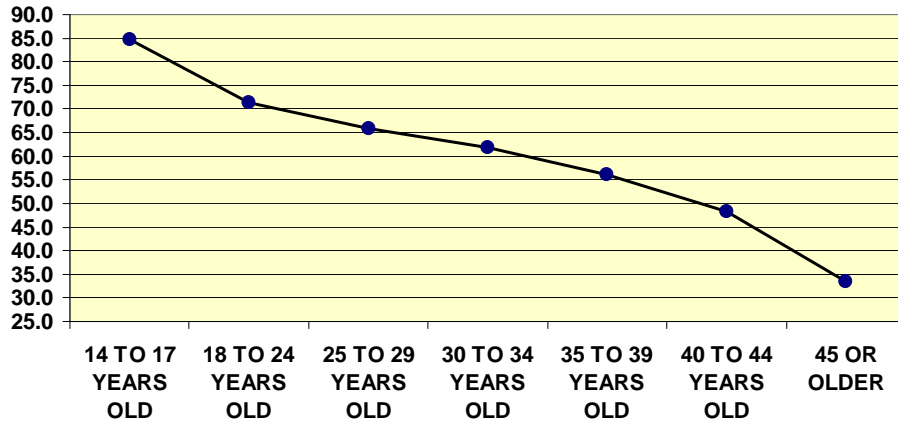
- Recidivism rates vary widely across states.
- Several individual level characteristics affect recidivism risk (e.g., sex, age, arrest history), however, some individual effects vary across states.
- Studies have found numerous state level characteristics related to imprisonment rates, but little is known about the extent to which these characteristics also affect recidivism rates.

INDIVIDUAL LEVEL CHARACTERISTICS AFFECTING RECIDIVISM RISK

Prior research has found that the following individual level characteristics are associated with recidivism:

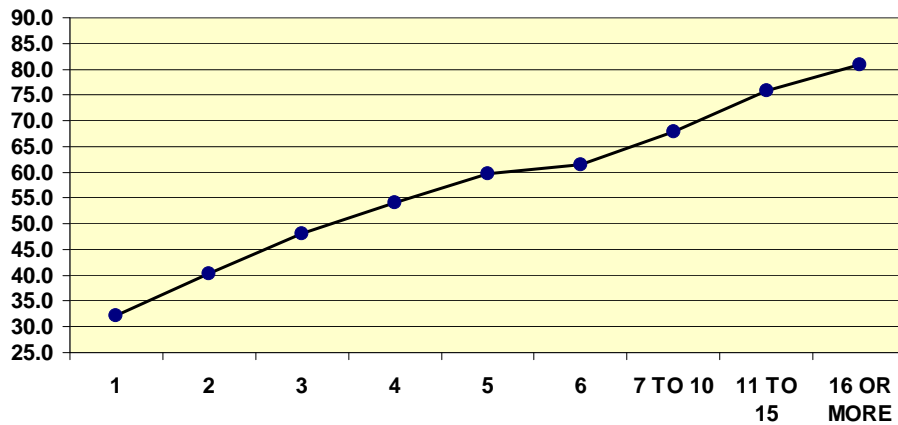
- 1) **Age at Release** (Beck & Shipley, 1989; Harer, 1994; Lowenkamp & Latessa, 2005)
- 2) **Prior Criminal History** (Gendreau, Little & Goggin, 1996; Lowenkamp & Latessa, 2005)
- 3) **Race** (Beck & Shipley, 1989; Gendreau, Little & Goggin, 1996)
- 4) **Type of Offender** (Property, Drug or Violent Offender) (Rosenfeld, Wallman & Fornango, 2005)
- 5) **Sex** (Beck & Shipley, 1989; Gendreau, Little & Goggin, 1996)

**THREE-YEAR REARREST PERCENTAGES
BY AGE AT RELEASE**



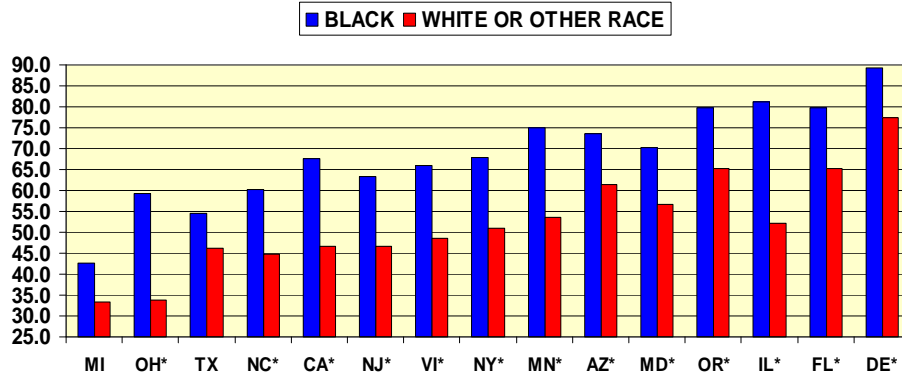
In line with prior research, age at release was a significant predictor of rearrest in all 15 states, even when race, sex, number of prior arrests and type of offender were controlled for.

**THREE-YEAR REARREST PERCENTAGES
BY NUMBER OF PRIOR ARRESTS**



In line with prior research, number of prior arrests was a significant predictor of rearrest in all 15 states, even when race, sex, age at release and type of offender were controlled for.

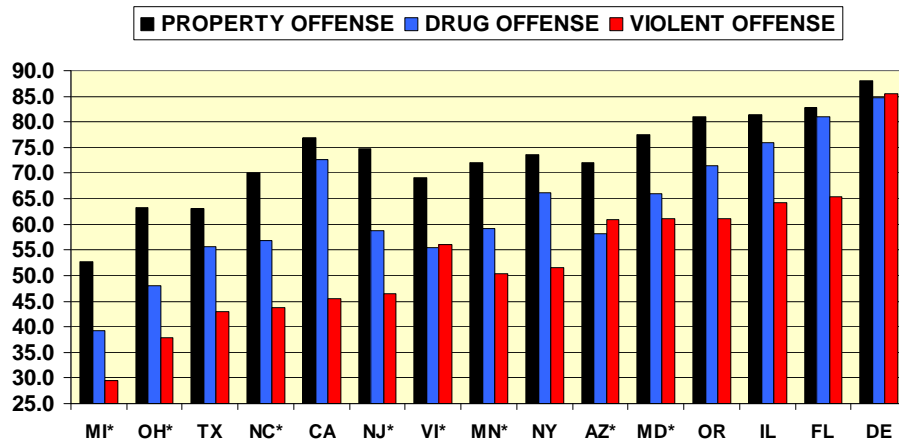
THREE-YEAR REARREST PERCENTAGES BY STATE AND RACE OF OFFENER



Blacks have higher three-year rearrest percentages than other races in all 15 states (* the difference is greater than ten percent in 13 of these states).

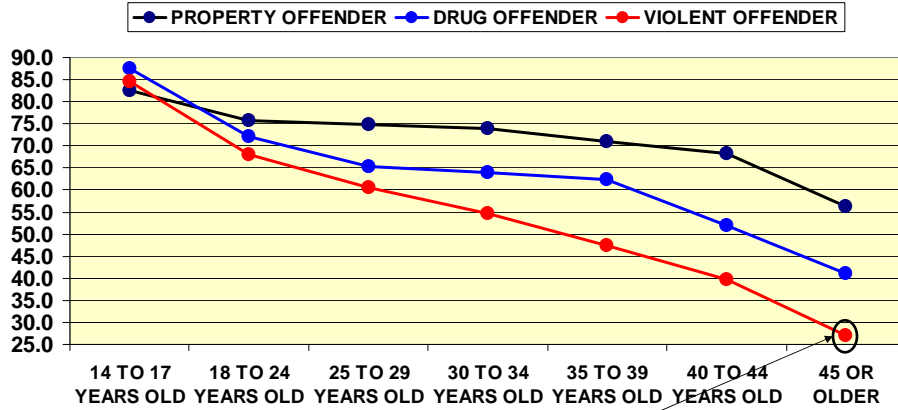
Possible explanations for this difference include social ecology, resource deprivation and racial segregation (Mears, Wang, Hay & Bales, 2008; Kubrin & Stewart, 2006).

THREE-YEAR REARREST PERCENTAGES BY STATE AND OFFENSE TYPE



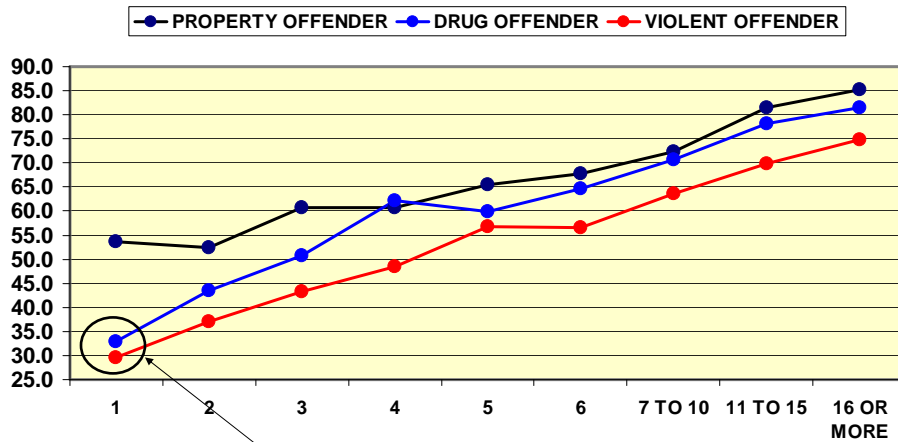
Property offenders have higher three-year rearrest percentages than drug offenders and violent offenders in all 15 states (*the difference is at least ten percent higher than both other offenses in eight states).

THREE-YEAR REARREST PERCENTAGES BY OFFENSE TYPE AND AGE



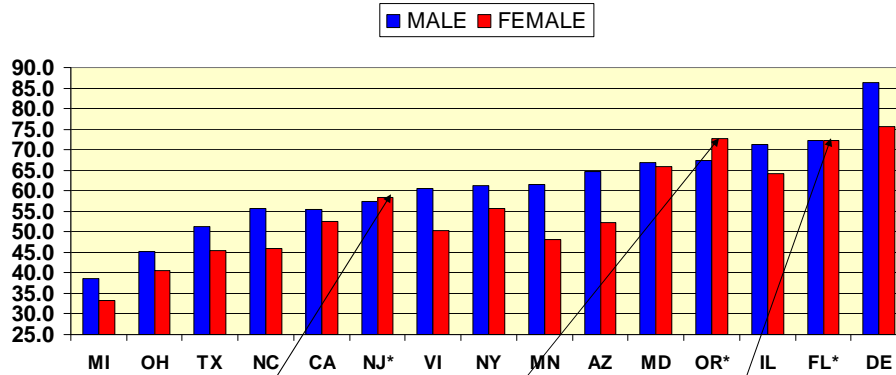
One finding with policy implications is that less than 30 percent of inmates 45 or older released for violent offenses are rearrested within three years of their release.

THREE-YEAR REARREST PERCENTAGES BY OFFENSE TYPE AND PRIOR ARRESTS



One finding with policy implications is that less than 35 percent of drug offenders and violent offenders with only one arrest were rearrested within three years of their release.

THREE-YEAR REARREST PERCENTAGES BY STATE AND SEX OF OFFENDER



New Jersey Rearrest Pct: Males – <u>57.5 percent</u> Females – <u>58.4 percent</u>	Oregon Rearrest Pct: Males – <u>67.3 percent</u> Females – <u>72.7 percent</u>	Florida Rearrest Pct: Males – <u>72.2 percent</u> Females – <u>72.3 percent</u>
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* While males had higher rearrest rates than females in 12 states, contrary to expectations from prior research, females had higher rearrest rates in New Jersey, Oregon and Florida.

REASONS WHY FEMALES MIGHT HAVE HIGHER REARREST RATES

MORE AVERAGE ARRESTS THAN FEMALE OFFENDERS FROM OTHER STATES – One possible reason for higher rearrest rates is that female offenders in Oregon, Florida and New Jersey had a higher average number of arrests than female offenders from other states.

STATE	AVG. PRIOR ARRESTS FOR FEMALES
OREGON	12.1
FLORIDA	11.2
NEW JERSEY	10.3
NEW YORK	10.1
DELAWARE	9.9
CALIFORNIA	9.8
ILLINOIS	7.9
MARYLAND	7.6
ARIZONA	6.5
VIRGINIA	6.0
TEXAS	6.0
MINNESOTA	5.9
MICHIGAN	4.1
OHIO	4.1
NORTH CAROLINA	4.0

STATE	AVG. PRIOR ARRESTS FOR MALES
DELAWARE	13.7
OREGON	12.3
NEW YORK	8.6
FLORIDA	8.3
CALIFORNIA	7.8
ILLINOIS	7.2
NEW JERSEY	6.9
MARYLAND	6.7
ARIZONA	6.7
MINNESOTA	6.1
VIRGINIA	6.1
NORTH CAROLINA	5.1
TEXAS	5.1
MICHIGAN	3.9
OHIO	3.5

REASONS WHY FEMALES MIGHT HAVE HIGHER REARREST RATES

MORE AT RISK THAN MALE RELEASEES FROM THEIR STATE – A second possible explanation about rearrest rates by gender deals with the demographics of populations being released from state prison. Female offenders released from Florida, New Jersey and Oregon have characteristics associated with higher likelihoods of rearrest than their male counterparts.

	Avg. Age	Pct. Black	Prior Arrests	Pct. Property Offenders
Florida				
Female	32.1	64.9%	11.2	36.9%
Male	34.5	46.6%	8.3	20.5%
New Jersey				
Female	32.9	74.5%	10.3	43.8%
Male	32.9	64.9%	6.9	27.3%
Oregon				
Female	33.4	20.5%	12.1	28.4%
Male	35.6	16.3%	12.3	25.5%
All 15 States				
Female	33.2	57.1%	7.6	35.3%
Male	33.5	50.4%	6.9	24.6%

Florida female released inmates were younger, more likely to be black and had more prior arrests than their male counterparts from Florida. The percentage of property offenders who were female was also greater in Florida than in other states.

New Jersey female released inmates had more prior arrests than their male counterparts from New Jersey. The percentage of property offenders who were female in New Jersey was also greater than in other states.

Oregon female released were younger and more likely to be black than their male counterparts from Oregon.

WHILE THE FINDINGS INDICATE THAT SEX, RACE, AGE, PRIOR RECORD AND OFFENSE TYPE ALL INFLUENCE RECIDIVISM

rearrd	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
<u>sex</u>	0.41275	0.05555	7.43	0.000	0.30388	0.52163
<u>race</u>	0.54996	0.02995	18.37	0.000	0.49127	0.60865
<u>release age</u>	-0.06799	0.00172	-39.53	0.000	-0.07136	-0.06462
<u>prior arrests</u>	0.10120	0.00276	36.68	0.000	0.09579	0.10660
<u>violent offense</u>	-0.50066	0.03699	-13.53	0.000	-0.57317	-0.42816
<u>drug offense</u>	-0.35793	0.04258	-8.41	0.000	-0.44139	-0.27447

Slide is top portion of ordered logistic regression of rearrest rates, controlling for sex, race, age at release, number of prior arrests, offense type and state of release. Findings on state of release are listed on next slide.

**THE ODDS OF RECIDIVISM STILL VARY ACROSS
STATES EVEN AFTER CONTROLLING FOR STATE-
LEVEL DIFFERENCES IN INDIVIDUAL
CHARACTERISTICS**

rearrrd	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
<u>Arizona</u>	0.61949	0.08413	7.36	0.000	0.45461	0.78438
<u>California</u>	0.25000	0.06395	3.91	0.000	0.12466	0.37535
<u>Delaware</u>	1.10819	0.14408	7.69	0.000	0.82581	1.39058
<u>Florida</u>	0.92609	0.07455	12.42	0.000	0.77997	1.07220
<u>Illinois</u>	0.61872	0.07620	8.12	0.000	0.46936	0.76807
<u>Maryland</u>	0.42731	0.08040	5.32	0.000	0.26973	0.58488
<u>Michigan</u>	-0.46877	0.07460	-6.28	0.000	-0.61500	-0.32250
<u>Minnesota</u>	0.24066	0.07889	3.05	0.002	0.08604	0.39529
New York	0.13516	0.07489	1.80	0.071	-0.01162	0.28194
North Carolina	-0.05414	0.07339	-0.74	0.461	-0.19798	0.08971
Ohio	-0.09549	0.07521	-1.27	0.204	-0.24291	0.05192
<u>Oregon</u>	0.54406	0.08778	6.20	0.000	0.37201	0.71611
Texas	0.01170	0.07449	0.16	0.875	-0.13430	0.15771
<u>Virginia</u>	0.15611	0.07409	2.11	0.035	0.01090	0.30132

Contrast State is New Jersey (also used as contrast state in Rosenfeld, Wallman & Fornango (2005)).

**STATE LEVEL VARIABLES
RELATED TO IMPRISONMENT**

Prior research has found that certain state level characteristics may be associated with higher imprisonment rates:

- 1) **State Minority Populations** (Jacobs & Carmichael, 2001; Selke & Andersson, 2003; Smith, 2004)
- 2) **Rate of Out-of-Wedlock Births** (Jacobs & Kleban, 2003)
- 3) **Percentage in a State without Health Insurance** (Selke & Andersson, 2003)
- 4) **Strength of the Republican Party** (Jacobs & Carmichael, 2001)
- 5) **Crime Rates** (Neapolitan, 2001; Stucky, Heimer & Lang, 2005 – but also see Jacobs and Carmichael, 2001; Tonry, 2004)

**BUT ARE THESE STATE LEVEL
CHARACTERISTICS ALSO
ASSOCIATED WITH HIGHER
ARREST RECIDIVISM RATES?**

**HLM ESTIMATES OF STATE-LEVEL EFFECTS ON
REARREST RATES**

State-Level Variables	Coefficient (B)	Odds Ratio
State Violent Crime Rate ¹	0.000401	1.000401
State Homicide Rate ¹	-0.020350	0.979856
State Property Crime Rate ¹	0.000135	1.000135
Percent Black ²	-0.004081	0.995927
Percent without Insurance ²	0.013945	1.014042
Percent Births to Unmarried Mothers ³	0.025554	1.025883
Percent Voted Republican for President in 92 ⁴	-0.005568	0.994447

FINDING – THERE ARE NO STATISTICALLY SIGNIFICANT DIFFERENCES BETWEEN GROUPS

¹Crime in the United States 1994

²U.S. Census Bureau

³Centers for Disease Control

⁴Dave Leip's Atlas of U.S. Presidential Elections (<http://uselectionatlas.org/RESULTS/>)

FUTURE RESEARCH

- While one possible explanation for the non-significant state level findings has to do with the small number of states in the sample, it's clear additional research is needed in this area.

CONCLUSIONS AND POLICY RECOMMENDATIONS

- **More research needs to be undertaken to help explain why females have higher rearrest rates in some states than males.**
- **As violent offenders, older offenders, and those with fewer prior arrests have lower overall rearrest percentages; discussion of long mandatory sentences for certain violent offenders is warranted.**
- **Based on the fact that less than half of drug offenders with only one or two arrests are rearrested, discussion of mandatory sentences for these offenders is also warranted.**
- **The state level characteristics associated with increased incarceration rates do not appear to have the same effect on rearrest recidivism rates.**
- **Future research should attempt to identify additional state level characteristics that can help to explain state differences in recidivism.**

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