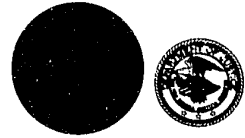
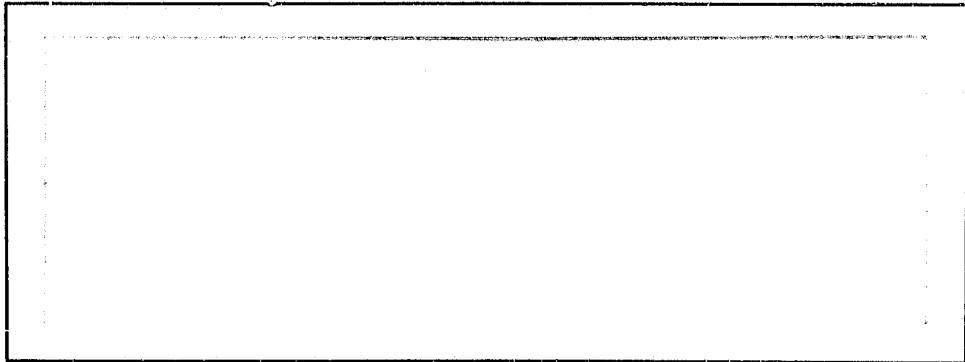


U.S. Department of Justice
Bureau of Justice Statistics



Bureau of Justice Statistics Discussion Paper



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Who Gets Caught Doing Crime?

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Preface

This report documents a Bureau of Justice Statistics sponsored study of types of offenders and their rates of arrest (84-BJ-CX-0003). The study addresses the ability of criminal justice agency staff to focus selectively on serious high-rate offenders. Suggestions for distinguishing between the most serious offenders and lesser offenders are based on analysis of data from two public use files archived by the Inter-university Consortium for Political and Social Research.

Who Gets Caught Doing Crime? Executive Summary

Criminal justice practitioners increasingly are being forced to institute two apparently contradictory policies. Faced with a conservative political movement, public officials are under pressure to increase apprehension, conviction, and incarceration of offenders. At the same time, high case loads, crowded prisons, and fiscal limitations are forcing many jurisdictions to release some offenders without incarcerating them. In response to these realities, police, prosecutors, and other criminal justice agencies are attempting to focus their limited resources on offenders who are most menacing to public safety.

To accomplish this goal, criminal justice personnel must know who are the high rate offenders. More specifically, they must be able to examine official records of arrestees and determine with some confidence whether or not they commit crimes at high rates.

This study confirms what many have suspected: that some arrestees with apparently extensive arrest histories are not high rate, serious offenders. Rather, they are somewhat inept, unprofessional criminals who may be arrested nearly every time they commit a crime. Based on their arrest record alone, it is nearly impossible to distinguish them from offenders who commit crimes at high rates. Indeed, we caution against trying to use, as indicators of high rate criminal behavior, the total number of times individuals have been arrested or convicted as adults. Rather, to make these determinations, their official records must be examined in combination with specific information about their methods for committing crimes, their life-long history of arrest, conviction, and incarceration, and their drug use patterns.

This study also suggests another caution for those who process men apprehended for felonies. Among the prisoners in the study sample, we found a small group of high rate offenders who had been getting away with crimes for many years and therefore had short or non-existent records of prior arrests and convictions. These "successful" criminals were all eventually caught and convicted, but they may be similar to persistent high rate offenders out on the streets who still are successfully avoiding arrest and conviction and who officially appear to be clean.

Methods and Data Sources

The data for this study were obtained from two different surveys of male prison inmates, a 1978-79 Rand Corporation survey in California, Michigan, and Texas prisons, and a 1979 Bureau of Justice Statistics (BJS) survey of 11,397 inmates in 215 state correctional facilities. Both data sets were obtained from public use data files maintained by the Inter-university Con-

sortium for Political and Social Research.

Only the Rand survey data included information that could be used to classify respondents according to their crime rates or arrest rates. Nonetheless, by working with both data sets in tandem, we were able to draw conclusions about these distinctions from the BJS survey data. The data analysis capitalized on the data items common to both surveys in such a way as to shed light on the value of information collected only in the BJS survey.

For the purposes of this study, Rand survey respondents were considered to be high-rate if they reported committing any one of seven specific types of crime at rates higher than seventy percent of respondents who also committed that crime. (For example, since 70 percent of respondents who committed robbery committed fewer than 9 per year, men who committed 9 or more robberies per year were considered to be high rate. However, men who committed 9 drug deals per year were not considered to be high-rate since half of all dealers in the sample committed at least 15 drug transactions per year.) Respondents were considered to be low rate if they were in the bottom 30 percent of the class of respondents who committed the same types of crimes. For example, respondents whose assault rate was under 1 assault per year were considered low-rate, as were those whose theft rate was under 3 thefts per year.

We constructed a postdiction model of high-rate criminal behavior from variables that were nearly identical on the two surveys. ("Postdiction" is a prediction of something that occurred in the past.) When this model was applied to the BJS data, it provided an estimate of each respondent's probability of being a high-rate offender. From these probabilities, statistical analysis permitted determining what other information collected on the BJS survey (but not on the Rand Survey) was also related to high-rate criminal behavior. Thus, without knowing crime commission rates of inmates who responded to the BJS survey, we were able to obtain useful descriptive information about high-rate criminal offenders from the BJS survey data.

Description of Low-Rate Losers

The offenders who are arrested frequently despite their relatively low rate of committing crimes are called low-rate losers in this study. They tend to be relatively inexperienced offenders. Unlike the vast majority of high-rate offenders, they started committing crimes as adults rather than as young teenagers. Their absence of juvenile arrests may be one indicator of a late start in committing crimes. They rarely plan their crimes or work with partners. They do not have a wide repertoire of different types of crimes and usually commit primarily assaultive crimes. They tend not to have a conviction history for robbery.

Our data showed the low-rate losers tend to be relatively

straight, hardworking men who are not involved with drugs or heavy drinking. They were disproportionately black in the samples we studied, and the vast majority had not completed high school.

Description of High-Rate Offenders

By contrast, high-rate offenders tend to be young and high-school educated, heavily involved with barbiturates and/or addicted to heroin, and unlikely to be supporting themselves through legitimate employment. Most became enmeshed in a life style involving drugs and crime when they were young teenagers. Many of them come from relatively well-educated, but broken families; their fathers or brothers are likely to have also been involved with crime. Typically, they commit a wide variety of different crimes, many including the combination of robbery, assault, and drug dealing -- which we identified in previous research as characterizing the violent predator.

Among the high-rate offenders, the ones with relatively low arrest rates were much less likely to be addicted to heroin; they used some other illicit drug such as hallucinogens or barbiturates. They were also more careful planners of their crimes and more likely to be employed. More research needs to be done on high-rate offenders who evade arrest for long periods of time. Obviously random samples of prison inmates generally yield only very small numbers of such offenders.

Distinguishing Between High-Rate and Low-Rate Criminals Who Are Arrested Frequently

A relatively small number of low-rate offenders with high rates of arrest were found among the prison inmates we studied. Moreover, this type of offender had a history of shorter incarcerations than were typical for high-rate offenders who also were arrested frequently. These findings indicate that criminal justice practitioners are already making meaningful distinctions between the lowest-rate offenders and other types of offenders with whom they are dealing.

Nonetheless, police and other criminal justice practitioners can potentially improve their ability to distinguish between high-rate and low-rate criminals by using the following combination of information:

- o Rap sheet information on arrests or convictions for specific types of offenses
- o Arrest report information about number of offenders involved, weapons use, status of motor vehicles used by arrestees
- o Pre-trial investigation report information about release status, duration of incarceration in

recent past and juvenile incarcerations

- o Reports on breathalyzer and urine analysis at arrest
- o Arrest reports, pre-trial investigation reports: information about the arrestees social stability
- o Indication of use of any form of illicit drug, including marijuana, at a very early age
- o During the month before arrest, regular use of hallucinatory drugs such as PCP or LSD
- o During the year before arrest, use of any form of illicit drug combined with getting drunk several times weekly
- o Numerous sentences to probation as a juvenile
- o Multiple sentences as a juvenile to correctional facilities for crimes other than drunkenness, vagrancy or traffic offenses
- o At time of last arrest, being on parole
- o A father or sibling who served time in jail or prison.

Our findings concerning the involvement of other family members in crime suggest that the problems of dealing with high-rate offenders are long-term and cannot be resolved by actions taken against today's arrestees. Serious offending behavior appears to be an occupation handed down from father to son. Unless this chain is somehow broken, the problem will not go away. Yet, virtually all criminal justice policies outside the area of organized crime are geared to individuals rather than families. We urge that the problem of the criminogenic family be emphasized in future criminal justice practice, policy, and research.

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Steven R. Schlesinger, Director of the Bureau of Justice Statistics, encouraged the use of the wealth of data collected and archived by the Bureau. Our first project monitor, Ralph Rossum, provided administrative assistance. Our second project monitor, Carol Kalish, provided valuable substantive, editorial and administrative advice. Patrick Langan led us through the intricacies of the BJS survey instrument, warned us about the problems and pitfalls in using the data, and provided excellent insights and suggestions throughout the analysis.

Bruce Johnson, Paul Goldstein and Eric Wish (New York State Division of Substance Abuse Services) helped us formulate interpretations of the results of analyses concerned with drug use. Dale Parent (NISA) provided advice about offender classifications, acted as a sounding board for much of the research and provided a helpful review of an earlier draft. Stephen Gottfredson commented with rigor on our methods and conclusions. Mark Corrigan offered comments on the policy implications of the findings. Many colleagues at the American Society of Criminology 36th Meeting in Cincinnati gave us advice about methods and interpretations.

David Chaiken provided programming assistance in the analysis of the quality of the Rand survey data and the coding of missing variables in the BJS data. Cathy Ruley typed and corrected this report with unfailing good humor.

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INTRODUCTION

Criminal justice practitioners increasingly are being forced to institute two apparently contradictory policies. Faced with a conservative political movement, public officials are under pressure to increase apprehension, conviction, and incarceration of offenders. At the same time, high case loads, crowded prisons, and fiscal limitations are forcing many jurisdictions to release some offenders without incarcerating them. In response to these realities, police and prosecutors are attempting to focus their limited resources on offenders who are most menacing to public safety.

To accomplish this goal, criminal justice personnel must know who are the high-rate offenders. More specifically, they must be able to examine official records of arrestees and determine with some confidence whether or not they commit crimes at high rates. Difficulties arise because some offenders with high rates of arrest commit relatively few crimes while other offenders with high rates of arrest commit many crimes. Further, some offenders commit crimes at high rates yet are unusually successful at avoiding apprehension. Based on analysis of data collected in two separate surveys, this report describes the characteristics that distinguish among these types of offenders.

Past research has shown that high-rate offenders are distinctly young, unstably employed drug users who began to commit violent crimes before they were 16 years old.

Using survey data collected by the Bureau of Justice Statistics (BJS) in a 1979 national survey of prisoners, this study determines distinctive characteristics of offenders who appeared to have committed crimes at very high rates. We find that although such offenders are younger than other inmates, they have relatively long histories of convictions and incarcerations and have spent a large fraction of their lives in correctional facilities. They are more likely than other offenders to have been incarcerated in the past for robbery. They started using illicit drugs as juveniles, most at earlier ages than other felons; they were still abusing a wide spectrum of drugs, including alcohol, on a regular basis during the period preceding their incarceration.

Offenders who commit crimes at high rates come from relatively well educated but broken families. They are more likely than other offenders to have a father or brothers who were also convicted and incarcerated. Few have served in the U.S. Armed Forces. Among the veterans, the high-rate offenders are more likely than other offenders to have become addicted to drugs while in the service and to have a less than honorable discharge. They are less likely than other offenders to support themselves through legitimate employment; crime is a chief source of income. When last arrested, a relatively large number were on parole or probation for crimes for which they had been convicted

previously.

Using survey data collected by the Rand Corporation in 1979 from prisoners in three different states we studied the characteristics of three types of offenders:

- o high-rate losers: those who reported committing crimes at high rates and had official records showing that they were already being arrested a lot;
- o low-rate losers: those who reported committing crimes at low rates but whose official records showed a relatively high arrest rate; and
- o high-rate winners: offenders who reported committing crimes at high rates yet had official records showing a low rate of arrest.

Since the offenders we studied were limited to a sample of men in prison, we can not estimate the proportion of each type of offender in the population of unincarcerated criminals. Nor can we say anything about types of women who get caught committing crimes. However, we can describe the distinctive characteristics, background and behavior of these three types of offenders.

When we compared high-rate losers with high-rate winners we found that those getting away with more crimes tended to be younger, more likely to be employed, more careful about planning their crimes, and more likely to have been getting away with crimes since early adolescence. Although the majority of high-rate winners used illicit drugs such as barbiturates, they were significantly less likely than the high-rate losers to be heroin users. As might be deduced from their characteristics and arrest rates, we found relatively few high-rate winners in our prison sample.

Low-rate losers (in comparison to offenders who were also being arrested a lot but who committed crimes at high rates) tended to be either assaultive offenders who did not commit crimes for profit or offenders who committed less serious property crimes. They were significantly more likely to be black and less educated; however they were more likely to be employed. Relatively few low-rate losers used illicit drugs. Part of the reason they seem to get caught is their lack of planning. They were significantly less likely than their high-rate colleagues to have an escape plan or even to find out whether they were committing crimes in a guarded area.

High-rate losers were characteristically men who had been cycling

in and out of correctional institutions since they were juveniles. They were more likely than other types of offenders to have embraced a life-style as juveniles that included both crime and drugs and as a result were first arrested at an earlier age than other types of offenders. They were more likely than other types of offenders to be addicted to heroin and, in spite of their need for money for drugs, less likely than other types of offenders to be employed. Although they were more likely than low-rate losers to plan their crimes, they were less organized in their plans than those who were getting away with crimes.

In comparison to low-rate losers, high-rate losers are committing and being arrested for combinations of more serious types of crimes. However, simple counts of prior arrests or convictions alone cannot be used to meaningfully discriminate between high-rate and low-rate offenders with frequent arrests. Rather specific combinations of arrests, drug abuse patterns, and sociodemographic characteristics together provide a more powerful basis for discriminating between these types of offenders.

The rest of this paper presents the background of the study and a description of the data, the sample, the methods we used to classify offenders, and the methods used to analyze differences in offenders' characteristics, criminal behavior, and interactions with the criminal justice system.

The methods and analyses are presented in two parts. Part one involves the data collected by the Rand Corporation; part two, those collected by the Bureau of Justice Statistics. The unique methodological contribution of this study is its use of two separate data sets in tandem to learn more about the respondents than could be learned from either survey separately. A model of high-rate criminal behavior is established using the Rand survey data and then applied to the BJS survey data. We also discuss the quality of self-report data and its implications for classification. Finally, the policy implications of the study are presented.

BACKGROUND

Two focal concerns of criminal justice analyses have been the identification of career criminals and the feasibility of dealing with career criminals at different stages in the criminal justice system. The latter has been analyzed in many modeling efforts (see, for examples, Blumstein and Nagin, 1981; Greenberg, 1975; Shinnar and Shinnar, 1975). It has also been the focus of evaluations of career criminal units engaged in investigation, apprehension, bail decisions, prosecution, and sentencing. (See, for examples, Chelimsky and Dahmann, 1981; Eck, 1983; Forst, 1983; Goldkamp, Gottfredson and Mitchell, 1983). After reviewing the results of these studies, Estrich, Moore and McGillis (1983)

have concluded that the most important stage for changes is not the sentencing stage, since sentencing is already very selective, but rather the "front stage" of the system -- apprehension and prosecution. They also suggested continuing ongoing research on identification of career criminals to help police and prosecutors identify high-rate dangerous offenders.

Recent studies suggest that it may be possible to identify subgroups of offenders who differ in terms of their criminal behavior, other forms of behavior, and social characteristics. More specifically, studies show that:

Among any group of offenders, the vast majority commit crimes at low rates; a small number of offenders commit crimes at prodigiously high rates. (Wolfgang, 1972; Peterson and Braiker, 1981; Chaiken and Chaiken, 1984; Elliott, et al. 1980; Tracy, Wolfgang, and Figlio, 1985).

The seriousness of crimes committed by offenders, the rates at which they commit crimes, and their persistence in committing crimes are significantly inter-related. Violent predators -- offenders who commit robbery, assault and drug deals -- are more likely than any other type to commit these and other crimes at high rates (Chaiken and Chaiken, 1982).

The violent predators are most often not criminals with long records of arrest, although they typically did begin committing both violent and property crime before age 15. They are more likely than any other type of offender to be unmarried, to be employed irregularly, and to be users of large quantities of heroin or other psychotropic drugs (Chaiken and Chaiken, 1982).

Although these findings are helpful in recognizing the difference among various types of offenders that come to the attention of the criminal justice system, one cannot however, conclude that criminal justice resources should immediately be heavily invested in the apprehension of offenders who appear to be violent predators. Vera Institute studies indicate that offenders with characteristics of violent predators may be precisely the offenders who already are more than likely than other types of offenders to have high arrest rates (Smith, 1983).

And, as Spelman (1983) has pointed out, if the police are currently aware of the most frequent offenders and already arrest them at high rates, then investing greater resources in apprehending these offenders cannot be an effective change.

If, however, there are other types of high-rate offenders who have learned to avoid apprehension, changes in policy that could

increase apprehension of these more successful criminals would be warranted. Similarly, offenders with records of numerous arrests include some who commit many more crimes than those for which they are arrested and others who commit relatively few crimes but because of mental incapacity, lack of skills, or other factors are arrested for most or all of the crimes they commit. The ability to distinguish between these two types of offenders would allow police and prosecutors to divert resources used in dealing with the low-rate naturally unsuccessful offenders to more pressing needs. These are issues that are addressed in this paper.

THEORETICAL BASIS FOR THE STUDY

Three basic social-psychological concepts underlie this research. First and most general is the concept that all human behavior, including criminal behavior, is not random but occurs in a limited number of observable and regular patterns. Criminal behavior in particular is not a system of unlimited permutations and combinations of illegal acts, but rather is limited to a relatively small number of specific combinations of types of offenses.

Guided by this concept, Chaiken and Chaiken (1982) found that inmates in prisons and jails in three states could be meaningfully categorized into ten varieties of criminal behavior. The varieties, defined in terms of the types of crimes the inmates reported committing, were found to be highly correlated with the rates at which the inmates reported committing crimes and the persistence of their criminal careers.

The second concept suggests that any behavioral outcome is dependent on an individual's response to his environment; however, certain biological, psychological and social characteristics of individuals dramatically increase or decrease the probability of occurrence of specific forms of behavior, independent of environmental factors. In terms of criminal behavior, this concept has been supported by the studies of Glaser (1964), Hare (1979), Irwin (1970), Mann, Friedman and Friedman (1976), McCord and McCord (1959), Robins and Wish (1977) and most recently by Chaiken and Chaiken (1982), Herrnstein (1983), and Hirschi (1983). For one example, Chaiken and Chaiken found that the ten varieties of criminals identified in their study varied significantly in terms of the offenders' age, race, employment history, marital status and involvement in juvenile criminality.

Finally, the more specific concept that underlies this research is the assumption that the probability of an individual's interaction with the criminal justice system is not only a factor of the number of offenses he commits, but is also dependent on his personal characteristics including his mental state, the risks he

is willing to take, his skills in planning criminal activities, and his integration into a more or less conventional social network (Bittner, 1967a; Bittner, 1967b; Cicourel, 1968; Emerson, 1969; Black and Reiss, 1972; Rubenstein, 1973; Smith, 1983).

ANALYSIS OF THE RAND SURVEY DATA

DESCRIPTION OF THE DATA

One set of data used in this study was collected by the Rand Corporation in a 1978-1979 survey of approximately 2200 male inmates in prisons and jails in Michigan, California, and Texas. We obtained these data from a public use data file archived by the Inter-university Consortium for Political and Social Research. A full description of the Rand Inmate Survey (RIS) data and collection methods has been presented by Peterson, Chaiken, Ebener and Honig (1982), Ebener (1983), and Honig (1983).

The subset of RIS data used for the analyses discussed below include self-report data on the following topics:

- o For the reference period (a calendar period up to two years long preceding the last arrest), frequency of committing specific types of crimes including burglary, robbery, assault, forgery, fraud, vehicular theft, other theft, and drug deals.
- o For the same reference period, specific forms of drug and alcohol abuse, number of jobs, intercity moves, economic motives for committing crimes, gangmember self-image, and particular forms of planning prior to committing crimes.
- o For two two-year periods before the primary reference calendar period, the number of months institutionalized.
- o Sociodemographic characteristics.
- o Juvenile behavior including use of illicit drugs, criminal involvement, and interactions with the criminal and juvenile justice systems.

We also used the following RIS data that were collected from the inmates' official records:

- o Numbers of arrests for specific crimes during the same reference period mentioned above for self-reports (up to two years before the last arrest).
- o Total number of arrest incidents during the reference period.
- o Commitments as a juvenile.
- o Prior adult convictions for specific crimes.
- o Prior adult commitments to prison.
- o Probation and parole revocations.
- o Age at first arrest.

In addition, we constructed measures of data quality from pairs of questionnaire items scattered throughout the survey instrument that asked for essentially the same information.

THE STUDY SAMPLE

A sample of respondents was selected from the original RIS sample using the following criteria:

- o Respondents in the original sample were selected only if data had been collected from their official records. This criterion eliminated all jail respondents, since no attempt had been made to collect official record data for jail inmates on the original survey; also eliminated were a small number of prisoners whose inmate folders were not available at the time of the survey.
- o Respondents were selected from the original sample only if the calendar period of interest before last arrest consisted of four or more months. It was deemed necessary to eliminate respondents with short calendar periods from the analysis because valid estimates of annual crime-rates have been shown to be difficult to obtain for respondents with short street times (Visher, forthcoming).

These selection criteria resulted in a study sample of 1150 male prisoners.

CLASSIFICATION METHODS

Respondents were classified as having a high arrest rate if their estimated annual rate of arrest incidents was above 1.2, the mean annual rate of arrest incidents for the study sample. Respondents were classified as having a low arrest rate if their estimated annual rate of arrest incidents was below .75, the value of the first quartile annual arrest incident-rate for the study sample (i.e. one quarter of the sample had lower rates).¹

Respondents were classified as high crime-rate if the minimum estimate of the annual rate at which they committed any of the crimes about which we asked was at or above the 70th percentile value for those in the study sample that reported committing the specific crime.² The 70th percentile-rate was selected for the following reasons:

- o The distribution of individual crime-rates is highly skewed. Most offenders who commit specific types of crimes commit these crimes at very low rates; a relatively small number of offenders commit specific crimes at very high rates. Respondents below the 70th percentile-rate for almost crimes on which the survey focused did not differ greatly in the rates at which they committed specific crimes (see Table 1). Therefore the 70th percentile appeared to be a suitable cutoff for classifying respondents as high-rate.

¹Annual rates of arrest incidents were estimated by dividing an individual's number of arrest incidents recorded on his RAP sheet during that period by the number of months he was unincarcerated during the reference period and multiplying by 12. Since the sample was drawn from inmates in prison, almost all respondents had at least one arrest incident recorded on their RAP sheet. Some people could not be classified in the low arrest rate category simply because the survey design gave them a short reference period; for example respondents who were arrested in January would have a reference period at most 13 months long and could not be classified as low arrest-rate according to our definition. These may in fact be low arrest rate respondents, but given the survey design we can't tell. Our classification procedure places such respondents with one arrest in the residual category, neither high nor low.

²The method for obtaining minimum estimates of annual rates of committing crimes is described in Chaiken and Chaiken, 1982, Appendix A.

- o The rates at which respondents above the 70th percentile commit crimes increases dramatically from percentile to percentile. Selecting respondents above the 75th or 80th percentile would result in analytically capturing extremely high-rate offenders. However discussions with practitioners suggested that they considered the 70th percentile values certainly to be high-rate, and that excluding respondents who committed crimes at those rates from the high-rate category would be conceptually unsound.

The estimated rates at or above which a respondent was considered to be a high-rate offender are as follows:

Robberies	8.8 per year
Burglaries	12.0
Assaults	3.1
Theft	36.0
Auto-theft	6.3
Forgery	8.4
Fraud	10.5
Drug deals ³	278.6

Respondents were classified as low crime-rate offenders if their estimated annual rate of committing any of the crimes about which they were asked did not exceed the 30th percentile value (under two crimes per year for most crimes). The estimated rates at or below which a respondent was considered to be a low-rate offender are as follows:

Robberies	1.5
Burglaries	2.1
Assaults	.8
Theft	3.0
Auto-theft	1.5
Forgery	1.9
Fraud	1.9
Drug deals	7.2

³Drug deals did not include buying or possessing drugs for personal use. The category did include a span of undifferentiated activities including such diverse crimes as selling a couple of "joints of marijuana" and selling kilos of heroin for resale. We suspect from talking with our interviewers that most drug deals consisted of activities of the former type. Therefore we do not think that 280 drug deals is an excessively high value to use to classify an offender as high-rate.

Respondents who denied committing any of the crimes included on the survey questionnaire may have been a type of offender on whom the analysis was not meant to focus, for example, a child molester. (In addition, of course, they may have been lying or truly innocent, but most respondents who denied all the survey crimes appeared to be involved in different types of crimes, judging from their conviction offense.) Therefore, respondents who reported committing no crimes about which they were asked were placed in the residual category and not classified as low crime-rate.

Using the criteria for high and low arrest-rate and high and low crime-rate, approximately 30% of the respondents were classified into the analytical groups of interest (See Table 2). Numbers of respondents in each category were:

- o 60 low-rate losers (high arrest-rate, low crime-rate).
- o 235 high-rate losers (high arrest-rate, high crime-rate).
- o 69 high-rate winners (low arrest-rate, high crime-rate).

VALIDITY OF THE CLASSIFICATION

One inherent problem with using self-report data to classify respondents as high-rate or low-rate offenders is the fact that the classification is dependent on the truthfulness of respondents.

Past analyses of the validity of the Rand Survey data suggested that although these self-reports have many inadequacies, they can be used with some confidence to classify respondents. Marquis and Ebener (1981) quantified the response error and showed it was relatively large. Further, Chaiken and Chaiken (1982) found that eliminating respondents with relatively poor quality data from analyses resulted in truncating both high and low ends of the distribution of crime rates.

However, Chaiken and Chaiken also found that the models they constructed for identifying high-rate offenders remained stable when respondents with poor quality data were eliminated from analyses. Marquis and Ebener found that the response error was statistically unbiased.

Although the quality of the data did not appear to substantively affect the results of past research, there was still a distinct possibility that the respondents classified as low-rate

losers simply lied more often about the crimes they committed than respondents classified as high-rate losers. To explore this possibility we used a previously constructed set of indicators and summary measures of confusion, inconsistency, omissions and overall quality.⁴ (The higher the value of the summary measure, the poorer the quality of the data.) Comparing all summary measures for low-rate losers with those for the rest of the sample, we found that the low-rate losers had slightly better quality data (See Table 3). These findings suggest that the low-rate losers did not blatantly lie or deny committing crimes more than other respondents and that they gave responses that were as good in overall quality as other respondents.

However, Table 3 also shows that the low-rate losers were worse than the high-rate losers on all measures of data quality (significantly worse at the .01 level for the measure of overall quality). The difference between the overall data quality of the low-rate losers and the high-rate losers may possibly be attributable to any one of a number of factors. For example, as we discuss below, the low-rate losers had less education. Also, they were less likely to be incarcerated during the reference periods, and therefore had more months asked about and were subject to recall error. Still, given the observed differences in the measures of data quality, the possibility remains that some of the findings discussed in the next part of the paper may be explained by some respondents' patterns of lying when filling out their questionnaires.

VARIETIES OF CRIMES COMMITTED BY LOW-RATE LOSERS AND HIGH-RATE LOSERS

Past studies have shown that the rates at which offenders commit crimes and the types of crimes they commit are highly interrelated. Violent predators, those offenders that concurrently commit robbery, assault and drug deals, are the highest rate offenders; as a group, violent predators commit more burglaries than offenders who commit just burglary and a greater number of other property crimes than offenders who "specialize" in those crimes (Chaiken and Chaiken, 1983; Johnson et al. 1985.) Therefore, we expected to find and did find more violent predators among the high-rate losers than among the low-rate losers (see Table 4).

One third of the high-rate losers were violent predators; an additional sixteen percent were either assaultive robbers or

⁴The specific indicators and summary measures are described in Chaiken and Chaiken, 1982, Appendix B. Since the public use files do not include these data, they were recalculated for the present research.

combined robbery with dealing drugs. None of the low-rate losers were assaultive robbers or robber-dealers; under two percent were violent predators. Two thirds of the high-rate losers combined drug dealing with other forms of income producing crime; these combinations were committed by less than one tenth of the low-rate losers. High-rate losers were also more assaultive than low-rate losers and while most assaulters among the low-rate losers committed no crimes other than assault, all assaultive high-rate losers committed violent acts as an adjunct to income producing crimes.

Since high-rate losers not only commit more crimes than low-rate losers, but also commit more serious combinations of crimes, the ability to distinguish between these two types of frequent arrestees is important for many reasons, including just deserts, community safety, and effective resource allocation. In the following sections we discuss the major differences between these types of offenders and the information criminal justice practitioners can bring in discriminating between them.

CHARACTERISTICS OF LOW-RATE LOSERS

Based only on the numerous serious crimes they commit, it is understandable why high-rate losers frequently are picked up by the police. However, given the relatively small number of crimes committed by low-rate losers, their high rate of arrest is less understandable. In order to help explain why this type of offender is apprehended relatively frequently, we examined some characteristics that have been suggested in the past as factors that increase the probability of arrest. (See Tables 5 to 9 for comparative statistics and T-test results.) We found that low-rate losers have a number of distinctive characteristics that appear to increase their probability of apprehension.

As a group, low-rate losers tend to be relatively inexperienced offenders. Unlike the vast majority of high-rate losers who start committing crimes as youngsters, most low-rate losers did not get involved in illegal activities until they were adults (Table 5). Their inexperience seems to be reflected in their lack of planning. Only twelve percent of the low-rate losers who committed property crimes worked out a plan for the crime before they went out and did it (Table 9).

The low-rate losers did not seem to be enmeshed in a criminal network that could provide resources for reducing vulnerability to arrest. Only sixteen percent of those who committed property crimes worked with partners and less than 5 percent used tips to line up places to do the crimes. In fact they appear to be relatively straight, hardworking men. Although slightly over half experimented with drugs as juveniles, 70 percent reported no drug use in the primary reference period

and only 10 percent reported drinking heavily, getting drunk often, or having a drinking problem (Table 7). Moreover, 80 percent were employed at least some months during the reference period (Table 6).

Two other factors, race and education, also probably interfered with their ability to commit crimes without being caught. Seventy-two percent of the low-rate losers (compared to 50 percent of the entire study sample) were black, and as pointed out by research over the years, blacks are more vulnerable to arrest (Table 6). The vast majority (72%) had not completed high school. As a group they were significantly different from the high-rate losers in terms of all these characteristics.

DIFFERENCES BETWEEN HIGH-RATE LOSERS AND LOW-RATE LOSERS

The high-rate losers appeared to be enmeshed in a lifestyle including crime and drugs from a very early age. Eighty percent used drugs as juveniles, including thirty-five percent who used heroin before turning eighteen.

The vast majority continued drug abuse as adults; one-third were addicted to heroin in the primary reference period and an additional forty percent were abusing other drugs. In fact, for a majority, the need to get money for drugs provided an important motivation for doing crimes (see Table 7).

The behavior of most high-rate losers does not conform to the media portrait of a drug-crazed offender who does not think before he commits crimes. A majority did work out a plan before going out to do robbery or property crimes. Their planning included finding places or persons with a lot of money (57%) working out an escape plan (50%), and lining up a fence or buyer before the crime(44%).

Most high-rate losers in the study sample were not black (60 percent) and almost half had completed high school.

DISCRIMINATING BETWEEN HIGH-RATE AND LOW-RATE LOSERS

Lack of experience, lack of planning, and lack of general education combined with possible effects of racial discrimination may help explain why some low-rate offenders get arrested as frequently as high-rate offenders. However, for obvious reasons, such information cannot be used systematically by criminal justice practitioners to determine which frequent arrestees are high-rate and which are low-rate offenders. In order to explore what combination of information can best be used by police, prosecutors or other criminal justice system practitioners to make this distinction, we took into consideration the current

availability of the information, its potential availability, and the ethics of using such information. All of the information discussed in this section seems "logically" related to high-rate criminality, and most of it has been found in previous studies to be postdictive of high-rate criminality. Yet we will show that only selected items actually discriminate between high-rate losers and low-rate losers.

First, the accuracy of classification based on information usually available at the time of arrest was determined; this included rap sheet data⁵ on:

- o Prior convictions for homicide, robbery, burglary, assault, kidnap, drug dealing
- o Numbers of charges in the primary reference period for homicide, robbery, burglary, assault, theft, auto theft, forgery, fraud, drug dealing
- o Number of prior prison incarcerations

It also included data on juvenile commitments. Although juvenile data are not included on rap sheets, at least some jurisdictions with offender based data files accessible by computer include this information.

Second, we examined the additive improvement in accuracy that could potentially be achieved by using information from the following types of sources:⁶

- o Arrest reports: information about number of offenders involved, weapons used, status of motor vehicles used by arrestee
- o Pre-trial investigation reports such as own recognizance investigation reports: release status and duration of incarceration in

⁵In previous studies using these same rap sheet data, we found that the information recorded on rap sheets may not be complete or accurate (Chaiken and Chaiken, 1984). For this reason the rap sheet data have less strength in distinguishing between high-rate and low-rate losers than would be the case if they were accurate.

⁶The data used in the analysis were not actually obtained from the indicated sources, but rather from a combination of self reports and inmate folders. However, the purpose of the analysis is to examine types of information currently available in many jurisdictions from the suggested sources.

recent past, prior convictions including juvenile incarcerations

- o Reports on breathalyzer and urine analysis at arrest: information about blood alcohol level and drug use
- o Arrest reports, pre-trial investigation reports, experiential knowledge of arresting officer or investigating officer: arrestees' race, age, marital status, employment status, education

Discrimination between low-rate and high-rate losers based only on rap sheet information and official records of juvenile commitments was statistically significant (Table 10) but not practically meaningful. Although, by definition, both groups had frequent incidents of arrest in the reference period, it was not surprising to find that high-rate losers were more likely to have two or more crimes charged at a single arrest. This specifically happened with more charges for robberies, thefts and auto-thefts.

Since high-rate losers were criminally active for substantially longer periods than low-rate losers and committed more serious crimes, it also was not surprising to find that they were more likely to have a record of at least one juvenile commitment. Prior convictions too, help distinguish between the two types of frequent arrestees. High-rate losers were more likely to have a record of past conviction for murder and burglary; low-rate losers, for drug deals or rape.⁷ The use of these data caused none of the high-rate losers to be classified as low-rate, however only thirteen percent of the low-rate losers were correctly identified (Table 11).

The additional information potentially available from arrest reports and pre-trial investigation reports (Table 12) more than doubled the number of low-rate losers who were correctly classified. Moreover information about alcohol abuse and drug use when also used (Table 13) increased the fraction of low-rate losers who were correctly classified to sixty percent.

Once these data are used to distinguish between the two types of frequent arrestees, information about socio-economic characteristics (Table 14) provide a relatively small improvement in classification accuracy (Table 11).

⁷Prior convictions for murder, drugs or rape were relatively rare. It should also be noted that this finding cannot be interpreted to mean that rapists are low-rate losers. Among the 24 men in the study sample who had been convicted of rape in the past, only three were low-rate losers.

These findings suggest that without using controversial information such as employment record and by using information already routinely collected at arrest in some jurisdictions, criminal justice practitioners can distinguish a large proportion of frequent arrestees who commit crimes at low rates from offenders who are frequently arrested and commit crimes at high rates.

CHARACTERISTICS OF HIGH-RATE WINNERS AND COMPARISON WITH HIGH-RATE LOSERS

High-rate winners are in many ways the most serious offenders with whom criminal justice practitioners must deal. By definition, they commit crimes at high rates but are not often arrested. Our analysis showed they also commit very serious combinations of crimes: over forty percent were committing robbery in conjunction with other types of crimes during the primary reference period (Table 16). Moreover, like the high-rate losers, the vast majority began committing crimes as juveniles; forty percent committed violent crimes before they were sixteen (Table 17).

However, unlike the high-rate losers, they are likely to have been getting away with doing crimes since early adolescence. Obviously, after years of doing crimes, the few high-rate winners we found among inmate survey respondents were incarcerated at the time of the survey. However, compared to high-rate losers, high-rate winners were significantly less likely to have been incarcerated as juveniles or during the years preceding the primary reference period (Table 18); although 87 percent said they committed crimes as juveniles, only 41 percent appeared to have been incarcerated for these crimes.⁸

The high-rate winners did not seem to avoid incarceration by outwardly maintaining a more conventional life-style than the high-rate losers. Except for a better record of employment, they were just as likely to have become involved in drug use as juveniles and to be high school dropouts, and more likely to be young, black, and unmarried (Table 19).

Two factors may help explain why the high-rate winners were more successful at avoiding arrest than other high-rate offenders. First, although the high-rate winners were just as likely as the high-rate losers to use illicit drugs, they were less likely to use heroin (Table 20). The choice of drugs other than heroin

⁸This statistic was taken from official records and includes local, state or federal incarceration; by self report, 35 percent did time in a juvenile state or federal facility.

allows users to avoid tell-tale appearances such as track marks or ulcers or wearing inappropriate clothing during hot weather to cover up physical signs of addiction. Second, the high-rate winners were more cautious planners; they were more likely to follow victims to safe places before robbing them and were more likely to do their crimes with partners (Table 21). These factors may have decreased their visibility to the police.

These differences, even when combined with information about past arrests and incarcerations and socioeconomic characteristics, do not clearly discriminate between high-rate offenders who get arrested a lot and those who do not (see Table 22). It is quite possible that the distinction is muddled by factors that lead to the high-rate winners in our sample finally being incarcerated; a clear distinction may have to be based on more knowledge about the population of high-rate offenders out on the streets who are still getting away with crimes.

Although, based on the data gathered from inmates, it is not possible to state with a high degree of confidence why some high-rate offenders get arrested frequently and other do not, it is possible to distinguish high-rate offenders from lower-rate offenders with greater certainty. Using the knowledge gained by analysis of the Rand Survey data, we now turn our attention to the data gathered by the Bureau of Justice Statistics to learn more about high rate offenders.

ANALYSIS OF THE BUREAU OF JUSTICE STATISTICS SURVEY DATA

DESCRIPTION OF THE DATA

The data used in this part of the study were collected by the Bureau of Justice Statistics in a 1979 survey of 11,397 inmates in 215 state correctional facilities. We obtained these data on a public use data tape from the Inter-university Consortium for Political and Social Research. A description of the data and sample selection methods has been presented by the Bureau of Justice Statistics (1981).⁹ All data items in the BJS survey were obtained from self-reports.

The subset of BJS survey data used for the analyses discussed below includes two types of items: data that could be used to construct variables that were identical or very similar to variables constructed with the Rand Inmate Survey data, and data on topics not covered in the RIS but theoretically causes of or correlated with high-rate criminal behavior.

⁹Neither the original collectors of the data nor the Consortium bear any responsibility for the data analysis or interpretations presented here.

The types of BJS survey data that were used to construct variables analogous to the previously constructed variables from the RIS data included the following:

- o date on which current incarceration began
- o sex
- o date of birth
- o race
- o marital status
- o if unemployed before current offense, date of last employment
- o prior incarcerations (up to 13)
 - date admitted to facility
 - type of facility
 - total time spent incarcerated before release or new sentence
 - conviction offense
- o whether or not free at least one year before current offense
- o highest grade completed
- o drug use month before current offense
 - frequency of use of heroin
 - frequency of use of amphetamines
 - frequency of use of barbiturates
- o age at which first regularly used heroin, methadone, cocaine, marijuana or hashish, LSD, PCP, or (without a doctor's prescription) uppers, downers, other drug
- o drinking habits the year before last incarceration
 - frequency of drinking beer, wine, liquor, other alcohol
 - state of sobriety by the time generally stopped drinking (relatively sober, feeling good, pretty loaded, very drunk)

The types of BJS survey data that were used to construct variables not available from the Rand survey included information about:

- o probation, parole or escape status at the time of the current offense
- o service in the US armed forces
 - type of discharge
 - drug and alcohol problems during service
- o sources of income before current offense
- o if unemployed and not seeking employment, reasons for not seeking work
- o family background
 - number of dependents
 - number of children
 - provision of child support

- number of siblings
- birth order
- mother's age (used to determine mother's age when respondent was born)
- mother's educational level
- mother working outside home when respondent was growing up
- father's educational level
- relationship to primary adults in home when growing up
- whether or not other family members did time
- o age at which regular use of specific drugs began¹⁰
- o sources for obtaining illicit drugs

THE STUDY SAMPLE

From the total set of inmates interviewed in the BJS Survey, a sample frame was selected to be congruent with the RIS 1979 sample of an incoming male incarceration cohort. The frame consisted of all men sentenced to prison from October 1978 through September 1979 [N=3445]. Given the large size of this subgroup, a sample [N=1179] consisting of approximately one-third of the BJS study sample was randomly selected for analysis.

Even though the Rand survey was limited to three states while the BJS survey was conducted in a national sample of prisons, the characteristics of the inmates in the two study samples were quite similar in terms of their age, marital status, and overall record of prior prison and juvenile incarcerations (see Table 23). The Rand sample included more blacks and more respondents who had completed high school. Respondents in the Rand sample were much more likely to have been addicted to heroin in the period prior to their last arrest; BJS respondents were more likely to have spent at least one year unincarcerated before their last arrest.

CLASSIFICATION METHODS

The BJS survey contains no information about respondents' arrest rates or crime rates. Therefore, it is not possible to group the BJS respondents using the methods developed in the analysis of the RIS data. Nonetheless, by working with both sets of data in tandem, it was possible to calculate, for each BJS respondent in the study sample, the probability of being a high-rate

¹⁰The Rand Inmate Survey determined whether or not specific drugs were used as juveniles or adults, but did not determine the ages when drug use began.

offender (and then analyze the relationship between the variables unique to the BJS data set and this newly constructed variable).

In order to estimate the probability of being a high-rate offender for each BJS respondent in the study sample, we carried out the following steps:

- o Using the BJS survey data, we constructed variables that were identical or very similar to variables constructed with the Rand survey data.
- o Using the entire Rand study sample, stepwise regressions were used to determine which variables common to the Rand data and the BJS data were the strongest postdictors of high-rate criminal behavior (among RIS respondents).¹¹
- o Using the variables determined to be the strongest postdictors and one-half the Rand study sample (randomly selected), logistic regression was used to generate the coefficients for estimating the probability of being a high-rate offender.
- o After testing the accuracy of the equation, as discussed below, the equation was used to calculate for each respondent in the BJS sample the probability of being a high-rate offender.

THE ACCURACY OF CALCULATING THE PROBABILITY OF BEING A HIGH-RATE OFFENDER

The equation for estimating a respondent's probability of being a high-rate offender was derived from logistic regression analysis using data from a randomly selected half of the Rand study sample (Table 24). Data obtained from the other half of the study sample were used to compare the self-reported rate of committing crimes with the probability of being a high-rate offender. There was a close correspondence between these respondents' postdicted probability of being a high-rate offender and their self-report of committing at least one type of crime at the 70th percentile crime rate (see Figure 1).

¹¹High-rate criminal behavior was defined as committing any of the crimes asked about in the survey at or above the 70th percentile rate for those who committed that crime. For a discussion of why this cutoff was selected, see the section on classification of RIS respondents, presented above.

Perhaps more important, the third of these respondents who had the greatest calculated probability of being high rate offenders excluded all low-rate losers (See Table 25).

This increased our confidence that when applied to the BJS sample, the equation would not misidentify low-rate offenders who, on the basis of their prior records, could mistakenly appear to be high rate.

The comparisons between the postdicted and actual probability of being a high-rate offender shown in Figure 1 were derived for the half of the RIS sample that was not used to fit the logistic model. This choice was made because usually a model fits artificially well in its own construction sample and fits somewhat less well in any other subsample. In this case, however, the model was found to fit very well in both parts of the sample; in fact the fit happened to be slightly better in the half-sample shown in Figure 1 than in the construction sample.¹²

The lack of any discernable shrinkage in the quality of the model when applied to the second half of the sample is another indication of the model's robustness and its likely meaningfulness when applied to the BJS data.

OFFENDER CHARACTERISTICS AND THE PROBABILITY OF COMMITTING CRIMES AT HIGH RATES

The findings given in this section describe additional characteristics of offenders who commit crimes at high rates. They are not determined directly from data about individual offenders' characteristics and their crime rates. Rather, they are deter-

¹²The quality of the fit was determined by chi-square test applied to the groupings of cases shown on Figure 1. I.e., respondents whose postdicted probability of being high-rate was between 0 and .1 were the first group, those between .1 and .2 were the second group, and so on to probabilities between .8 and .9 for the ninth group. (No cases had postdicted probability over .9). For purposes of the chi-square test, the expected fraction high-rate in the first group was taken to be .05, the expected fraction in the second group .15, and so on. Since both samples had nearly identical numbers of cases (N=571 for the construction sample and N=579 for the application sample), the numerical values of chi-square for the two subsamples can be compared directly, with smaller values of chi-square indicating better matches between expected and actual. For the construction sample, chi-square equalled 5.51, and for the application sample, 4.25. Since there are 8 degrees of freedom, either of these values of chi-square is substantially lower (better) than would occur 50 percent of the time if each case's probability of being high-rate was exactly as postdicted by the model.

mined by applying the postdiction model (whose coefficients were estimated from Rand survey data) to BJS survey respondents. We then calculated correlations between the estimated probability of being a high-rate offender and other characteristics of the BJS survey respondents. Partial correlations were calculated to control for variables that appear in the model (Table 24) used to estimate the probability of being a high-rate offender. Correlation and levels of significance are shown in Tables 26 to 29.

As shown in the postdicted model itself (Table 24), younger men were more likely to be high rate; therefore, those most likely to be high-rate offenders were men who had never been married, who had no children or other dependents (Table 27).

Crime provided equal employment opportunity for these young, unattached men. Among the respondents in the BJS study sample, no one racial or ethnic group was more likely than another to include individuals with a high probability of being very active offenders (Table 29). Although the few men who had not worked at all in the past six years (4%) were more likely to be committing crimes at high rates, for the majority of respondents the probability of being a high rate offender had little to do with the ability to find a job; employment at the time of the last arrest was not a significant factor (Table 29). However, among those who were employed, the amount of money earned was significant; men who were able to support themselves from wages and salaries were likely to commit fewer offenses (Table 28). Conversely, respondents who supported themselves by the income from their illegal activities were most likely to be high rate offenders, even though, to supplement this income, they were likely to have received financial assistance from their families or friends. Other sources of income, such as welfare, didn't appear to make any difference in the probability of being a high rate offender.

The families of men most likely to be high rate were not traditional two-parent households. Respondents who grew up with both their mother and father at home were likely to commit crimes at low rates; those who grew up with only their mother were more likely to be high-rate. And, young men likely to be high rate offenders were also likely to have their mothers employed outside of the home when they were children. More important, these men appeared to be entrenched in a highly deviant lifestyle as children.

Crime appeared to be an option favored by the entire family of respondents who were most likely to be high-rate offenders. Although not a single respondent among the thousands interviewed said that their mothers had been incarcerated, the probability of being a high-rate offender was strongly associated with having a father who did time, a sister who did time, or a number of

brothers who had been incarcerated in prison or jail. There was little evidence to suggest that the families turned to crime because they lacked skills to find legitimate employment. On the contrary, the probability of being a high-rate offender not only was associated with coming from a family involved in crime, it was also associated with both parents have a relatively high educational level. (This finding persists even when controlling for the respondent's educational level -- one of the variables in the postdictive equation for high-rate behavior).

Drugs appeared to play a major role in the childhood life-style of the men most likely to be high-rate offenders. As previously determined, juvenile drug use and drug use in the period before the last arrest are strongly associated with high rate criminal behavior. But even among those who used drugs as juveniles and continued use as adults, men with the highest probability of being the most active offenders were also most likely to begin using a variety of drugs at very early ages.

Given this background, it is not surprising that the probability of being a high-rate offender is strongly associated with being placed on probation at an early age, numerous sentences as a juvenile for major crimes,¹³ and numerous incarcerations as a juvenile in state or federal facilities. In fact, those most likely to be high-rate offenders were also likely to have spent a large fraction of their lives incarcerated in "correctional" facilities.

The patterns established in early childhood carried over into adult years for the high-rate offenders. Getting drunk several times a week and regular use of drugs including marijuana are earmarks of offenders most likely to be high rate. For obvious reasons, few ever served in the United States Armed Forces; those who did were likely to report having become addicted to drugs or having a drinking problem while they served. Perhaps as a result, among the veterans, offenders who were most likely to commit crimes at high rates were also the most likely to have received a less than honorable discharge.

As previously determined, most high-rate offenders cycle in and out of correctional facilities as adults, especially for burglary convictions. The BJS respondents most likely to high-rate also have more past incarcerations for assault, drug charges and robberies, the combinations of crimes committed by violent predators. At the time of their last arrest, they were also more likely than other offenders to be on parole or probation.

¹³The number of sentences as a juvenile for drunkenness, vagrancy, or traffic offenses was not significantly related to the probability of being a high-rate offender.

In summary, the portrait that emerges of the high-rate offender is a young man who developed a flagrant disregard for a traditional lifestyle and an appreciation of chemically induced highs and crime at a very early age. Deeply enmeshed in a world of drugs and illegal activities, the threat of incarceration does not prevent him from committing numerous serious crimes. He has seen his brothers and often his father serve time and has been incarcerated numerous times himself. Yet when released, he hits the street ready to prey violently on his victims until he is caught again, reincarcerated, and the cycle begins anew.

CONCLUSIONS AND POLICY IMPLICATIONS

In past research (Chaiken and Chaiken, 1984), we confirmed studies showing that a small proportion of offenders commit crimes at very high rates. We also found that violent predators -- men who currently commit robbery, assault, and drug deals -- also commit a range of other types of crimes at high rates. Most offenders who commit any crime at high rates are violent predators. We showed that they are likely to be young, to have become involved in serious crimes before they were sixteen, and to have started using drugs as juveniles. Our study also showed that it is very difficult to distinguish accurately between high- and low-rate offenders using only information available on official criminal justice system records such as RAP sheets or inmate folders.

Police and prosecutors, however, frequently know a lot more about an offender than the information explicitly maintained in official records of criminal history. Witnesses to an offender's crime, family and community members, and criminal justice practitioners who have had contact with the offender, often supply information that potentially can be used to distinguish between the most serious offenders and lesser offenders. For many reasons, such information cannot be used for determining the sentence length of a convicted offender and selectively incapacitating those who appear to be high-rate (Coffee, 1984; von Hirsh, 1984; Cohen, 1984). However, police and prosecutors do use such information to decide on whom to concentrate their scarce resources. The primary purpose of this study was to inform criminal justice practitioners about the usefulness of specific information in distinguishing between high-rate and low-rate offenders.

INDICATORS OF HIGH-RATE CRIMINALITY

Based on our analysis of the BJS data, we suggest that for men arrested for felonies the following factors be considered

indicative of high-rate criminality.¹⁴

- o Indication of use of any form of illicit drug, including marijuana, at a very early age
- o During the month before arrest, regular use of hallucinatory drugs such as PCP or LSD
- o During the year before arrest, use of any form of illicit drug combined with getting drunk several times weekly
- o Numerous sentences to probation as a juvenile
- o Multiple sentences as a juvenile to correctional facilities for crimes other than drunkenness, vagrancy or traffic offenses
- o A father or sibling who served time in jail or prison
- o At the time of last arrest, being on parole

Also, based on the analysis of both the BJS data and the Rand survey data, we caution criminal justice practitioners against using, as indicators of high-rate criminal behavior, the number of times a felon has been arrested, convicted, or incarcerated as an adult. This information is misleading because two types of offenders come to the frequent attention of the criminal justice system; offenders whose frequency of apprehension reflects their high rates of committing crimes, and offenders who are basically unprofessional, inept, low-rate criminals.

DISTINGUISHING BETWEEN HIGH-RATE AND LOW-RATE CRIMINALS WITH A HISTORY OF FREQUENT ARRESTS

We found a relatively small number of low-rate offenders with high rates of arrest in our study sample. In addition, we found that in the past, this type of offender has been incarcerated for shorter durations than high-rate offenders who also were arrested frequently. These findings indicate that criminal justice practitioners are already making meaningful distinctions between the lowest-rate offenders and other types of offenders with whom they are dealing.

Based on the analysis of the Rand survey data we suggest that

¹⁴The BJS study sample consisted of convicted felons; therefore, based on this study, we cannot extrapolate our findings to men arrested for lesser offenses.

police and other criminal justice practitioners can improve their ability to distinguish between high-rate and low-rate criminals by using the following combination of information:

- o RAP sheet information on arrests or convictions for specific types of offenses
- o Arrest reports information about number of offenders involved, weapons use, status of motor vehicle used by arrestee
- o Pre-trial investigation report information about release status, duration of incarceration in recent past, and juvenile incarcerations
- o Reports on breathalyzer and urine analysis at arrest
- o Arrest reports, pre-trial investigation reports, experiential knowledge of arresting officer or investigating officer: arrestees race, age, marital status, employment status, education

Among frequent arrestees in our study sample, the lowest rate offenders were likely to be men who have had no arrests for robbery, no prior convictions for robbery, and no juvenile arrests. They committed their crimes alone rather than with partners. They did not use drugs. The vast majority were black and employed even though they hadn't completed high school. We suggest that frequent arrestees with these characteristics are the most likely candidates for programs that present alternatives to incarceration or other forms of intensive supervision.

On the other hand, we suggest that frequent arrestees who require the most intensive supervision are drug users who have had multiple prior convictions for robbery and burglary, who are charged with more than one robbery incident, and who have a record of a juvenile arrest before age 16 or more than one juvenile incarceration in a state or federal facility, one or more parole or probation revocations, and those who commit their crimes with partners or are allied with fences. Men with these characteristics are already being incarcerated frequently and for relatively long periods; however, at least in the past, they were likely to begin committing crimes at high rates when released. It therefore is advisable to monitor them carefully through intensive supervision when they return to the community.

CHARACTERISTICS OF HIGH-RATE OFFENDERS WHO GET CAUGHT INFREQUENTLY

Our findings suggest that a group of the most dangerous, high-rate criminals are rarely arrested for their crimes. Because they are successful at avoiding apprehension, we found very few of this type in prison. Those in the study sample were primarily young black offenders who were drug users but not addicts. They were experienced criminals who started doing crimes when very young, and carefully planned their offenses. They were likely to commit their crimes in pairs or groups, and they stalked victims with money to safe locations before robbing them.

These characteristics are reminiscent of violent predators who haunt the streets of impoverished ghetto areas rolling drunk johns, robbing addicted drug dealers, and claiming other people's welfare checks through theft, threats, and intimidation. By preying on people least likely to go to the police for assistance, they increase their chances of getting away with their crimes.¹⁵

However, because quantitative studies of criminal behavior have been generally conducted among populations of inmates or addicts, we know less about high-rate offenders who don't get caught than we do about most other types of offenders. To learn more about the predators who get away with crime, we strongly suggest conducting research using self-report survey materials and using samples drawn from communities, schools, or non-criminal justice organizations where people involved have a high probability of being serious offenders.

LONG RANGE NEEDS FOR DEALING WITH FAMILIES OF HIGH-RATE OFFENDERS

Our suggestions for improving identification of different types of offenders are offered in response to the immediate need of practitioners to deal with high case loads and overcrowded jail and prison facilities. Yet the results of this study suggest that the problems of dealing with high-rate offenders are long term and will not be resolved by actions taken against today's arrestees. One key indicator of high-rate criminality is the involvement of other family members in crime. Serious offending behavior appears to be an occupation handed down from father to son (and perhaps to daughter). Unless this chain is somehow

¹⁵This profile was suggested in conversations with Bruce Johnson and Paul Goldstein, New York Division of Substance Abuse Services, and other researchers engaged in studies of street crimes.

broken, the problem will not go away. Yet, virtually all criminal justice policies outside the area of organized crime are geared to individuals rather than families.

The intrafamilial nature of high-rate criminality helps explain why criminal justice policies of the past have had limited effect on crime rates. Rehabilitation is bound to be ineffective if an offender lives with other criminals. Deterrence is minimal for people for whom crime and incarceration are normal life cycle events. And incapacitation of an offenders cannot make a big difference in overall community crime rates if brothers and sisters will replace him in criminal activities while he is incarcerated. We therefore urge that the need to develop better ways of dealing with the criminogenic family should be emphasized in all criminal justice endeavors including research, policy, and practice.

Appendix 1

DEFINITION OF HIERARCHICAL VARIETIES OF CRIMINAL BEHAVIOR

Group	Robbery	Assault ^a	Burglary	Theft, ^b Fraud, Forgery, Credit Card Crimes	Drug Deals
Violent predators (robber-assaulter-dealers)	+	+	?	?	+
Robber-assaulters	+	+	?	?	0
Robber-dealers	+	0	?	?	+
Low-level robbers	+	0	?	?	0
Mere assaulters	0	+	0	0	0
Burglar-dealers	0	??	+	?	+
Low-level burglars	0	0	+	?	0
Property & drug offenders	0	??	0	+	+
Low-level property offenders	0	0	0	+	0
Drug dealers	0	0	0	0	+
Residual	0	0	0	0	0

NOTE: + = Group member commits this crime, by definition.
 0 = Group member does not commit this crime, by definition.
 ? = Group member may or may not commit this crime. Analysis shows that nearly all members of the group do.
 ?? = Group member may or may not commit this crime. Most don't.

^aAssault includes homicide arising out of assault or robbery.

^bTheft includes auto theft.

Appendix 2
 Common Variables Constructed from Data from
 The 1979 Rand Inmate Survey and the 1979 BJS Prison Survey

Variables from Rand Data			Variables from BJS Data		
Variable	Description	Codes	Variable	Description	Codes
RA2	AGE AT 1ST CONVICTION	CONTINUOUS	AGE1CJS	AGE 1ST PROBATION OR AGE 1ST INCAR- CERATION IF LOWER	CONTINUOUS
RPCASLT	PRIOR ASSAULT CONVICTIONS	CONTINUOUS	SIN4ASL	PRIOR INCARCERATIONS FOR ASSAULT	CONTINUOUS
RPCBURG	PRIOR BURGLARY CONVICTIONS	CONTINUOUS	SIN4BURG	PRIOR INCARCERATIONS FOR BURGLARY	CONTINUOUS
RPCDRUG	PRIOR DRUG DEAL CONVICTIONS	CONTINUOUS	SIN4DRUG	PRIOR INCARCERATIONS FOR DRUG DEALS	CONTINUOUS
RPCKILL	PRIOR HOMICIDE CONVICTIONS	CONTINUOUS	SIN4KILL	PRIOR INCARCERATIONS FOR HOMICIDE	CONTINUOUS
RPCROB	PRIOR ROBBERY CONVICTIONS	CONTINUOUS	SIN4ROB	PRIOR INCARCERATIONS FOR ROBBERY	CONTINUOUS
FREELONG	NOT LOCKED UP FOR MONTH OR MORE DURING PRIMARY REFERENCE PERIOD	0,1	FREELONG	NOT LOCKED UP DURING YEAR BEFORE LAST INCARCERATION	0,1
RD5	MONTHS LOCKED UP IN EARLIER REFERENCE PERIOD	0=0 OR UNKNOWN 2.5=LESS THAN 1 MONTH 3.0=1 TO 6 MONTHS 9.5=7 TO 12 MONTHS 15.5=13 TO 18 MONTHS 21.0=19 TO 23 MONTHS 24.0=ALL 24 MONTHS	RMOSINW2	MONTHS LOCKED UP 1975-1976	SAME AS RD5

Appendix 2
(Continued)

RD14	MONTHS LOCKED UP IN EARLIEST REFERENCE PERIOD	0=0 OR UNKNOWN 1.5=LESS THAN 1 MONTH 3.0=1 TO 6 MONTHS 9.5=7 TO 12 MONTHS 15.5=13 TO 18 MONTHS 21.0=19 TO 23 MONTHS 24.0=ALL 24 MONTHS	RMOSINW1	MONTHS LOCKED UP 1973-1974	SAME AS RD14
RA6B	BEFORE AGE 18, NUMBER INCARCERATIONS IN STATE OR FEDERAL FACILITY	CONTINUOUS	KIDSFAC	BEFORE AGE 18 NUMBER INCARCERATIONS IN STATE OR FEDERAL FACILITY	CONTINUOUS
ORPPRIS	NUMBER PRIOR PRISON COMMITMENTS	CONTINUOUS	SRPPRIS	NUMBER PRIOR PRISON COMMITMENTS	CONTINUOUS
HISCHOOL	COMPLETED 12TH GRADE OR MORE	0,1	HISCHOOL	COMPLETED 12TH GRADE OR MORE	0,1
RC22	DRANK HEAVILY, GOT DRUNK OFTEN OR HAD A DRINKING PROBLEM DURING PRIMARY REFERENCE PERIOD [PRP]	0,1	DRUNK	YEAR BEFORE CONVICTION OFFENSE, DRANK UNTIL PRETTY LOADED OR VERY DRUNK, 3 OR MORE DAYS/WEEK.	0,1
RC23	DURING PRP USED DRUGS OTHER THAN PRESCRIBED DRUGS OR MARIJUANA	0,1	DRUGS	MONTH BEFORE CONVICTION OFFENSE, USED DRUGS OTHER THAN PRESCRIBED DRUGS OR MARIJUANA	0,1
DOWNUSE	DURING PRP USED BARBITURATES	0,1	DOWNUSE	MONTH BEFORE CONVICTION OFFENSE, USED BARBITURATES	0,1
DOWNUSE	DURING PRP USED BARBITURATES	0,1	DOWNUSE	MONTH BEFORE CONVICTION OFFENSE, USED BARBITURATES	0,1

Appendix 2
(Continued)

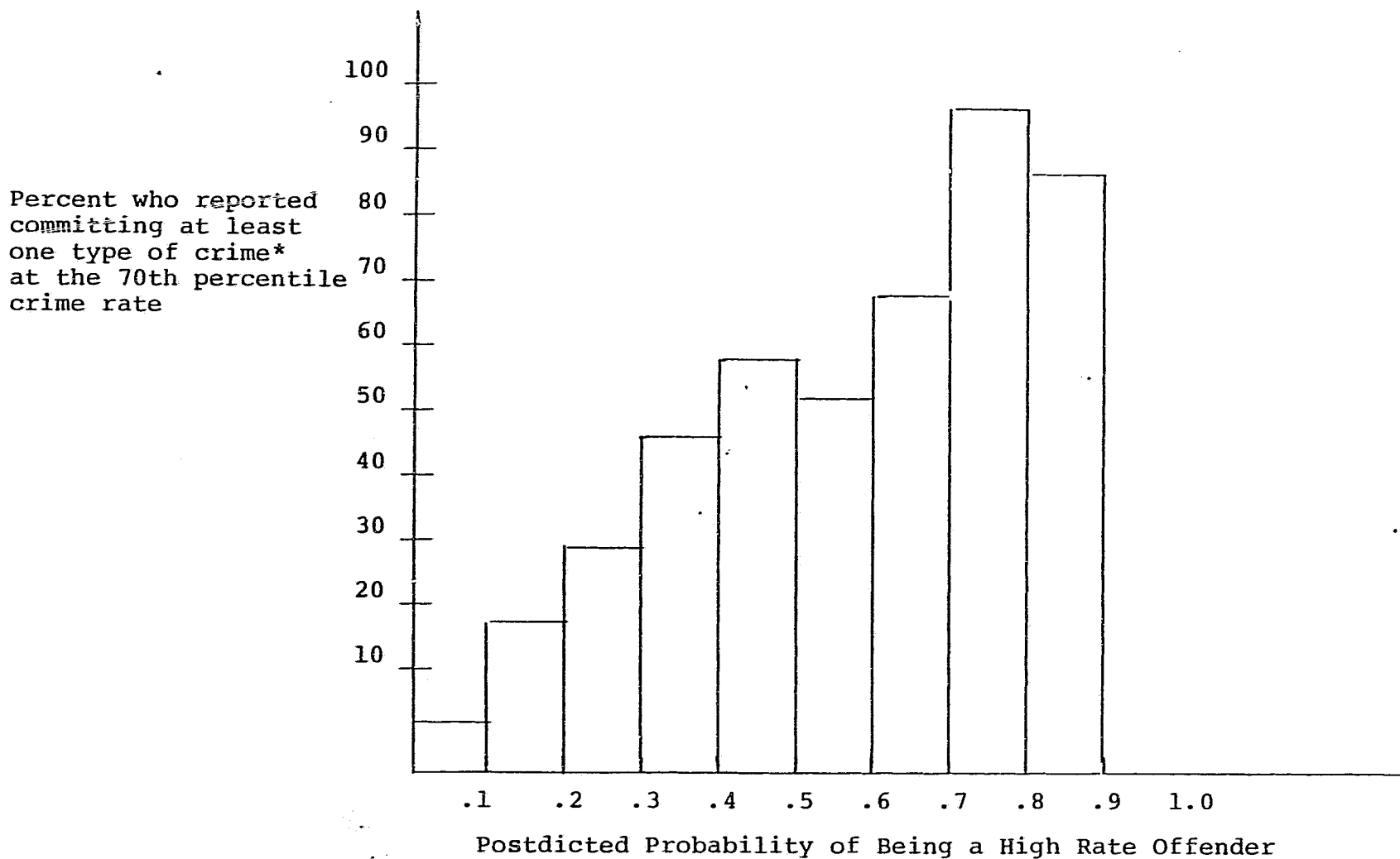
UPPERUSE	DURING PRP USED AMPHETAMINES	0,1	UPPERUSE	MONTH BEFORE CONVIC- TION OFFENSE, USED AMPHETAMINES	0,1
USEDH	DURING PRP USED HEROIN	0,1	USEDH	MONTH BEFORE CONVIC- TION OFFENSE, USED HEROIN	0,1
HEROIN	DURING PRP USED HEROIN ALMOST DAILY OR MORE	0,1	HEROIN	MONTH BEFORE CONVIC- TION OFFENSE, USED HEROIN ALMOST DAILY	0,1
RKIDUSER	BEFORE AGE 18, USED SPECIFIC DRUGS, SOMETIMES OR OFTEN	0=NO DRUGS QUERIED 1=JUST MARIJUANA 2=OTHER DRUGS 3=HEROIN SOMETIMES OR OFTEN	RKIDUSER	BEFORE AGE 18, USED NONPRESCRIPTION DRUGS ON REGULAR BASIS	0=NO REGULAR US 1=JUST MARIJUAN 2=OTHER DRUGS,N HEROIN 3=HEROIN USE IN DAILY USE
W3AGE	AGE AT BEGINNING OF PRIMARY REFERENCE PERIOD	CONTINUOUS	W3AGE	AGE AT BEGINNING OF OF CURRENT INCARCERATION	CONTINUOUS
BLACK	RACE	0=NOT BLACK OR UNKNOWN 1=BLACK	BLACK	RACE	0=NOT BLACK 1=BLACK
NEVERWED	MARITAL STATUS	0=MARRIED, DIVORCED SEPARATED WIDOWED 1=SINGLE, NEVER MARRIED	NEVERWED	SAME AS ISII	SAME AS ISII

Appendix 2
(Continued)

NOJOB01	UNEMPLOYED IN ALL REFERENCE PERIODS (UP TO 6 YEARS)	0,1	NOJOB	UNEMPLOYED LAST 6 YEARS BEFORE INCARCERATION	0,1
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Figure 1

Postdicted Probability of Being a High Rate Offender
compared with
Self Reported High Rate Criminality



* Includes only crimes asked about in survey.

Source: Calculated for one-half of the RIS sample not used to calibrate the postdiction model (N=579).

Table 1
Change in Crime Commission Rate Between Percentiles

Type of Crime	Percentile for Crime Rate								
	10	20	30	40	50	60	70	80	90
Robbery	0	0	0	0	1	2	4	6	53
Burglary	0	0	0	0	2	2	5	40	154
Assault	0	0	0	0	0	0	1	2	5
Theft	0	1	1	2	2	4	26	80	201
Auto Theft	0	0	0	0	0	1	3	5	70
Forgery/Credit Card	0	0	0	1	1	2	3	19	117
Fraud	0	0	0	1	1	2	4	14	122
Drug Deal	2	2	3	6	15	95	135	526	1000+

Note: Percentiles are based on the minimum estimate of annual crime rate for respondents who commit the crime. For example, the 60th percentile robbery rate is 2 robberies per year higher than the 50th percentile. Changes indicated as 0 are smaller than one crime per year.

Source: Rand Inmate Survey (RIS) data for prison inmates in three states.

Table 2
Numbers of Respondents in Each Category

<u>Category</u>	<u>Number</u>
Low-Rate Losers	60
High-Rate Losers	235
High-Rate Winners	69
Residual Category	786
Total Study Sample (RIS* Prison Inmates with official record data)	1150

* Rand Inmate Survey

Table 3
 Summary Measures of Response Quality:
 Respondents in Study Sample

Summary Measure	Low-Rate Losers [N=60] Mean	High-Rate Losers [N=235] Mean	All Others [N=795] Mean
Indicators of omission	.78	.43	1.06
Indicators of inconsistent responses	1.25	.96	1.27
Indicators of confusion [skip pattern errors]	.60	.41	.69
Overall percent of indicators coded "bad quality"	10%	7%	11%

Source: Calculations from RIS data.

Table 4
Comparison of the Varieties of Criminal Behavior*
Reported by Low-Rate Losers and High-Rate Losers

Variety of Criminal Behavior	Percent of Low-Rate Losers	Percent of High-Rate Losers
Violent predator	1.7	32.8
Robber-assaulter	0	8.5
Robber-dealer	0	7.2
Low-level robber	18.3	2.6
Mere assaulter	15.0	0
Burglar dealer	1.7	20.4
Low-level burglar	30.0	12.3
Property offender-dealer	5.0	5.1
Low-level property offender	13.3	7.7
Dealer	15.0	3.4

Source: Calculation from RIS data. (All respondents whose data were included in our study could be classified into one of the ten varieties of criminal behavior.)

* For definition of categories, see Appendix 1.

Table 5
 Comparison of Crimes Committed as Juvenile by
 Low-Rate Losers and High-Rate Losers

Characteristic	Percent Low-Rate Losers	Percent High-Rate Losers
Committed no crimes as juvenile	54	11
Committed only property crimes as juvenile	36	53
Committed violent crimes before age 16	10	35

Chi-square = 53.8 Sig. < .001

Source: Calculated from RIS self-reports.

Table 6
Comparison of Socioeconomic Characteristics of
Low-Rate Losers and High-Rate Losers

Characteristic	Low-Rate Losers	High-Rate Losers	T	Sig.
Mean age in primary reference period	25.8	24.7	.99	NS
Race (% black)	72	40	4.80	<.001
Marital Status (% never married)	57	56	.48	NS
Unemployed in all months of reference period	20	38	-2.93	.004
Average number of months employed at each job	4.9	2.5	3.69	<.001
Education (% completed high school)	28	49	-3.13	.002
State (% in each)				
California	20	48	-4.50	<.001
Michigan	22	28	-1.05	NS
Texas	58	24	4.87	<.001

Source: RIS self-reports (except separation into California, Michigan, and Texas not from self-reports).

Table 7
 Comparison of Drug Use and Alcohol Abuse of
 Low-Rate Losers and High-Rate Losers

Form of Drug Abuse	Low-Rate Losers Percent	High-Rate Losers Percent	T	Sig.
During primary reference period, drank heavily, got drunk often, or had a drinking problem	10	30	-4.10	<.001
During primary reference period used drugs other than prescribed or marijuana	30	75	-6.73	<.001
During primary reference period used:				
Heroin	17	53	-6.25	<.001
Barbiturates	7	44	-8.19	<.001
Amphetamines	10	37	-5.94	<.001
During primary reference period used heroin every day or almost every day	8	34	-5.33	<.001
Before age 18, used illicit drugs (including marijuana)	53	80	-3.74	<.001
Before age 18, used illicit drugs other than marijuana	22	65	-6.93	<.001
Before age 18, used heroin	7	35	-6.36	<.001
Important reason for doing crime in reference period: to get money for drugs	15	55	-6.87	<.001

Source: RIS self-reports

Table 8
Comparison of Past Criminal Justice System Involvement of
Low-Rate Losers and High-Rate Losers

Characteristic	Low-Rate Losers	High-Rate Losers	T	Sig.
Average number of past convictions for:				
Assault	.32	.30	.17	NS
Burglary	.60	.94	-2.43	.02
Drugs	.27	.14	1.38	NS
Homicide	0	.01	-1.42	NS
Rape	.05	.01	1.59	NS
Robbery	.18	.36	-1.59	.04
Kidnap	0	.01	-1.00	NS
 *Average age at first arrest	 18	 16	 4.50	 <.001
 *Average age at first conviction	 20	 17	 3.01	 .004
Average number of arrests in reference period for:				
Robbery	.27	.74	-4.12	<.001
Homicide	.03	.06	-.94	NS
Assault	.42	.40	.08	NS
Burglary	.87	1.13	-1.57	NS
Theft	.23	.48	-2.72	.007
Forgery	.12	.26	-1.58	NS
Fraud	0	.02	-2.01	.05
Drugs	.32	.27	.42	NS
Auto Theft	.44	.29	-2.04	.04
 *Percent incarcerated in primary reference period	 53	 73	 -2.69	 .009
 *Average number of months incarcerated in earlier two year reference period	 4.0	 9	 -4.11	 <.001

Continues

Table 8
Continued

Comparison of Past Criminal Justice System Involvement of
Low-Rate Losers and High-Rate Losers

Characteristic	Low-Rate Losers	High-Rate Losers	T	Sig.
Average number of months incarcerated in earliest reference period	4.6	6.8	-1.84	.07
Percent with official record of prior parole or probation revocations	57	62	-.76	NS
Official record of prior prison terms (average number)	.73	.71	.11	NS
*Average number of juvenile incarcerations, (state or federal)	.35	.86	-3.30	.001
Official record of juvenile commitments (local, state or federal)	.43	.58	-2.00	.05

Source: From RIS official record data, except items marked with asterisks(*) from self-reports.

Table 9
Comparison of Modus Operandi of
Low-Rate Losers and High-Rate Losers*

	Low-Rate Losers Percent	High-Rate Losers Percent	T	Sig.
Worked out a plan for the crime before went out to do it	12	57	-6.33	<.001
Found places or persons with a lot of money	12	57	-6.08	<.001
Learned about alarms, hours of money transfers	12	39	-3.59	.001
Decided to do the crime on the spot	36	26	.99	NS
Worked out an escape plan before doing the crime	12	50	-5.05	<.001
Got special equipment such as burglary tools	12	34	-2.25	.005
Worked with partners	16	34	-2.26	.03
Lined up a fence or buyer before the crime	8	44	-5.45	<.001
Used tips to line up places	4	21	-3.39	.001
Only cased a place or person just before the crime	24	34	-1.02	NS
Stole a car or gun that could not be traced	4	25	-4.26	<.001
Followed a person to a safe place to do the crime	8	19	-1.08	NS

* Applies to only respondents who reported committing burglary (break-in), robbery, theft, car theft, forgery, fraud or swindle during the reference period. Low-rate losers N=26; High-rate losers N=209.

Source: RIS self reports

Table 10
 Discriminating Between Low-Rate Losers and High-Rate Losers:
 Standard Criminal Justice System Record Variables

Discriminant Variables	Coefficient*	Sig.**
Prior convictions for:		
Burglary	+.42	.0004
Drug charges	-.28	.0001
Murder	+.23	.0001
Rape	-.56	.0053
Number of charges in reference period for:		
Robbery	.39	.0010
Theft	.35	.0002
Forgery	.19	.0001
Auto Theft	.32	.0001
Record of juvenile commitment	.35	.0001

* Minus(-) indicates positive association with low rate losers; plus(+) with high-rate losers.

** Significance of coefficient estimated from Wilk's Lambda

Source: Multivariate stepwise discriminant analysis of RIS official record data

Table 11
Discriminating Between Low-Rate and High-Rate Losers:
Percent Respondents Correctly Classified Using Different
Types of Variables to Discriminate*

Type of Variable	Percent Low-Rate Losers Correctly Identified	Percent High-Rate Losers Correctly Identified
Standard criminal justice system record items	13.3	99.6
Standard criminal justice items + Modus operandi + Duration of past incarcerations + Details of juvenile commitment	28.1	97.0
Standard criminal justice system variables + Modus operandi + Duration of past incarcerations + Details of juvenile commitment + Drug use in primary reference period	60	94

Continues

Table 11
Continued
Discriminating Between Low-Rate and High-Rate Losers:
Percent Respondents Correctly Classified Using Different
Types of Variables to Discriminate*

Type of Variable	Percent Low-Rate Losers Correctly Identified	Percent High-Rate Losers Correctly Identified
Standard criminal justice variables + Modus operandi + Duration of past incarceration + Drug use in reference period + Socioeconomic characteristics	68.3	95.7

*For specific variables included in each general type of variable see Tables 6 to 10.

Source: Multivariate Stepwise Discriminant Analysis of RIS data

Table 12
 Discriminating Between Low-Rate Losers and High-Rate Losers:
 Standard Criminal Justice Record Variables and
 Non-standard Criminal Justice Record Variables

Discriminant Variables	Coefficient**	Sig.***
Prior convictions for:		
Burglary	.16	<.0001
Drug charges	-.28	<.0001
Homicide	.19	<.0001
Rape	-.35	<.0001
Number of charges in reference period for:		
Robbery	.25	<.0001
Assault	-.15	<.0001
Theft	.24	<.0001
Fraud	.18	<.0001
Drug deals	.22	<.0001
Auto theft	.27	<.0001
*Age at first conviction	-.20	<.0001
*Duration of incarceration in earlier reference period	.40	<.0001
*Lined up a fence or client before committing crime	.43	<.0001
*Worked with partners	.31	<.0001
*Stole a car or gun that could not be traced [for crime]	.18	<.0001

Source: Multivariate stepwise discriminant analysis of RIS official record data, except items marked with asterisks(*) from self-report.

** Minus(-) indicates positive association with low rate losers; plus(+) with high-rate losers.

*** From Wilk's Lambda

Table 13
Discriminating Between Low-Rate Losers and High-Rate Losers:
Standard and Non-standard Criminal Justice System
Record Variables and Drug Use Variables

Discriminant Variables	Coefficient**	Sig.***
°Prior convictions for:		
Burglary	.12	<.0001
Drug charges	.12	<.0001
Homicide	.13	<.0001
Rape	-.32	<.0001
°Number of charges in reference period for:		
Robbery	.20	<.0001
Assault	-.13	<.0001
Theft	.22	<.0001
Fraud	.15	<.0001
Auto theft	.21	<.0001
Duration of incarceration in earlier reference period	.32	<.0001
Number of juvenile incarcerations in state or federal facility	.13	<.0001
Lined up a fence or client before committing crime	.33	<.0001
Worked with partners	.20	<.0001
Stole a car or gun that could not be traced [for crime]	.15	<.0001
During reference period:		
Drank heavily, got drunk often or had a drinking problem	.20	<.0001
Used illicit drugs other than marijuana	.25	<.0001
Used heroin	.14	<.0001
Used barbiturates	.25	<.0001

Source: Multivariate Stepwise Discriminant Analysis of RIS self-report data, except items marked with (°) from official record.

** Minus(-) indicates positive association with low rate losers; plus(+) with high-rate losers.

*** Wilk's Lambda

Table 14
 Discriminating Between Low-Rate Losers and High-Rate Losers:
 Standard and Non-standard Criminal Justice System
 Record Variables, Drug Use Variables and
 Socioeconomic Characteristics

Discriminant Variables	Coefficient**	Sig.***
°Prior convictions for:		
Drug charges	-.19	<.0001
Rape	-.25	<.0001
°Number of charges in reference period for:		
Robbery	.18	<.0001
Assault	-.14	<.0001
Theft	.21	<.0001
Fraud	.15	<.0001
Auto theft	.13	<.0001
Duration of incarceration in earlier reference period	.30	<.0001
Lined up a fence or client before committing crime	.36	<.0001
Stole a car or gun that could not be traced [for crime]	.13	<.0001
During reference period:		
Drank heavily, got drunk often or had a drinking problem	.20	<.0001
Used illicit drugs other than marijuana	.17	<.0001
Used heroin	.17	<.0001
Used barbiturates	.15	<.0001

Continues

Table 14
Continued
Discriminating Between Low Rate Losers and High Rate Losers:
Standard and Non-standard Criminal Justice System
Record Variables, Drug Use Variables and
Socioeconomic Characteristics

Discriminant Variables	Coefficient**	Sig.***
Age during reference period	-.34	<.0001
Completed high school	.24	<.0001
Never married	-.15	<.0001
Black	-.25	<.0001
Average number of months worked at each job during reference period	-.24	<.0001
Did not work during reference period	.26	<.0001

Source: Multivariate Stepwise Discriminant Analysis of RIS self-report data, except items marked with (°), from official records.

** Minus(-) indicates positive association with low rate losers; plus(+) with high-rate losers.

*** From Wilk's Lambda

Table 15
Variables That Did NOT Discriminate
Between Low-Rate Losers and High-Rate Losers
[Multivariate Stepwise Discriminant Analysis]

Prior convictions for:

Assault*

Robbery*

Kidnapping

Number of charges in reference period for:

Murder**

Burglary**

Drug deals**

Number of prior prison incarcerations as adult on official record

Number of parole or probation revocations on official record

Whether or not incarcerated during primary reference period***

Amphetamine use during reference period****

Geographic mobility (number of cities in which respondent lived during reference period)

* The stronger variables were arrests during the primary reference for these crimes.

** The stronger variables were prior convictions.

*** The stronger variables were incarcerations in earlier reference periods.

**** The stronger variables were general drug use and barbiturate use.

Table 16
Comparison of the Varieties of Criminal Behavior
Reported by High-Rate Winners and High-Rate Losers

Variety of Criminal Behavior	Percent of High-Rate Winners (N=66)	Percent of High-Rate Losers (N=235)
Violent predator	25.8	32.8
Robber-assaulter	9.1	8.5
Robber-dealer	12.1	7.2
Low-level robber	10.6	2.6
Mere assaulter	0	0
Burglar dealer	16.7	20.4
Low-level burglar	7.6	12.3
Property offender-dealer	6.1	5.1
Low-level property offender	7.6	7.7
Dealer	4.5	3.4

Source: Calculated from RIS data

Table 17
Comparison of Crimes Committed as Juvenile by
High-Rate Winners and High-Rate Losers

	High-Rate Winners	High-Rate Losers
Committed no crimes as juvenile	13	11
Committed only property crimes as juvenile	48	54
Committed violent crimes before age 16	39	35

Chi-square = .69 df = 2 (not significant)

Source: RIS self-reports.

Table 18
Comparison of Past Criminal Justice System Involvement of
High-Rate Winners and High-Rate Losers

	High-Rate Winners	High-Rate Losers	T	Sig.
Average number of past convictions for:				
Assault	.16	.30	-1.99	.05
Burglary	.20	.94	-6.51	<.001
Drugs	.06	.14	-1.66	NS
Homicide	.03	.01	.69	NS
Rape	.03	.01	1.19	NS
Robbery	.35	.36	-.14	NS
Kidnap	0	.01	-1.00	NS
*Average age at first arrest				
	17	16	1.41	NS
*Average age at first conviction				
	17	17	.69	NS
Average number of arrests in reference period for:				
Robbery	.61	.74	-.75	NS
Homicide	.12	.06	1.35	NS
Assault	.22	.40	-2.19	.03
Burglary	.44	1.13	-2.86	.005
Theft	.10	.48	-5.52	<.001
Forgery	.03	.26	-2.98	.003
Fraud	.02	.02	-.15	NS
Drugs	.06	.27	-3.22	.001
Auto Theft	.03	.29	-5.77	<.001
*Percent incarcerated in primary reference period				
	19	73	9.63	<.001
*Average number of months incarcerated in earlier two-year reference period				
	4	9	-4.48	<.001

Continues

Table 18
Continued
Comparison of Past Criminal Justice System Involvement of
High-Rate Winners and High-Rate Losers

	High-Rate Winners	High-Rate Losers	T	Sig.
*Average number of months incarcerated in earliest reference period	3.1	6.8	-4.09	<.001
Percent with official record of prior parole or probation revocations	33	62	-4.40	<.001
Percent with official record of prior prison terms (average number)	36	71	-3.21	.04
*Percent who had juvenile, state or federal incarcerations (self report)	36	86	-3.62	<.001
Percent who had juvenile commitments (local, state or federal)	41	58	-2.53	.01

Source: From RIS officials record data, except items marked with asterisks(*) from self-reports.

Table 19
Comparison of Socioeconomic Characteristics of
High-Rate Winners and High-Rate Losers

Characteristic	High-Rate Winners	High-Rate Losers	T	Sig.
Mean age in primary reference period	22.7	24.7	-2.63	.01
Race (% black)	59	40	2.94	.004
Marital Status (% never married)	67	56	2.05	.04
Unemployed in all months of reference period	30	38	-1.16	NS
Average number of months employed at each job	6.1	2.5	4.04	<.001
Education (% completed high school)	44	49	-.76	NS
°State (% in each)				
California	17	48	-5.37	<.001
Michigan	49	28	3.15	.002
Texas	33	24	1.43	NS

Source: RIS self-reports except items marked (°)

Table 20
Comparison of Drug Use and Alcohol Abuse of
High-Rate Winners and High-Rate Losers

Form of Drug Abuse	High-Rate Winners Percent	High-Rate Losers Percent	T	Sig.
During primary reference period, drank heavily, got drunk often, or had a drinking problem	25	30	-.93	NS
During primary reference period, used drugs other than prescribed or marijuana	64	75	-1.65	NS
During primary reference period used:				
Heroin	38	53	-2.31	.02
Barbiturates	36	44	-1.20	NS
Amphetamines	38	37	-0.35	NS
During primary reference period, used heroin every day or almost every day	25	34	-1.48	NS
Before age 18, used illicit drugs (including marijuana)	77	80	-0.48	NS
Before age 18, used illicit drugs other than marijuana	54	65	-1.62	NS
Before age 18, used heroin	22	35	-2.30	.02
Important reason for doing crime in reference period: to get money for drugs	50	55	-0.67	NS

Source: RIS self-reports

Table 21
 Comparison of Modus Operandi of
 High-Rate Winners and High-Rate Losers*

	High-Rate Winners Percent	High-Rate Losers Percent	T	Sig.
Worked out a plan for the crime before went out to do it	67	57	1.29	NS
Found places or persons with a lot of money	61	57	.54	NS
Learned about alarms, hours of money transfers	40	39	.22	NS
Decided to do the crime on the spot	23	26	-.48	NS
Worked out an escape plan before doing the crime	56	50	.85	NS
Got special equipment such as burglary tools	30	34	-.60	NS
Worked with partners	58	34	3.18	.002
Lined up a fence or buyer before the crime	44	44	.04	NS
Used tips to line up places	23	21	.36	NS
Only cased a place or person just before the crime	33	34	.02	NS
Stole a car or gun that could not be traced	28	25	.40	NS
Followed a person to a safe place to do the crime	35	19	2.30	.02

* Applies to only respondents who reported committing burglary (break-in), robbery, theft, car theft, forgery, fraud or swindle during the reference period. High-rate winners, N=57. High-rate losers, N=209.

Table 22
Discriminating Between High-Rate Winners and
High-Rate Losers*

Discriminant Variables [in order of stepwise entry]	Standardized** Coefficient	Sig.***
Average number of months worked at each job during reference period.	+.68	<.0001
Record of probation or parole revocations	-.31	<.0001
Black	+.24	<.0001
Number of prior convictions for burglary	-.30	<.0001
Worked with partners	+.24	<.0001
Number months incarcerated in earlier reference period	-.15	<.0001
Unemployed all reference period	+.22	<.0001
Number of past conviction for rape	+.22	<.0001
Commitments as juvenile	-.21	<.0001
Never married	+.19	<.0001
Used barbituates in reference period	-.15	<.0001

Source: Multivariate Stepwise Discriminant Analysis of RIS data.

* 38 percent high-rate winners correctly identified; 91 percent high-rate losers correctly identified.

** Minus(-) denotes positive association with losers; Plus(+) denotes positive association with winners.

*** From Wilk's Lambda

Table 23
Comparison of Characteristics of
Rand Study Sample and BJS Study Sample

Characteristic	Rand Study Sample (N=1150)	BJS Study Sample (N=1179)
Average age at beginning of current incarceration	25.6	25
Percent Black	50.0	43
Percent completed high school	39	30
Percent never married	51	53
Percent ever incarcerated in prison before current conviction	35	35
Percent ever incarcerated in juvenile, state or federal facility	23	25
Addicted to heroin in primary reference period	18	6
Free at least one year before last arrest	54	83

Table 24
 Variables Used to Calculate
 The Probability of Being a High-Rate Offender

Variable	Coefficient
Number of times sentenced to serve time for burglary	.12
Number of months incarcerated in 1975-1976	.03
Completed high school?	.04
Used illicit drugs the month before the current offense?	.78
Used barbituates the month before the current offense?	.54
Used heroin the month before the current offense?	.66
Scale of juvenile drug use:	.26
No regular drug use	
Used just marijuana regularly	
Used other illicit drugs regularly, but not heroin	
Used heroin regularly	
Age at time of last incarceration	-.05
Constant	-.89

Source: Maximum-likelihood estimate of coefficients in logistic regression using a random half of RIS data. Variables are worded to correspond to the BJS survey.

Note: A logistic function of variables x_1, \dots, x_8 has the form $1/(1+\exp(-b_0 - b_1x_1 - \dots - b_8x_8))$, where b_0 is the constant term and b_1, \dots, b_8 are the other coefficients.

Table 25
 Crime Rate - Arrest Rate Groups and Their
 Postdicted Probability of Being High-Rate Offenders

Type of Group	Percent Postdicted to have Probability under .666	Percent Postdicted to have Probability .666 or more
Residual [N=333]	97	3
Low-rate Losers [N=37]	100	0
High-rate Winners [N=93]	83	17
High-rate Losers [N=116]	70	30

Source: Logistic model in Table 24 was applied to one-half the RIS sample not used to calibrate the model.

Table 26
 Probability of Being a High-Rate Offender:
 Drug Use Variables with Strongest Zero-Order Correlation
 Controlling for Definitional Variables*

Variable	Coefficient	Definitional Variable	Coefficient After Control
Age first used amphetamines (not prescribed)	-.60	Four drug use variables**	-.52
Age first used methadone (not prescribed)	-.55	"	-.66
Used marijuana month before offense	.54	"	.03[NS]
Age first used marijuana	-.52	"	-.42
Age first used heroin	-.45	"	-.47
Age first used barbiturates	-.45	"	-.55
Age first time used cocaine	-.45	"	-.89
Used marijuana on a regular basis	.42	"	.08(sig.=.004)

* Variables used in the calculation of probability, shown in Table 24.

** The following four drug variables were used to calculate the probability of being a high-rate offender: drug use the month before the current offense; used heroin the month before the current offense; used barbiturates the month before the current offense; scale of juvenile drug use.

Continues

Table 26
Continued
Probability of Being a High-Rate Offender:
Drug Use Variables with Strongest Zero-Order Correlation
Controlling for Definitional Variables*

Variable	Coefficient	Definitional Variable	Coefficient After Control
Age first time used LSD	-.39	Four drug use variables	-.42
Age first time used PCP	-.39	"	-.19(sig.=.03)
Age first used other drugs	-.38	"	-.44
Used LSD on a regular basis	.27	"	.11(sig.=.03)
Used cocaine on a regular basis	.18	"	.01 NS
Used PCP on a regular basis	.18	"	.16
Used amphetamines on a regular basis	.16	"	.01[NS]

Note: All coefficients shown are significantly different from zero ($P < .0005$), unless noted otherwise.

Source: From BJS study sample

Table 27
 Probability of Being a High-Rate Offender:
 Nondefinitional Variables* Other than Drug Use
 With Strongest Zero-Order Correlations

Variable	Coefficient	Control Variable	Coefficient After Control
Age first time on probation	-.41		
By the time generally stopped drinking liquor; state of sobriety	-.29		
Year before arrested supported by money from illegal sources	.26		
Number of times on probation as a juvenile	.25		
Number of times sentenced to jail, prison or other correctional facility as a juvenile for crimes other than drunkenness, vagrancy or traffic offenses	.25		

*. Variables NOT used in the calculation of probability and variables not definitionally related to variables used in the calculation of probability.

Continues

Table 27
Continued
Probability of Being a High-Rate Offender:
Nondefinitional Variables* Other than Drug Use
With Strongest Zero-Order Correlations

Variable	Coefficient	Control Variable	Coefficient After Control
Unincarcerated for at least a year prior to last arrest	-.23	Number of months incarcerated in 1975-1976	-.19
Never married	.23	Age	[.02]NS
Number of incarcerations in juvenile, state or federal facility	.21**		
Number of children	-.21	Age	[-.03]NS
By the time generally stopped drinking beer; state of sobriety	-.21		
By the time generally stopped drinking wine; state of sobriety	-.18		
Anyone in immediate family ever served time in a jail or prison	.16		
Father served time in a jail or prison	.16		

**Correlation probably attenuated by large number of missing values due to change in data collection procedures during the BJS survey.

Continues

Table 27
Continued
Probability of Being a High-Rate Offender:
Nondefinitional Variables* Other than Drug Use
With Strongest Zero-Order Correlations

Variable	Coefficient	Control Variable	Coefficient After Control
Number of brothers who served time in a jail or prison	.16		
Father's educational level	.16	Respondent's educational level.	.17
Frequency of wine consumption	.15		
Mother was employed outside home	.14	Age of respondent.	[.03]NS
Mother's educational level	.14	Respondent's educational level.	.14
Year before arrested supported by social security	.14	Age of respondent.	[-.02]NS
Ever on Probation	.14		
Any siblings who ever served time in a jail or prison	.14		
On conditional release when last incarcerated	.14	Number of months incarcerated in 1975-1976.	.14
Never served in U.S. armed forces	.13	Age of respondent.	[.01]NS

Continues

Table 27
Continued
Probability of Being a High-Rate Offender:
Nondefinitional Variables* Other than Drug Use
With Strongest Zero-Order Correlations

Variable	Coefficient	Control Variable	Coefficient After Control
Number of sisters ever served time in jail or prison	.11		
Frequency of beer consumption	.11		
Frequency of liquor consumption	.11		
% of life incarcerated	.10	Age of respondent.	.24
Amount of time incarcerated in 1973-1974	.10	Amount of time incarcerated in 1975-1976	NS
On parole at time of last conviction	.10		

Note: All coefficients shown are significantly different from zero ($p < .0005$), unless noted otherwise.

Source: From BJS study sample

Table 28
Probability of Being a High-Rate Offender:
Nondefinitional Variables Having Moderately Strong Correlation

	Correlation Coefficient
Income from wages year before arrest	-.10
Number of dependents	-.10
Number prior incarcerations for robbery	.09

Note: All coefficients shown are significantly different from zero with $p < .002$, but $p \geq .0005$.

Table 29
Probability of Being a High-Rate Offender:
Nondefinitional Variables with Relatively Weak Correlation

Variable	Correlation Coefficient
If served in armed forces, less than honorable discharge	.16
When growing up, lived with both mother and father	-.08
Support from family or friends year before arrest	.08
Number of times on probation as adult	-.08
Number of past incarcerations for drug offenses	.07
Unemployed for past six years	.06
Oldest child in family	-.06
Escapee at time of last conviction	.06
Number of prior incarcerations for assault	.06
When growing up, lived with mother (not father)	.06
On probation at time of last conviction	.05
Number of prior prison incarcerations	.03
Among those not on conditional release, seriousness of first conviction charge	.02

Note: These correlation coefficients are significantly different from zero with $p < .05$, not as strong correlations as in the previous tables.

Source: From BJS study sample.

Table 30
Probability of Being a High-Rate Offender:
Variables With NO Significant Relationship

Race

Ethnicity

Unemployed at time of last arrest

Support year before last arrest from welfare

Support year before last arrest from unemployment

Among those with children, provision of child support

Number of siblings

Mother's age when respondent was born

Having a child who served time in prison or jail

When growing up, in household with adults other than both parents, or mother [i.e. just father, grandparents, friends, foster home, or agency]

Among those on conditional release when last arrested, seriousness of new charge

Among those not on conditional release, seriousness of secondary charges

Number of past convictions for homicide

Number of times incarcerated as a juvenile for drunkenness, vagrancy or traffic violations

Number of times incarcerated as an adult for drunkenness, vagrancy or traffic violations

Number of times incarcerated as an adult for crimes other than drunkenness, vagrancy or traffic violations

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