Career Offenders and Justice System Performance*

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ABSTRACT

A model is proposed to measure the level of performance of justice systems. The model is used to compare justice system performance against two categories of offenders from a birth cohort. Career offenders (those who have at least five officially recorded police contacts by age 30) and non-career recidivists (offenders who have had two, three, or four officially recorded police contacts by age 30) are compared. Results indicate the justice system was much more efficient against career offenders. They are more likely to be convicted, incarcerated and to serve longer incarceration sentences than are non-career recidivists. The justice system appears to have rationally pursued the objectives usually sought by career offender programs. The juvenile justice system was less efficient in this regard than was the adult justice system.

Results are discussed in the context of their policy implications and of factors associated with attempts to improve the performance of criminal justice systems. The justice system model presented here can be used to evaluate the impact of programs designed to improve the operational efficiency of justice systems. The model may also be used more generally to monitor the operations of justice systems and to make comparisons of performance over time and between jurisdictions.

Career Offenders and Justice System Performance

I. INTRODUCTION

Strategies directed toward career offenders assume that efforts to control crime will be maximized by concentrating on offenders who have a demonstrated record of serious crime. This assumption is based on some strong evidence that there is a small proportion of all offenders that is responsible for a large proportion of serious offenses (Petersilia, et al., 1978; Shannon, 1976; Wolfgang, Figlio and Sellin, 1972; Wolfgang and Collins, 1978). Policies that concentrate criminal justice resources on the apprehension, conviction and incarceration of career offenders, however that term is defined, expect their impact to derive in large part from the incapacitation of these offenders. In addition such policies often implicitly expect that the cause of deterrence will be served if serious offenders have a high likelihood of being incarcerated for their offenses. Presumably this risk will dissuade other offenders and potential offenders from serious involvement in crime.

Crime control efforts that attempt to be rational and efficient need to be concerned with two major factors: (1) the rate at which offenders commit offenses and, (2) the performance of the justice system. This paper will deal with number 2, justice system performance and with the implications of the level of this performance for crime control efforts that focus on career offenders. More specifically, a simple model to compare justice system performance for "career" and "non-career" offenders is proposed and demonstrated with data. The

implications of the first factors (individual offense rate) for public policy toward serious offenders is not discussed in detail here. However, it is obvious that the magnitude of individual offense rates will have important implications for crime control policies that focus on selected offender types. The incarceration of high offense rate offenders will, other things being equal, prevent the occurrence of more offenses than the incarceration of offenders who commit offenses at a lower rate.

II. THE MODEL

The justice system model is made up of three terms: (1) the probability of conviction given the commission of an offense (Q), the probability of incarceration given conviction (J) and the amount of time served on an incarceration sentence (S). The product of these three items can be viewed as a measure of the level of performance of the justice system. Stated another way, QUS is the capacity of the justice system to incapacitate offenders. The term estimates time served given the commission of an offense. As will be seen later, only index offenses are considered here so that QJS values as calculated here for an offender group will estimate the average time incarcerated given the commission of an index offense for members of that group. Avi-Itzhak and Shinnar (1973) and Shinnar and Shinnar (1975) provide an earlier example of this method of measuring justice system performance. The derivation of this model is presented in appendix A. A more complete explication of the model and its assumptions can be found in Wolfgang and Collins (1978).

Higher values of QJS indicate relatively efficient justice system performance. For example, if there exists a 10 percent chance that commission of an offense will be followed by conviction, and a 50 percent chance that a conviction will be followed by incarceration, and if the average incarceration sentence for convicted offenders is two years, QJS = .1 (.1 x .5 x 2). If there is a 5 percent probability of conviction, a 75 percent probability of incarceration and an average one year incarceration sentence QJS = .038 (.05 x .75 x 1).

The logic and goals of career offender programs can be stated in terms of the values computed under the QJS model. These programs attempt to develop higher values for career offenders, i.e., increase the probabilities of conviction and incarceration and increase the length of incarceration sentences for career offenders. Thus if QJS values are computed for career and non-career offenders, the effectiveness of career offender programs can be evaluated. In order to illustrate this usage and so that the actual past performance of one justice system can be measured, we will develop these values for a cohort of offenders.[1/] QJS values will be computed for individuals defined as career offenders; these values will be compared to those computed for non-career offenders. A career offender is defined here as an individual who has at least five officially recorded police contacts. Operational career offender programs usually use both past arrest or conviction record and the nature of the current offenses as the two criteria for defining who is to be prosecuted on a priority basis. The comparisons made here will not constitute an evaluation of a particular career offender program. Rather, the values developed will measure performance levels for one justice system for a single cohort of offenders followed over their offending careers up to age 30. The time period involved is approximately 1955-1975; the vast majority of cases (90-95 percent) will have been processed through the Philadelphia juvenile and adult justice systems.

The notions of career offender, justice system performance and incapacitation are related to each other in ways that are important for policy purposes. By using the simple justice system performance model proposed here, the policy implications of special crime control efforts

can be made explicit. The data presented will allow the performance of one system to be observed and will help explicate both policy and operational issues.

III. THE DATA

In order to compute the values for the proposed justice system model four kinds of data are required:

1. the number of offenses committed by an offender,
2. the number of convictions which result from these offenses,
3. the number of incarcerations which result from these convictions, and
4. the actual amount of time served for these incarcerations.

Offenses, as measured here, will include both officially recorded offenses (they will be referred to as arrests) and offenses committed but not officially recorded. The former were extracted from police data; the latter are measured on the basis of self-reports secured during personal interviews of the cohort members. Conviction, incarceration and time served data are secured from a number of different sources: Philadelphia Police, Court and Prisons records, FBI criminal histories, a number of state and local correctional institutions and the Federal Bureau of Prisons. These record sources were used in a complementary manner so that the history of an offense could be reconstructed from arrest through release from prison. In the most straightforward case we found out about an arrest from police records, followed the case through the adjudication process with court records and used prison records to compute the amount of time served. In other cases the progress of an arrest through a criminal justice system had to be pieced together because one or more of the elements which describe the process was missing. 2/

In the analysis to follow, offenders who have only one officially recorded policy contact are excluded. These offenders are excluded because they are usually not a focus of special crime control policies. They are generally considered to be candidates for diversion from the justice system. Further, the 155 one-time offenders in our sample did not commit many serious offenses. They were charged with only 6 injury offenses and 23 serious property offenses.[3/] In the following analyses we also exclude nonindex offenses from our calculations of justice system performance. These are generally those offenses considered to be less serious and are not given priority during justice system processing.

IV. RESULTS

Table 1 displays values for justice system performance for the index offenses of non-career recidivists (2, 3, or 4 total arrests) and for career offenders (5 or more total arrests). The offenses committed by career offenders are more likely to result in a conviction than are those committed by non-career recidivists; these career offender convictions are more likely to be followed by incarceration than are convictions of non-career recidivists, and the amount of time served during these incarcerations is longer for the offenses of career offenders. These data indicate that the justice system was more efficient in the case of career offenders. The conclusions that can be drawn from this finding are limited. The performance of the justice system is measured for only one cohort of offenders, in one jurisdiction. However, the data are clear in their indication that the justice system operated more efficiently against the more serious offender group.

Table 1.

Justice System Performance for Career Offenders and Non-Career Recidivists: Probability of Conviction (Q), Probability of Incarceration (J) and Incarceration Time Served (S)

	Q	J	S (Years)	QJ	QJS
Non-career Recidivist	.021	.333	.62	.007	.004
Career Offenders	.081	.587	.92	.048	.044

The above findings are not surprising in the case of incarceration probability and amount of time incarcerated. Career offenders should be expected to be treated more harshly for at least two reasons: (1) their offenses tend to be more serious than those of offenders who offend less frequently,[4/] and (2) sentencing judges would logically be expected to take the extent and seriousness of an individual's criminal history into account in the sentencing decision. Thus the data to some extent simply indicate rational sentencing decisions; but they also confirm that the more serious offender in this cohort was not able to avoid comparatively serious sentences when convicted.

The reasons for the difference between the two offender groups on conviction probability are not so easily explained. If the two offender groups have an equal probability of being arrested for offenses they did not commit, (in other words if there is no systematic arrest bias) and if the adjudication process operates primarily to determine legal guilt, then the results appear to be anamolous. Under these two assumptions, both offender types hould be convicted with equal probability. But if we assume with Packer (1968) and others, that modern criminal justice systems operate under a "crime control" rather than a "legalistic" model, then the disparity between the two offender groups in the likelihood of conviction makes more sense. Apparently the justice process takes account of the criminal history of the offender in sentencing decisions and also in the formal determination of guilt. Alternate interpretations of this finding are possible but the view of the criminal justice process as one that operates under a paradigm of efficiency and crime control rather than in a more legalistic manner seems consistent with contemporary realities.

The summary measures QJS and QJS in table 1 indicate the magnitude of the disparity in justice system performance for the offender groups. The likelihood of conviction and incarceration is 6.9 times higher (.048 ÷ .007) for the offenses of career offenders. When actual time incarcerated is also considered, justice system performance for the offenses of career offenders is 11 times higher (.044 ÷ .004) than for those of non-career recidivists.

Our data also indicate that justice system performance varies systematically by offender age. QJS values are much higher after age 18 when offenders become subject to the adult justice system. Table 2 indicates QJS values for juveniles and adults.

Table 2 indicates the likelihood of conviction and incarceration (QJ) is approximately three and one-half times higher for adults than for juveniles (.0488/.0143). The estimate of time served given the commission of an index offense (QJS) is approximately two and one-half times higher for adults than for juveniles (.0479/.0194). Thus it appears that the juvenile justice system operated at a lower level of efficiency than did the adult justice system for this cohort of offenders. Examination of the individual performance measures in table 2 indicates that if juveniles in this cohort were incarcerated for an index offense, the amount of time served (S) by them averaged about .38 years longer than did the sentences served by cohort members who were incarcerated for index offenses when they were adults (1.36 - .981). But overall the data indicate that the adult justice system performed at a higher level than did the juvenile justice system.

Two factors are probably associated with the comparatively low juvenile justice performance. First, the philosophy of juvenile justice has emphasized alternatives to penal sanctions for young people. Second, the development of serious criminal histories by individuals, which presumably would increase the severity of criminal sanctions, is gradual. During the juvenile years many offenders have simply not had the time to accumulate serious offense records that would tend to increase dispositional severity.

Table 2

Justice System Performance for Juveniles (Ages 14-17)[5/] and Adults (Ages 18-25)[6/]

	Q	J	S (Years)	QJ	QJS
Juveniles	.031	.461	1.36	.014	.019
Adults	.060	.81	.981	.049	.048

V. SUMMARY OF FINDINGS

The following conclusions appear justified on the basis of the data presented.

1. The performance level of the justice system is relatively low in terms of an incarceration risk to offenders who commit index offenses.
2. The justice system is most efficient in the case of career offenders. It appears to have rationally pursued the objectives usually sought by career offender programs.
3. The juvenile justice system performed at a lower level of efficiency than the adult justice system.

It needs to be emphasized that these findings are tentative. The data refer to only one age cohort of offenders and because an overwhelming percentage of cases were processed by the justice system of a single jurisdiction, the findings can only be inferred to apply to that jurisdiction.

VI. POLICY ISSUES

The finding that career offenders were dealt with more harshly than non-career offenders suggests that the justice system examined here exhibited a logic of crime control usually associated with career offender programs. In this section we examine some of the implications of improving justice system performance. It is one thing to develop a model to measure the performance of the justice system; a different set of issues are raised when possibilities for changing the system or elevating its efficiency are considered. In these considerations two categories of factors are important.

1. justice system tractability[7/]
2. fiscal, organizational and political constraints

The major ways that justice system efficiency for serious offenders can be improved is by attempting to impact conviction and incarceration rates and by extending the amount of time served. Conviction rates are not as tractable as are incarceration rates and time incarcerated. The loci of decisions which have the major impact on the magnitude of these latter two variables is identifiable and relatively concentrated. Judges and parole boards largely control how many convicted offenders are incarcerated and how long they remain so. It is of course also true that such things as the changing practices of police and prosecutors and the disciplinary policies and "good time" policies of prisons also have an impact on incarceration. However, considerable power to affect incarceration rate and length is concentrated in the hands of judges and parole boards. A possible implication of this reality is that these two components of justice system are manipulable.

The conviction rate is not nearly so tractable. This rate is largely determined by the rates at which offenses are reported to the police and on the rate of clearance of these reported offenses by the police. After arrest a number of additional decisionmakers and processes affect the conviction rate. The number of actors and the number of final outcome foci make conviction rate much less tractable than incarceration rate or length.

Fiscal, organizational and political constraints also limit the extent to which justice system performance is maniuplable. The number of prosecuting attorneys and the amount of prison space available are two examples of justice system components that are related to each other in complex fiscal, organizational, and political ways. If the caseload per prosecutor is high in a district attorney's office and additional funds are not available for personnel to reduce this caseload pressure, special efforts to incarcerate the serious offender may not be possible. LEAA's Career Criminal Program is partly designed to address this problem. Funds are provided to jurisdictions so that they can develop special programs for the prosecution of those defined as career offenders.

The capacity of prisons in a jurisdiction places some limit on the number of offenders who can be incarcerated. At some point when prison capacity is exceeded, sentencing or parole decisions will be affected. Fewer individuals will be sent to prison or those who are sent will stay for shorter periods of time. This is likely to happen even in the face of special prosecution efforts to incarcerate serious offenders for long periods.

Further, the criminal justice system has a demonstrable capacity to "nullify the law" (Zimring and Hawkins, 1973: 62). Radzinowicz

(1971) showed how the English courts avoided imposing and carrying out the death penalty when the court felt such a legally mandated penalty was not justified. Judges sometimes resist sentencing accountability requirements (Robin, 1975); correctional systems may refuse to implement court directives they regard as encroachment (Sullivan and Tifft, 1975). Criminal justice system segments have a demonstrable capacity to avoid or mute impacts that challenge their capacity, philosophy or vital interests.

VII. IMPLICATIONS

The model proposed here can be used as a diagnostic and evaluation tool for justice systems. An example of how the model might be used to judge the effectiveness of a career offender program was presented. Its utility was also demonstrated in the comparison of the performance levels of the juvenile and adult justice systems. The model is more generally useful. It might be used to monitor the overall operation of a justice system. Particular aspects of performance can also be monitored. For example, if the incarceration sentencing practices of judges were to change, that change would be reflected in the value of J--the probability of incarceration. Changes in parole practices that reduced the amount of time served in prison by offenders would also be reflected in lower S values.

The comparison of the performance of different criminal justice systems or of the same justice system over time can be more rigorous and parsimonious by use of this model. The model itself might also be modified by additional terms. If the amount of time required to bring a case to sentencing for example, is judged to be an important aspect of justice system performance, such a measure could be added to the model.

The data collected for the research described in this paper required a substantial investment of time and resources. Several different record systems had to be accessed and their use on a case by case basis to reconstruct the processing of each arrest took considerable time. The self reported offense data was collected during personal interviews and these were expensive. We believe these investments of time and resources to be entirely justified by the quality of

the data; for some research questions there is no adequate substitute for longitudinal data. However, it is also true that many jurisdictions wishing to monitor the operations of their justice process will be unable or unwilling to collect longitudinal, case by case data. For such jurisdictions the model proposed here can be easily adapted for use with the data routinely collected during the operational activities of each justice system segment.

However, if official record systems are used as the sole source of data to estimate offenses committed, at least one problem is apparent. In order that the probability of conviction be estimated on the basis of all offenses committed in the absence of self report data (not just those officially recorded), additional assumptions or adjustments would need to be made. The existence of victimization data might be useful in this regard. These data provide the potential for estimating differences between total crime and officially recorded crime. Victimization data might pfovide the capacity to "correct" police data so that total offenses, not just those recorded by the police can be estimated.

Finally, a variety of research issues can be addressed fruitfully with the use of a criminal justice system model such as the one proposed here. The deterrence and incapacitation issues provide a good example; such research needs good measures of the certainty and severity of punishment (Blumstein et al., 1978). The important and complex questions raised in connection with deterrence research can be more rigorously addressed if justice system performance is measured as proposed here. In the past, much of this research has relied on rough estimates of the important variables.

VIII. CONCLUSION

Justice system operations can be measured by the use of a conceptually simple model. This model will permit evaluation of performance in terms of incarceration time served for offenses committed. Results for one cohort of offenders in one jurisdiction indicated system performance was higher for offenders with serious criminal histories; these offenders were more likely to be convicted, incarcerated and to serve longer sentences. These are the goals normally sought by career offender programs.

The simplicity of the performance model belies the complexities involved in attempting to engineer changes in justice system operations. The system is only tractable within limits and a variety of fiscal, organizational and political constraints impinge on attempts to engineer change. Nonetheless, use of the proposed model permits the comparison of performance over time and between jurisdictions and allows evaluation of program effects to be monitored.

FOOTNOTES

(1) This cohort was born in 1945 and originally numbered approximately 10,000. Research findings for the cohort's juvenile offensivity is published in Wolfgang, Figlio and Sellin (1972). The offenders whose criminal justice system experience is reconstructed for present purposes represent all those individuals from a 10 percent sample (N=975) of the original cohort who have had more than one officially recorded police contact. The offenders number 304 individuals who had a total of 2,093 officially recorded police contacts by age 30 (1975). More complete findings are reported in Wolfgang and Collins (1978).

(2) A more complete description of the data collected and the data collection methodology is contained in Wolfgang and Collins, 1978: 133-137. The formulas used to compute values for the justice system model are included in the appendix to this paper.

(3) The Uniform Crime Report (UCR) Offense classification system is followed here and classifies injury offenses as homicide, forcible rape, aggravated assault and robbery. Serious property offense are burglary, larceny over $100 and auto theft. Together these seven constitute the UCR Part I offenses. We will hereafter refer to them as index offenses.

(4) Each officially recorded offense was scored for seriousness using the Sellin-Wolfgang (1964) system. The offenses of career offenders consistently developed higher seriousness scores than the same type offenses committed by other offenders. Career offender offenses were more likely to involve victim injury, substantial monetary or property loss, use of weapons, etc.

(5) Very few index offenses are committed prior to age 14.

(6) Self-reported offense data were gathered by interviews at age 25 so conviction probability can only be estimated up to that age. See formula in appendix.

(7) See Scott and Shore (1974) for a discussion of the need of policy research to deal with independent variables that are "tractable," i.e., "accessible to control or manipulation" (p. 52).

BIBLIOGRAPHY

Avi-Itzhak, B. and Shinnar, A. 1973. "Quantitative models in crime control." Journal of Criminal Justice 6: 185-217.

Blumstein, A., Cohen, J. and Nagin, D. 1978. Deterrence and Incapacitation: Estimating the Effects of Criminal Sanctions on Crime Rates. Washington, D.C.: National Academy of Sciences.

Packer, Herbert L. 1972. "Two models of the criminal process." In G. F. Cole, ed., Criminal Justice: Law and Politics. Belmont, California: Wadsworth, pp. 35-52.

Petersilia, J., Greenwood, P. W. and Lavin, M. 1978. Criminal Careers of Habitual Felons. National Institute of Law Enforcement and Criminal Justice, Law Enforcement Assistance Administration, U.S. Department of Justice, July.

Radzinowicz, L. 1948. "The movement for reform." A History of English Criminal Law and Its Administration from 1750, Vol. I. London: Stevens & Sons, Ltd., pp. 151-161, 163-164.

Robin, G. D. 1975. Judicial resistance to sentencing accountability." Crime and Delinquency 21 (July): 201-212.

Scott, R. A. and Shore, A. 1974. "Sociology and policy analysis." The American Sociologist 9 (May): 51-59.

Sellin, T. and Wolfgang, M. E. 1965. The Measurement of Delinquency. New York: John Wiley & Sons.

Shannon, L. W. 1976. "Predicting adult criminal careers from juvenile careers." Monograph. Iowa City: Iowa Urban Community Research Center, 1976.

Shinnar, S. and Shinnar, R. 1975. "The effects of the criminal justice system on the control of crime: A quantitative approach." Law and Society Review 9 (Summer): 581-612.

Sullivan, D. C. and Tifft, L. L. 1975. "Court intervention in correction--resistance and compliance." Crime and Delinquency 21 (July): 213-222.

Wolfgang, M. E. and Collins, Jr., J. J. Offender Careers and Restraint: Probabilities and Policy Implications. Final Report, Law Enforcement Assistance Administration, February, 1978. (Grant #76-NI-99-0089).

Wolfgang, M. E. Figlio, R. M. and Sellin, T. 1972. Delinquency in a Birth Cohort. Chicago: University of Chicago Press.

Zimring, F. E. and Hawkins, G. J. 1973. Deterrence: The Legal Threat in Crime Control. Chicago: University of Chicago Press.

APPENDIX A

The terms used in the formulas which form the bases for our criminal justice system performance model are as follows:

X	=	an officially recorded police contact for an offense
X*	=	a self-reported offense
G	=	a guilty finding for an offense
I	=	an incarceration for a guilty offense
F	=	an incarceration length for a guilty offense
Q	=	the probability of conviction given the commission of an offense
J	=	the probability of incarceration given conviction
S	=	incarceration time served for a guilty offense

The formulas used to determine justice system performance values are as follows:

$$Q = \frac{\Sigma G}{\Sigma X + \Sigma X^*}$$

$$J = \frac{\Sigma I}{\Sigma G}$$

$$S = \frac{\Sigma F}{\Sigma I}$$

OR (AFTER REDUCTION)

$$QJS = \frac{\Sigma F}{\Sigma X + \Sigma X^*}$$