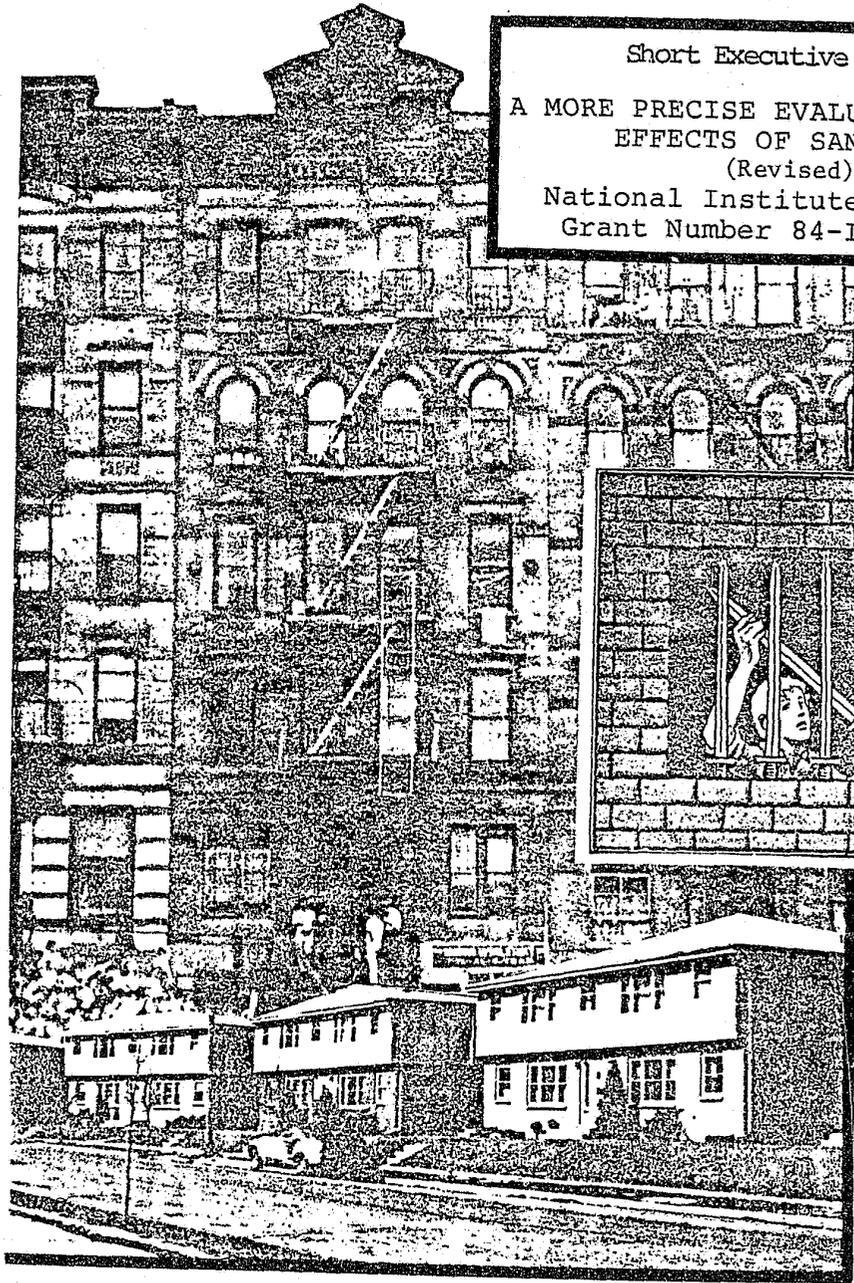


**IOWA
URBAN
COMMUNITY
RESEARCH
CENTER**



"Scientific Social Research that Counts"



Short Executive Report
A MORE PRECISE EVALUATION OF THE
EFFECTS OF SANCTIONS
(Revised)
National Institute of Justice
Grant Number 84-IJ-CX-0013



103973

THE UNIVERSITY OF IOWA · IOWA CITY, IOWA

Short Executive Report

A MORE PRECISE EVALUATION OF THE
EFFECTS OF SANCTIONS

LYLE W. SHANNON

Iowa Urban Community Research Center
University of Iowa
Iowa City, Iowa

NCJRS

DEC 8 1986

ACQUISITIONS

A Report to the
National Institute of Justice
United States Department of Justice

Prepared under Grant Number 84-IJ-CX-0013.
Points of view or opinions stated in this document
are those of the author and do not necessarily
represent the official position or policies of the
United States Department of Justice.

Revised August 1986

**U.S. Department of Justice
National Institute of Justice**

This document has been reproduced exactly as received from the person or organization originating it. Points of view or opinions stated in this document are those of the authors and do not necessarily represent the official position or policies of the National Institute of Justice.

Permission to reproduce this copyrighted material has been granted by

Public Domain/NIJ

U.S. Department of Justice

to the National Criminal Justice Reference Service (NCJRS).

Further reproduction outside of the NCJRS system requires permission of the copyright owner.

SHORT EXECUTIVE REPORT

INTRODUCTION

The Basic Problem

When the same miscreant youth appear in court again and again, when the same young adults are arrested and referred to the courts time after time, when the judge is confronted with adults whose lengthy records of felonious behavior indicate that prior efforts to punish and/or resocialize them have been fruitless, the attention of persons in the justice system has invariably turned to the problem of continuity in delinquency and crime, i.e., to the career criminal. Furthermore, research on delinquency and crime in institutions has always shown that a large proportion of the community of prisoners has had lengthy official and, if not official, lengthy self report careers.

On the other hand, our research in Racine, Wisconsin revealed that most juveniles (4 out of 5) who had non-traffic police contacts before the age of 18 ceased to commit these or similar kinds of acts which brought them into contact with the police before they became adults.¹ If they had police contacts as

¹ This research is a continuation of our longitudinal study of three birth cohorts, 1942, 1949, and 1955 (6,127 persons of whom 4,079 had continuous residence in Racine, Wisconsin). The data cover a span of almost 30 years.

The first stage of this research not only demonstrated that the link between juvenile delinquency and adult crime was present for only some more serious juvenile offenders, that most delinquents did not continue into adult crime, but also that many who had not been in trouble with the police or had not engaged in serious misbehavior as juveniles committed serious offenses as adults. Assessing the Relationship of Adult Criminal Careers to Juvenile Careers, U.S. Department of Justice, Office of Juvenile

adults they were for different reasons than as juveniles, more likely auto-related. Only one out of 10 who had non-traffic police contacts before the age of 18 in the cohorts born in 1942 and 1949 had a felony-level contact after the age of 18, although this had increased to 1.8 out of 10 in the 1955 Cohort.

Very few youth commenced their depredations at an early age and continued beyond their late teens into lives of serious young adult or adult crime. Desistance (discontinuity rather than continuity) was the rule. Eighty percent of the males in the 1942 Cohort, 73% in the 1949 Cohort, and 65% in the 1955 Cohort ceased to have felony-level contacts after their second felony-level police contact.

Emphasis on continuity comes from the fact that, while the total who discontinued increased from contact to contact, the proportion of the remaining offenders who continued to each next contact became somewhat higher. This has also been demonstrated by Wolfgang and his associates in their Philadelphia birth cohort studies. In a sense, we have a set of findings which may either be perceived quite darkly if one is on the firing line (a probation or aftercare officer) and dealing with long-time offenders, or be perceived quite brightly if one is concerned about the general success of the process of socialization--very few youth continue their misbehavior and turn into hardened criminals.

Justice and Delinquency Prevention (National Criminal Justice Reference Service NCJ77744, 963 pages), 1982. (A 16-page summary by the author is also available from NCJRS.)

How do we explain desistance if early desistance rather than continuity is the pattern? The answer varies depending upon a person's position in society and his/her perception of the role that he/she plays. For example, the police officer prefers to think that effective patrolling and/or counselling at the street level deters youth from continuity and we have found that many youth do cite their contacts with the police as reasons for desisting from further delinquent behavior, perhaps because the contact was a traumatic experience or perhaps because the officer counselled the juvenile in such a manner to effect a change in self concept.

Since our research in Racine has indicated that over half of the 1942 and 1949 Cohorts stopped their misbehavior because of changing self concept, their values, or a reassessment of their behavior, while less than 10% mentioned the fear of being caught, one is inclined to attribute change to the effectiveness of society in, gradually though it may be, socializing the great bulk of its youth. Nowhere have we found evidence that sanctions, as administered, are consistently effective in either specific or general deterrence.

These findings are disappointing to anyone looking for what works, but think how disappointing it will later be if we do not warn that more billions for reformatories and prisons is not the answer to the crime problem.

Historical Perspectives

The most disconcerting finding in the first stage of this research was that the more severely juveniles were sanctioned, the worse their misbehavior in the following period.² Only shortly before our report appeared, Philip J. Cook's lengthy article and bibliography on criminal deterrence was published, foretelling some of the outcomes of research on deterrence during the early part of the decade of the Eighties.³ He suggested, as we have done, that society's best efforts may, at great financial and other costs, take only a small bite out of crime.

The second stage of the Racine research, which followed the ecological tradition of American sociology, provided even more provocative findings. This report concluded that, as the justice system operates, it returns the worst offenders to the neighborhoods from which they came with little likelihood of integration into the larger society, that is, involvement in school or the world of work at a level which would make law abiding behavior a meaningful option. It was also evident that the courts had not sent a message through those who had been sanctioned that would have general deterrent effects on other

² "Assessing the Relationship of Adult Criminal Careers to Juvenile Careers," in Problems in American Social Policy Research. Clark C. Abt (ed.), Abt Books: Cambridge, 1980, pp. 232-246.

³ Philip J. Cook, "Research in Criminal Deterrence: Laying the Groundwork for the Second Decade," in Crime and Justice, Vol. 2, Norval Morris and Michael Tonry (eds.), Chicago: The University of Chicago Press, 1980, pp. 211-258.

persons in these neighborhoods.⁴

The third phase of our research dealt with the development of serious criminal careers and the delinquent neighborhood, providing additional evidence of the failure of the justice system to produce either specific or general deterrence and the role that it plays in the "hardening of the inner city." The process of becoming delinquent and staying delinquent differed depending on whether one had been socialized in the inner city or in other neighborhoods.⁵ Perhaps the most surprising finding was that the decrease in leniency for serious offenders was most evident in the inner city, the opposite of popular impressions.⁶

All of these findings were intriguing to the quizzical or questioning person, familiar to those who have been on the firing line long enough to be jaded or cynical, and disturbing to those who are sure that wielding a heavy stick works better than no

⁴ See The Relationship of Juvenile Delinquency and Adult Crime to the Changing Ecological Structure of the City, 477 pp., 1981. Final Report to the National Institute of Justice, Department of Justice, Grant Number 79NI-AX-0081, available from NCJRS. The major findings are summarized in "Ecological Evidence of the Hardening of the Inner City," Metropolitan Crime Patterns, Robert M. Figlio, Simon Hakim, and George F. Rengert, (eds.), Willow Tree Press, 1986, pp. 21-53.

⁵ Thornberry has utilized the Philadelphia data, controlling for seriousness of offense and recidivism, to demonstrate that more severe sentences are meted out to Blacks and low SES members of the cohort. See Terence P. Thornberry, "Race, Socioeconomic Status and Sentencing in the Juvenile Justice System," Journal of Criminal Law and Criminology 64 (1973): pp. 90-98.

⁶ See The Development of Serious Criminal Careers and the Delinquent Neighborhood, 344 pp., 1984. Final Report to the National Institute of Juvenile Justice and Delinquency Prevention, Department of Justice Grant Number 82-JN-AX-0004.

stick at all and is certainly better than a carrot on a stick.

The results of our earlier research were so provocative that we believed that an entire project should be concentrated on an analysis of the effectiveness of sanctions. If, for example, intervention in itself is effective, particularly if frequent, all other things being equal, we should find number of prior interventions or modest sanctions a deterrent to future offense seriousness. By contrast, if becoming tougher is the answer to delinquency and crime, then severity of prior sanctions, average severity of prior sanctions, and/or other indicators or measures of severe sanctions should be followed by greater desistance than that which takes place early in the careers of similarly misbehaving persons in each cohort who have not been severely sanctioned. What works may not be quite that clear, however, because there are many complex combinations of offense frequency and seriousness and many combinations of intervention frequency and severity of sanctions.

THE FINDINGS ON SANCTIONS FROM EARLIER ANALYSES

Measuring and Encapsulating Experience

A complete description of the adjudication process including alternatives at each step in handling juveniles who have been referred to the court in Wisconsin takes 14 pages of schematic diagrams. Obviously, it was not feasible to examine the process in its complexity to determine the consequences of each alternative step of each category of juveniles referred to the court. We, therefore, encapsulated their experiences to facilitate analysis.

Records of persons whose police contacts indicated a referral for further action were checked for formal juvenile or adult dispositions. Initial coding included all possible categories (sentence suspended, commuted, etc., 20 categories of fines, 11 categories for time in institutions, etc.) which were then combined within each type of category on a basis of degrees of penalties imposed. This collapsing process resulted in 21 code categories with variation in severity of sanctions within major categories.

While not all justice models call for a one-to-one relationship between either seriousness of juvenile misbehavior and severity of juvenile sanctions or seriousness of adult misbehavior and severity of adult sanctions, the fact remains that neither juvenile misbehavior and juvenile sanctions nor adult misbehavior and adult sanctions were highly correlated in the Racine data. Until recently the extent to which factors other than present offense and prior record influence sentencing has been the subject of considerable research but with conflicting findings because of problems with research design. More adequate funding and the existence of better data have made the effects of extra-legal factors or, as some term it, the capriciousness of the sanctioning process more certain.⁷

⁷ Joan Petersilia has summarized her findings in Racial Disparities in the Criminal Justice System, prepared for the National Institute of Corrections, U.S. Department of Justice, The Rand Corporation Publication Series, R-2947, NIC, June 1983, p. ix, "Controlling for the other major factors that might influence sentencing and time served, we found that minorities receive harsher sentences and serve longer in prison--other things being equal." In the pages which follow she goes on to

The Failure of the System

Going beyond the brief reference that we have made about the effects of sanctions during the juvenile period, after age 18 or 21 seriousness scores were lower for those 1949 Cohort members who had not been sanctioned and higher for those who had been institutionalized. With controls for seriousness of prior career, those who had been institutionalized had markedly higher after-age seriousness scores than those who had been sanctioned but not institutionalized, males and females combined, males alone, and each race/ethnic group alone. In other words, the institutionalization of juveniles or young adults failed to deter them from continuing to accumulate fairly high seriousness scores as adults.⁸

state that although the system may not be discriminating in using recidivism indicators in sentencing, this reflects the racial problems of the larger society. As the system relies more heavily on recidivism indicators which are not racially neutral, the problem is intensified. Also see Marjorie S. Zatz, "Race, Ethnicity, and Determinate Sentencing," Criminology 22(1984): pp. 147-171, has reviewed the research on Chicano sentencing and also used data on California sentencing in 1978 to show that factors related to length of sentence, taking into consideration type of offense, differ for Whites, Blacks, and Chicanos. Some of the disparities in reported research results may be accounted for by lumping Chicanos with Whites or Blacks, as has so frequently been done in research involving limited numbers of Chicanos.

⁸ Very few studies have been designed in such a fashion to give a definitive answer to the question of what the consequences of incarceration are, although those that have attempted to introduce appropriate controls conclude that incarceration does not work. For one of the more definitive studies see Andrew Hopkins, "Imprisonment and Recidivism: A Quasi-Experimental Study," Journal of Research in Crime and Delinquency 13 (1976): pp. 13-32. Hopkins concludes that incarceration may be worse than noninstitutional treatment.

Although we have not meant to imply that sanctions in themselves generate continuity in careers from delinquency to adult crime, the analyses do indicate that severe sanctions, all other things roughly equal, are not followed by declines in the accumulation of police contacts and higher seriousness scores. We have also found that, step by step, the process of continuation worked to place a disproportional number of inner city blacks in institutions before the age of 18 and to continue to place them in institutions. This is a function of the interaction of place of socialization, race/ethnicity, response to intervention, and, even more specifically, to severity of sanctions including institutionalization.⁹

PUTTING THE RESEARCH IN ITS SOCIETAL PERSPECTIVE

While Racine, Wisconsin has a crime rate similar to that of major cities in the United States, it did not have street gangs when the data were collected for any of our research projects. No segment of its economy was controlled by organized crime and racketeering. Drug use was on the upswing but drugs were not supplied by an underworld linked to the international narcotics trade which we now read about and view on the evening news or see

⁹ As Edward Green, "Race, Social Status and Criminal Arrest," American Sociological Review 35 (1970): pp. 476-490, concludes, "...the high official rate of crime for Negroes compared with whites results predominantly from the wider distribution among Negroes of lower class characteristics associated with crime." To the extent that place of residence (inner city and interstitial areas) is an indicator of social class, it is apparent that race/ethnicity and social class combine to produce a referral rate for blacks that is higher than that which they would obtain from place of residence alone.

portrayed in some of our most popular television programs. Racine's upper class was not a miniature of the upper classes of megalopolises. People in Racine earned a living by metal fabrication and spent their modest incomes on commonplace material goods.

Although Racine has its share of violent homicides, some as an outgrowth of armed robbery, some generated in tavern interaction, and some stemming from unrequited love or domestic disputes, Racine is not Crimeville, USA. It is not one of those small towns which, by its dissimilarity to ordinary communities, is a breeding ground for crime and vice. Its politicians are not grafters, its police are not burglars, and its labor leaders are not racketeers. Delinquency and crime are perceived by its good citizens as problems.

In attempting to account for the delinquent and criminal behavior of those who engage in these behaviors, we do not pardon it, justify it, condone it. Our concern is for how this type of behavior develops, how it is continued by some juveniles and adults, and how efforts to deal with delinquency and crime seem to be so ineffective.

It is more appropriate to re-examine the effectiveness of intervention and sanctions. Although we and others have dealt elsewhere at length with the problem of mandatory sentencing¹⁰

¹⁰ Lyle W. Shannon, "The Prediction Problem as it Applies to Delinquency and Crime Control," presented to the First National Symposium on Crime Control, National Criminal Justice Association, Philadelphia, 1983. This paper dealt with the failure of the Racine data to permit accurate predictions of future criminal careers as well as the failure (unrecognized) of

and selective incapacitation, the research presented in reports and professional literature reveals that the "debate" will continue.¹¹

CONSIDERATION OF OFFENSE SERIOUSNESS, THE DECISION TO REFER, AND SEVERITY OF SANCTIONS

Offense Seriousness and the Decision to Refer

Although cohort, time period, and age effects on offense seriousness were examined, with number of prior offenses as a control, very little of the variance (less than 6%) in offense seriousness was accounted for. Only 20% of the variance in the decision to refer was accounted for by cohort, time period, age, offense seriousness, and number of prior contacts. Although as much as 32% of the variance was accounted for when numerous other variables were regressed on the decision to refer or not, seriousness of offense was most important even with sex, race, place of residence, etc., included.

Severity of Sanctions

Cohort and time period had relatively little effect on severity of sanctions but offense seriousness and number of prior contacts had consistently positive effects on severity of sanctions. Although the precise comparison of studies is always

other highly valued studies. A lengthy bibliography on career criminals, prediction, and the problems of mandatory sentencing is provided.

¹¹ See Arnold Barnett and Anthony J. Lofaso, "Selective Incapacitation and the Philadelphia Cohort Data," Journal of Quantitative Criminology 1(1985): pp. 3-36, as an example of perceptive evaluation of the literature and an excellent piece of research based on the 1945 Philadelphia cohort.

difficult because most researchers define their variables without much reference to other studies, thus not producing completely comparable results, our statistics, as do others, show that Whites (Anglos) fare better when they appear before the judge than do minority groups.¹²

BEGINNING WITH A SIMPLIFIED RESEARCH STRATEGY

There are 4,079 persons with continuous residence in the combined cohorts, although only 2,601 of them, males and females, ever had a police contact. While these 2,601 persons had a total of 15,245 police contacts, only 3.3% of the 1942 Cohort, 10.3% of the 1949 Cohort, and 14.5% of the 1955 Cohort had a police contact for an allegedly felony-level offense. Since not all felons are serious or dangerous offenders, we shall, with some reservations, use felony as an operational definition of seriousness in our simplified analysis of what happens to persons who are referred to juvenile and/or adult authorities as a consequence of their police contacts.

Concentration on Cohort Members with Non-Traffic Contacts, Ages 13-22

Let us turn to those persons from the combined cohorts who had non-traffic police contacts during the ages 13 through 22, aggregated into two-year periods, as shown in Table 1. Each of

¹² Regional differences in sentencing disparities have also been dealt with most recently in Peter W. Greenwood, Allan Abrahamse, and Franklin Zimring, Factors Affecting Sentence Severity for Young Adult Offenders (Santa Monica: Rand, 1984) and in a Bureau of Justice Statistics Special Report, Felony Sentencing in 18 Local Jurisdictions, May, 1985.

the 1,798 persons who had one of the 31 types of careers is arrayed from those 153 who had at least one non-traffic contact during the ages 13-14 to those 107 who had at least one such contact during the ages 21-22. There were 201 persons who had no non-traffic police contacts during the ages 13 through 22 who had one or more at an earlier or later age. There were 602 who had only traffic contacts at any age period and 1,478 who never had a police contact. Table 1 dramatizes how varied are careers for even such a short span of time.

The complexity of the experience patterns that we have attempted to encapsulate by coding to categories and by controlling through statistical manipulation of variables is further demonstrated by Diagram 1. Here it is even clearer that cohort members drifting in and out of delinquency and crime make the analysis of effects on continuity quite difficult. In the last stage we would have included 107 persons who had not previously (since age 12) had a non-traffic contact and would have lost 352 persons who had contacts at the ages of 19-20 but did not have a contact during the ages 21-22.¹³

Coupled with the foregoing is the fact that during each age period a person may have more than one police contact with more than one level of seriousness and that, if they have been referred, there is more than one level of severity of sanction.

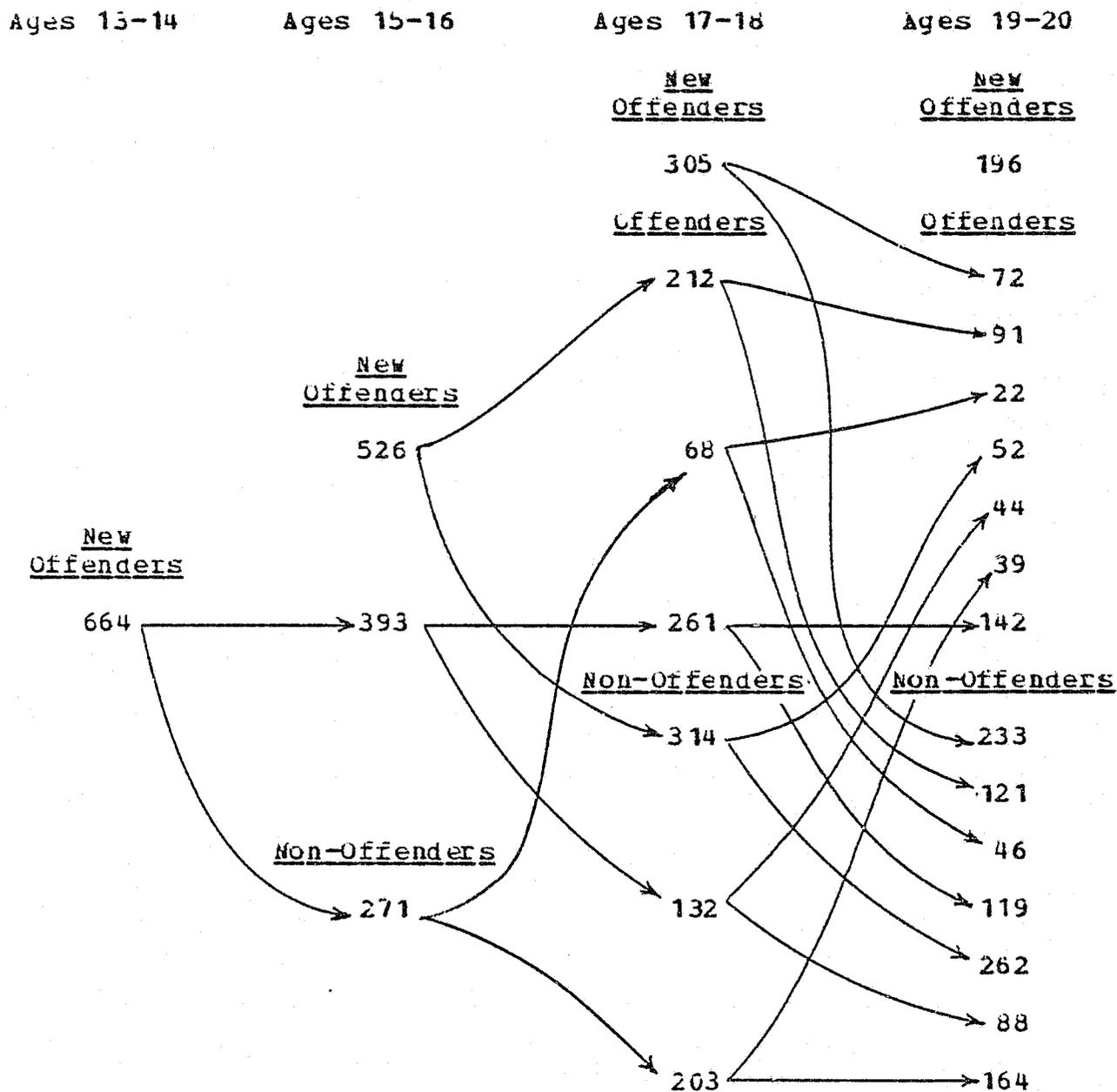
¹³ The complexity of the problem and its impact on research findings has recently been detailed by Marjorie S. Zatz and John Hagan, "Crime, Time, and Punishment: An Explanation of Selection Bias in Sentencing Research," Journal of Quantitative Criminology 1(1985): pp. 103-126.

TABLE 1. CONTINUITY TYPES OF DELINQUENT AND YOUNG ADULT CAREERS
 BASED ON NON-TRAFFIC POLICE CONTACTS, BY TWO-YEAR PERIODS,
 FOR COMBINED COHORTS¹

Types	Age 13-14	Age 15-16	Age 17-18	Age 19-20	Age 21-22	NUMBER
1	X					153
2	X	X				75
3	X	X	X			83
4	X	X	X	X		57
5	X	X	X	X	X	85
6	X	X	X		X	36
7	X	X		X	X	20
8	X	X			X	13
9	X	X		X		24
10	X		X	X	X	7
11	X		X	X		15
12	X		X		X	8
13	X		X			38
14	X			X	X	15
15	X			X		24
16	X				X	11
17		X				234
18		X	X			93
19		X	X	X		40
20		X	X	X	X	51
21		X	X		X	23
22		X		X	X	11
23		X		X		41
24		X			X	23
25			X			201
26			X	X		50
27			X	X	X	22
28			X		X	32
29				X		151
30				X	X	45
31					X	127
32	No Non-Traffic Contacts 13-22					201
33	Traffic Contacts only During Career					602
34	No Contacts at Any Time					1478
TOTAL	664	919	846	658	519	4079

¹ Cohort member had at least one non-traffic contact during the two-year period.

DIAGRAM 7. CONTINUITY AND DISCONTINUITY FOR PERSONS WITH NON-TRAFFIC POLICE CONTACTS, AGES 13-20, FOR COMBINED COHORTS



To deal with this we have collapsed the data to 13 categories of combinations of offense seriousness and severity of sanctions.

The first category consists of persons who had police contacts which were of such a nature that they were not referred by the police. The second category consists of minor misdemeanors that were referred but dismissed, the third category were fined, the fourth category were given probation, and the fifth were institutionalized. The next set of four categories consists of persons with major misdemeanors according to the category of sanctioning that they received, while the last set consists of felonies according to severity of sanction.

Contacts for minor misdemeanors and major misdemeanors were collapsed for most of the analyses. This reduced the categories to a point that one could detect trends and relationships from tables with little difficulty.

Responses to Police Dispositions and Court Sanctions

Commencing at Ages 13-14. Table 2 permits retention of the age perspective but focuses our attention even more carefully on serious offenders (the most serious offense by each offender during each two-year period). Note that without exception, over half of the police contacts for non-traffic offenses were not referred. The percent of all non-traffic police contacts consisting of referred felony-level offenses reached its peak at ages 15 through 20, 145 at ages 15-16, 138 at ages 17-18, and then 107 at ages 19-20. They comprised 15.8%, 16.3%, and 16.3% of those with non-traffic contacts but only 3.5%, 3.4%, and 2.6%

TABLE 2. DISPOSITION OF THEIR MOST SERIOUS NON-TRAFFIC OFFENSES FOR COMBINED COHORT MEMBERS, AGES 13 THROUGH 22, BY TWO YEAR PERIODS¹

	Age 13-14		Age 15-16		Age 17-18		Age 19-20		Age 21-22	
	N	%	N	%	N	%	N	%	N	%
Contact not referred	451	67.9	515	56.0	439	51.9	382	58.1	355	68.4
Misdemeanor or Other Referral of Less Than a Felony Offense										
Dismissed	117	17.6	202	30.0	189	23.3	87	13.2	54	10.4
Fined			10	1.1	51	6.0	65	9.9	52	10.0
Probation	16	2.4	40	4.4	18	2.1	3	.5	1	.2
Institutionalized			7	.8	11	1.3	14	2.1	9	1.7
Subtotal	133	20.0	259	28.2	269	31.8	169	25.7	116	22.4
Felony Referred										
Dismissed	38	5.7	70	7.6	80	9.5	58	8.5	34	6.5
Fined			5	.5	9	1.1	13	2.0	4	.7
Probation	32	4.8	44	4.8	30	3.5	21	3.2	5	1.0
Institutionalized	10	1.5	26	2.8	19	2.2	15	2.3	5	1.0
Subtotal	80	12.0	145	15.8	138	16.3	107	16.3	46	9.2
TOTAL	664	99.9	919	100.0	846	100.0	658	100.0	519	100.0

¹ If a cohort member had more than one police contact during any two-year period, the most serious was selected, and if there were two of equal seriousness, the one receiving the most severe disposition was selected.

of the combined cohorts, i.e., 3.6% of the combined cohorts had referred felony-level police contacts at ages 15 or 16, 3.4% at 17 or 18, and 2.6% at ages 19 or 20. Put even more simply, about 3% of the cohort had a referred felony-level contact each year at ages 15 through 20. This is a very small proportion of the youth of those ages. An even smaller proportion had a referred contact of a less serious nature as their most serious justice experience.

From the perspective of one who looks at cohorts, most youth are pretty well behaved as far as their relationship to the police is concerned. From the perspective of those who have overcrowded juvenile bureaus, detention centers filled with unruly young people, frenzied juvenile court intake offices, and crowded court schedules, it is something else. The perspective of the victim of a shattered auto, vandalized school, or emptied home, differs in another way.

That about half of the referred felony-level offenses result in dismissal and relatively few result in institutionalization is a concern for those who believe that we are too easy on youth.¹⁴

¹⁴ For a variety of reasons, including the small Ns involved and the ages of most offenders, some of the tables which follow must be considered more suggestive than definitive. Racine's felony probationers did better than those sentenced to probation in Los Angeles and Alameda Counties, not surprising of course. A more definitive answer to the question, for example, of the effectiveness of probation vs. institutionalization will be forthcoming from Petersilia, *et al.* See: Joan Petersilia, Susan Turner, James Kahan, and Joyce Peterson, Granting Felons Probation: Public Risks and Alternatives. Prepared for the National Institute of Justice, U.S. Department of Justice (Santa Monica: Rand, 1985). The ineffectiveness of probation is exceeded only by the ineffectiveness of institutionalization. If neither is well-conducted, what other results could be expected?

These figures do not show, of course, that even a smaller percent of the felony-level offenders are placed in what might be termed a medium security-level institution and that a very, very small percent are incarcerated in maximum security institutions. For this we are fortunate, not just the offenders. The desistance rate is high for most offenders who are not sanctioned. Some selectivity is involved in the decision to severely sanction but even then desistance is not increased after imprisonment. Society has always thought that some penitence must come from incarceration but it appears that incarceration produces even harder men (and perhaps women). Until it can be shown that institutionalization is effective in changing miscreants it is difficult to see how judges may be faulted if they fail to institutionalize offenders other than those who are considered dangerous to society.

We next went a step further and examined the status of offenders at one two-year age period and at each following two-year age period, as shown in Table 3. Note that the Ns at the bottom of each column correspond to the Ns for ages 13-14 in this table, with the exception of the categories omitted because there were too few persons. By reading down each column one may observe how the persons in each of the five categories across the top of the table at ages 13-14 were distributed at ages 15-16, 17-18, 19-20, and 21-22. For example, of those 451 who had unreferred non-traffic contacts at the ages of 13-14, 47.5% had no non-traffic police contacts at ages 15-16 but this had increased to 72.5% by the ages of 21-22. Similarly, if one

TABLE 3. STATUS OF COMBINED COHORT MEMBERS ACCORDING TO DISPOSITION OF THEIR MOST SERIOUS NON-TRAFFIC OFFENSE AT THE AGE OF 13-14 AND TWO-YEAR AGE PERIODS FOLLOWING¹

Statuses, Later Age Periods	Status, Ages 13-14 & 15-16					Status, Ages 13-14 & 17-18								
	Cont. Not Ref.	Misd. Other Ref. Dis.	Ref. Fel. Dis.	Ref. Fel. Prob.	Ref. Fel. Inst.	Cont. Not Ref.	Misd. Other Ref. Dis.	Ref. Fel. Dis.	Ref. Fel. Prob.	Ref. Fel. Inst.				
No Contact	47.5	36.8	21.1	15.6	----	54.1	50.4	31.6	46.9	10.0				
Contact Not Referred	27.5	27.4	13.2	25.0	20.0	22.8	20.5	26.3	12.5	30.0				
Misdemeanor or Other Referral of Less than a Felony Offense														
Dismissed	10.9	12.8	21.1	21.9	20.0	10.2	10.3	10.5	15.6	10.0				
Fined	.9	.9	----	----	----	2.9	3.4	2.6	----	10.0				
Probation	3.1	4.3	5.3	3.1	----	.6	.9	2.6	----	----				
Institutionalized	.4	1.7	----	----	----	1.3	----	2.6	----	----				
Subtotal	15.3	19.7	26.4	25.0	20.0	15.0	14.5	15.6	13.0	20.0				
Felony Referred														
			STATUS: AGES 13-14					STATUS: AGES 13-14						
Dismissed	AGES 15-16	}	4.4	6.8	23.7	18.8	20.0	17-18	}	3.3	6.0	15.8	12.5	20.0
Fined			.4	.9	----	----	----			.9	----	----	----	----
Probation			2.7	7.7	5.3	5.3	----			2.2	6.8	----	6.3	10.0
Institutionalized			2.2	.9	10.5	9.4	40.0			1.6	1.7	7.9	6.3	10.0
Subtotal			9.7	16.2	39.5	34.5	60.0			6.0	14.5	23.7	25.1	40.0
N			451	117	38	32	10			451	117	38	32	10

TABLE 3, Continued

	Status, Ages 13-14 & 19-20					Status, Ages 13-14 & 21-22						
	Cont. Not Ref.	Misd. Other Ref. Dis.	Ref. Fel. Dis.	Ref. Fel. Prob.	Ref. Fel. Inst.	Cont. Not Ref.	Misd. Other Ref. Dis.	Ref. Fel. Dis.	Ref. Fel. Prob.	Ref. Fel. Inst.		
Statuses, Later Age Periods												
No Contact	67.9	61.5	47.4	50.0	20.0	72.5	74.4	50.0	59.4	50.0		
Contact Not Referred	18.4	14.5	7.9	21.9	30.0	17.3	12.0	29.0	25.0	20.0		
Misdemeanor or Other Referral Less Than Felony												
Dismissed	3.5	7.7	2.6	9.4	10.0	3.1	2.6	5.3	3.1	----		
Fined	2.7	5.1	7.9	6.3	----	3.3	6.0	5.3	3.1	----		
Probation	.2	.9	----	----	----	----	.9	----	----	----		
Institutionalized	.4	1.7	7.9	----	----	.9	----	2.6	----	----		
Subtotal	6.8	15.4	18.4	15.7	10.0	7.3	9.5	13.2	6.2	----		
Felony Referred												
	STATUS: AGES 13-14					STATUS: AGES 13-14						
Dismissed	AGES 19-20	4.2	3.4	10.5	3.1	20.0	21-22	1.6	2.6	5.3	5.4	20.0
Fined		.7	2.6	2.6	3.1	----		1.7	----	----	----	----
Probation		.9	----	5.3	3.1	----		.4	----	----	----	----
Institutionalized		1.1	2.6	7.9	3.1	20.0		.7	----	2.6	----	----
Subtotal		6.9	8.5	26.3	12.4	40.0		2.9	4.3	7.9	9.4	20.0
N		451	117	38	32	10		451	117	38	32	10

¹ Categories of dispositions other than dismissal are eliminated for misdemeanor or lesser offenses and fines for felony-level offenses for the age 13-14 category because there were fewer than 10 persons in each.

examines each of the other categories for ages 13-14 one will find an increase in the percent with no contact from age to age.

Although more and more of those who had been institutionalized for a referred felony were without a non-traffic contact year by year, the increase in percent who discontinued or desisted for this group was still low compared to other groups. It should be noted that of those felonies sanctioned in the combined cohorts, 8.5% had a lag time of one year beyond date of offense and 6.9% had more than a year beyond date of offense and conviction. Thus, in a few cases, the actual imposition of a sanction would be in a different two-year period so that desistance based on the positive effects of incarceration, if they existed, would be found in the second or later following period. The findings indicate that lag has little effect on outcomes.

Examining the top row of figures reveals that within each two-year age group there was a decline in the percent who had no contacts in the following age period from those 451 who had no referred non-traffic contacts to those 10 who had referred felonies resulting in institutionalization. Note that the effects of early institutionalization were slow to wear off compared to the effects of probation or dismissal. The first row of this table quickly confirms in a simple way what we had as our earliest concern about the unplanned consequences of severe sanctioning. Of course, we have not controlled for type of felony or prior record, etc., but this is not an encouraging

finding for persons enamoured with institutionalization as an effective way of changing behavior for the better. Although 27.5% of these 451 had an unreferred non-traffic contact at the ages of 15-16, this had declined to 17.3% by ages 21-22. Those who had been institutionalized for a felony did not have a decrease in their percent with an unreferred contact from age period to age period.

Most important, however, is the fact that of those with referred felonies during the ages 13-14, the percent who, in the next age period, had referred felonies, increased depending upon whether the referred felony had been dealt with as a dismissal, by probation, or by institutionalization. This was evident at the following age periods of 15-16, 17-18, and 19-20. It should also be noted that as one proceeds from having a non-referred contact to a felony contact culminating in institutionalization the percent of those who have had at least one felony referral increases at any given following two-year period. More people go on to have contacts that are referred and the contacts are more concentrated at the felony level when a felony at ages 13-14 is dealt with by institutionalization. In other words, institutionalization for a felony has as its consequence another felony rather than desistance. As high as 60% behave in the next two age periods in such a fashion as to have at least one other felony referral on their records. This means that institutionalization for felony-level police contacts has little deterrent effect.

Commencing at Ages 15-16. Since the ages 13-14 might be argued as young for the first two years of such an analysis, we next turned to those who had had non-traffic police contacts at the ages of 15-16. Whether they were first or whatever police contacts, they had a more rapid shift to no contact status than did those who had earlier appearances. Some of these had earlier appearances and some did not (525 cohort members were added who had not had a non-traffic contact at ages 13-14) but in the main the group shifted to contact statuses in roughly the same pattern as did the earlier group (13-14) by ages 17-18. Those with referred felonies during the age periods 15-16 and then 17-18, 19-20, and 21-22 had declines in the percent with referred felonies somewhat more immediately after the initial period but to essentially the same extent by the age period 21-22 as for those who had started earlier. The most important point is that persons with referred felonies resulting in institutionalization were more likely to have referred felonies in the following period than were those cohort members whose referred felonies had resulted in less severe sanctions.

Commencing at Ages 17-18 and 19-20. Over 300 cohort members are added for ages 17-18 but 649 desisted for at least two years. There was a rise in percent of those with no non-traffic contacts in the age groups 19-20 and 21-22 and a relatively lower percent of those with further referred felonies from each group with earlier referred felonies (17-18). The proportion with felony referrals was lower in the next period for those with contacts at

ages 17-18 or 19-20, a group, some of whom had contacts at earlier periods but many of whom had their first or second non-traffic contacts.

Institutionalization of persons with felony contacts at later ages does not seem to produce proportionately as many persons with felony contacts at following ages as it does for persons institutionalized at earlier ages. Of course, the type of institutionalization offered, experiences in the institution, and perceptions of inmates may differ with age. Although there is also no control for length of institutionalization at earlier vs. later ages, we believe that the difference in response between those who have been institutionalized vs. those whose cases were dismissed is sufficiently large that it will remain with these controls inserted. Again, there is no evidence that early institutionalization, i.e., severe sanctioning at an early age, is an effective deterrent to future serious offenses.

An Even More Precise View of the Dynamics
of Delinquent Behavior and Official Response

Table 3 helped us see why so much attention has been focused on the serious offender. Institutionalization of those with felony-level offenses at an early age produces few with no immediate contacts but about 60% with another referred felony within the next two years and about 40% the next two years after that. This gives rise to the idea of continuity. Beyond that, some people interpret this as the failure of institutions to reform while others seize upon the idea that release was too quick. whichever, the high proportion of those who return to

felony-level contacts that are serious enough to be referred only shortly after early institutionalization (nipping them in the bud) highlights the problem.

But why is it that the no further contact percent is so much higher and remains higher year by year, whatever the age at which a group is selected for following, particularly for persons with referred felony-level contacts whose cases are dismissed? And why is the opposite found so consistently, i.e., the highest proportion with future referred felonies are those whose referred felonies were dealt with by institutionalization?

Although we examined cohort members, case by case, particularly to determine if there was a link between discontinuity or complete desistance and institutionalization, in most cases where desistance could have followed, it did not. The reason or reasons behind cessation of contact-generating behavior would seem to arise from something other than time spent in an institution.¹⁵

¹⁵ There were, as we previously indicated, 1,798 persons who had a police contact during at least one of the two-year periods between the ages of 13 and 22 for other than traffic offenses. Among these were 119 who were institutionalized as juveniles or young adults for one or more of these offenses. In addition, there were 13 who were institutionalized for only traffic offenses (and 7 who received sentences of time in institutions for both traffic and non-traffic offenses).

A check of the record of each of the 132 persons (all cohorts combined) who had been institutionalized revealed that there were only 13 who had been removed from the community long enough to have been unable to have contacts during the next two-year period(s).

If the other 119 had no contact it could have been because institutionalization was effective. Thus, failure to have additional contacts because they had been removed from the

INTRODUCTION TO THE MULTIVARIATE ANALYSES

In our full final report to the National Institute of Justice, A More Precise Evaluation of the Effects of Sanctions, over 100 pages of text, tables, and appendices dealt with the problem of the effectiveness of dispositions and sanctions on a contact-by-contact or age-by-age basis without producing substantial evidence of the effectiveness of sanctions at any point in delinquent or criminal careers. On the other hand, it appeared that demographic and offender characteristics better accounted for outcomes. This does not imply that the explanation for continuity in careers vs. discontinuity lies within the person, his/her psyche or immutable biological make-up. The demographic characteristics of people within an on-going social milieu plus the nature of interaction between the alleged offender and representatives of the justice system are most

community would account for only a small proportion of the even short-time discontinuers.

Among those who ever received a sanction for a non-traffic offense were 85 who were in career continuity Type 5 (see Table 1). Of the total of 40 Type 5 persons institutionalized, six received their only institutionalization(s) at ages 21 and/or 22. Whether or not they were deterred in the following age period is not apparent from this analysis. The remaining 34 were apparently undeterred, since they had police contacts at every age period.

There were 1,279 persons in the 15 career types (Table 1) who desisted after age 14, 16, 18, or 20, i.e., sometime during ages 13 through 22. They comprised 71.1% of the 1,798 persons with non-traffic contacts. Only 51 of these 1,279 persons in what might be characterized as "terminal career" categories had been institutionalized, which is only 4.0% of those whose careers ceased before age 21. Even if it could be assumed that institutional programs should receive the credit for desistance this would only be a small percent of the total number who desisted for whatever reason.

helpful in understanding how some continue to misbehave while others desist. Unfortunately, we were unable to take different kinds of institutional experiences into consideration in these analyses but we know that not everyone has the same experience in even the same program.

One set of analyses of court dispositions and severity of sanctions was based on demographic, ecological, and career data alone and a second set of analyses included interview data for those who were interviewed from the 1942 and 1949 Cohorts. The interview data provided a wide variety of explanatory variables, such as demeanor and attitude of respondents at the time of and following police contacts as they recalled them.

The alleged offenders' prior contact and court dispositions records were also included in order to assess their additional effects on the disposition and severity of sanctions at each present court appearance as well as future delinquent or criminal behavior. The analyses actually became a cumulative type of endeavor as it proceeded contact by contact, throughout the cohort member's career.

This procedure permitted a more precise assessment of the effects of sanctions than did previous analyses which did not statistically control for numerous background and experiential variables simultaneously. When the interview data were included, only those variables which could have effects on contacts and dispositions at that age were included.

FUTURE OFFENSE SERIOUSNESS AND THE ROLE OF INTERVENTION/SANCTIONS

The Most Difficult Decision

Our earlier analyses as well as those conducted as part of this project have demonstrated that it is difficult to account for what a person will do next after the most recent police contact, or after all prior contacts, or at the next age. This is why police, probation, court workers, judges, parole boards, etc., have so much difficulty. The public expects more from them than they should. The relationships used as a basis for either formal or informal prediction are simply not strong enough, or, if strong, are not based on sufficiently large samples to be statistically significant. On the other hand, even though the seriousness of next offense is not predictable, that there will be another offense is more predictable, i.e., even though most desist early in their careers, after a certain point in career development more will commit another offense in the future than will desist.

The assumption that how persons on the firing line deal with miscreants enables them or others to predict how soon or what the miscreant will next do is quite fallible.

The Juvenile Period

When the model attempted to account for total future offense seriousness at the first through tenth juvenile police contacts, the first-order correlation coefficients produced significant relationships between total future offense seriousness and the following independent variables: juvenile neighborhood, race,

age, number of prior sanctions, and, to some extent, sex and prior and present seriousness of contact.

Only age had much impact on future offense seriousness in the multiple regression analysis. The younger one was at the time of any given contact level, the greater the probability of future contacts. At each contact level the absolute value of the standardized estimate for age at contact was much larger than for any other variable. Race had the second largest standardized estimate at each contact level and was significant at the first, second, third, and sixth contacts. None of the career variables, including intervention and sanctions, contributed significantly to the model in explaining the variation in future total offense seriousness.

The amount of variance accounted for by the independent variables was weak to moderate and increased from 20% at the first contact level to about 38% at the upper contact levels. When the multiple regression was conducted with severity of prior sanctions eliminated the adjusted R^2 s were the same as previously and the standardized estimates for number of prior sanctions (court interventions) remained essentially the same.

The Adult Period

In general, the first-order coefficients of correlation for the adult period were weak to moderate in strength but not significant after the eighth contact, except for age which was significant at all 10 contacts. There were clearly and consistently (at nearly every contact) significant relationships

between future offense seriousness and the independent variables race, age, total prior sanctions, total prior seriousness, number of prior sanctions (court interventions), and adult neighborhood. Sex, type seriousness of present contact, and court sanction were also significant at some contact levels.

Age was increasingly negatively correlated with total future offense seriousness, peaking around the seventh contact. This relationship, aside from the fact that crime-prone young adults may get into trouble earlier, is also due to the fact that a younger age at a given contact number permits more time for future criminal activity. Reaching a certain contact number at a younger age also implies something about the nature of a person's activity, his/her visibility to the police, and their recognition or labelling of the person as a lawbreaker. Race was correlated with future offense seriousness at all contact levels, significant at the first through seventh, and decreased in strength as contact level increased. In other words, once the higher contact levels have been reached it seems to matter less whether a person is White or Non-White in terms of total future seriousness, as was also the case for the second Philadelphia cohort.

Three of the five adult career variables (total prior offense seriousness, total prior severity of sanctions, and number of prior sanctions) were positively and significantly correlated with future offense seriousness at most contact levels. For the adult career alone, then, prior cumulative

delinquent and criminal activity and cumulative official response seem to be directly related to future cumulative criminal activity.

Although inner city residence increases the probability of future offense seriousness, the correlations were significant only for the first through fifth contacts. Thus it seems that as a person's adult criminal career reaches a certain point, the effect of inner city residence diminishes in importance.

The relationship of sex to future offense seriousness was significant only at the first three contacts; after a criminal career is pretty well established, total future offense seriousness and being male have little relationship. There are, of course, very few females with lengthy continuities in recorded delinquency and crime.

As was true for the juveniles, the strength and direction of the relationships between the dependent variable and the most immediate indicators of criminal activity, type seriousness of present contact and most recent sanction, were neither large nor consistent.

Contact by contact, then, the correlations indicated that demographic characteristics, cumulative measures of prior criminal behavior, and cumulative measures of interaction with the justice system are related to future offense seriousness but the more immediate and time-specific measures of criminal behavior and sanctioning were not.

However, when total future offense seriousness was regressed on the independent variables for each contact level, only age at contact and total prior offense seriousness emerged as having significant impact. Age had more of an impact at the sixth through tenth contacts, while total prior offense seriousness has more impact than any other variable at the first through fifth contacts. The standardized estimates were always negative for age (significant at all contact levels) and always positive for total prior seriousness (significant at the first through fifth contacts).

The amount of variation in total future seriousness accounted for by the independent variables in the regression equation ranged from 29% at the first contact to 11% at the tenth contact, a rather modest overall fit for the model. When severity of prior sanctions was eliminated from the multiple regression analysis (leaving number of prior sanctions or court interventions) the results, in terms of accounted-for variance, just as in the juvenile case, were essentially the same as with it included. However, the standardized estimates for number of prior sanctions more than doubled at several of the earlier contact levels, was statistically significant through the third adult contact, and remained higher than previously through the tenth contact.

So far, then, we see that more of the variation in future total offense seriousness was explained for the juveniles than for the adults at each contact (except the first contact) and the

amount of variation accounted for increased for the juveniles and decreased for the adults as the number of contacts increased.

The data were also submitted to a Lisrel analysis that emphasized differences in the impact of variables during the juvenile and adult periods, to some extent differences that varied from the multiple regression analyses, although the end product was essentially the same amount of the variance accounted for whichever technique had been employed.

Juvenile and Adult Periods Combined

For the total career, juvenile and adult combined, the first-order correlation coefficients indicated the presence of a significant relationship between future offense seriousness and the following independent variables at most contact levels: age, race, total prior seriousness, type seriousness of present contact, number of prior sanctions, sex, and juvenile neighborhood. Severity of present sanction is significantly correlated only at some contact levels, while severity of prior sanctions is never significantly correlated with future offense seriousness.

Age at contact was, as always, significantly and increasingly correlated with future offense seriousness across contact levels. Race was significantly correlated with future seriousness at all contact levels but declined in strength with number of contacts.

There was a weak positive relationship between total prior offense seriousness and total future offense seriousness; the

relationship tended to increase in strength, contact-by-contact. The correlation coefficients were significant at the second through tenth contacts. The number of prior sanctions was negatively correlated with future offense seriousness, increasing slightly as contacts increased, significant at the second through tenth contacts.

Being male was directly related to higher future total offense seriousness at all contacts, significant at the first six contact levels, but decreased somewhat from contact to contact. Inner city residence was related to higher future offense seriousness, with significant but not very strong correlations found at all contact levels.

Perhaps the most important finding was the lack of a significant relationship between the severity of prior sanctions and total future offense seriousness. The relationship between total future offense seriousness and severity of sanction just received was weak and inconsistent in direction.

Contact by contact, the standardized estimates for age and race were greater than those for other variables. Youthfulness at time of contact and being Non-White were related to future offense seriousness. For age the values were significant at the .01 level or better, first through tenth contacts, while for race at the values were significant first through seventh contacts.

In sum, 22% of the variation in future offense seriousness was accounted for at the first contact, 38% to 40% at contacts levels 8, 9, 10. Eliminating total prior severity of sanctions

in the multiple regression analysis resulted in practically no change in the adjusted R²s or the standardized estimates for the independent variables. We have also found that neither a ratio dealing with instant offense seriousness and severity of sanctions or a similar variable cumulating the ratio of prior severity of sanctions and prior offense seriousness is useful in accounting for future offense seriousness.

The same analysis with age and race omitted resulted in total prior seriousness and number of prior sanctions becoming the most important variables, increasing from police contact to contact. The higher the total prior seriousness, the more serious the future career. The higher the number of prior sanctions the less serious the future career. The importance of these variables was closely followed by inner city residence. All were significant but no more than 13% of the variance was accounted for. In other words, the variables in which we are most interested, severity of present sanction, number of prior sanctions, and severity of prior sanctions, accounted for only a small proportion of the differences in total future offense seriousness, i.e., the seriousness of future delinquent and criminal careers.

A path analysis was conducted to see if further insight into the relationships between the cumulative career measures and future offense seriousness could be achieved. Causal models were developed to analyze possible mediating effects of the variables age of contact and race on the relationships between the career

variables and future total offense seriousness. The results of the path analysis suggest that the effects of the career variables are mediated by the variable age of contact so that age of contact does, in fact, have a direct causal effect on future total offense seriousness.

In essence, the younger a person at the time of their sixth contact (chosen because it is the time at which a person has been thoroughly involved in the process of becoming delinquent and thoroughly involved in the justice system as well), the more probable that a serious career in delinquency will continue to evolve.

Variation in Future Offense Seriousness by Cohort

The amount of variation in future offense seriousness accounted for by the regression model did not change drastically in the analysis when the cohort comparison was done for two of the three cohorts (1942 and 1949) or as compared to the uncontrolled results. For the 1955 cohort, however, there was a slightly larger amount of variation in future offense seriousness accounted for by the model than when there was no control for cohort, ranging from 23% to 57% at the ninth contact. For the combined cohorts the amount of variation ranged from 23% to 39% at the ninth contact. Age at contact emerged as the most important variable in the regression model regardless of which cohort is under consideration, with coefficients that tended to increase in value from the 1942 Cohort to the 1949 Cohort to the 1955 Cohort. Overall, the other variables that had impact were race and juvenile neighborhood.

ACCOUNTING FOR CONTINUITY VS. DISCONTINUITY

The Multiple Regression Findings

With the dependent variable being continuity vs. discontinuity (desistance) from first through ninth contacts, age at contact was the only variable that was statistically significant from the first through the ninth contacts for the juvenile and adult periods or without controls for period; the lower the age at any contact the greater the probability of continuity beyond that contact. Age had its greatest effect at the third juvenile contact, at which point 22.6% of the variance in juvenile continuity was accounted for. Age had its greatest adult impact at the seventh contact, the amount of variance accounted for around 11%. Without controls for period, the fourth contact was the point at which the most continuity (23.4%) was accounted for. In essence, continuity vs. desistance was better accounted for than offense seriousness at any given contact.

One must remember that discontinuity and continuity differ from total future offense seriousness as dependent variables. Even after the first contact more males will have a second contact than will not. The continuation rate is higher for males than females in the early stages of careers but they become more similar after the tenth contact because of a small proportion of the females who are even more repetitious in their behavior than the males. This is not true at the felony level, however, where the desistance rate of females has been high in every cohort. It

is very apparent that those males who do continue have more serious future careers than do females who fail to desist.

The Multiple Discriminant Function Approach

The multiple discriminant function was utilized to determine which factors distinguish those who will continue from those who will desist at any contact level. However, even though maximum discriminatory ability was reached by the fourth or fifth contact and what we have termed career variables became significant by the fifth police contact, only 24% of the desistance at that point was accounted for with age at contact the most important variable in either continuity or desistance.

INTEGRATING INTERVIEW DATA INTO THE ANALYSIS

Interview Responses and Self-Reported Delinquency

Each of the interview variables selected fitted into one of seven categories of independent variables (Transition measures, Home conditions, Employment, Education, World view, Associations, and Adult status) or was a self report measure to be used as a dependent variable. Intercorrelations of the independent variables were in almost all cases lower than .500; there was no problem of multicollinearity. On the other hand, there was a high degree of multicollinearity among the dependent self report measures so that a total measure was much the same as a measure for either the juvenile or adult period or a measure for major misdemeanor was about the same as a measure of all self reported offenses.

Such variables as attitude toward the police and self concept as a delinquent had modest correlations with self report measures of delinquency. There was hardly a case where the independent interview variables characterizing cohort members, either by attitudes, behavior, associations, or demographic characteristics, were correlated with the dependent self report measures in a direction that was different from that predicted by sociological theories of the causes of delinquency and crime. At the same time, these correlations were very modest, seldom exceeding .400.

Delinquency self concept at ages 6-17, attitude toward the police, perception of police patrolling the juvenile neighborhood, attitude toward school, auto use while in high school, desire to have been a different type of person as a juvenile, having juvenile friends in trouble with the police, and residence in the inner city vs. other neighborhoods accounted for 43.7% of the variance in self report delinquency rates (offense frequency and seriousness). These juvenile variables accounted for 33.3% of the variance in self report rates after reaching age 18.

Disconcerting though it may be to those who believe that sanctions are effective in one way or another, the number of sanctions imposed on juveniles had a significant positive impact on their adult self report seriousness. Not surprising is the fact that self concept as a delinquent and having friends in trouble with the police had the highest correlations with

juvenile self report rates. Having juvenile friends in trouble with the police continued its effect into the adult period and had a greater impact than any other variable. Interpreting these relationships is another matter.

Among those strictly adult variables which had an effect on adult self report rates, adult friends in trouble with the police had by far the greatest impact. Consistent with earlier research in which youthful employment was associated with higher official delinquency was the fact that age at first full time job (this ranged from 12 to 35 so that use of the variable is appropriate) had the greatest impact on delinquency self report rates, the earlier that first full time job commenced, the higher the rates. Early age of driver license and leaving home at an early age were other transitional variables which, along with later age at marriage and inner city residence, accounted for 18.1% of the self report variance in delinquency rates and 15.5% of the adult variance.

Although failure to graduate from high school had the greatest impact on self reported delinquency, we do not imply that failure to graduate is in itself the cause of delinquency; involvement in delinquency while working may be the factor that contributes to drop out just as working may be such a detractor from school that drop out follows. The point is that the relationships utilizing interview data must be considered with caution whether they involve the interrelation of independent variables or the relationship of independent variables to measures of delinquency and crime.

Interview Data and Official Delinquency

With interview data added to the career variables, there was little consistent improvement in accounting for future offense seriousness beyond that previously obtained, except for the contribution of a variable describing reaction to contact with the police. The latter, however, is a circular variable. If respondent stated that the contact had a deterrent effect, it appeared to have one. If the respondent stated that he/she had a rebellious reaction, continuity in delinquent behavior seemed to be the case. This variable was significant for the first three contacts even when included with 17 other variables and was only exceeded by age at contact and race. These findings suggest that the police officer and others in the justice system have an opportunity to turn some juveniles around early in their careers. What must they do to succeed?

When world view interview variables were combined with the career variables, up to 46% of the variance was accounted for by the ninth contact, and after the third or fourth contact considerably more of the variance than was accounted for by the career variables alone. Attitude toward the police had the greatest effect by the fifth police contact but the problem, as we have noted before, is that career experiences may be the determinant of attitude toward the police. It is difficult to ascertain the temporal relationship between attitude development and misbehavior in interviews so long removed from delinquent behavior.

The associational variables alone had relatively little effect on future offense seriousness, although they had been consistently correlated at the zero-order level with every measure of official careers and every self report measure. By contrast, home conditions alone accounted for significant variation in future offense seriousness, increasing to .456 by the eighth contact. The consistent effects of regular employment by the head of the household and other proxy variables for SES only served to reinforce the findings of all prior analyses, a finding which, in one way or another, focused attention on low SES as an important factor in accounting for delinquency and crime and their continuity.

The education and neighborhood milieu variables had few significant effects alone but in combination with the career variables accounted for more of the variance at most contact levels than did the career variables alone. Combining selected juvenile and adult interview data indicating age of transitional events and current status with the career data increased the accounted-for variance to around 50%.

Going a step further, combining the household condition data that were proxy variables for SES, high school graduation, and the career variables resulted in an equation that accounted, contact by contact, for an increasing amount of the variance in future offense seriousness from 41% at the first contact to 76% at the tenth contact. What we found is, of course, nothing new and/or startling. Lower SES, non-high school graduates with

early, lengthy, and serious offense records who have been frequently and severely sanctioned have higher future offense seriousness than do others from the 1942 and 1949 Cohorts. Even more of the variance in future offense seriousness was accounted for from the first to the fifth contacts by adding other attitudinal and employment variables.

SUMMARY AND CONCLUSIONS

The first question that we must ask ourselves is whether we have pushed the findings beyond what we knew about the effectiveness of intervention and sanctions from earlier analyses. The second question that we must ask is whether these findings could be useful to persons on the firing line. The answer to both is a resounding "yes."

Close scrutiny of the data permits us to say with far more certainty than before that increasing the severity of sanctions is not a solution to the problem of delinquency and crime. It will do those who are most concerned about the problem of delinquency and crime no good to expend their energy calling for bigger and better institutions unless they know how to make them more effective. Second, and this suggestion is currently being paralleled by other researchers, more intensive monitoring and more frequent minimal intervention may be more effective than administering severe sanctions.¹⁶

¹⁶ Although findings from the Racine and Philadelphia cohorts have been compared, most notably by Joan Petersilia, "Criminal Career Research: A Review of Recent Evidence," in Crime and Justice: An Annual Review of Research, Norval Morris and Michael Tonry (eds.), (Chicago: The University of Chicago Press, 1980): pp 321-379, and found comparable in many respects and the

The Stochastic Nature of Offenses and Sanctions

Part of the problem in predicting from any present event to a future event stemmed from the irregularity of offense seriousness from police contact to police contact. No matter how serious the first police contact, the next was most likely to be a minor misdemeanor. Severity of sanction at the first contact likewise had little effect on the seriousness of the second contact.

Failure to Account for Single Events

Police officers, juvenile bureau personnel, juvenile court intake officers, and judges must make decisions about single events; presumably they have some understanding of how events come about and what should be done. It was impossible to account for the seriousness of present offense (police contact) with demographic, ecological, or prior offense or court records. This was true for the juveniles, adults, and when juvenile and adult records were combined. We also failed to account for variance in seriousness of police contacts from year to year of age for the combined cohorts. It was equally impossible to account for the seriousness of last police contact for those who had discontinued having contacts vs. those who were continuing to have contacts.

differences explicable by demographic and/or definitional variables, there are differences which will continue to appear because Wolfgang described developing careers in delinquency while the Racine data, covering a longer span of years, focused on continuities in delinquency and crime.

Accounting for Future Offense Seriousness

Various attempts were made to account for total future offense seriousness, contact by contact. It is really difficult to fault police or others in the justice system for their judgments, when the most carefully selected data do not allow us to account for or anticipate future delinquent and/or criminal behavior for any sizeable proportion of the cohorts.

The variable which had the most consistent impact on future offense seriousness was age at present offense; the younger one was at the time of any given contact, the greater the probability of future and more serious police contacts whether it be the juvenile or adult period. During the adult period, total prior offense seriousness had more impact than any other variable at the first through fifth contacts and age at contact had more impact at the sixth through tenth contacts. Although the nine variables utilized in the multiple regression analyses produced relatively few statistically significant standardized estimates (significant effects), it must be remembered that six of the variables had fairly consistent correlations with total future offense seriousness during the juvenile period and that all nine of the variables were significant during the first two adult contacts.

The independent demographic, ecological, and career variables but not severity of sanctions have significant first-order correlations; they are interrelated in such a way that only age at contact and total prior seriousness survived in a multiple

regression analysis which examined the impact of each variable, all others held constant. Sizeable first-order correlations, some of which were negative and some positive, led to an equation which accounted for as much as 38% of the variance in future offense seriousness for juveniles at the fifth and sixth contacts but declined from 28% to 11% of the variance for adults. This tells us why an individual who may appear to be the kind of person who will have a serious future career on a basis of some of his/her characteristics does not always do so. And, of course, it tells us why a person on the firing line may make a judgment based on a person's characteristics and past record, but find that this judgment was far from correct.

When the juvenile and adult periods were combined the results were, as would be expected, more similar to those for the juvenile period than the adult period. However, more of the variance in total future offense seriousness was accounted for, reaching 33% to 40% at the higher contact levels 8, 9, and 10. This, of course, refers to the point at which future seriousness is best accounted for, not to the point at which intervention may seem most propitious, which is much earlier. Again, it would seem that the most important finding was the lack of a significant relationship between the severity of prior sanctions and total future offense seriousness.

Although there were cohort differences in the amount of variance in future offense seriousness accounted for, and that accounted for reached 57% by the ninth contact for the 1955

Cohort, this was consistent with our position that the near future (although not the next event) can be predicted more accurately than the far future.

Ascribed vs. Achieved Characteristics

Another way to summarize the results of the multiple regression analyses is to think of the independent variables as those which represent the characteristics of persons (demographic and ecological) and those which represent their behavior and society's response, that is, career types. The characteristics of persons were important at all stages of careers but more so at the time of contacts 1-5, while career type variables were more important at contacts 6-10, although in some analyses at all stages. We also concluded that the results of the separate cohort analyses gave the impression of a changing importance of the variables' influences on future seriousness of careers. The demography of the city and the experiences of inner city youth are more critical during the youth and young adulthood of the 1949 and 1955 Cohorts. How the justice system worked did little to reduce the seriousness of future careers.

Adding the Interview and Self Report Data

At the juvenile level the interview data added little to the variance in present or future offense seriousness accounted for. However, we did note that the respondents' descriptions of how they reacted to the police (in spite of the circular nature of the variable) suggested that the police and others in the justice system have an opportunity to influence juveniles in the

direction of non-delinquent behavior. We have stated in previous reports that enhancing police training in human behavior problems might be more appropriate for most officers than additional training in the use of forceful methods of control.

In the adult case, most notable in accounting for future offense seriousness beyond what was accounted for by the basic variables were the consistent effects of regular employment by the head of the household and other proxy SES variables. Combining the basic demographic, ecological, and official career data with those interview variables which appeared to be most closely related to future offense seriousness enabled us to account for 42% of the variance in total future offense seriousness at the first contact to 78% at the tenth contact. This really added little new information to earlier findings because we had long ago found that lower SES, non-high school graduates with early, lengthy, and serious offense records who had been frequently and severely sanctioned had higher total future offense seriousness.

The Failure of Severe Sanctions

Most cohort members who had non-referred police contacts soon had no future contacts. Those who had referred contacts less serious than a felony dropped out of delinquency at a high rate. Those with referred felonies who were not institutionalized were less likely to have another referred felony in the next two-year period than were those who had been institutionalized at an early period in their lives. The data

verified earlier findings that sanctions as administered do not deter offenders from further delinquency or crime.¹⁷

Even when cohort members were examined case by case for the years when police contact rates were the highest there were few cases where discontinuity for a period of years or desistance following institutionalization could have been a consequence of either incarceration (removal from the community) or the impact of the institutional program.

Institutionalization and Continuity

The most disconcerting finding for those who believe that an early response to delinquency is more effective than one delayed to later years was the fact that early institutionalization was followed by greater continuity in serious misbehavior than was later institutionalization. Also, these unwanted effects were slow to wear off. The fact that a small percentage (less than 15%) of those who were referred for a felony-level offense were institutionalized in any two-year period is probably quite fortunate rather than a matter that should be of concern. It is obvious that the call for more severe sanctioning of juveniles has been a case of misplaced concern by those who are unfamiliar with all aspects of the available data.

¹⁷ We must again make it clear that we do not believe that this research leads to support for the idea of selective incapacitation. We reject this idea on the basis of our own prior research; Lyle W. Shannon, "Risk Assessment vs. Real Prediction: The Prediction Problem and Public Trust," Journal of Quantitative Criminology 1(1985): pp. 159-189, and such excellent contributions as Andrew von Hirsch, "The Ethics of Selective Incapacitation: Observations on the Contemporary Debate," Crime and Delinquency 30(1984): pp. 175-194.

Intervention and Continuity

On the positive side, the high rate of discontinuity for even serious offenders for whom intervention has meant some attention or supervision, suggests that expressed concern may be more effective than the punishing experience of incarceration, no matter how well-intended is the latter.¹⁸ There is no suggestion here, of course, that incarceration may not sometimes be necessary for the safety of society or the miscreant.

More specifically, for those who are charged with the decision to intervene, frequency of intervention (if the event is serious enough to raise the question of intervention) rather than severity of sanctions seems to have had the most desirable effect. In other words, frequent referrals or court appearances rather than severe sentences seemed to have the most deterrent effect on future misbehavior. Since success in intervention involves intervention at the appropriate stage in careers, it is apparent that our concern should best be directed at young persons with early serious offenses before they have established even more serious delinquent or criminal careers.

¹⁸ Our own conclusions have, of course, been preceded by other similar conclusions drawn from different kinds of data. Petersilia has also concluded that alternatives to probation and institutionalization, intensive surveillance coupled with community service and restitution, for example, may be sufficiently restrictive to ensure public safety and meet the public notion of justice. But, as Timothy J. Carter, "Juvenile Court Dispositions," Criminology 17(1979): pp. 341-359, suggests, diversion programs, while a step in the right direction, are not enough.

This brings us to the question of how to intervene in such a way as to not define a young person as a career offender before he/she is a career offender. How can it be carried out through an identification process that has few negative or positive errors? Some positive errors may be tolerated if a program aimed at the general youth population that includes the much smaller target population is neither prohibitively expensive nor harmful to larger youthful populations. In other words, a delinquency prevention program should be defined as a youth program providing opportunities for upward mobility, social satisfaction, peer group and adult recognition, socialization into the adult world, etc.

If the program is defined as one aimed at only potential career offenders and requires some identification of them as judicial or quasi-judicial targets, then infringement upon civil liberties may be only a step away from those infringements which characterize selective incapacitation.

Predicting the future serious offender is a difficult task and as these predictive devices now work, sizeable negative and positive errors are made. If the best predictors are demographic, ecological, socioeconomic, and are based on prior delinquent or criminal behavior, and these together are still not very accurate, then programs must indeed be broad rather than implicative, i.e., not designed for the career offender. If the evidence indicates that existing approaches are ineffective, then accurate identification of the target population is still of no avail.

We must conclude by saying again that this research suggests the need for: 1) broader and more creative approaches to delinquency and crime prevention and 2) concentration on selected, accurately identified juveniles and adults for programs that do no more than remove them from the community when public safety is paramount. This suggests that the justice system, if it is to be effective, must develop a broader perspective than one geared to apprehending and convicting criminals and facilitating the application of just deserts.