REHABILITATION, RELEASE, AND REOFFENDING:

A REPORT ON THE CRIMINAL CAREERS

OF THE DIVISION OF JUVENILE REHABILITATION

"CLASS OF 1982"

John C. Steiger, Ph.D.

and

Cary Dizon, M.A.

May 1991

Juvenile Offender Research Unit
Management Services Division
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EXECUTIVE SUMMARY

This study analyzed the pre and post commitment criminal convictions of 926 juvenile offenders. The sample included all males released from Washington State Division of Juvenile Rehabilitation (DJR) residential facilities in 1982. The criminal convictions of offenders in the sample were tracked for an average of 10.5 years, beginning with the first (conviction) offense until 6.5 years after the 1982 release. The study assessed the impact of DJR confinement on post release criminal behavior.

Recidivism

- The offense histories of the sample illustrate the level of chronic and serious delinquency among youth committed to DJR. During the 10.5 year period examined, the 926 offenders in the sample were convicted of a total of 16,341 offenses, including

  - 9,460 convictions prior to the 1982 commitment
  - 368 convictions during confinement in DJR
  - 6,513 convictions in the 6.5 years after release

- Confinement in DJR had a significant incapacitation effect.

  - During the average of 241 days confinement in DJR, offenders in the sample committed an average of 0.6 new offenses per year, compared to the baseline rate of 4.4 offenses per year prior to confinement.

  - The drop in offenses during confinement represents an apparent reduction of 2,303 offenses due to incapacitation in DJR facilities.

- Confinement in DJR residential programs produced a significant rehabilitation effect, reducing post release criminal behavior compared to the two years prior to commitment.

  - The rate of offending dropped by an average of 75 percent after release from DJR. Offenders in the sample were convicted of an average of 1.1 offenses per year during the 6.5 years after release compared to 4.4 prior to release.

  - Twenty percent of the offenders remained offense free in the 6.5 years after release from DJR.

  - The percent of offenders committing Class B+ or higher offenses decreased from 40% prior to commitment to 23% after release.

- DJR confinement reduced, but did not eliminate, criminal activity among the offenders in the sample.

  - The majority of offenders (80%) were convicted of new offenses in the 6.5 year follow-up period. They were convicted of a total of 6,513 offenses in the 6.5 years after release from DJR.

  - Forty percent were returned to confinement during the 6.5 year follow-up. Two thirds were convicted of felonies during the follow-up.

Sample Profile

The sample had the following profile at release from DJR in 1982:

- Ethnicity

  - 80 percent White
  - 10 percent African-American
  - 5 percent Hispanic
  - 2 percent Asian American
  - 1 percent Native American

- Age

  - 13.9 years old at first convicted offense
  - 15.7 years old at first DJR admission
  - 16.8 years old at (1982) release

- Criminal History

  - 53 percent had a violent offense conviction
  - 11 percent had a sexual offense conviction
  - 33% had been previously committed to DJR
  - an average of 241 days DJR confinement
  - an average of 10.2 convictions per offender

Prediction of Recidivism

- Three variables provided the best combined prediction of the number and seriousness of new convictions:

  - Age at Release From DJR
  - Number of Convictions Prior to Release
  - Ethnicity (African-American status)

- Ethnicity added a relatively small amount of explained variance after taking into consideration the effects of the criminal justice variables. It is unclear whether the effects of ethnicity are a result of differences in the behavior of African-American offenders, or are a result of different responses on the part of the criminal justice system to African-Americans.

Offender Types and New Convictions

- Offenders were classified into three categories (violent, sexual, or property) based on their criminal convictions prior to release in 1982. These offender types differed in the seriousness and pattern of post release convictions.

  - **Sexual Offenders (11 percent of the sample)**

    - least likely to reoffend (68% had new convictions)
    - most likely to commit new sex offense (12%)
    - four times more likely to commit sex offenses than other offenders
    - committed fewest new offenses (average of 4.5)

  - **Violent Offenders (42 percent of the sample)**

    - most likely to commit new violent offense (24%)
    - committed most new offenses (average of 7.6)
    - had the most serious combined recidivism score

  - **Property/Drug/Other Offenders (47 percent of the sample)**

    - most likely to reoffend (83% had new convictions)
    - most likely to commit only new property offenses (61%)
    - least likely to commit new sexual offenses (2%)

Eight State Comparison of Recidivism Rates

- Washington's rate of recidivism was compared to recidivism in Massachusetts, Florida, Utah, California, Wisconsin, Texas, and Illinois.

  - Rates of reconviction were lower in Washington and Massachusetts (43%) than in Florida (44%), Utah (48%) or California (54%).

  - Rates of reincarceration were lowest in Massachusetts (25%), followed by Washington (29%), Wisconsin (34%), Texas (43%), Illinois (49%), and California (62%).

I. INTRODUCTION

This study reports on the criminal activities of nearly one thousand young males released from Washington State Division of Juvenile Rehabilitation (DJR) residential facilities in 1982. These youths had completed court ordered confinement of up to 300 weeks for crimes ranging from burglary to murder. During their confinement, they received a variety of treatment and educational services. On release, most returned to the community under juvenile parole supervision.

In a sense, these youths comprise the state's juvenile corrections "Class of 1982." Like students at a prestigious college, they were carefully selected for admission. Under Washington's presumptive sentencing guidelines, they were selected according to strict standards for age, criminal history, and current offense seriousness. While "on campus," they had access to a variety of educational and treatment resources. Like most students, they eventually returned to the "real world" outside their institution's grounds. This study revisits the DJR "Class of 1982," six and a half years after their graduation. It presents data which reflect not only on the successes and failures of those in the class, but also on the system from which they graduated.

II. METHODOLOGY

The study analyzes official data on the criminal careers of male[1] offenders released from Washington State Division of Juvenile Rehabilitation (DJR) residential facilities in 1982. Only male offenders who had completed sentences for criminal offenses and who were released from DJR in 1982 were included. Four youths were excluded from the initial sample because their records were incomplete. The final study sample of 926 thus includes all males admitted to serve terms of confinement in DJR, who were released in 1982, and for whom records could be found.[2]

The primary sources of data for the study were the computerized data systems maintained by the Washington State Patrol, juvenile court system, state juvenile corrections system, and state adult corrections system. Three types of data were collected: criminal convictions, offender demographics, and corrections system admissions and releases. These data were then merged into a single data base for analysis.

All four data sources were searched for records of criminal convictions as well as data on age, ethnicity, and periods of incarceration. Duplicate records were eliminated and inconsistencies across systems reconciled to provide as complete and accurate a picture as possible of each

[1] Females were not included in the study because the small number of female offenders (62) released in that period.

[2] The final sample is essentially the same as the males used in an earlier study (Guthmann, David R. (1987) "Recidivism: An Analysis of Division of Juvenile Rehabilitation Clients Released from Residential Status in 1982.") which examined recidivism during the three years after release, except for the four missing or destroyed files.

youth's criminal convictions in Washington State. Offenses committed outside of Washington State and offenses that did not result in arrest and conviction are not included in the study. For these reasons, the assembled criminal history data provide a conservative picture of these youths' actual criminal behavior both before and after their release from DJR.

The remainder of this report describes the results of our analysis of these data. It details the youths' criminal convictions and examines the degree to which they specialize in specific types of offenses. It analyzes the relationship between demographic variables and reoffending. It tests predictions of the incidence and severity of future offenses based on prior criminal behavior. Finally, it considers the effects of confinement on community safety, both in terms of incapacitation and rehabilitation.

III. FINDINGS

The Sample

Ethnicity and Age

Table 1 and Table 2 present basic demographic data on the sample. As Table 1 shows, youths of White ethnicity are the largest single group of offenders (80 percent). African-American youth represent the second largest group at ten percent of the sample. The remaining ten percent of the sample is comprised of Americans of Hispanic, Asian, and Native American origin (in order of proportion).

TABLE 1. ETHNICITY

ETHNICITY	%	N
White	80.2%	743
African American	10.0%	93
Hispanic	4.8%	44
Asian American	2.4%	22
Other/Unknown	1.8%	17
Native American	0.8%	7
Total	100.0%	926

Table 2 presents the distribution of age at release from DJR custody. Youths released in 1982 by DJR varied considerably in age, ranging from ten to twenty-one . The average age at release

was 16.8 years.[3]

TABLE 2. AGE AT RELEASE

AGE AT RELEASE	%	N
10-14	12.3%	114
15	15.6%	144
16	21.3%	197
17	27.2%	252
18-21	23.7%	219
Total	100.1%	926

Prior Criminal Involvement

Table 3 presents data on the prior[4] criminal history of youths in the sample. The average age at first conviction was thirteen. The average number of offenses committed prior to release in 1982 was over ten. Most offenders (53 percent) had committed at least one violent offense; eleven percent had committed a sexual offense. While the average offender released by DJR in 1982 was only sixteen years old, commitment had been preceded by extensive involvement in the juvenile justice system.

Table 4 presents data on the commitment histories of the youths released in 1982. One third of the youths released from DJR in 1982 had already completed at least one prior commitment to DJR. In fact, 108 youths (twelve percent) had more than one prior commitment. The average age at the current commitment was 16.2 years and the average commitment lasted just under eight months. On release from DJR, about two-thirds (70 percent) were placed under (state) juvenile parole supervision. Except for a few youths transported to adult correctional facilities to serve "adult" sentences for offenses committed before or during their DJR confinement, the remainder were released to the community free from state juvenile parole supervision.[5]

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[3] Under the Washington State juvenile code, the juvenile court has jurisdiction until the age of eighteen. However, if a youth is convicted of an offense which occurs before age eighteen, juvenile court jurisdiction can be extended until age twenty-one to allow for the completion of terms of confinement, supervision, and other requirements of the court disposition.

[4] Only 34 offenders (3.7%) had no prior criminal history when committed to DJR. For the remainder of this study, "prior offenses" are defined as offenses committed prior to the admission which ended in release from DJR in 1982. Prior offenses therefore include the offense(s) that resulted in the commitment from which the offender was released in 1982. As a result, all youths released in 1982 had at least one "prior" offense. The reader should note that this definition differs from the one used by Guthmann (1987).

[5] Some of these youths returned to county operated probation supervision. The exact percentage is unknown.

TABLE 3. PRIOR CRIMINAL HISTORY

VARIABLE	
Average Age At First Conviction	13.9
Average Number of Conviction	10.2
Convicted of a Violent Offense	53%
Convicted of a Sex Offense	11%

TABLE 4. COMMITMENT HISTORY

VARIABLE	
Percent With Prior DJR Commitments	33%
Average Age at First DJR Commitment	15.7
Average Age at (Current) DJR Admission	16.2
Average Age at (1982) DJR Release	16.9
Average Length of (Current) DJR Commitment (Days)	241.0
Placed on Parole at Release in 1982	70%

Offense Patterns/Offender Types

"Do youths committed to DJR specialize in certain kinds or levels of criminality?" This section of the study examines the degree to which offenders in the sample can be categorized as to the type and/or seriousness of their criminal behavior. Two dimensions will be explored: offense severity and offense type.

All offenses in the data base were categorized on the basis of their statutory seriousness.[6] A

[6] The Washington State juvenile code establishes a system of presumptive sentencing, based on sentencing guidelines which categorize offenses into ten seriousness categories. Each category is assigned a numerical point value corresponding to its assessed seriousness. The Washington State Juvenile Disposition Standards then assign presumptive sentences as a function of offense seriousness, offender age, and criminal history. The severity scale was created by using the point value assigned for 16 year old offenders. This scaling assigns significantly more points

weighted severity scale was created based on the statutory classification of offenses. Table 5 presents the resulting severity scale along with representative offenses. The table also presents the distribution of the sample in terms of the most serious offense leading to the instant[7] commitment to DJR. The most common category of most serious commitment offense was Burglary 2°, a "Class B" offense. Almost forty percent of the sample were committed for this category of offense. About one quarter of the sample were committed for offenses more serious than burglary. The remainder were committed for less serious offenses.

TABLE 5. OFFENSE SEVERITY SCALE

EXAMPLE OF OFFENSES	CLASS	SEVERITY	COMMITMENT OFFENSE (STUDY SAMPLE) (N)	%
Murder 1°, Murder 2°	A+	500	6	0.6
Arson 1°, Assault 1°, Kidnap 1°	A	375	39	4.2
Rape 2°, Rape of a Child 1°	A-	200	0	0.0
Assault 2°, Burglary 1°, Child Molestation 1°, Kidnap 2°, Robbery 2°, Indecent Liberties	B+	140	183	19.8
Arson 2°, Burglary 2°, Possession Stolen Property 2°	B	57	360	38.9
Rape 3°, Auto Theft	C+	55	12	1.3
Theft 2°, Possession Stolen Property 2°	C	50	237	25.6
Custodial Assault	D+	24	16	1.7
Theft 3° (Shoplifting)	D	22	54	5.8
Misdemeanor	E	8	19	2.1
Average Severity Score: Most Serious Offense Of 1982 DJR Commitment	84.2			

to violent crimes as opposed to less serious property crimes. For example, an Arson 1° is given a point value of 375 while a Burglary 2° is assigned a value of 57 points. The juvenile code does not assign a point value to Class A+ offenses (Murder); the score of 500 was assigned by the authors.

[7] Instant commitment will be used in this study to refer to the commitment to DJR which terminated in release in 1982 (i.e., to be distinguished from other DJR commitments).

The offense severity scale presented in Table 5 is used in subsequent sections of this report, both to measure the severity of individual offenses and to assess the total severity of offenses committed before or after release.

Offense Patterns

Figure 1 presents an offender typology. The four offender types are: sexual, violent, violent sexual, and a residual category composed primarily of property and drug offenses. The typology was formed by cross-classifying offense histories on two dimensions: sexual and violence components. Offenders who had committed both sexual and violent offenses were classed as "violent sexual" offenders. Youths in this category may have committed a violent sex offense (e.g., rape), or a combination of violent (e.g., assault) and sexual (e.g., public indecency) offenses. Those who had committed violent offenses but no sexual offenses were placed in the "violent" category. Those who had committed only "non-violent" sex offenses, were categorized as "sexual" offenders. All other offenders were placed in the residual category, composed primarily of property and/or drug offenders. The offenses in each category are presented in Appendix A.

Offenders in the sample were categorized by their prior criminal convictions into the offense pattern typology. Figure 1 presents the distribution of cases in the sample by offender type. The largest single offender type was the property/drug category. This category is a residual one, containing all offenders who had neither a violent nor a sexual offense prior to release from DJR. The second largest group was the violent offender category. Initially, a category was constructed for non violent sexual offenders. However, so few offenders had histories of only "non-violent" sex offenses, that this category was subsequently combined with the violent sexual category into a "sexual offender" category for the remainder of the analysis.

The typology described in Figure 1 obscures that almost all offenders in the sample had committed property offenses, in addition to whatever other types of offenses they may have committed. In reality, there were few "pure" sexual or violent offenders in the sense of individuals who committed only offenses that were sexual or violent. The criminal history data are therefore most consistent with the "smorgasbord" model of delinquency reported in prior research, in that few offenders specialize in a particular type of crime. For example, all three types of offenders were more likely to commit a property crime than a violent one, despite having committed prior violent and/or sexual offenses.

Recidivism

The primary focus of this study is recidivism. Historically, recidivism has been measured in a variety of ways including self-reported offenses, arrests, convictions, and returns to prison. No one indicator provides a completely accurate, unbiased picture of the underlying dimension of interest, new criminal behavior. For this reason, we utilized four indicators of recidivism, all of which are based on official records of either new convictions or returns to confinement. The

indicators are reconviction, reincarceration, most serious new conviction, and total severity score of new convictions. These are described in the following sections.

FIGURE 1. OFFENSE PATTERN TYPOLOGY

	NO VIOLENCE	VIOLENCE
NO SEXUAL COMPONENT	Property/Other (46.8%)	Violent Non-Sexual (41.9%)
SEXUAL COMPONENT	Sexual (0.6%)	Violent/ Sexual (11.3%)

Percent Reconvicted

The cumulative percent reconvicted over time is a classic measure of recidivism. Table 6 presents this measure of recidivism for the offenders in the sample. The table presents the proportion of the sample reconvicted as a function of months after release from DJR. The same data are presented graphically in Figure 2.

The recidivism of our sample follows the usual pattern of large proportions of the sample reoffending in the first year after release, followed by diminishing increments in the cumulative percent reconvicted after that. For example, over half of the sample was convicted of a new offense within one year of release. Two-thirds had been convicted of at least one new offense after two years. The rate of increase in cumulative percent reconvicted appears to have nearly ceased after six and a half years "at-risk" (i.e., after release).

Alternate Measures of Recidivism

A simple dichotomy, such as the percent reconvicted, is insensitive to differences among offenders. In effect, it treats all offenders who have committed any new offenses as representing the same degree of "failure." This overlooks differences, for example, between an offender who commits a simple misdemeanor and one who commits a violent felony. For this reason, our analysis will also consider three additional outcome measures including: reinstitutionalization (i.e., recommitment to juvenile institutions or adult prison), most serious new conviction (i.e., misdemeanor, Class B or C felony, or Class B+ or higher felony), and total seriousness of new convictions (i.e., summed severity scores of new offenses).

FIGURE 2. CUMULATIVE RECIDIVISM

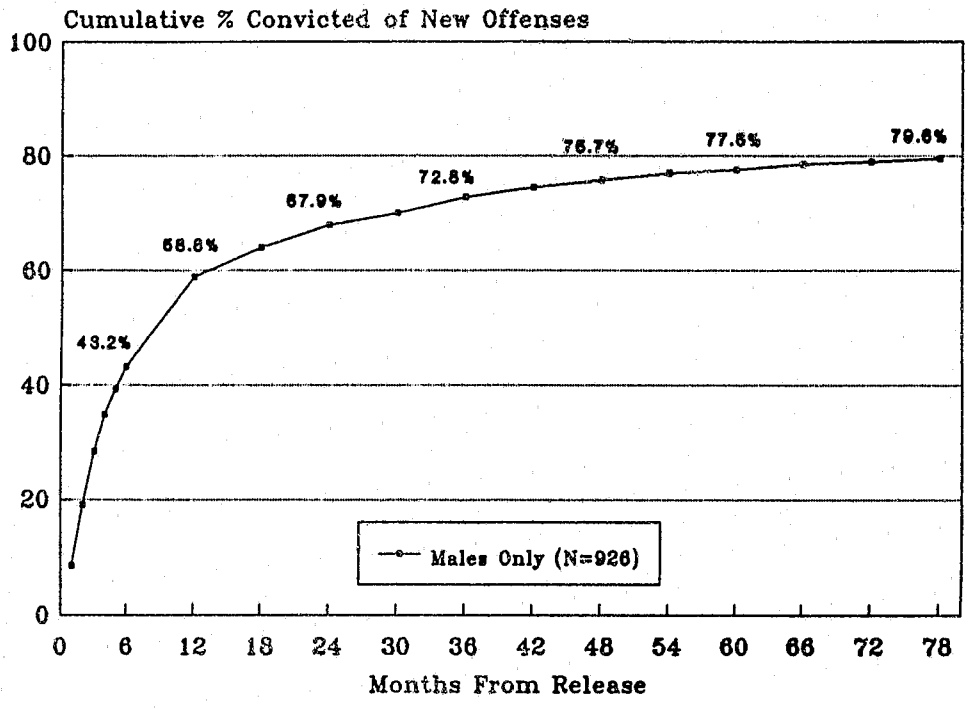


TABLE 6. CUMULATIVE PERCENT REOFFENDING BY MONTHS SINCE RELEASE

MONTHS	PERCENT
6	43.2%
12	58.8%
24	67.9%
36	72.8%
48	75.7%
60	77.5%
72	79.6%

The choice of recidivism measure and the time frame are critical in determining whether a population's recidivism appears high or low. To illustrate, Table 7 presents the percent of the sample falling into categories of each of the four measures of recidivism described earlier. This table points out the differences among the measures. While almost eighty percent of the sample was convicted of a new offense, less than half of the sample (40 percent) were returned to either DJR institutions or prison. Even fewer (23 percent) were convicted of Class B+ or higher felonies.[8] Thus, depending on the measure of recidivism used, while 80 percent of the sample were failures in the sense that they committed new offenses, 77 percent could also be considered "successes" in that they did not commit new Class B+ or higher felonies.

TABLE 7. ALTERNATIVE MEASURES OF RECIDIVISM

PERCENT WITH NEW OFFENSES		PERCENT W/NEW COMMITMENTS		MOST SERIOUS NEW OFFENSE		TOTAL SERIOUSNESS	
No	20.4%	No	59.9%	None	20.4%	Minimum	0
Yes	79.6%	Yes*	40.1%	Misd.	13.0%	Maximum	3,418
				Class B or Class C Felonies	43.3%	Average Total Severity	320.7
				Class B+ or Higher Felony	23.3%		

*17.5% returned to DJR only; 7.8% returned to DJR and were later sent to prison; 14.8% did not return to DJR but were later sent to prison.

The final measure of recidivism presented in Table 7, the "total severity score," differs from the others by providing a single summary score of the relative seriousness of each offender's convictions after release in 1982. The total severity score is a combination of the number and seriousness of all convictions after release. It was computed by summing the seriousness of an offender's individual offenses, based on the offense's legal classification (See Table 5 and Appendix A).

Comparison of Recidivism in Other States

The recidivism rate for the Washington State sample ranged from 79.6 percent to 23.3 percent, depending on the indicator of recidivism selected (Table 7). As the differences among these

[8] See Appendix A for offenses by class.

figures suggest, comparisons of recidivism can be deceiving, unless comparable measures of recidivism and at-risk period are used. However, with these issues in mind, the question can be asked, "How does the rate of recidivism in the DJR sample compare to other states?" Figure 3 and 4 present comparisons of the DJR sample to juvenile offender populations in seven other states.[9]

FIGURE 3.

Juvenile Offenders Reconvicted Within 12 Months At-Risk[10]

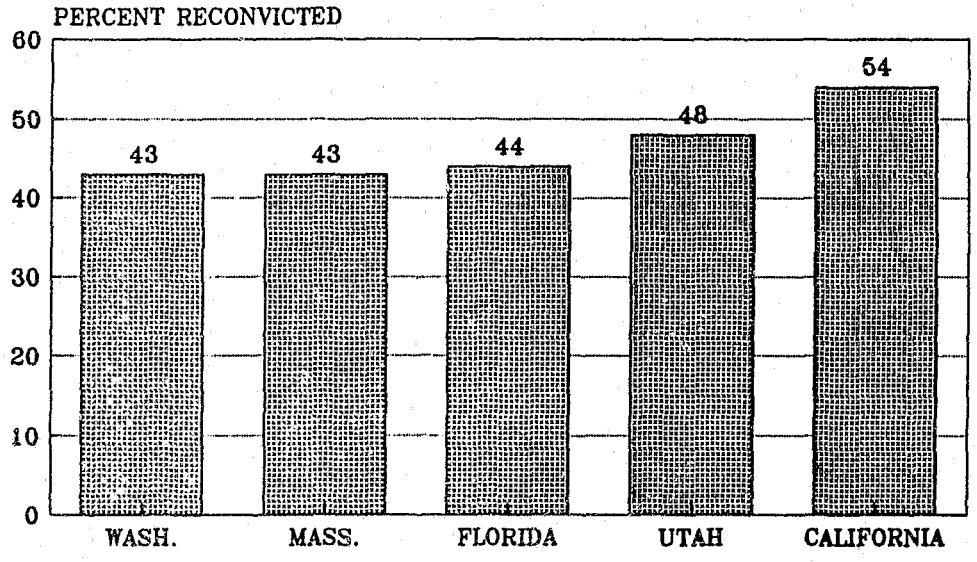


Figure 3[10] compares the recidivism of juvenile offenders in five states. Recidivism is measured by the proportion reconvicted after a twelve month at-risk period. In four of the states the at-risk period was after release from juvenile facilities. The data for Massachusetts includes time spent in community residential facilities, which would tend to reduce recidivism because of increased supervision. These data show that of the five states, Washington and Massachusetts have the lowest rates of recidivism. The rate is highest in California.

[9] Comparable data on juvenile recidivism rates are difficult to come by. The states selected for comparison were chosen because the data were available and because the states provide a relatively good cross section of the United States.

[10] The data for comparison states displayed in Figures 3 and 4 are from, "Unlocking Juvenile Corrections: Evaluating Massachusetts Department of Youth Services." (1989) Austin, James, William Elms, Barry Krisberg, and Patricia A. Steele. San Francisco: National Council on Crime and Delinquency.

FIGURE 4.

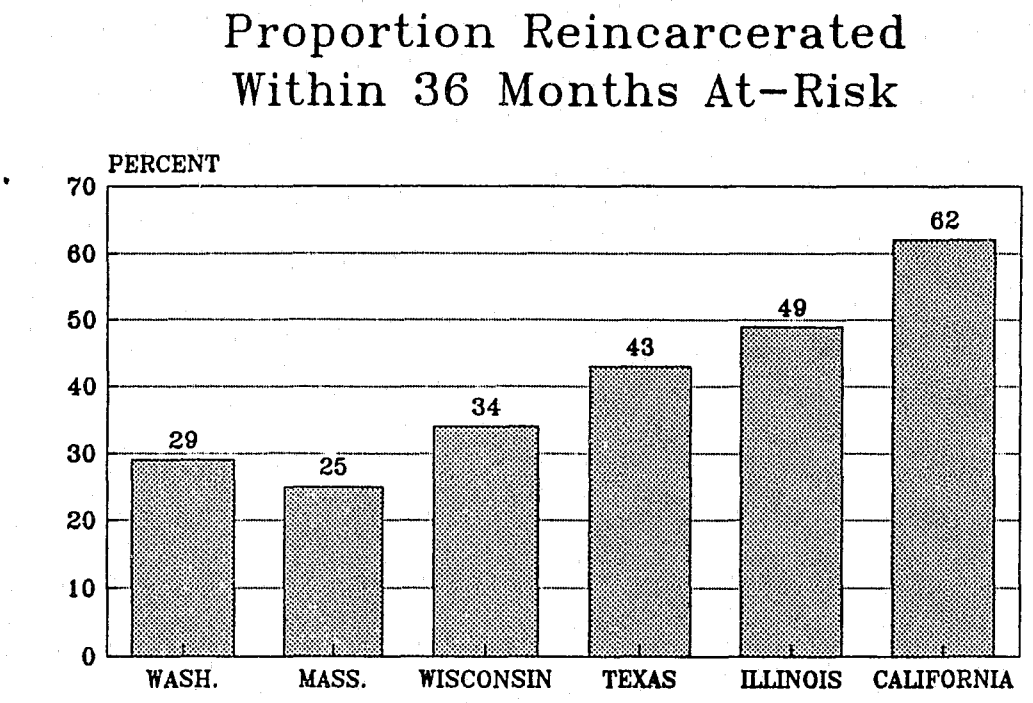


Figure 4 presents a comparison of six states using an alternative measure of recidivism: proportion of juveniles reincarcerated during a three year at-risk period. Using this measure, recidivism rates range from 25 percent (Massachusetts) to 62 percent in California. The rate for Washington is 29 percent. Washington's figure includes both recommitment to state juvenile facilities as well as commitment to prison.

The data in Figures 3 and 4 illustrate the range of juvenile recidivism rates in eight states as well as the effect of variations in the definition of recidivism and the time period analyzed. For example, depending on the definition used, Washington's recidivism rate ranged from 29 percent to 43 percent. Similarly, Massachusetts' rate ranged from 25 percent to 43 percent. Rates ranged from a low of 25 percent to a high of 62 percent. The data presented show that recidivism in the Washington sample is among the lowest in the in the eight states compared.

Prediction

This section examines the predictability of offense patterns, the probability of recidivism, and the seriousness of new offenses. A variety of predictor variables will be examined, beginning with those demographic and criminal justice variables which have been identified in earlier studies as being related to recidivism.

Previous research, including Guthmann's (1987) study of these same offenders, consistently identifies prior criminal justice involvement and certain demographic variables as predictors of recidivism. For example, Guthmann reported that younger age, greater number and severity of prior criminal offenses, and shorter terms of commitment were significant predictors of recidivism.

Table 8 presents data on criminal justice and demographic variables which predict both the probability and severity of recidivism. These variables include ethnicity, age at release, number and severity of prior criminal offenses, and length of commitment.

Age and Ethnicity

Ethnicity predicts the severity of recidivism but not the probability of reoffending. The average seriousness of the most serious reoffense of African-American offenders was greater than that of either European-American offenders or the residual category which included Hispanic-American, Asian-American, and Native-American offenders. The relationship between ethnicity and probability of reoffending was similar in direction, but not large enough to be statistically significant. Age at release was also related to the probability and severity of reoffending. The younger the offender at release, the greater the probability and severity of reoffense. Younger offenders were also more likely to be recommitted to DJR or adult prison than offenders who were older at release.

Criminal Justice Variables

Both prior criminal history and length of commitment were related to recidivism. The number and severity of prior offenses predict the probability of recidivism, its severity, and the likelihood of return to DJR or prison. Length of commitment is inversely related to the probability of new felonies and the seriousness of new offenses; the shorter the commitment to DJR, the greater the number and severity of new convictions.

The relationships between the reoffense severity and the variables in Table 8 remained unchanged when only those offenders who reoffended were considered. The only exception was the relationship between length of commitment and reoffense severity was no longer significant when offenders who did not reoffend were removed from the sample. These findings suggest that the relationship between reoffense severity and the independent variables in Table 8 are not an artifact resulting from differences in probability of reoffending; the categories of offenders identified as being more likely to reoffend are also, as a group, likely to commit more serious new offenses.

Predicting Offender Type

Table 9 presents data on the degree to which prior criminal behavior predicts post release offender type. The results of this analysis confirm that sex offenders stand out as a distinct offender type. Sex offenders in our sample were twice as likely to desist (i.e., not reoffend after

TABLE 8. RECIDIVISM BY OFFENDER CHARACTERISTIC

CHARACTERISTICS	% COMMITTING NEW OFFENSE	MEAN SEVERITY MOST SERIOUS NEW OFFENSE	N
ETHNICITY	n.s.	p< .001	
Asian-American, Hispanic, Native-American, Other	77.8%	64.8	90
White	79.0%	69.8	743
African-American	86.0%	113.8	93
AGE AT RELEASE	p< .001	p< .001	
18-21	69.4%	57.0	219
16-17	78.8%	70.6	449
10-15	90.7%	93.6	258
NUMBER OF PRIOR OFFENSES	p< .001	p< .001	
1-4	60.4%	47.0	169
5-8	77.4%	67.4	234
9-12	83.3%	81.4	252
13 or More	90.0%	88.8	271
TOTAL PRIOR OFFENSE SEVERITY	p< .05	p< .005	
Low (46-325)	74.7%	60.2	297
Medium (326-550)	80.9%	77.2	325
High (551+)	82.9%	83.3	304
LENGTH OF COMMITMENT	p< .01	n.s	
12+ Months	72.2%	74.9	151
6-12 Months	76.6%	67.0	273
0-6 Months	83.5%	77.1	502

TABLE 8. RECIDIVISM BY OFFENDER CHARACTERISTIC (Cont.)

CHARACTERISTICS	% WITH NEW FELONIES	% RETURNED TO DJR/DOC	N
ETHNICITY	n.s.	p< .001	
Asian-American, Hispanic, Native-American, Other	63.3%	34.4%	90
White	65.6%	39.4%	743
African-American	77.4%	50.5%	93
AGE AT RELEASE	p< .001	P< .001	
18-21	53.0%	25.6%	219
16-17	64.0%	36.7%	449
10-15	83.0%	58.1%	258
NUMBER OF PRIOR OFFENSES	p< .001	p< .001	
1-4	44.4%	15.4%	169
5-8	62.4%	31.2%	234
9-12	71.0%	46.0%	252
13 or More	80.0%	57.6%	271
TOTAL PRIOR OFFENSE SEVERITY	p< .001	p< .001	
Low (46-325)	58.6%	26.3%	297
Medium (326-550)	67.1%	42.5%	325
High (551+)	74.0%	51.0%	304
LENGTH OF COMMITMENT	p< .05	n.s.	
12+ Months	58.9%	33.1%	151
6-12 Months	63.4%	39.1%	273
0-6 Months	70.7%	42.6%	502

release) than either violent offenders or the residual, property offender type. On the other hand, sex offenders were almost four and a half times as likely to reoffend sexually as either the property or violent offender types. These data indicate that a prior sex offense conviction significantly raises the probability that an offender will commit a sex offense after release.

TABLE 9. PRIOR OFFENDER TYPE VS REOFFENSE TYPE

	PRIOR OFFENDER TYPOLOGY		
REOFFENDER TYPOLOGY	Property (N=433)	Violent (N=388)	Sexual (N=105)
Desist	16.9%	21.1%	32.4%
Property	60.7%	52.1%	42.9%
Violent	19.9%	24.0%	12.4%
Sexual	2.5%	2.8%	12.4%
Total %	100.0%	100.0%	100.1%

Our data suggest that sexual offenders also differ in the pattern of their offense behavior from both property and violent offenders. Violent offenders appear less likely to specialize than sex offenders. They are only slightly more likely to reoffend violently than property offenders (24 percent vs. 20 percent). Only one in four violent offenders and one in five property offenders in the sample were convicted of any violent offense after release from DJR. Violent, sexual, and property offenders are all most likely to reoffend in non-violent, non-sexual crime categories. Violent and property offenders are similar in terms of the relationship between prior and reoffense behavior, with both types of offender equally likely to reoffend and to commit violent offenses, and both more likely than sexual offenders to offend in violent, non sexual ways.

Offender Type and Seriousness of Recidivism

Table 10 presents additional data on the relationship between prior offender type and recidivism. Three measures of seriousness are used: the total number of offenses, the severity of the most serious new conviction and the total (summed) severity of all new offenses.

Offender type was significantly related to the total number of new offenses and the total new offense seriousness score. Sex offenders had the fewest new offenses and the lowest total new offense seriousness (365.4). Violent offenders had the highest total severity (450.0). Property offenders had an average total new offense score (370.5) slightly higher than sexual offenders and lower than violent offenders.

The data in Table 10 support the finding that the offense patterns of sex offenders differ from other offenders. Sex offenders had the lowest rate of recidivism, the fewest (new) offenses, and the lowest total reoffense severity scores. Violent offenders, in contrast, were similar to property offenders, although their combined new offense seriousness was higher.

TABLE 10. PRIOR OFFENDER TYPE VS REOFFENSE SERIOUSNESS

	PRIOR OFFENDER TYPOLOGY		
REOFFENSES	Property (N=433)	Violent (N=388)	Sexual (N=105)
Number of Offenses	7.15**	7.60**	4.47**
Average Severity of Most Serious Offense	88.3	96.6	98.3
Total Seriousness Score	370.5*	450.0*	365.4*

* $p < .05$

Multivariate Prediction of Recidivism

The preceding sections presented a series of variables each of which individually predict recidivism. This section examines the degree to which recidivism can be predicted using a number of variables simultaneously. In other words, how successfully can recidivism be predicted, given knowledge of a variety of demographic and criminal history variables, each of which is individually related to recidivism.

Probability of Reoffending and Return to Confinement

The data were analyzed using discriminant analysis to determine whether two measures of recidivism, new felony convictions and returns to confinement, can be correctly predicted based on information that is routinely available at release from DJR. Ideally, such predictions should minimize both false negatives (incorrectly predicting that an offender will not reoffend) and false positives (incorrectly predicting that an offender will reoffend).

The statistical procedure of discriminant analysis is used to predict membership in two or more groups (e.g., recidivism and non-recidivism). Discriminant analysis uses linear combinations of predictor variables to construct a linear prediction equation which generates a prediction of group membership. If the group membership of individuals in the sample is known, the accuracy of prediction can then be judged by comparing the discriminant analysis predictions with actual

group membership.

Discriminant analysis was used to identify the set of independent variables that would best predict each of two variables: 1) whether an offender would commit a new felony, and 2) whether an offender would be returned to confinement. The analysis identified four variables as providing the best prediction: age at first conviction, age at release from DJR, the combined seriousness scores of all prior offenses, and total number of convictions prior to DJR release.

Table 11 presents the results of using these four variables to predict whether offenders would commit new felonies after release from DJR. The analysis correctly classified 68 percent of those who had no new felonies and 63 percent of those committing new felonies. There were 98 "false negatives" and 226 "false positives."

TABLE 11. PREDICTION OF NEW FELONY CONVICTIONS

ACTUAL GROUP (N)		PREDICTED GROUP*		
		No New Felonies	New Felonies	Percent Predicted Correctly
No New Felonies	(309)	211	98	68%
New Felonies	(617)	226	391	63%
Total	(926)	437	489	65%

* Based on the variables: age at first conviction, number of prior offenses, prior offense seriousness, and age at release from DJR.

The discriminant function provides only one of several options for "prediction rules" to predict recidivism. Table 12 shows how the discriminant function compares with predictions based on the overall probability of reoffending (67 percent). The first column shows that if 67 percent of the cases were predicted to reoffend, 412 (44 percent) would be incorrectly predicted, split evenly between false positives and negatives. The second column shows that if all cases were predicted to reoffend, there would be a total of 309 (33 percent) prediction failures. These would be all false positives. The final column shows that basing predictions on the four criminal history variables would provide prediction accuracy similar to that of predicting failure for all cases (65 percent), but would decrease the number of false positives while increasing false negatives. The discriminant function, while not the best prediction in terms of total correct predictions, does provide the best prediction in terms of minimizing both false negatives and false positives.

Table 13 and Table 14 present comparable results predicting whether offenders would return to confinement after release from DJR. The four criminal history variables produced slightly more accurate predictions of new confinements. The discriminant analysis correctly classified 72

TABLE 12. RELATIVE SUCCESS IN PREDICTING NEW FELONY CONVICTIONS, BY PREDICTION RULE

PREDICTION OUTCOME	PREDICTION RULE		
	Predicting Using Rate of New Felonies	Predicting All Will Reoffend	Predicting Based On Prior Behavior*
False Negatives	206	0	98
False Positives	206	309	226
Total % Correct	56%	67%	65%

* Based on the variables: age at first conviction, number of prior offenses, prior offense seriousness, and age at release from DJR.

percent of those who had were not returned to DJR or prison. It correctly classified 67 percent of those who were returned to confinement. These predictions produced 158 false negatives and 123 false positives.

TABLE 13. PREDICTION OF RETURN TO CONFINEMENT

ACTUAL GROUP (N)	PREDICTED GROUP*		
	No Return to Confinement	Returned to Confinement	Percent Predicted Correctly
No Return (N=555)	397	158	72%
Returned to Confinement (N=371)	123	248	67%
Total (N=926)	520	406	69%

* Based on the variables: age at first conviction, number of prior offenses, severity of prior offenses, and age at release from DJR.

The discriminant function prediction was significantly better than other prediction rules in predicting returns to confinement.

Table 14 shows how the discriminant function compares with predictions based on the probability of returning to confinement (.40) . The first column shows that if 40 percent of the cases were predicted to return, 223 (52 percent) would be incorrectly predicted, split evenly between false positives and negatives. The second column shows that if all cases were predicted to return,

there would be a total of 371 (40 percent) prediction failures. These would be all false negatives (i.e., offenders predicted not to return to DJR or prison, who did in fact return). The final column shows that basing predictions on the four criminal history variables would provide the highest prediction accuracy (70 percent), producing the lowest numbers of false negatives, and fewer false positives than would predicting outcomes based on the overall return rate.

TABLE 14. RELATIVE SUCCESS IN PREDICTING RETURN TO CONFINEMENT, BY PREDICTION RULE

PREDICTION OUTCOME	PREDICTION RULE		
	Predicting Using Rate of Return	Predicting None Will Return	Predicting Based On Prior Behavior*
False Negatives	223	371	158
False Positives	222	0	123
Total % Correct	52%	60%	70%

* Based on the variables: age at first conviction, number of prior offenses, prior offense seriousness, and age at release from DJR.

These data show that criminal history variables are helpful in predicting both new felony convictions and returns to prison. Discriminant analysis is most effective in predicting returns to confinement, significantly reducing both false negatives and false positives. In the case of predicting returns to DJR or prison, errors were made in 31 percent of the cases. The number of false negatives was particularly low, with only 24 percent of those offender predicted not to return actually being returned to DJR or prison.

Multiple Regression Prediction of Reoffense Seriousness

This section analyzes the degree to which the overall seriousness of recidivism can be predicted by criminal history variables. Recidivism seriousness is measured in terms of both the number of new convictions and the combined severity of all new offenses. The combined offense severity scale was created by summing the seriousness score of each individual reoffense using the scale presented in Table 5.

New Convictions

Multiple regression was used to determine if new convictions during the fixed 6.5 year at risk period could be predicted from demographic and criminal history information available at time of release from DJR. Three variables provided the best prediction of new convictions: Age at Release From DJR, Number of Priors, and Ethnicity. Offenders who were younger at release

from DJR, had more prior convictions, or were of African-American origin had the highest number of new convictions. The largest effects were for admission age and number of priors. Ethnicity added a small, but statistically significant, increment to the prediction of new convictions.

Table 15 summarizes the results of the multiple regression analysis of new convictions. The average number of new convictions per year was 1.1 . Twenty-seven percent of the variance in this variable can be explained by three criminal history/demographic variables known at release. The best predictor was age at release from DJR, which accounted for 16.7 percent of the variance. The second best predictor was the number of prior convictions which explained an additional 9.7 percent of the variance. Ethnicity explained an additional 0.7 percent of the variation in the number of new convictions in the 6.5 year at risk period.

TABLE 15. MULTIPLE REGRESSION ANALYSIS SUMMARY: PREDICTING NEW CONVICTIONS

PREDICTOR VARIABLES	REGRESSION ANALYSIS SUMMARY: NUMBER OF NEW CONVICTIONS		
	Beta* (ß)	% of Variance Explained	Average Change in New Convictions Per Unit Change In Predictor
AGE AT RELEASE	- .396	16.7%	2.0
NUMBER OF PRIORS	+ .316	9.7%	0.4
ETHNICITY*	+ .083	0.7%	2.1
TOTAL		27.1%	

* Beta is a regression statistic which describes the amount of change in a dependent variable predicted to result from a change of one unit in the independent variable, where both variables are expressed in standard units (i.e., standardized in terms of their own variance).

* Ethnicity was coded: 0= Not African-American, 1= African-American. Being African-American was positively related to the number of new offense convictions.

The last column in Table 15 puts the size of the relationship in perspective by indicating how large a change in the number of convictions per year would result from a unit change in each of the predictor variables. For example, every year younger an offender was at release from DJR produced a predicted increase of two new convictions in the 6.5 year follow up period. Similarly, each prior conviction produced an increase of .4 new convictions. Being African-American was associated with an increase of 2.1 new convictions over the 6.5 year at risk period.

Combined Seriousness of New Convictions

The combined recidivism outcome variable has no direct practical analogy in that a specific score may reflect one serious offense or several less serious offenses. For example, a score of 200 could reflect a Rape 2° or four Theft 2° convictions. It is, however, very useful for comparing different individuals or groups of individuals in terms of their overall recidivism within a specific time period in that it reflects a combination of the number and severity of new convictions. For these reasons it should be viewed as a measure of overall recidivism and not be equated to a specific offense.

Table 16 presents the results of a multiple regression analysis of the combined recidivism seriousness measure. Three variables provided the best prediction of new convictions: Age at Release From DJR, Number of Priors, and Ethnicity. These three criminal history/demographic variables predicted 19.5 percent of the variation in recidivism seriousness. These were the same variables that predicted number of new convictions.

TABLE 16. MULTIPLE REGRESSION ANALYSIS SUMMARY: PREDICTING COMBINED RECIDIVISM SERIOUSNESS

PREDICTOR VARIABLES	REGRESSION ANALYSIS SUMMARY: COMBINED RECIDIVISM SERIOUSNESS		
	Beta (ß)	% of Variance Explained	Average Change in Combined Recidivism Per Unit Change In Predictor
AGE AT RELEASE	- .312	10.2%	82.5
NUMBER OF PRIORS	+ .277	7.3%	17.3
ETHNICITY*	+ .139	1.9%	185.1
TOTAL		19.5%	

* Ethnicity was coded: 0= Not African-American, 1= African-American. Being African-American was positively related to the combined seriousness of new convictions.

The best predictor of combined recidivism seriousness was age at release from DJR, explaining 10.2 percent of the variance. The younger the offender when released from DJR, the more serious the offender's recidivism. The number of priors was the second best predictor, explaining 7.3 percent of the variance. Ethnicity explained an additional 1.9 percent of the variation in the combined seriousness of all new convictions.

As in Table 15, the last column in Table 16 shows the impact on overall recidivism seriousness of a unit change in each of the predictor variables. For example, for each year younger at release from DJR, the seriousness score is predicted to increase by 82 points. Similarly, the projected increase for prior convictions is seventeen points per prior conviction. Being African-American increases the predicted combined offense seriousness by 185.1 points.

The regression analysis of new convictions and recidivism seriousness confirm that criminal history and demographic variables can predict significant amounts of variance in both variables. Age at release and number of prior convictions explained 17 percent and 26 percent of the variance in the seriousness and number of new convictions, respectively. Ethnicity explained an Taken together, additional 1-2 percent of the variance. It is unclear whether the effects of ethnicity are a result of differences in the behavior of African-American offenders, or are a result of different responses on the part of the criminal justice system to African-Americans.

The Impact of Corrections on Community Safety

This section assesses the impact of confinement on community safety. Two major areas are examined: rehabilitation and incapacitation. Rehabilitation is defined as a reduction in the number or seriousness of offenses as a result of juvenile justice treatment interventions. Incapacitation is defined as a reduction in the number or seriousness of offenses committed resulting from a reduction in at risk time through confinement in a correctional facility.

Table 17 presents a summary of the offenses committed by the sample during three time periods: the period between their first conviction and commitment to DJR, during the instant DJR confinement, and during the 6.5 years after release from DJR. The 926 youths in the sample were convicted of 9,460 offenses before their commitment, 368 offenses during confinement, and 6,513 in the 6.5 years after release.

The mix of offenses committed before and after DJR confinement was very similar. Fifty-eight percent of the offenses were felonies in the pre commitment period versus 55 percent in the post release period. A total of 6.8 percent of the offenses were Class B+ or higher felonies in the pre DJR confinement period versus 6.4 percent in the post release period.

The major difference among the three time periods is in the rate of offending. The highest rate of offending occurred during the pre commitment period during which the offenders were convicted of committing an average of 4.4 offenses per year. During the period of DJR confinement, the rate decreased to 0.6 offenses per year. In the 6.5 years after release, the rate rebounded to 1.1 per year: twice the during confinement rate, but only one quarter of the pre confinement rate.

As these data indicate, the 926 offenders had a serious impact on community safety before, during, and after their confinement in DJR. They also suggest that confinement had a significant rehabilitative and incapacitative effect.

Rehabilitation

One way to quantify the rehabilitative impact of confinement is to compare the number of offenses being committed per year prior to confinement with the number committed after release. Such an impact has been termed a "suppression effect,"[11] i.e., confinement is seen as suppressing the subsequent level of criminal activity.

TABLE 17. OFFENSES COMMITTED BEFORE, DURING, AND AFTER CONFINEMENT

TIME PERIOD	CONVICTIONS BY TIME PERIOD		
	Total Number of Convictions	Total Days	Convictions Per Offender Per Year
From First Conviction to Instant DJR Confinement*	9,460	854	4.4
During Instant Confinement	368	241	0.6
After Instant DJR Confinement	6,513	2,374	1.1

* At-risk period was calculated for each offender from the date of his first offense until date of the instant DJR admission.

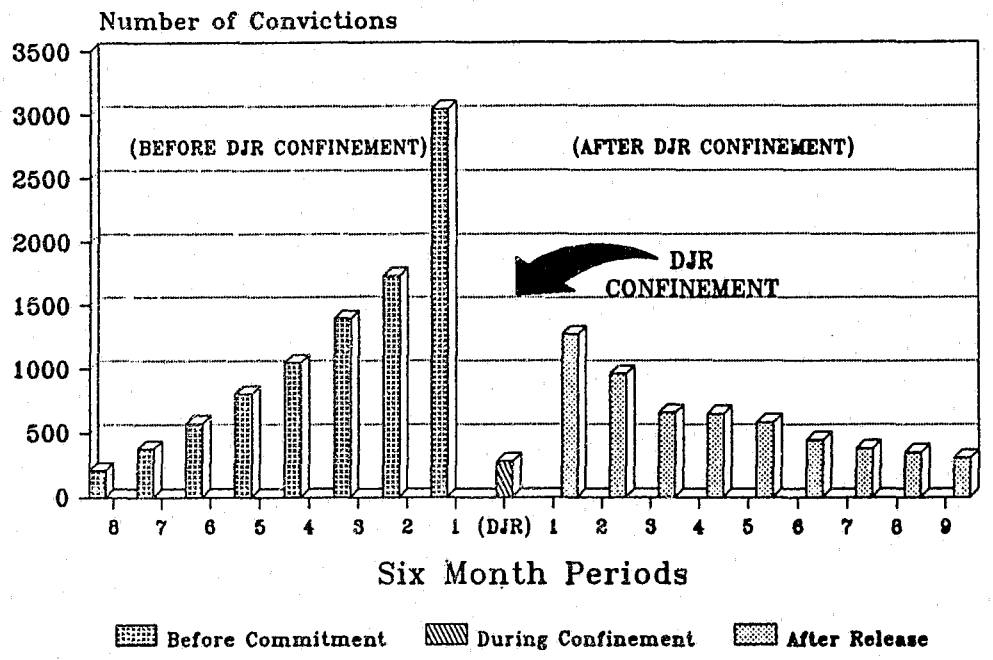
Figure 5 illustrates the suppression effect by presenting the number of offenses committed by the sample of 926 offenders before and after confinement. Offense totals are presented by six month intervals for the four years prior to commitment and the 4.5 years after release. In the six months prior to commitment, the sample committed over three thousand offenses (3,041). In the six months after release, they committed 1,271 offenses. This represents a 58.2 percent reduction or suppression in offending.

Another way of assessing the rehabilitative impact of commitment is to compare the actual number of offenses committed in the 6.5 years after release with the number which would have been committed had the offenders continued at the same rate as they had prior to entering DJR. The sample committed 6,513 offenses in the average of 6.5 years after release from DJR. If they had continued to commit offenses at the pre commitment rate of 4.4 per year, they would have committed 26,303 offenses during the 6.5 year post release period. The rehabilitative impact of DJR on these 926 offenders was a 75 percent reduction (a reduction of 19,790 offenses).[12]

[11] Murray, Charles and Louis Cox. (1979) Beyond Probation. Beverly Hills, CA: Sage.

[12] This assumes, of course, that the decrease in reoffending is solely due to rehabilitation.

FIGURE 5. SUPPRESSION EFFECT OF CONFINEMENT



The existence of suppression effects is controversial. They are sometimes criticized as statistical artifacts resulting from "regression to the mean"[13] and maturation effects[14]. While these two factors will tend to produce a spurious suppression effect, the effects due solely to these factors are likely to be large only if relatively short periods of time before and after confinement are compared. As is evident in Figure 5, the suppression effect is large, even when the period immediately prior to confinement is discounted. Based on these data, it appears that while few offenders are "cured" in the sense of committing no new offenses, commitment to DJR does have a rehabilitative impact.

[13] The best prediction for the mean of a sample is the mean of the population from which it is drawn. Therefore, when a sample mean differs from that value, the probability is that the next randomly drawn sample will produce a mean closer to the population's. This property of sampling is called "regression to the mean," and applies in a variety of "sampling" situations. For example, if your first child is abnormally tall (or delinquent), the chances are the next one will be shorter (or less delinquent). Since all (100%) of the offenders entering confinement have recently committed an offense, as a function of regression to the mean, the probability of them offending in the period immediately after release is likely to return to the mean (and be lower than in the period immediately preceding commitment).

[14] Maturation refers to the tendency for rates of delinquency to drop as offenders approach adulthood. Maturation is a consistent process in the general population of youths, but is less predictable/evident among chronic delinquents.

Incapacitation

Incarceration also impacts community safety by incapacitating offenders. Simply put, offenders who are locked up are less likely to commit offenses than those who are free in the community. For example, the average number of offenses per year by the 926 offenders in the sample was 4.4 during the 2.3 years prior to commitment. The average number of offenses per year dropped to 0.6 during confinement in DJR. This represents a potential savings resulting from the temporary incapacitation of these 926 offenders in DJR of an additional 2,303 offenses from the number that would be projected using the pre commitment conviction rate.

In addition to the obvious reduction in offenses during the instant DJR commitment which defines the study population, other periods of confinement both before and after the instant commitment undoubtably reduced the total number of offenses committed by the sample during the period studied. For example, in our sample 12.5 percent of the post release at-risk time was actually spent in confinement in either DJR or adult corrections facilities. Similarly, the sample spent 13.7 percent of the period prior to the instant commitment in DJR confinement. In effect, the sample spent about one eighth of the time before and after the instant commitment in confinement, an incapacitation which undoubtably further reduced the number of offenses committed.

The data on our sample suggest that both rehabilitation and incapacitation play roles in protecting community safety. The effect of rehabilitation seems larger, although it is less readily quantified. The effect of incapacitation is also significant, particularly in that the juvenile justice system in Washington, according to our data, tends to selectively incapacitate those most likely to reoffend.[15]

III. SUMMARY

Sample

This study examined the criminal activities of nearly one thousand young males subsequent to their release from Washington State juvenile correctional facilities in 1982. The youths had been confined in the state juvenile corrections facilities for up to 300 weeks. Thirty-three percent of the sample had been committed to state facilities at least once before. During their criminal careers prior to the instant confinement in DJR they had been convicted of over 9,460 offenses.

Offense History

Despite being provided a range of educational and treatment opportunities during their average of 7.6 months in confinement, most of the offenders were convicted of new offenses within a

[15] This is evident by the large negative correlations between net risk time (the 6.5 year follow up period less additional confinement time) and most measures of recidivism used in the study.

year of release. As a group, the same individuals committed an average of 1.1 offenses per year during the 6.5 years after release. Forty percent returned to prison or DJR facilities as a result of new convictions in that period. Twenty-three percent were convicted of a Class B+ or higher felony after release from DJR. The sample accounted for 6,513 convictions during the 6.5 years after release from DJR.

The number and seriousness of the crimes committed by this small group of juvenile offenders both before and after confinement in DJR is reason for continuing concern. During the (average) 10.5 year period studied, the offenders were convicted of 16,521 offenses. This figure does not indicate the offenses which did not result in arrest and or conviction.

Recidivism

On the other hand, the data do provide some findings that provide a basis for optimism. Twenty-five percent of the offenders had no new convictions in the 6.5 years after release. The absolute number of offenses committed in the year after release was less than half the number in the year prior to commitment. In addition, the trend in number of offenses committed per year was increasing prior to commitment. This trend was reversed after confinement in DJR; the number of offenses committed per year continued to decrease each year after release.

Prediction of Recidivism

The analysis identified demographic and criminal history variables which predict both the number and seriousness of new offenses. The best predictors proved to be number of prior offenses and age at first conviction. Together, these variables accounted for 14-16 percent of the variance in recidivism. The most serious new convictions of African-Americans were more serious than those of other ethnic groups; they were also more likely to be returned to DJR or prison. These findings confirm that recidivism is at least partially predictable, and is not a purely random phenomenon. While this information can hopefully be used with stricter parole supervision to decrease further the number of new offenses,[16] the findings on ethnicity raise serious questions concerning differential criminal justice system response to African-American offenders.

Offender Types and Specialization

The analysis also revealed important differences among types of offenders. In particular, sexual and violent offenders differed from other offenders in the sample. Sexual offenders had fewer prior offenses. They were less likely to reoffend, but they were much more likely to commit a sexual offense if they did in fact reoffend. Violent offenders did not specialize to the degree that sexual offenders did, but they had the most serious combined recidivism scores. They also committed more offenses than other offender types.

[16] DJR uses a risk prediction instrument which incorporates age at first conviction and prior criminal history to establish levels of parole supervision.

Our findings on offender specialization and offender types should not obscure the overall finding that property offenses are by far the most common crime among all types of offenders in the sample. For example, sexual offenders, violent offenders, and the residual category of property/drug offenders were all most likely to commit a property offense if they reoffended. In fact, the most common offenses before and after release from DJR were felony property or non-felony offenses. Only 6.8 percent of the pre release offenses were Class B+ or higher felony offenses[17] as were 6.3 percent of the post release offenses. The percent of the sample committing Class B+ or higher felonies declined from 40 percent during the period before commitment to 23 percent during the 6.5 years after release. Unfortunately, the fact that 23 percent of the sample committed Class B+ or higher offenses after release demonstrates that many of the offenders in the sample were capable of such offenses, given the right circumstances.

Costs and Benefits

The data confirm that confinement in DJR is effective in reducing recidivism, both through incapacitation and rehabilitation. Confinement, which in juvenile facilities may run over $100 per day, is expensive. On the other hand, it dramatically reduces offending while the youths are in custody. It is also effective in reducing, although not eliminating, criminal behavior after release. In this sense, it provides a rehabilitative benefit to the community by reducing the number of crimes committed.

Quantifying the effects of confinement on community safety are difficult. However, as was shown earlier, the rehabilitative effect of confinement in DJR can be estimated to be 19,790 offenses during the 6.5 years after release. Similarly, the effects of incapacitation amount to an additional 2,303 reduction in offenses that would have been committed during the time the offenders were incapacitated in DJR facilities had offenders continued at the rate that existed prior to confinement. These data indicate that the effects of rehabilitation are significantly greater than those of incapacitation.

Conclusion

The question of what to do about juvenile crime prompted the creation of the first juvenile institution in Washington in 1896. The first debate on whether Washington State's juvenile corrections programs "work" probably began before the mortar hardened. The issue continues to concern the public and policy makers in the 1990's. The purpose of this study was to provide some empirical data in an area where hard information is sometimes lacking.

This report has presented the results of a study of recidivism among Washington State's most serious and chronic juvenile offenders. This population represents a small proportion of juvenile offenders, but it accounts for large numbers of offenses and a disproportionate share of serious juvenile crime. The goal of the study was to evaluate the impact of state residential correctional

[17] That is, B+ or higher class felonies.

programs on the post release behavior of this group, and to identify variables which predict differences in the pattern of recidivism.

The study focused on the chronic and serious juvenile offenders who, under Washington's presumptive sentencing law, are sentenced to state residential facilities. The criminal convictions of 926 males released from Division of Juvenile Rehabilitation (DJR) residential facilities in 1982 were tracked from their first offense until six and a half years after their 1982 release. Convictions before commitment were compared to convictions after release to determine the impact of confinement. Conviction data were used to create offender typologies which were then related to differences in post release behavior. Finally, variables which improve the prediction of new offenses were identified.

Our data are clear on the question of the impact of confinement on recidvisim. Washington State's Division of Juvenile Rehabilitation residential programs do not stop delinquency, but they do significantly reduce the level of delinquent behavior of offenders who are released after a period of confinement. While only one out of five of the chronic offenders studied were "cured" in the sense that they committed no new offenses during the 6.5 year follow-up, the offenders in the sample were significantly less delinquent. During the follow-up period, they were convicted of seventy-five percent fewer offenses per year than they were during the 2.3 years (average) before the being committed to DJR.

This study was undertaken to assess the impact of confinement on the juvenile offenders who "graduated" from DJR juvenile correctional facilities in 1982. We hope we have demonstrated how judgments on the performance of juvenile corrections programs are often, as Murray and Cox pointed out in 1979, a function of the question asked. We agree with them that the most appropriate outcome measure is whether delinquency is reduced, and our findings are remarkably consistent with theirs. The data lead to the clear conclusion that for the DJR "Class of 1982," the effects of confinement and treatment did produce a large and sustained decrease in the rate of new convictions.

APPENDIX A

OFFENSE TYPE DEFINITIONS

VIOLENT SEX

RCW	TITLE
9A.44.040	Rape 1
9A.44.050	Rape 2
9A.44.060	Rape 3
9A.44.073	Rape of a child 1
9A.44.100	Indecent liberties

VIOLENT PROPERTY

RCW	TITLE
9A.08.020	Accomplice to burglary 1
9A.48.020	Arson 1
9A.52.020	Burglary 1
9A.56.120	Extortion 1
9A.56.200	Robbery 1
9A.56.210	Robbery 2

OTHER VIOLENT

RCW	TITLE
9.41.025	Committing a crime with arms
9.41.270	Intimidation with a weapon
9A.28.040	Conspiracy to murder 1
9A.32.030	Murder 1
9A.32.050	Murder 2
9A.32.055	Homicide by abuse
9A.32.060	Manslaughter 1
9A.32.070	Manslaughter 2
9A.36.011	Assault 1
9A.36.021	Assault 2
9A.36.031	Assault 3
9A.36.041	Assault 4
9A.36.045	Reckless Endangerment 1
9A.36.050	Reckless Endangerment 2
9A.36.070	Coercion
9A.36.080	Malicious harassment
9A.36.100	Custodial Assault
9A.40.020	Kidnap 1
9A.40.030	Kidnap 2
9A.40.040	Unlawful imprisonment

APPENDIX A
OFFENSE TYPE DEFINITIONS

OTHER VIOLENT, continued

9A.42.020	Criminal mistreatment 1
9A.42.030	Criminal mistreatment 2
9A.72.110	Intimidating a witness
9A.76.180	Intimidating a public servant
9A.84.010	Riot without a weapon
9A.84.010	Riot with a weapon
9A.88.070	Promoting prostitution 1
10.95.202	Aggravated murder 1
46.61.520	Vehicular homocide
46.61.522	Vehicular assault

NONVIOLENT SEX

RCW	TITLE
9.61.230	Obscene phone call
9A.44.076	Rape of a child 2
9A.44.079	Rape of a child 3
9A.44.083	Child molestation 1
9A.44.086	Child molestation 2
9A.44.089	Child molestation 3
9A.44.093	Sexual misconduct with a minor 1
9A.44.096	Sexual misconduct with a minor 2
9A.64.020	Incest
9A.88.010	Public indecency

NONVIOLENT PROPERTY

RCW	TITLE
9A.28.040	Conspiracy to Burglary 2
9A.48.030	Arson 2
9A.48.040	Reckless Burning 1
9A.48.070	Malicious Mischief 1
9A.48.080	Malicious Mischief 2
9A.48.090	Malicious Mischief 3
9A.52.030	Burglary 2
9A.52.095	Vehicle prowling 1
9A.52.100	Vehicle prowling 2
9A.56.030	Theft 1
9A.56.040	Theft 2
9A.56.050	Theft 3
9A.56.070	Auto Theft
9A.56.080	Theft of Livestock
9A.56.130	Extortion 2

APPENDIX A
OFFENSE TYPE DEFINITIONS

NONVIOLENT PROPERTY, continued

9A.56.150	Possessing stolen property 1
9A.56.160	Possessing stolen property 2
9A.56.170	Possessing stolen property 3
9A.60.020	Forgery
46.52.010	Hit and run, unattended
46.52.020	Hit and run, attended
46.52.020	Hit and run, injury

DRUG

RCW	TITLE
9.47A.020	Unlawful inhalation of toxic fumes
46.61.515	Driving While Intoxicated
66.44.270	Minor in possession of alcohol
69.41.020	Illegally obtaining a legend drug
69.41.030	Possessing a legend drug with intent to sell
69.41.030	Possessing prescription drugs
69.50.401A	Conspiracy to deliver narcotic/non-narcotic
69.50.401A	Intent to deliver narcotic
69.50.401B	Deliver counterfeit narcotic (non-narcotic)
69.50.401B	Conspiracy to deliver counterfeit narcotic (non-narcotic)
69.50.401C	Delivery in lieu
69.50.401D	Possessing a controlled substance
69.50.401D	Possessing over 40 grams of marijuana
69.50.401E	Possessing less than 40 grams of marijuana
69.50.403	Illegally obtaining a controled substance
69.50.410	Sale of a controlled substance (narcotic)
69.50.501A	Intent to deliver a non-narcotic
69.52.030	Intent to sell imitation controlled substance

ALL OTHER

RCW	TITLE
7.21.010	Contempt of court - offender
9.40.100	Tampering with a fire alarm
9.40.120	Possessing an incendiary
9.41.050	Possessing a weapon without a permit
9.41.230	Discharge of a dangerous weapon
9.41.240	Minor useing a weapon
9.41.250	Possessing a dangerous weapon
9.41.270	Carry/display a dangerous weapon
9.41.280	Student carrying a weapon
9.61.160	Bomb threat

APPENDIX A
OFFENSE TYPE DEFINITIONS

ALL OTHER, continued

9A.36.060	Promote suicide
9A.40.050	Custodial interference
9A.46.020	Harassment
9A.48.050	Reckless Burning 2
9A.52.060	Posessing burglary tools
9A.52.070	Criminal trespass 1
9A.52.080	Criminal trespass 2
9A.72.080	Tampering with a material witness
9A.76.020	Obstructing a public servant
9A.76.040	Resisting arrest
9A.76.110	Escape 1
9A.76.120	Escape 2
9A.76.130	Escape 3
9A.76.140	Introducing contraband 1
9A.76.150	Introducing contraband 2
9A.76.160	Introducing contraband 3
9A.76.170	Bail jumping
9A.84.020	Failure to disperse
9A.84.030	Disorderly conduct
9A.84.040	False reporting
9A.88.030	Prostitution
9A.88.080	Promoting prostitution 2
10.19.130	Failure to appear
46.20.021	Driving without a license
46.61.024	Attempting to elude a police vehicle
46.61.500	Reckless driving
46.61.525	Negligent driving
69.50.412	Possessing drug paraphernalia
70.74.180	Possessing an explosive
70.77.255	Possessing illegal fireworks

UNKNOWN

RCW	TITLE
9A.08.020	Accomplice to an unspecified offense
9A.20.010	Unspecified offense
9A.28.020	Attempted unspecified offense
9A.28.040	Conspiracy to an unspecified offense
13.40.030	Unspecified offense
	Parole/Probation violation