



National Institute of Justice

Research in Brief

Jeremy Travis, Director

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Issues and Findings

Discussed in this Brief: This study sought to determine the degree to which judicial sentencing decisions affect subsequent criminal careers. It examined the criminal careers of 962 felony offenders in Essex County, New Jersey, sentenced in 1976 and 1977 variously to confinement and noncustodial programs. The 18 participating judges exercised considerable discretion in making sentencing decisions. The data collected included judicial perceptions, the judges' predictions of the offenders' future criminal behavior, the judges' sentencing purposes, offender backgrounds, execution of sentences, and offenders' arrests and charges during the 20 years after sentencing. Also measured were the judges' selection of different sanctions, the validity of subjective and objective predictions of future criminal behavior (risks), and the offenders' time in the community (free of the incapacitating effects of jail or prison).

Key issues: Rigorous tests of sentencing policy changes are rare because serious obstacles impede assessments of the crime control effects of such policies. The results of controlled experiments involving different punishments of equivalent groups of offenders cannot be compared because such studies, rarely believed to be feasible, are not done.

Other obstacles to sentencing research include: judges' reluctance to provide detailed records of their reasons for choosing particular sentences; fixed or mandatory sentencing laws that limit sentencing alternatives available to judges; and the demands of careful, long-term followup analysis of sentencing effects on offenders' subsequent criminal careers.

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Effects of Judges' Sentencing Decisions on Criminal Careers

By Don M. Gottfredson

Despite the absence of adequate data on the effects of incarceration and other sanctions on convicted offenders' subsequent recidivism, sentencing trends over the past two decades have moved toward increased determinacy, greater use of mandatory sentences with longer terms, and reduced judicial discretion. A better understanding of how different felony sanctions impact the future behavior of offenders is needed to provide a basis for evaluating the efficacy of current sentencing policies.

To this end, the National Institute of Justice sponsored research that examined the crime control effects of sentences, over a 20-year period, on 962 felony offenders sentenced in 1976 or 1977 in Essex County, New Jersey. This Research in Brief summarizes findings of the study.

Research issues

Three main factors bias comparisons of outcomes for differently punished groups of offenders: selection of sentence, risk of reoffense, and time in confinement. Fair comparisons of sentencing choices must take these sources of variation in outcomes into account:

- Selection—groups given different sentences are not equivalent because judges make their sentencing deci-

sions based on case and offender characteristics.

- Risk—differently sentenced groups may represent different risks of future offending at the time their sentences are imposed (usually called the a priori risk).
- Incapacitation—offenders are confined for differing periods of time as a result of the sentence imposed on them for the current offense and crimes they commit later.

These factors must be considered when assessing the effects of punishment, treatment, specific deterrence, and incapacitation. The results of controlled studies of different punishments cannot be compared because experiments with different sentences for equivalent groups of offenders—for example, by random assignment of sentences—rarely are believed to be feasible and are not often done.

Assessment of sentencing policies ordinarily is hindered by several problems that cast doubt on the relevance of findings about sentencing choices:

- The most rigorous research methods, in which offenders would be randomly assigned to various sentencing alternatives, usually are precluded.
- Judges rarely are willing to record in detail their views on the seriousness

Issues and Findings

continued...

This study included careful statistical controls for biasing factors (judicial selection of sentences, offender risk of reoffense, time in confinement, and time in the community), detailed recording by judges, availability of broad sentencing discretion, and study of offenders' criminal careers over the 20 years after sentencing.

Key findings: The judges' subjective risk assessments of offenders' likelihood of recidivism, although only modestly valid, had a substantial influence on their sentencing choices. More formal, empirically derived methods provide better measures of the risk of reoffending.

Available sentencing choices had little effect—other than that of incapacitation—on recidivism as measured by new arrests and charges:

- Whether the offender was confined or given noncustodial sanctions made no difference.
- Where the offender was confined (i.e., in jail, a youth facility, or prison) made little difference.
- The length of the offender's maximum imposed sentence made no difference.
- The length of time the offender actually was confined made little difference.
- A "split" sentence of jail and probation made no difference.
- Fines or restitution made no difference.

Some important lessons for current policy are clear from this study; it offers little support, aside from incapacitation, for increased use of confinement, emphasis on longer terms, or more acceptance of specific deterrence as a crime control strategy.

Target audience: Judges, legislators, prosecutors, defense attorneys, sentencing guidelines commissions, corrections administrators, researchers, and others concerned with sentencing policy.

of the offense or the offender's prior record, their assessment of the risk that the offender will commit future crimes, their ratings of other case characteristics, or their specific reasons for selecting the sentences they impose.

- As changes in sentencing policy have taken place over the past two decades, judicial discretion often has been reduced by greater determinacy in sentencing structures or stricter mandatory sentencing laws or guidelines. As a result, judges have not had as much choice in imposing sentences as they did previously.
- Perhaps most important, researchers must carefully trace the offenders' records through any periods of confinement resulting from the sentence (and from later crimes) to determine the sentence as actually executed and then observe new arrests, convictions, and sentences after their release into the community. Sufficient time must elapse after sentencing to enable most offenders to complete any terms of confinement and then to experience enough time free in the community to permit a fair assessment of the effects of the sentences on their criminal careers.

These problems were mitigated in this study by using careful statistical controls for biasing factors, detailed recording by the judges, the availability of broad sentencing discretion, and the detailed study of offenders' criminal careers during the 20 years after they were sentenced.¹

Study methods

Beginning in May 1976, 18 judges in the Essex County, New Jersey, Court recorded their judgments when sentencing 962 felony offenders to confinement and non-custodial programs. They continued to code the cases they sentenced during the next year. Under New Jersey's then indeterminate sentencing law, the judges

were allowed much discretion in their decisionmaking. Besides documenting the sentences they imposed, the judges recorded their perceptions of the seriousness of the crime and the offender's past criminal record and their assessment of the likelihood that the offender would commit future crimes.

The central issue of this study was the effects of different sanctions on the offenders' subsequent criminal careers. Secondary issues concerned the measurement of judicial selection of different sanctions, the validity of subjective and objective predictions of risks for reoffending, and the amount of time the offenders were in the community free of the incapacitating effects of jail or prison. The effects of sentences on later arrests and charges were assessed through statistical or "quasi-experimental" methods that adjusted for the nonequivalence of differently sentenced groups.

Data on the imposition and actual execution of sentences and postconviction arrests, charges, sentences, and confinements over the next 20 years were examined. The followup data collection ended in February 1997. It relied on the New Jersey Department of Corrections Offender-Based Correctional Information System and record files, the U.S. Department of Justice Interstate Identification Index, the National Crime Information Center Wanted Persons File, and the New Jersey PROMIS/GAVEL Prosecutors Case Tracking System. Staff familiar with each of these systems coded the data. No records after sentencing could be found for 37 persons (4 percent) who were counted as having no known subsequent arrests.²

Measures of sentence selection and the offender's a priori risk (risk as estimated from data available at the time of sentencing) were developed using multivariate statistical methods. Time variables were calculated from recorded dates. Differences in later arrests and charges (at 5 years and 20 years after sentencing) associated with

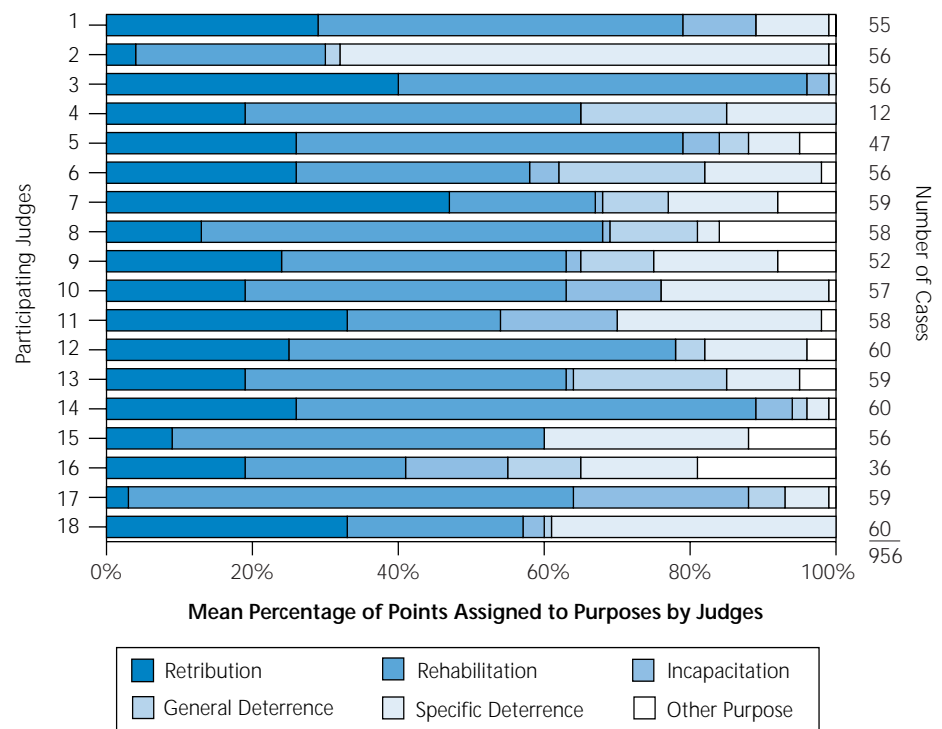
different sentences were analyzed with statistical controls for measures of the biasing factors.³ The variability in new arrests and charges was analyzed to assess sentence effects, and survival without arrest over time was examined for differently sentenced groups.

Crimes, demographics, results

The offenders had been convicted of crimes typically considered to be felonies. These crimes were classified by legal definitions and groupings based on a multidimensional approach to scaling offense seriousness.⁴ By legal offense classifications, 37 percent were convicted of violent crimes, 24 percent of drug offenses, 23 percent of property crimes, 10 percent of weapons offenses, and 6 percent of other crimes. By the behavioral classification based on judgments of seriousness, one in six was convicted of an offense involving interpersonal confrontation or physical violence, although property crimes were most common. Fifteen percent were serious drug offenders whose crimes included the sale of drugs other than marijuana.

On other measures, the study sample was fairly typical of sentenced offender populations. The average age was 29. Most were black males; one-fourth were white; one-eighth were women. About half had served prior jail terms; 16 percent had been in prison; and 80 percent had prior placements on probation. On average, they were first arrested at age 22, had 2.4 prior arrests and convictions, and were currently charged with two counts and convicted of one. One in 10 was reported to have used heroin or barbiturates as a juvenile, and 29 percent had a recorded use of these drugs in the 2 years prior to their arrest. One-third had histories of drug offenses; nearly half had a record of property offenses; and one-third had a history

Exhibit 1. Average percentage of points assigned by each judge to each purpose of incarceration*



* Data were missing for 6 cases. Points assigned by judge 7 were prorated to total 100. (Ratings did not always total 100.)

of violent crimes. One in 10 had been committed to a juvenile facility.

Research results described the sentences as imposed (announced) and as executed (carried out), the sentencing purposes of the judges, and later arrests and charges. Next, the validity of the judges' predictions and the measures of a priori risk and sentence selection needed for the analyses of effects were considered, as described below.

Sentences

Most offenders were sentenced to incarceration with terms ranging from 1 month to life (typically 6, 12, or 18 months in jail or 5, 7, or 10 years in prison). Sentences were suspended in whole or in part for many offenders, who then usually were placed on pro-

bation. The main choices, in terms of executed sentences, were a noncustodial sentence (42 percent), jail (29 percent), prison (19 percent), or a youth facility (10 percent). About 10 percent received "split" sentences of probation with jail. Others received special conditions, including fines and restitution.

Sentencing purposes. Judges most often reported a crime control aim as the main reason they imposed the sentences they did. Rehabilitation and specific deterrence were prominent considerations. Other sentencing goals included incapacitation and general deterrence. Retribution was the primary purpose in about one in five cases. Judges typically had more than one purpose. The distribution of ratings is shown in exhibit 1. The

cases were assigned sequentially according to the availability of the judge, and all judges participated. It cannot be assumed that the judges received entirely equivalent cases.

Offenses after sentencing

Thirty percent of the offenders were not arrested in the 20 years after sentencing. More than half of all, however, were rearrested in the first 5 years after they were sentenced. The 962 offenders were arrested 5.3 times on average in the 20 years after sentencing. The arrest rate for all offenders participating in the study, not including the time spent incarcerated, was 0.28 arrests per year. The rate for offenders who were rearrested at least once was 0.36. For those rearrested, the average time to a new arrest was 3.5 years; half of those with new arrests were rearrested within 2.2 years.

Charges classified by legal offense groups. In terms of the legal offense classifications, in the 20 years after their initial sentencing, the offenders were charged with 40 criminal homicides (murders or manslaughters), 455 robberies, 752 assaults, 928 burglaries, 18 rapes, 507 weapons offenses, 682 receiving stolen property offenses, and 16 kidnappings—to list some charges out of 9,346 allegations of new crimes. The median number of charges was 5, while the mean was 9.7.

Charges classified by behavioral offense groups. The offenders in this sample were arrested 5,117 times during the 20 years after sentencing. Most often, by far, they were charged with property crimes or nuisance offenses, but they also were charged with a substantial number of serious personal confrontation crimes and drug offenses.⁵ The charges at the first arrest after sentencing, classified into kinds of offenses as used in this

study, are shown in exhibit 2. The numbers and percentages are those for the most serious charges among any made after the first arrest in the followup period. The total numbers of offenses charged during the followup period, grouped into these general classes, are shown in exhibit 3.

Judges' predictions

Judges' subjective predictions of whether the offenders would commit any new property, violent, or any type of crimes were valid but modestly so. Predictions of "any new arrest" accounted for about 6 percent of the differences in new arrests. The validity of some judges' predictions compared favorably with some empirically derived, formal prediction methods. Yet, the predictions of 4 of the 18 judges were invalid as to whether the offenders would commit any new property, violent, or any crimes; would be charged with new offenses; or would be rearrested. The predictions of seven judges as to whether the offenders would commit any new crimes had no validity.

The validity of the judges' predictions of property crimes was similar to that for any new offense. Predicting whether the offenders would commit crimes against other persons proved to be a more difficult problem because these crimes are relatively infrequent. The judges' predictions accounted for less than 2 percent of the differences in new arrests for offenses involving interpersonal confrontation. The predictions of violent crimes by 12 of the judges had no statistically significant relationship to new violent offense arrests or charges.

The judges who would be better predictors, of course, could not be identified beforehand. The judges' predictions appeared to be influenced

Exhibit 2. Charges at first arrest after sentencing, by behavioral offense

Type of Charge	Number of Persons	Percentage of Total
None	288	29.9
Nuisance	269	28.0
Fraud	35	3.6
Property	248	25.8
Serious drug	7	0.7
Personal confrontation	115	12.0
	962	100.0

Exhibit 3. Number of charges in the followup period, by behavioral offense

Type of Charge	Number of Charges	Percentage of Total
Nuisance	3,584	38.3
Fraud	376	4.0
Property	3,642	39.0
Serious drug	93	1.0
Personal confrontation	1,175	12.6
Other	476	5.1
	9,346	100.0

Exhibit 4. Factors considered by judges in making subjective predictions of risk of any new crime by an individual



mainly by their assessments of the seriousness of the offense, their judgments of the offender’s social stability, and the length of the offender’s arrest and conviction records. The factors that explain the judges’ risk predictions for any new crime are shown in exhibit 4.⁶ The validity of the judges’ predictions is illustrated in exhibit 5.⁷

Empirical measures of risk

Two more formal risk measures were developed for use in statistically controlling for the offenders’ a priori risk of new arrests. Each was based on information available at the time of sentencing. *Risk measure 1* was based on the whole sample. *Risk measure 2* was based on probationers only.⁸

Risk measure 1 included, as predictors, measures of age, the judges’ ratings of the offender’s arrest record, race, heroin or barbiturate use in the 2 years prior to arrest, alcohol abuse, and the type of

crime (property or serious drug offense). In combination, these and other factors shown in exhibit 6 accounted for 23 percent of the differences in new arrests (see exhibit 7). The same measure substantially correlated with other outcomes, such as the total number of arrests and charges.

Risk measure 2 included most of the measures in *risk measure 1*, plus such factors as the offender’s sex, number of prior probation sentences, and prior incarceration for probation or parole violations (see exhibit 8). The scores on this measure accounted for 31 percent of the variation in the any new arrest criterion (see exhibit 9).

Selection of sentences by judges

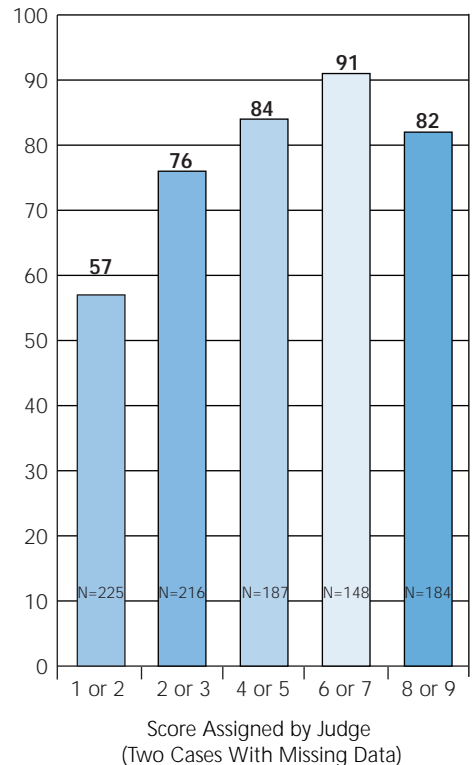
Measures were devised to control for judicial selection of sentences in the statistically designed studies of effects.⁹ These included the decision

about whether to order confinement (“in-out”), selection of the four main sentencing alternatives (noncustodial, jail, youth facility, or prison), selection of the three main custodial sanctions, and selection of “split” sentences.

Selection for any confinement (in-out). In deciding whether to order confinement, judges appeared to be influenced mainly by their assessment of rehabilitation as an important aim of sentencing in the particular case, the recommendation of the probation officer for confinement (unless the probation officer and the judge used the same information in arriving at the decision), their own prediction of whether the offender would commit future crimes, and the seriousness of the offense (see exhibit 10). These and other items enabled correct

Exhibit 5. Validity of judges’ predictions of any new crime

Percentage With New Arrests (20-Year Followup)



classifications (“predictions”) of confinement in 88 percent of the sample.

Selection of type of sanction.

Selection of a noncustodial sentence, jail, youth facility, or prison appeared to be influenced mainly by the judges’ predictions of whether the offender would commit any future crime, the perceived importance of rehabilitation for the offender, the seriousness of the charge, the offender’s criminal record, the number of counts in the conviction, and the recommendation of the probation officer. The sentence type also appeared to be influenced by the age of the offender and whether the felony was a property crime.

Selection of split sentences.

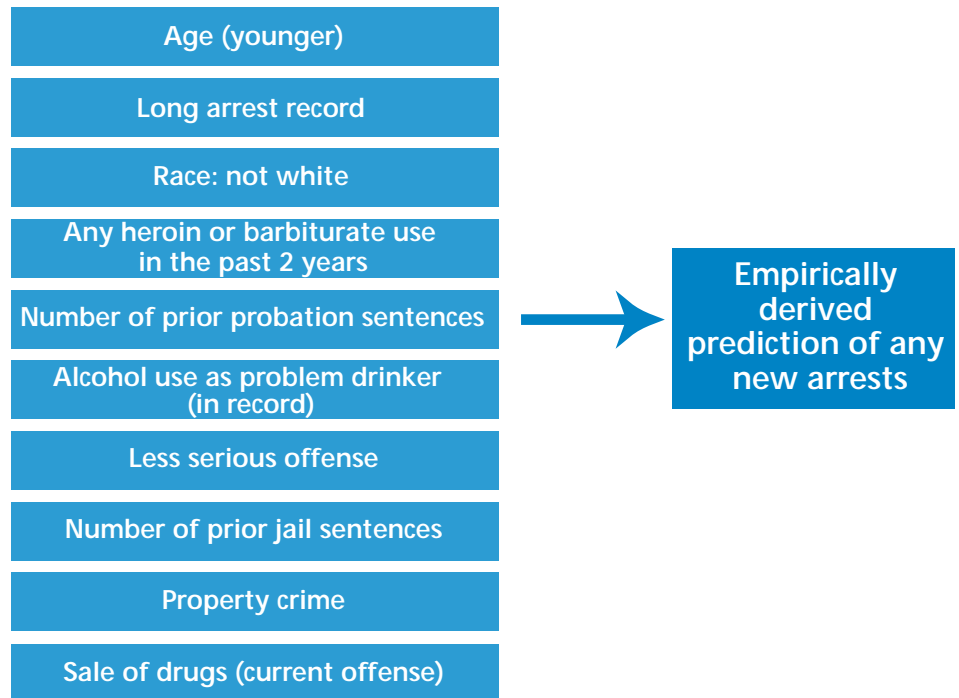
In ordering split sentences, the judges seemed to be influenced by their own predictions of whether the offender would commit future crimes, aggravating factors, and the relative importance of retributive and rehabilitative aims.

Effects of sentences

The effects of different sentences were studied using statistical designs that controlled for the measures of sentence selection, the a priori risk, how long the offender was confined as a result of the sentence, and how long the offender subsequently had an opportunity to reoffend in the community (20 years minus time served on the sentence and incapacitation time for later confinements).¹⁰ Typically, a naive interpretation of the observed outcomes without consideration of the effects of selection, risk, and incapacitation was compared with adjusted values taking into account the potentially biasing factors.

Effects of the in-out decision. Seventy percent of offenders who were not sentenced to confinement and 82 percent of those who were sentenced to

Exhibit 6. Factors in an empirically derived measure of risk of any new arrests (risk measure 1)



confinement were rearrested during the 20-year followup period. When adjustments were made for sentence selection, a priori risk, and the time spent in the community (not incapacitated), however, there was no statistically significant difference in the percentage of offenders with new arrests between the two groups during that period. Similarly, there was no difference due to the type of confinement when only the first 5 years after sentencing were considered (see exhibit 11). When selection, risk, and incapacitation were taken into account, confinement had no effect on the offenders’ arrest rates, the total number of arrests or charges, or charges for specific crime categories.

Effects of the type of sentence.

The type of sentence—noncustodial, jail, youth facility, or prison—had a

small but statistically significant effect on new arrests during the first 5 years after the offender was sentenced. After adjusting for selection, a priori risk, and incapacitation, those offenders sent to the youth facility had the highest adjusted percentage of new arrests.

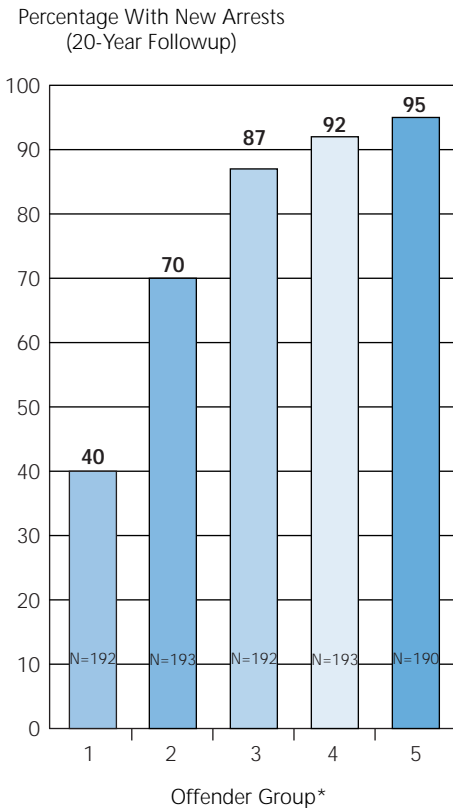
When persons given noncustodial sanctions were excluded from the analysis, a statistically significant effect of placement in a jail, youth facility, or prison was found in the 20-year followup. The adjusted values for jail and prison were the same, but those offenders sent to the youth facility had higher adjusted values for new arrests (see exhibit 12).

The choice among the four sentence alternatives had a small effect, mainly due to higher adjusted values for new arrests for those sent to a youth facility.

Age, selection, a priori risk, or incapacitation could not explain this effect. Placement in noncustodial programs, jail, or prison had no effect.

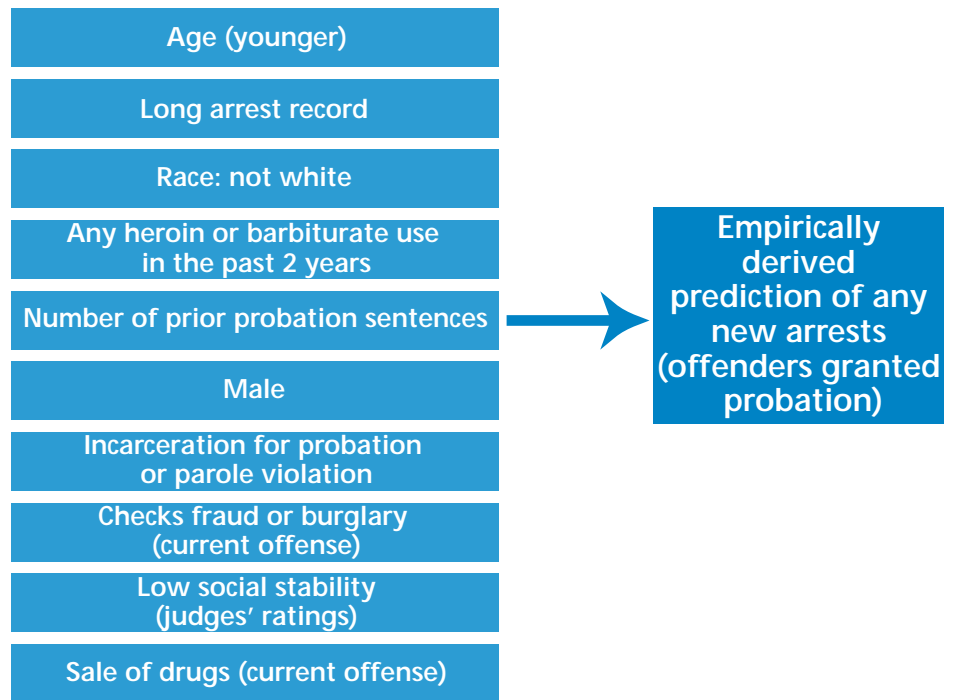
Effects of the time served in confinement. Factors helping to explain the time actually served in jail or prison are listed in exhibit 13. After adjusting for selection, a priori risk, and incapacitation, the amount of time the offender actually served in confinement had a small but statistically significant effect on new arrests, accounting for less than 2 percent of the differences in new arrests. A comparison of the actual and adjusted values for new arrests is shown in exhibit 14.

Exhibit 7. A priori risk groups and the percentage with new arrests in the followup period (risk measure 1)



* Offenders were divided into groups of about equal size for analysis. Data were missing for two cases.

Exhibit 8. Factors in an empirically derived measure of risk of any new arrests (risk measure 2) for the probation sample only



Survival in the community without arrest. The offender’s survival in the community over time (after serving any incapacitating sentences) without arrest did not differ between those who were confined and those who were not confined. This result is reflected in exhibit 15, which shows the “hazard rates” for offenders who were sentenced to confinement and those who were not.¹¹ The curve shows new arrests from the time of release from the relevant confinement (if the sentence called for incarceration) or the date of the sentence (if the offender was not incarcerated). Whether the offender was confined or not makes little or no difference to survival without arrest when the survival or hazard function is calculated on the basis of the a priori risk, total time incapacitated, and length of incapacitation on the present sentence. The hazard function shown

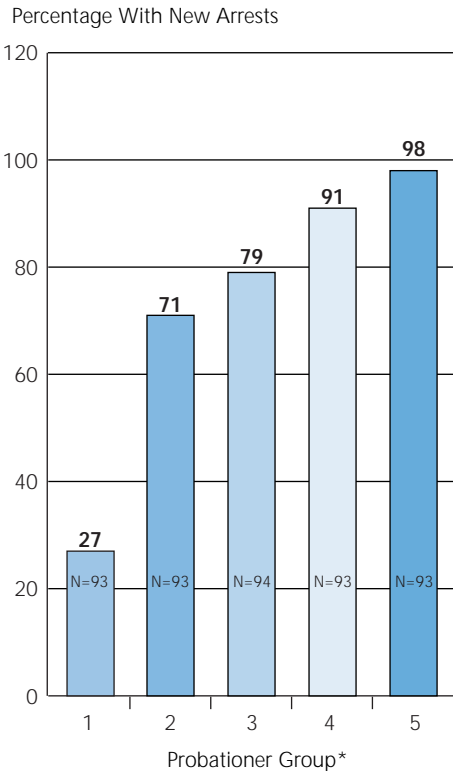
indicates the rates of arrests at particular times, given no arrest until that time. That is, it is an arrest rate per unit of time. Analyses of survival, however, indicated that the effects of confinement in the youth facility or in prison may change over time and should be further investigated.¹²

Other effects of sentences. No effect on new arrests, beyond incapacitation, was found for the following sentencing choices: the maximum sentence imposed, “split” sentences of jail and probation, fines, restitution, and compliance with fine or restitution orders.

Implications

The judges’ diverse selection purposes for sentencing individuals support the need for greater clarity and consistency in sentencing aims. The conflict between

Exhibit 9. A priori risk groups and the percentage with new arrests in the followup period (risk measure 2) for the probation sample only



* Probationers were divided into groups of about equal size for analysis.

utilitarian and retributive perspectives was apparent in this study, despite a general preference on the part of judges for utilitarian crime control. Clarity could be increased if there were an internally consistent sentencing theory and if it were consistently applied.

Despite their modest validity, the judges' subjective risk judgments substantially influenced their sentencing choices. The use of more formal, empirically derived methods would enhance sentencing rationality when sentencing theory incorporates risk as a relevant and justifiable consideration.

The main sentencing choices available to these judges had little effect on crime control aims:

- Except for the effect of incapacitation, *whether the offender was sentenced to confinement* made no difference.
- *Where the offender was confined* made little difference—except perhaps for the unfavorable effect of placement in a youth facility.
- *The length of the maximum sentence imposed* made no difference.
- *The length of time actually confined* made a slight difference.
- *When jail was imposed along with probation*, it made no difference.
- *Fines or restitution* made no difference.

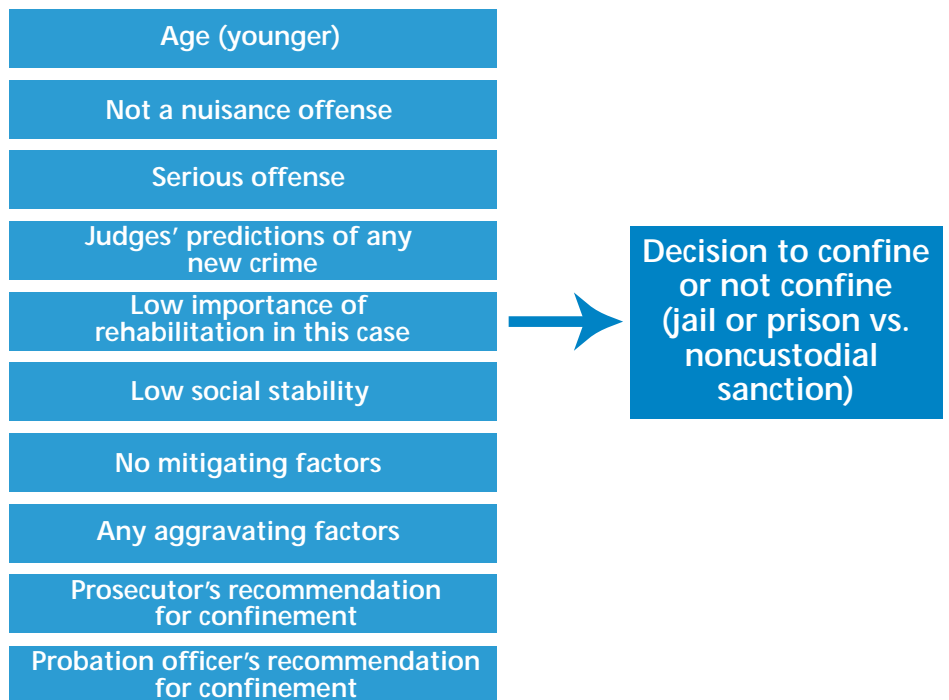
Aside from general deterrence (not studied) and incapacitation (in this study it mainly provided a correction for the investigation of other crime con-

trol effects), little justification for differences in sentences was found from a crime control perspective. The different sanctions, varying in severity of punishment and incapacitating effect, may have served as a warning to others or as deserved punishment, but there was little or no evidence of other effects on crime control objectives.

This study found no evidence to justify the belief that the addition of jail time to a probation sentence has a specific deterrent effect. Unless it is believed that jail time is required for punishment, or the hope of an effective warning to others is maintained, this study would support abandoning the use of split sentences.

Similarly, if considerations of general deterrence and deserved punishment are set aside, it must be concluded

Exhibit 10. Factors helping to explain judges' decisions about whether to confine offenders



that confinement or increased length of incarceration served the crime control purpose of incapacitation but had little or no effect as a “treatment” with rehabilitative or specific deterrent effects. Exhibit 16 illustrates that there is little or no effect of sentences on crime control objectives—other than by incapacitation—as measured in this study. It also portrays the large area of unexplained variability in new offenses by the persons who were sentenced.

Policy implications

How is a study of 20-year-old sentencing practices relevant to current debates? Some important lessons for present day policy are clear. These results offer little support for the policy trends, prominent since this project began, that have supported increased use of confinement as a sentencing choice, emphasized longer terms, or accepted specific deterrence to reduce offenders’ recidivism. Another lesson concerns specific procedures for the sentencing decision process: When the risk of new offenses is seen as an appropriate element in sentencing policy, empirically derived methods are equal or superior to subjective assessments.

The societal stake in crime control effects of sentences, the limitations of statistical designs, and the results of this study suggest the importance of investigating these and similar questions by rigorous experimental methods whenever they are determined to be ethically justifiable.

Study limitations

Some sentencing concerns were beyond the scope of the project. This study did not examine sentencing for purposes of retribution or general deterrence—whether punishments were deserved or whether they served as an

Exhibit 11. Actual and adjusted percentage of offenders with any new arrests in the 5 years after sentencing, by sentences to confinement or noncustodial sanctions

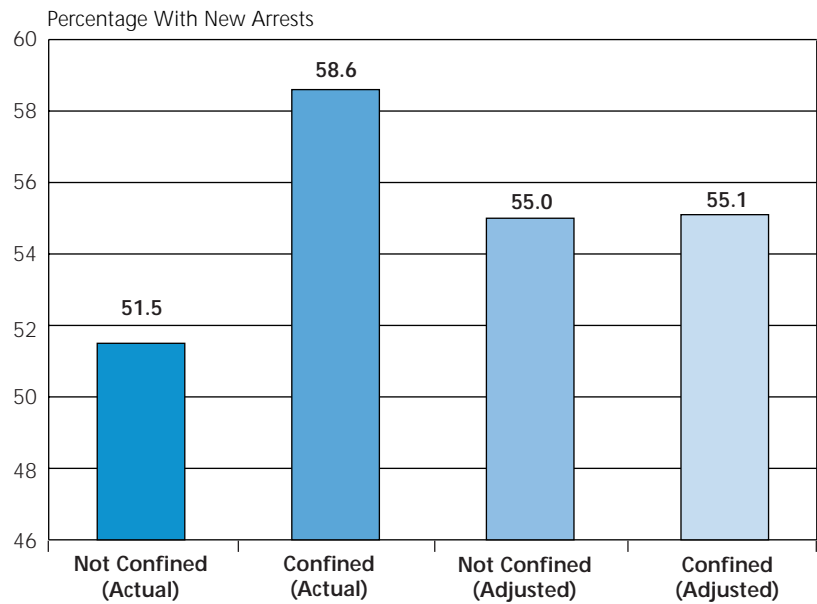
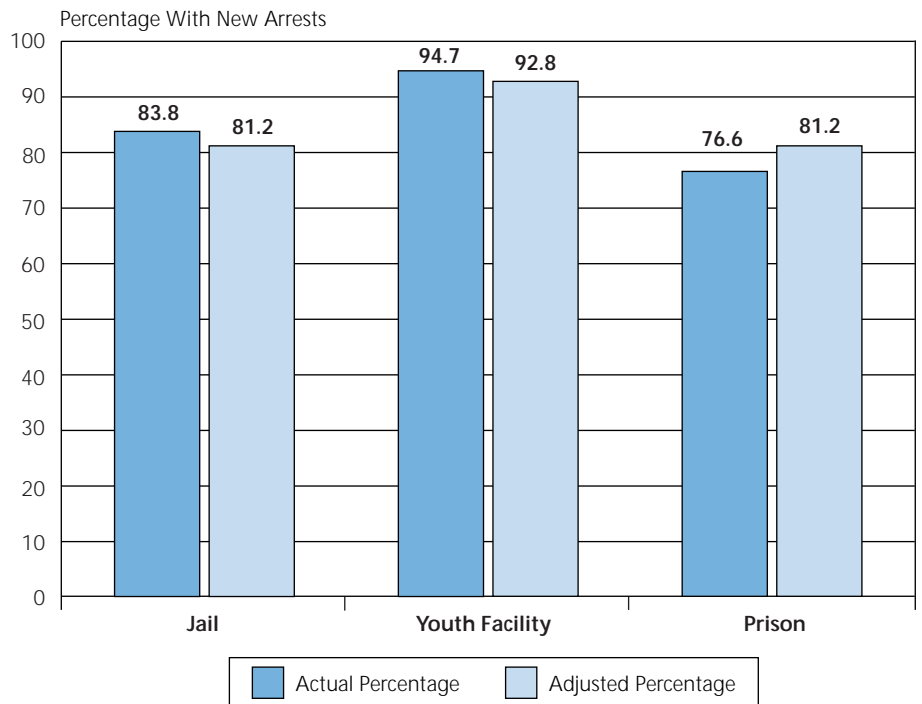


Exhibit 12. Percentage of offenders with new arrests in the 20-year followup period, by sentences to jail, youth facility, or prison



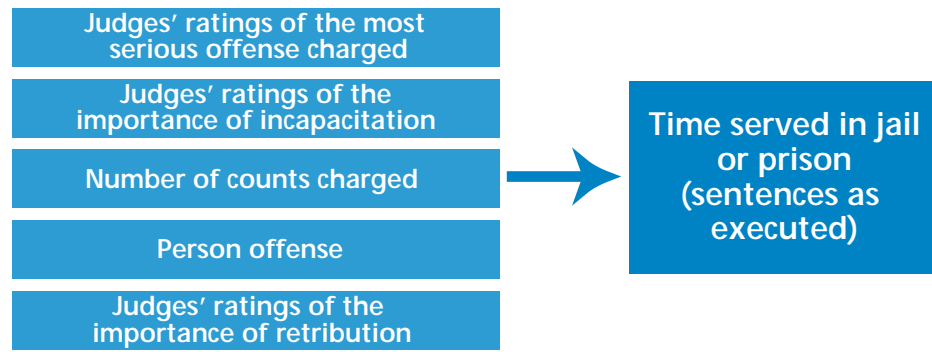
effective warning to others. The relative costs of sentencing choices, in either human or monetary terms, were not assessed.

Conclusions from this study cannot be generalized to other jurisdictions or

other times. The study does not show, for example, that well-designed interventions implemented with fidelity to a clear, coherent theory cannot be effective in meeting crime control objectives. No measures of the quality of rehabilitative programs or the severity

of sanctions beyond the length of sentences were available. The analyses reported here could not show whether different kinds of sanctions are differentially effective for different kinds of offenders. If either objectives or sanctions have changed, for example, to emphasize aims of restorative justice or elaborated “intermediate sanctions,” this report must remain silent about the newer goals and alternatives.¹³

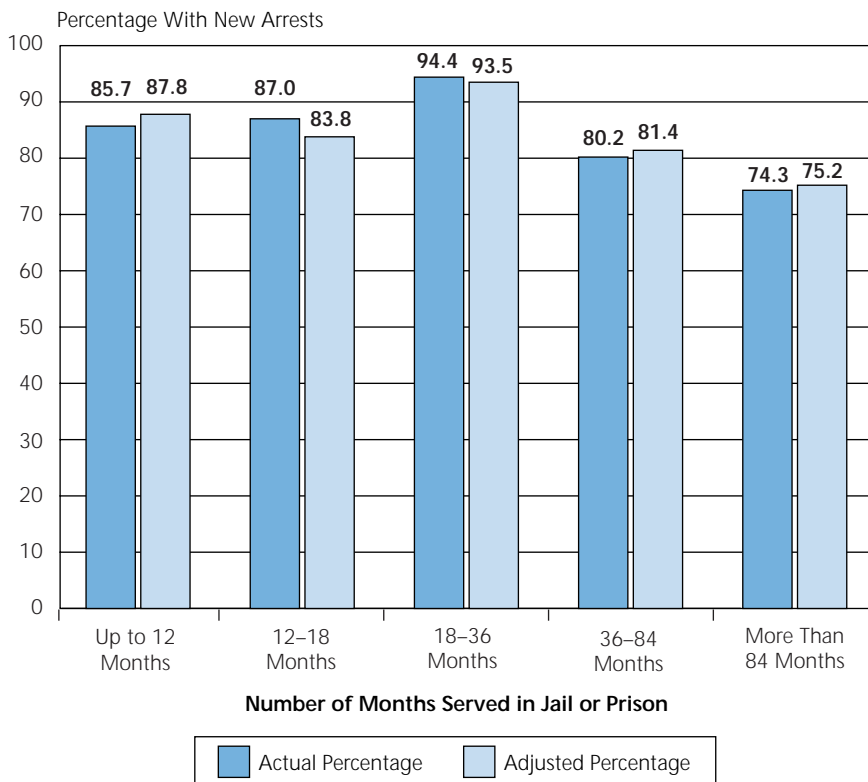
Exhibit 13. Factors helping to explain time served in jail or prison (sentences as carried out)



Nonjudicial decisions may have affected the results. For persons sentenced to prison, the time actually served in prison reflected decisions by a parole board as well as the judges.

Statistical designs such as those used in this study always provide less definitive results than do true experiments, which ensure that offenders compared after submission to different sanctions may be considered equivalent in all respects at the outset. Perhaps other, as yet unknown, selection factors affect either judicial decisions or risk and therefore influence the outcomes.

Exhibit 14. Actual and adjusted percentage of offenders with new arrests, by number of months served in jail or prison on the present sentence



Other limitations are due to an often used but nevertheless crude measurement of outcomes. Counts of arrests and charges are not adequate to assess the full spectrum of costs and harms associated with either the sanctions imposed or the new crimes committed in the community.

Similarly, a lack of information limited measurement of the main independent variables of the study: Adequate descriptions of community treatment programs and jail and prison programs were not available, nor were measures of the quality of rehabilitative programs and the severity of sanctions within the main types of sentences imposed.

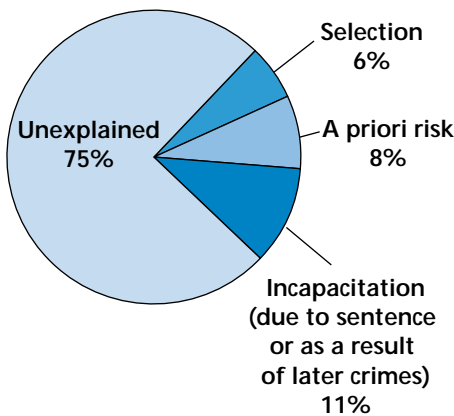
Related research results ameliorate some of these limitations. The case of

the judges' predictions provides an example. In the past 70 years, 136 studies have documented 617 distinct comparisons of the two basic measures of prediction (subjective or "in the head" versus more formal or statistical measures). Some of these studies were conducted in the criminal justice arena. In criminal justice decisions and in all other areas of behavioral prediction, the evidence clearly shows that more formal objective measures are superior to subjective evaluations.¹⁴ Similarly, related research since the 1960s does not support the expectation that the length of time someone is incarcerated in prison is related to repeated offending, particularly when relevant offender characteristics are taken into account.¹⁵

Notes

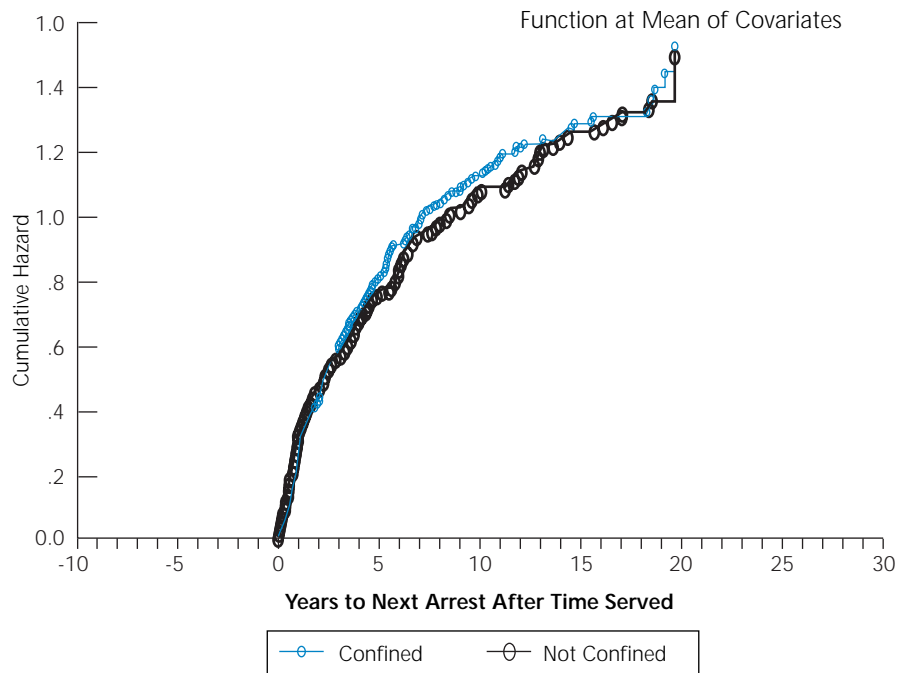
1. This study started more than 20 years ago in collaboration with the judges of the Essex County, New Jersey, Court, particularly with Judge John A. Marzulli, then the assignment judge. The support of Robert D. Lipscher, then director of the New Jersey Administrative

Exhibit 16. Explained and unexplained variances in any new arrests during the 20 years after sentencing*



* Neither variation in the time served on the present sentence nor the type of sentence (noncustodial, jail, youth facility, or prison) explained differences in outcomes beyond their incapacitative effects.

Exhibit 15. Hazard of arrest after serving required sentence, confined and not confined*



* The covariates were the a priori risk, incapacitation, and time served.

Office of the Courts, and John McCarthy, deputy director for criminal practice for the New Jersey Administrative Office of the Courts, was essential. The followup phase of the project described in this Research in Brief relied on the expertise of an advisory committee composed of McCarthy; Stan Repko, deputy commissioner for research and planning, New Jersey Department of Corrections; and Wayne Fisher, deputy director, New Jersey Division of Criminal Justice. The full report of the study, including references, is available from the National Criminal Justice Reference Service. See Gottfredson, Don M., *Choosing Punishments: Crime Control Effects of Sentences*, report to the National Institute of Justice, Sacramento, CA: Justice Policy Research Corporation, 1998.

2. Resources did not permit a search for death records, and the total number of deaths during the followup period is unknown. Twelve persons are known to have died during the followup. Two had received noncustodial sentences; four received jail sentences; four were sent to a youth facility; and two went to prison. Before their deaths, none of these offenders had been arrested after sentencing.

3. Typically, these were analyses of covariance with the measures to be controlled for as covariates. Analyses of "survival" (the time that had elapsed when arrest occurred) also were used.

4. Gottfredson, S.D., and R.B. Taylor, "Community Context and Criminal Offenders," in *Communities and Crime Prevention*, ed. T. Hope and M. Shaw, London: Her Majesty's Stationery Office, 1988; and Gottfredson, S.D., and D.M. Gottfredson, "Behavioral Prediction and the Problem of Incapacitation," *Criminology* 32 (3) (1994): 450-451.

5. "Nuisance" offenses include, for example, parole and probation rules violations, possession or use of drugs, marijuana offenses, disorderly conduct, prostitution, and gambling.

6. The items listed are from regression analysis results. In combination, these items resulted in a multiple correlation of 0.79 (N=931) with the judges' ratings, which were scores of 1 to 9. The weights of each item (i.e., the standardized regression coefficients) are not reflected in the exhibit but are given in the full report cited.

7. The point biserial correlation of these scores with any new arrests was 0.22 (N=960).

8. The items listed are from regression analyses. The point biserial correlation of *risk measure 1* scores with any new arrest was 0.48 (N=960); for *risk measure 2*, it was 0.56 (N=466). (For standardized coefficients, see the full report.) The results of logistic regression analyses, theoretically more

appropriate for the dichotomous dependent variable, did not differ substantively. This is not atypical; see, for reviews and reasons, Copas, J.B., and R. Tarling, "Some Methodological Issues in Making Predictions," in *Criminal Careers and "Career Criminals,"* ed. A. Blumstein, J. Cohen, J. Roth, and C. Visher, Washington, DC: National Academy of Sciences, 1986; Farrington, D., and R. Tarling, *Predicting Crime and Delinquency,* Albany, NY: State University of New York Press, 1985; Gottfredson, D.M., and M.R. Gottfredson, "Data for Criminal Justice Evaluation: Some Resources and Pitfalls," in *Handbook of Criminal Justice Evaluation,* ed. M.W. Klein and D.S. Teilmann, Beverly Hills, CA: Sage Publications, 1980. In both the ordinary least squares regression and the logistic regression, the items most helpful in prediction, in the context of the other variables included, were age, arrest record, race, and heroin or barbiturate use in the past 2 years. The race variable ("white") was included and retained because the prediction method was not developed for any operational classification use but only for the purpose of statistical control in the other analyses described. More complete specifications of these and other analytical results discussed here are included in the full report of the study.

9. Selection measures relied on discriminant functions with $n-1$ equations where n =the number of groups to be discriminated. The equations, including the standardized coefficients, are given in the full report of the study.

10. Most analyses relied on analyses of covariance, others on regression methods. The "adjusted values" shown in the exhibits are the adjusted means from the analyses of covariance.

11. This result is based on a Cox regression analysis.

12. A Cox regression analysis based on the groups given noncustodial, jail, youth facility, and prison sentences did not meet assumptions of proportionality required for the use of the

model, and there was a significant effect from a time x treatment interaction. Further analysis indicated the hazard rate increased more rapidly over time for those sentenced to the youth institution, less so for those imprisoned. Survival in the community without arrest after release from confinement in the youth facility decreased more rapidly than did survival without arrest for persons who had been imprisoned.

13. For recent reviews, see Cullen, F.T., J.P. Wright, and B.K. Applegate, "Control in the Community: The Limits of Reform?" in *Choosing Correctional Options That Work,* ed. A. Harland, Thousand Oaks, CA: Sage Publications, 1996: 113–115; Petersilia, J., "Understanding Probation and Parole: Theory and Practice," in *Oxford Criminology Handbook,* ed. M. Tonry, London: Oxford University Press, 1998; Petersilia, J., *Community Corrections: Probation, Parole, and Intermediate Sanctions,* London: Oxford University Press, 1998.

14. Meehl, P.E., and W.M. Grove, "Comparative Efficiency of Informal (Subjective, Impressionistic) and Formal (Mechanical, Algorithmic) Prediction Procedures: The Clinical-Statistical Controversy," *Psychology, Public Policy, and Law* 2 (2) (1996): 293–323.

15. Glaser, D., *The Effectiveness of a Prison and Parole System,* New York: Bobbs-Merrill, 1964: 302–303; Department of Institutions, State of Washington, Research Monograph No. 27, Olympia, WA: Department of Institutions, State of Washington, 1967; Department of Corrections, State of California, *Long Jail Terms and Parole Outcomes,* Sacramento, CA: Department of Corrections, State of California, 1967; Assembly Committee on Criminal Procedure, (Committee Report). Sacramento, CA: Assembly of the State of California, 1968; Kolodny, S., *Parole Board Reform in California: Order Out of Chaos,* Report of the Select Committee on the Administration of Justice, Sacramento, CA: Assembly of the State of California, 1970;

Gottfredson, D.M., M. Neithercutt, J. Nuffield, and V. O'Leary, *Four Thousand Lifetimes: A Study of Time Served in Prison and Parole Outcomes,* Davis, CA: National Council on Crime and Delinquency, 1973; Gottfredson, D.M., M.R. Gottfredson, and J. Garafalo, "Time Served in Prison and Parole Outcomes Among Parolee Risk Categories," *Journal of Criminal Justice* 5 (1) (1977).

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