Recidivism: The Effect of Incarceration and Length of Time Served

Lin Song
with
Roxanne Lieb

September 1993
Recidivism: The Effect of Incarceration and Length of Time Served

Lin Song
with
Roxanne Lieb

September 1993

Washington State Institute for Public Policy
110 Fifth Avenue SE, Suite 214
Post Office Box 40999
Olympia, WA 98504-0999
Telephone: (360) 586-2677
FAX: (360) 586-2793
URL: http://www.wsipp.wa.gov
Document No. 93-09-1201
Mission

The Washington Legislature created the Washington State Institute for Public Policy in 1983. A Board of Directors—representing the legislature, the governor, and public universities—governs the Institute, hires the director, and guides the development of all activities.

The Institute’s mission is to carry out practical research, at legislative direction, on issues of importance to Washington State. The Institute conducts research activities using its own policy analysts, academic specialists from universities, and consultants. New activities grow out of requests from the Washington legislature and executive branch agencies, often directed through legislation. Institute staff work closely with legislators, as well as legislative, executive, and state agency staff to define and conduct research on appropriate state public policy topics.

Current assignments include projects in welfare reform, criminal justice, education, youth violence, and social services.

Board of Directors

Senator Don Carlson         Dennis Braddock, Department of Social and Health Services
Senator Karen Fraser       Marty Brown, Office of Financial Management
Senator Betti Sheldon      Douglas Baker, Washington State University
Senator James West         Stephen Jordan, Eastern Washington University
Representative Don Cox      Marsha Landolt, University of Washington
Representative Jeff Gombosky Thomas L. "Les" Purce, The Evergreen State College
Representative Cathy McMorris Ken Conte, House Office of Program Research
Representative Helen Sommers Stan Pynch, Senate Committee Services

Staff

Roxanne Lieb, Director
Steve Aos, Associate Director

March 2003
## Contents

Summary .........................................................................................................................................1  
Introduction ....................................................................................................................................2  
Theoretical Background ...................................................................................................................2  
Review of Empirical Studies ...........................................................................................................4  
  Does Incarceration Reduce Recidivism? .................................................................4  
  Does Length of Sentence Affect Recidivism? ......................................................5  
  Does Early Release Affect Recidivism? .................................................................7  
Conclusions .....................................................................................................................................8  
Appendix: Summary of Research Findings ...............................................................................9  
References .....................................................................................................................................10

*We thank the following individuals for their assistance on this paper: Sheila Donnelly, Peggy Roper, Staci Thomas, Dave Fallen, John Steiger, and Tom Sykes.*
Recidivism:
The Effect of Incarceration and Length of Time Served

SUMMARY

Offenders may reoffend after they return to the community. This reoffense behavior is known as recidivism. The effect of prison or jail sentences on recidivism is an important issue to those concerned with public safety and the cost-effectiveness of putting convicted offenders in prison. Opinions are divided between those advocating longer sentences in the interest of public safety, and those advocating shorter sentences with the assumption that incarceration, or longer prison terms, will not reduce recidivism rates.

This paper summarizes the theories and the empirical studies on this issue. Study findings indicate that the effect of incarceration (versus other sentencing options) and sentence length on recidivism is complex and is likely to be offender-specific. For some offenders, incarceration and longer confinement seem to increase the risk of recidivism. For other offenders, the likelihood of reoffense will either be unaffected or reduced by longer terms of incarceration. Furthermore, early-release programs do not appear to affect overall recidivism rates.
INTRODUCTION

The effect of incarceration on offender recidivism is an important issue for those concerned with public safety and the cost-effectiveness of incarceration. Points of view are divided between those advocating longer sentences in the interest of public safety, and those advocating shorter sentences with the assumption that longer incarceration will not reduce, but may increase, recidivism rates.

Those advocating longer sentences generally argue that longer periods of incarceration will reduce crime rates for three reasons (Blumstein, Cohen, and Nagin 1978; U.S. Department of Justice 1992):

- The offender cannot reoffend against the public while incarcerated (incapacitation);
- Long periods of incarceration discourage released offenders from committing additional crimes (specific deterrence); and
- The awareness of penalties discourage potential offenders from committing crimes (general deterrence).

Those advocating shorter sentences argue that:

- Certainty of punishment is more important than duration of punishment in deterring offenders from reoffending;
- Many offenders commit crimes due to physical addictions, or limited life choices, and are in need of treatment programs, literacy efforts, and job training as opposed to long periods of incarceration;
- Prison is a school for criminals, and those who are incarcerated become more sophisticated and more entrenched criminals (Branham 1992).

This paper summarizes the research that has explored the relationships between recidivism rates and the length of incarceration. We limit our focus to the influence of specific deterrence, that is, the effect of incarceration on the criminal behavior of convicted offenders after their release from prison.

The amount of crime in a community is influenced by many factors, in addition to the recidivism rate of convicted offenders. For example, crime rates are affected by demographic changes (such as age, ethnicity, and migration), economic conditions as reflected by unemployment rates, prison and jail capacities, and law enforcement policies (Ekland-Olson, Kelly, and Eisenberg 1992). The recidivism rate of convicted offenders is an important contributor to the amount of crime, but it is not the sole factor.

THEORETICAL BACKGROUND

Theoretically, the effect of incarceration and longer sentences on recidivism can be both positive and negative. Theories supporting longer sentences argue that punishment (incarceration)
reduces the risk of recidivism by causing an emotional response, such as fear, anxiety, or guilt, which compels the individual to avoid future punishment, and thus discourages reoffense. In addition, longer sentences may cause offenders to conclude that a new offense would be too costly in terms of lost earnings and other advantages associated with freedom (Orsagh and Chen 1988).

Cusson and Pinsonneault (1986) suggest that the accumulation of punishment, such as arrest and imprisonment, gradually wears down the criminal drive because punishment produces four types of reactions in the offenders: 1) increased estimate of the probability of punishment for a new crime; 2) increased difficulty in coping with and accepting imprisonment, especially as offenders become older; 3) increased awareness of the weight of previous convictions on the severity of subsequent sentences; and 4) increased fear of punishment. In general, as the experience of punishment accumulates, career criminals may gradually become dissatisfied with their way of life and decide to give up criminal activity.

The rehabilitation model also suggests that certain problems of offenders, whether physical, psychological, or social, are the direct causes of the criminal behavior. During incarceration, these problems can be diagnosed, treated, and “corrected” or at least mitigated. As a result, the offenders will be less likely to reoffend (Maltz 1984).

On the other hand, the negative impact of incarceration has also been observed. Clemmer (1940) hypothesized that during imprisonment, inmates learn the norms of the antisocial subculture from other prisoners (prisonization). Therefore, the longer offenders stay in prison, the higher their degree of prisonization, thus the greater likelihood of reoffending.

Based on a review of the literature, Orsagh and Chen (1988) concluded that the longer a person is removed from “outside” society, the weaker his or her social bonds. These bonds include interpersonal, familial, work place, and economic relationships. Weakened social bonds resulting from incarceration are likely to increase an offender’s propensity to commit new crimes after release. Orsagh and Chen wrote:

...as the sentence becomes longer, expected legitimate earnings and employment opportunities decrease because of the loss of contact with the job market, expected earnings and employment in illegitimate activity increase (assuming that prison is a school for crime), and the distaste or unwillingness to engage in 8 hours per day, 5 days per week work activity increases as one becomes accustomed to the inactivity of prison life. All of these effects enhance postprison criminal propensities.

Nevertheless, the degree of prisonization and weakening of traditional social bonds, and the subsequent propensity for reoffense may not always increase with increased length of time served. In a study of attitude changes among prisoners, Wheeler (1961) found that the degree of prisonization was the highest among prisoners who were in the “middle phase” of their prison terms. For newly-entered prisoners and for those prisoners who were close to their time of release, their attitude toward crimes, justice, and discipline conformed more to the norms of the society. Wheeler suggested that the prisonization model, that is, the “internalization of a criminal value system,” is only part of the explanation for offender recidivism. Adjustment difficulties after the offender is released from prison, such as social rejection, may also influence reoffense behavior.
REVIEW OF EMPIRICAL STUDIES

Any analysis of the role played by time served on recidivism must take into account other key variables such as the offender’s age, criminal history, and type of offense (Walker 1987). Offenders who have served longer prison terms tend to be older at release, and thus less likely to reoffend, regardless of their imprisonment experience. Offenders with prior offenses are more likely to reoffend than first-time offenders. Some types of offenders, such as burglars and robbers, have higher recidivism rates than other types of offenders. These individual variables could obscure the true effect of time served on recidivism rates. Any analysis must take these variables into account before it is possible to isolate the “pure” effect of time served.

An experimental design could help isolate the effect of time served on recidivism. With such a design, a large sample of offenders convicted of the same type of offense would be randomly incarcerated for varied lengths of time. These offenders would then be followed for a number of years after release to measure their reoffense rates.

Practically, however, it is not possible to randomly assign offenders to different lengths of incarceration. The research on this topic, therefore, has relied on statistical techniques to control for certain known factors.

This section reviews studies addressing three separate questions:

- Does incarceration reduce recidivism?
- Does length of sentence affect recidivism?
- Does early release affect recidivism?

Study findings are summarized in the Appendix.

1. Does Incarceration Reduce Recidivism?

Bartell and Winfree, Jr. (1977) analyzed the reconviction rates of 100 offenders convicted of burglary in 1971 in New Mexico. Of the 100 offenders, 34 were imprisoned, 45 were granted probation, and 21 were given other sentences (fines, drug and alcohol treatment, community services, etc.). After statistically controlling for differences in age, prior criminal history, and type of burglary, the findings indicated that offenders who were placed on probation were less likely to be reconvicted than those who were incarcerated.

Walker, Farrington, and Tucker (1981) used data obtained from a sample of 2,069 male offenders in England to analyze the reconviction rates for offenders with different types of sentences. These sentences included discharge, fine, probation, suspended sentence, and immediate imprisonment. The researchers statistically controlled for the effects of offense type, previous convictions, age, and length of sentence. The study indicated that reconviction rates varied according to the offenders’ previous convictions. For offenders with five or more previous convictions, the reconviction rates were high in all sentence types. Probation was less effective than imprisonment in reducing the reconviction rates for first-time offenders, but was more effective for those with one-to-four previous convictions.
Wheeler and Hissong (1987) compared the recidivism rates of misdemeanor offenders (Class A or B misdemeanor convictions, excluding driving while intoxicated) who received fines, probation, or jail sentences in Houston, Texas. Recidivism was defined as any Class A or B misdemeanor or felony violation. With three years of follow-up and taking offenders’ criminal history and demographic factors into account, the researchers found that probation was superior to fines and jail sentences in terms of recidivism. Although the results were not conclusive due to potential uncontrolled factors which may have influenced prosecution as well as offender self-selection, the researchers explained that perhaps post-disposition supervision procedures imposed by probation were better deterrents to subsequent new offenses than a relatively brief jail experience.

Cohen, Eden, and Lazar (1991) conducted a follow-up study of 202 offenders who were convicted in Israel in 1978 and 1979 for serious felonies. All of these offenders were recommended for probation by their investigating probation officers. Forty-eight percent of the offenders were granted probation and 52 percent were sent to prison. After five years of follow-up, either after completion of probation or release from prison, the recidivism rate was 55.7 percent for the probation group and 60 percent for the prison group. After controlling for the effects of age, education, and prior offenses, the researchers found that whether an offender received incarceration or probation was not associated with the recidivism rates. Because of the high recidivism rates in both groups, the researchers concluded that “neither prison nor probation was a very good means of reducing recidivism.”

2. Does Length of Sentence Affect Recidivism?

Gottfredson et al. (1973) studied 104,182 male prisoners in 14 offense categories in the United States who were paroled for the first time between 1965 and 1970. The follow-up time was one year, with recidivism defined as a return to prison. The median time served ranged from 12.2 months for fraud offenders (non-check fraud) to 58.6 months for homicide offenders. In this study, attempts were made to statistically control for the effects of offense type, prior offense, and age. Results indicated that while on parole, offenders with the longest time served generally had higher recidivism rates than offenders with the shortest time served. The significance of the association between time served and the recidivism rates varied across different offense categories. For property offenders, all subgroups (auto theft, check offense, burglary, larceny, and fraud) who served the longest time had higher recidivism rates than those subgroups who served the shortest time. For armed robbery and drug offenses, however, offenders with longer sentences had slightly lower recidivism rates than offenders with shorter sentences.

Beck and Hoffman (1976) followed 1,546 adult federal prisoners in the United States for two years after their release. Offenders were categorized according to their “salient factor score” which took into account their prior criminal history, age, education, employment history, and marital status. The offenders were first grouped by their scores, and were then further divided according to their time served. Results showed that there was no substantial association between time served and the recidivism rates.

Gottfredson, Gottfredson, and Garofalo (1977) investigated the relationship between time served and parole outcome in a single jurisdiction. The study followed 5,349 male prisoners paroled in Ohio between 1965 and 1972, with a follow-up time of one year. The offenders were classified
into nine categories of reoffense risk according to their age, offense type, prior criminal history, alcohol and drug use, and parole performance. Results of the study showed a somewhat mixed relationship between time served and the recidivism rates in different risk categories. However, the authors were able to conclude that overall, increased length of time served did not reduce recidivism. The recidivism rates either increased or remained constant with increased time served.

Orsagh and Chen (1988) tested the theory that there is an optimum sentence length which minimizes recidivism rates. The researchers studied 1,425 offenders released from a North Carolina prison in 1980. Of the total sample, 40 percent had been incarcerated for robbery or burglary. These offenders were followed for two years and recidivism was defined as a post-release arrest. After controlling for the potential effects of age, race, marital status, employment, and criminal history, the findings indicated:

- For **robbery offenders**, the probability of reoffense increased with the amount of time served.

- For **burglary offenders**, the estimated optimum time served was 1.3 years for younger offenders (younger than the median age) and 1.8 years for older offenders. In other words, beyond 1.3 years, recidivism rates go up for younger offenders, controlling for other possible explanations. Similarly, for older offenders, recidivism rates go up after 1.8 years served.

- For **the whole group** of offenders that were convicted of any offenses, including robbery and burglary, the estimated optimum time served was 1.2 years. When time served was less than 1.2 years, increased length of confinement was associated with a decreased likelihood of recidivism. When time served was more than 1.2 years, however, offenders serving longer sentences had an increased risk of recidivism.

Orsagh and Chen concluded that:

- Time served affects recidivism rates;
- The direction of the effect varies across offense classes;
- For some offense classes, recidivism rates will be reduced by shortening the period of confinement.

Orsagh and Chen indicated that the effect of longer prison sentences on recidivism “is complex and is likely to be offender specific. …A sentence can be either too long or too short for a specific individual.”
3. Does Early Release Affect Recidivism?

During the past decade, many states have relied on early release programs as a means of relieving prison overcrowding. Early release shortens the length of time served and may change offenders’ perceptions about the certainty and severity of punishment.

Berecochea and Jaman (1981) conducted an experimental study to examine the relationship between early release and recidivism rates. The sample included male felony offenders in California who were eligible for parole between March and August 1970. The average prison term of the sample was three years. These offenders were randomly assigned to one of two groups: 1) the experimental group who received a six months reduction in prison term (on average, a 16 percent reduction), and 2) the control group who served their normal terms. At 12 months of follow-up, the early release group had a parole failure rate of 34.4 percent compared to 28.2 percent for the control group. At 24 months after release, the parole failure rate was 47.4 percent for the early release group and 39.5 percent for the control group. However, these differences in recidivism rates were not statistically significant (i.e., the differences could have occurred by chance). The authors concluded that time served in prison could be reduced without affecting overall post-release recidivism.

Sims and O’Connell (1985) studied the impact of early release programs on 1,674 prisoners in Washington State who received early parole between 1979 and 1984 in six early release efforts. On the average, these offenders were released 4.6 months earlier than expected. A group of 1,867 offenders who were released 12 months before the first early release effort was used as a comparison group. Recidivism was defined as a return to prison. Results showed that, in general, the recidivism rates of the early release offenders at one, two, and three years of follow-up were lower or about equal to the recidivism rates for the comparison group. The type of new offenses committed by the early release offenders were similar to those committed by the comparison group. Nevertheless, offenders in the third effort of early release had significantly higher recidivism rates than the comparison groups. The researchers suggested that the higher recidivism rates in the third early release effort were most likely due to a higher percentage of habitual offenders. In this study, the independent effect of early release on offender recidivism was not assessed.

Austin (1986) evaluated the recidivism rates in a sample of 1,428 prisoners who received early release from Illinois prisons between 1980 and 1983. This sample represented a total of 21,000 early-release prisoners. Their recidivism rates were compared to those who served their full terms during the same period. On the average, these offenders were released 3.5 months earlier than their full terms. Results showed that at one year of follow-up, the rearrest rate for offenders who received early release (42 percent) was lower than the rate for offenders who served their full prison terms (49 percent). However, after controlling for the effect of age, criminal history, severity of current offense, and institutional conduct, the lower recidivism rate was not attributed to early release. The author concluded that early release had no impact on overall recidivism rates.

---

1 A parole failure includes either a new arrest or a parole violation.
CONCLUSIONS

To date, only a limited number of studies have examined the relationship between time served and post-release recidivism. This literature review indicates that the effects of incarceration (versus other sentencing options) and the length of time served on recidivism are perhaps offender-specific. The direction and the extent of these effects upon the offenders may be influenced by the jurisdiction and offender characteristics such as age, offense type, prior offense, and prior sentence experiences. For some offenders, incarceration and longer confinement increase the risk of recidivism. For other offenders, recidivism rates will either be unaffected or reduced by longer terms of incarceration. It is possible that for some types of offenders, there is an optimum length of sentence which minimizes recidivism. Early release (only a few months early in the studies reviewed) appears to neither increase nor decrease the overall recidivism rates. More research is needed for a better understanding about the effects of time served and early release on the reoffending behavior of specific types of offenders.
## APPENDIX: Summary of Research Findings

### Effects of Incarceration on Recidivism

<table>
<thead>
<tr>
<th>Description</th>
<th>Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. <em>Does incarceration reduce recidivism?</em></td>
<td></td>
</tr>
<tr>
<td>Incarceration less effective than probation</td>
<td>Bartell &amp; Winfree, Jr., 1977, New Mexico</td>
</tr>
<tr>
<td></td>
<td>Wheeler &amp; Hissong, 1987, Texas</td>
</tr>
<tr>
<td>Incarceration less effective than probation for offenders with 1-4 prior convictions</td>
<td>Walker, Farrington, &amp; Tucker, 1981, England</td>
</tr>
<tr>
<td>Incarceration more effective than probation for First-time offenders</td>
<td>Walker, Farrington, &amp; Tucker, 1981, England</td>
</tr>
<tr>
<td>No significant difference between incarceration and probation</td>
<td>Cohen, Eden, &amp; Lazar, 1991, Israel</td>
</tr>
<tr>
<td>2. <em>Does longer sentence length affect recidivism?</em></td>
<td></td>
</tr>
<tr>
<td>Negative effect for property offenders</td>
<td>Gottfredson et al., 1973, US</td>
</tr>
<tr>
<td>Negative effect for robbery offenders</td>
<td>Orsagh and Chen, 1988, North Carolina</td>
</tr>
<tr>
<td>Negative or no effect</td>
<td>Gottfredson et al., 1973, Ohio</td>
</tr>
<tr>
<td>Positive effect for armed robbery and drug offenders</td>
<td>Gottfredson et al., 1973, US</td>
</tr>
<tr>
<td>No effect</td>
<td>Beck and Hoffman, 1976, US</td>
</tr>
<tr>
<td>Optimum sentence length</td>
<td>Orsagh and Chen, 1988, North Carolina</td>
</tr>
<tr>
<td>3. <em>Does early release affect recidivism?</em></td>
<td></td>
</tr>
<tr>
<td>No effect</td>
<td>Berecochea and Jaman, 1981, California</td>
</tr>
<tr>
<td></td>
<td>Austin, 1986, Illinois</td>
</tr>
<tr>
<td>No effect or positive effect</td>
<td>Sims and O’Connell, 1985, Washington</td>
</tr>
</tbody>
</table>

2 Negative (positive) effect indicates that offenders with longer length of time served had higher (lower) recidivism rates than offenders with shorter length of time served.
References


