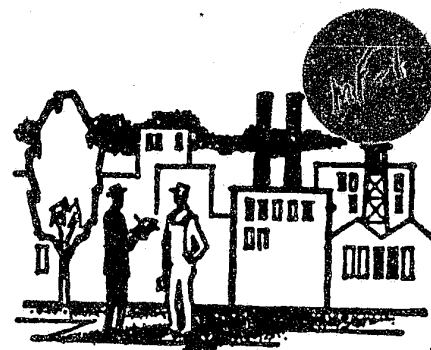
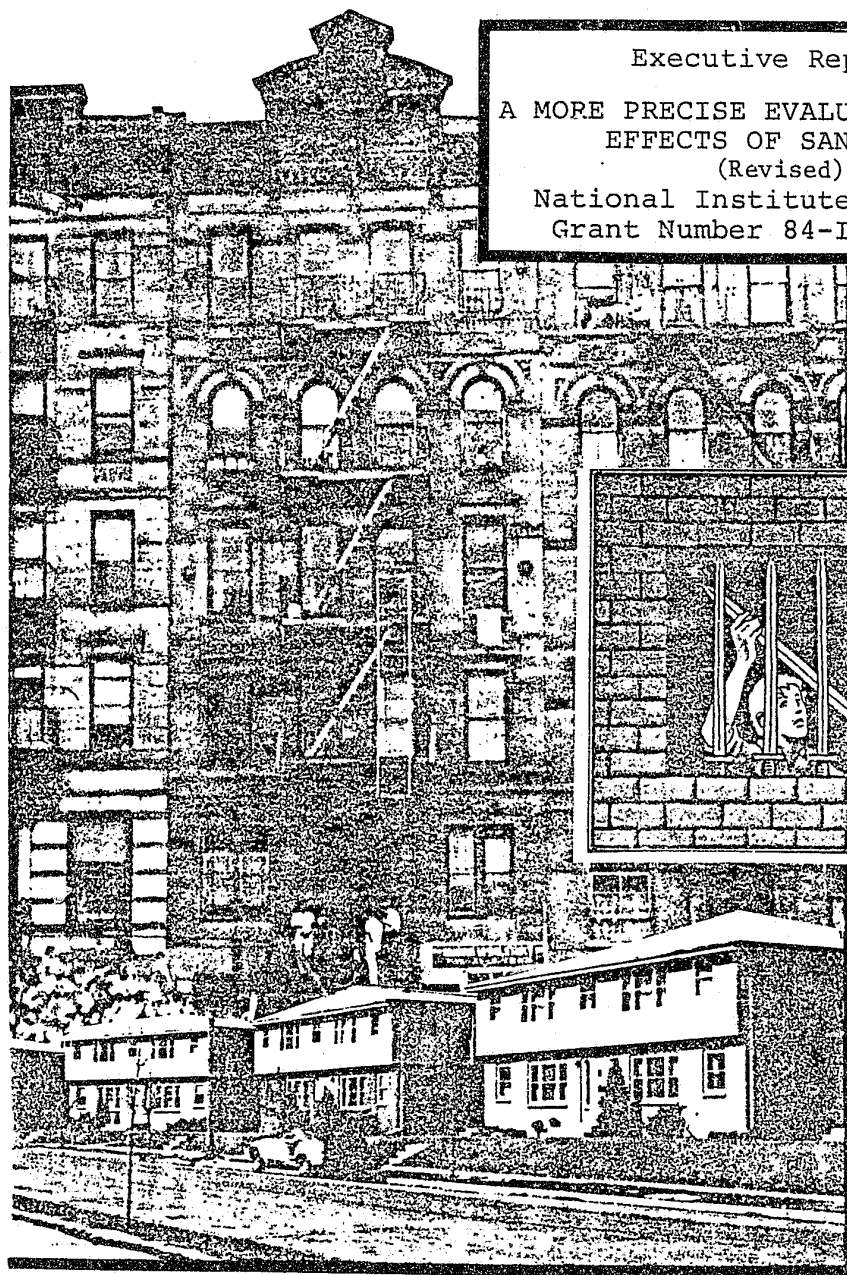


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Executive Report

A MORE PRECISE EVALUATION OF THE
EFFECTS OF SANCTIONS
(Revised)

National Institute of Justice
Grant Number 84-IJ-CX-0013



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THE UNIVERSITY OF IOWA • IOWA CITY, IOWA

Executive Report

A MORE PRECISE EVALUATION OF THE
EFFECTS OF SANCTIONS

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NCJRS

DEC 8 1986

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National Institute of Justice
United States Department of Justice

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Although our first funds for research on delinquency and crime came from the Fleischman Foundation of Reno, Nevada, strong

support and frequent support since 1974 has been given by the National Institute of Juvenile Justice and Delinquency Prevention. We received our first grant from the National Institute of Justice in 1979 and since then have received others, including our current grant from NIJ. Our relationship has been extremely close with many people in Washington. We wish that all of the research directors and monitors would have been able to visit the Iowa Urban Community Research Center.

Continuing support from NIJ and NIJJDP reveal that they have become increasingly aware of the shortcomings of a patchwork approach to research on delinquency and crime. We see the continuity in current funding of similar basic research projects as a realization that a concerted move toward understanding the nature and causes of delinquency and crime in modern urban society is imperative to planning programs for their control. For this we applaud those who are responsible.

As far as acknowledgments in respect to the current project, this must include those members of the Center's staff who have played a crucial role in the entire endeavor during the past few years or more. Judith L. McKim (Senior Social Science Research Assistant), W. Edger Murph (Programmer Analyst), Lawrence Haffner (Programmer Analyst, now Director of Academic Computing Services at Harper College). This updated version of the report has been a major undertaking for Kathleen R. Anderson (Graduate Research Assistant). Professor Robert Nash Parker (Department of Sociology, University of Iowa), served as statistical and

computer consultant, while Professor Marvin E. Wolfgang (Director, Center for Studies in Criminology and Criminal Law, University of Pennsylvania) and Dean Terence P. Thornberry (Dean, School of Criminal Justice, State University of New York at Albany) were consulting criminologists. None, of course, are responsible for any of the unique or confounding interpretations that the author has made of the data.

ABSTRACT

Very few youth commence their miscreant behavior at an early age and continue into adult crime. Two-thirds of the males in three Racine birth cohorts desisted after their fifth contact and an even greater proportion ceased to have felony-level police contacts at that time.

Although numerous studies have shown that sanctions, as administered, have been ineffective in deterring youth and adults from further delinquency and crime, there are people who contend that more severe sanctions for a greater proportion of the offender population would increase the effectiveness of the justice system.

Multiple regression and other analytic strategies are utilized to determine specific deterrent effects of number of judicial interventions and severity of sanctions (present and cumulative) with controls for sex, race, age at police contact, neighborhood of residence, and offense seriousness (present and cumulative).

The younger the cohort member at any given police contact level, the less likely their contact would be the last. Of even more concern is the finding that the earlier and the more severely felony-level offenses are sanctioned, the more likely are these cohort members to have felony-level police contacts in the next two years. Neither severity of sanctions nor number of judicial interventions had consistent or hoped-for effects on future offense seriousness or the decision to desist from future offenses.

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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 has before him/her adults with lengthy records of felonious behavior, the attention of persons in the justice system has invariably been turned to the problem of continuity in delinquency and crime, i.e., to the career criminal. Furthermore, sociological research on delinquency and crime has been replete with studies conducted in institutions where, by the process of selection, 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 has shown that most juveniles (4 out of 5) who have non-traffic police contacts before the age of 18 cease to commit these or similar kinds of acts which bring them into contact with the police before they are adults.¹ And if they have police contacts

¹ This 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 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 Justice and Delinquency Prevention (National Criminal Justice

as adults they will be for different reasons than as juveniles, more likely auto-related. Of those who have non-traffic police contacts before the age of 18, only one out of 10 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 commence their depredations at an early age and continue beyond their late teens into lives of serious young adult or adult crime. Desistance (discontinuity rather than continuity) is the rule. Over two-thirds of the males in each cohort discontinued having police contacts after their fifth contact. 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 the second contact. The emphasis on continuity comes from the fact that as progression is made from contact to contact, the proportion of offenders who continue becomes somewhat higher. This has been demonstrated by Wolfgang and his associates in their Philadelphia birth cohort studies, just as we have shown this to be the pattern in our own Racine cohort research. In a sense, we have a set of findings which may be perceived quite darkly if one is on the firing line (a probation or aftercare officer) or quite brightly if one is concerned about the general success of the process of socialization--very few youth turn into hardened criminals.

Reference Service NCJ77744, 263 pages), 1982. (A 16-page summary by the author is also available from NCJRS.)

Accepting the fact that early desistance rather than continuity is the pattern, how do we explain desistance? The response given to this question varies depending upon a person's position in society and his/her perception of the role that he/she plays. 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 cite their contacts with the police as reason 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 that his/her self concept commenced to change. 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. For males, sanctions seem to be counter-productive to the goal of deterrence.

Historical Perspectives

Let us put this report into better historical (25 years of research in Racine covering a date time span of almost 30 years) perspective before going further. The most disconcerting finding in the first stage of the research which we have conducted in

Racine, but not new to those who have done similar research, was that the more severely juveniles were sanctioned, the worse their misbehavior in the following period.² That we had hit a sensitive nerve was apparent because the 16-page NCJRS 1982 summary of Assessing (our final report to NIJJDP) in which these findings were highlighted and followed by extensive media exposure, generated a multitude of letters to editors, phone calls, and letters to the principal investigator decrying his error in finding that sanctions were not effective. It was evident that our report had appeared at a propitious time. Only shortly before that, Philip J. Cook's lengthy article and bibliography on criminal deterrence had appeared.³ This excellent and quite perceptive paper, it can be seen, foretold some of the outcomes of research on deterrence during the early part of the decade of the Eighties. He, in fact, suggested 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 than did the first. If not hurting anyone's feelings is an important criterion, the National Institute of

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.

Justice probably showed good judgment in not publishing it. 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 being integrated 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 to other persons in these neighborhoods through those who had been sanctioned that would have general deterrent effects.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. Perhaps the most surprising finding was that the decrease in leniency for serious offenders was most evident in the inner city, the opposite of what popular impressions have been.⁵

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 NCJPS. The major findings are summarized in "Ecological Evidence of the Hardening of the Inner City," Metropolitan Crime Patterns, Robert A. Figlio, Simon Hakim, and George F. Rengert, (eds.), Willow Tree Press, 1986, pp. 27-53.

⁵ 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

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 stick at all and most of all a carrot on a stick.

The results of our earlier research have been 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 more effective, particularly if frequent, all other things being equal, we should find number of prior interventions or modest sanctions to be 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 other measures of severity of sanctions should be greatest just before the sizeable desistance that takes place early in the careers of many persons in each cohort. It may not be quite that clear, however, because frequent intervention with mild sanctions may be more effective in others.

Let us now go back to the beginning and take a quick look at the kinds of sanctions which are applied to offenders and their immediate and future consequences.

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.

Persons whose record of police contacts indicated a referral for further action became those whose records 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.

With the data collapsed and the penalty groups rank ordered, the data were converted to a Severity of Dispositions Geometric Score (a procedure making use of both error and non-error types obtained in Guttman scales and recommended to us by Louis Guttman for an earlier project) by assigning a code of 1 to a single dismissal, 2 to 2-3 dismissals, 4 to 4-5 dismissals, through 1,048,576 for 1 or more years of institutionalization. The

lowest Geometric score involving a sentence of time was 131,072 but if the score was 1,048,576 or more, that person had been incarcerated for a minimum of one year. While Geometric scores may be utilized in generating tables for analysis by nominal statistical techniques, they are not to be used in correlational analyses without the employment of some transformational technique.

Inasmuch as we wished to determine the relationship of level of sanctions at or through any given age to later reasons for police contacts, referrals, and sanctions, dismissals were eliminated in an additive scale which we have called the Severity of Sanctions scale. Each score on this scale received a rank order based on the level of severity which it represented, with similar levels combined so that the scores ranged from 0 to 60. Thus, severity of sanctions during any age period could be correlated with the number and seriousness of offenses during any age period. For example, through age 18, past and present severity of sanctions for the 1942 Cohort had a Pearsonian correlation of .323 with number of police contacts in the future and a Somers' D of .602. For the 1949 Cohort the corresponding correlations were .365 and .600 and for the 1955 Cohort they were .412 and .400. Although the argument may be made that this is not a true metric and should be considered a rank order scale, it was decided that there would be relatively little difference in the results from those obtained if a rank order statistic was used.

Simplifying the Findings

In order to control for the number and seriousness of juvenile police contacts and the sanctions meted out to them by the courts, everyone in each cohort was placed in one of seven combinations of contacts and sanctions shown on the left of each segment of Table 1. The rows start with persons who have had no police contacts (and thus no sanctions) through age 18 and descend to the bottom row of persons who have had 5 or more contacts and a seriousness score of 6 or more and higher sanctions, i.e., a score of 7 or more on the severity of sanctions scale. Whether the data are arranged by number and severity of contacts through age 18 or by severity of sanctions, it is clear that both have consistent effects on the proportion of persons with additional and serious contacts after the age of 19. If the reader looks at the boxed-in set of percentages for the 1949 Cohort, the relationship between number of contacts before age 18 and severity of sanctions and number of contacts after age 18 may be readily seen. But more than that, if the top four rows are considered alone, i.e., those who had no police contacts or only 1-4 contacts, the relationship between severity of sanctions and number of contacts after age 18 is apparent. More or less the same finding is obtained by observation of other segments of the table.

Similar tables were created for other ages (13 through 30 for the 1942 Cohort, for example) but the data for through 18 and at and after age 19 are presented as illustrative of the severity

TABLE 1. RELATIONSHIP OF POLICE CONTACTS AND SANCTIONS THROUGH AGE 18 AND POLICE CONTACTS AT AND AFTER AGE 19 FOR MALES IN ALL COHORTS

Through Age 18		Contacts at and After 19				Through Age 18		Seriousness at and After 19			
Number of Contacts	Severity of Sanctions	None	1-4	5 or +	N	Seriousness Score	Severity of Sanctions	None	1-5	6 or +	N
1942 Cohort											
None	None	41.0	48.5	10.4	134	None	None	41.8	41.0	17.1	134
1-4	None	15.6	61.5	22.9	122	1-5	None	19.8	46.9	33.3	81
1-4	Low	13.0	30.4	56.5	23	1-5	Low	33.3	----	66.6	6
1-4	High	----	25.0	75.0	4	1-5	High	----	----	----	0
5 or +	None	5.9	32.3	61.8	34	6 or +	None	6.7	29.3	64.0	75
5 or +	Low	8.0	24.0	68.0	25	6 or +	Low	7.1	9.5	83.3	42
5 or +	High	----	21.4	78.6	14	6 or +	High	----	16.6	83.3	18
Number:		81	168	107	356	Number:		82	122	152	356
1949 Cohort											
None	None	57.4	40.0	2.5	235	None	None	57.5	34.9	7.7	235
1-4	None	36.8	50.7	12.6	302	1-5	None	42.5	38.2	19.3	212
1-4	Low	5.9	67.6	26.5	34	1-5	Low	----	----	100.0	5
1-4	High	----	60.0	40.0	5	1-5	High	----	----	----	0
5 or +	None	3.7	45.7	50.6	81	6 or +	None	14.0	34.5	51.5	171
5 or +	Low	6.1	53.1	40.8	49	6 or +	Low	6.4	30.8	62.8	78
5 or +	High	2.9	32.3	64.7	34	6 or +	High	2.6	15.4	82.0	39
Number:		255	347	138	740	Number:		255	252	233	740
1955 Cohort											
None	None	75.0	24.5	.5	420	None	None	75.0	18.3	6.7	420
1-4	None	56.3	39.3	4.3	300	1-5	None	59.9	30.0	10.1	227
1-4	Low	33.6	57.6	8.0	137	1-5	Low	36.7	30.6	32.7	49
1-4	High	47.4	42.1	10.5	19	1-5	High	100.0	----	----	2
5 or +	None	38.2	35.3	26.5	34	6 or +	None	43.0	24.3	32.7	107
5 or +	Low	17.1	51.4	31.4	70	6 or +	Low	26.0	29.7	44.3	159
5 or +	High	25.4	32.1	42.5	134	6 or +	High	27.2	14.6	58.3	150
Number:		599	399	116	1114	Number:		599	255	260	1114

of the problem which faces people on the firing line. Although seriousness of sanctions has been presented in collapsed form, the basic relationship existed when the entire range of sanctions scores was correlated with frequency and seriousness of contacts.

What we see is a larger number of future additional police contacts and more serious reasons for contacts as severity of juvenile sanctions increases, with considerable regularity for males in all cohorts (there is less regularity for females). Few females received sanctions in the 1942 and 1949 Cohorts but there were sufficient who did in the 1955 Cohort to discern that neither sanctions nor their severity has deterred them from continued police contacts.

Among those from the 1942 Cohort who had 1-4 contacts through age 13, the percent with 5 or more contacts later increases from 22.9% for those with no sanctions to 75.0% for those with high severity of sanctions. The increase is not as marked among those with 5 or more contacts through 13, but it is there. Note that among those with 5 or more contacts or seriousness scores of 6 or more and high sanctions through age 13 there are either none or very few with no contacts after that period in the 1942 and 1949 Cohorts.

Although there is evidence of a heightened relationship between previous record and sanctions through age 13 from cohort to cohort, police contact records at that age and severity of sanctions administered after that age, severity of sanctions within each category of contacts or seriousness scores afterward

are not consistent with the number of contacts or seriousness scores and sanctions meted out through 13. While an adult justice model does not 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 are highly correlated. May not this type of relationship or lack of relationship be viewed by some as evidence of the capriciousness of the sanctioning process?⁶ 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 more certain.⁷

⁶ 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.

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 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,

The Failure of the System

When the number of contacts and seriousness scores through the ages 15, 17, and 20 were controlled and measures of association calculated between severity of sanctions through and number of contacts and seriousness scores after these ages for 45 different groups with and without sex controls, there was not a single correlation that would indicate that those who received more severe sanctions through a given age had fewer police contacts or lower seriousness scores than was the case for persons who received less severe sanctions through that age. Every correlation was positive, indicating that severity of sanctions was related to more contacts or more serious reasons for contacts in subsequent years.

Although we have briefly described the effects of sanctions during the juvenile period on the seriousness of police contact records after the juvenile period, we have not described each cohort in terms of differences during the juvenile period or juvenile and young adult periods based on no sanctions, sanctions less serious than institutionalization, and sanctions involving institutionalization.⁸ Let us in this respect briefly refer to

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

the 1949 Cohort whose members had sufficient time after either age 18 or 21 to have gotten into difficulty, if that was their bent. After-age seriousness scores were lower for those who had not been sanctioned and highest 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.

While we have not meant to imply that sanctions in themselves generate continuity in careers from delinquency to adult crime, the analyses do indicate that severity of sanctions, all other things roughly equal, is not followed by a decline in the accumulation of police contacts and higher seriousness scores. In instances where some decline has been found following the application of sanctions it may as well be said that the decline is part of the general attrition in contacts also found among persons who have not been sanctioned.

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 actually be worse than noninstitutional treatment.

We have also shown 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 after that age. As the data indicate, 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

It is apparent that the process of attrition for some and continuation for others works differently for persons with different statuses. Being socialized and probably continuing to reside in the inner city and/or being a minority group member are obviously statuses which have important effects on the process by which some proceed through the juvenile and adult justice systems to institutions disproportionately more than do those not of these statuses. Since inner city/Non-White are highly correlated because relatively few Non-Whites live outside the inner city, one rather than the other has shown up as the variable which is related to this or that measure of delinquency, adult crime, or official responses to them.

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.

PUTTING THE RESEARCH IN ITS SOCIETAL PERSPECTIVE

We have usually pointed out that while Racine, Wisconsin has a crime rate similar to that of major cities in the United States it did not have street gangs at the time 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 portrayed in some of our most popular television programs. Nor was Racine's upper class a miniature of the upper classes of megalopolises. People in Racine earned a living by metal fabrication and they spent their modest incomes (even the wealthy are staid in Racine) on commonplace material goods advertised on TV, in the press, and in outdoor sporting and recreational magazines.

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. But delinquency and crime are perceived by its good citizens as problems.

We, in attempting to account for the delinquent and criminal behavior of those who engage in these behaviors, do not pardon

it, justify it, condone it. Our concern is for how this type of behavior develops, is continued by some juveniles and adults, and how efforts to deal with delinquency and crime seem to be so ineffective.

It is perhaps more appropriate than ever that we re-examine the Racine data from the standpoint of the effectiveness of intervention. Although we and others have dealt elsewhere at length with the problem of mandatory sentencing¹⁰ 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

Since we are concerned with the problem of serious offenders more than with delinquency and crime in general, cohort, time period, and age effects on offense seriousness were examined, with number of prior offenses also inserted in order to give a

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 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.

better picture of basic effects on offense seriousness. Very little of the variance (less than 6%) in offense seriousness is accounted for and cohort effects remain greater than do number of prior police contacts. Even when police contacts for traffic offenses were eliminated the accounted-for variance decreased to only 3%.

Decision to Refer

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. Eliminating traffic offenses decreased the explained variance by only 1%. It should be noted that decade and cohort referral rates were correlated .526, age and cohort were correlated -.427, and decade and age were correlated .410.

Although we have regressed numerous other variables on the decision to refer or not, seriousness of offense was always most important even when sex, race, place of residence, etc., were included. In these regression models, however, no more than 32% of the variance was accounted for.

That juvenile residence in the inner city has little effect on the decision to refer or on the severity of sanctions in this kind of static analysis does not belie a cumulative effect of inner city residence. Although being male was associated with referrals, these correlations were low. While older age as a juvenile produced positive correlations, all were negative for adults, thus older juveniles and younger adults were referred.

The larger the number of persons involved in a contact, the less likely a cohort member was to be referred as a juvenile. In the case of adults, there was little relationship of the number involved to the likelihood of referral.

Severity of Sanctions

We next turned to some of the basic effects on severity of sanctions. During juvenile careers, cohort, time period, age, offense seriousness, and number of prior contacts had significant effects on severity of sanctions. Age had the greatest impact on severity of sanctions. During adult careers, offense seriousness and number of prior contacts had significant and relatively strong effects on severity of sanctions. Cohort, time period, and age had virtually no impact. For the total career, cohort and time period had relatively little effect on severity of sanctions while offense seriousness and number of prior contacts had consistently positive effects on severity of sanctions. Very little difference in effects or accounted for variance was found when contacts for traffic offenses were eliminated from the analyses.

Several other analyses were conducted with offenses controlled for type of contact, robbery, burglary, theft, auto theft, etc. (23 different contact types). Controls for race were inserted as well but there was no consistent pattern of increase or decrease in severity of sanctions with these controls with one exception. In the case of armed robbery, the proportion who were institutionalized, whether white or non-white, had declined from

cohort to cohort, with the proportion of non-Whites who had been institutionalized always remaining higher than that for whites.

Some of the complexities and what might appear to be inconsistencies in effects are related to the fact that mean age declines with cohort but increases with decade at the first-order level; each cohort was 10 or 11 years but was larger than the previous cohort.

What all of this made clear is that if we are to evaluate the effectiveness of sanctions we must not only do an overall analysis but must examine effects during the juvenile period and the adult period separately as well as combined. Furthermore, we must, as suggested before, not overlook differences related to cohorts, time period, and age.

It should also be noted that comparison of severity of sanctions for Racine with severity of sanctions for major urban areas such as Philadelphia and such criminogenic areas as California, Michigan, and Texas (as shown by Petersilia's research) reveals that offenders are dealt with less severely in Racine than in other areas. What is surprising is that even the supposedly more "enlightened" administration of sanctions by Racine judges is as ineffective as that found in areas relatively untouched by (or unable to respond to current knowledge) research, research that has indicated the ineffectiveness of sanctions designed to "break" the offender.

Our statistics, as do others, no matter how they are evaluated, show that Whites (Anglos) do better when they appear

before the judge than do minority groups. There are, of course, some problems in making this assessment because discrimination differs from offense to offense, even though the results may not be readily assigned to racism in itself. Petersilia has pointed this out at length in Racial Disparities in the Criminal Justice System. The precise comparison of studies is, of course, always difficult because most researchers are really quite independent cusses who define their variables without reference to other studies, thus not producing completely comparable results.¹²

CONTINUATION OF THE DISCUSSION OF BASIC ISSUES

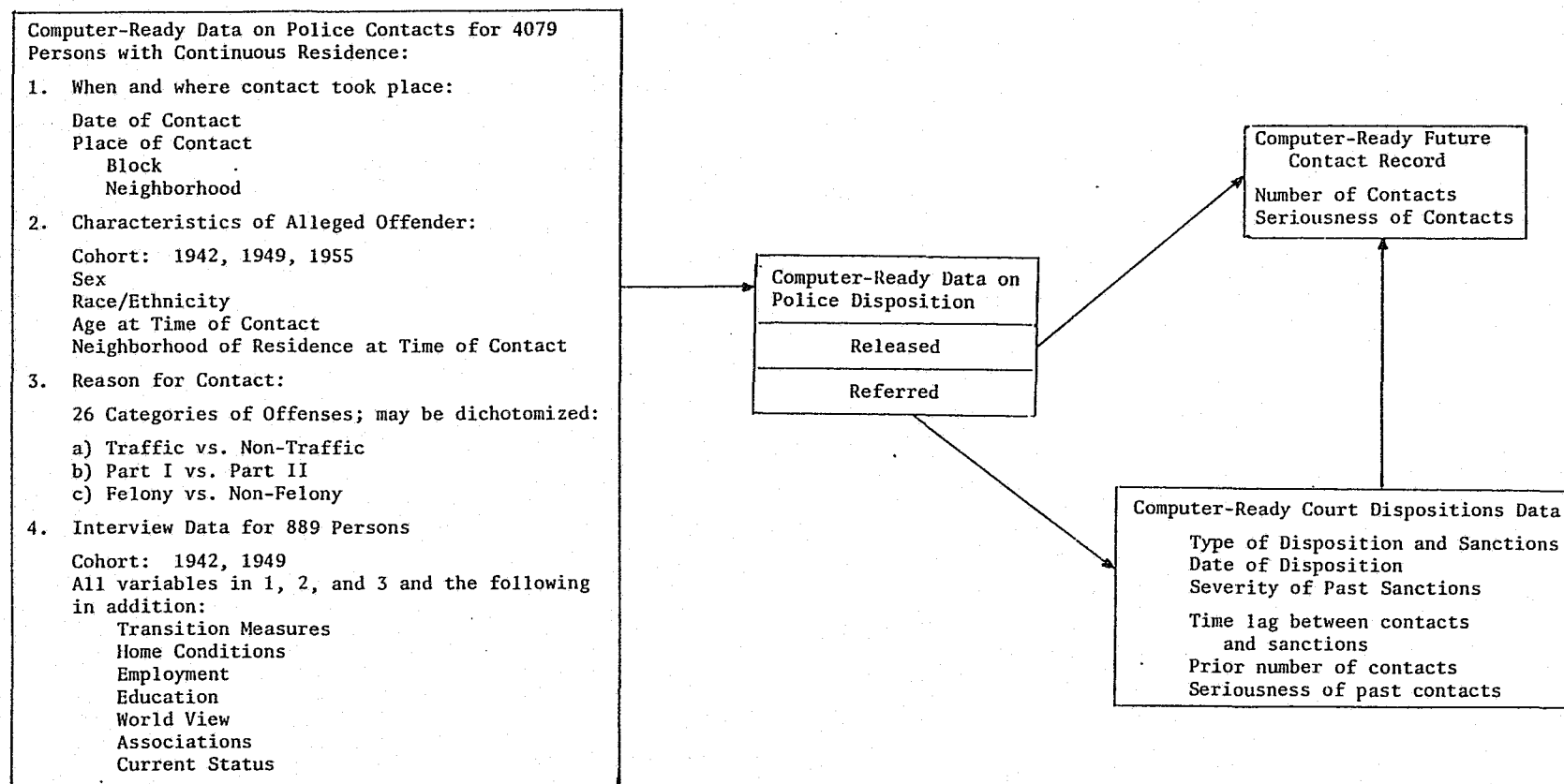
Further Investigation of the Severity of Sanctions

Over 80 different multiple regression analyses have been conducted with selected variables regressed on severity of juvenile or adult sanctions. Seriousness of present offense had significant effects in both of the juvenile and adult analyses while number and severity of prior sanctions had significant but less consistent effects.

Whether the court disposition involves a juvenile or an adult, prior misbehavior (serious and/or frequent) and prior sanctions (severe and/or frequent) had more impact on severity of sanctions than did demographic and social variables.

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.

DIAGRAM 1. ANALYTIC SCHEME FOR OFFICIAL RECORDS AND RESIDENTIAL DATA



Although we have indicated that only 25% of the variance in severity of sanctions could be accounted for by prior offense seriousness, prior severity of sanctions, number of prior offenses, number of prior sanctions, etc., this analysis was without controls for whether it was a first, second, third, etc., offense. When this was done, even less of the variance in severity of sanctions was accounted for by the basic demographic and career variables. Seriousness of present offense and severity of prior sanctions were the only variables with consistent effects during the juvenile period. Seriousness of present offense had consistent effects during the adult period. When the juvenile and adult periods were combined, seriousness of present offense and severity of prior sanctions had consistent effects.

Accounting for Seriousness of Next Offense

To this point we had only explored the impact of the independent variables listed in Diagram 1 on police dispositions and sanctions as we indicated would be done in the first stages of the analysis. We next turned to the more difficult problem of determining what follows when cohort members have been sanctioned or not sanctioned or sanctioned with varying degrees of severity.

No matter how serious the first police contact and what happened as a consequence, the next contact was most likely to be a minor misdemeanor. Although felonies against property produced more severe sanctions than did the other first offenses, severity of sanctions at first contact had little effect on seriousness of

the next offense. At the juvenile level, in particular, sanctions did not have much relationship to next offense seriousness. The number of prior juvenile contacts alone had little influence on severity of sanctions for first adult contact. Although prior contacts may have an impact on severity of sanctions when all other variables are held constant, they do not have the alleged impact that some would say that they have, that is, those persons who contend that one's juvenile record follows one into adult court.

To make sure that the reader was aware of the danger of oversimplification of relationships or the too hasty conclusion that little or no relationship exists between several variables, a table based on 1,965 adult (age 18 or older) first contacts, was presented. A better understanding of what was going on was then obtained by examining segments of the table which were considered crucial to some substantive issue or segments in which a large proportion of the contacts are found.

There were more first contacts at the contact for suspicion and investigation level (about 60%) than at any other. Slightly less than half of the adult contacts were not only first adult contacts but first contacts as well. One must also remember that a smaller proportion of the females than males had juvenile contacts so that, of the total, a sizeable proportion would have their first contacts as adults. Comparatively few first adult contacts were preceded by 5 or more juvenile contacts (13%).

Beyond that vast majority of the minor misdemeanors in which sanctions were not given, there were also some which received a wide range of severity of sanctions even though they were preceded by no prior or very few prior police contacts. While there were relatively few police contacts for major misdemeanors or felonies, proportionately more of them had been preceded by numerous prior contacts and relatively more severe sanctions.

Overall, as we have previously shown by multivariate analysis, there is a positive relationship between the number of prior police contacts and the severity of sanctions for any given contact. This relationship is almost non-existent at the least serious offense levels (1-3) but is quite apparent at the more serious offense levels (4-5). Dismissal is included as a sanction because it does involve the trauma of a court appearance. Thus, it might be that instead of number of sanctions it would be just as accurate, as we have done in the introductory section, to say number of court interventions.

The Effect of Lag

One final comment should be made about the complexity of the data in terms of lag between police contact and court dispositions. The difficulty here is also compounded by the fact that other events take place between the initial contact and court disposition so that it is difficult to determine whether an ultimate disposition by the judge is based on the seriousness of the initial contact and all other variables relevant at the time or those and variables which the judge now considers to be

relevant. In the case of Part I offenses and most other offenses, the longer the lag between contact and disposition, the less severe the sanction but overall the relationship was not sufficient to consider this to be an important variable.

BEGINNING WITH A SIMPLIFIED RESEARCH STRATEGY

It should be remembered that one advantage of cohort studies is that they enable us to see the problems of delinquency and crime in perspective. Although there are 4,079 persons with continuous residence in the combined cohorts, only 2,601 of these persons, males and females, ever had a police contact. While these persons had a total of 15,245 police contacts, only 8.3% 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. Do not make the mistake of thinking that all felons are serious or dangerous offenders. It is very easy for even a child to engage in behavior that would, if he or she was an adult, be considered a felony-level offense. Since we wish to concentrate on how to deal more effectively with more serious offenders we shall, with some reservations, use felony as an operational definition of seriousness in this initial and quite 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. Rather than examine their records on a yearly basis we have aggregated them into two-year periods, as shown in Table 2. Each of 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 down 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 2 dramatizes how varied are careers for even such a short span of time.

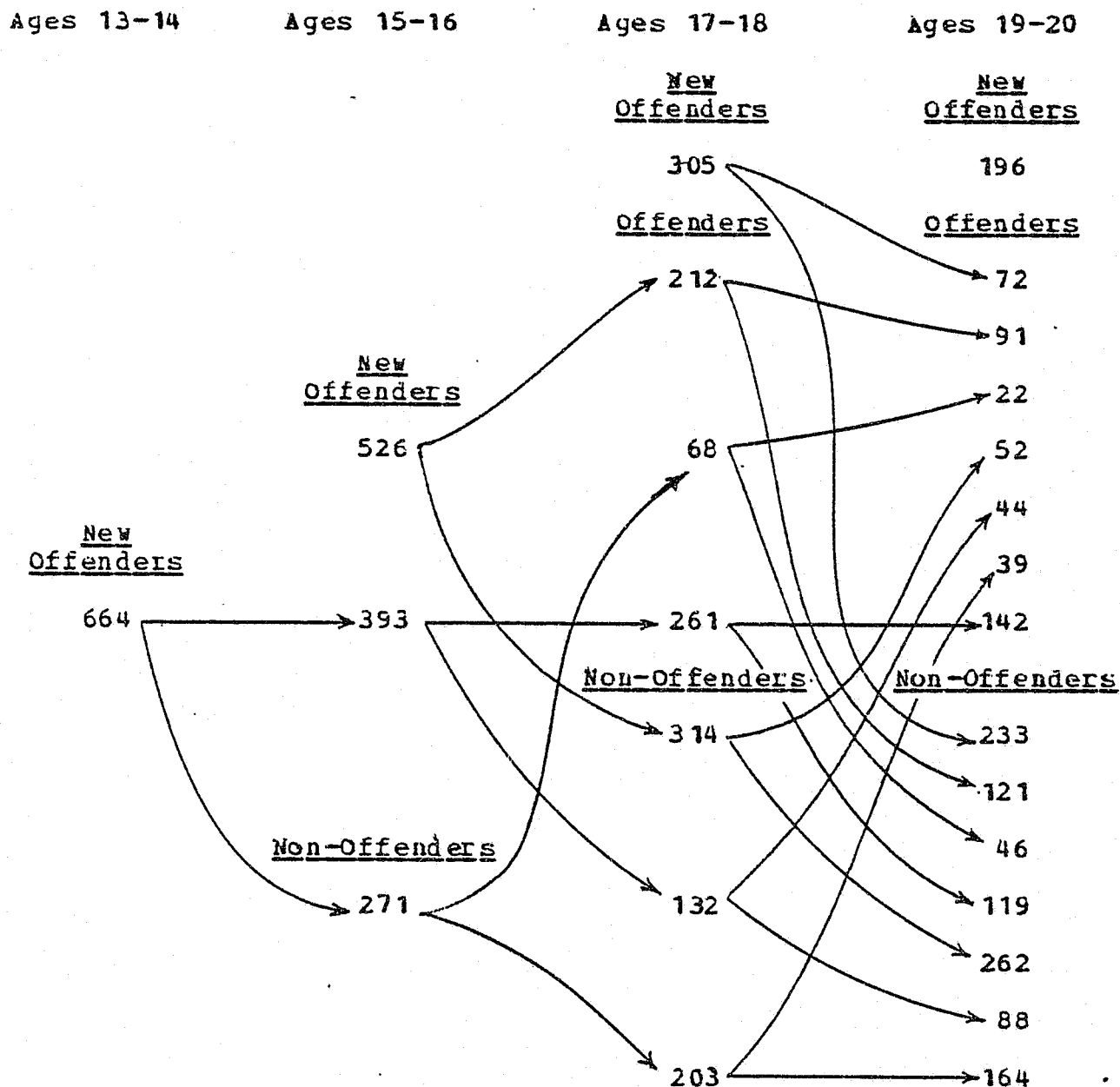
The complexity of the experience patterns that we have attempted to encapsulate by coding to categories and by controlling through statistical manipulation of variables is further demonstrated by Diagram 2. Although it is carried through only four of the five age periods because each of the groups at ages 19-20 could split into those with contacts and those without contacts in ages 21-22, thus producing too complex a diagram, this diagram makes it 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

TABLE 2. 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	95
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	6
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	26
22		X		X	X	11
23		X		X		41
24		X			X	28
25			X			201
26			X	X		50
27			X	X	X	22
28			X		X	32
29				X		151
30				X	X	43
31					X	107
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 2. CONTINUITY AND DISCONTINUITY FOR PERSONS WITH
NON-TRAFFIC POLICE CONTACTS, AGES 13-20, FOR
COMBINED COHORTS



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. To deal with this we have resorted to a collapsing scheme that produces 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.

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.

Responses to Police Dispositions and Court Sanctions

Commencing at Ages 13-14. Table 3 enables us to retain the age perspective but focus 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 and 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 3.6%, 3.4%, and 2.6% 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.

TABLE 3. 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	8.3	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	48	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.

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 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 we produce even harder men (and perhaps women), as we shall see. 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 dangerous to society.

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?

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 4. Note that the Ns at the bottom of each column correspond to the Ns for ages 13-14 in Table 4, 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 unrefereed 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 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.

Even those who were in the category of having been institutionalized for a referred felony had more and more of their numbers without a non-traffic contact year by year. Of course, the increase in percent who discontinued or desisted for this group was low compared to other groups. It should be noted that for those felonies which were sanctioned in the combined cohorts, 8.5% had a lag time of one year beyond date of offense and 5.9% 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

TABLE 4. 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

	Status, Ages 13-14 X 15-16					Status, Ages 13-14 X 17-18				
	Cont.	Misd.	Ref.	Ref.	Ref.	Cont.	Misd.	Ref.	Ref.	Ref.
	Not Ref.	Other Ref. Dis.	Fel. Dis.	Fel. Prob.	Fel. Inst.	Not Ref.	Other Ref. Dis.	Fel. Dis.	Fel. Prob.	Fel. Inst.
<u>Statuses, Later Age Periods</u>										
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	13.6	20.0
Felony Referred										
	STATUS: AGES 13-14					STATUS: AGES 15-16				
Dismissed	4.4	6.8	23.7	18.8	20.0	3.3	6.0	15.8	12.5	20.0
Fined	.4	.9	----	----	----	.9	----	----	----	----
Probation	2.7	7.7	5.3	6.3	----	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	8.0	14.5	23.7	25.1	40.0
N	451	117	38	32	10	451	117	38	32	10

TABLE 4, Continued

	Status, Ages 13-14 X 19-20					Status, Ages 13-14 X 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	60.0		
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 {	1.8	2.6	5.3	9.4	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.

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 contact 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 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 dismissed, had been dealt with 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 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 does not mean that institutionalization for felony-level police contacts has the anticipated effect of deterrence; it indicates the exact opposite.

Commencing at Ages 15-16. Since the age 13-14 might be argued as an early age for the first two years of such an analysis, we next turned to those who had had non-traffic police contacts at the age 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 (526 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 among those from each group with earlier referred felonies (17-18). The proportion with felony referrals is 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. We shall examine this matter even more thoroughly in the next section.

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

Table 4 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% have 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 and, 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?

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 92 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 105 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 92 had no contact it could have been because institutionalization was effective. Thus, failure to have additional contacts because they had been removed from the 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 2). Of the total of 32 Type 5 persons institutionalized, four 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 28 were apparently undeterred, since they had police contacts at every age period.

There were 1,279 persons in the 15 career types (Table 2) who desisted after age 14, 16, 18, or 20, i.e., sometime during ages 13 through 20. They comprised 71.1% of the 1,798 persons with non-traffic contacts. Only 39 of these 1,279 persons in what might be characterized as "terminal career" categories had been institutionalized, which is only 3.0% 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.

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.

EVALUATION OF THE MULTIVARIATE ANALYSES

At the very beginning of this report we stated our strategy of age period analyses of the data, juvenile vs. adult, or juvenile, young adult, adult, etc. Although the analyses that we had conducted enabled us to conclude that severe sanctions had little or no effect on the reduction of continuities in delinquency or continuity into young adult or adult crime, a more precise look at the effectiveness of sanctions was required.

For over 100 pages of text, tables, and appendices we 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. It is 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, that are most 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.

Quite aside from the criticism that may be lodged against earlier findings which were based on age period aggregated data or those which may be made when attempting to deal with relationships which vary from contact to contact, not always producing a clear trend, there is the possibility that analytic techniques utilized may not have generated findings of the type which are really meaningful to persons who are involved in day-to-day decision-making. Although it is true that career becomes important in accounting for continuity and future offense

seriousness by the fifth or sixth police contact, and that there is no clear relationship between severity of sanctions and a decline in delinquent or criminal behavior, we have not produced specific information about the consequences of dealing with more serious offenses or offenders in one way rather than another at various ages, simultaneously controlling for a variety of other independent variables.

ATTEMPTING TO ACCOUNT FOR SERIOUSNESS OF PRESENT OFFENSE

The Operations Involved in the Analysis

Recorded court dispositions and severity of sanctions were entered in the data set as part of each police contact record. This permitted a contact-by-contact analysis of dispositions and sanctions rather than the year-by-year statistics which were utilized in earlier analyses.

Our emphasis was on the differential effects of sanctions with controls for offense seriousness level based on a scale which gives different weights to each of the 26 categories of reasons for police contact depending on whether they fall in the most serious or least serious of broad categories ranging from felonies against the person (if a juvenile, behaviors that would be considered felonies if engaged in by an adult) to those which are of a minor nature and generally result in no action other than a record of contact by the police.

One set of analyses is based on demographic, ecological, and career data alone and a second set of analyses includes interview data. The latter analysis was conducted on only those who were

interviewed from the 1942 and 1949 Cohorts but included a wider variety of explanatory variables, such as demeanor and attitude of respondents as they recalled them.

From the start we were concerned about a cohort member's time at risk (residence in the community) between the age of 6 and the end of the period for which each cohort had been followed and, as a consequence, have conducted our analyses which involved continuity on only those cohort members who were defined as continuous residents. Although the effect of length of incarceration or institutionalization is controversial and must be given some attention, time in an institution generally increases the seriousness of total career even if it reduces the number of offenses committed in the community during the period of institutionalization.

In this stage of the analysis we also included the alleged offenders' number of prior contacts and severity of court dispositions record 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 become a cumulative type of endeavor, contact by contact, throughout the cohort member's career.

This multi-stage procedure permitted a more precise assessment of the effects of sanctions than did previous analyses which did not statistically control for 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. For example, attitude toward the police at high school age or during adulthood cannot be included when attempting to account for early behavior by juveniles or persons in the justice system. While this may seem to be a quite complex analysis, it was necessary to avoid the charge of spurious relationships based on the exclusion of crucial variables or the inclusion of non-antecedent variables or variables of instant relevance.

If it was found, as our earlier aggregated analyses suggested, that sanctions are generally ineffective as applied, this research could still suggest that there are procedures and applications that produce specific deterrence. Although we and others have shown that sanctions do not seem to have general deterrent effects, certain types and levels of sanctions may work for certain types of persons. Thus, we may turn from the position of being pro-sanctions or anti-sanctions to the development of more fine-tuned procedures for dealing with juvenile and adult offenders. In other words, which kinds of people are most effectively sanctioned in what manner?

Accounting for Seriousness of First to Ninth Contacts
with Control for Continuation vs. Discontinuation at Contact

While we are concerned about what generates increasing vs. decreasing offense seriousness, particularly the role of sanctions, continuation vs. discontinuation is a simple dichotomous approach to the basic problem. Earlier research, as we have stated, has shown that discontinuation (desistance) takes

place very rapidly at first but tapers off after the first few contacts, moreso for females than males.

Contact by contact, there is little that can be said about the experiences or characteristics of people who desist that will explain the offense seriousness of their last contact. No more can be said about the seriousness of that same number or the *i*th contact for those who continue, contact by contact. In other words, we cannot account for the seriousness of any given offense (which is the last offense for those juveniles who desist) vs. that offense for those who continue. With offense seriousness for last prior contact included among the independent variables, only 29.7% of the variance in present offense seriousness was accounted for at the sixth contact for those who had no future contacts. In this case, seriousness of the previous contact had the largest impact on present offense seriousness, followed by total prior offense seriousness.

For those who continued to have contacts after the sixth contact, the independent variables accounted for only 5% of the variance in seriousness of present offense. Only total prior sanctions had a significant impact on present offense for those cohort members who continued to have police contacts, the more severely they had been sanctioned in the past, the more serious their current offense. Although significant amounts of the present offense seriousness variance are accounted for among adults who continue to have future contacts, this represents only

a small proportion of the variance.¹⁵

When the period of police contact (juvenile vs. adult) was not controlled for those with future contacts, the results were quite similar to those for the juvenile and adult periods with relatively little of the variance in offense seriousness accounted for. However, for those with no future contacts, when period of police contact was not controlled, the amount of variance explained was small and roughly of the same magnitude as for the juvenile and adult period.

Accounting for Seriousness of Contacts by Age at Contact

Rather than attempt to account for offense seriousness from first to Nth contact (we had used 10 as the Nth because the number of contacts beyond this were markedly reduced), the most serious contact at age was substituted for contact order. Although most of the first-order correlations were significant at the age of 13 and older, the multivariate analysis again failed to account for more than 10% of the variance at any age. Furthermore, although the signs of the first-order correlations were quite consistent, there was considerable variation from age to age in the signs of the standardized estimates. However, the standardized estimates indicated that total prior seriousness and number of prior contacts (contact sequence number) were consistently important in accounting for the offense seriousness at the age of 11 and older, although neither was statistically

¹⁵ Whenever reference is made to significance we mean statistically significant at the .01 level or greater.

significant until the age of 14.

Although there was a question of multicollinearity in variables such as number of prior sanctions, severity of prior sanctions, and total prior seriousness, when the multiple regressions were rerun without number of prior sanctions or without total prior seriousness, there was little difference in the amount of variance accounted for.

ACCOUNTING FOR FUTURE OFFENSE SERIOUSNESS

The Most Difficult Decision

We 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 which they use 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 (sophistication of police disposition of contacts with alleged offenders) enables them or others to predict how soon or what the miscreant will next do is probably the most fallible.

The Juvenile Period

When the model was changed so that an attempt was made to account for total future offense seriousness at the first through tenth juvenile police contact, 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, type seriousness of present contact, and sex.

In the multiple regression analysis only age had much impact on future offense seriousness. The younger one is 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 is much larger than for any other variable. Race has the second largest standardized estimate at almost every contact level and is significant at the first, second, third, and sixth contacts. None of the career variables contributes 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. Multicollinearity was not a problem during the juvenile period, the highest intercorrelation of independent variables being between number of prior sanctions and severity of prior sanctions and only .576 at the highest. When the multiple regression was

conducted with severity of prior sanctions eliminated the adjusted R²s were the same as previously and the standardized estimates for number of prior sanctions (court interventions) remained the same through two decimals; in other words, there was no difference.

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, after which there was a slight decline in value. 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 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.

For the adult period three of the five 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. The correlation coefficients indicate moderately strong relationships but the strength of the relationship tends to decline as the number of contacts increases. 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 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.

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. For all the other variables the standardized estimates were small. 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 explained by the independent variables in the regression equation ranged from 28% 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 estimate 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.

It should be noted that 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 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, number of prior sanctions, sex, type

seriousness of present contact, and juvenile neighborhood. The other independent variables, with the exception of severity of prior sanctions, are never significant. Severity of present sanction is significantly correlated at only one contact level.

Age at contact was, as always, significantly and increasingly correlated with future offense seriousness across contact levels. It should be noted that when the regression analysis was conducted without age at time of contact as an independent variable, the proportion of the variance accounted for was reduced about 66%. Prior seriousness and sanctions became more important. Race, too, 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. Juvenile neighborhood, i.e., 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 dominated all 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 for every police contact, first through tenth, while for race the values were significant for the first through seventh contacts.

Twenty-two percent 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 R^2 s or the standardized estimates for the independent variables. It has also been suggested that the ratio of severity of sanctions to offense seriousness may be more explanatory of future offense seriousness than are either of the other variables, neither a ratio dealing with instant offense seriousness or severity of sanctions or a similar variable cumulating the ratio of prior severity of sanctions and prior offense seriousness being useful in accounting for future offense seriousness.

When the variables age of contact and race were eliminated from the multiple regression analysis, total prior seriousness and number of prior sanctions emerged as the most important effects on future career. A path analysis was conducted to further analyze the relationship between the cumulative career variables and future total offense seriousness. Specifically, causal models were developed to analyze possible mediating effects of age of contact and race. The results of the path analysis suggest that the effects of career variables on future offense seriousness are mediated by the variable age of contact so 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 as well as thoroughly involved in the justice system), the more probable that a serious career 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 is a slightly larger amount of variation in future offense seriousness accounted for by the model than when there is no control for cohort, ranging from 23% to 57% at the ninth contact. For the

combined cohorts the amount of variation ranges from 22% to 40% at the ninth contact.

Summary Observations on the First-Order Correlation Coefficients

Future total offense seriousness was significantly related to more variables for the 1942 Cohort than for the 1949 Cohort and future offense seriousness was significantly related to more variables for the 1949 Cohort than it was for the 1955 Cohort. There are several ways that this may be interpreted. It may well be that the impact of these variables becomes more and more apparent with time; the additional years of exposure for the 1942 Cohort has enabled more cohort members to reach their tenth police contact. This type of effect is limited, however, because, cohort-by-cohort, serious careers have developed somewhat more rapidly. There is also a sort of focusing of dependence or effect as a function of the development of a large Non-white inner city which has become "hardened" over the years. This is exemplified by the very factors which were most significant for the 1955 Cohort.

Furthermore, if we consider the independent variables as comprising two groups (Group 1 = characteristics of persons and Group 2 = career types) and then consider the concentration of significant relationships by stage of career (say contacts 1-5 vs. contacts 6-10) and variable group we see the significant relationships for Group 1 either at all stages of careers or at the early stage and the significant relationships for Group 2 at all stages of careers or at the later stage. For the 1955 Cohort

it is hard to get a feel for this because the variables are significantly related at all or nearly all contacts. This is true to a lesser degree for the 1949 Cohort but it is still possible to see the pattern. This pattern is most obvious in the 1942 Cohort.

The foregoing paragraph suggests that a person's official delinquent or criminal career has to be pretty well established before career experience begins to be related to future career or alternatively, that characteristics such as juvenile neighborhood, race, sex, etc., become less important to future behavior as career becomes more defined (by contact level reached). What we are saying here, of course, is that a well-developed juvenile career, as measured by official contact and labels, seems to perpetuate further frequent or serious police contacts. A set of "disadvantage criteria" may account initially for the development of a criminal career but then lose their explanatory potency to experience variables.

It should also be noted that the more discrete measures of criminal career, type seriousness of present offense and severity of present sanction, are very rarely significantly related to future offense seriousness (never for the 1955 Cohort, at only a few contact levels for the 1942 Cohort, and at about half of the contact levels for the 1949 Cohorts).

Not only are the direction and significance of a relationship important, strength or weakness as indicated by the absolute value or magnitude of the correlation coefficient must

also be considered. When considering the strength of the correlation coefficients they may be grouped by values as weak (less than .200), moderate (.200 to .500), or strong (more than .500) in association.

For the 1942 Cohort the two main variables are race and age, race moderately associated with future offense seriousness and age moderately or strongly associated. For the 1949 Cohort juvenile neighborhood, age, total prior offense seriousness, and number of prior sanctions were the variables with the most significance. Age was strongly associated with future offense seriousness at all but the first contact level, while juvenile neighborhood and future offense seriousness had a relationship that was moderate in strength. The two career variables were either weakly or moderately correlated with future offense seriousness. For the 1955 Cohort sex, race, age, and number of prior sanctions were significant, sex usually weakly correlated, race always moderately associated, number of prior sanctions always weakly correlated, and age always strongly associated. The correlation coefficient for the latter has values greater than .700 at contacts 8, 9, and 10.

Summary Observations on Standardized Estimates

The first-order correlation coefficients suggest which factors (independent variables) play a part in improving the prediction of future criminal behavior based on past behavior and personal characteristics, but the standardized estimates of the parameters are considered most important and most conclusive.

In terms of the relative size of the standardized estimates for the 1942 Cohort (Table 5), age at contact had the most impact on the regression model (except at the fifth and seventh contacts), being significant and negative at all contact levels and ranging in value from $-.274$ to $-.425$. A further look at the standardized estimates revealed an interesting pattern. At the lower contact levels, the early stage of career, significant impact was confined to age and race, both characteristic variables. The other variables (no values greater than $.200$) had standardized estimates that were very small. At the later stages of a career other variables, again including race, begin to have an impact on future offense seriousness. Among these were some of the career variables, notably those having to do with the sanctioning aspects of prior criminal career. Of the variables that we define as having impact by virtue of their being significant and having standardized estimates greater than $.200$, all were increasing in absolute size.

Again, for the 1949 Cohort, age dominated and was significant at all contact levels. The values ranged from $-.358$ to a peak of $-.533$ (contact 8). Age was the only variable which had standardized estimates greater in magnitude than $.200$. None of the career variables was significant and in the instances (contact levels) where characteristic variables were significant the values (except for age, of course) were relatively weak. When the standardized estimates are ranked largest to smallest, juvenile neighborhood or number of prior sanctions ranked second

TABLE 5. SUMMARY OF EFFECTS OF SELECTED VARIABLES AT FIRST TO TENTH OFFENSES ON FUTURE OFFENSE SERIOUSNESS, 1942, 1949, 1955, AND COMBINED COHORTS

	1st Contact				2nd Contact				3rd Contact				4th Contact				5th Contact			
	42	49	55	T	42	49	55	T	42	49	55	T	42	49	55	T	42	49	55	T
Type Seriousness of Contact	+	+	+a	+a	+	+	-	+	+a	+	+	+	+	+	+	+	+	+	+	+
Juvenile Neighborhood	-	-a	-	-a	-	-a	-	-a	+	-a	+	-	-	-a	-	-	-	-a	-	-
Sex	+a	+a	+a	+a	+	+	+a	+a	+	+	+	+a	+	+	+	+a	+	+	+	+a
White/Non-White	+a	+a	+a	+a	+a	+	+a	+a	+a	+	+a	+a	+a	-	+a	+a	+a	-	+a	+a
Age at Contact	-a	-a	-a	-a	-a	-a	-a	-a	-a	-a	-a	-a	-a	-a	-a	-a	-a	-a	-a	-a
Severity of Prior Sanctions					-	-	+	+	+	+	+	+	+	+	+	+	+	+	+	-
Total Prior Seriousness					-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Number of Prior Sanctions					+	-	-	-	-	-	-	-a	+	-	-	-	-	-	-	-
Severity, Present Sanction	-	-	+	-	+	+	+	+	-	-	+	-	-	+	-	-	+a	-	-	-
Adj. R ²	24	22	23	22	28	29	33	29	30	30	42	32	28	34	46	33	35	36	48	35

	6th Contact				7th Contact				8th Contact				9th Contact				10th Contact			
	42	49	55	T	42	49	55	T	42	49	55	T	42	49	55	T	42	49	55	T
Type Seriousness of Contact	-	+	+	-	-	+	+	+	+	+	+	+	+	+	+	+	+	-	+	-
Juvenile Neighborhood	-	-	-	-	-	-	-	-	+	-	-	-	+	-	-	-	+	-	-	-
Sex	+	-	+	+a	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+
White/Non-White	+a	-	+a	+a	+	-	+a	+a	+a	-	+	+	+	-	+	+	+	-	+	+
Age at Contact	-a	-a	-a	-a	-a	-a	-a	-a	-a	-a	-a	-a	-a	-a	-a	-a	-a	-a	-a	-a
Severity of Prior Sanctions	+a	+	-	+	+	+	-	-	+a	+	-	+	+a	+	-	-	+	-	-	-
Total Prior Seriousness	+a	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Number of Prior Sanctions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-
Severity, Present Sanction	-	+	-	-	+a	-	-	+	-	-	+	-	-	-	-	-	+a	-	-	-
Adj. R ²	31	37	51	37	31	39	52	37	27	39	56	40	33	37	57	39	39	35	56	37

Key: + or - = Sign of standardized estimate

a = Standardized estimate significant at .01 level or greater

a = Standardized estimate significant at .01 level or greater and .200 or greater

o = Standardized estimate .200 or greater but not significant

Note: Decimal point has been omitted for the Adjusted R² figures.

to age in impact at nine of the 10 contacts. For the 1949 Cohort there was no defined pattern based on characteristic vs. career variables and stage of criminal career.

For the 1955 Cohort age had the most impact on the model. The standardized estimates were significant and ranged in value from $-.370$ to $-.716$ (ninth contact). As was true for the 1949 Cohort, none of the other variables had standardized estimates greater than $.200$ and even where there was significance the values were weak. When the coefficients were ranked by size, race followed age in amount of impact on the model and was significant at every contact level. Unlike the standardized estimates for age, there is no strong pattern of increase or decrease as contacts increase. So, 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.

Remember, however, that race is not an explanatory variable unless we consider it to be a proxy for disadvantage or difficulty in becoming integrated into the larger society. Inner city socialization is explanatory in the sense that it stands for lack of opportunity and difficulty in becoming integrated into the larger society. To the extent that Non-Whites are residents of the inner city they have the characteristics of the disadvantaged of our society on two scores, not withstanding the changes that have taken place since WW II.

ACCOUNTING FOR CONTINUITY VS. DISCONTINUITY

The Multiple Regression Findings

We next conducted the analysis 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 contact 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. In the adult case age had its greatest impact at the seventh contact; the amount of variance accounted for was 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. It should be noted, however, that neither number nor severity of prior sanctions or severity of most recent sanction had a significant effect on continuity or discontinuity during the juvenile, adult, or total career periods.

One must also 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 there are 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 findings from any comparative table will vary depending on the level of offenses included and whether the juvenile, adult, or combined periods are considered.

The Multiple Discriminant Function Approach

The multiple discriminant function is also a useful technique when one is concerned about factors which identify those who will continue vs. 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 is accounted for with age at contact the most important variable in either continuity or desistance. Although severe prior sanctions increase the probability of continuation and numerous judicial interventions (all other things held equal) decreases the probability of continuation, the stability of the findings from contact to contact was not as great as in the other analyses that we have conducted.

FURTHER CONSIDERATION OF ANALYTIC STRATEGY

Eliminating Demographic Variables

The reader will recall that age of contact and race had consistently high standardized estimates when the analysis was based on combined age periods, so high in comparison with the other variables that it was clear that they accounted for most of the variation in future offense seriousness. But only one of these variables is what could be called a manipulable variable. Police policy could reduce the number of juveniles whose early alleged misbehavior (much of which consists of status offenses alone) results in the acquisition of a police record. Race differences are manipulable only to the extent that police policy differentiates by race in the application of intervention.

The same analysis with age and race omitted resulted in total prior seriousness becoming the most important variable, increasing with police contacts. The higher the total prior seriousness, the more serious the future career. The importance of this variable was closely followed by number of prior sanctions and then by inner city residence as a juvenile. 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.

There were also some cohort differences when separate tables by race and age period were constructed. For the 1942 Cohort, severity of prior sanctions, severity of present sanction, type seriousness of present contact, and total prior offense seriousness had the largest and most frequently significant standardized estimates, although none was significant at each contact level. Severity of prior sanctions and severity of present sanction, when significant, had a positive impact on future offense seriousness (what we have rather consistently found and the opposite of the intended effects of sanctions), as did total prior offense seriousness and type seriousness of present contact. In this case, the percent of the variance accounted for ranged from 11% to 28%, the latter at the seventh contact where severity of present sanction had its greatest positive effect on future seriousness, followed by total prior seriousness. What we have, in essence, is the impact of an accumulated offense seriousness plus severe sanctions for a repeat offender culminating in high future offense seriousness.

The 1949 Cohort presented a somewhat different set of findings, not unexpected considering the development of a more sharply defined inner city. Prior offense seriousness and number of prior sanctions had the same effects as previously but residing in the inner city as a juvenile now had a significant effect on future offense seriousness. The percent of the variance accounted for increased from approximately 11% for the first contact to 21% at the ninth contact.

In the case of the 1955 Cohort, little of the variance in future offense seriousness was accounted for, no more than 11% at any point. Number of prior sanctions had the negative impact on future offense seriousness mentioned for other cohorts, while inner city residence increased future offense seriousness. But, again, it is a case of relatively little explained variance when race and age at contact were removed from the regression equation.

Even though statements may be made about what a certain percent of a group will do in the future, i.e., statements about the aggregate, a very large proportion of the variance must be accounted for before it is possible to predict the future behavior of individuals with sufficient accuracy to guide the decision-making process.

INTEGRATING INTERVIEW DATA INTO THE ANALYSIS

Interview Responses and Self-Reported Delinquency

The process of selecting appropriate interview variables commenced with a thorough reconsideration and evaluation of each variable. Each of the variables selected should fit into one of the seven categories of independent variables shown in Diagram 1 (Transition measures, Home conditions, Employment, Education, World view, Associations, and Adult status) or be a self report measure to be used as a dependent variable. Those variables which would not allow discrimination because the distribution of responses was highly skewed were eliminated as, of course, were those which did not fit into the seven categories. This produced 34 independent and 18 dependent variables.

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.

On the positive side, it may be noted that 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.

In the research proposal we indicated that interview data would be utilized in attempting to account for variation in self-reports of delinquent and criminal behavior as well as official records of delinquent and criminal behavior. Delinquency self concept, ages 6-17, attitude toward the police, perception of police patrolling the neighborhood as a juvenile, 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. These same juvenile variables accounted for 33.3% of the variance in self-report rates after reaching age 18. Adding official records of juvenile offense seriousness and number of juvenile sanctions to the regression failed to increase the amount of self-report adult offense seriousness accounted for.

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. Even in cases where the interview variables had little effect on adult self-report offense seriousness the official juvenile offense seriousness and number of juvenile sanctions, when added to the regression analysis, would markedly affect the proportion of adult self-report offense seriousness accounted for. Other groups of variables accounted for less of the juvenile and/or adult self-report variance. Not surprising is the fact that self concept as a delinquent and having friends in trouble with the police had the greatest relationship to 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 did any other variable.

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 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 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 only 20% of the variance was accounted for by a combination of school variables and neighborhood, failure to graduate from high school, as in countless other analyses, had the greatest impact on self-reported delinquency for either the juvenile or adult period. We do not imply that failure to graduate is in itself the cause of delinquency, merely that it is associated with delinquency to a significant extent. 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 which appear must be considered with caution.

Interview Data and Official Delinquency

The next analysis attempted to account for future official offense seriousness among juveniles and included a variety of interview variables, attitudinal as well as behavioral, in addition to the career variables, such as severity of prior sanctions, number of prior sanctions, and total prior offense

seriousness, all, of course, for the juvenile period. The Adjusted R²s ranged from almost zero to .691, depending on which combination of basic variables, including age at contact, were included in the analysis.

The important point is that at the juvenile level the interview variables added little to the variance accounted for beyond that which was obtained with the basic characteristics of offender and career data, except for variables which were derived from reaction to contact with the police. The latter, however, is a circular type of 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, it would seem, that the police officer and others in the justice system have an opportunity to turn juveniles around early in their careers. What must they do to succeed?

We next turned to a wide range of attempts to account for future adult seriousness utilizing the basic career data, the demographic data, and various interview variables.

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 eighth police contact but the problem, as we have noted before, is that career experiences may be the determinant of attitude toward the police.

The associational variables alone had relatively little effect on future offense seriousness, although they had been consistently correlated at the zero 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. None of the traditional variables had consistent effects on future offense seriousness.

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 42% at the first contact to 73% at the tenth contact. What we find 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 contact by adding other attitudinal and employment variables.

Further Consideration of Cohort Differences

Throughout this report we have combined cohorts, having decided that although there are cohort differences with offense seriousness, disposition formality, and severity of sanctions, these differences were not sufficient to necessitate three sets of analyses with the official data and two sets with the self report and interview data.

It would be remiss not to add that mean juvenile offense seriousness and severity of sanctions vary by cohort and by contact number, but that a clear pattern of trends and differences does not exist contact by contact. Our efforts to account for offense seriousness and severity of sanctions, contact by contact or from any given point to the future, were sure to be difficult not only because the variables fluctuate but because even the most basic variables have inconsistent

relationships with each other. Although sanctions for adults in the 1955 Cohort were definitely greater on the average than for the 1942 and 1949 Cohorts, the relationship between offense seriousness and severity of sanctions for all cohorts was significant at nearly every contact level.

With these basic data in mind it is not surprising that the multiple regression analyses failed to produce consistent patterns of relationships between independent and dependent variables, contact by contact. This, of course, is the underlying reason that a model based on one cohort may not explain or predict the behavior of a following cohort.

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

The Failure of Sanctions as Administered

We commenced by pointing out that previous published work by sociologists and others with similar research interests had failed to find evidence that sanctions, as administered, have been effective in the United States.

Assessing the Problem of Cohort Variation

Although variation related to cohort, period (decade), and age was present, the amount was insufficient to account for more than 6% of the variance in offense seriousness or the decision to refer. No more than 6% of the variation in severity of sanctions could be accounted for by cohort, decade, and age. We concluded that most of the analyses could be based on the combined cohorts.

The decision to refer to court or to other agencies could not be accounted for (only from 26% to 30%) by demographic, ecological, social, or prior delinquent and/or criminal or court experience variables. Even with controls for the juvenile vs. the adult period, the demographic and other variables produced only 23% to 26% accounted-for variance in the decision to refer

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, 1960): pp 321-379, and found comparable in many respects and the 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.

to court. The addition of offense seriousness and number of prior offenses still allowed us to account for no more than 16% of the variance in severity of sanctions. Attempting to account for the severity of sanction for specified offenses, first through tenth, brought us to 22% for the seventh juvenile contact and 21% for the eighth adult contact.

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.

Our earlier contention was confirmed that decisions to refer and decisions to sanction, although bearing some relationship to the alleged delinquent's or criminal's malfeasance are scarcely straight line.

Failure to Account for Single Events

We next went down a road which we surmised would be the wrong one but did so because 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.

Accounting for Future Offense Seriousness

Various attempts were made to account for total future offense seriousness, contact by contact. We decided that it is really difficult to fault police for their judgments or fault 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 is at the time of any given contact level, 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 present or prior 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 are negative and some positive, led to an equation which accounts for as much as 36% of the variance in future offense seriousness for juveniles at the sixth contact 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 36% 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 gives 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 c

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) did suggest that the police and others in the justice system have an opportunity to influence juveniles in the direction of non-delinquent behavior. We have suggested 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 difference is that the data were not manipulated in such a precise fashion, as we have now done.

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. Table by table, the data verified earlier findings that sanctions as administered do not deter offenders from further delinquency or crime.¹⁷ Less severe sanctioning or no sanctions produced a lower percent of continuers.

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.

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 a 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.

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.

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.

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.

More specifically, for those who are charged with the job of intervention, 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 would best be directed at young persons with early serious offenses before the time that they have established even more serious delinquent or criminal careers.

This turns the question to one of what can be done 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 negative and positive errors may be tolerated if the program is aimed at the general youth population that includes the much smaller target population but is not so expensive as to be prohibitive for administration to the larger group. 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 as a judicial

or quasi-judicial target, 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., defined as 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.