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Abstract

An analysis of recidivism was conducted for offenders released in 1970, 1978, and 1980 from the Federal Bureau of Prisons. Recidivism defined as arrest following release from prison is best declining. Three years after release, the arrest rates for 1970, 1978 and 1980 offenders were 51.3%, 45.7% and 36.0%, respectively. The analysis also showed that inmates with a lower risk of recidivism were being released into each subsequent group. When controlling for risk of recidivism, there were no differences in the arrest rates for the three release samples.

This report describes the recidivism patterns of Federal offenders released in 1970 and 1978 and a new, as yet unreported cohort released in 1980. Despite problems in the definition and measurement of recidivism, it continues to be a measure of interest to correctional administrators and the public.

Recidivism Defined

Hoffman and Stone-Meierhoefer (1980) have shown that recidivism will vary with the choice of a criterion (arrest, conviction, prison commitment, etc.). Although recommitment to prison is most commonly used, this is usually a pragmatic choice based on the availability of data. Nonetheless, the use of recommitment to prison as the definition of recidivism places other restrictions on the findings. For example, state correctional systems most commonly report recommitment based only on return to prison within the state from which the offender was released (Walleries, 1984).

The Federal system has follow-up data available from the Federal Bureau of Investigation (rap sheets) and the National Crime Information Center (NCIC) files. FBI and NCIC files contain arrest and commitment information from jurisdictions, both state and Federal, throughout the United States. Therefore, it is practical to gather data on post-release contact with the criminal justice system nationwide, not just with the Federal system.

Unfortunately, there are problems with data which limit the use of the "recommitment" definition. NCIC and FBI files contain a large number of pending dispositions. Because there are so many of these pending dispositions, the only completely unambiguous criterion is arrest. Therefore, for purposes of this study, recidivism (failure) will be defined as any arrest or warrant issued following release from prison.

Sampling and Data Collection

For the study, random samples of releases were used from the years 1970, 1978, and 1980. Only inmates whose sentences were longer than one year and one day were selected. The resultant final samples were 1,816 for 1970, 2,173 for 1978, and 489 for 1980. The length of the follow-up is three years.
Arrest Comparisons Among Releases

Arrest comparisons among each sample year indicated that the 1970 group had higher recidivism rates than the 1978 group, which, in turn, had higher recidivism rates than the 1980 group. This decline in recidivism occurred for each follow-up year, so that regardless of whether the follow-up period was one, two or three years, the arrest rates were highest in 1970 and lowest in 1980. After three years of follow-up, the recidivism rate was 51.4% for the 1970 group, 43.9% for the 1978 group and 38.0% for the 1980 group. The decline in recidivism rates could be attributable to changes in the background characteristics of releases which made them lower recidivism risks. For example, a person who had five previous convictions, a history of drug abuse, and who is 23 years old is known to be more likely to be rearrested than a person with no prior convictions, no history of drug abuse, and who is 36 years old. Perhaps more recent releases are lower recidivism risks, which may account for the differences in recidivism across time.

To better understand why the recidivism rate is declining over time, and to determine whether the decline was attributable to differences in the characteristics of those being released, an analysis of the relationship of some background characteristics of releases to recidivism was undertaken.

### Salient Factor Score and Recidivism

One instrument that identifies background characteristics associated with recidivism and which assesses an individual on his/her "risk" of becoming a recidivist is the Salient Factor Score. This instrument is used by the United States Parole Commission in its parole determination process. The Salient Factor Score is composed of items assessing an individual's criminal history, employment record, and other social and demographic items. Salient Factor Score data was available for the three samples, and was useful for determining whether changes in recidivism were attributable to the background characteristics of the groups studied.

Table 2 presents the percent of failures (recidivists) by release year, follow-up period and Salient Factor Score risk group. Table 2 was analyzed to determine the effect of release year, risk category and follow-up period on the arrest data. The results showed that when controlling for risk of recidivism, there were no differences in the arrest rates for the three groups. This indicates that the decline in the arrest rates for the three samples is due to differences in the characteristics of the offender populations that were released i.e., the years with the larger proportion of offenders in the high risk category had the higher recidivism rates.

### Time to Arrest (Failure)

To gain additional insight into the arrest process and to pinpoint critical risk points in the post-release follow-up period, the time to arrest for each releasee was analyzed. Such analyses can indicate the most important periods for intervention by parole or other criminal justice officials.

For each inmate, the number of months from release to arrest was computed. The 1978 and 1980 follow-up periods ended at three years (36 months); however, the 1970 group had six year follow-up data available (72 months). This longer follow-up period was included to examine failure rate trends beyond the three years available in the 1978 and 1980 samples.

Figure 1 represents the failure rate over the follow-up period for each of the three release groups. The figure shows that (based on the average failure rate line) arrest was most likely in the first few months after release. In fact, the probability of arrest actually increased over the first six months, then declined steadily. At about 44 months, the probability of arrest reaches the lowest point and is relatively constant over the remaining 28 months of the follow-up period.

When analyzing the three release groups separately, we find that for the first 36 month period it appears that the 1970 release group has initially higher failure rates than the 1978 and 1980 groups. By the second year, failure among the three release groups was about the same. To determine the difference in recidivism rates for drug offenders across time periods. Thus, there is no complete explanation for a decline in recidivism based solely on proportional changes in prisoner commitment offenses.

### Commitment Offenses and Recidivism

One of the fundamental changes in the Bureau of Prisons' inmate population in the 1970s was a re-distribution of commitment offenses. Because the types of crimes offenders committed may have had an influence on their return to crime, we examined the effect of distribution changes in commitment offenses on recidivism independent of the contribution of the Salient Factor Score. Thus, the analysis focused on whether the types of crimes inmates committed, despite their criminal history, affected their post-release outcome.

Commitment offense, in fact did partially determine the recidivism rate across the three release groups. The most notable differences between 1970 and 1980 were a decline in released offenders who had been committed for vehicle theft (32% in 1970, 2.9% in 1980), and an increase in offenders committed for drug offenses (17% in 1970, 32% in 1980). Although both of these groups have high recidivism percentages, the average three year failure rate for offenders convicted of vehicle theft was 64% while for drug offenders it was 44%. Thus, part of the decrease in recidivism rates in the decade was attributable to changes in these offense categories.

However, there was also a decline in recidivism rates for drug offenders across time periods. Thus, there is no complete explanation for a decline in recidivism based solely on proportional changes in prisoner commitment offenses.

### Figure 1: RELEASE GROUP FAILURE RATES

![Figure 1: RELEASE GROUP FAILURE RATES](image-url)
Conclusions

These analyses indicate that Federal prisoners were being re-arrested at much lower rates over time, and that this is, in part, attributable to the release of offenders in lower recidivism risk groups in the years subsequent to 1970. Some of this risk reduction is attributable to a decrease, over time, in the release of vehicle theft offenders, a group with an extremely high recidivism rate.

The analyses also indicate that arrest is most likely in the first few months after release, and that categories of releasees with higher expected rates of recidivism are arrested sooner than lower risk releasees.

Footnotes

The 1970 data was limited to offenders with a one year and one day sentence. For purposes of comparability, the 1978 and 1980 data used similar criteria. A one year and one day sentence is significant because of the Federal parole policy and the categories that determine both release and sentencing procedures. Offenders whose sentences are one year or less cannot have a parole hearing and thus always serve their entire sentence in prison time. Inmates whose sentences are one year and one day can have a parole hearing; however, in practice, they are almost never granted parole. For further information on the 1970 and 1978 study groups, see P. B. Hoffinan and J. L. Beck, 1980 and P. B. Hoffman and B. Steel-Matthefele, 1980.

Some of the arrest records for the 1980 three year follow-up analyses were coded only four months after the end of the three year release period. Judging from posting time information provided by the FBI and NCCID, six months is a reasonable amount of time for arrests to be recorded in the releases' criminal records. Since the 1970 and 1978 samples had at least a six month interval between the end of the three year follow-up period and the coding of arrest data, we limited the three year arrest rates for the 1980 sample for each month to see if rates were lower in the latter months when there would be less time for arrest data to be posted. The analysis revealed that there were no systematic differences in the arrest rates as a function of release month, suggesting that the shorter interval had no effect on arrest rates for the 1980 sample.

The 1980 sample had consistently lower re-arrest rates for each follow-up year, not only for the third year.

The analysis of time to failure was done with BMDP4L, survival analysis.

The effect of release group and Salient Factor Score was analyzed with Cox's proportional hazards model, BMDP2L.

References


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