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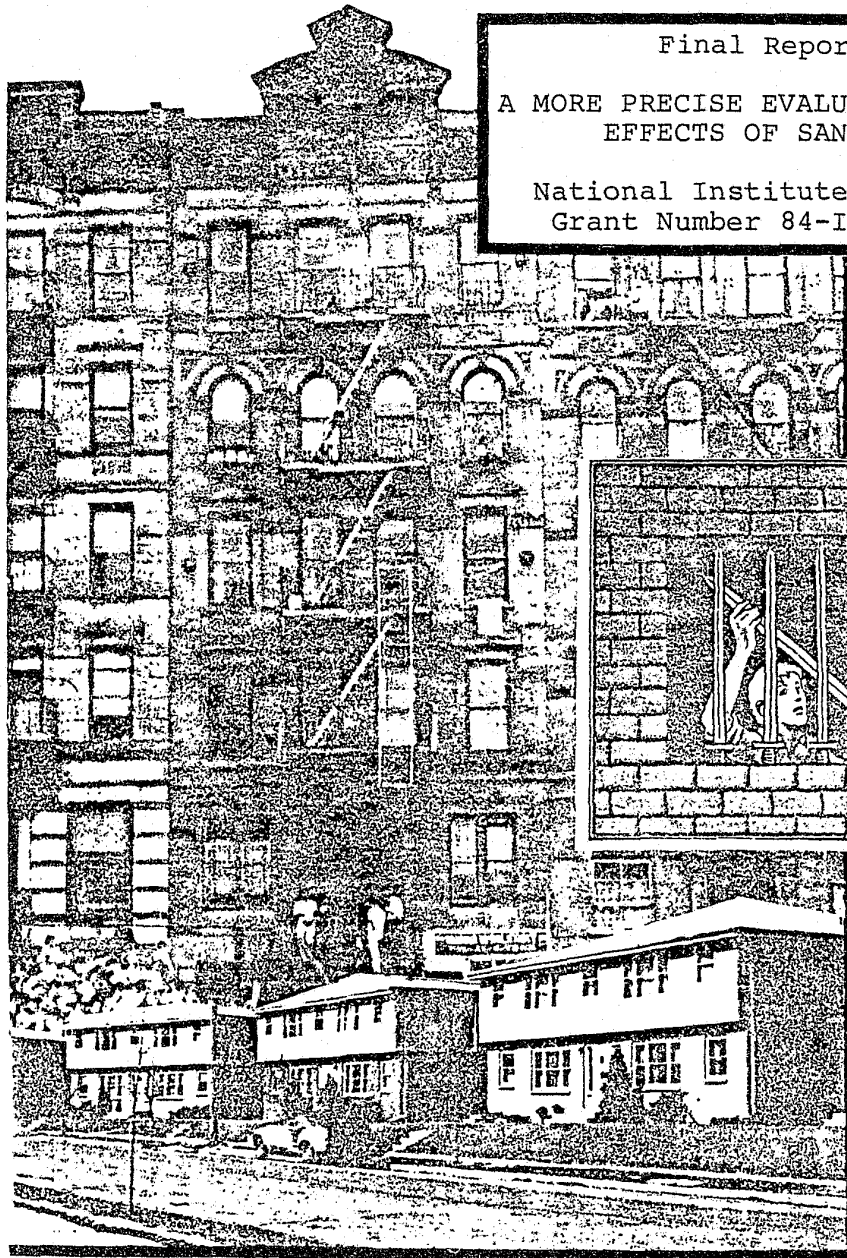


"Scientific Social Research that Counts"

Final Report

A MORE PRECISE EVALUATION OF THE
EFFECTS OF SANCTIONS

National Institute of Justice
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A MORE PRECISE EVALUATION OF THE
EFFECTS OF SANCTIONS

LYLE W. SHANNON

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

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The day has long passed when acknowledgments are made to long-suffering wives who have typed and retyped manuscripts and "research" reports or to children who endured the loss of companionship of fathers who so carefully calculated and recalculated their findings based on either too few cases or too few variables or both. However appropriate these acknowledgments were, they are increasingly replaced by words of appreciation for those who have recognized the importance of adequately funded sustained research and made it possible by continued financial and administrative support.

Our first thanks is to the College of Liberal Arts, the Graduate College, and the Office of the Vice President for Educational Development and Research for their continuous support of the Iowa Urban Community Research Center since 1958, the year of its founding as an independent interdisciplinary research center within the College of Liberal Arts. Although funded at its inception principally by the College of Liberal Arts (Dean Dewey B. Stuit) and the Federal government (National Defense Educational Act), it has since been liberally supported by the Graduate College and the Office of the Vice President for Educational Development and Research (Vice President D.C. Spriestersbach) as well as the College of Liberal Arts (Deans Howard J. Laster and Gerhard Loewenberg). This provided the Center resources, facilities, staff salaries, and funds for day to day computer usage, without which it would have been

impossible to have research continuity and difficult to systematically seek the extensive and continuous outside funding that was necessary for data collection, coding, management, and storage required for longitudinal research, particularly the longitudinal birth cohort studies which we have been conducting during the last decade or so and which cover a data span of more than 35 years.

This brings us to mention the specific foundations and agencies which have provided hundreds of thousands of dollars of support since the beginning of the longitudinal birth cohort studies, on which this report is one in a long series. Although our first funds came from the Fleischman Foundation of Reno, Nevada, strong support and frequent support since 1974 has come from the National Institute of Juvenile Justice and Delinquency Prevention. In 1979 we received our first grant from the National Institute of Justice and have received other grants, including our current grant from NIJ. It is to these agencies which understand the importance of continuity that we must give great credit, along with the University of Iowa. It is not really possible to mention all of the people from administrators to supporting office staff who have been helpful, but let it be noted that 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 NIJJDJP reveal that they have become increasingly aware of the shortcomings of a patchwork approach to research on delinquency and crime. While we cannot expect Federal agencies to go beyond the mandate given to them by Congress and also realize the restrictions placed upon them by limited appropriations, 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. Edgar Murph (Programmer Analyst), Lawrence Haffner (Programmer Analyst, now Director of Academic Computing Services at Harper College), and 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 ever 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).

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. 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.

Chapter 1. Review of the Racine Studies

INTRODUCTION

The Effectiveness of Intervention and Court Sanctions

The effectiveness of intervention and court sanctions (as applied historically and at present) has been questioned in a lengthy literature that has almost invariably culminated in the conclusion that nothing works for juveniles or adults if a decline in delinquent and criminal behavior by a specific target population is the criterion.¹ Furthermore, it is difficult, if not impossible, to attribute declines in delinquency or crime rates to programs with ameliorative goals when associated demographic and economic variables may have equally relevant explanatory importance.

¹ For an excellent introduction to the problem of the juvenile court see Task Force on Delinquency and Youth Crime of the President's Commission on Law Enforcement and Administration of Justice, Juvenile Delinquency and Youth Crime (Washington, D.C.: U.S. Government Printing Office, 1967), pp. 2-9. Among the numerous publications which have been highly critical of the operation of the court are the following: Patrick T. Murphy, Our Kindly Parent...The State: The Juvenile Justice System and How It Works (New York: Viking Press, 1974); Anthony Platt, The Child Savers (Chicago: The University of Chicago Press, 1983). For a very recent critical text see: Barry Krisberg and James Austin, The Children of Ishmael: Critical Perspectives on Juvenile Justice (Palo Alto, California: Mayfield, 1978). LaMar T. Empey has also summed it up quite well in "Juvenile Court: The Tarnished Superparent," Chapter 16, American Delinquency: Its Meaning and Construction (Homewood, Illinois: The Dorsey Press, 1978), pp. 440-483. It may well be, as suggested by Martinson after consideration of over 200 studies, that nothing works. See Robert Martinson's "What Works? 'The Martinson Report'" from "What Works? Questions and Answers about Prison Reform," The Public Interest 35 (1974), pp. 22-55, reprinted in Norman Johnson and Leonard D. Savitz (eds.), Justice and Corrections (New York: John Wiley & Sons, 1978), pp. 788-810. Lest the reader conclude that nothing has been learned, Palmer's

While some studies of post-release juveniles and adults have concluded that recidivism runs as high as 80%, there have been few efforts to compare the behavior of those who have had the hypothesized benefits of intervention with the behavior of those who have also had contacts with the justice system for the same behavior but for whom intervention by the police was followed by no further action.

Only in recent years have the resources been available to conduct large scale, long term experimental studies or lengthy longitudinal cohort research projects designed to determine the effectiveness of intervention (and varying degrees of severity of sanctions) by comparing persons who have and have not experienced it at the juvenile or adult level in the justice system.² The crucial question in both research approaches is whether those who are ignored are more or less likely to cease their delinquent and

reply should be noted: Ted Palmer, "Martinson Revisited," Journal of Research in Crime and Delinquency 12 (1975), pp. 133-152, also reprinted, op. cit., pp. 811-827. Whether juveniles who have committed noncriminal acts should be dealt with by a correctional system has become an issue in more recent years as well stated by William H. Sheridan, "Juveniles Who Commit Non-Criminal Acts: Why Treat in a Correctional System?" Federal Probation 31 (1976), pp. 26-30.

² A review of the even more recent literature on corrections in the United States to 1975 has been conducted by David F. Greenberg. Studies are cited in which random assignment to experimental and control groups were made but the results were no more heartening in terms of evidence of correctional program effectiveness than from previous surveys. In concluding a chapter, "The Correctional Effects of Corrections," he refers again to the Lipton, Martinson, and Wilks survey by saying that, "The blanket assertion that 'nothing works' is an exaggeration, but not by very much." David F. Greenberg (ed.), Corrections and Punishment (Beverly Hills: Sage, 1978), Chapter 5, p. 141.

criminal activities than are those who receive the attention of the judicial system and are sanctioned with varying degrees of severity.³

We have already shown that being referred to Juvenile County Probation (juvenile court intake), the District Attorney, Juvenile Traffic Court, or some other agency vs. being released or counselled and released is not only one further step in the process of becoming known to persons in the justice system but is a forerunner of police contacts for increasingly serious reasons.⁴ Fortunately, as we see it, considering the evidence, about two-thirds of the males' and 80% of the females' contacts in the 1942 and 1949 Cohorts resulted in counselling and release by the police. Unfortunately, the proportion of the juvenile contacts referred to the County Probation Department has

³ Although the data are available for our project in a community of 100,000, this research would be difficult, if not impossible, to carry out in most metropolitan areas where such extensive longitudinal records are not as readily available. Some of the problems for a megalopolis such as Los Angeles are presented in Peter W. Greenwood, Joan Petersilia, and Franklin E. Zimring, Age, Crime, and Sanctions: The Transition from Juvenile to Adult Court, National Institute of Justice (N-2642-NIJ) (Santa Monica: Rand), 1980.

Racine is, in many respects, an ideal laboratory in which to study how social processes operate in an urban setting. In 1930 almost 20% of the population consisted of foreign-born Whites, while less than 1% was Black (Negro). By 1940 the population of foreign-born Whites dropped to 16.5%, by 1950 to 12%, by 1960 to 8%, and by 1970 to 6%. At the same time, the Black population increased from 1% in 1940 to 2% by 1950, to 5.3% by 1960, and to 10.5% by 1970.

⁴ Chapter 10, "Differentials in the Referral of Police Contacts and Their Use in Predicting Continuity," 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 Reference Service NCJ77744,

increased from cohort to cohort so that between the 1942 and 1955 Cohorts the proportion with this referral increased from 9.2% to 22.4% for males and from 5.5% to 20.2% for females. While our analyses have indicated that referral is also the first step toward continuity in careers, further analysis of the official reports and self-report data with more stringent controls was deemed necessary in order to determine the extent to which intervention of various types and severity may be an effective deterrent action for persons who are alleged to have engaged in a specific behavior (juveniles) or to have committed a specific offense (adults), at a specific age, with a specified prior offense record, prior record of sanctions, sex, race/ethnicity, socioeconomic status, and socialization in a milieu that may be characterized as one in which delinquency is a way of life.

Some Analytic Considerations

Although we have conducted numerous analyses of the Racine cohort data over a period of 10 years, most of these analyses have been based on the age-by-age data sets, data sets in which cohort members' offenses have been aggregated for the juvenile, intermediate, or adult periods, or ecological data sets. Very little has been done with what we call the contact-by-contact data sets. In other words, we have been concerned with the

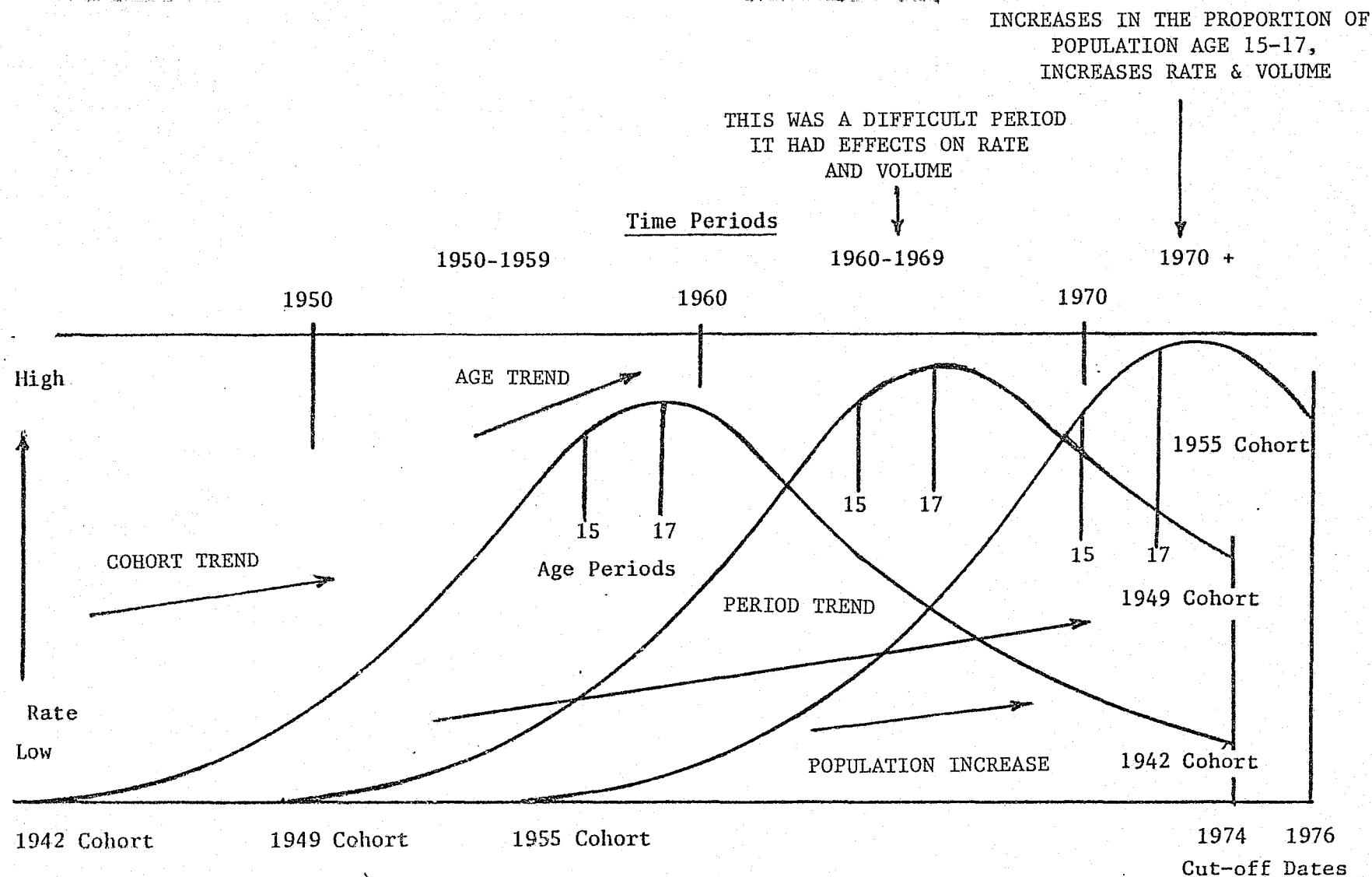
963 pages, 1982). Also see: Lyle W. Shannon, "A Longitudinal Study of Delinquency and Crime," Chapter 7 in Charles Welford (ed.), Quantitative Studies in Criminology, (Beverly Hills: Sage, 1978), pp. 121-146 and "Assessing the Relationship of Adult Criminal Careers to Juvenile Careers," in Clark C. Abt (ed.), Problems in American Social Policy Research (Cambridge: Abt Books, 1980), pp. 232-246.

aggregated segments of careers of people, what has happened to people within spatial units, or what has happened within spatial units rather than with what has happened as a result of contacts, contact by contact.

At the same time, in every analysis that we have conducted, we have been concerned about cohort differences, age differences, and time period differences. The following two diagrams focus attention on the complexity of this type of analysis. As Diagram 1 shows, each of the three cohorts has its juveniles at the age in which police contacts are most frequent during a different decade or time period. Cohort by cohort police contact rates have become higher, decade by decade they have become higher and, as the diagram reveals, police contact rates increase to a peak at around 17 and then decline. At the same time that the size of the juvenile population has increased with general population increase it has also increased disproportionately to the general population. This increase in the volume of delinquency tends to focus public attention on the problem of youth and may thus result in not only close scrutiny of them, more careful accounting or reporting of their behavior, and more formal attention in the form of referrals. Diagram 2 shows the ages included for each cohort during the period for which data were collected.

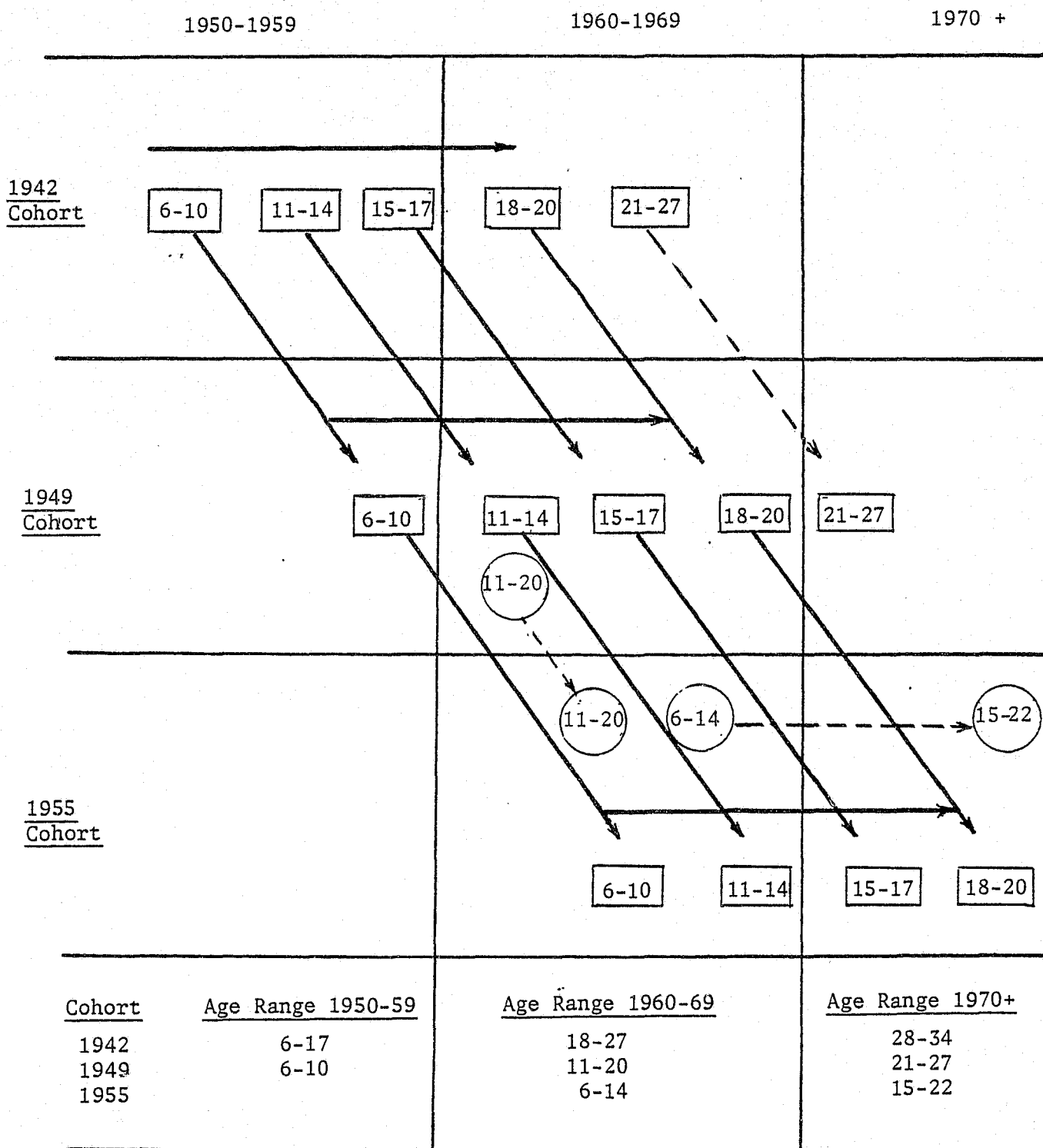
When the three cohorts are combined 51.1% of the police contacts came before the age of 18 and 48.9% after that age, 25.5% between the ages of 18 and 21 and 23.4% after the age of

DIAGRAM 1. TYPES OF OFFENSE RATE VARIATION - THEIR EFFECTS ON VOLUME OF DELINQUENCY & CRIME



NOTE: COHORTS BECOMING LARGER INCREASES VOLUME (POPULATION INCREASE)
COHORT DIFFERENCES IN CRIME PRONENESS INCREASE RATE & VOLUME

DIAGRAM 2. AGGREGATION OF THE AGE-BY-AGE DATA SET FOR AGE PERIOD AND COHORT DIFFERENCE ANALYSIS



21. The relatively greater impact of the 1955 Cohort may be seen in two ways, first of all in its size. The 633 persons in the 1942 Cohort with continuous Racine residence produced 17.7% of the police contacts, the 1297 persons in the 1949 Cohort produced 36.0% of the contacts, and the 2149 persons in the 1955 Cohort produced 46.3% of the contacts. Secondly, the 1955 Cohort made a disproportional contribution to the total number of contacts at the juvenile level (57.0%) and at the young adult level of 18-20 (51.6%). By contrast, the 1942 Cohort contributed 38.4% of the contacts by cohort members at ages 21 and older. Put differently, 62.9% of the 1955 Cohorts contacts came before age 18 while 59.1% of the 1942 Cohort's contacts came after age 18.

Those who have been involved in secondary analyses of our data have addressed themselves to similar cohort, age, and time period issues. Perhaps the most definitive secondary analyses of our data in terms of our current problems have been those conducted by Steven P. Lab and colleagues who have co-authored articles with him. In this case it is appropriate to refer to his article, "Cohort Analysis and Changing Offense Rates: In Search of the Lost Method." He has found, using the age-by-age data sets, age and cohort but predominant period effects on changing offense rates, especially for females. We have, of course, found similar effects in our earlier analyses of the age period data sets. At this point, however, we are examining specific contacts as well as careers. The complexity and interrelationship of these effects on individual contacts is made clear in the computer-generated diagrams in Appendix A.

It should be noted that we consider sex and race/ethnicity as statuses providing different kinds of experiences in a given society or subsociety and not as basic explanatory variables. Much research has been clouded by failing to indicate that these are ascribed statuses that increase or decrease the risk of exposure and differential treatment.⁵ While there is little doubt that race/ethnicity and sex combined with neighborhood of residence are often determinants of the variety of delinquent and criminal activities that one will have from early to later life, it is the experience of contact with the police and counselling and release vs. the impact of referral to an agency which has the potential for sanctioning (and determining the severity of sanctions administered) that must be examined more extensively than has been done to date.

⁵ Evaluation of the existing literature may lead to the conclusion that police, probation officers, and judges do not discriminate against juveniles or adults on a basis of race/ethnicity or socioeconomic status when controls for seriousness of offenses, previous record, etc., have been introduced: Nathan Goldman, "The Differential Selection of Juvenile Offenders for Court Appearance," National Council on Crime and Delinquency (1963); Alexander W. McEachern and Riva Bauzer, "Factors Related to Disposition in Juvenile Police Contacts," in M.W. Klein (ed.), Juvenile Gangs in Context (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1967): pp. 148-160; William F. Hohenstein, "Factors Influencing the Police Disposition of Juvenile Offenders," in T. Sellin and M.E. Wolfgang (eds.), Delinquency: Selected Studies (New York: John Wiley and Sons, Inc., 1969): pp. 138-149; Donald J. Black, "Production of Crime Rates," American Sociological Review 35 (1970): pp. 733-748; Donald J. Black and Albert J. Reiss, Jr., "Police Control of Juveniles," American Sociological Review 35 (1970): pp. 63-77; Theodore G. Chiricos and Gordon P. Waldo, "Socioeconomic Status and Criminal Sentencing: An Empirical Assessment of a Conflict Proposition," American Sociological Review 40 (1972): pp. 753-772; Norman L. Weiner and Charles V. Willie, "Decisions by Juvenile Offenders," American Journal of Sociology 77 (1971): pp. 199-210.

The issue of self-labelling vs. official labelling is a related topic whether we are dealing with self-report or official data on delinquent and criminal behavior. Although the findings in this research have consistently supported labelling theory, increasingly serious misbehavior may be the product of a developing career, self-labelling or official labelling, the learning experience of institutionalization, or combination of these variables. Whichever it may be, those who have a record of continuing and more serious police contacts are not benefitting from intervention in the manner anticipated by society.⁶

A series of questions in the interview schedule enables us to examine the effects of different types of police behavior, referral experiences, and peer vs. parental reaction on respondent's attitude and response at the time of and after

There are other studies which suggest that the opposite is the case: Irving Piliavin and Scott Briar, "Police Encounters with Juveniles," American Journal of Sociology 70 (1964): pp. 206-214; Theodore A. Ferdinand and Elmer C. Luchterhand, "Inner-city Youths, the Police, the Juvenile Court, and Justice," Social Problems 17 (1970): pp. 510-527; Theodore G. Chiricos, Phillip D. Jackson and Gordon P. Waldo, "Inequality in the Imposition of a Criminal Label," Social Problems 19 (1972): pp. 553-572; Terence P. Thornberry, "Race, Socioeconomic Status, and Sentencing in the Juvenile Justice System," Journal of Criminal Law and Criminology 64 (1973): pp. 90-98; William R. Arnold, "Race and Ethnicity Relative to Other Factors in Juvenile Court Dispositions," American Journal of Sociology 77 (1971): pp. 211-227; Charles W. Thomas and Robin J. Cage, "The Effect of Social Characteristics on Juvenile Court Dispositions," The Sociological Quarterly 18 (1977): pp. 237-252; Alan J. Lizotte, "Extra-legal Factors in Chicago's Criminal Courts: Testing the Conflict Model of Criminal Justice," Social Problems 25 (1978): pp. 564-580; Allen E. Liska and Mark Tausig, "Theoretical Interpretations of Social Class and Racial Differentials in Legal Decision-Making for Juveniles," The Sociological Quarterly 10 (1974): pp. 197-207; James D. Unnever, Charles E. Frazier, and John C. Henretta, "Race Differences in Criminal Sentencing," The Sociological Quarterly 21 (1980): pp. 197-205.

contact (holding reason for contact, age at contact, and a host of other relevant variables constant).

In summary, we have proposed to examine the effects of referral, dispositions, and sanctions on future behavior with controls for individual and group characteristics. The data which we have collected permit determination of the differential effects of referral and severity of sanctions for specific offenses as they relate to categories of people in a demographic, locational, and socioeconomic status context, in terms of prior delinquent and criminal experience and sanctions and with consideration of their behavioral and attitudinal responses as well. We are also able to determine when and where sanctions of differing degrees of severity have been effective, if at all. This may be an improvement over the position that referral and

While these are only selected studies of discrimination at various levels in the justice system, they are illustrative of the conflicting findings that have been reported and indicate the basis on which it has been concluded that evidence of direct discrimination by the police or courts has been considered sparse or the conclusion that discrimination is present in some places at some times but not in other places. The problems of discrimination and sentencing disparity have been precisely formulated and the extensive literature most recently reviewed by Alfred Blumstein, Jacqueline Cohen, Susan E. Martin, and Michael H. Tonry (eds.), Research in Sentencing: The Search for Reform, (Washington, D.C.: National Academy Press, 1983).

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

sanctions are generally not effective in specific deterrence or rehabilitation.⁷

PROCEDURES FOLLOWED IN THE EARLIER RESEARCH AND SOME EXAMPLES OF PERIOD-AGGREGATED FINDINGS

The Racine cohort data on sanctions have been subjected to considerable analysis. Real questions have been raised about the wisdom of increasing the severity of sanctions for either juveniles or adults as a solution to the problems of delinquency and crime. Although we are now substituting individual level event analyses for the earlier period-aggregated findings in previous reports and papers and described on the following pages, we believe that it is important to present a brief review of these earlier findings from the age-by-age data.

heavily on recidivism indicators which are not racially neutral, the problem is intensified.

Marjorie S. Zatz, "Race, Ethnicity, and Determinate Sentencing," Criminology 22 (1984): pp. 147-171, has reviewed the research on Chicano sentencing and also used data on California sentencing in 1978 to show that factors related to length of sentence, taking into consideration type of offense, differ for Whites, Blacks, and Chicanos. Some of the disparities in reported research results may be accounted for by lumping Chicanos with Whites or Blacks, as has so frequently been done in research involving limited numbers of Chicanos.

For an understanding of how women come to engage in different patterns of delinquency and crime and sex-related societal responses see: Darrell J. Steffensmeier, "Organization Properties and Sex Segregation in the Underworld: Building a Sociological Theory of Sex Differences in Crime," Social Forces 61 (1983): pp. 1010-1032 and Darrell J. Steffensmeier, "Assessing the Impact of the Women's Movement on Sex-Based Differences in the Handling of Adult Criminal Defendants," Crime and Delinquency (July 1980): pp. 344-357.

⁶ Some indication of the negative effects of processing,

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

particularly for White males, has been found by Suzanne S. Ageton and Delbert S. Elliott, "The Effects of Legal Processing on Delinquent Orientations," Social Problems 22 (1974): pp. 87-100.

7 Although our own thrust has been toward investigation of the failure of the system to deter specific people from continued misbehavior or to rehabilitate those who are dealt with in one manner or another, including probation and institutionalization, others have been concerned with general deterrence. The difficulty of disentangling the effects of arrests on crime and crime on arrests in order to assess the deterrence effect has long been considered a thorny problem. Greenberg, et al., contend that studies of crime rates which have appeared over the last decade and which have been interpreted as supportive of the sanctions deterrence position are really not. See David F. Greenberg, Ronald C. Kessler, and Charles H. Logan, "A Panel Model of Crime Rates and Arrest Rates," American Sociological Review 44 (1979): pp. 843-850.

sanctions within major categories.

With the data collapsed and the penalty groups rank ordered, the data were converted to a Severity of Dispositions Type 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 should not 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 is represented, with similar levels combined so that the scores range 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 .385 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.

Data on the relationship of sanctions to future behavior of males are presented on a simple percentage basis in Table 1. While not definitive, the results indicated that we were on the track of something very important. They were startling in the extent to which they suggested that sanctions (as applied) may be counter-productive.

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

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 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 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 18, 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 18, 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 18 there are either none or very few with no contacts after that period in the 1942 and 1949 Cohorts.

Tables have also been constructed in which categories of persons are viewed in terms of the number and seriousness of contacts and the severity of sanctions accorded them after 19, for example, within the number and seriousness of contacts and sanctions categories through 18. What we found suggests that sanctions have not been evenly applied over the years, or, for that matter, may not have been evenly applied during a given period of time. For example, only 2.4% of the 1942 Cohort males and 4.3% of the 1949 Cohort males had 1-4 contacts after reaching 19 had been severely sanctioned after reaching 19 while 18.5% of the 1955 Cohort with 1-4 contacts had already been severely sanctioned after that age. Similarly, in terms of the trend toward higher sanctions, only 34.6% of the 1942 Cohort males, 46.4% of the 1949 Cohort, but 81.0% of the 1955 Cohort with 5 or more contacts after 19 had been severely sanctioned since then. Progression from cohort to cohort in level of severity was also present for males with seriousness scores after the age of 18.

The pattern of progression was similar for females, particularly in the increasing proportion severely sanctioned among persons with high seriousness scores after the age of 19.

Although there is evidence of a heightened relationship between previous record and sanctions through age 18 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 18. While an adult justice model does not call for a one-to-one relationship between juvenile misbehavior, juvenile sanctions, and adult misbehavior and 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?⁸ Unfortunately, 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 designs.⁹

⁸ 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.

⁹ In addition to previously cited studies one of the most recent efforts to examine the effects of extra-legal factors in determining the length of prison sentences has indicated the

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.

complex nature of the problem with the conclusion that research strategy should recognize the existence of justice subcultures which may have the effect of reducing the obviousness of judicial discrimination. While the research by Charles E. Frazier and E. Wilbur Bock, "Effects of Court Officials on Sentence Severity," Criminology 20 (1982): pp. 257-272, failed to find the usual type of discrimination in a rather limited setting, it does make it clear that attention to situational factors may produce evidence of sex and race discrimination that would otherwise not appear. The role of accumulated disadvantage has been shown by: Ilene Nagel Bernstein, William R. Kelley, and Patricia A. Doyle in "Societal Reaction to Deviants: The Case of Criminal Defendants," American Sociological Review 42 (1977): pp. 743-755.

The problem has been further exacerbated by by problem of measuring the impact of inappropriate variables, a solution to which has been offered by Aiden R. Vining, "Developing Aggregate Measures of Disparity," Criminology 21 (1983): pp. 233-252. The effects of less discretion are, as one might expect, not evenly found in a nationwide sample, as shown by Stuart Nagel and Robert Geraci, "Effects of Reducing Judicial Sentencing Discretion," Criminology 21 (1983): pp. 309-331.

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 of institutionalization.¹⁰ Let us in this respect briefly refer to 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.

¹⁰ Very few studies have been designed in such a fashion to give a definitive answer to the question of what the consequences of incarceration are, although those that have attempted to introduce appropriate controls conclude that incarceration does not work. For one of the more definitive studies see Andrew Hopkins, "Imprisonment and Recidivism: A Quasi-Experimental Study," Journal of Research in Crime and Delinquency 13 (1976): pp. 13-32. Hopkins concludes that incarceration may actually be worse than noninstitutional treatment.

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 seriousness scores. To the extent that some decline has been found following the application of sanctions it cannot be said that the decline is not part of the general attrition in contacts also found among persons who have not been sanctioned.

We have also found that, step by step, the process of continuation worked to place a disproportional number of inner city Blacks in institutions before the age of 18 and to continue to place them in institutions 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.¹¹

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

¹¹ 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.

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.

PUTTING THE RESEARCH IN PERSPECTIVE

In several previous research reports we have included what might be considered a disclaimer or warning in the executive summary or in the concluding chapter of the report. This research was conducted in Racine, Wisconsin. While Racine 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.

While it is true that 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 ordinary 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.

THE NEED FOR SCIENTIFIC INTERVENTION

In order to effectively intervene, persons on the firing line would like more specific information as early as possible about who is most likely to continue their behavior in such a fashion as to ultimately be incarcerated in an adult institution. A considerable segment of the public shares this goal, i.e., they see intervention as a step which may decrease the probability of ultimate incarceration. There is, of course, another segment of the public for whom intervention means removal of the juvenile from the community and commitment to an institution as a means for immediately reducing the amount of delinquency (crime). Whichever goal is to be implemented by intervention, one must first know more about the systematic linkages from neighborhood to institution in order to determine if intervention and

sanctions, including institutionalization, are justified on either a socially or economically cost-effective basis.¹²

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 at length with the problem of mandatory sentencing¹³ and selective incapacitation, the research presented in reports and professional literature reveals that the "debate" will continue,¹⁴

We must now turn to a hard look at the data, and the questions raised by combining cohorts for analysis, before reporting the findings.

¹² Lest the reader be concerned that we have been rather narrow in the type of literature to which reference has been made, it should be noted that we have read and are aware of the broader, perhaps more theoretical, contributions as well as those more oriented toward effects of sanctions and differentials in the administration of sanctions, e.g., Jack P. Gibbs, "Social Class, Deterrence, and Perspectives on Social Order," Social Forces 56 (1977): pp. 408-432; Harold G. Grasmick and George J. Bryjak, "The Deterrent Effect of Perceived Severity of Punishment," Social Forces 59 (1980): pp. 472-491; Robert Nash Parker and M. Dwayne Smith, "Deterrence, Poverty, and Type of Homicide," American Journal of Sociology 85 (1979): pp. 614-624; Charles R. Tittle, "Sanction Fear and the Maintenance of Social Order," Social Forces 55 (1977): pp. 479-496, and Charles R. Tittle and Charles H. Logan, "Sanctions and Deviance: Evidence and Remaining Questions," Law and Society Review (1973): pp. 371-392; Gary F. Jensen and Maynard L. Erickson, "The Social Meaning of Sanctions," in Marvin D. Krohn and Ronald L. Akers (eds.), Crime, Law, and Sanctions (Beverly Hills: Sage, 1978); Henry N. Pontell, "Deterrence: Theory vs. Practice," Criminology 16 (1978): pp. 3-22.

¹³ 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.

¹⁴ 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.

Chapter 2. A Preliminary Look at 15,245 Police Contacts

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

TABLE 2. COHORT, TIME PERIOD (Decade), AGE, AND PRIOR CONTACT CORRELATIONS AND EFFECTS ON OFFENSE SERIOUSNESS FOR 15,245 POLICE CONTACTS

	Std. Est.	Std. Est.	Pearson Corr.
Cohort	.141*	.133*	.120*
Decade	-.017	-.022	.069*
Age	.029	.009	-.038*
Priors		.066*	.067*
Adj. R ²	.014*	.018*	

* Significant at .001 level or greater

(Table 2), with number of prior offenses also inserted in order to give a better picture of basic effects on offense seriousness. Very little of the variance (less than 2%) 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 increased to only 2%.

Decision to Refer

In Table 3, which is a companion to Table 2, we immediately see that offense seriousness has the highest first-order correlation with the decision to refer or not refer at time of

TABLE 3. COHORT, TIME PERIOD (Decade), AGE, SERIOUSNESS, AND PRIOR CONTACTS CORRELATIONS AND EFFECTS ON POLICE DECISION TO COUNSEL AND RELEASE OR REFER AT TIME OF 15,245 CONTACTS

	Std. Est.	Std. Est.	Std. Est.	Pearson Corr.
Cohort	-.017	-.068*	-.080*	.095*
Decade	.080*	.086*	.078*	.003
Age	-.165	-.175*	-.206*	-.125*
Serious		.366*	.360*	.370*
Priors			.101*	.085*
Adj. R ²	.019*	.151*	.160*	

* Significant at .001 level or greater.

police contact and that it has higher standard estimates than do the other independent variables. However, only 16% of the variance was accounted for by cohort, time period, age, offense seriousness, and number of prior contacts. Eliminating traffic offenses increased the explained variance by only 2%. Although multicollinearity in referral rates was not a problem, it should be noted that decade and cohort 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 each case the variables are regressed on the decision to refer or not refer, with Traffic contacts included and excluded. Appendix B is a Code Book for variables which have either been selected from the larger Code Book for the Racine studies of delinquency and crime or have been generated to

characterize the antecedent behavior and experiences of the person who had the contact or the future behavior of that person.

Table 4 includes any referral whether it be to juvenile court intake (county probation) or the district attorney for adult contacts, or to some other agency for either juveniles or adults, while Table 5 includes only those referrals to juvenile court intake or the district attorney. The data are coded so that high offense seriousness or sanctions, residence outside the inner city, older age, more persons involved, being Non-white, and being male produces a positive first-order correlation relationship with referrals. Note that in Tables 4 and 5 most of the first-order correlations are positive and statistically significant. We would have expected inner city residence to be associated with referrals and they were, as indicated by the negative sign, but the correlations were low.

The ecology of delinquency and crime in Racine has been described in more detail in publications and reports on earlier analyses. Although juvenile residence in the inner city has little effect on the decision to refer or on the severity of sanctions in this type of static analysis, it does not belie the cumulative effect on careers of inner city residence shown by Tables 5-10 in Appendix C.

Although being male was associated with referrals in Tables 4 and 5, these correlations were low. While older age as a juvenile had positive correlations with referral, all were negative for adults, thus older juveniles and younger adults were

TABLE 4. EFFECTS OF SELECTED VARIABLES ON DECISION TO REFER TO COURT OR OTHER AGENCIES: COMBINED COHORTS, JUVENILE AND ADULT CONTACTS

	Traffic Offenses Included (7043)		Traffic Offenses Excluded (6084)	
	Std.Est.	Pears.Corr. ¹	Std.Est.	Pears.Corr.
<u>Juvenile</u>				
Juv.Neigh.	-.015	-.043*	-.013	-.055*
Prior Off.Ser.	.053	.250*	.090	.281*
Prior Snc.Sev.	.019	.223*	.022	.245*
# Prior Off.	-.058	.238*	-.064	.268*
# Prior Snc.	.169*	.265*	.160*	.293*
Ser.Pres.Off.	.340*	.351*	.371*	.384*
Sex	-.019	.011	-.047*	-.007
White/Non-Wh.	-.004	.058*	-.003	.074*
Age	.207*	.257*	.183*	.246*
Persons Inv.	-.068*	-.058*	-.058*	-.038*
Adj. R ²	.224*		.249*	
	Traffic Offenses Included (6413)		Traffic Offenses Excluded (3925)	
	Std.Est.	Pears.Corr.	Std.Est.	Pears.Corr.
<u>Adult</u>				
Juv.Neigh.	-.026	-.074*	-.028	-.093*
Prior Off.Ser.	-.228*	.142*	-.142	.147*
Prior Snc.Sev.	.000	.136*	.025	.157*
# Prior Off.	.129	.129*	.010	.120*
# Prior Snc.	.195*	.163*	.187*	.174*
Ser.Pres.Off.	.376*	.388*	.487*	.514*
Sex	.109*	.134*	.101*	.127*
White/Non-Wh.	.001	.073*	.003	.107*
Age	-.057*	-.071*	-.086*	-.136*
Persons Inv.	-.026	.018	.008	.070*
Adj. R ²	.181*		.293*	

¹ First-order correlations.

* Significant at .01 level or greater.

TABLE 5. EFFECTS OF SELECTED VARIABLES ON DECISION TO REFER TO COURT: COMBINED COHORTS, JUVENILE AND ADULT POLICE CONTACTS

	Traffic Offenses Included (7043)		Traffic Offenses Excluded (6084)	
	Std.Est.	Pears.Corr. ¹	Std.Est.	Pears.Corr.
<u>Juvenile</u>				
Juv.Neigh.	-.018	-.053*	-.018	-.059*
Prior Off.Ser.	.064	.243*	.107	.273*
Prior Snc.Sev.	-.004	.200*	.013	.234*
# Prior Off.	-.031	.233*	-.076	.260*
# Prior Snc.	.147*	.250*	.153*	.283*
Ser.Pres.Off.	.346*	.359*	.373*	.386*
Sex	-.023	.014	-.043*	-.004
White/Non-Wh.	-.001	.067*	-.004	.075*
Age	.163*	.211*	.177*	.237*
Persons Inv.	-.047*	-.034*	-.058*	-.037*
Adj. R ²	.204*		.243*	
	Traffic Offenses Included (6413)		Traffic Offenses Excluded (3925)	
	Std.Est.	Pears.Corr.	Std.Est.	Pears.Corr.
<u>Adult</u>				
Juv.Neigh.	-.036*	-.088*	-.047*	-.078*
Prior Off.Ser.	-.318*	.125*	-.306*	.088*
Prior Snc.Sev.	.037	.115*	.021	.088*
# Prior Off.	.323*	.119*	.234*	.079*
# Prior Snc.	.031	.128*	.060	.100*
Ser.Pres.Off.	.414*	.423*	.480*	.476*
Sex	.076*	.091*	.106*	.113*
White/Non-Wh.	.007	.079*	-.028	.056*
Age	-.025	-.045*	-.003	-.048*
Persons Inv.	.045*	.091*	.007	.058*
Adj. R ²	.197*		.240*	

¹ First-order correlations.

* Significant at .01 level or greater.

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, the more who were involved, the greater the likelihood of referral.

Be all that as it may, when the standard estimates are examined we find that few variables have a significant effect on the decision to refer. Of these, seriousness of present offense is the most important and consistent. But in no case is more than 30% of the variance accounted for. Since there was a possibility of multicollinearity between prior offense seriousness and prior number of contacts, all segments of Tables 4 and 5 were rerun with number of prior offenses and prior severity of sanctions eliminated. The only change in the tables sufficient to mention was a consistent reduction in the standardized estimates for total prior offense seriousness, all now becoming very small. This is rather curious because total prior offense seriousness had a positive correlation with the decision to refer in every segment of Tables 4 and 5. On the other hand, number of prior sanctions continued to have a significant positive impact on the decision to refer in Table 4 and in the juvenile segments of Table 5.

Severity of Sanctions

We next turned to some basic effects on severity of sanctions (Tables 6 and 6A), and found that, although cohort and time period had relatively little effect on severity of sanctions, offense seriousness and number of prior contacts had

TABLE 6. COHORT, TIME PERIOD (Decade), AGE, OFFENSE SERIOUSNESS, AND PRIOR CONTACT EFFECTS ON SEVERITY OF SANCTIONS

	Contacts Referred ¹ (1,411)	Contacts Referred ² (2,607)	Contacts Referred ³ (5,533)
Standardized Estimates			
Cohort	.042	.004	.109*
Decade	.012	-.003	.037
Age	-.228*	-.228*	.008
Adj. R ²	.063*	.054*	.017*
Cohort	-.060	-.036	.064
Decade	.054	.013	.055
Age	-.286*	-.211*	-.000
Serious	.169*	.219*	.183*
Adj. R ²	.088*	.098*	.049*
Cohort	-.110	-.048*	.045
Decade	.056	.006	.047
Age	-.391*	-.276*	-.040
Serious	.163*	.200*	.173*
Priors	.241*	.206*	.131*
Adj. R ²	.138*	.136*	.064*
Pearson Correlations			
Cohort	.184*	.125*	.127*
Decade	-.002	-.029	.104*
Age	-.251*	-.231*	-.031
Serious	.175*	.252*	.197*
Priors	.145*	.145*	.148*

¹ Includes only those contacts referred to County Probation (juvenile court intake) or District Attorney with formal disposition.

² Includes contacts which were referred to other agencies as well as court intake with formal disposition.

³ Includes contacts referred but unknown court dispositions coded to the lowest-level sanction, dismissal.

* Significant at .001 level or greater.

TABLE 6A. COHORT, TIME PERIOD (Decade), AGE, OFFENSE SERIOUSNESS, AND PRIOR CONTACT EFFECTS ON SEVERITY OF SANCTIONS DURING THE JUVENILE AND ADULT PERIODS

	Contacts Referred ¹		Contacts Referred ²	
	Juvenile (781)	Adult (630)	Juvenile (968)	Adult (1,639)
Standardized Estimates				
Cohort	-.210*	.183*	-.263*	.131
Decade	.159	.018	.173*	.005
Age	-.311*	-.027	-.390*	.012
Adj. R ²	.056*	.038*	.105	.015*
Cohort	-.236*	.064	-.273*	.096
Decade	.177*	.027	.188*	-.003
Age	-.305*	-.053	-.353*	.018
Serious	.143*	.182*	.192*	.203*
Adj. R ²	.074*	.059*	.139*	.054*
Cohort	-.266*	.022	-.280*	.091
Decade	.155	.019	.162*	-.013
Age	-.327*	-.106	-.357*	-.021
Serious	.120*	.195*	.160*	.189*
Priors	.301*	.195*	.274*	.175*
Adj. R ²	.161*	.093*	.211*	.082*
Pearson Correlations				
Cohort	-.013	.205*	-.073	.128*
Decade	-.073	.110*	.152*	.092*
Age	-.217*	-.108*	-.294*	-.056
Serious	.156*	.236*	.246*	.221*
Priors	.280*	.184*	.276*	.181*

¹ Includes only those contacts referred to County Probation (juvenile court intake or district attorney) with formal disposition.

² Includes contacts which were referred to other agencies as well as court intake with formal disposition.

* Significant at .001 level or greater.

consistently positive effects on severity of sanctions.¹⁵ 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 followed for fewer years but was larger than the previous cohort.

¹⁵ Although we have shown how measurement level influences career types in Appendix C, special attention should be paid to this point in reference to the analyses described in Chapters 3 and 4 of this report. Findings vary, sometimes considerably on a basis of measures of prior record. This problem has most recently been dealt with in the literature by Susan Welch, John Gruhl, and Cassie Spohn, "Sentencing: The Influence of Alternative Measures of Prior Record," Criminology 22 (1984): pp. 215-227. The authors not only found that measures of prior record influence explanations of severity of sentence imposed, but that the relationship between measures of severity may vary for Black and White defendants. Their review of the lengthy literature, to some of which we have referred, suggests that contrary findings may, in some cases, be accounted for by these differences in measures.

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 more lightly in Racine than in other areas. For example, 10.6% of the 1980 California adult felony arrestees were released by the police while 23.4% of the Racine combined cohort's recorded contacts as adults were released. While 7.8% of the California felons who were referred to court were convicted and sentenced to state institutions (prison), only 3.7% of the Racine referrals were sent to prison. If the criterion is changed to jail or prison the percentage for California increases to 14.5% and for Racine to 10.6%. Although the Racine data cover the period from 1960 to 1976 and are not strictly comparable, it is reasonable to presume that Racine's judges have been less severe than California's judges.

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. What is surprising is that even the more "enlightened" sanctions administered by Racine judges are as ineffective as those administered in areas relatively untouched by (or unable to respond to current knowledge) 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 complexities on this issue because discrimination differs from offense to offense, even though the results may not be readily assigned to racism in itself, as Petersilia has pointed out in Racial Disparities in the Criminal Justice System. The precise comparison of studies is, of course, difficult because most researchers are really quite independent cusses who define their variables without reference to other studies, thus not producing completely comparable results. We have mentioned this from time to time but repetition does not seem without value.

CONTINUATION OF BASIC ISSUES

Table 7 is presented as an example of the over 80 different multiple regression analyses that we have conducted with with selected variables regressed on severity of juvenile or adult sanctions. Seriousness of present offense had significant effects on severity of sanctions in both of the juvenile and

TABLE 7. EFFECTS OF SELECTED VARIABLES ON SANCTIONS; COMBINED COHORTS, JUVENILES AND ADULTS

	Juvenile (744)		Adult (1245)	
	Std.Est.	Pears.Corr. ¹	Std.Est.	Pears.Corr.
Juv.Neigh.	.000	-.040	.065	-.047
Av.Prior Off.Ser.	.080	.261*	-.008	.146*
Av.Prior Snc.Sev.	.168*	.290*	.079*	.190*
# Prior Off.	-.076	.281*	-.021	.265*
# Prior Snc.	.322*	.335*	.234*	.303*
Ser.Pres.Off.	.255*	.275*	.350*	.407*
Sex	-.076	.046	.025	.069
White/Non-Wh.	-.050	.073	.094*	.210*
Adj. R ²	.210*		.235*	

	Juvenile (744)		Adult (1146)	
	Std.Est.	Pears.Corr.	Std.Est.	Pears.Corr.
Juv.Neigh.	-.017	-.040	.052	-.047
Tot.Prior Off.Ser.	.303*	.318*	.495*	.312*
Tot.Prior Snc.Sev.	.264*	.371*	.181*	.341*
# Prior Off.	-.248	.281*	-.371*	.265*
# Prior Snc.	.065	.335*	-.028	.303*
Ser.Pres.Off.	.261*	.275*	.329*	.407*
Sex	-.067	.046	.025	.069
White/Non-Wh.	-.054	.073	.056	.210*
Adj. R ²	.203*		.249*	

¹ First-order correlations.

* Significant at .01 level or greater; all Rs significant at .001 level.

adult analyses while number and severity of prior sanctions had significant but less consistent effects.

Still, it is apparent that whether the court disposition involves a juvenile or an adult, prior misbehavior (serious and/or frequent) and prior sanctions (severe and/or frequent) have more impact on severity of sanctions than do demographic and social variables.

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. Table 7A does this but with even less of the variance in severity of sanctions accounted for by the basic demographic and career variables. Seriousness of present offense and severity of prior sanctions are the only variables with consistent effects during the juvenile period.¹⁶ Seriousness of present offense has consistent effects during the adult period. When the juvenile and adult periods are combined, seriousness of present offense and severity of prior sanctions have consistent effects.

To this point we have only explored the impact of the independent variables listed in Diagram 3 (except interview data) on police dispositions and sanctions as we indicated would be done in the first stages of the analysis. We next turn to the

¹⁶ This finding is consistent with Terence P. Thornberry and R.L. Christianson's, "Juvenile Justice Decision-Making as a Longitudinal Process," Social Forces 63 (1984): pp. 433-444, where they concluded that prior disposition is exceeded in importance only by the seriousness of current offense. As they state, and as we have attempted to emphasize again and again, "These results point to the need for treating dispositional outcomes as part of a more general, longitudinal process unfolding across an individual's criminal career."

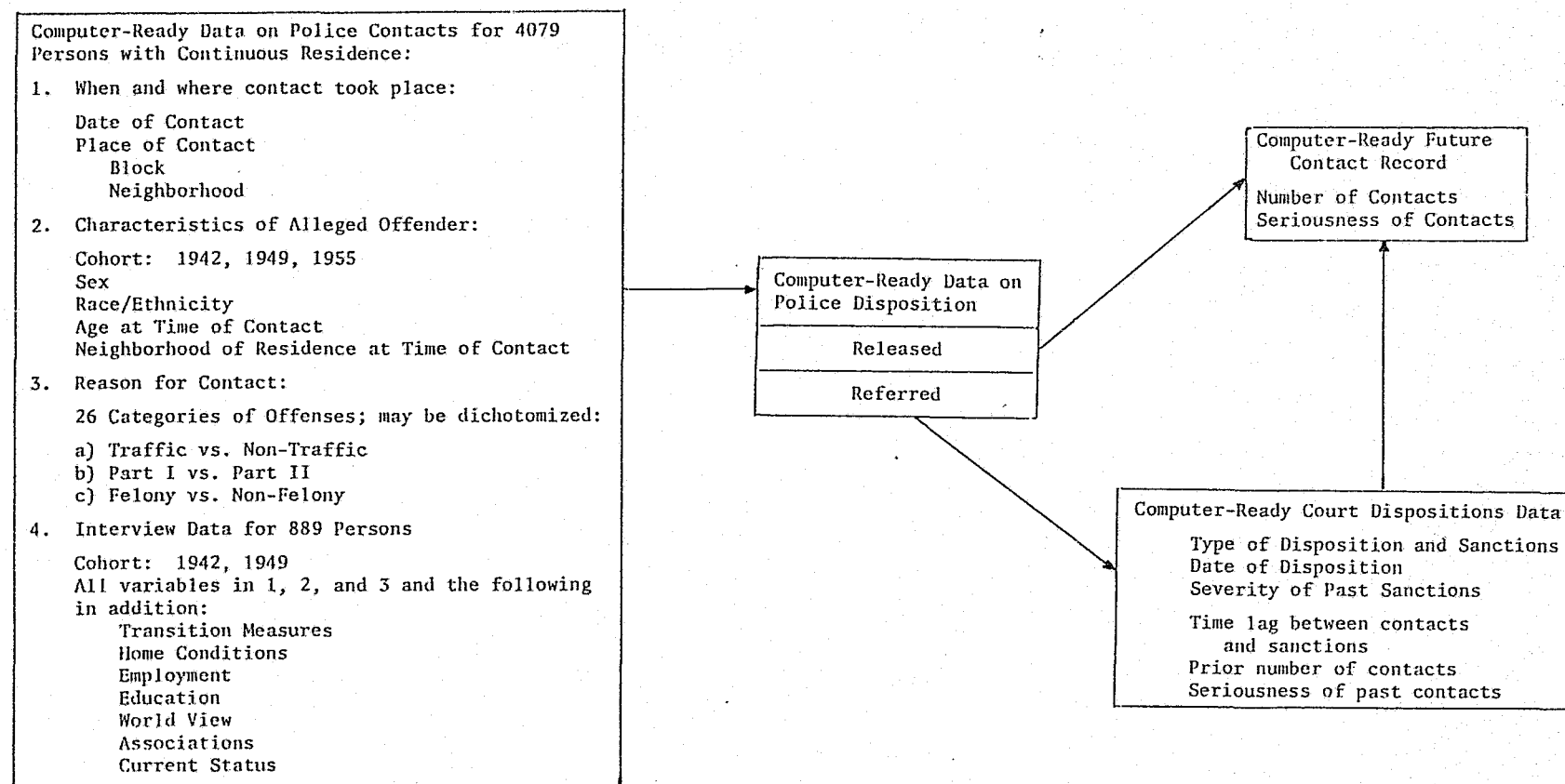
The data presented in Table 7A are also consistent with Allan Horowitz and Michael Wasserman, "Some Misleading Conceptions in Sentencing Research," Criminology 18 (1980): pp. 411-424, in that the extra-legal factors still have a negligible influence on severity of dispositions at the juvenile level and that relatively little of the variance is accounted for.

TABLE 7A. EFFECTS (STANDARDIZED ESTIMATES) OF SELECTED VARIABLES ON SEVERITY OF SANCTIONS FOR FIRST TO TENTH OFFENSES COMBINED COHORTS, JUVENILES, ADULTS, AND COMBINED PERIODS

	1	2	3	4	<u>Juvenile Period</u>		7	8	9	10
					5	6				
Type Seriousness, Present Offense		.144*	.240*	.268*	.181*	.285*	.323*	.250*	.311*	.281*
Juvenile Neighborhood		-.051	.066	-.104	.035	-.013	.014	.079	-.092	-.039
Sex		-.042	-.067	.028	-.076	-.078	.055	.000	-.032	.098
White/Non-White		-.061	.013	.044	.124	.031	.076	-.004	-.158	-.054
Age at Contact		.122*	.078	.123*	.041	.077	.037	-.042	-.012	.153
Severity of Prior Sanctions		.096*	.126*	.216*	.231*	.061	.237*	.368*	.097	.173
Total Prior Seriousness		.012	-.045	-.067	-.033	.034	.004	.051	.088	.061
N		1016	697	507	409	330	283	242	210	189
Adj. R ²		.048*	.077*	.132*	.095*	.087*	.177*	.197*	.095*	.122*
	1	2	3	4	<u>Adult Period</u>		7	8	9	10
					5	6				
Type Seriousness, Present Offense		.198*	.170*	.240*	.174*	.189*	.299*	.323*	.170	.332*
Juvenile Neighborhood		.005	.013	-.007	-.030	-.024	-.109	.123	.104	-.081
Sex		.093*	.066	.037	.062	.058	.079	.053	.094	-.005
White/Non-White		.043	.048	.010	.023	-.040	.007	.097	.072	.065
Age at Contact		-.053	-.058	-.036	-.071	-.094	-.031	-.097	-.135	-.073
Severity of Prior Sanctions		.015	-.105	.089	.003	-.045	.081	.218	.273*	.236
Total Prior Seriousness		.098*	.182*	.071	.225*	.105	.083	.018	-.113	.137
N		1740	1026	677	506	383	298	248	204	175
Adj. R ²		.071*	.062*	.091*	.120*	.047*	.077*	.176*	.179*	.068*
	1	2	3	4	<u>Combined Periods</u>		7	8	9	10
					5	6				
Type Seriousness, Present Offense		.145*	.213*	.267*	.204*	.239*	.274*	.281*	.218*	.245*
Juvenile Neighborhood		-.055	.037	-.038	.038	.006	-.016	.059	-.040	-.016
Sex		.004	-.001	.022	-.019	-.000	.055	-.000	.031	.060
White/Non-White		-.066	.047	.040	.050	.057	.020	.026	-.071	-.064
Age at Contact		.035	.027	-.001	-.057	.004	-.091	-.019	-.042	-.017
Severity of Prior Sanctions		.074	.119*	.219*	.160*	.073	.163*	.265*	.067	.189*
Total Prior Seriousness		.027	-.038	-.043	-.043	.018	.051	.040	.094	.068
N		1608	1191	950	767	642	556	486	430	386
Adj. R ²		.030*	.056*	.119*	.067*	.061*	.131*	.155*	.062*	.106*

* Significant at .01 level or greater.

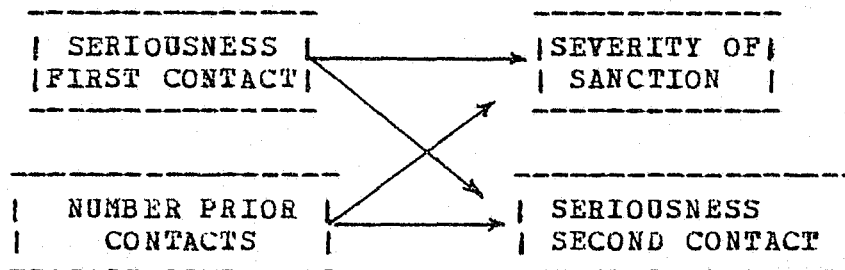
DIAGRAM 3. ANALYTIC SCHEME FOR OFFICIAL RECORDS AND RESIDENTIAL DATA



more difficult problem of determining what follows when cohort members have been sanctioned or not sanctioned or sanctioned with varying degrees of severity, taking into consideration some of their demographic and social characteristics. Diagram 4 is presented in order that the next stage of the analysis be better understood.

It is apparent that seriousness of first contact has a significant impact on seriousness of second contact but that severity of sanction does not, either at the first-order level or at the multivariate level. Since this is only for the first and

DIAGRAM 4. HYPOTHESIZED RELATIONSHIP BETWEEN FIRST AND SECOND CONTACTS AS ADULTS, ALL PRIOR CONTACTS, AND SANCTION FOR FIRST CONTACT AS ADULT



Seri. of 1st Contact vs. Sev. of Sanction=	.215*
Number of Prior Contacts vs. Sev. of Sanction=	.160*
Number of Prior Contacts vs. Seri. of 2nd Contact=	.101*
Seri. of 1st Contact vs. Seri. of 2nd Contact=	.114*
Sevr. of Sanction 1st Contact vs. Sev. of 2nd Contact=	.000

Dependent Variable: Seriousness of 2nd Police Contact

	Std. Est.
Seriousness: 1st Contact	.112*
Sev. of Sanction: 1st Contact	-.038
Number of Prior Contacts	.095*
R ²	.020

second contacts, we would be premature in saying that prior

record and justice system experience has little effect on seriousness of the next offense. It is for this reason that the analysis (with other independent variables included) will be continued through at least the tenth police contact.

Furthermore, the fact that correlations are modest poses a problem in causal explanation and in prediction. The shape of the distributions and the complex interrelationships of variables within Tables 8-11 make it clear why the various coefficients of correlation and other measures of relationship are not high.

Table 8 shows that no matter how serious the first police contact or 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.

Table 9 reveals that the pattern for adult contacts was similar to that for juvenile contacts but property felonies were dealt with by more severe sanctions. Nonetheless, perusal of neither table suggests that severe sanctions produces any less serious next offense. These tables do little more than produce speculation that severity of sanctions produces little reduction in the seriousness of delinquent or criminal behavior, a point that we have made on previous occasions. And at the juvenile level, in particular, they reveal, as stated before, that sanctions do not have much relationship to next offense seriousness.

TABLE 8. SERIOUSNESS OF FIRST AND SECOND CONTACTS AS JUVENILE BY SEVERITY OF THE SANCTION FOR THE FIRST CONTACT

[illegible]

TABLE 9. SERIOUSNESS OF FIRST AND SECOND CONTACTS AS ADULT BY SEVERITY OF THE SANCTION FOR THE FIRST CONTACT

TS1	TS2	Severity of Sanctions																		
		SC00	SC01	SC03	SC06	SC09	SC12	SC23	SC25	SC26	SC33	SC36	SC39	SC46	SC48	SC49	SC58	SC61	SC68	SC72
1	- 0	125	8																	
1	- 1	58	1																	
1	- 2	133																		
1	- 3		8																	
1	- 5	13																		
1	- 6	11	1																	
2	- 1		3																	
2	- 3	1	2																	
3	- 0	484	63	24	40		11	15	2						1			1		
3	- 1	81	17	17	7	1	2	1						2					1	
3	- 3	415	63	42	24	2	12	8						2	2	1	1			
3	- 4	2																		
3	- 5	25	3	3	3		1													1
3	- 6	13	7	1			2	1												
4	- 0						1													
4	- 1		1																	
4	- 3	3	1					1												
5	- 0	15	10		2		1													
5	- 1	6	3		4		1							1						
5	- 2	1																		
5	- 3	12	15	1	8		1			1	2									1
5	- 4	1		1																
5	- 5	5	6	2	1		1				1									
5	- 6	3	3		2															
6	- 0	7	12				1				2									
6	- 1	2	6		1			1		2										
6	- 3	15	11		3			1			3	1	1							
6	- 5		2								1									
6	- 6	4	4								2									

Table 10 indicates that number of prior juvenile contacts alone has little influence on severity of sanctions for first adult contact. Although prior contacts may have an impact on severity of sanction 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 is aware of the danger of oversimplification of relationships or the too hasty conclusion that little or no relationship exists between several variables, Table 11, a table based on 1,975 adult (age 18 or older) first contacts, is presented. The complexity of this table is so great that one cannot see how number of prior contacts has any relationship to seriousness of first adult contact, severity of sanctions for first adult contact, and seriousness of second adult contact. A better understanding of what is going on is obtained by examining segments of the table which are 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 minor misdemeanor level (about 71%) than any other and most of these (again about 71%) resulted in no formal sanction. About half of the adult contacts were not only first adult contacts but first contacts as well. One must remember that a smaller proportion of the females than males had juvenile contacts, therefore, of the total a sizeable proportion would have their first contacts as adults.

TABLE 10. NUMBER OF PRIOR OFFENSES BY SEVERITY OF SANCTIONS

Priors	Severity of Sanctions																		
	SC00	SC01	SC03	SC06	SC09	SC12	SC23	SC25	SC26	SC33	SC36	SC39	SC46	SC48	SC49	SC58	SC61	SC68	SC72
0	599	96	18	28		13	9	1		3		1		1			1		
1	262	44		10		5	5	2						1	1				
2	154	30	13	20		2	3							1	1				
3	108	18	11	6		5	1			1				1					
4	49	13	9	7		1	2			1									
5	46	15	4	6		1	2		1	1									
6	36	4	2	5		1													
7	23	4	2		1	1	1			1									
8	18	8	2	1		2													
9	12	2	3	2	1														
10	13	2	1	1			1						1						1
11	10	2		2												1			
12	11	7	1			1				1									
13	6	1		1		1													
14	6	3																	
15	6						1												
16	5																		
17	4	1	1	2									1						
18	3	1	1	1															
19	2	2				1													
20	5	2								1		1							
21	3	1																	
22	4																		
23	4	1																	
24	1	3																	
25	1					1													
26						1													
27	1		1																
28	2	3																	
29	1																		
30		1																	
31	1	1																	
32		1																	
33		1		1															
34		1																	
35	1					1													
36				1															
37	1									1	1								
38	1	2											1						
39				1															
40	1	1																	
41		1																	1
42	1																		
44	4																		
45	1																		
46			1																
61	1																		

[illegible]

Comparatively few contacts were preceded by 5 or more contacts (15%) .

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.

When those with felony-level property contacts were considered, if the severity of sanction was low, there was a direct relationship between number of prior contacts and seriousness of second offense. If the severity of sanction was high, number of prior contacts was inversely related to seriousness of second offense. In other words, high severity of sanctions for felony-level property offenses produced a more serious next-referred offense for those with fewer prior offenses but lower severity of sanctions for first offense of this type produced more serious next offenses for those with more prior offenses. For those whose first offense was a felony against a person, number of prior contacts was positively related to offense seriousness for next offense.

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 (4-6) .

The definition of severity of sanctions has been dealt with operationally in Appendix B but in the event that the reader has forgotten it should be noted that 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, if not moreso, to say number of court interventions.

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 an important variable.

Chapter 3. Attempting to Account for Seriousness of Present Offense

THE OPERATIONS INVOLVED IN THE ANALYSIS

We have recoded court dispositions and severity of sanctions and entered the data as part of each police contact record. This permits a contact-by-contact analysis of dispositions and sanctions rather than the year-by-year or age period by age period statistics which were utilized in earlier analyses.

Police contacts may be analyzed: 1) according to type (26 categories from murder to non-moving vehicle); 2) according to felony, misdemeanor, and status offenses; and 3) by Part I Offenses (Index) vs. Part II Offenses. How these differ by continuity or career types based on police contacts during the juvenile, intermediate, and adult periods and level of seriousness is described in Appendix C. Our emphasis will be on the differential effects of sanctions with controls for 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.

The coding schemes for severity of dispositions and sanctions are essentially the same as those which were previously utilized (see Code Book, Appendix B). The variables to be

utilized in the analyses (although not complete) were presented in schematic form in Diagram 3. Note that one set of analyses will be based on demographic, ecological, and career data alone and that a second set of analyses includes interview data. The latter analysis may be conducted on only those who were interviewed from the 1942 and 1949 Cohorts but it is possible to include a wider variety of explanatory variables, such as demeanor and attitude of respondents as they recall them.

Multiple regression analysis are used to determine the effects of various factors on the police referral decision, court dispositions and severity of sanctions, and future contact records. At each stage of the analysis we assess the effects of demographic, ecological, and career characteristics of the alleged offender vs. contact characteristics (including seriousness of reason for contact) on the seriousness of contacts following the court disposition. This approach allows us to determine the relative importance of extra-legal factors (e.g., characteristics of the alleged offender, his/her place of socialization and residence, and prior record vs. those pertaining to the nature of the contact itself. Although there are some problems with multicollinearity, we shall see that exclusion of some variables has resulted in very little difference in outcome.

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 time of incarceration or institutionalization must be given some attention, time in an institution is generally a plus as far as total career is concerned even if it may reduce the number of offenses committed in the community during the period of institutionalization. Since we are now concerned about a more precise assessment of the effects of sanctions, we shall be concerned about the period in which number and severity of sanctions are most effective.

In this stage of the analysis we will also include the alleged offenders' prior contact and court dispositions record in order to assess its additional effects on the disposition and severity of sanctions of 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 permits 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 are included, only those variables which could have effects on contacts and dispositions at that age are 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 is 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 is found, as our earlier aggregated analyses suggested, that sanctions are generally ineffective as applied, this research may still suggest that there are specified 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 Nth Contacts

We now turn to a series of regression analyses on the seriousness of first offense (based on demographic and social variables) and second, third, fourth, through tenth offenses, each with eight independent variables regressed on them, each variable (aside from demographic and social variables) a representation of the seriousness of prior career and severity of justice system reaction to it. This has been done for the juvenile period, for the adult period with juvenile and adult records as priors, and for the combined juvenile and adult periods.

In Table 12 we may see the first-order Pearsonian coefficients of correlation for eight variables and seriousness of police contacts 1-10 (alleged offenses) as well as the standardized estimates for each of them. Anyone who has conducted research on delinquency and crime knows that the correlation between antecedent variables and any single offense will not be very high. What we are wondering, of course, is if there is a specific point, i.e., following a certain number of offenses, at which the relationship of past variables to seriousness of current offense is not only statistically significant but large enough to account for a considerable proportion of the variance. More specifically, we are concerned about how much of the variance is accounted for in a multiple regression analysis, and whether any notable changes occur after a given number of police contacts.

For the juveniles in Table 12 the only clearly significant zero-order relationship is found between race and type seriousness of contact. These correlations are, however, low and disappear in the multiple regression analysis. There is no evidence that the independent variables have a more significant impact on seriousness of present offense after any given number of police contacts. It should be noted, however, that total prior offense seriousness and severity of prior sanctions have their greatest relative impacts on present offense seriousness at the sixth contact, the more serious prior offenses and the more severe prior sanctions, the more serious the sixth offense.

TABLE 12. EFFECTS OF SELECTED VARIABLES ON SERIOUSNESS OF FIRST TO TENTH OFFENSES; COMBINED COHORTS, JUVENILES

	<u>Pearson Correlation for Contact Number</u>									
	1	2	3	4	5	6	7	8	9	10
Juvenile Neighborhood	-.012	-.053	-.065	-.073	-.161*	.066	-.053	-.145	-.003	.088
Sex	.060	.031	.087	.119*	.058	.034	.140	.113	.003	-.019
White/Non-White	.041	.061	.096*	.127*	.171*	-.002	.149	.255*	.133	.043
Age at Contact	.031	-.005	-.081	-.023	-.018	.008	-.029	-.083	-.110	-.117
Number of Prior Sanctions	----	.010	-.015	.007	.074	.023	.008	-.012	-.003	.066
Severity, Most Recent Sanction	----	-.032	-.017	-.013	-.005	.071	.061	.067	.042	.109
Total Prior Seriousness	----	.075	.033	.162*	.123	.144*	.163*	.097	.106	.171
Severity Prior Sanctions	----	-.034	.011	-.012	.027	.141	.099	.053	.005	.029
	<u>Standardized Estimate</u>									
	1	2	3	4	5	6	7	8	9	10
Juvenile Neighborhood	.008	-.034	-.013	-.004	-.121	.049	.046	-.005	.098	.164
Sex	.073*	.033	.084	.125*	.095	-.016	.111	.089	.057	-.075
White/Non-White	.057	.044	.082	.115	.109	-.075	.155	.237*	.157	.086
Age at Contact	.055	.019	-.055	.023	.022	.010	.000	-.053	-.084	-.106
Number of Prior Sanctions	----	.059	.001	.015	.097	-.096	-.036	.003	.031	.041
Severity, Most Recent Sanction	----	-.448	-.082	-.023	-.091	-.033	.021	.005	.033	.110
Total Prior Seriousness	----	.079	.013	.137*	.063	.155	.113	.029	.067	.172
Severity Prior Sanctions	----	.369	.096	-.007	.045	.174	.085	.035	-.056	-.093
N	1657	1016	697	507	409	330	283	242	210	189
Adj. R ²	.006*	.006	.012	.037*	.041*	.028	.037	.049	.005	.032

* Significant at .01 level.

For the adults in Table 13 a much greater relationship between offense seriousness and the independent variables is apparent, although not all of the variables have a significant relationship with offense seriousness or present any pattern that is discernible as the progression through the tenth contact occurs.

For the adults, race, age, number of prior sanctions, total prior offense seriousness, and total prior severity of sanctions have significant first-order correlations with offense seriousness. Adult neighborhood and offense seriousness have a direct relationship which is significant for the third, fourth, sixth, and seventh contacts. The relationship between race and offense seriousness (Non-Whites had more serious present offenses) increases from the first through the sixth contact whenever there is significance. A similar finding was made for the second Philadelphia cohort.

The importance of age increases with contact number, the younger the adult at contact, the more serious the offense. The relationship between number of prior sanctions and offense seriousness is direct and significant but there is only a slight overall increase as the analysis moves from the second through the tenth contact. Between severity of prior sanctions and offense seriousness the relationship is positive and significant at the third, fourth, seventh, and eighth contacts.

The standard estimates indicate that, aside from number of prior contacts and total prior seriousness, the independent variables have little impact on offense seriousness.

TABLE 13. EFFECTS OF SELECTED VARIABLES ON SERIOUSNESS OF SECOND TO TENTH OFFENSES; COMBINED COHORTS, ADULTS

	<u>Pearson Correlation for Contact Number</u>								
	2	3	4	5	6	7	8	9	10
Adult Neighborhood	-.070	-.117*	-.167*	-.080	-.198*	-.178*	-.127	-.173	-.055
Sex	-.033	-.032	-.052	-.042	-.044	.089	-.019	.123	-.003
White/Non-white	.100*	.115*	.199*	.065	.266*	.125	.116	.198*	-.004
Age at Contact	-.058	-.137*	-.150*	-.062	-.134	-.176*	-.196*	-.148	-.231*
Number of Prior Sanctions	.119*	.107*	.146*	.073	.156*	.229*	.199*	.238*	.143
Number of Prior Contacts	.099*	.078	.128*	.059	.106	.221*	.132	.198*	.137
Severity, Most Recent Sanction	.000	.044	.080	.074	.023	.099	.341*	.171	.086
Total Prior Seriousness	.125*	.105*	.159*	.063	.153*	.216*	.183*	.260*	.186
Severity Prior Sanctions	.132*	.104*	.154*	.036	.106	.220*	.214*	.299*	.188
	<u>Standardized Estimate</u>								
	2	3	4	5	6	7	8	9	10
Adult Neighborhood	-.021	-.066	-.078	-.047	-.062	-.172	-.062	-.111	-.091
Sex	-.051	-.048	-.060	-.048	-.039	.105	-.014	.136	-.006
White/Non-white	.040	.024	.095	.022	.163	.034	-.015	.039	-.185
Age at Contact	-.036	-.116*	-.101	-.034	-.084	-.097	-.137	-.048	-.180
Number of Prior Sanctions	-.024	.076	-.064	.149	.202	.118	.055	-.268	-.430
Number of Prior Contacts	-.497*	-.550*	-.411	-.017	-.615	.470	-.651	-.580	-.795
Severity, Most Recent Sanction	-.027	.012	.030	.063	.009	.018	.309*	.051	.092
Total Prior Seriousness	.584*	.549	.526	-.029	.602	-.535	.681	.026	1.173*
Severity Prior Sanctions	.053	-.021	.040	-.087	-.146	.133	-.080	.227	.131
N	1011	669	506	383	297	240	202	172	149
Adj. R ²	.028*	.036*	.064*	-.005	.084*	.074*	.133*	.117*	.071

* Significant at .01 level.

The question of multicollinearity in the independent variables accounts for the fact that number of prior contacts had a negative sign while total prior seriousness had a positive sign at most contact levels. Actually, total prior seriousness, number of prior contacts, total prior severity of sanctions, and number of prior sanctions were highly intercorrelated, ranging from .77 to .97. When number of prior contacts and sanctions were removed and the multiple regression rerun, the accounted-for variance was about the same, significant but in no case more than 12%. Interpreting the standardized estimates is simpler, however, since higher standardized estimates of opposite signs for number of contacts and total seriousness are eliminated.

Tables 12 and 13 were also rerun for contact four utilizing the Lisrel technique. Offense seriousness, present sanction severity, and total of prior sanctions were combined to deal with multicollinearity. Although this variable was significant for adults and race now became significant for both juveniles and adults, the results were essentially the same as before.

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

The next step was to run the same variables with the cohorts divided into those with no future contacts and those with future contacts during the juvenile period. 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 in Philadelphia and Racine has shown

that discontinuation (desistance) takes place very rapidly at first but that it tapers off after the first few contacts, more so for females than males. This is illustrated in Table 14 where the decrease from contact to contact in those who will continue is very large in sheer numbers at the first few contacts. The question here is whether those who desist differ have a relationship between their offenses and sanctions, past and present, that could be translated into a prescription for more effective sanctioning. Identification of the subgroup which desists by race, sex, neighborhood, and other characteristics would also contribute to the value of the findings.

Contact by contact, there is little that can be said about the experiences or characteristics of people who desist that will account for the offense seriousness of their last contact. No more can be said about the seriousness of that same number or ith contact for those who continue, contact by contact. In other words, Table 14 does not tell us much about effects on the seriousness of any given offense (which is the last offense for those juveniles who desist) vs. that offense for those who continue. Unfortunately, there was no significant pattern of differences in the relationships of the independent variables to offense seriousness, i.e., no pattern that would assist us in determining which variables are related to present offense seriousness in such a way as to differentiate between those who desist and those who continue at any given contact.

TABLE 14. EFFECTS OF SELECTED VARIABLES ON SERIOUSNESS OF FIRST TO NINTH OFFENSES BY FUTURE CONTACT, JUVENILES

<u>Standardized Estimates; No Future Contacts</u>									
	1	2	3	4	5	6	7	8	9
Juvenile Neighborhood	.052	.057	.053	.069	.101	-.122	-.305	.296	.189
Sex	.050	.122	.043	.193	.138	-.036	.101	.021	.036
White/Non-White	.081	-.009	.034	.202	.299	-.120	.013	.504	.317
Age at Contact	.137*	-.008	-.208*	-.043	.020	.051	.096	-.242	-.023
Number of Prior Sanctions	----	----	.037	.075	.089	.048	.032	-.334	-.015
Severity, Most Recent Sanction	----	-.028	-.098	.010	-.040	-.160	.020	-.312	.051
Total Prior Seriousness	----	----	.010	.132	.104	.222	.101	.115	-.387
Severity Prior Sanctions	----	----	.019	-.039	.007	-.216	.117	.004	-.168
N	641	319	190	98	79	47	41	32	21
Adj. R ²	.019*	.094	.019	.000	.006	.000	.000	.065	.000
<u>Standardized Estimates; Future Contacts</u>									
	1	2	3	4	5	6	7	8	9
Juvenile Neighborhood	-.016	-.072	-.040	-.021	-.156	.065	.100	-.009	.085
Sex	.079	-.003	.109	.123	.094	.009	.122	.102	.077
White/Non-White	.033	.062	.099	.106	.092	-.062	.178	.250*	.133
Age at Contact	.023	.020	-.044	.042	.047	-.007	-.027	-.013	-.121
Number of Prior Sanctions	----	----	.010	-.028	.096	-.093	-.013	.073	.049
Severity, Most Recent Sanction	----	-.041	.026	-.008	-.043	.067	.071	.013	.022
Total Prior Seriousness	----	----	.008	.120	.013	.093	.078	.056	.121
Severity Prior Sanctions	----	----	.063	.004	.033	.160	.057	.002	-.044
N	1016	697	507	409	330	283	242	210	189
Adj. R ²	.003	.007	.019	.026	.031	.023	.032	.053	.023

* Significant at .01 level.

This table (Table 14) was also constructed with offense seriousness for last prior contact included. At the sixth contact, .023 percent of the variance in offense seriousness was accounted for by the independent variables for those who had no future contacts. In this case, seriousness of the previous contact had the largest impact, followed by total prior seriousness of offenses. For those who continued to have contacts after the sixth contact, only 2 percent of the variance in seriousness of present offense was accounted for. Only total prior sanctions had a significant impact on present offense, the more severely they had been sanctioned in the past, the more serious their current offense. Beyond this, the results were similar to those in Table 14 with little of the variance accounted for.

Table 15 presents the same data for the adult period with juvenile/adult records included except for the first adult contact. Although significant amounts of the variance in present offense seriousness are accounted for among those who continue to have future contacts, this represents only a small proportion of the variance.¹⁷ Here, again, one must really say that there is not much information of use to persons on the firing line.

When the period of police contact 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,

¹⁷ Whenever reference is made to significance we mean statistically significant at the .01 level or greater.

TABLE 15. EFFECTS OF SELECTED VARIABLES ON SERIOUSNESS OF FIRST TO NINTH OFFENSES BY FUTURE CONTACT, ADULTS

<u>Standardized Estimates: No Future Contacts</u>									
	1	2	3	4	5	6	7	8	9
Adult Neighborhood	.004	-.094	-.117	-.134	-.072	-.124	-.186	-.041	.278
Sex	-.048	-.006	-.104	-.051	-.055	-.008	-.038	.164	-.028
White/Non-White	-.053	-.068	-.102	.087	.156	.125	-.071	.319	.331
Age at Contact	-.025	.010	-.212	-.129	.116	-.112	-.036	-.156	-.114
Number of Prior Sanctions	----	.147	.107	-.168	.830*	.001	.007	.168	.452
Number of Prior Contacts	----	-.198	-.023	-.757	.274	.060	-.221	.916	-2.457
Severity, Most Recent Sanction	----	.023	.075	.060	.159	.258	.410	.254	-.118
Total Prior Seriousness	----	.061	.143	.882	-.871	-.134	.358	-1.119	1.763
Severity Prior Sanctions	----	.124	-.090	.132	-.179	-.033	-.114	.310	-.066
N	824	399	195	133	101	57	55	33	26
Adj. R ²	.000	.016	.055	.043	.076	.007	.034	.024	.173
<u>Standardized Estimates: Future Contacts</u>									
	1	2	3	4	5	6	7	8	9
Adult Neighborhood	-.020	-.014	-.067	-.099	-.057	-.059	-.198	-.060	-.152
Sex	.024	-.070	-.024	-.033	.005	-.043	.139	-.042	.098
White/Non-White	.134*	.050	.017	.059	-.013	.130	-.010	-.018	-.008
Age at Contact	-.046	-.097	-.070	-.104	-.081	-.083	-.099	-.105	-.101
Number of Prior Sanctions	----	-.032	.057	-.125	.089	.274	.160	.131	-.343
Number of Prior Contacts	----	-.581*	-.657*	-.332	.025	-.757	.325	-.578	-.691
Severity, Most Recent Sanction	----	-.032	.037	-.004	.053	-.034	.011	.303	.101
Total Prior Seriousness	----	.702*	.656*	.478	-.036	.728	-.382	.596	1.008*
Severity Prior Sanctions	----	.024	-.030	.069	-.080	-.190	.091	-.125	.177
N	1161	762	567	434	333	276	221	180	162
Adj. R ²	.022*	.040*	.022*	.045*	.000	.085*	.080*	.118*	.121*

* Significant at .01 level.

for those with no future contacts when period of police contact was not controlled the amount of variance in offense seriousness accounted for was markedly higher at the fourth through tenth contact than it was when the relationship was looked at by either the juvenile or adult period. At this time there is no point in describing the results in detail because other analyses provide us with more rewarding and potentially useful data.

It must also be remembered that much of what we are discussing at this point is of a preliminary nature, but is still essential because we must be sure that we have been correct in our earlier position that the seriousness of the next offense cannot really be predicted or accounted for. In other words, as we have indicated in previous reports and again in this report, it is best not to say what a cohort member will do next, at least with any attempt at specificity.

Accounting for Continuation vs. Discontinuation at Contact

Inasmuch as it is relatively easy to analyze the data in a variety of ways, we next ran the same kind of multiple regression analysis with the dependent variable being continuity vs. discontinuity (desistance) from first through ninth contacts (these tables are not included separately in the report but the standardized estimates are included in a summary table in Chapter 7). 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 22.2% of the variance in juvenile continuity was accounted for. In the adult case age had its greatest impact at the fifth contact and at this point the amount of variance (14.9%) accounted for was also at its highest point. Without controls for period, the fifth contact was the point at which the most continuity (22.8%) 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 the decision to continue or desist for juveniles, adults, or total careers.

One must remember that discontinuity vs. continuity differ from total future offense seriousness as dependent variables. When considering desistance vs. continuity, 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 females who are even more repetitious of 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.

Accounting for Seriousness of Contacts by Age at Contact

In Table 16, 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 8% 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 indicate 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 significant until the age of 14. The negative sign for number of prior contacts is a function of the increase and decline in offense seriousness with age and number of police contacts.

Once again there is the 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

TABLE 16. EFFECTS OF SELECTED VARIABLES ON SERIOUSNESS OF OFFENSES AGES 8 THROUGH 21; COMBINED COHORTS

	<u>Pearson Correlation for Ages</u>													
	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Juvenile Neighborhood	-.076	-.186*	-.153	.028	-.018	-.141*	-.040	-.050	-.001	-.009	-.078*	-.085*	-.087*	-.051
Sex	.085	.160	-.032	.098	.112	.060	.115*	.139*	.097*	.037	.025	.067	.052	.017
White/Non-White	.210	.109	.184*	.051	.102	.194*	.127*	.121*	.077*	.051	.132*	.153*	.152*	.108*
Contact Sequence Number	.200	.197*	.051	.222*	.034	.116*	.167*	.132*	.046	.081*	.134*	.135*	.121*	.097*
Number of Prior Sanctions	-.061	.222*	.104	.198*	.033	.169*	.190*	.081	.063	.081*	.157*	.141*	.161*	.132*
Total Prior Seriousness	.182	.228*	.065	.238*	.050	.153*	.211*	.151*	.068*	.091*	.159*	.154*	.155*	.122*
Severity Prior Sanctions	-.061	.222*	.104	.135	.027	.180*	.166*	.062	.058	.085*	.141*	.127*	.187*	.122*
	<u>Standardized Estimate</u>													
	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Juvenile Neighborhood	.105	-.173	-.058	.064	.011	-.048	.021	.026	.054	.032	-.029	-.005	-.049	.027
Sex	.064	.138	-.013	.068	.113	.031	.048	.085*	.087*	.014	-.007	.044	.012	-.021
White/Non-White	.183	-.035	.129	.082	.122	.108	.057	.083	.085*	.037	.066	.099	.046	.057
Contact Sequence Number	.450	-.318	.051	-.613	-.291	-.432	-.724*	-.187	-.460*	-.232	-.603*	-.217	-.669*	-.662*
Number of Prior Sanctions	-.196	.045	.074	-.031	-.121	.003	-.058	-.159	.007	-.084	.008	-.072	-.007	.105
Total Prior Seriousness	-.221	.476	-.087	.841	.374	.454	.949*	.461*	.505*	.365	.705*	.384	.687*	.720*
Severity Prior Sanctions	-----	-----	-----	.021	.041	.087	-.001	-.027	-.032	.036	.018	.014	.123	-.054
N	86	206	205	275	411	666	1029	1256	1571	1544	1279	1173	1051	979
Adj. R ²	.029	.079*	.014	.049*	.014	.055*	.074*	.046*	.022*	.008*	.040*	.034*	.053*	.028*

* Significant at .01 level.

the amount of variance accounted for. Since total prior seriousness had positive effects cancelled out by sizeable negative effects of contact sequence number, the end result was a reduction in the effect of sequence number and the R^2 s were only slightly lower. Eliminating number of prior sanctions left total prior offense seriousness and contact sequence number with effects of opposite signs and almost identical amounts of the variance accounted for.

Chapter 4. Accounting for Future Offense Seriousness

THE JUVENILE PERIOD

The reader may be dismayed by now that the findings have been more negative than positive because there has been little accounting for offense seriousness at any given contact number or age at contact. What must not be forgotten is that we have again 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 enables them or others to predict what the miscreant will do next is probably the most fallible, for, as we have said, the tables which we have presented show little relationship between number of judicial interventions or severity of prior sanctions and seriousness of next offense.

We commence to hit pay dirt, however, when the model is changed so that an attempt is made to account for total future offense seriousness at the first through tenth juvenile police contact. Let us examine Table 17 which uses juvenile career data to account for juvenile and adult future seriousness. When the first-order correlation coefficients are considered, there is clearly a significant relationship between total future offense seriousness and the following independent variables: juvenile neighborhood, race, age, number of prior sanctions, and, to some extent, total prior seriousness, and sex.

The effect of where a person is socialized, inner city or other neighborhood, tends to increase as a person's career progresses; i.e., inner city residence and more serious future offenses are directly related to each other, somewhat more following the fifth contact. As expected, the younger the age at each specific contact number the greater the probability of high total future offense seriousness. Race is significantly correlated with future total offense seriousness with little increase in the correlation coefficients as number of contacts increases, as was also found for the second Philadelphia cohort. Although sex (being male leads to a higher total future seriousness) is significantly correlated at the first six contacts, after the sixth contact the correlations are no longer significant and there is a decrease in magnitude.

Next, we come to the relationship between the cumulative career variables, total prior seriousness and number of prior

TABLE 17. EFFECTS OF SELECTED VARIABLES ON FUTURE OFFENSE SERIOUSNESS AT FIRST TO TENTH OFFENSES; COMBINED COHORTS, JUVENILES

	<u>Pearson Correlation for Contact Number</u>									
	1	2	3	4	5	6	7	8	9	10
Type Seriousness, Present Offense	.060	-.036	.111*	-.073	-.138*	-.032	.090	-.139	-.150	-.065
Juvenile Neighborhood	-.194*	-.192*	-.198*	-.209*	-.217*	-.230*	-.260*	-.233*	-.224*	-.232*
Sex	.221*	.179*	.150*	.150*	.160*	.143*	.121	.146	.135	.129
White/Non-White	.241*	.230*	.228*	.244*	.237*	.267*	.270*	.237*	.286*	.311*
Age at Contact	-.372*	-.486*	-.560*	-.569*	-.591*	-.589*	-.556*	-.560*	-.538*	-.514*
Severity of Prior Sanctions	----	-.026	-.012	-.018	-.052	-.048	-.107	-.086	-.094	-.126
Total Prior Seriousness	----	.068	-.079	.136*	.140*	.196*	.166*	.168*	-.184*	.180
Number of Prior Sanctions	----	-.101*	-.155*	-.154*	-.173*	-.170*	-.186*	-.178*	-.162	-.138
Severity, Present Sanction	-.046	-.022	-.007	-.035	-.036	-.104	.039	.003	-.060	-.030
	<u>Standardized Estimate</u>									
	1	2	3	4	5	6	7	8	9	10
Type Seriousness, Present Offense	.053	.009	.037	.025	.102	-.018	.018	-.045	-.096	-.076
Juvenile Neighborhood	-.072*	-.068	-.059	-.071	-.050	-.050	-.066	-.049	-.074	-.074
Sex	.158*	.117*	.077	.090	.062	.044	.010	.017	.010	.018
White/Non-White	.158*	.120*	.108*	.108	.105	.141*	.127	.130	.130	.181
Age at Contact	-.303*	-.438*	-.513*	-.517*	-.540*	-.522*	-.489*	-.505*	-.465*	-.449*
Severity of Prior Sanctions	----	.014	.063	.058	.023	.011	-.048	-.003	-.043	-.087
Total Prior Seriousness	----	.046	.037	.059	.045	.121	.133	.132	.147	.124
Number of Prior Sanctions	----	-.026	-.060	-.044	-.041	-.059	-.072	-.090	-.072	-.055
Severity, Present Sanction	.000	.049	.040	-.009	-.033	-.049	.047	-.013	-.104	.048
N	1657	1016	697	507	409	330	283	242	210	189
Adj. R ²	.200*	.273*	.342*	.353*	.379*	.385*	.347*	.348*	.341*	.312*

* Significant at .01 level.

sanctions. Total prior seriousness is significantly correlated with future total offense seriousness for the fourth through the ninth contacts but the pattern of change is not significant. Number of prior sanctions is negatively correlated (relatively weak) with future offense seriousness, significant for the second through the eighth contacts, the magnitude of the coefficients generally increasing across contact levels. This inverse relationship (although weak) might be construed as offering some support for the effectiveness of routine intervention (monitoring) to reduce future offense seriousness. Conspicuously absent are significant relationships between the most immediate measures of antecedent criminal career (sanction just received and type seriousness of present contact) and total prior sanctions. This absence is probably a further demonstration of the earlier conclusion that it is difficult to predict what a person will do next after most recent police/judicial involvement.

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. The sign of the parameter is negative at all contact levels. As for parameter reliability, the values are significant at each of the 10 contact levels. Race has the second largest standardized estimate at each 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 overall fit of the regression model was modest and the amount of variance accounted for by the independent variables was weak to moderate and increased from 20% at the first contact to about 35% 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 R^2 s were the same as before and the standardized estimates for number of prior sanctions (court interventions) remained the same through two decimals; in other words, there was no difference. In sum, these analyses provide little or no evidence of how juveniles may be dealt with more effectively.

THE ADULT PERIOD

Table 18 relates to only adult career and contains the first-order Pearsonian coefficients of correlation for the nine independent variables with future offense seriousness as well as the results of the multiple regression analysis for the combined cohorts.

In general, the coefficients of correlation are weak to moderate in strength but not significant after the eighth

TABLE 18. EFFECTS OF SELECTED VARIABLES ON FUTURE OFFENSE SERIOUSNESS AT FIRST TO TENTH OFFENSES; COMBINED COHORTS, ADULTS

	<u>Pearson Correlation for Contact Number</u>									
	1	2	3	4	5	6	7	8	9	10
Type Seriousness, Present Offense	.096*	.129*	.037	.113	.013	-.057	-.018	.055	-.033	.048
Adult Neighborhood	-.223*	-.232*	-.219*	-.198*	-.183*	-.137	-.159	-.163	-.151	-.174
Sex	.184*	.135*	.131*	.104	.089	.059	.037	.009	-.002	-.025
White/Non-White	.240*	.239*	.214*	.201*	.175*	.156*	.173*	.138	.119	.141
Age at Contact	-.239*	-.314*	-.357*	-.373*	-.390*	-.395*	-.395*	-.359*	-.321*	-.321*
Severity of Prior Sanctions	.289*	.272*	.267*	.251*	.226*	.196*	.174*	.116	.047	.016
Total Prior Seriousness	.462*	.419*	.386*	.356*	.332*	.286*	.254*	.203*	.142	.116
Number of Prior Sanctions	.399*	.365*	.336*	.310*	.274*	.227*	.201*	.146	.079	.048
Severity, Present Sanction	.146*	.196*	.110*	.092	.120	.134	.028	.018	.014	.104
	<u>Standardized Estimate</u>									
	1	2	3	4	5	6	7	8	9	10
Type Seriousness, Present Offense	.017	.052	-.051	.020	-.031	-.172*	-.126	-.008	-.111	-.056
Adult Neighborhood	-.118*	-.120*	-.130*	-.115	-.097	-.079	-.101	-.125	-.142	-.147
Sex	.079*	.059	.074	.079	.056	.065	.092	.059	.073	.041
White/Non-White	.079*	.076	.067	.067	.043	.086	.072	.028	.026	.022
Age at Contact	-.129*	-.186*	-.241*	-.278*	-.298*	-.348*	-.367*	-.349*	-.354*	-.352*
Severity of Prior Sanctions	-.108*	-.105	-.062	-.030	-.042	-.041	-.035	-.031	-.033	-.081
Total Prior Seriousness	.579*	.463*	.428*	.372*	.379*	.334	.279	.311	.375	.352
Number of Prior Sanctions	-.128	-.084	-.124	-.119	-.178	-.203	-.169	-.264	-.394	-.403
Severity, Present Sanction	.046	.092*	.035	-.064	.037	.080	-.014	-.056	-.030	.064
N	1681	1011	669	506	383	297	248	202	172	149
Adj. R ²	.280*	.265*	.238*	.219*	.199*	.204*	.180*	.131*	.115*	.111*

* Significant at .01 level.

contact, except for age which is significant at all 10 contacts. There are 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 current sanction are also significant at some contact levels.

Age is increasingly negatively correlated with total future offense seriousness, peaking around the seventh contact, after which there is 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 is correlated at all contact levels, significant at the first through seventh, and decreases in strength as contact level increases. 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) are 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 are 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 is 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 indicate 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 are not.

When total future offense seriousness is regressed on the independent variables for each contact level, only age at contact and total prior offense seriousness emerge as having significant impact. Age has 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 are small. The standardized estimates are 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 ranges 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 estimates for number of prior sanctions more than doubled in several of the earlier contact levels, was statistically significant through the third

adult contact, and remained higher than previously through the tenth contact. Otherwise, however, none of the findings assist use in the formulation of a more effective sanctioning policy.

So far, then, we see that more of the variation in future total offense seriousness is explained for the juveniles than for the adults at each contact (except the first contact) and the amount of variation accounted for increases for the juveniles and decreases for the adults as the number of contacts increases.

JUVENILE AND ADULT PERIODS COMBINED

For the total career, juvenile and adult combined (Table 19), the Pearsonian correlation coefficients indicate 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, and juvenile neighborhood. The other independent variables, with the exceptions of severity of prior and present sanctions, which are never significant, are significantly correlated only at some contact levels.

Age at contact is, as always, significantly and increasingly correlated with future offense seriousness across contact levels. The values indicate moderate to strong association. It should be noted that when the regression analysis is conducted without age at time of contact as an independent variable, the proportion of the variance accounted for is reduced about 75%. Prior seriousness and associations become more important. Race, too, is significantly correlated with future offense seriousness at

TABLE 19. EFFECTS OF SELECTED VARIABLES ON FUTURE OFFENSE SERIOUSNESS AT FIRST TO TENTH OFFENSES; COMBINED COHORTS, JUVENILES AND ADULTS

	<u>Pearson Correlation for Contact Number</u>									
	1	2	3	4	5	6	7	8	9	10
Type Seriousness of Contact	.054*	.037	.124*	.070	.142*	-.030	.081	.123*	.068	.063
Juvenile Neighborhood	-.183*	-.189*	-.185*	-.181*	-.180*	-.177*	-.182*	-.203*	-.191*	-.194*
Sex	.231*	.185*	.158*	.144*	.133*	.111*	.107	.099	.113	.123
White/Non-White	.242*	.235*	.224*	.213*	.208*	.219*	.205*	.195*	.178*	.185*
Age at Contact	-.409*	-.495*	-.539*	-.554*	-.563*	-.575*	-.580*	-.600*	-.560*	-.587*
Severity of Prior Sanctions	----	-.028	-.017	-.010	-.031	.005	-.049	.006	-.016	-.029
Total Prior Seriousness	----	-.058	.073	.124*	.127*	.181*	.151*	.171*	.174*	.169*
Number of Prior Sanctions	----	-.101*	-.147*	-.121*	-.135*	-.144*	-.177*	-.168*	-.175*	-.153*
Severity, Present Sanction	-.048	-.011	.004	-.010	.031	-.049	.103	.018	-.018	.024
	<u>Standardized Estimate</u>									
	1	2	3	4	5	6	7	8	9	10
Type Seriousness of Contact	.053*	.010	.051	.016	.085*	-.045	.029	.042	.040	-.039
Juvenile Neighborhood	-.064*	-.064*	-.047	-.048	-.052	-.045	-.056	-.059	-.064	-.070
Sex	.147*	.105*	.081*	.081*	.088*	.088*	.065	.082	.090	.094
White/Non-White	.159*	.136*	.131*	.123*	.110*	.136*	.128*	.114	.112	.123
Age at Contact	-.337*	-.438*	-.483*	-.509*	-.517*	-.533*	-.538*	-.562*	-.570*	-.561*
Severity of Prior Sanctions	----	.005	.028	.020	-.012	.003	-.029	.006	-.033	-.080
Total Prior Seriousness	----	.045	.039	.061	.049	.112*	.084	.083	.081	.082
Number of Prior Sanctions	----	-.048	-.068	-.047	-.051	-.064	-.079	-.074	-.071	-.054
Severity, Present Sanction	-.022	.007	-.003	-.045	-.020	-.049	.023	-.019	-.082	-.006
N	2291	1608	1191	950	767	642	556	486	430	386
Adj. R ²	.224*	.284*	.325*	.337*	.353*	.379*	.379*	.400*	.403*	.385*

* Significant at .01 level.

all contact levels but declines in strength with number of contacts. There is a weak positive relationship between total prior offense seriousness and total future offense seriousness; the relationship tends to increase in strength, contact-by-contact. The correlation coefficients are significant at the fourth through tenth contacts. The number of prior sanctions is negatively correlated with future offense seriousness, increasing slightly as contacts increase, significant at the second through tenth contacts. Being male is directly related to higher future total offense seriousness at all contacts, significant at the first six contact levels, but decreases somewhat from contact to contact. Juvenile neighborhood, i.e., inner city residence, is related to higher future offense seriousness, with significant but not very strong correlations found at all contact levels.

The relationship between offense seriousness of present contact and total future offense seriousness is significant at the first, third, fifth, and eighth contacts but, in general, the values are weak.

Perhaps the most important finding is 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 is also weak and inconsistent in direction.

The independent variables with weak first-order correlation coefficients have little impact in the regression model. Contact by contact, the standardized estimates for age and race dominate

all other variables; youthfulness at time of contact and being Non-White are related to future offense seriousness. For age the values are significant at the .01 level or better for every police contact, first through tenth, while for race the values are significant for the first through seventh contacts, indicating a high degree of reliability for the parameters.

Although the overall fit of the regression model is good at all 10 contact levels, steadily increasing amounts of variation being accounted for by the independent variables in the regression model from contact to contact, 22% of the variation in future offense seriousness at the first contact and 38% to 40% at contacts levels 8, 9, 10, we cannot make the kinds of positive recommendations that would enhance the effectiveness of sanctions. The system is not effective. 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 relationship of severity of sanctions to offense seriousness may be more explanatory of future offense seriousness than are either of the other variables. Although a variable was computed that dealt with the relationship of severity of present sanction to seriousness of present offense and a similar variable cumulating prior severity of sanction and prior offense seriousness, neither changed the amount of future offense seriousness accounted for when placed in the equation as additional variables were inserted in place of the sanctions variable with which they were highly correlated.

To some persons the multiple regression analyses that we have conducted do not really answer the questions posed as neatly as would a path analysis approach. Such an analysis, but with similarly little explanatory completeness, may be found in Appendix D.

The pattern of contact to contact and juvenile/adult differences described in this chapter received limited confirmation from the Lisrel analyses presented in Appendix E. Although the impact of some variables (age, sex, and race) included in Tables 17 and 18 varies significantly from the juvenile to the adult period and there are differences in the effects of specific variables, there is relatively little difference in the amount of variance accounted for.

The results of the regression analysis suggest that in general the effects of the independent variables on future total offense seriousness were different for the juvenile and adult career periods. It was decided to use Lisrel analysis (a statistical and programming technique) to test this conclusion more precisely and verify statistically whether or not conclusions reached from the regression analysis would stand up under more careful scrutiny. Rather than relying on perceived similarity or dissimilarity of effects of the unstandardized coefficients of the multiple regression analysis, Lisrel permits formal assumptions that constrain the effects to be the same or frees the effects to differ. These assumptions are modelled, results are generated, and the results compared to sample

results. The best model yields the best fit to the actual sample data.

The Lisrel analysis reveals that at some contact levels the effects are the same for the two periods. The effect of neighborhood is the same at the fifth and sixth contact levels for both periods. Although the effect of the punish variable (a theoretical construct based on the three observable cumulative career variables) is the same at the fourth, fifth, and sixth contact levels, it is significant only at the fifth contact level. The effects of race and sex are the same at the seventh contact level but are never significant.

VARIATION IN FUTURE OFFENSE SERIOUSNESS BY COHORT

Previously the analysis of total future offense seriousness was done with no controls for cohort. Here we are looking at the same independent variables, now analyzing the effects separately for each of the three cohorts to see if controlling for cohort increases the "explanatory" power of the independent variables within the regression model. Some differences are expected but not enough to change our position that analyses of the combined cohorts were sufficient.

The amount of variation in future offense seriousness accounted for by the regression model does not change drastically in the analysis when the cohort comparison is 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 24% to 58% at the ninth contact. For the combined cohorts the amount of variation ranges from 22% to 40% at the ninth contact.

1942 Cohort

The first-order coefficients of correlation and the results of the multiple regression analysis for the 1942 Cohort are presented in Table 20. First, considering only first-order correlation coefficients, we see age at contact significant and negative at all contacts, race significant (Non-Whites had higher future offense seriousness) at the first six contacts, and the rest of the variables, where there is significance, significant at only two or three contact levels. Where there is significance the values tend to be weak to moderate in strength but even for age, which has values that are moderate to strong, there is little evidence of progressive increases in strength with contact number. In sum, at the first-order level demographic variables take precedence over the career variables in the strength of their association with total future offense seriousness.

Age and race dominate the regression model (age does so at nine of the 10 contacts), particularly at the first four in which they are the only variables with significant impact. After the fourth contact, age and race still dominate but the interaction of other variables assumes some importance. By the fifth contact, severity of present sanction along with race has an impact on the determination of future offense seriousness. At

TABLE 20. EFFECTS OF SELECTED VARIABLES ON FUTURE OFFENSE SERIOUSNESS AT FIRST TO TENTH OFFENSES; 1942 COHORT, JUVENILES AND ADULTS

	<u>Pearson Correlation for Contact Number</u>									
	1	2	3	4	5	6	7	8	9	10
Type Seriousness of Contact	.067	.128	.215*	-.017	.301*	.017	.156	.001	-.007	.056
Juvenile Neighborhood	-.152*	-.150*	-.147	-.152	-.133	-.121	-.102	-.125	-.085	-.037
Sex	.298*	.218*	.157	.158	.121	.106	.072	.071	.089	.072
White/Non-White	.244*	.230*	.234*	.253*	.275*	.248*	.212	.178	-.153	.161
Age at Contact	-.436*	-.481*	-.479*	-.501*	-.470*	-.441*	-.403*	-.408*	-.467*	-.515*
Severity of Prior Sanctions	----	.018	.117	.135	.096	.261*	.155	.325*	.367*	.356*
Total Prior Seriousness	----	.059	.137	.219*	.159	.271*	.255*	.266	.267	.237
Number of Prior Sanctions	----	.018	.011	.063	-.028	-.026	-.019	.054	.072	.051
Severity, Present Sanction	.023	.145	.087	.062	.293*	-.025	.414*	.039	-.160	.425*
	<u>Standardized Estimate</u>									
	1	2	3	4	5	6	7	8	9	10
Type Seriousness of Contact	.017	.049	.163*	-.032	.177	-.068	-.146	-.045	.098	.026
Juvenile Neighborhood	-.031	-.012	-.001	-.001	.010	.025	.024	.045	.080	.115
Sex	.163*	.090	.059	.013	.083	.136	.114	.089	.116	.031
White/Non-White	.219*	.225*	.250*	.241*	.214*	.228*	.199	.225	.209	.195
Age at Contact	-.373*	-.442*	-.439*	-.471*	-.363*	-.397*	-.329*	-.401*	-.452*	-.503*
Severity of Prior Sanctions	----	-.018	.094	.062	.120	.259*	.113	.279*	.301*	.167
Total Prior Seriousness	----	.016	.041	.154	.136	.231*	.256*	.169	.104	.052
Number of Prior Sanctions	----	-.001	-.026	.024	-.115	-.119	-.130	-.082	-.017	.088
Severity, Present Sanction	-.008	.116	.022	.016	.251*	-.048	.373*	.073	-.095	.245
N	384	294	221	185	149	125	105	92	84	76
Adj. R ²	.259*	.288*	.303*	.310*	.363*	.328*	.340*	.266*	.325*	.399*

* Significant at .01 level.

the sixth contact, four of the independent variables play a definite role in estimating the dependent variable. Age (significant and negative) dominates, followed by severity of prior sanctions (significant and positive), prior offense seriousness (also significant and positive), and race (significant, with Non-Whites having higher future offense seriousness). At the seventh contact severity of present sanction (significant and positive) has the most impact, followed by age and total prior offense seriousness (positive and significant). The model for the eighth and ninth contact levels is dominated by age, severity of prior sanctions, and race, in that order. At the tenth contact only age and severity of present sanction have much importance in the regression model. When total severity of prior sanctions was eliminated the variance accounted for was slightly reduced and the standardized estimates for number of prior sanctions considerably reduced, the sign for total severity of prior sanctions having been the opposite of that for number of prior sanctions.

One might summarize the results of the contact-by-contact analyses for the 1942 Cohort by pointing out that there is a pattern of demographic variable dominance at the lower contact levels with little or no participation by the career variables in the determination of future offense seriousness until at least the fifth contact. So, early in a career a person's characteristics such as age and race are better predictors of future criminal behavior but as the career progresses prior

criminal behavior and the responses to it take on more importance. Unfortunately, society responses only exacerbate the problem.

1949 Cohort

The results of the analysis for the 1949 Cohort are presented in Table 21. At the first-order level age is significant and negative at all contacts and ranges in absolute value (indicating moderate to strong association) from .421 to .601, fluctuating somewhat in strength as contact number increases. Juvenile neighborhood (those socialized in the inner city have higher future offense seriousness) is significant at nine of the contact levels and steadily increases in strength. Number of prior sanctions is significant and negative at eight of the contact levels, with steadily increasing strength of association. Total prior offense seriousness (significant and positive) also increases in strength to contact six, after which it declines slightly to the tenth contact.

Being Non-White is significant at only the first four contacts, where it is associated with higher total future offense seriousness. The other variables are either significant at only a few contact levels or are never significant.

Considering the strength and number of significant first-order relationships found, one might expect that there would be numerous effects on total future offense seriousness within the regression model. Actually, this turns out not to be the case. At every contact level age dominates with relatively large and

TABLE 21. EFFECTS OF SELECTED VARIABLES ON FUTURE OFFENSE SERIOUSNESS AT FIRST TO TENTH OFFENSES; 1949 COHORT, JUVENILES AND ADULTS

	<u>Pearson Correlation for Contact Number</u>									
	1	2	3	4	5	6	7	8	9	10
Type Seriousness of Contact	.048	.087	.128*	.139*	.205*	.028	.020	.066	.119	.036
Juvenile Neighborhood	-.208*	-.214*	-.233*	-.241	-.259*	-.238*	-.238*	-.261*	-.260*	-.319*
Sex	.221*	.165*	.141*	.127	.126	.094	.089	.033	.042	.073
White/Non-White	.203*	.184*	.176*	.158*	.139	.132	-.115	.125	.095	.095
Age at Contact	-.421*	-.510*	-.538*	-.571*	-.591*	-.603*	-.616*	-.628*	-.613*	-.601*
Severity of Prior Sanctions	----	-.076	-.033	-.032	.002	-.004	-.049	-.055	-.100	-.095
Total Prior Seriousness	----	.065	.105	.151*	.187*	.256*	.253*	.247*	.237*	.232*
Number of Prior Sanctions	----	-.120*	-.148*	-.139*	-.135	-.193*	-.251*	-.270*	-.313*	-.281*
Severity, Present Sanction	-.080	-.014	-.012	.033	-.024	-.032	-.032	-.086	.031	-.016
	<u>Standardized Estimate</u>									
	1	2	3	4	5	6	7	8	9	10
Type Seriousness of Contact	.033	.032	.052	.026	.128*	.012	.047	.056	.118	-.170
Juvenile Neighborhood	-.132*	-.141*	-.132*	-.149*	-.129	-.112	-.108	-.121	-.145	-.145
Sex	.123*	.061	.025	.022	.024	.010	-.010	.011	-.001	.025
White/Non-White	.103*	.084	.054	.019	.012	.022	.016	.006	-.022	-.006
Age at Contact	-.358*	-.468*	-.490*	-.529*	-.538*	-.537*	-.549*	-.557*	-.523*	-.522*
Severity of Prior Sanctions	----	-.030	.042	.004	.060	.046	.072	.078	.054	-.014
Total Prior Seriousness	----	.022	.040	.059	.058	.112	.110	.084	.126	.161
Number of Prior Sanctions	----	-.029	-.071	-.019	-.048	-.121	-.142	-.111	-.134	-.126
Severity, Present Sanction	-.040	.017	-.027	.016	-.094	.009	.002	-.041	-.102	-.007
N	790	579	444	360	279	239	203	175	148	131
Adj. R ²	.225*	.293*	.314*	.343*	.362*	.382*	.399*	.405*	.397*	.386*

* Significant at .01 level.

significant standardized estimates ($-.358$ to $-.557$), significant at the .01 level or better. For the other independent variables the standardized estimates are weak to nearly non-existent. With one exception, type seriousness of contact (contact 5), none of the standardized estimates for the career variables is significant. Juvenile neighborhood has a significant impact but only at the first four contacts where the values are rather weak (inner city residence was directly associated with high future offense seriousness). Most of the variance accounted for may be attributed to youthfulness at time of police contact. As in the case of the 1942 Cohort, eliminating severity of prior sanctions did not change the amount of variance accounted for but did slightly reduce the standardized estimates for total prior severity of sanctions.

1955 Cohort

The results of the analysis for the 1955 Cohort are presented in Table 22. For the first-order correlations the results can be quickly summarized since the independent variables tend to be either significant at all or nearly all contact levels or never significant. Age is negative and significant at all contact levels, steadily increasing from $-.435$ to $-.733$ at the ninth contact. Non-Whites, as in all prior cases, had higher future offense seriousness, the significant correlations following a pattern of decline, with some fluctuation. Being male has a significant impact on future offense seriousness at nine of the 10 contact levels, decreasing from the first contact

TABLE 22. EFFECTS OF SELECTED VARIABLES ON FUTURE OFFENSE SERIOUSNESS AT FIRST TO TENTH OFFENSES; 1955 COHORT, JUVENILES AND ADULTS

	<u>Pearson Correlation for Contact Number</u>									
	1	2	3	4	5	6	7	8	9	10
Type Seriousness of Contact	.055	-.015	.092	.016	.056	-.103	.065	.147	.014	.025
Juvenile Neighborhood	-.176*	-.184*	-.158*	-.135*	-.133	-.140	-.162	-.183*	-.178	-.170*
Sex	.225*	.204*	.191*	.178*	.166*	.158*	.157	.181*	.194*	.197*
White/Non-White	.263*	.256*	.234*	.212*	.210*	.236*	.232*	.212*	.203*	.214*
Age at Contact	-.435*	-.558*	-.636*	-.656*	-.673*	-.685*	-.692*	-.723*	-.733*	-.719*
Severity of Prior Sanctions	----	-.037	-.056	-.055	.107	-.087	-.131	-.078	-.102	-.121
Total Prior Seriousness	----	.051	.036	.076	.063	.093	.049	.086	.092	.083
Number of Prior Sanctions	----	-.125*	-.196*	-.166*	-.180*	-.170*	-.198*	-.191*	-.190*	-.177
Severity, Present Sanction	-.060	-.060	-.016	-.084	-.028	-.087	.053	.006	-.058	-.097
	<u>Standardized Estimate</u>									
	1	2	3	4	5	6	7	8	9	10
Type Seriousness of Contact	.080*	-.002	.034	.066	.061	-.020	.101	.041	.040	.070
Juvenile Neighborhood	-.024	-.015	.010	-.008	-.004	.002	-.003	.013	.014	.000
Sex	.126*	.086*	.035	.053	.053	.056	.033	.036	.024	.042
White/Non-White	.179*	.137*	.148*	.144*	.156*	.185*	.169*	.165*	.171*	.175
Age at Contact	-.370*	-.506*	-.595*	-.628*	-.650*	-.661*	-.687*	-.708*	-.724*	-.704*
Severity of Prior Sanctions	----	.047	.058	.069	-.001	-.001	-.060	-.064	-.075	-.090
Total Prior Seriousness	----	.075	.044	.046	.073	.118	.095	.127	.119	.103
Number of Prior Sanctions	----	-.062	-.092	-.090	-.063	-.040	-.012	-.034	-.028	-.018
Severity, Present Sanction	.003	.009	.025	-.050	-.004	-.051	-.033	.026	-.069	-.070
N	1117	735	526	405	339	278	248	219	198	179
Adj. R ²	.241*	.339*	.427*	.461*	.486*	.514*	.522*	.562*	.577*	.561*

* Significant at .01 level.

to the sixth contact and then increasing from the eighth through the tenth contact. Number of prior sanctions (as contrasted to severity of prior sanctions) is significantly related to future offense seriousness (the more frequently sanctioned, the lower future offense seriousness), the relatively low coefficients fluctuating so there is no definite trend. Juvenile neighborhood (inner city produces higher offense seriousness) is sometimes (six of 10 contact levels) significantly correlated with future offense seriousness.

Most of the significant relationships occur between a variable that defines a person's characteristics, such as age or race, rather than a career variable. It is important to note, however, that these correlations tend to be weak.

Again, age dominates the regression model while all the other variables have coefficients that are weak, so weak, in fact, that the variables all but drop out of the regression equation as far as their impact on the estimation of future offense seriousness. The standardized estimates for age are negative, statistically significant and range in absolute value from $-.370$ to $-.724$ at the ninth contact. Removal of severity of prior sanctions from the analysis did not change the results.

Summary Observations on the Pearsonian Correlation Coefficients

At the first-order level (Pearsonian correlation coefficients) cohort by cohort where there is significance at a majority of contact levels for a variable, the direction (+ or -) of the association tends to be consistent from contact to

contact. Also, where there is significance, as contacts increase the coefficients either tend to increase, decrease, or stay about the same. That is, the coefficients do not increase markedly from one contact to the next and then decrease from that contact to the next, and so on.

Without regard to significance, all of the variables except total prior severity of sanctions, number of prior sanctions, and severity of sanction just received are correlated with total future offense seriousness in the same direction for each cohort. Total prior severity of sanctions are positively correlated with future total offense seriousness for the 1942 Cohort but negatively correlated for the 1949 and 1955 Cohorts. Number of prior sanctions and future offense seriousness follow the same pattern. Since the exceptions to consistency involve severity of sanctions received, prior or present, and we find that the direction of the relationship differs for the 1942 Cohort compared to the 1949 and 1955 Cohorts, the question arises as to whether this represents some sort of period effect that is captured by the cohort analysis. For any particular variable for which there are some significant correlations the associations are consistent in direction where there is significance and the direction of the relationship is also the same for all three cohorts.

From the 1942 Cohort to the 1955 Cohort there is a change in the concentration of significant relationships by number of variables (contact-by-contact) for which there is significant

association. For the 1942 Cohort all of the variables except number of prior sanctions are significant at some level but only two variables, race and age, are significant at a majority of the contact levels. For the 1949 Cohort all of the variables except severity of prior sanctions and severity of present sanction are significant at some level and four of the nine variables, juvenile neighborhood, age, total prior offense seriousness, and number of prior sanctions, are significant at a majority of the contact levels. For the 1955 Cohort four of the variables, seriousness of present contact, total prior severity of sanctions, total prior offense seriousness, and severity of present sanction, are never significant. Five of the variables, juvenile neighborhood, sex, race, age, and number of prior sanctions, are, however, significant at a majority of the contact levels.

Future total offense seriousness is significantly related to more variables for the 1942 Cohort than for the 1949 Cohort and future offense seriousness is significantly related to more variables for the 1949 Cohort than it is 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. Our earlier analyses have also shown that

predicting behavior for the intermediate period from the juvenile period is easier than predicting into the later adult period from the juvenile period. On the other hand, perhaps prediction has become simpler from cohort to cohort, i.e., effective prediction of future offense seriousness encompassed more factors for the 1942 Cohort than for the 1949 Cohort, and more for the 1949 Cohort than for the 1955 Cohort. There is 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. What all of this suggests is 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 and at only a few contact levels for the 1942 and 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. Only those relationships which are significant at a majority of contact levels will be considered.

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

Summary Observations on Standardized Estimates

The first-order correlation coefficients may suggest which factors (independent variables) will play a part in improving the prediction of future criminal behavior based on past behavior and personal characteristics, but, due to the tendency of the independent variables to interact with each other and weakly correlated relationships to grow weaker or even disappear, this phase of the analysis in which the standardized estimates of the parameters are considered is most important and most conclusive. Table 23 has been generated from the data in Tables 20, 21, and 22 in order to assist the reader in following the discussion of the most important findings of our current analyses.

In terms of the relative size of the standardized estimates for the 1942 Cohort (Table 20), age at contact has the most

TABLE 23. SUMMARY OF EFFECTS OF SELECTED VARIABLES AT FIRST TO TENTH OFFENSES ON FUTURE OFFENSE SERIOUSNESS, 1942, 1949, 1955, AND COMBINED COHORTS

	<u>1st Contact</u>				<u>2nd Contact</u>				<u>3rd Contact</u>				<u>4th Contact</u>				<u>5th Contact</u>			
	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	+	+	+	-	+	+	+	+	+a	+	+a
Juvenile Neighborhood	-	-a	-	-a	-	-a	-	-a	-	-a	+	-	-	-a	-	-	+	-	-	-
Sex	+a	+a	+a	+a	+	+a	+a	+a	+	+a	+	+a	+	+	+	+a	+	+	+	+a
White/Non-White	+o	+a	+a	+a	+o	+	+a	+a	+o	+	+a	+a	+o	+	+a	+a	+o	+	+a	+a
Age at Contact	-o	-o	-o	-o	-o	-o	-o	-o	-o	-o	-o	-o	-o	-o	-o	-o	-o	-o	-o	-o
Severity of Prior Sanctions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Prior Seriousness	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Prior Sanctions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Severity, Present Sanction	-	-	+	-	+	+	+	+	+	-	+	-	+	+	-	-	+a	-	-	-
Adj. R ²	26	23	24	22	29	29	34	28	30	31	43	33	31	34	46	34	36	38	49	35

	<u>6th Contact</u>				<u>7th Contact</u>				<u>8th Contact</u>				<u>9th Contact</u>				<u>10th Contact</u>			
	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	+	-a	+	-	+	-a	-	-	+	-a	+	-	+	-a	+	-	+	-a	+	-
Sex	+	+	+	+a	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
White/Non-White	+o	+	+a	+a	+	+	+a	+a	+o	+	+a	+	-o	-	+a	+	+	-	+	+
Age at Contact	-o	-o	-o	-o	-o	-o	-o	-o	-o	-o	-o	-o	-o	-o	-o	-o	-o	+o	-o	-o
Severity of Prior Sanctions	+o	+	-	+	+	+	-	-	+o	+	-	+	+o	+	-	-	+	-	-	-
Total Prior Seriousness	+o	+	+	+a	+o	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Number of Prior Sanctions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-
Severity, Present Sanction	-	+	-	-	+o	+	-	+	+	-	+	-	-	-	-	-	+o	-	-	-
Adj. R ²	33	38	51	38	34	40	52	38	27	41	56	40	33	40	58	40	40	39	56	39

Key: + or - = Sign of standardized estimate

a = Standardized estimate significant at .01 level or greater

o = 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.

impact on the regression model (except at the seventh contact), being significant and negative at all contact levels and ranging in value from $-.373$ to $-.503$. A further look at the standardized estimates reveals an interesting pattern. At the lower contact levels, the early stage of career, significant impact is confined to age and race, both characteristic variables. The other variables (no values greater than $.200$) have standardized estimates that are very small. At the later stages of a career other variables, again including race, begin to have an impact on determining an estimate of future offense seriousness. Among these are 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 are increasing in absolute size. The reader must always keep in mind that contact-to-contact comparisons of standardized estimates are not exact because of deviation in the means of variables from contact level to contact level. We are referring only to general trends in the impact of these variables from contact to contact.

Again, for the 1949 Cohort (Table 21), age at contact dominates and is significant at all contact levels. The values range from $-.358$ to a peak of $-.557$ (contact 8). Age is the only variable which has standardized estimates greater in magnitude than $.200$. None of the career variables is significant and in the instances (contact levels) where characteristic variables are

significant the values (except for age, of course) are relatively weak. If we forget about considering any absolute magnitude such as greater than .200 and rank the standardized estimates largest to smallest, juvenile neighborhood or number of prior sanctions turn out to be second to age in impact at nine of the 10 contacts. For the 1949 Cohort it is not really possible to see any defined pattern based on characteristic vs. career variables and stage of criminal career.

For the 1955 Cohort, also, age has the most impact on the model. The standardized estimates are significant and range in value from $-.370$ to $-.724$ (ninth contact). As was true for the 1949 Cohort, none of the other variables ever has standardized estimates greater than .200 and even where there is significance the values are pretty weak. If the coefficients are ranked by size, race follows age in amount of impact on the model. Race is 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 emerges as the most important variable in the regression model regardless of which cohort is under consideration, with coefficients that tend to increase in value from the 1942 Cohort to the 1949 Cohort to the 1955 Cohort. Overall, the other variables that have impact are 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, notwithstanding the changes that have taken place since WW II. The severity of prior sanctions and present sanction are important for the 1942 Cohort.

The pattern emerging from the 1942 Cohort suggests that stage of career is important for the number and type of variables actually involved (to the extent that they have impact on the estimation of future offense seriousness). More variables, career as well as characteristic, do have impact on future offense seriousness for the 1942 than for the 1949 and 1955 Cohorts. Considering the results of the 1949 and 1955 regressions gives the impression of a concentration of impact on variables associated with the demography of the city and the experiences of inner city youth.

The Cohorts Combined

For the combined cohorts age of contact (with values ranging from $-.337$ to $-.567$) is the variable with the most impact on total future seriousness and this was still found to be the case when cohort was controlled for in the analysis. When the significance and size of the standardized estimates were considered, the results for the 1949 and 1955 Cohorts were very similar to that found in the combined cohort analysis. That is, race always followed age in having the most impact. The combined

cohort results differed from those found for the 1942 Cohort. In general the values of the standardized estimates for all variables except age were lower in the combined cohort analysis than when cohort was controlled. Contact by contact, age had more impact on the model when the uncontrolled analysis was done than when cohort was controlled.

More of the variation in future total offense seriousness is accounted for by independent variables utilized in the regression model for the 1955 Cohort than for the 1942 or 1949 Cohorts. The amount of variation accounted for ranges from 24% to 58% for the 1955 Cohort, from 23% to 41% for the 1949 Cohort, and from 26% to 40% for the 1942 Cohort. Controlling for cohort reduces the amount of variation accounted for in the 1942 Cohort relative to the combined cohort but increases the amount of variation accounted for in the 1949 and 1955 Cohorts relative to the amount explained when cohort was not controlled.

In general, more of the variation in future offense seriousness is accounted for as contact level increases whether or not the analysis is done for combined cohorts or cohort-by-cohort. (While overall the values increase, for the 1942 Cohort there is a peak at the fifth contact, a decrease at the sixth contact, and then a steady increase through the tenth contact.) For the combined cohorts, the 1955 Cohort and 1949 Cohort the largest amount of variation accounted for is at the eighth or ninth contact.

FURTHER CONSIDERATION OF ANALYTIC STRATEGY

Eliminating Variables to Simplify the Analysis

The importance of analytic strategy should not be overlooked. The reader will recall that age of contact and race had consistently high standardized estimates in Table 19, 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. Sex differences are manipulable only to the extent that police policy differentiates by sex in the application of intervention. None of this is new, however.

If these variables are removed, what do we find? Table 19 was, therefore, rerun with age and sex omitted (not included in report). Number of prior sanctions (judicial interventions) became the most important variable, increasing with police contacts, and the negative sign indicated that the greater the number of prior sanctions, the less serious the future career. The importance of this variable was closely followed by seriousness of past offenses and then by inner city residence as a juvenile. All were significant at the .01 level or greater but no more than 9% or 10% 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.

Separate tables by race and age period were also constructed for each cohort but are not included in the report. There are some cohort differences, however, which should be mentioned. When race and age were removed from the regression analysis for the 1942 Cohort, severity of prior sanctions, severity of present sanction, number of prior sanctions, and total prior offense seriousness had the largest and most frequently significant standardized estimates, although none was significant at each contact level. While severity of prior sanctions and severity of present sanction 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, number of prior sanctions had the opposite effect. The greater the number of prior sanctions, the less serious the future cumulative offenses. In this case, the percent of the variance accounted for ranged from 6% to 23.5%, 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 9% for the first through the fourth contact to 13% or 14% and then 15% before reaching 19.3% 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 9% 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.

Continuity vs. Desistance Accounted for by
Multiple Discriminant Function

If the strategy is further simplified so that we are concerned about factors which identify those who will continue vs. those who will desist at any contact level, the multiple discriminant function is a useful technique. We have shown in Appendix F, however, that even though maximum discriminatory ability is reached by the fourth or fifth contact and that what we have termed career variables became significant by the fifth

police contact, only 24% of the desistance at that point is accounted for. Although severe prior sanctions increases the probability of continuation at some points and numerous judicial interventions all other things held equal) decreases the probability of continuation at some points, the results are not consistent with the other analyses that we have conducted, some for continuation vs. discontinuation and others for future offense seriousness. In fact, differences in findings based on the analytic approach selected here have turned out to be one of the obstacles to the development of a more effective program for delinquency containment.

Again, it is important to remind the reader that 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 vary 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.

Length of Career as an Independent Variable

One extremely simple variable not included in the analyses described in this chapter should be given brief mention, i.e., the chronological length of delinquent and criminal careers. Length of career has a relatively high correlation with total number of offenses (.574) and with total offense seriousness (.545). Its correlation with number of court dispositions is only slightly lower (.472). Of course, offense seriousness,

number of court dispositions, and total severity of sanctions are correlated from .804 to .985. When juvenile neighborhood, race, total number of police contacts, offense seriousness, number of court dispositions, and total severity of sanctions were regressed on length of career only .367 percent of the variance was accounted for. Number of contacts had the greatest effect, followed by number of court dispositions and total severity of sanctions, the latter two having a negative relationship. When number of contacts was eliminated total offense seriousness became the best item in the model, followed by number of court dispositions, which had a negative relationship.

In other words, length of career in time is increased by number and seriousness of offenses but reduced by number and severity of sanctions. In fact, perusal of the results of our numerous multiple regressions suggests that seriousness of career and length of career in time, although correlated .574, are accounted for somewhat differently. Sanctions are more effective in shortening a career in time than in reducing its total seriousness.

Chapter 5. 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 the variables. Each of the variables selected should fit into one of the seven categories of independent variables shown in Diagram 3 (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 (see Appendix G, Interview Variables Code Book).

The intercorrelations of the independent variables (sig. at the .01 level) are shown in Table 24, as are their correlations with selected dependent self report measures. Intercorrelations of the independent variables are in almost all cases lower than .500; there is no problem of multicollinearity here. 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 have

TABLE 24. CORRELATIONS OF INDEPENDENT (ATTITUDINAL, SOCIAL, AND DEMOGRAPHIC CHARACTERISTICS) AND DEPENDENT (SELF-REPORT DELINQUENCY AND CRIME) VARIABLES: FROM 1976 INTERVIEWS

[illegible]

modest correlations with self report measures of delinquency. There is hardly a case where the independent interview variables characterizing cohort members, either by attitudes, behavior, associations, or demographic characteristics, are correlated with the dependent self report measures in a direction that is different from that predicted by sociological theories of the causes or antecedents of delinquency and crime. These correlations, however, are 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. We, therefore, ran through a lengthy exercise in an effort to see if the interview variables enabled us to account for much of the self-report variance for either the juvenile or the adult period.

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, the number of sanctions imposed as a juvenile had a significant positive impact on adult self-report seriousness, the opposite of that which would have been found if sanctions were effective. 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, markedly affected 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 impact on 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.

This discussion has taken us a distance from the topic of our major research concern, i.e., how much impact do sanctions have on continuity and seriousness of delinquent and criminal careers compared to other variables which must be simultaneously considered and how and when may sanctions be effectively administered?

INTERVIEW DATA AND OFFICIAL DELINQUENCY

When the independent interview variables were placed in a multiple regression analysis to determine the extent to which they might account for offense seriousness of the first 10 official juvenile contacts, contact by contact, there was little or no improvement over that obtained with the basic variables utilized in Table 12. In fact, the only statistically

significant effects came from variables which could be considered as proxy for SES, such as head of household employed, head of household's sex, and mother worked. Furthermore, these became significant at only the ninth contact.

The next analysis attempting to account for future offense seriousness among juveniles (comparable to Table 17) 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, however, is that at the juvenile level the interview variables added little to the variance accounted for beyond that which was obtained with the basic data (characteristics of offender and career data from Table 17) except for data 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 turn to a wide range of attempts to account for future adult seriousness utilizing the basic career data, the demographic data, and various interview variables. The results of these efforts are shown in Table 25 in some detail because so much attention has been placed on the problem of young adult offenders.

One notes that no more than 35% of the variance for the combined 1942 and 1949 cohorts at any contact level is accounted for by the basic variables. The reader may determine who is included and which variables are included in the results reported in each following segment of the table by reference to the detailed footnotes. In the next segment, for example, only those interviewed from the 1942 and 1949 Cohorts are included. Note that somewhat more of the variance of the interviewed cohort members is accounted for by the same variables as was accounted for in all three cohorts.

Only world view interview variables are included in the segment which follows. They account for 35% of future offense seriousness by the tenth contact, very little until the eighth contact. Attitude toward school was the most important.

When these variables were combined with the career variables, up to 45% of the variance was accounted for by the fourth contact, and after the third or fourth contact considerably more of the variance than was accounted for by the

TABLE 25. EFFECTS OF SELECTED VARIABLES ON FUTURE OFFENSE SERIOUSNESS OF FIRST TO TENTH OFFENSES; ADULTS

	<u>Standardized Estimate</u>									
	1	2	3	4	5	6	7	8	9	10
<u>Selected from Table 18¹</u>										
Type Seriousness, Present Offense	.028	.074	.007	.029	-.016	-.072*	-.039	.028	-.007	-.053
Adult Neighborhood	-.133*	-.134*	-.143*	-.132*	-.140*	-.113	-.110	-.118	-.092	-.100
Age at Contact	-.145*	-.211*	-.240*	-.270*	-.314*	-.375*	-.407*	-.400*	-.388*	-.380*
Severity of Prior Sanctions	-.101*	.149*	.205*	.242*	.244*	.249*	.266*	.251	.220	.115
Total Prior Seriousness	.406*	.307*	.297*	.226*	.211	.170	.142	.182	.223	.209
Number of Prior Sanctions	-.075	-.077	-.090	-.018	-.102	-.141	-.116	-.173	-.225	-.134
Adj. R ²	.333*	.354*	.346*	.352*	.344*	.327*	.348*	.289*	.242*	.245*
Mean Future Offense Seriousness	9.57	12.00	14.59	16.67	19.12	22.19	23.65	26.36	28.04	28.99
<u>Interviewed²</u>										
Adult Neighborhood	-.129*	-.181*	-.193*	-.214*	-.223	-.244	-.265	-.274	-.183	-.184
Age at Contact	-.108*	-.218*	-.246*	-.204*	-.242*	-.293*	-.371*	-.345*	-.199	-.144
Total Prior Seriousness	.570*	.540*	.524*	.294	.414*	.387	.375	.342	.366	.426
Adj. R ²	.422*	.434*	.444*	.488*	.454*	.432*	.453*	.360*	.363*	.333
Mean Future Offense Seriousness	9.08	12.32	14.70	16.92	19.15	22.69	25.05	29.09	30.60	31.11
<u>World View Variables³</u>										
Adj. R ²	.064*	.034	.011	-.006	-.016	.018	.104	.231*	.211	.346
<u>World View and Table 18 Variables⁴</u>										
Adj. R ²	.354*	.366*	.381*	.443*	.428*	.417*	.423*	.414*	.405*	.355*
<u>Associational Variables⁵</u>										
Adj. R ²	.067	.092	.045	.026	-.210	-.040	-.055	-.074	-.210	-.159
<u>Home Conditions⁶</u>										
Adj. R ²	.079*	.107*	.126*	.141*	.095	.198*	.211*	.456*	.392*	.388*
Head of House Reg. Employed	-.154*	-.231*	-.307*	-.338*	-.312	-.396*	-.468*	-.712*	-.734*	-.745*
<u>Transitional Variables⁷</u>										
Adj. R ²	.055*	.048	.036	.028	.028	.028	.020	.005	.172	.238
<u>Self Concept⁸</u>										
Adj. R ²	.118*	.128*	.155*	.166*	.221*	.190*	.260*	.200	.142	.121
Effect of Being Caught	-.239*	-.229*	-.368*	-.412*	-.483*	-.473*	-.510*	-.485*	-.475*	.392
<u>Education and Milieu Variables⁹</u>										
Adj. R ²	.159*	.169*	.177*	.179*	.139*	.107	.151	.085	.122	.154
<u>Education and Milieu Variables and T18 Variables</u>										
Adj. R ²	.369*	.372*	.376*	.434*	.386*	.386*	.416*	.267	.263	.219
<u>Combination of Juvenile and Adult Interview and T18 Variables¹⁰</u>										
Adj. R ²	.400*	.403*	.414*	.480*	.457*	.493*	.496*	.448*	.529*	.495*
<u>Proxy SES and High School Graduation and T18 Variables¹¹</u>										
Adj. R ²	.426*	.448*	.479*	.503*	.517*	.600*	.721*	.757*	.757*	.783*

Table 25 Continued

	Standardized Estimate									
	1	2	3	4	5	6	7	8	9	10
<u>Attitude, Home Conditions, School, and T18 Variables¹²</u>										
Adj. R ²	.546*	.543*	.542*	.604*	.616*	.639*	.747*	.734*	.756*	.720*
<u>Head of Household's Occupation (Craftsmen and Above/Others) and Selected T18 Variables, All Cohorts Combined¹³</u>										
Adj. R ²	.218*	.256*	.239*	.228*	.230*	.204*	.196*	.158*	.126*	.101*
<u>Head of Household's Occupation (Craftsmen and Above vs. Others) and Selected T18 Variables, Interviewed Only¹⁴</u>										
Adj. R ²	.380*	.396*	.408*	.444*	.446*	.479*	.514*	.455*	.481*	.388*
<u>Head of Household Regularly Employed and Selected T18 Variables, Interviewed Only¹⁵</u>										
Adj. R ²	.398*	.430*	.454*	.478*	.494*	.557*	.658*	.636*	.611*	.616*

* Significant at .01 level.

¹ The basic independent variables in Table 18 were those shown here as well as sex, race, and severity of present sanction, none of which produced sizeable effects. These figures are based on the combined 1942 and 1949 Cohorts.

² Effects of variables included in Table 18 on persons interviewed from 1942 and 1949 Cohorts. Those who were interviewed had essentially the same future careers at every contact point as those who were in the 1942 and 1949 Cohorts. One must remember that the 1942 and 1949 Cohorts had more years at risk than did the 1955 Cohort, thus these two combined cohorts would be inclined to have higher mean future seriousness scores than the larger combined group of all three cohorts which was dominated by the 1955 Cohort in Table 18. On the other hand, severity of offenses was increasing somewhat so that years at risk would be somewhat offset.

³ Attitude toward the police, perception of heavy police patrolling in neighborhood, attitude toward school, auto use as a juvenile, and desire to have been a different type of person as a juvenile. Of these, only attitude toward school had a significant impact at more than one contact level.

⁴ By the 4th contact, attitude toward the police becomes significant and continues to be significant: in fact, by the 8th contact it has a greater effect on future seriousness than do any other variables. Furthermore, by the 4th contact, attitude toward police has essentially the same effect as does age and total prior seriousness.

⁵ Juvenile friends in trouble with the police, adult friends in trouble with the police, and number of persons involved in the offense. None of these variables had significant effects on future offense seriousness.

⁶ Head of household regularly employed, head of household's sex, mother employed, number of siblings, and occupational level of head of household. Regular employment by the head of the household had an important effect at every contact level. Occupational level of the head of the household was next in importance, although usually significant at only the .05 level.

⁷ Age driver license, age moved away from home, marital status, age at marriage, age at first job, presently employed, and present income. None had consistent effects on future offense seriousness.

⁸ Effect of experience of being caught by police, delinquent self concept 6-17, self report score 6-17, and summary of positive influences. Effect of experience was increasingly deterrent from contact to contact.

⁹ Jobs during high school, education, graduation, and juvenile neighborhood. High school graduation and

juvenile neighborhood had significant effects through the 4th contact. None were significant when combined with basic variables included in Table 18.

¹⁰ Presently employed, income, marital status, age driver license, age moved away from home, age married, and age at first job. Although a considerable amount of the variance is accounted for at each contact, age at contact and prior total offense seriousness (T18 variables) still have the greatest effects on future seriousness.

¹¹ Head of household regularly employed, head of household's sex, and high school graduation. These, with T18 variables, accounted for more of the variance than did any other combination of variables thus far. Regular employment of the head of the household contributed more than did any other variable after the 8th contact level.

¹² Regular employment of head of household, head of household's sex, effect of being caught, summer employment during high school, high school graduation, and T18 variables. In this combination increasingly large percentages of the variance were accounted for by regularity of employment of the head of the household, a proxy variable for SES. Perhaps even more interesting is the decline in impact of being apprehended after the 5th contact.

¹³ Head of household's occupation, juvenile neighborhood, age at contact, total prior severity of sanctions, number of prior sanctions, and total prior offense seriousness. Occupational level had no significant effects.

¹⁴ These variables are identical to those included for all cohorts above but are only for persons interviewed from the 1942 and 1949 Cohorts. Although the accounted-for variance increased, it is attributed to greater effects for total prior offense seriousness, age of contact, and occupational level of the head of the household among those who were interviewed in comparison to the total number of persons who were included in all cohorts.

¹⁵ Regular employment of head of household, age at contact, and total prior offense seriousness at contact account for most of the variance with the SES proxy, regular employment by head of household becoming of increasing importance along with age at contact.

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 transitional variables had consistent effects on future offense seriousness.

Moving on to the self concept variables, we find only modest effects on future offense seriousness but respondents consistently reported that the effect of being caught was a deterrent. This result must be considered as only very suggestive because the effect of being caught is based on the first contact about which respondent chose to speak. This presents something of a problem in interpretation because the effect of being caught the first time mentioned was correlated only .154 with the effect of being caught the second time

mentioned; the effect of being caught the second time mentioned was correlated only .273 with the effect of being caught the third time mentioned, and the third and fourth effects only correlated .477.

The education and 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 data indicating age of transitional events and current status obtained in the interviews 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 78% at the tenth contact. What we are finding 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 other persons who were interviewed 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. However, as shown in the

last three segments of the table, use of head of household's occupation or employment regularity and the career variables failed to account for as much of the variance as did the wider selection of interview and career variables.

FURTHER CONSIDERATION OF COHORT DIFFERENCES

More often than not we have combined cohorts in this report, 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 a table which does show how cohort differences do exist and how some simple relationships do vary from cohort to cohort. In Table 26 one sees that mean juvenile offense seriousness varies by cohort and by contact number but that a clear pattern of trends and differences does not exist contact by contact. The same may be said for severity of sanctions. While the relationship of offense seriousness to severity of sanctions is generally positive only for the 1955 Cohort, it is statistically significant at every contact. In a sense, this table tells us that our efforts to account for offense seriousness and severity of sanctions, contact by contact or from any given point to the future, will be difficult because the variables fluctuate and even the most basic variables have inconsistent relationships with each other.

TABLE 26. MEAN OFFENSE SERIOUSNESS, MEAN SEVERITY OF SANCTIONS, AND RELATIONSHIP OF SERIOUSNESS AND SANCTIONS, FIRST THROUGH TENTH CONTACTS, BY COHORTS, FOR JUVENILE AND ADULT PERIODS

<u>Juvenile Period</u>										
	1	2	3	4	5	6	7	8	9	10
<u>1942 Cohort</u>										
Mean Seriousness	2.87	2.97	2.85	2.53	2.95	3.00	2.97	2.62	2.45	2.56
Mean Sanctions	.45	.92	.38	.91	1.82	2.57	3.54	.15	.23	2.61
R	.27*	.13	.17	.27	.12	.55*	.54*	.19	.31	.44
<u>1949 Cohort</u>										
Mean Seriousness	2.74	2.85	2.80	2.94	2.95	2.66	2.67	2.79	2.82	3.53
Mean Sanctions	.22	.54	.71	.91	1.44	1.04	.42	.53	1.70	1.71
R	.12*	.11	.19*	.09	.18	.21	.13	-.07	.32*	.23
<u>1955 Cohort</u>										
Mean Seriousness	2.82	2.83	3.03	3.04	2.96	2.85	3.14	3.19	3.19	3.18
Mean Sanctions	.63	.94	1.28	2.05	2.27	1.87	3.82	2.78	3.02	1.88
R	.21*	.16*	.24*	.35*	.22*	.23*	.37*	.32*	.28*	.29*
<u>Adult Period</u>										
<u>1942 Cohort</u>										
Mean Seriousness	2.85	2.89	2.74	2.63	2.82	2.83	2.78	2.71	2.74	2.43
Mean Sanctions	.40	.65	.72	.82	1.35	1.70	1.67	.92	1.01	1.07
R	.23*	.12	.09	.17	.19	.37*	.42*	.23	.20	.31*
<u>1949 Cohort</u>										
Mean Seriousness	2.72	2.75	2.72	2.76	2.77	2.71	2.73	2.72	2.93	3.11
Mean Sanctions	.23	.51	.67	.75	.93	1.32	.97	.82	1.34	1.18
R	.14*	.12*	.23*	.11	.17*	.22*	.17	.15	.27*	.22
<u>1955 Cohort</u>										
Mean Seriousness	2.84	2.89	2.99	3.14	3.01	3.00	3.22	3.16	3.30	3.31
Mean Sanctions	.85	1.06	1.35	2.10	2.34	2.01	3.09	2.73	2.84	1.86
R	.20*	.17*	.22*	.35*	.23*	.21*	.31*	.33*	.19*	.26*
<u>1942 and 1949 Cohorts Combined</u>										
Mean Seriousness	2.71	2.72	2.68	2.68	2.75	2.71	2.82	2.70	2.79	2.74
Mean Sanctions	.73	.94	1.03	1.13	1.51	1.91	1.53	1.33	.83	2.56
R	.13*	.18*	.23*	.13	.25*	.27*	.39*	.29*	.20	.41*

* = Significant at .01 level or greater.

Turning to the adult period, we find essentially the same problem, although in this case we find that sanctions for adults in the 1955 Cohort are definitely greater on the average than for the 1942 and 1949 Cohorts. Again, it is only for the 1955 Cohort that the relationship between offense seriousness and severity of sanctions is significant at every contact level.

In the last section of Table 26 the 1942 and 1949 Cohorts are combined. This will be useful for comparison with the means for adults who were interviewed in Table 27. Here we find juvenile vs. adult differences in the variables and in the relationship of offense seriousness and severity of sanctions to each other within each period as in Table 26. With these basic data in mind it is not surprising that the multiple regression analyses have 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 adequately explain or predict the behavior of a following cohort.

TABLE 27. MEAN OFFENSE SERIOUSNESS, MEAN SEVERITY OF SANCTIONS, AND RELATIONSHIP OF SERIOUSNESS AND SANCTIONS, FIRST THROUGH TENTH CONTACTS, BY COMBINED COHORTS, FOR JUVENILE, ADULT, AND COMBINED PERIODS FOR PERSONS INTERVIEWED

	1	2	3	4	5	6	7	8	9	10
<u>Juvenile Period</u>										
Mean Seriousness	2.90	2.98	2.75	2.88	2.92	2.81	2.68	2.57	2.94	2.92
Mean Sanctions	.42	.83	.77	1.49	1.48	1.11	.59	.62	.81	1.65
R	.18*	.10	.14	.13	.26	.41*	.13*	-.15	.09	.33
<u>Adult Period</u>										
Mean Seriousness	2.70	2.72	2.58	2.74	2.59	2.69	2.80	2.53	2.88	2.93
Mean Sanctions	.64	.87	1.16	.86	1.09	3.15	2.29	2.95	.94	2.83
R	.15*	.19*	.24*	.14	.28	.39*	.44*	.52*	.27	.38
<u>Combined Periods</u>										
Mean Seriousness	2.88	2.81	2.65	2.70	2.77	2.76	2.71	2.52	2.83	2.64
Mean Sanctions	.36	.36	.68	.87	.93	1.82	.86	.99	1.25	1.15
R	.17*	.11	.16	.11	.22*	.25*	.24*	.16	.10*	.31*

* = Significant at .01 level or greater.

Chapter 6. Simplifying the Research Strategy

CONCENTRATING ON COHORT MEMBERS WITH NON-TRAFFIC CONTACTS, AGES 13-22

At the very beginning of this report we stated our concern with the 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 have 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. Nor have we been able to make definitive statements about the kinds of people who are most likely to benefit from less severe vs. more severe sanctions. On the other hand, it appears that demographic and offender characteristics better account 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 are 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 severe sanctions are not deterrent, we have not produced simple tables with specific information about the consequences of dealing with more serious offenses or offenders in one way rather than another at various ages. This problem is now to be addressed.

Without digressing too far, 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/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 must, with some reservations, use felony as an operational definition of seriousness.

Let us now 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 28. 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.

It should be noted that there were 13 cohort members who were institutionalized for offenses for a sufficiently long period of time (detention or juvenile institutionalization is usually for a short period of time) that the institutionalization in itself could have prevented them from having police contacts during the next two-year period, thus placing them in a less continuous type. For example, the institutionalization of five cohort members might well have prevented them from being Type 5

TABLE 28. 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					<u>153</u>
2	X	X				75
3	X	X	X			83
4	X	X	X	X		57
5	X	X	X	X	X	85
6	X	X	X		X	36
7	X	X		X	X	20
8	X	X			X	13
9	X	X		X		24
10	X		X	X	X	7
11	X		X	X		15
12	X		X		X	8
13	X		X			38
14	X			X	X	15
15	X			X		24
16	X				X	11
17		X				<u>234</u>
18		X	X			93
19		X	X	X		40
20		X	X	X	X	51
21		X	X		X	28
22		X		X	X	11
23		X		X		41
24		X			X	28
25			X			<u>201</u>
26			X	X		50
27			X	X	X	22
28			X		X	32
29				X		<u>151</u>
30				X	X	45
31					X	<u>107</u>
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.

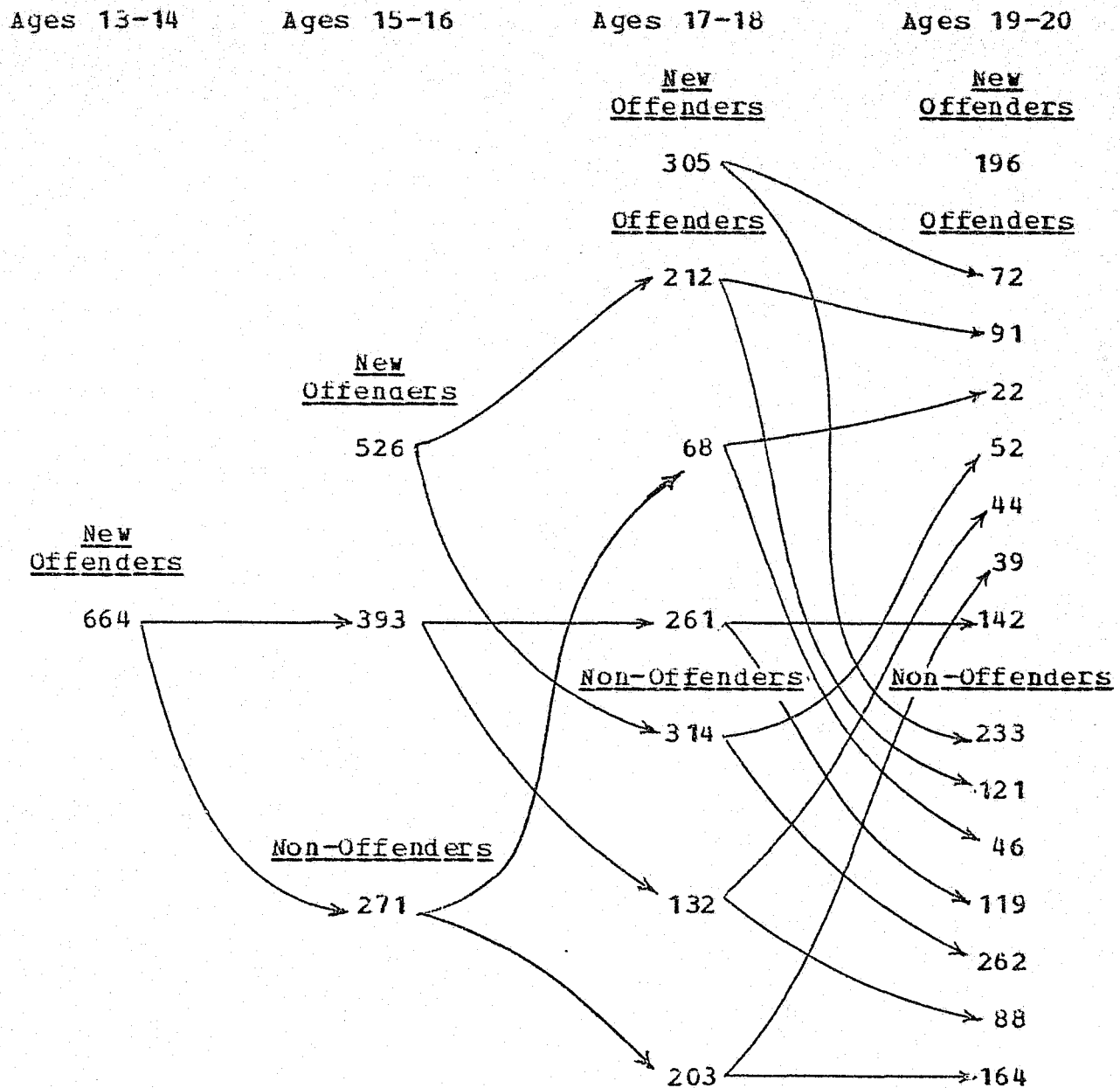
instead of Type 4, as they were in Table 28. This would still have produced very little change in the table. Although we have stated that careers tend to peak in terms of actual number of

police contacts at the ages of 16 and 17, the fact that the larger 1955 Cohort had age 16 as its peak year resulted in the age period 15-16 becoming that with the largest number of non-traffic contacts.

PATTERNS OF MISBEHAVIOR AND OFFICIAL RESPONSES

Table 28 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 5. 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 fact, it is this dynamic aspect of delinquency that makes the problem so complex, so difficult, and so challenging--if not so disconcerting to persons on the firing line. In the last stage we would have included 107 persons who had not previously (since age 12) had a non-traffic contact and would have lost 352 persons who had contacts at the ages of 19-20 but did not have a contact during the ages 21-22.¹⁸

DIAGRAM 5. CONTINUITY AND DISCONTINUITY FOR PERSONS WITH
NON-TRAFFIC POLICE CONTACTS, AGES 13-20, FOR
COMBINED COHORTS



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 for the most serious and/or most severely sanctioned offense during that two-year age period.

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 relatively little difficulty.

¹⁸ 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 29 enables us to retain the age perspective but focus our attention even more carefully on serious offenders (the most serious and/or sanctioned offense by each offender during each two-year period). Note that with the exception of one two-year period, ages 17-18, 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 18 but these people, 264 ages 15-16 and then 230 at ages 17-18, comprised 28.7% and 27.2% of those with non-traffic contacts but only 6.5% and 5.6% of the combined cohorts, i.e., 6.5% of the combined cohorts had referred felony-level police contacts at ages 15 or 16 and 5.6% at ages 17 or 18. Put even more simply, about 3% of the cohort had a referred felony-level contact each year at ages 15 through 18. 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 with 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 29. 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	422	63.5	480	52.2	411	48.6	369	56.1	339	65.3
Misdemeanor or Other Referral of Less Than a Felony Offense										
Dismissed	87	13.1	137	14.9	144	17.0	58	8.8	40	7.7
Fined	1	.2	11	1.2	43	5.1	51	7.8	51	9.8
Probation	4	.6	20	2.2	10	1.2				
Institutionalized			7	.8	8	.9	14	2.1	6	1.2
Subtotal	92	13.9	175	19.1	205	24.2	123	18.7	97	18.7
Felony Referred										
Dismissed	82	12.3	138	15.0	126	14.9	84	12.8	51	9.8
Fined	6	.9	17	1.8	38	4.5	35	5.3	14	2.7
Probation	49	7.4	77	8.4	42	5.0	23	3.5	6	1.2
Institutionalized	13	2.0	32	3.5	24	2.8	24	3.6	12	2.3
Subtotal	150	22.6	264	28.7	230	27.2	166	25.2	83	16.0
TOTAL	664	100.0	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 most 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.¹⁹ 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.

Now let us go a step further and examine the status of offenders at one two-year age period and at each following two-year age period, as shown in Table 30. Note that the Ns at the bottom of each column correspond to the Ns for ages 13-14 in Table 29, with the exception of the categories omitted because

¹⁹ 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?

TABLE 30. 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	Other	Fel.	Fel.	Fel.	Not	Other	Fel.	Fel.	Fel.		
	Ref.	Ref.	Dis.	Prob.	Inst.	Ref.	Ref.	Dis.	Prob.	Inst.		
	Dis.	Dis.				Dis.	Dis.					
Statuses, Later Age Periods												
No Contact	49.8	33.3	29.3	10.2	---	55.9	43.7	41.5	40.8	7.7		
Contact Not Referred	24.9	24.1	15.9	10.2	7.7	20.9	23.0	18.3	8.2	15.4		
Misdemeanor or Other Referral of Less than a Felony Offense												
Dismissed	6.9	20.7	6.1	12.2	23.1	7.6	13.8	7.3	8.2	7.7		
Fined	.9	---	---	---	---	2.4	2.3	4.9	4.1	---		
Probation	1.4	2.3	2.4	8.2	---	.5	---	---	---	---		
Institutionalized	.2	1.1	---	2.0	---	.9	1.1	---	---	---		
Subtotal	9.4	24.1	8.5	22.4	23.1	11.4	17.2	12.2	12.3	7.7		
Felony Referred												
	STATUS: AGES 13-14					STATUS: AGES 13-14						
Dismissed	AGES 15-16 {	7.6	8.0	19.5	22.4	30.8	17-18 {	5.0	8.0	7.3	16.3	38.5
Fined		1.9	2.3	2.4	2.0	---		2.6	2.3	4.9	4.1	7.7
Probation		4.5	5.7	18.3	22.4	---		2.8	4.6	7.3	10.2	7.7
Institutionalized		1.9	2.3	6.1	10.2	38.5		1.4	1.1	8.5	8.2	15.4
Subtotal	15.9	18.8	46.3	57.0	69.3	11.8	16.0	28.0	38.8	69.3		
N	422	87	82	49	13	422	87	82	49	13		

TABLE 30, Continued

	Status, Ages 13-14 X 19-20					Status, Ages 13-14 X 21-22						
	Cont.	Misd.	Ref.	Ref.	Ref.	Cont.	Misd.	Ref.	Ref.	Ref.		
	Not	Other	Fel.	Fel.	Fel.	Not	Other	Fel.	Fel.	Fel.		
	Ref.	Ref.	Dis.	Prob.	Inst.	Ref.	Ref.	Dis.	Prob.	Inst.		
Statuses, Later Age Periods												
No Contact	69.4	59.8	56.1	38.8	23.1	73.9	73.6	63.4	57.1	53.8		
Contact Not Referred	18.0	11.5	14.6	14.3	15.4	16.1	12.6	15.9	16.3	23.1		
Misdemeanor or Other Referral Less Than Felony												
Dismissed	2.1	8.0	4.9	4.1	7.7	1.9	2.3	2.4	4.1	7.7		
Fined	1.4	4.6	3.6	8.2	---	2.6	5.7	3.7	10.2	---		
Probation	---	5.7	---	---	---	---	---	---	---	---		
Institutionalized	.5	---	3.7	2.0	---	.7	1.1	---	---	---		
Subtotal	4.0	18.3	12.2	14.3	7.7	5.2	9.1	6.1	14.3	7.7		
Felony Referred												
	STATUS: AGES 13-14					STATUS: AGES 13-14						
Dismissed	AGES 19-20 {	4.3	6.9	3.7	10.2	30.8	{	3.3	1.1	8.5	6.1	15.4
Fined		2.1	3.4	4.9	8.2	---		.2	1.1	3.7	6.1	---
Probation		.9	2.3	2.4	8.2	---		.2	1.1	1.2	---	---
Institutionalized		1.2	2.3	6.1	6.1	23.1		.9	1.1	1.2	---	---
Subtotal		8.5	14.9	17.1	32.7	53.9		4.6	4.4	14.6	12.2	15.4
N		422	87	82	49	13		422	87	82	49	13

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.

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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 422 who had unreferred non-traffic contacts at the ages of 13-14, 49.8% had no non-traffic police contacts at ages 15-16 but this had increased to 73.9% 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 slow 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 6.9% had more than a year beyond date of offense and conviction. Thus, in a few cases, the actual imposition of a sanction would be in a different two-year period so that desistance based on the positive effects of incarceration, if they existed, would be found in the second or later following period. The findings suggest, as we shall see, 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 422 who had

referred non-traffic contacts to those 13 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. Although 24.9% of these 422 had an unreferred non-traffic contact at the ages of 15-16, this had declined to 16.1% by ages 21-22. Those who had been institutionalized for a felony had an increase in their percent with an unreferred contact from age period to age period. What happened to each group at age 13-14 in terms of their future proportion with misdemeanors is not as easy to describe. Only one thing may be said for sure and that is that the 87 persons who, at the ages of 13-14, had misdemeanor or lesser offenses dismissed were most similar by the age period 21-22 to persons who had unreferred contacts at the ages of 13-14. Would these cohort members have been even more like those who had unreferred contacts if they, too, had not been referred?

Most important, however, is a careful examination of the three groups of persons with referred felonies. To make it simple, note 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 had been dealt with by institutionalization. This was evident at the following age periods of 15-16, 17-18, and 19-20. It should also be noted that as one proceeds from having a non-referred contact to a felony contact culminating in institutionalization the percent of those who have had at least one felony referral increases at any given following ages: 15-16, 17-18, or 19-20. In other words, institutionalization for a felony has as its consequence another felony rather than desistance. As high as 70% 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 indicate that institutionalization for felony-level police contacts has the anticipated effect of deterrence; it indicates the exact opposite instead. Rather than having produced evidence of which kinds of people are most effectively sanctioned in what manner, we have produced additional evidence of the ineffectiveness of sanctions at an early age.

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 turn to Table 31. The trends found here are similar to those found in Table 30 but differ in several respects. Those who have had non-traffic police contacts at the age of 15-16, whether they be first or whatever police contacts have a more rapid shift to no contact status than did those who had earlier appearances. Some of these

TABLE 31. STATUS OF COMBINED COHORT MEMBERS ACCORDING TO DISPOSITION OF THEIR MOST SERIOUS NON-TRAFFIC OFFENSE AT THE AGE OF 15-16 AND TWO-YEAR AGE PERIODS FOLLOWING¹

Statuses, Later Age Periods	Status, Ages 15-16 X 17-18					Status, Ages 15-16 X 19-20					Status, Ages 15-16 X 21-22				
	Cont.	Misd.	Ref.	Ref.	Ref.	Cont.	Misd.	Ref.	Ref.	Ref.	Cont.	Misd.	Ref.	Ref.	Ref.
	Not Ref.	Other Ref.	Fel. Dis.	Fel. Dis.	Fel. Inst.	Not Ref.	Other Ref.	Fel. Dis.	Fel. Prop.	Fel. Inst.	Not Ref.	Other Ref.	Fel. Dis.	Fel. Prob.	Fel. Inst.
No Contact	57.3	48.9	43.5	20.8	18.8	72.7	68.5	59.4	44.2	31.3	76.0	72.3	64.5	57.1	53.1
Contact Not Referred	21.7	19.7	20.3	20.8	6.3	14.8	17.5	15.9	13.0	15.6	15.2	17.5	20.3	16.9	12.5
Misdemeanor or Other Referral Less Than Felony															
Dismissed	7.1	15.3	9.4	6.5	9.4	2.3	5.8	4.3	2.6	9.3	1.7	2.9	3.6	2.6	9.4
Fined	1.5	3.6	1.4	10.4	6.3	2.1	5.8	3.6	6.5	---	1.7	5.1	2.2	10.4	9.4
Probation	.6	.7	.7	1.3	---	---	---	---	---	---	---	---	---	---	---
Institutionalized	.6	.7	.7	---	3.1	.4	---	1.4	2.6	3.1	.4	---	---	2.5	---
Subtotal	19.3	20.3	12.2	18.2	18.8	4.8	11.6	9.3	11.7	12.4	3.8	8.0	5.8	15.5	18.8
Felony Referred															
	AGES 15-16					AGES 15-16					AGES 15-16				
Dismissed	6.5	5.1	15.9	13.3	15.6	4.2	3.6	8.0	10.4	12.5	2.7	---	6.5	5.2	9.4
Fined	2.9	1.5	2.9	6.5	6.3	1.5	1.5	1.4	11.7	---	1.0	---	.7	2.6	3.1
Probation	1.7	2.9	4.3	15.6	3.1	1.7	1.5	1.4	1.3	6.3	.6	.7	.7	1.3	---
Institutionalized	.2	1.5	.7	5.2	31.3	.4	.7	4.3	7.8	21.9	.6	1.5	1.4	1.3	3.1
Subtotal	11.3	11.0	23.8	40.3	56.3	7.8	7.3	15.1	31.2	40.7	4.9	2.2	9.3	10.4	15.6
N	480	137	138	77	32	480	137	138	77	32	480	137	138	77	32

¹ Categories of dispositions other than dismissal are eliminated for misdemeanor or lesser offenses and fines for felony-level offenses for the age 15-16 category because there were fewer than 10 persons in each.

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.

Moving over and down to those with referred felonies during the age periods 15-16 and then 17-18, 19-20, and 21-22, we note that declines in the percent with referred felonies are somewhat greater 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

Moving on to Table 32, the data are presented with more categories (7) in the first two-year age period for ages 17-18 and 19-20 and, of course, fewer following age periods. Over 300 cohort members are added but 649 desist for at least two years. The rise in percent of those with no non-traffic contacts in the age groups 19-20 and 21-22 is apparent, as is the relatively lower percent of those with further referred felonies among those from each group with earlier referred felonies (17-18). Although each of the preceding tables has shown a tendency for earlier institutionalization to produce comparatively high felony rates at the next period, the proportion with felony referrals is lower

TABLE 32. STATUS OF COMBINED COHORT MEMBERS ACCORDING TO DISPOSITION OF THEIR MOST SERIOUS NON-TRAFFIC OFFENSE AT THE AGE OF 17-18 AND 19-20 AND TWO-YEAR AGE PERIODS FOLLOWING¹

<u>Status, Ages 17-18 & 19-20</u>							
<u>Statuses, Later Age Periods</u>	Cont.	Misd.	Misd.	Ref.	Ref.	Ref.	Ref.
	Not Ref.	Other Dis.	Other Fine	Fel. Dis.	Fel. Fine	Fel. Prob.	Fel. Inst.
No Contact	71.0	59.0	55.8	54.0	47.4	35.7	33.3
Contact Not Referred	14.8	19.4	14.0	15.1	21.1	16.7	8.3
Misdemeanor or Other Referral Less Than Felony							
Dismissed	3.9	7.0	4.7	4.0	---	7.1	8.3
Fined	2.7	4.9	7.0	6.3	---	2.4	12.5
Probation	---	---	---	.8	---	---	---
Institutionalized	1.2	2.1	2.3	.8	2.6	---	---
Subtotal	7.8	14.0	14.0	11.9	2.6	9.5	20.8
Felony Referred	STATUS AGES 17-18						
Dismissed	3.7	4.2	4.7	6.3	15.8	7.1	16.7
Fined	1.9	2.1	11.6	2.4	2.6	11.9	---
Probation	.7	.7	---	5.6	5.3	2.4	---
Institutionalized	---	.7	---	4.8	5.3	16.7	20.8
Subtotal	6.3	7.3	16.3	19.1	29.0	38.1	37.5
N	411	144	43	126	38	42	24
	48.6%	17.0%	5.1%	14.9%	4.5%	5.0%	2.8%

TABLE 32, Continued

		Status, Ages 17-18 & 21-22					
		Cont. Not Ref.	Misd. Other Ref. Dis.	Misd. Other Fine	Ref. Fel. Dis.	Ref. Fel. Fine	Ref. Fel. Prob. Inst.
Statuses, Later Age Periods							
No Contact		75.2	70.1	62.8	58.7	57.9	50.0 62.5
Contact Not Referred		15.6	17.4	18.6	22.2	21.1	19.0 12.5
Misdemeanor or Other Referral Less Than Felony							
Dismissed		1.9	2.8	4.8	2.2	2.6	3.4 —
Fined		3.2	5.6	4.8	2.4	5.3	9.5 8.3
Probation		—	—	—	—	—	—
Institutionalized		.2	.7	2.3	—	2.6	—
Subtotal		5.3	9.1	11.9	4.6	10.5	12.9 8.3
Felony Referred							
		STATUS AGES 17-18					
Dismissed		2.7	2.3	—	8.7	2.6	9.5 12.5
Fined		.2	.7	2.3	1.6	2.6	4.8 —
Probation	AGES 21-22	.5	—	—	.8	—	4.8 —
Institutionalized		.5	—	4.8	2.4	5.3	— 4.2
Subtotal		3.9	3.5	7.1	13.5	10.5	19.1 16.7
N		411	144	43	126	38	42 24
		48.6%	17.0%	5.1%	14.9%	4.5%	5.0% 2.8%

TABLE 32, Continued

Status, Ages 19-20 X 21-22

<u>Statuses, Later Age Periods</u>	Cont.	Misd.	Misd.	Ref.	Ref.	Ref.	Ref.
	Not Ref.	Other Ref. Dis.	Other Fine	Fel. Dis.	Fel. Fine	Fel. Prob.	Fel. Inst.
No Contact	65.9	62.1	60.8	53.6	48.6	52.2	54.2
Contact Not Referred	24.1	20.7	15.7	17.9	14.3	21.7	12.5
Misdemeanor or Other Referral Less Than Felony							
Dismissed	2.4	1.7	2.0	7.1	11.4	---	---
Fined	3.5	5.2	13.7	4.8	5.7	---	8.3
Probation	---	---	---	---	---	---	---
Institutionalized	.7	---	2.0	1.2	---	---	---
Subtotal	6.6	6.9	17.7	12.6	17.1	---	8.3
Felony Referred	STATUS AGES 19-20						
Dismissed	1.9	8.6	3.9	8.3	5.7	13.0	8.3
Fined	.5	1.7	2.0	2.4	5.7	8.7	---
Probation	.3	---	---	1.2	2.9	---	4.2
Institutionalized	.5	---	---	3.6	5.7	4.3	12.5
Subtotal	3.2	10.3	5.9	15.3	20.0	26.0	25.0
N	369	58	51	84	35	23	24

¹ Categories of dispositions other than dismissal are eliminated for misdemeanor or lesser offenses and fines for felony-level offenses for the 17-18 and 19-20 age categories because there were fewer than 10 persons in each.

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 are having their first or second non-traffic contacts. This table also indicates that institutionalization of persons with felony contacts at later ages does not seem to produce proportionately as many persons with felony contacts at next later ages as it does for persons institutionalized at earlier ages. There is, of course, the element of change in strength of reaction with age, but certainly this is not a new idea because burn-out has been discussed as it relates to many other types of traumatic careers. 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

Now let us turn to further discussion of these same tables, returning to Table 30. Here we can 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 70% have another referred felony within the next two years and 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?

Any number of tables may be constructed by rearranging the data so that the no contact in following years lines are presented together or the felony referred lines are presented together and in each case the high percent of no future contacts is related to police contacts not being referred and the high percent of future referred felonies is associated with prior referred felonies.

Another seemingly simple but complex table (Table 33) must now be presented. In this table we commence with the first career or experience type shown in Table 28 and show its

TABLE 33. DISTRIBUTION OF CONTACT SERIOUSNESS AND SEVERITY OF SANCTION TYPE BY AGE PERIODS WITHIN POLICE CONTACT EXPERIENCE TYPES FOR COMBINED COHORTS

TYPEYRS	SANCTION TYPE										PERCENT		
	1	2/6	3/7	4/8	5/9	10	11	12	13	Total	1	2-9	10-13
1-13 14	122	14				14	2	1		153	79.7	9.2	11.1
2-13 14	47	13	1			8		6		75	62.7	18.7	18.7
15 16	40	12	1	2	1	11	2	4	2	75	53.3	21.3	25.3
3-13 14	47	13				13		9	1	83	56.6	15.7	27.7
15 16	40	9	2	4		11	4	11	2	83	48.2	18.1	33.7
17 18	37	15	2	1		14	8	3	3	83	44.6	21.7	33.7
4-13 14	25	9		1		10		6	6	57	43.9	17.5	38.6
15 16	14	10	1			10		12	10	57	24.6	19.3	56.1
17 18	21	10	3			8	1	5	9	57	36.8	22.8	40.4
19 20	19	7	7		2	5	6	2	9	57	33.3	28.1	38.6
5-13 14	37	13		1		15	3	12	4	85	43.5	16.5	40.0
15 16	16	14		4	1	20	5	17	8	85	18.8	22.3	58.6
17 18	17	13	8	1	3	18	6	14	5	85	20.0	29.4	50.6
19 20	22	8	7		3	21	7	8	9	85	25.9	21.1	52.9
21 22	35	6	14		3	14	5	3	5	85	41.1	27.1	31.6
6-13 14	21	6				7		1	1	36	58.3	16.7	25.0
15 16	13	11				5	1	4	2	36	36.1	30.6	33.3
17 18	13	8	1		2	3	3	4	2	36	36.1	30.6	33.3
21 22	25	3	3			4	1			36	69.4	16.7	13.9
7-13 14	14	1				2		3		20	70.0	5.0	25.0
15 16	4	2		3	1	3	2	4	1	20	20.0	30.0	50.0
19 20	11	1	1			4	3			20	55.0	10.0	35.0
21 22	11	2	3			2	1		1	20	55.0	25.0	20.0
8-13 14	7					2	1	2	1	13	53.8	—	46.2
15 16	8			1		3			1	13	61.5	7.7	30.6
21 22	10	1	1			1				13	76.9	15.4	7.7
9-13 14	13	3		1		2		5		24	54.2	16.7	29.2
15 16	10	4		1		8			1	24	41.7	20.8	37.5
19 20	14	2	1			2		3	2	24	58.3	12.5	29.2
10-13 14	6							1		7	85.7	—	14.3
17 18	3	2				2				7	42.9	28.6	28.6
19 20	3		1			1	2			7	42.9	14.3	42.9
21 22	1	1	1		1	3				7	14.3	42.9	42.9
11-13 14	11	2				2				15	73.3	13.3	13.3
17 18	9	1	1			1	1	2		15	60.0	13.3	26.7
19 20	9	3	1			1	1			15	60.0	26.7	13.3
12-13 14	6	2								8	75.0	25.0	—
17 18	5	2				1				8	62.5	25.0	12.5
21 22	4		3			1				8	50.0	37.5	12.5
13-13 14	32	4				2				38	84.2	10.5	5.3
17 18	25	5	3			1	1	2	1	38	65.8	21.1	13.2
14-13 14	9	1				3		2		15	60.0	6.7	33.3
19 20	13				2					15	86.7	13.3	—
21 22	11	1	1			1	1			15	73.3	13.3	13.3
15-13 14	14	6		1		2		1		24	58.3	29.2	12.5
19 20	19	1	1			2	1			24	79.2	8.3	12.5
16-13 14	10					1				11	90.9	—	9.1
21 22	9	1				1				11	81.8	9.1	9.1
17-15 16	154	40	1	2		29	2	6		234	65.8	16.4	15.8
18-15 16	56	11	2	2		14		7	1	93	60.2	16.1	23.7
17 18	50	13	7	1	1	14	4	2	1	93	53.8	23.7	22.6
19-15 16	23	5	2	1	1	4		3	1	40	57.5	22.5	20.0
17 18	14	13	1	1		5	3	3		40	35.0	37.5	27.5
19 20	21	5	6		1	5	1		1	40	52.5	30.0	17.5
20-15 16	27	7	1		1	8		6	1	51	52.9	17.6	29.4
17 18	18	7	3	2		13	6	1	1	51	35.3	23.5	41.1
19 20	21	6	8		4	7	2	2	1	51	41.1	35.3	23.5
21 22	26	5	8		1	6	1		2	51	54.9	27.5	17.6

TABLE 33. Continued

TYPE YRS	SANCTION TYPE										PERCENT		
	1	2/6	3/7	4/8	5/9	10	11	12	13	Total	1	2-9	10-13
21-15 16	16	3			1	6		1	1	28	57.1	14.3	28.6
17 18	18	4	1			4		1		28	64.3	17.9	17.9
2122	21	2	2			1		2		28	75.0	14.3	10.7
22-15 16	9				1	1				11	81.8	9.1	9.1
1920	8	1				1	1			11	72.7	9.1	18.2
2122	6	1				1	1	1	1	11	54.5	9.1	36.4
23-15 16	28	8	1			2	1	1		41	68.3	22.0	9.8
1920	27	1	4			7		2		41	65.9	12.2	22.0
24-15 16	22	1				3		1	1	28	78.6	3.6	17.9
2122	18	3	1			5	1			28	64.3	14.3	21.4
26-17 18	26	10	3		1	6	2	2		50	52.0	28.0	20.0
1920	28	6	4			6	5	1		50	56.0	20.0	24.0
27-17 18	11	3		1		5	1		1	22	50.0	18.2	31.8
1920	12	3	2			2	1	1	1	22	54.5	22.7	22.7
2122	15	1	3			1	1		1	22	68.2	18.2	13.6
28-17 18	17	4	3	1		6		1		32	53.1	25.0	21.9
2122	23	2	1			4	1		1	32	71.9	9.4	18.8
29-1920	106	10	8		2	17	3	4	1	151	70.2	13.2	16.6
30-1920	36	3	1			3	2			45	80.0	8.9	11.1
2122	34	5	4			1	1			45	75.6	20.0	4.4
31-2122	89	6	6		1	5				107	83.2	12.1	4.7

distribution according to the 13 contact seriousness and severity of sanction types on which Tables 30 through 32 were based. In order to simplify the table we have collapsed types 2 and 6, 3 and 7, etc., and then collapsed all 13 types into 1, 2-9, and 10-13 for percentaging. It is possible to see, for example, how the cohort members in a career experience Type 3 change their contact seriousness and severity of sanction type from ages 13-14 to ages 15-16 to ages 17-18. This could not be done in Tables 30 through 32 because those in each age period were all cohort members of that age with contacts and not just those who had a unique experience type such as contacts during the first three age periods.

The computer runs which produced this table also enable us to examine each experience type in order to determine if, age period by age period, the number of persons in the most serious offense and sanctions categories has increased. We have dealt with this in Tables 30-32 but each table includes a different number of persons for progression from age period to age period. Here we have controlled for experience type so that as we move from one age to another we are dealing with the same people. Let us look at the table carefully to see what it tells us that might be useful to people in the justice system.

Our attention should first be focused on Types 1 and 2. Note that without exception during each two-year age period more than 50% of the cohort members in these types had non-referred contacts. Only 3 out of 17 in Type 1 with referred felonies

received any kind of sanction but none continued to have contacts after the age of 14. Obviously, desistance is the pattern no matter what happens. Only two of the at least 19 persons with referred felonies in Type 2 were institutionalized but none continued to behave in such a way as to have a referred police contact after the age of 16.

Types 3, 4, and 5 have sizeable proportions of persons with referred felonies. Those in Type 3 desisted after 18, while those in Types 4 and 5 continued longer. What happened to them, case by case, that might account for their continuity and discontinuity? What happened to the cohort members in each of the other types that resulted in discontinuity or complete desistance?

Let us now consider the cohort members who were included in Tables 28 through 33 in summary fashion, taking into consideration the possibility that institutionalization for any offense may have played a part in the career pattern of cohort members. 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 18 and 22 for other than traffic offenses. Among these were 119 who were institutionalized as juveniles or young adults for one or more of these offenses. In addition, there were 13 who were institutionalized for only traffic offenses (and 7 who received sentences of time in institutions for both traffic and non-traffic offenses).

A check of the record of each of the 132 persons (all cohorts combined) who had been institutionalized revealed that there were only 13 who had been removed from the community long enough to have been unable to have contacts during the next two-year period(s). In one case local authorities were notified that, as an inmate, the cohort member had been making knives in the prison shop. Two of the 13 persons' records were unclear as to the length of sentence. One could have had contacts in each of the three succeeding two-year periods, depending on length of time served. It is improbable that the other was institutionalized beyond the age of 20 (a year or less), which would not have precluded contacts in the next period.

If the other 119 had no contact it could have been because institutionalization was effective. Thus, failure to have additional contacts because they had been removed from the 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 28). These persons had contacts in each of the five two-year periods. Thirty-seven of these Type 5 people received sentences of institutionalization (five of them also received time for traffic offenses). In addition, three received time in institutions for traffic offenses only. None of these persons was removed from the community long enough to preclude the possibility of contacts in the next age period and

institutionalization appeared to have little deterrent effect on them.

Of the total of 40 Type 5 persons institutionalized, six received their only institutionalization(s) at ages 21 and/or 22. Whether or not they were deterred in the following age period is not apparent from this analysis. The remaining 34 were apparently undeterred since they had police contacts at every age period.

There are 15 of the career continuity types which contain persons who had contacts in one or more two-year periods and then no contacts in the remaining period(s). Those who discontinued their delinquent and criminal behavior during periods of institutionalization or following institutionalization were only a small percent of these 1,279 persons who desisted after age 14, 16, 18, or 20, i.e., sometime during ages 13 through 22. These types comprise 1,279 (71.1%) of the 1,798 persons with non-traffic contacts. Only 51 of these 1,279 persons in what might be categorized as "terminal career" categories had been institutionalized, which is only 4.0% of those whose careers ceased before age 21. Even if it could be assumed that institutional programs should receive the credit for desistance, this would only be a small percent of the total number who desisted for whatever reason.

In the group of persons whose institutionalization might have precluded future contacts are three persons who, if they had been in the community, could have had contacts during the two-

year period of their sentence but who did not have contacts in any succeeding period(s). There were four persons who, if they had been at liberty, could have moved into category 5, contacts in each two-year period. Of the 132 persons who were institutionalized at least once between the ages of 13 through 22, there were few whose discontinuity during a two-year period could be accounted for by incarceration for a period of a year or more, i.e., they were out of the community. There were also 519 persons whose careers extended to (or began at) the 21-22 period, 81 of whom were institutionalized (15.6%).

Although we have examined cohort members, case by case, to see what happened, 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.

One must conclude that neither Tables 29 through 32 nor the analysis of Table 33 provides any more evidence of the effectiveness of severe sanctions than did the multiple regression analyses presented in Chapters 3 and 4.

Although it might well have been introduced earlier in the discussion, note should also be made of the perhaps surprising relationship of severity of sanctions to changing intervals between police contacts. When persons who had three or fewer police contacts were removed from the analysis and the trend

based only on those who had sufficient contacts for a trend, there was a definite decline in interval between offenses from the first through the 13th offense. Thereafter, the pattern, although one of general decline, was more erratic.

If these cohort members were divided into three groups, those not sanctioned or given a court disposition, those given a court disposition, and those who were institutionalized for any length of time, the picture was more complex. For example, the interval between contacts was greater for those without sanctions or court dispositions than for those who had a court disposition with only one exception up to the 10th contact. The mean interval between the first and second contact was 885 days. Between the second and third contact the interval was 607 days, declining to 160 days by the 11th contact.

Why the interval between contacts was comparatively short in some cases for those who had been sanctioned might be attributed to the frequent miscreant behavior of the individuals and the effects of institutionalization or some combination thereof. The fact that intervals between offenses were shorter for persons socialized in the inner city than for those who were socialized elsewhere (fifth interval 300 days for inner city vs. 595 for other) suggests that circumstances may have an influence on contact intervals as well as the behavior of cohort members. On the other side, the greatest and most consistent differences in intervals were found between those who had felony contacts in their records vs. those who were limited to non-felony contacts.

Here it was clear that more serious offenders had shorter intervals between police contacts, this prevailing even with the more severe sanctions including institutionalization meted out to felony offenders in comparison with non-felony offenders.

From the 10th contact on the interval between contacts was, with one exception, greatest for those who had been sanctioned, particularly from the 15th offense on, for those who had been institutionalized. But, in some cases, contact levels 12, 13, 14, 17, and 24, the shortest interval between contacts was for those who had been institutionalized. Institutionalization had sometimes been delayed so that we cannot say that it prevented any immediate recurrence of misbehavior. Other times institutionalization was for a short period of time so that it was possible to be in difficulty again quite soon. Since these numbers are small we shall not emphasize this finding but herein lies the reason for saying that the results are surprising. One would expect those who had been institutionalized to have the longest intervals between contacts, as they did at most higher contact levels. All in all, the interval data produced no consistent evidence for or against the effects of court dispositions or institutionalization.

Chapter 7. Summary and Conclusions

SUMMARY

The first question that we must ask ourselves, having completed a multitude of new and different types of analyses, 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 intervention may be more effective than administering severe sanctions.²⁰

²⁰ Although findings from the Racine and Philadelphia cohorts have been compared, most notably by Joan Petersilia, "Criminal Career Research: A Review of Recent Evidence," in Crime and Justice: An Annual Review of Research, Norval Morris and Michael Tonry (eds.), (Chicago: The University of Chicago Press, 1980): pp 321-379, and found comparable in many respects and the 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.

The Failure of Sanctions as Administered

Before going further, however, let us briefly summarize the research, chapter by chapter. In the first chapter it was pointed 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

Having noted that cohort, period, and age effects were present in the data it was incumbent upon us to examine these effects on offense seriousness, the decision to refer, and the severity of sanctions meted out by the courts, as we did in Chapter 2. Although variation related to cohort, period (decade), and age was present, the amount was insufficient to account for more than 2% 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, although some would be conducted by cohort in order to determine which differences did exist on this basis.

Moreover, the decision to refer to court or to other agencies could not be accounted for (only from 18% 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 20% to 25% accounted-for variance in the decision to refer either juveniles or adults to court or other agencies. The addition of offense seriousness and number of prior offenses 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 20% for the eighth juvenile contact and 18% 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.

The main thrust of this chapter was to confirm our earlier contention that decisions to refer and/or decisions to sanction, although bearing some relationship to the alleged delinquent's or criminal's malfeasance had limited relationship to offense seriousness. While this might seem reason for despair, it only challenges the curiosity of those who believe that easily-found answers are often inadequate.

Failure to Account for Single Events

In the third chapter we 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

In Chapter 4 we described various attempts to account for total future offense seriousness, contact by contact. We were attempting to determine if there was an optimum point at which it could be said that all prior offenses and experiences with the court, if added to demographic, ecological, and social variables, would tell us something about the likelihood of high future offense seriousness. Here, again, we found that it is really difficult to fault police for their judgments, 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.

Throughout this chapter the variable which had the most consistent impact on future offense seriousness was age at

present offense; the younger one was at the time of any given contact level, the greater the probability of future and more serious police contacts. This finding applied to both the juvenile and adult periods. During the adult period, age at contact had more impact at the sixth through tenth contacts and total prior offense seriousness had more impact than any other variable at the first through fifth contacts. Although the nine variables utilized in the multiple regression analyses throughout Chapter 4 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. These analyses are summarized in Table 34, age period by age period and variable by variable, one approach dealing with future offense seriousness and two others with continuation/discontinuation. The Lisrel analysis described in Appendix E is not included in Table 34.

The independent demographic, ecological, and career variables are, however, intercorrelated in such a way that only age at contact and total prior seriousness survive in a multiple regression analysis which examines the impact of each variable, all others held constant. Although the equation accounted for as much as 38% of the variance in future offense seriousness for juveniles at the sixth contact, it accounted for only from 28% to 11% of the variance for adults. This tells us why an individual

TABLE 34. COMPARISON OF RESULTS WITH DIFFERENT APPROACHES TO DETERMINING CONTRIBUTION OF DEMOGRAPHIC, ECOLOGICAL, OFFENSE, AND CAREER VARIABLES TO FUTURE OFFENSE SERIOUSNESS AND CONTINUATION VS. DISCONTINUATION

<u>Juvenile</u>					<u>Adult</u>					<u>Combined</u>				
Contact Number					Contact Number					Contact Number				
4	5	6	7	8	4	5	6	7	8	4	5	6	7	8
SEX														
Future Offense Seriousness (Std. Est.)														
Multiple Regression, T17 Text														
.090	.062	.044	.010	.017	.079	.056	.065	.092	.059	.081*	.088*	.088*	.065*	.082
Continuation/Discontinuation														
Multiple Regression, Not in Text														
-.004	-.057	.063	-.139	-.004	.093	.108	.081	.111	.044	.055	.104*	.061	.071	.010
Multiple Discriminant Function, T1, Appendix F														
										-.130*	-.245*	-.149*	-.192	-.029
RACE														
Future Offense Seriousness (Std. Est.)														
Multiple Regression, T17 Text														
.108	.105	.141*	.127	.130	.067	.043	.086	.072	.028	.123*	.110*	.136*	.128*	.114
Continuation/Discontinuation														
Multiple Regression, Not in Text														
-.011	-.029	.058	.057	-.193*	.074	-.141	-.014	.123	.013	.032	-.005	.095	.122	.062
Multiple Discriminant Function, T1, Appendix F														
										-.075	.011	-.232*	-.328	-.175
NEIGHBORHOOD														
Future Offense Seriousness (Std. Est.)														
Multiple Regression, T17 Text														
-.071	-.050	-.050	-.066	-.049	-.115	-.097	-.079	-.101	-.125	-.048	-.052	-.045	-.056	-.059
Continuation/Discontinuation														
Multiple Regression, Not in Text														
.025	-.001	.063	-.040	-.150	.059	-.138	-.041	.040	-.041	-.007	-.053	.027	.093	-.025
Multiple Discriminant Function, T1, Appendix F														
										-.016	.124*	-.067	-.250	.072
PRESENT OFFENSE SERIOUSNESS														
Future Offense Seriousness (Std. Est.)														
Multiple Regression, T17 Text														
.025	.102	-.018	.018	.045	-.020	-.031	-.172*	-.126	-.008	.016	.085*	-.045	.029	.042
Continuation/Discontinuation														
Multiple Regression, Not in Text														
.024	.071	.021	-.014	.112	-.042	.040	.021	-.035	-.008	.000	-.038	.033	-.007	.024
Multiple Discriminant Function, T1, Appendix F														
										.001	.089	-.080	.019	-.068
PRESENT SANCTION SEVERITY														
Future Offense Seriousness (Std. Est.)														
Multiple Regression, T17 Text														
-.009	-.033	-.049	.047	-.013	-.064	.037	.080	-.014	-.056	-.045	-.020	-.049	.023	-.019
Continuation/Discontinuation														
Multiple Regression, Not in Text														
.000	-.039	-.029	-.011	-.023	-.008	.043	.003	.066	-.041	.018	.006	.023	-.065	.052
Multiple Discriminant Function, T1, Appendix F														
										-.042	-.015	-.058	.176	-.148

Table 34, continued

AGE AT POLICE CONTACT

Future Offense Seriousness (Std. Est.)

Multiple Regression, T17 Text

-.517*	-.540*	-.522*	-.489*	-.505*	-.278*	-.298*	-.348*	-.367*	-.349*	-.509*	-.517*	-.533*	-.538*	-.562*
--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------

Continuation/Discontinuation

Multiple Regression, Not in Text

-.402*	-.352*	-.375*	-.292*	-.327*	-.301*	-.327*	-.337*	-.336*	-.326*	-.476*	-.471*	-.446*	-.403*	-.361*
--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------

Multiple Discriminant Function, T1, Appendix F

1.113*	1.107*	1.093*	1.087*	1.024*
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TOTAL PRIOR SERIOUSNESS

Future Offense Seriousness (Std. Est.)

Multiple Regression, T17 Text

.059	.045	.121	.133	.132	.372*	.379*	.334	.279	.311	.061	.049	.112*	.084	.083
------	------	------	------	------	-------	-------	------	------	------	------	------	-------	------	------

Continuation/Discontinuation

Multiple Regression, Not in Text

.019	-.057	-.050	.096	.044	-.059	.050 *	.149	.039	.028	.001	-.066	-.093	-.042	-.013
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Multiple Discriminant Function, T1, Appendix F

-.003	.156	.227*	.118	.037
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NUMBER PRIOR SANCTIONS

Future Offense Seriousness (Std. Est.)

Multiple Regression, T17 Text

-.044	-.041	-.059	-.072	-.090	-.119	-.178	-.203	-.169	-.264	-.047	-.051	-.064	-.079	-.074
-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------

Continuation/Discontinuation

Multiple Regression, Not in Text

-.008	-.022	-.005	-.193*	-.011	.171	.005	-.201	-.064	-.040	.013	.115*	.080	.106	.135
-------	-------	-------	--------	-------	------	------	-------	-------	-------	------	-------	------	------	------

Multiple Discriminant Function, T1, Appendix F

-.031	-.271*	-.196*	-.286	-.383*
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SEVERITY PRIOR SANCTIONS

Future Offense Seriousness (Std. Est.)

Multiple Regression, T17 Text

.058	.023	.011	-.048	-.003	-.030	-.042	-.041	-.035	-.031	.020	-.012	.003	-.029	.006
------	------	------	-------	-------	-------	-------	-------	-------	-------	------	-------	------	-------	------

Continuation/Discontinuation

Multiple Regression, Not in Text

.004	.042	.103	.110	.097	.055	-.014	.040	.006	.067	.033	-.088	.058	.036	-.022
------	------	------	------	------	------	-------	------	------	------	------	-------	------	------	-------

Multiple Discriminant Function, T1, Appendix F

-.077*	.207*	-.142*	.081	.064
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MULTIPLE REGRESSION (Future Offense Seriousness) R²

.353*	.379*	.385*	.347*	.348*	.219*	.119*	.204*	.180*	.131*	.337*	.353*	.379*	.379*	.400*
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MULTIPLE REGRESSION (Continue/Discontinue) R²

.146*	.120*	.130*	.126*	.124*	.123*	.149*	.096*	.108*	.081*	.234*	.228*	.200*	.151*	.129*
-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------

MULTIPLE DISCRIMINANT FUNCTION CANONICAL CORRELATION SQUARED

.240	.237	.211	.165	.145
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* Significant at .01 level.

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.

These analyses are presented differently in Table 34 than in Table 35. In Table 34 one may move across the row and observe if the relative effect (significant) of any variable on future offense seriousness changes from contact to contact for the juvenile, adult, or combined periods (keeping in mind that the means and standard deviations of variables change from contact to contact. One may also look down to determine the related effect of each variable at a given contact level but this involves skipping rows from technique to technique. To facilitate comparison of the various analytic approaches, we have included Table 35 for the combined age periods. In this table one may readily look across each row to determine the relative impact of each variable at that contact level on future offense seriousness as well as its relative impact on continuation/discontinuation. One may also look down the columns to see that age at contact had the greatest impact on future offense seriousness at every contact level regardless of the statistic utilized.

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

TABLE 35. RELATIVE EFFECTS OF VARIABLES ON FUTURE OFFENSE
SERIOUSNESS OR CONTINUITY/DISCONTINUITY, COMBINED AGE
PERIODS, FOURTH THROUGH EIGHTH CONTACTS

Sex	Race	ANG JNG	Pres Off Ser	Pres Snc Ser	Age	Total Prior Seri	# Prior Snc	Sev Prior Snc
4) Future Offense Seriousness (Std. Est.), Multiple Regression								
.081*	.123*	-.048	.016	-.045	-.509*	.061	-.047	.020
Continuation/Discontinuation								
Multiple Regression								
.055	.032	-.007	.000	.018	-.470*	.001	.010	.033
Multiple Discriminant Function								
-.130*	-.075	-.016	.001	-.042	1.113*	-.003	-.031	-.077*
5) Future Offense Seriousness (Std. Est.), Multiple Regression								
.088*	.110*	-.052	.085*	-.020	-.517*	.049	-.051	-.012
Continuation/Discontinuation								
Multiple Regression								
.104*	-.005	-.053	-.038	.006	-.471*	-.066	.115*	-.088
Multiple Discriminant Function								
-.245*	.011	.124*	.089	-.015	1.107*	.156	-.271*	.207*
6) Future Offense Seriousness (Std. Est.), Multiple Regression								
.088*	.136*	-.045	-.045	-.049	-.533*	.112*	-.064	.003
Continuation/Discontinuation								
Multiple Regression								
.061	.095	.027	.033	.023	-.446*	-.093	.080	.058
Multiple Discriminant Function								
-.149*	-.232*	-.067	-.080	-.058	1.093*	.227*	-.196*	-.142*
7) Future Offense Seriousness (Std. Est.), Multiple Regression								
.065*	.128*	-.056	.029	.023	-.538*	.084	-.079	-.029
Continuation/Discontinuation								
Multiple Regression								
.071	.122	.093	.007	-.065	-.403*	-.042	.106	.036
Multiple Discriminant Function								
-.192	-.328	-.250	.019	.176	1.087*	.118	-.268	.081
8) Future Offense Seriousness (Std. Est.), Multiple Regression								
.082	.114	-.059	.042	-.019	-.562*	.083	-.074	.006
Continuation/Discontinuation								
Multiple Regression								
.010	.062	-.025	.024	.052	-.361*	-.013	.136	-.022
Multiple Discriminant Function								
-.029	-.175	.072	-.068	-.148	1.024*	.037	-.383*	.064

variance in total future offense seriousness was accounted for, reaching 38% 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 58% 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 in Chapter 4 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 moreso 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 careers.

Adding the Interview and Self Report Data

In the fifth chapter the interview data were added. This increased the complexity of the analysis in some respects. The point was to determine if the interview variables would assist us in understanding when and under what circumstances sanctions are effective. At the juvenile level the interview data added little to the variance in present or future offense seriousness accounted for in Chapters 3 and 4. 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, certain categories of variables did enable us to account for future offense seriousness beyond what was accounted for by the basic variables utilized in Chapter 4. Most notable 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 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

Chapter 6 is one that was not planned but it facilitates focusing our attention on the types of careers that have continuity or in which the justice system may have played a part in the development of continuous careers. It is, in some respects, the most important chapter of all because it facilitates the communication of earlier findings through less complex tables. Here we found that 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 in Chapter 7 verified our earlier findings that sanctions as administered do not deter offenders

from further delinquency or crime.²¹ These tables were more specific in that they clearly showed that, with controls for offense seriousness, 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.

CONCLUSIONS

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.

²¹ 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.

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.²² There is no suggestion here, of course, that incarceration may not sometimes be necessary for the safety of society or the miscreant.

More specifically (if the event is serious enough to raise the question of formal intervention), for those who are charged with the task of intervention, frequency 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 court 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 young persons with early serious offenses should be dealt with before the time that they have established serious delinquent or criminal careers.

²² Our own conclusions have, of course, been preceded by other similar conclusions drawn from different kinds of data. Petersilia has also concluded that alternatives to probation and institutionalization, intensive surveillance coupled with community service and restitution, for example, may be sufficiently restrictive to ensure public safety and meet the public notion of justice. But, as Timothy J. Carter, "Juvenile Court Dispositions," Criminology 17 (1979): pp. 341-359, suggests, diversion programs, while a step in the right direction, are not enough.

This 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 potentially 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.

In other words, 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 that this research suggests the need for broader and more creative approaches of one type but concentration on a very selected few cohort members for programs that do no more than remove juveniles and adults from the community if public safety is paramount. This almost suggests that the justice system, if it is to be effective, must develop a wider perspective than one geared to apprehending and convicting criminals and facilitating the application of just deserts.

BIBLIOGRAPHY

- Ageton, Suzanne S. and Delbert S. Elliott, "The Effects of Legal Processing on Delinquent Orientations," Social Problems 22 (1974): pp. 87-100.
- Arnold, William R., "Race and Ethnicity Relative to Other Factors in Juvenile Court Dispositions," American Journal of Sociology 77 (1971): pp. 211-227.
- Barnett, Arnold and Anthony J. Lofaso, "Selective Incapacitation and the Philadelphia Cohort Data," Journal of Quantitative Criminology 1 (1985): pp. 3-36.
- Bernstein, Ilene Nagel, William R. Kelley, and Patricia A. Doyle in "Societal Reaction to Deviants: The Case of Criminal Defendants," American Sociological Review 42 (1977): pp. 743-755.
- Black, Donald J., "Production of Crime Rates," American Sociological Review 35 (1970): pp. 733-748.
- _____ and Albert J. Reiss, Jr., "Police Control of Juveniles," American Sociological Review 35 (1970): 63-77.
- Blumstein, Alfred, Jacqueline Cohen, Susan E. Martin, and Michael H. Tonry (eds.), Research in Sentencing: The Search for Reform (Washington, D.C., National Academy Press, 1983).
- Carter, Timothy J., "Juvenile Court Dispositions," Criminology 17 (1979): pp. 341-359
- Chiricos, Theodore G. and Gordon P. Waldo, "Socioeconomic Status and Criminal Sentencing: An Empirical Assessment of a Conflict Proposition," American Sociological Review 40 (1972): pp. 753-772.
- _____, Phillip D. Jackson and Gordon P. Waldo, "Inequality in the Imposition of a Criminal Label," Social Problems 19 (1972): pp. 553-572.
- Empey, Lamar T., "Juvenile Court: The Tarnished Superparent," Chapter 16, American Delinquency: Its Meaning and Construction (Homewood, Illinois: The Dorsey Press, 1978).
- Ferdinand, Theodore A. and Elmer C. Luchterhand, "Inner-City Youths, the Police, the Juvenile Court, and Justice," Social Problems 17 (1970): pp. 510-527.
- Frazier, Charles E. and E. Wilbur Bock, "Effects of Court Officials on Sentence Severity," Criminology 20 (1982): pp. 257-272.

- Gibbs, Jack P., "Social Class, Deterrence, and Perspectives on Social Order," Social Forces 56 (1977): pp. 408-432.
- Goldman, Nathan, "The Differential Selection of Juvenile Offenders for Court Appearance," National Council on Crime and Delinquency (1963).
- Grasmick, Harold G. and George J. Bryjak, "The Deterrent Effect of Perceived Severity of Punishment," Social Forces 59 (1980): pp. 472-491.
- Green, Edward, "Race, Social Status and Criminal Arrest," American Sociological Review 35 (1970): pp. 476-490.
- Greenberg, David (ed.), Corrections and Punishment (Beverly Hills: Sage, 1978).
- _____, Ronald C. Kessler, and Charles H. Logan, "A Panel Model of Crime Rates and Arrest Rates," American Sociological Review 44 (1979): pp. 843-850.
- Greenwood, Peter W., Joan Petersilia, and Franklin E. Zimring, Age, Crime, and Sanctions: The Transition from Juvenile to Adult Court, National Institute of Justice (N-2642-NIJ) (Santa Monica: Rand), 1980.
- Hirsch, Andrew Von, "The Ethics of Selective Incapacitation: Observations on the Contemporary Debate," Crime and Delinquency 30 (1984): pp. 175-194.
- Hohenstein, William F., "Factors Influencing the Police Disposition of Juvenile Offenders," in T. Sellin and M.E. Wolfgang (eds.), Delinquency: Selected Studies (New York: John Wiley and Sons, Inc., 1969).
- Hopkins, Andrews, "Imprisonment and Recidivism: A Quasi-Experimental Study," Journal of Research in Crime and Delinquency 13 (1976): pp. 13-32.
- Horowitz, Allan and Michael Wasserman, "Some Misleading Conceptions in Sentencing Research," Criminology 18 (1980): pp. 411-424.
- Jensen, Gary F. and Maynard L. Erickson, "The Social Meaning of Sanctions," in Marvin D. Krohn and Ronald L. Akers (eds.), Crime, Law, and Sanctions (Beverly Hills: Sage, 1978).
- Krisberg, Barry and James Austin, The Children of Ishmael: Critical Perspectives on Juvenile Justice (Palo Alto, California: Mayfield, 1978).
- Liska, Allen E. and Mark Tausig, "Theoretical Interpretations of

- Social Class and Racial Differentials in Legal Decision-Making for Juveniles," The Sociological Quarterly 10 (1974): pp. 197-207.
- Lizotte, Alan J., "Extra-legal Factors in Chicago's Criminal Courts: Testing the Conflict Model of Criminal Justice," Social Problems 25 (1978): pp. 564-580.
- Martinson, Robert, "What Works? 'The Martinson Report'" from "What Works? Questions and Answers about Prison Reform," The Public Interest 35 (1974), pp. 22-55, reprinted in Norman Johnson and Leonard D. Savitz (eds.), Justice and Corrections (New York: John Wiley & Sons, 1978).
- McEachern, Alexander W. and Riva Bauzer, "Factors Related to Disposition in Juvenile Police Contacts," in M.W. Klein (ed.), Juvenile Gangs in Context (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1967).
- Murphy, Patrick T., Our Kindly Parent...The State: The Juvenile Justice System and How It Works (New York: Viking Press, 1974).
- Nagel, Stuart and Robert Geraci, "Effects of Reducing Judicial Sentencing Discretion," Criminology 21 (1983): pp. 309-331.
- Palmer, Ted, "Martinson Revisited," Journal of Research in Crime and Delinquency 12 (1975), pp. 133-152.
- Parker, Robert Nash and M. Dwayne Smith, "Deterrence, Poverty and Type of Homicide," American Journal of Sociology 85 (1979): pp. 614-624.
- Petersilia, Joan, "Criminal Career Research: A Review of Recent Evidence," in Crime and Justice: An Annual Review of Research, Norval Morris and Michael Tonry (eds.), (Chicago: The University of Chicago Press, 1980).
- _____, 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.
- _____, 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).
- Piliavin, Irving and Scott Briar, "Police Encounters with Juveniles," American Journal of Sociology 70 (1964): pp. 206-214.
- Platt, Anthony, The Child Savers (Chicago: The University of Chicago Press, 1983).

Pontell, Henry N., "Deterrence: Theory vs. Practice,"
Criminology 16 (1978): pp. 3-22.

Shannon, Lyle W., "A Longitudinal Study of Delinquency and
Crime," Chapter 7 in Charles Welford (ed.), Quantitative
Studies in Criminology, (Beverly Hills: Sage, 1978).

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

-----, "Differentials in the Referral of Police Contacts and
Their Use in Predicting Continuity," Chapter 10 in 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 Reference Service NCJ77744, 963 pages, 1982).

-----, "Risk Assessment vs. Real Prediction: The Prediction
Problem and Public Trust," Journal of Quantitative
Criminology 1 (1985): pp. 159-189.

Sheridan, William H., "Juveniles Who Commit Non-Criminal Acts:
Why Treat in a Correctional System?" Federal Probation 31
(1976), pp. 26-30.

Steffensmeier, Darrell J., "Assessing the Impact of the Women's
Movement on Sex-Based Differences in the Handling of Adult
Criminal Defendants," Crime and Delinquency (July 1980):
pp. 344-357.

-----, "Organization Properties and Sex Segregation in the
Underworld: Building a Sociological Theory of Sex
Differences in Crime," Social Forces 61 (1983): pp.
1010-1032.

Task Force on Delinquency and Youth Crime of the President's
Commission on Law Enforcement and Administration of Justice,
Juvenile Delinquency and Youth Crime (Washington, D.C.:
U.S. Government Printing Office, 1967).

Thomas, Charles W. and Robin J. Cage, "The Effect of Social
Characteristics on Juvenile Court Dispositions," Juvenile
Court Dispositions, The Sociological Quarterly 18 (1977):
pp. 237-252.

Thornberry, Terence P., "Race, Socioeconomic Status, and
Sentencing in the Juvenile Justice System," Journal of
Criminal Law and Criminology 64 (1973): pp. 90-98.

----- and R.L. Christianson's, 'Juvenile Justice

- Decision-Making as a Longitudinal Process," Social Forces 63 (1984): pp. 433-444.
- Tittle, Charles R., "Sanction Fear and the Maintenance of Social Order," Social Forces 55 (1977): pp. 479-496.
- _____ and Charles H. Logan, "Sanctions and Deviance: Evidence and Remaining Questions," Law and Society Review (1973): pp. 371-392.
- Unnever, James D., Charles E. Frazier, and John C. Henretta, "Race Differences in Criminal Sentencing," The Sociological Quarterly 21 (1980): pp. 197-205.
- Vining, Aiden R., "Developing Aggregate Measures of Disparity," Criminology 21 (1983): pp. 233-252.
- Weiner, Norman L. and Charles V. Willie, "Decisions by Juvenile Offenders," American Journal of Sociology 77 (1971): pp. 199-210.
- Welch, Susan, John Gruhl, and Cassie Spohn, "Sentencing: The Influence of Alternative Measures of Prior Record," Criminology 22 (1984): pp. 215-227.
- Zatz, Marjorie S., "Race, Ethnicity, and Determinate Sentencing," Criminology 22 (1984): pp. 147-171.

APPENDIX A

TRENDS IN SEVERITY OF DISPOSITIONS AND SANCTIONS

These computer-generated diagrams show some trends in severity of dispositions and sanctions. Consideration of them whetted our interest in sanctioning variability more than has anything else except the analyses which showed that relatively severe sanctions were not only unrelated to better future behavior, but seemed to change it only for the worse, particularly among males. The original of this report has the diagrams in four colors. Trend lines and curves are in black on copies but are labeled as necessary for comprehension by the reader.

Diagram 1 shows that dispositional severity was increasing over the years for juvenile misdemeanors more than for other groups of offenses. These trend lines are the product of age, cohort, and time period effects. Diagrams 1A, 1B, and 1C reveal that there are pronounced cohort differences in dispositional severity. The 1942 Cohort's juvenile dispositions end in 1960 and that their adult dispositions commence in 1961. Overprinting at the lower end of the scale makes it difficult to see why a particular trend line may be what it is, the 1942 Cohort's adult felonies, for example. The juvenile trend lines could have ended at 1960 and the adult trend lines in at 1961. These diagrams give us an idea of differences in cohort trends. These cohort trends are also related to time period (decade) differences and the changing age of cohort members.

DIAGRAM 1

DISPOSITION SEVERITY BY YEAR CONTROLLING FOR SERIOUSNESS AND AGE

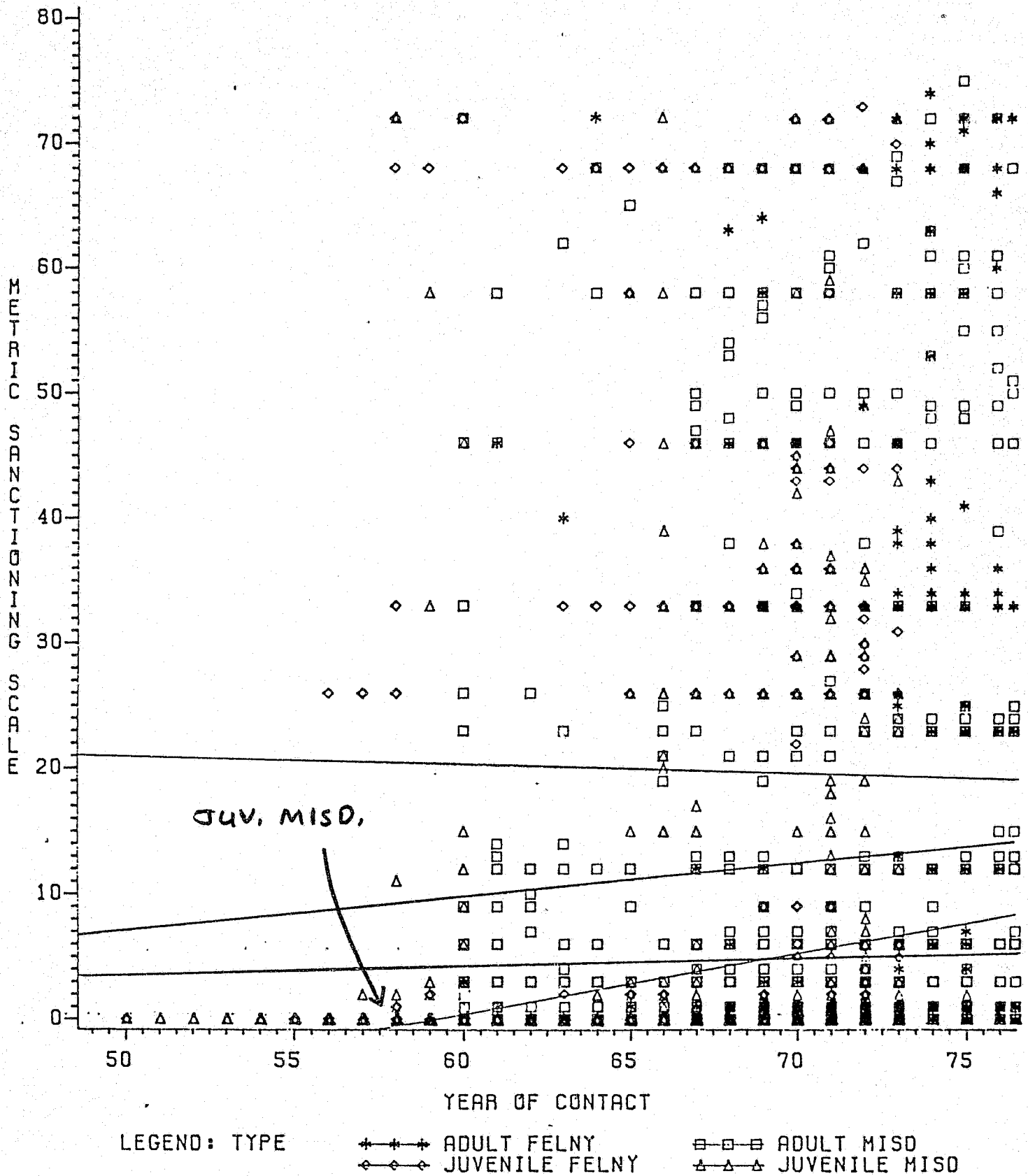
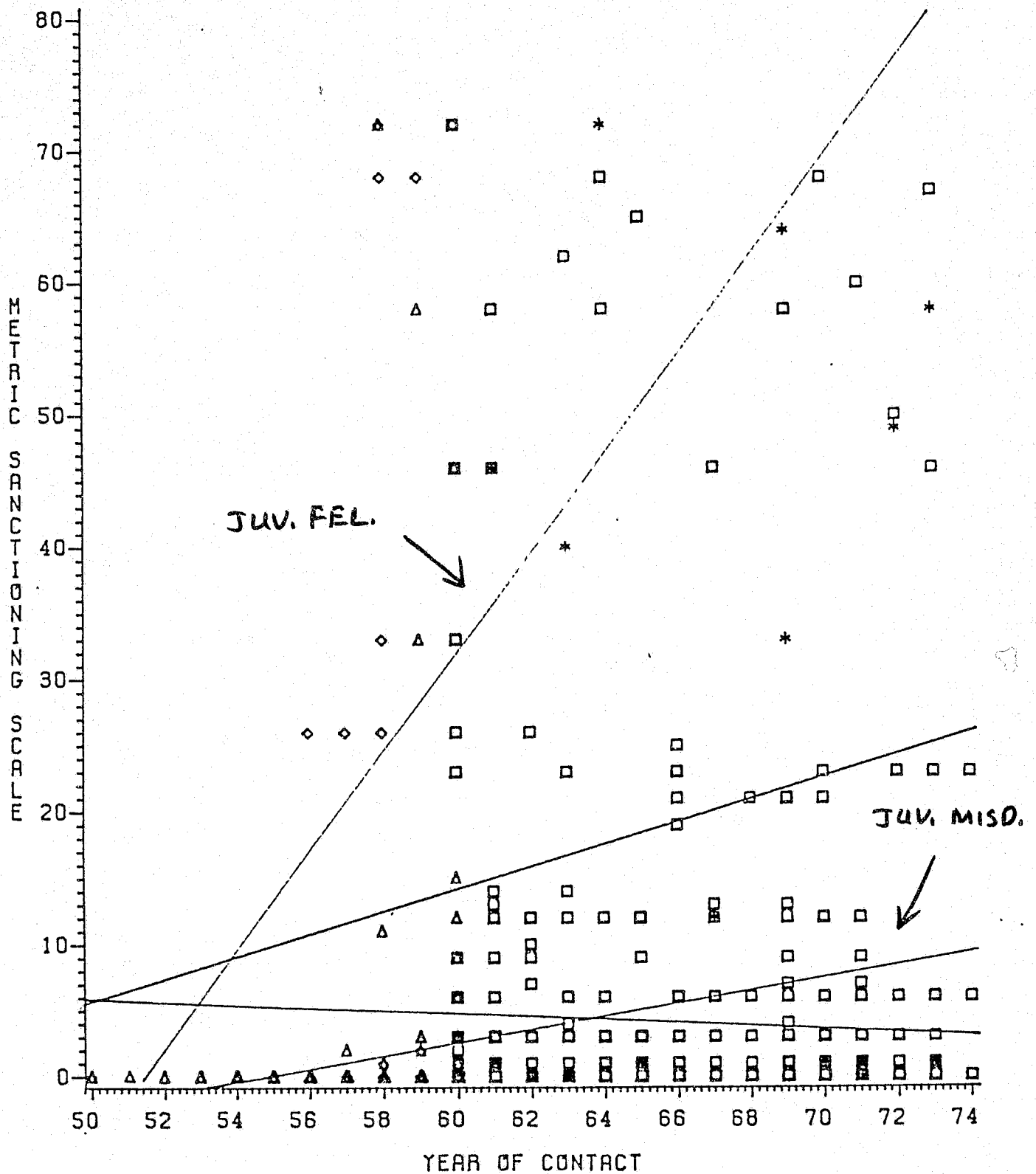


DIAGRAM 1A

DISPOSITION SEVERITY BY YEAR CONTROLLING FOR SERIOUSNESS AND AGE
1942 COHORT ONLY



LEGEND: TYPE

* * * ADULT FELNY
 ◇ ◇ ◇ JUVENILE FELNY

□ □ □ ADULT MISD
 △ △ △ JUVENILE MISD

DIAGRAM 1B

DISPOSITION SEVERITY BY YEAR CONTROLLING FOR SERIOUSNESS AND AGE
1949 COHORT ONLY

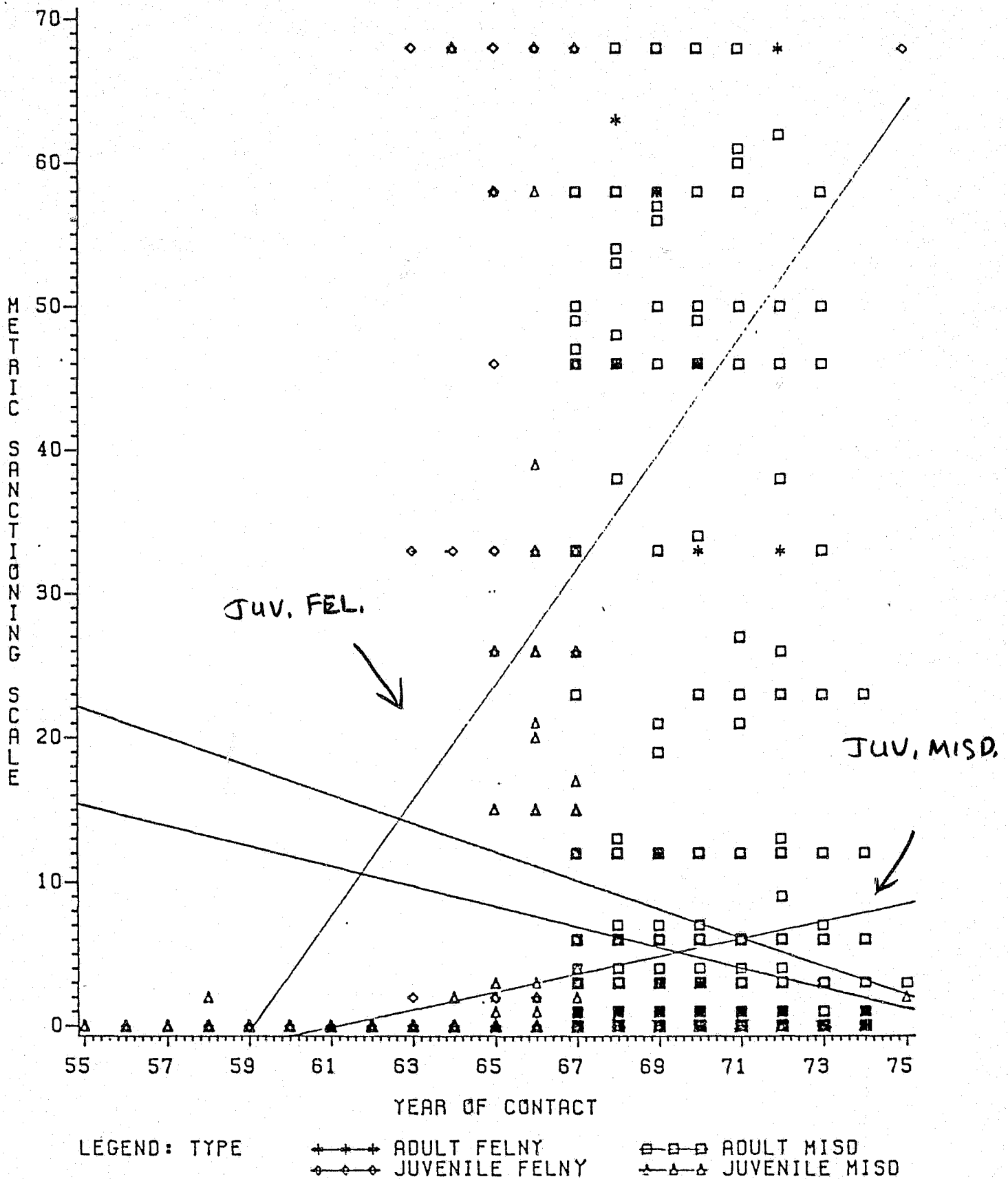
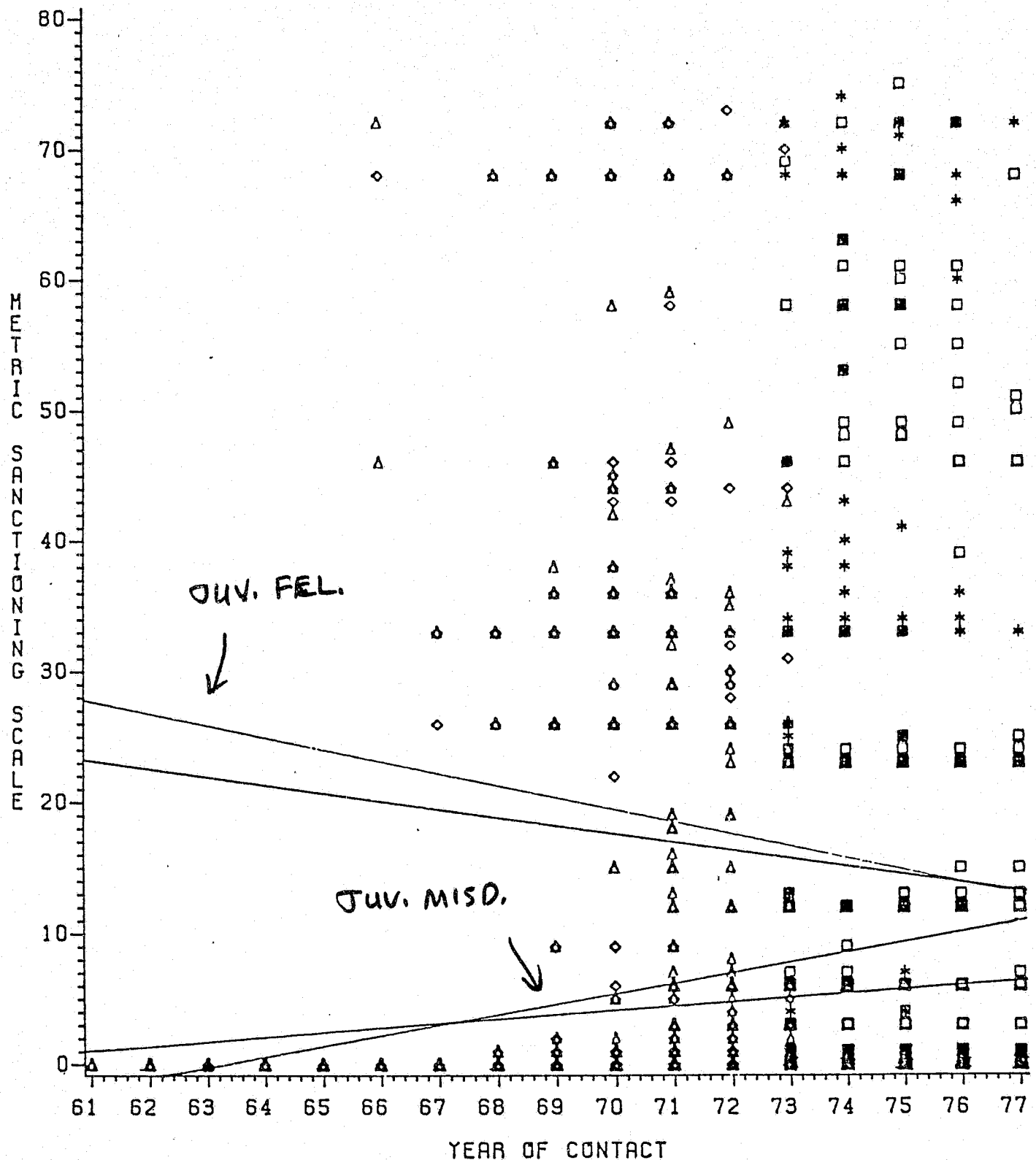


DIAGRAM 1C

DISPOSITION SEVERITY BY YEAR CONTROLLING FOR SERIOUSNESS AND AGE 1955 COHORT ONLY



LEGEND: TYPE

+ + + ADULT FELNY
 o o o JUVENILE FELNY

□ □ □ ADULT MISD
 △ △ △ JUVENILE MISD

Diagram 2 reveals that Part I offenses have been disposed of more severely over the years. Cohort and the age composition of each cohort also have had effects on these trend lines.

Diagram 3 shows that Part I offenses by juveniles have been dealt with increasingly more severely than have others, in part a consequence of increasing concern about serious juvenile offenders. This is, of course, also a part of generally increasing concern over the increase in Part I offenses in the community, especially if committed by juveniles. Diagram 4 fits two curves, as does Diagram 5, to the same data shown in Diagram 3.

In Diagram 6 we turn to court sanctions rather than dispositions, the latter of which may or may not have included court sanctions. In this case, we find a downward trend for severity of sanctions for felonies, the opposite of the disposition trend shown in Diagram 2. Police may refer persons for felony contacts but the courts may not be as severe in response to each case. There are, of course, age, cohort, and time period effects on this trend line. What we have here is a line indicating that all factors together have produced a decline in the severity of sanctions for persons who have been referred. Part of this may also be accounted for by the fact that the referral rate for young offenders has increased but that cases have been referred which were not sufficiently serious to merit sanctions, or that a busy court is an easy court for the offender.

DISPOSITIONS SEVERITY BY YEAR CONTROLLING FOR TYPE OF OFFENSE

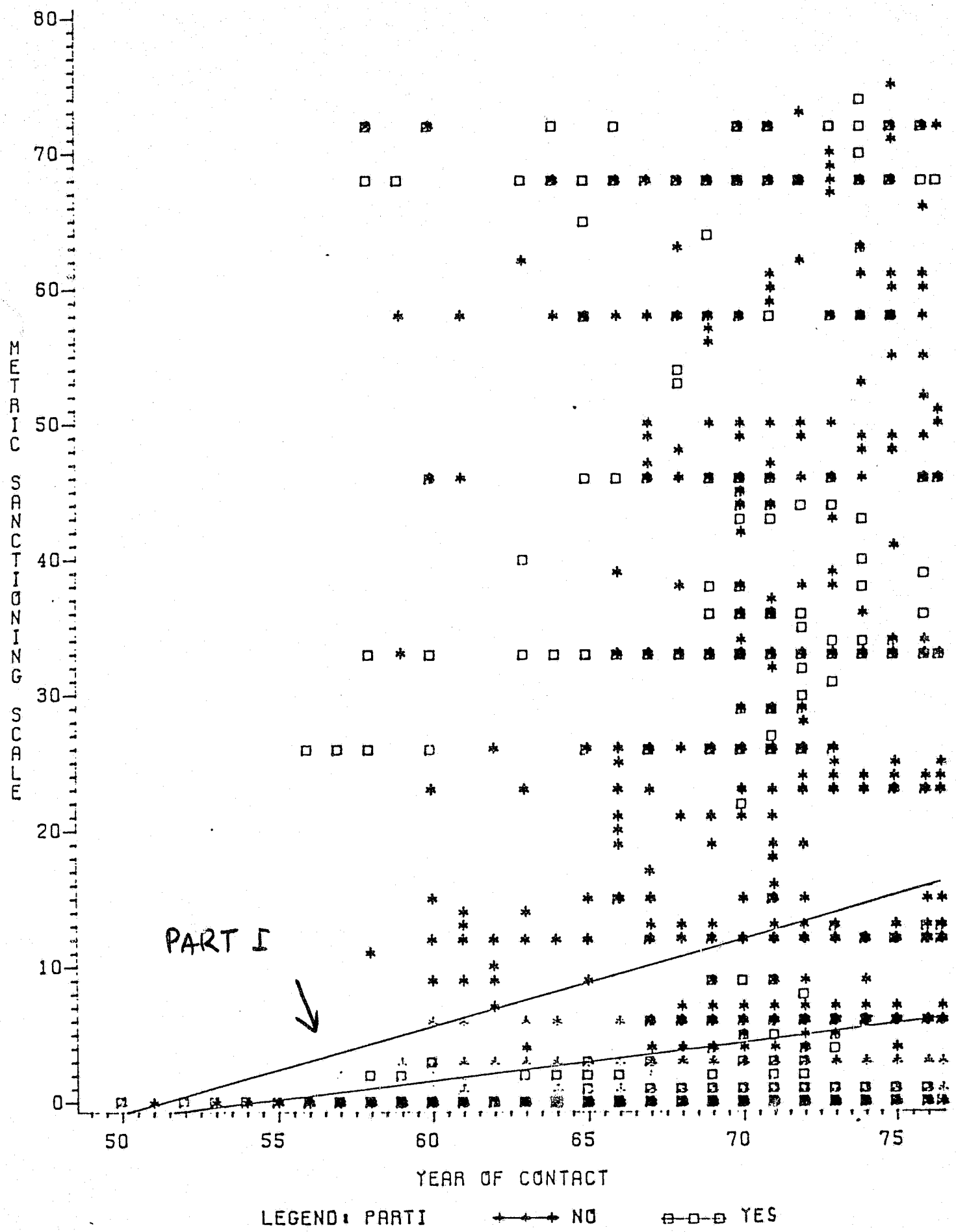
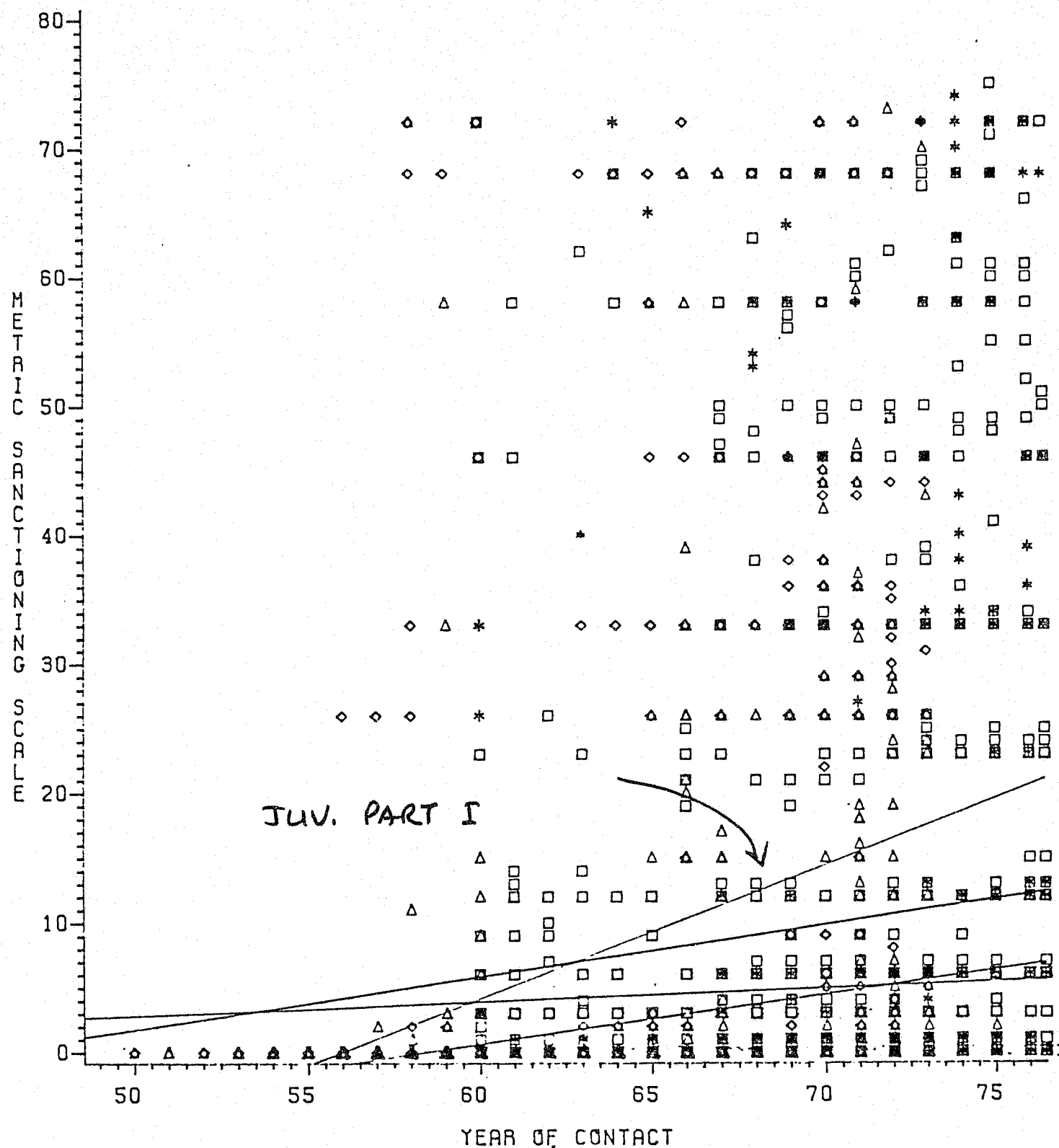


DIAGRAM 3

DISPOSITION SEVERITY BY YEAR CONTROLLING FOR TYPE AND AGE



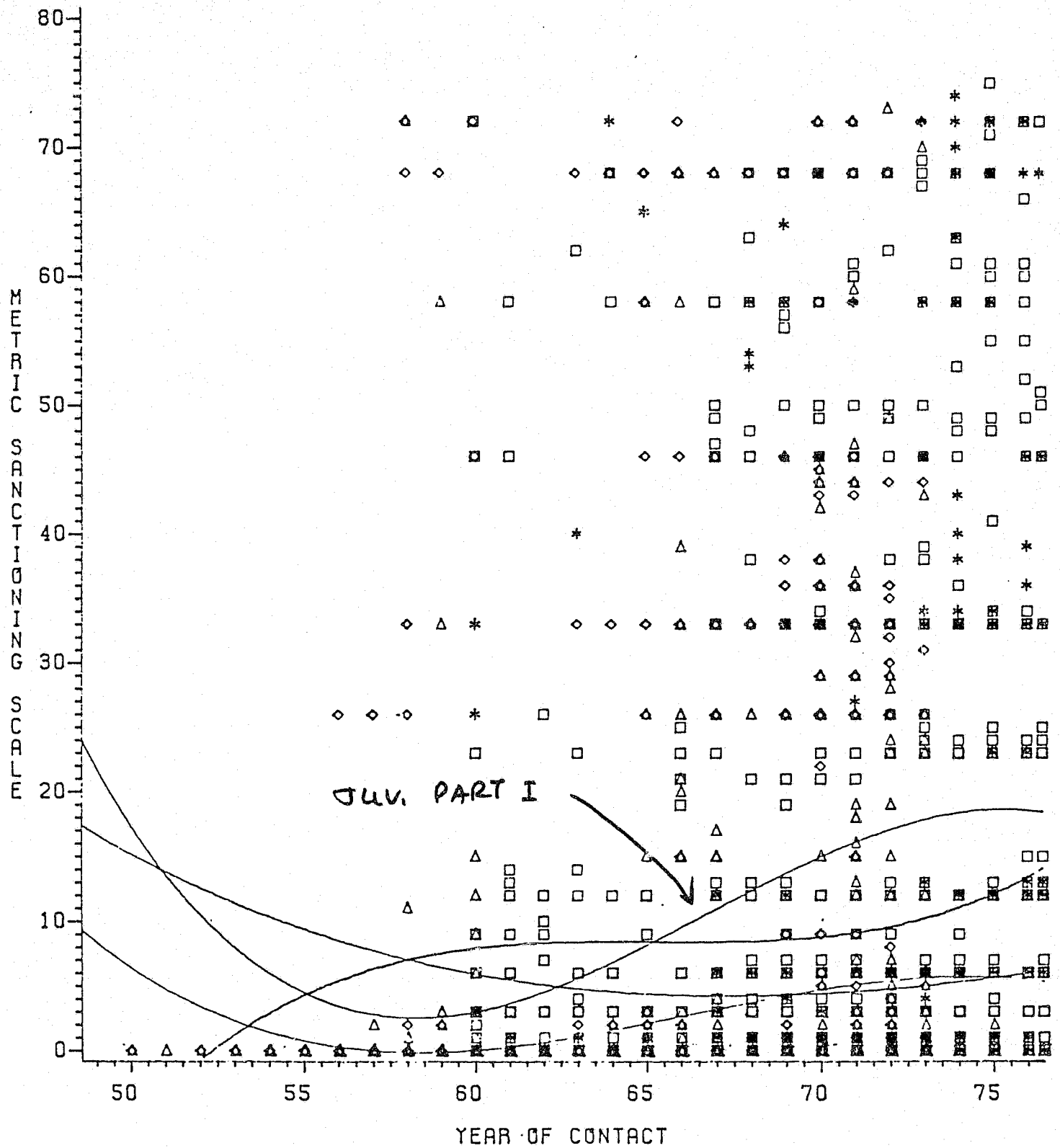
LEGEND: TYPE2

□-□-□ ADULT OTHER
△-△-△ JUVENILE OTHER

--* ADULT PART I
◇-◇-◇ JUVENILE PART I

DIAGRAM 4

DISPOSITION SEVERITY BY YEAR CONTROLLING FOR TYPE AND AGE



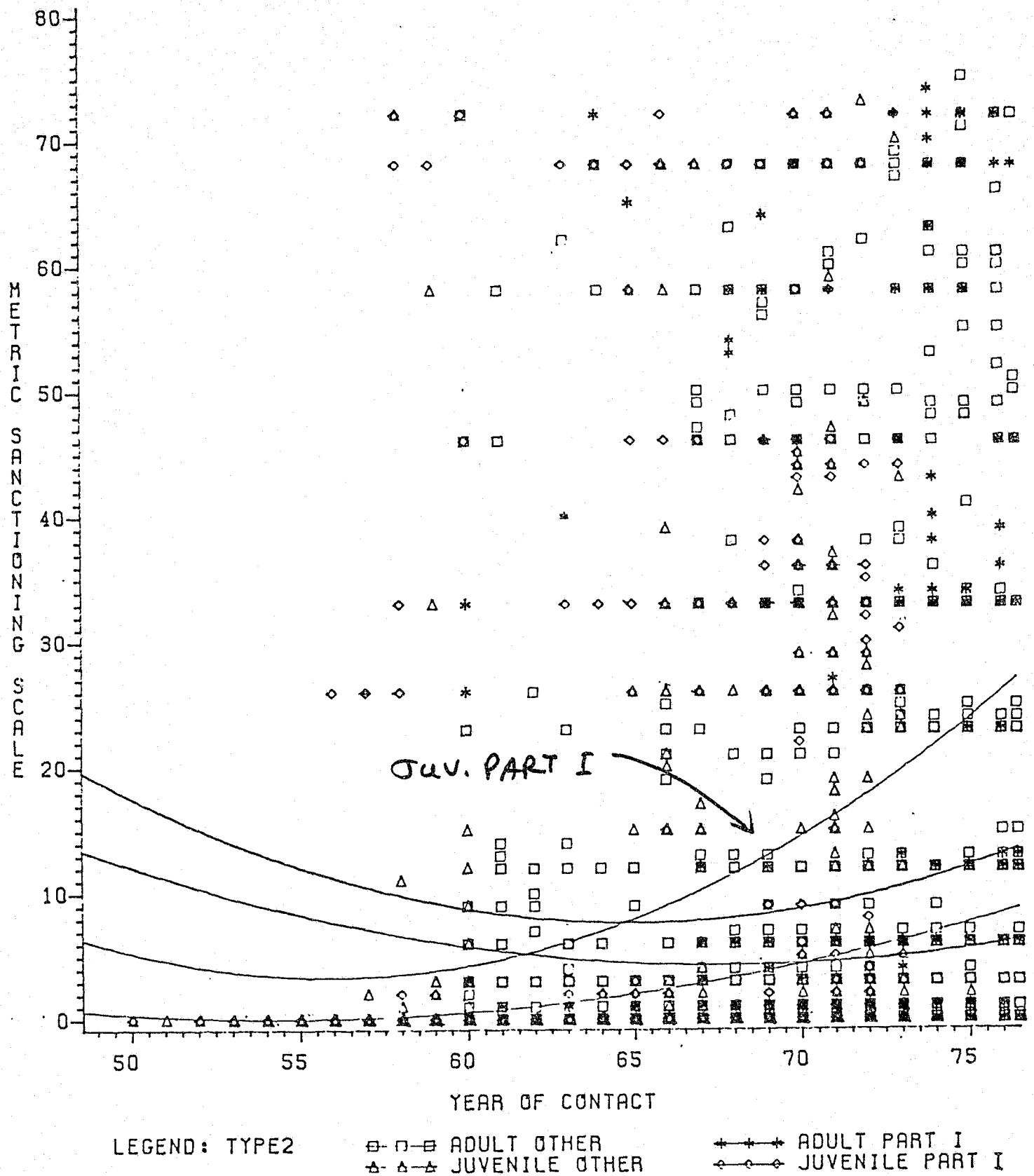
LEGEND: TYPE2

□-□-□ ADULT OTHER
△-△-△ JUVENILE OTHER

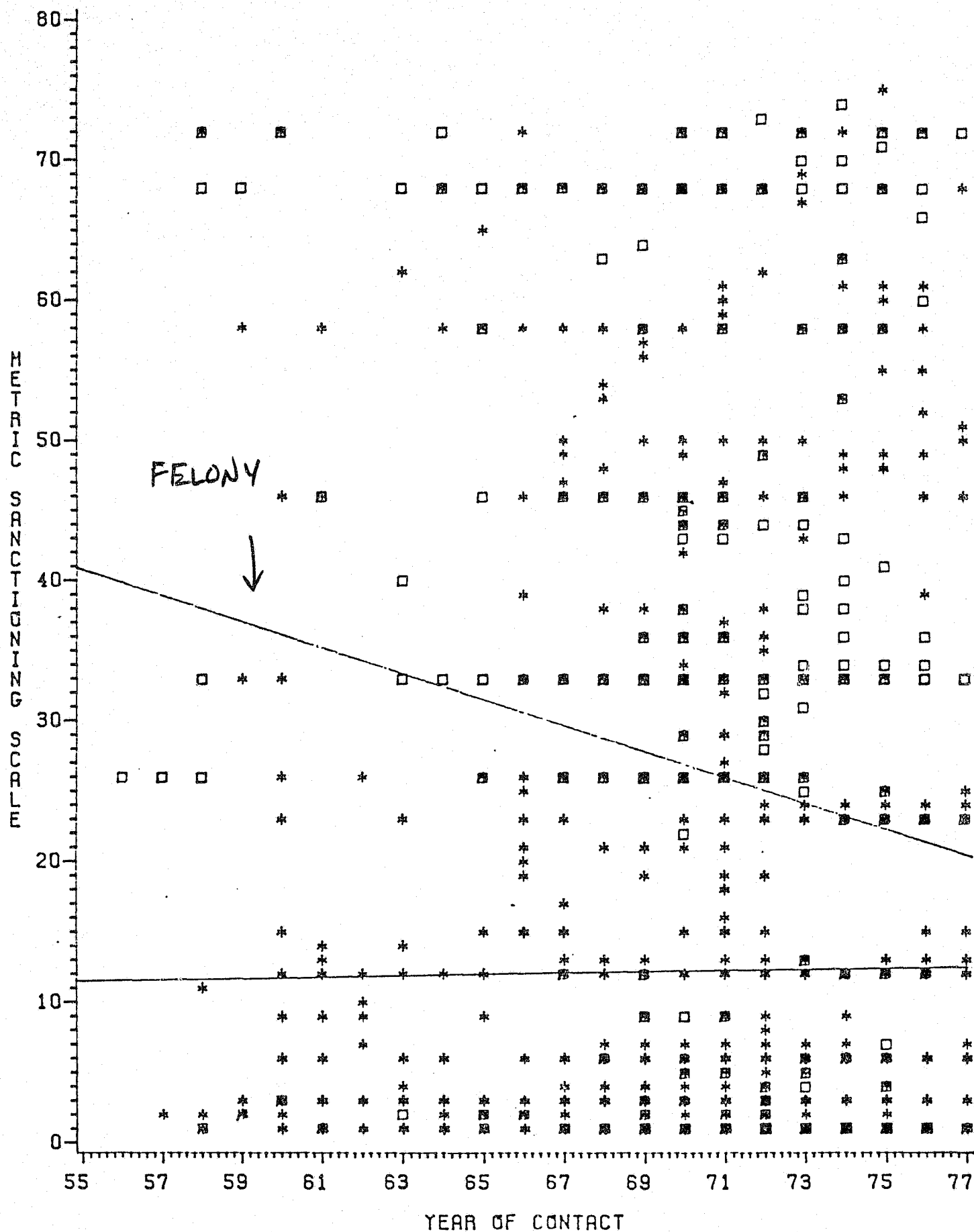
+--+ ADULT PART I
-- JUVENILE PART I

DIAGRAM 5

DISPOSITION SEVERITY BY YEAR CONTROLLING FOR TYPE AND AGE



SANCTIONING SEVERITY BY YEAR CONTROLLING FOR SERIOUSNESS



LEGEND: FELONY

* NO

□ YES

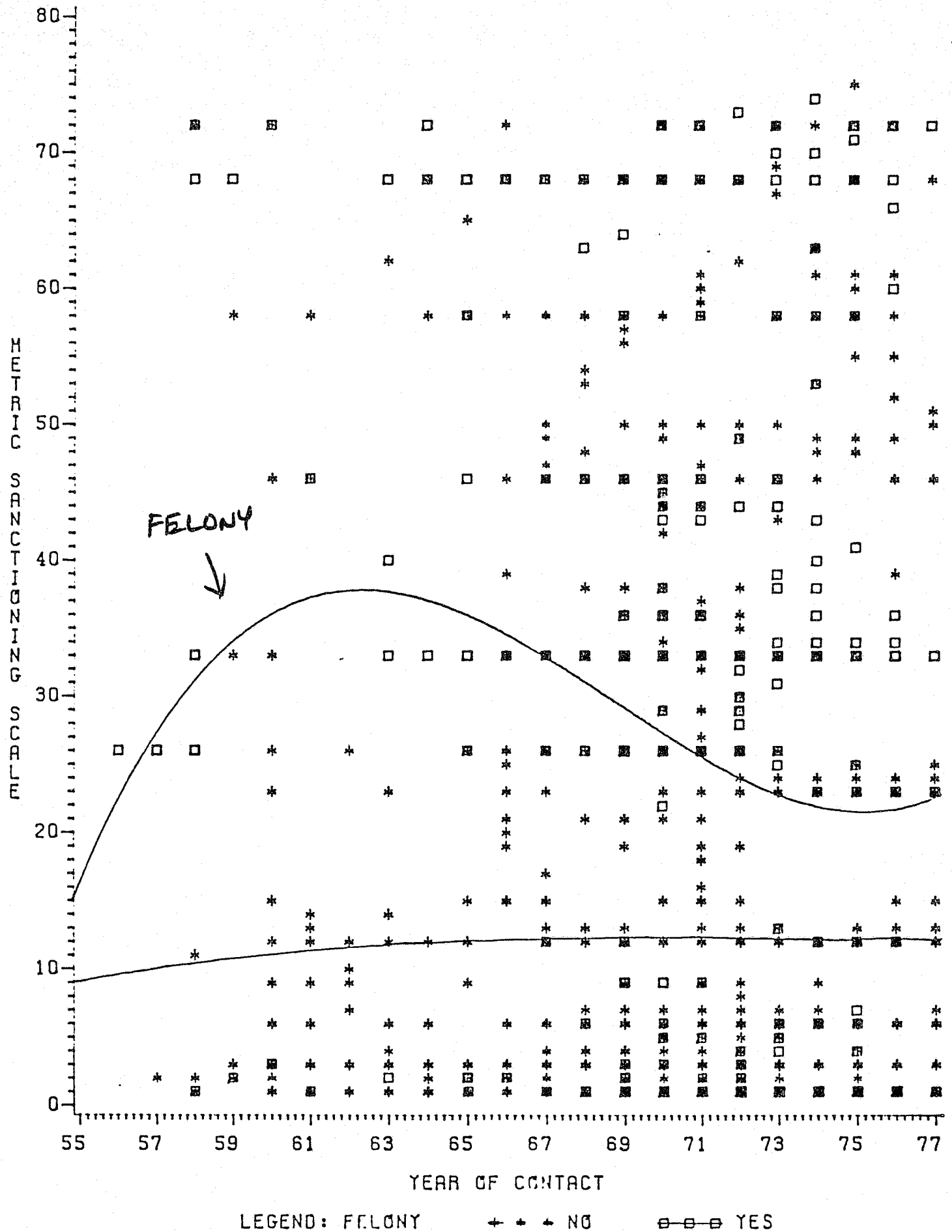
The same data are fitted with curves in Diagrams 7 and 8. Diagram 9 is identical to Diagram 6 but indicates confidence limits.

Diagram 10 shows a downward trend for juvenile sanctions whether the contacts were at the misdemeanor or felony level but an upward trend for adults, that is, cohort members age 18 and older. Although Tables 10A, 10B, and 10C enable one to see how cohort trends markedly differ, the most important thing to note is the wide range in severity of sanctions with many misdemeanors sanctioned as severely as felonies. It must also be remembered that at this point a variable has not been included for number of prior sanctions.

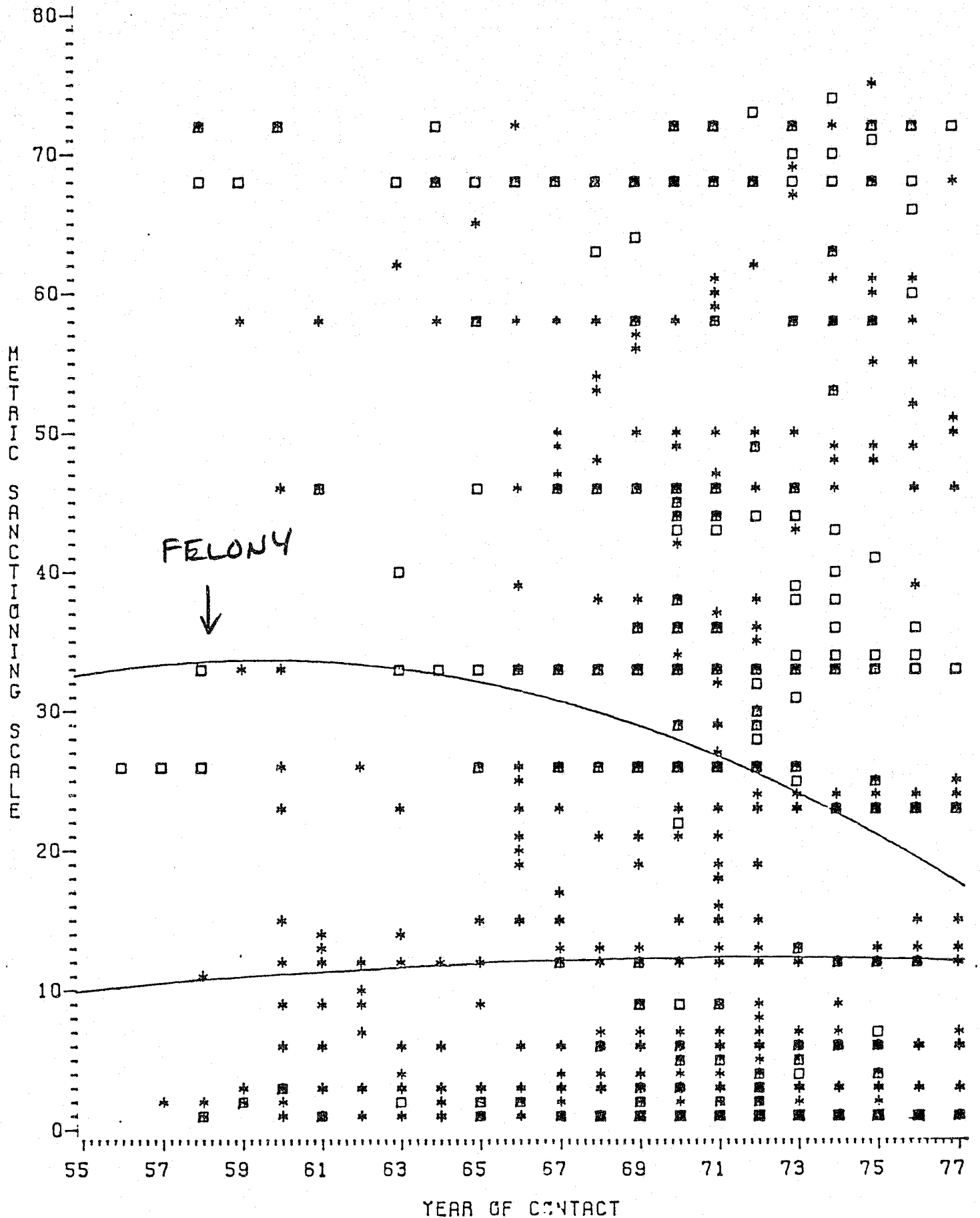
Diagram 11 indicates that there has been an overall decline in the severity of sanctions for Part I offenses which parallels that for felonies. Diagram 12 shows that severity of sanctions has declined for juveniles but increased for adults whether it be Part I or other offenses. Diagrams 13 and 14 apply compound curves to the data so that it is possible to see that the more recent trend for both juvenile and adult Part I offenses depends on the approach which is used in curve-fitting.

While this exercise may be confusing, the final diagram (Diagram 15) puts it all in place. Here we control for seriousness and age while examining the relationship of severity of sanctions to total prior sanctions. Now it becomes clear that whether juvenile or adult, felony or misdemeanor, prior sanctions have strong effects on the severity of current sanctions. This

SANCTIONING SEVERITY BY YEAR CONTROLLING FOR SERIOUSNESS



SANCTIONING SEVERITY BY YEAR CONTROLLING FOR SERIOUSNESS



LEGEND: FELONY

*** NO

□ YES

SANCTIONING SEVERITY BY YEAR CONTROLLING FOR SERIOUSNESS

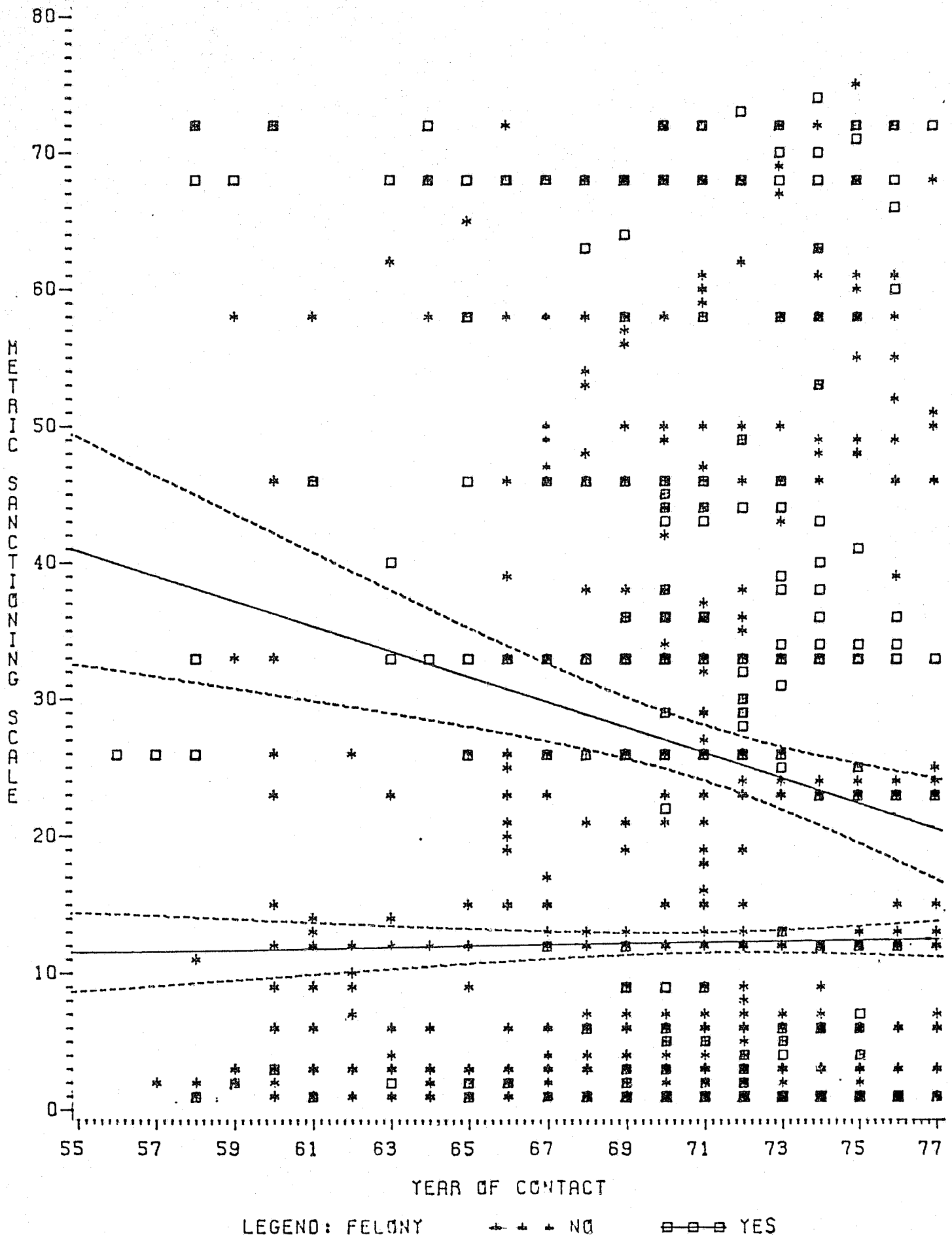
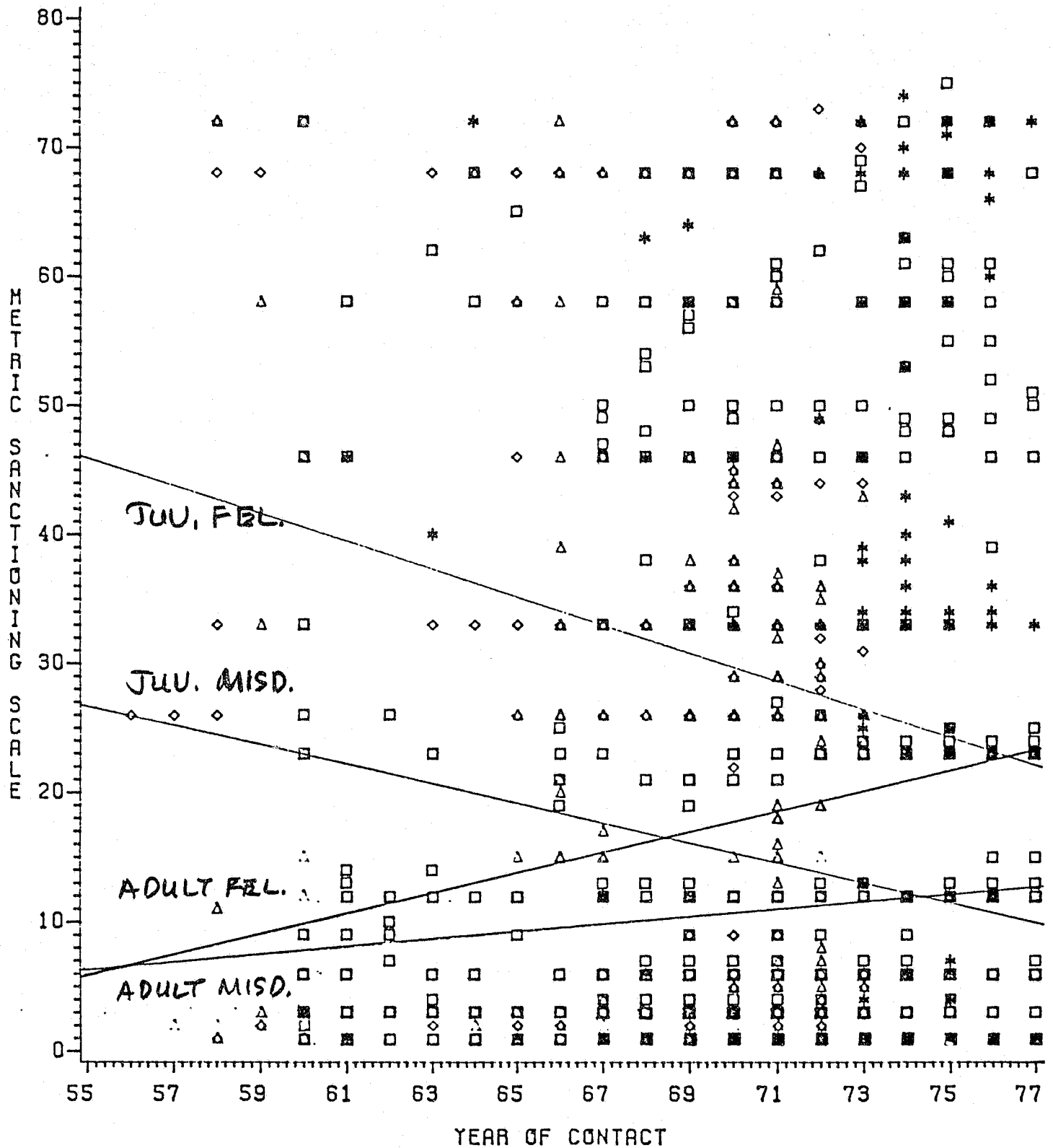


DIAGRAM 10

SEVERITY OF SANCTIONING BY YEAR CONTROLLING FOR SERIOUSNESS AND AGE



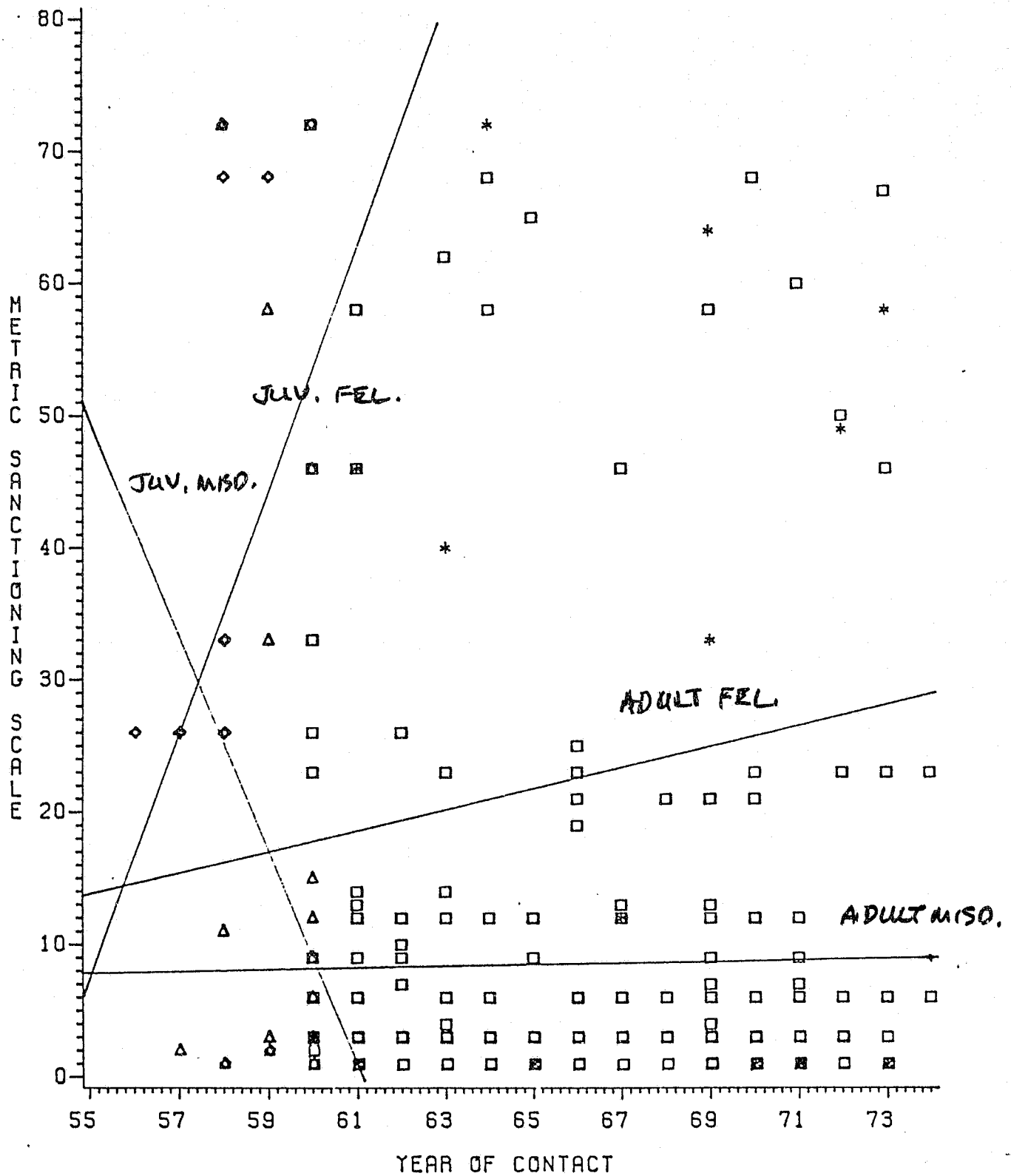
LEGEND: TYPE

+ + + ADULT FELNY
 ◇ ◇ ◇ JUVENILE FELNY

□ □ □ ADULT MISD
 △ △ △ JUVENILE MISD

DIAGRAM 10A

SEVERITY OF SANCTIONING BY YEAR CONTROLLING FOR SERIOUSNESS AND AGE
1942 COHORT ONLY



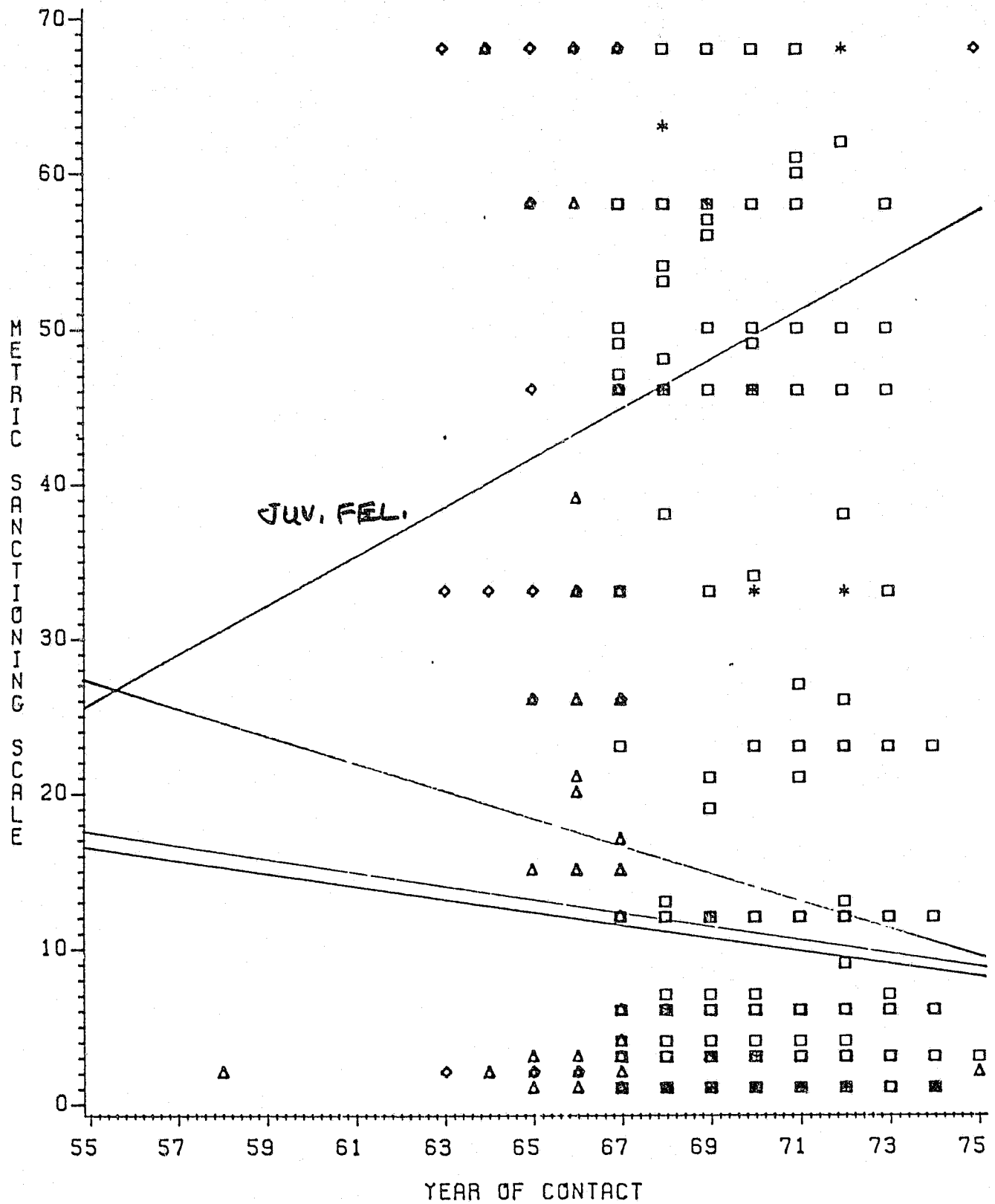
LEGEND: TYPE

+ + + ADULT FELNY
 ◊ ◊ ◊ JUVENILE FELNY

□ □ □ ADULT MISD
 △ △ △ JUVENILE MISD

DIAGRAM 10B

SEVERITY OF SANCTIONING BY YEAR CONTROLLING FOR SERIOUSNESS AND AGE
1949 COHORT ONLY



LEGEND: TYPE

♦♦♦ ADULT FELNY

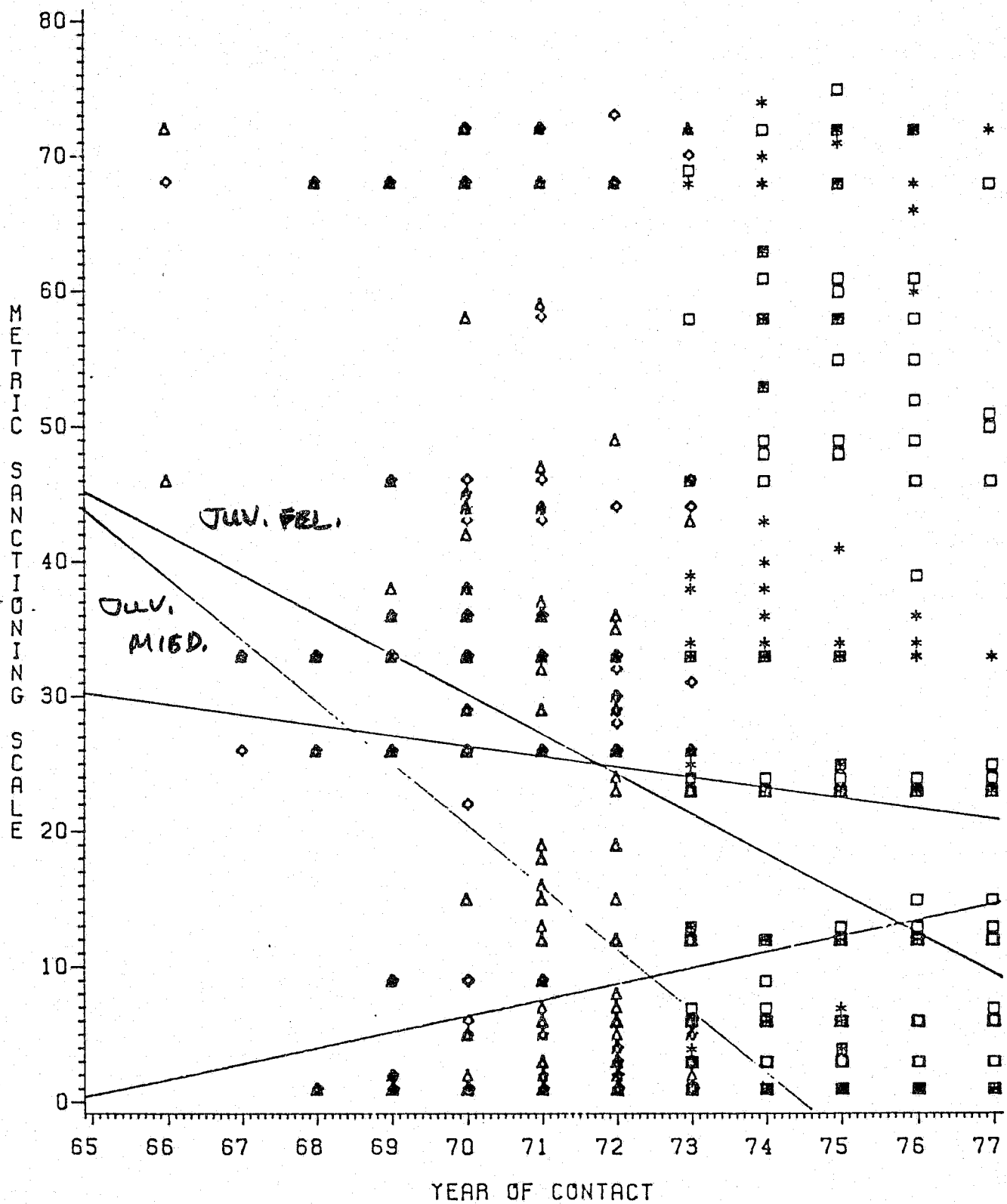
△△△ JUVENILE FELNY

□□□ ADULT MISD

△△△ JUVENILE MISD

DIAGRAM 10C

SEVERITY OF SANCTIONING BY YEAR CONTROLLING FOR SERIOUSNESS AND AGE
1955 COHORT ONLY



LEGEND: TYPE

+ + + ADULT FELNY
 * * * JUVENILE FELNY

□ □ □ ADULT MISO
 △ △ △ JUVENILE MISO

SANCTIONING SEVERITY BY YEAR CONTROLLING FOR TYPE OF OFFENSE

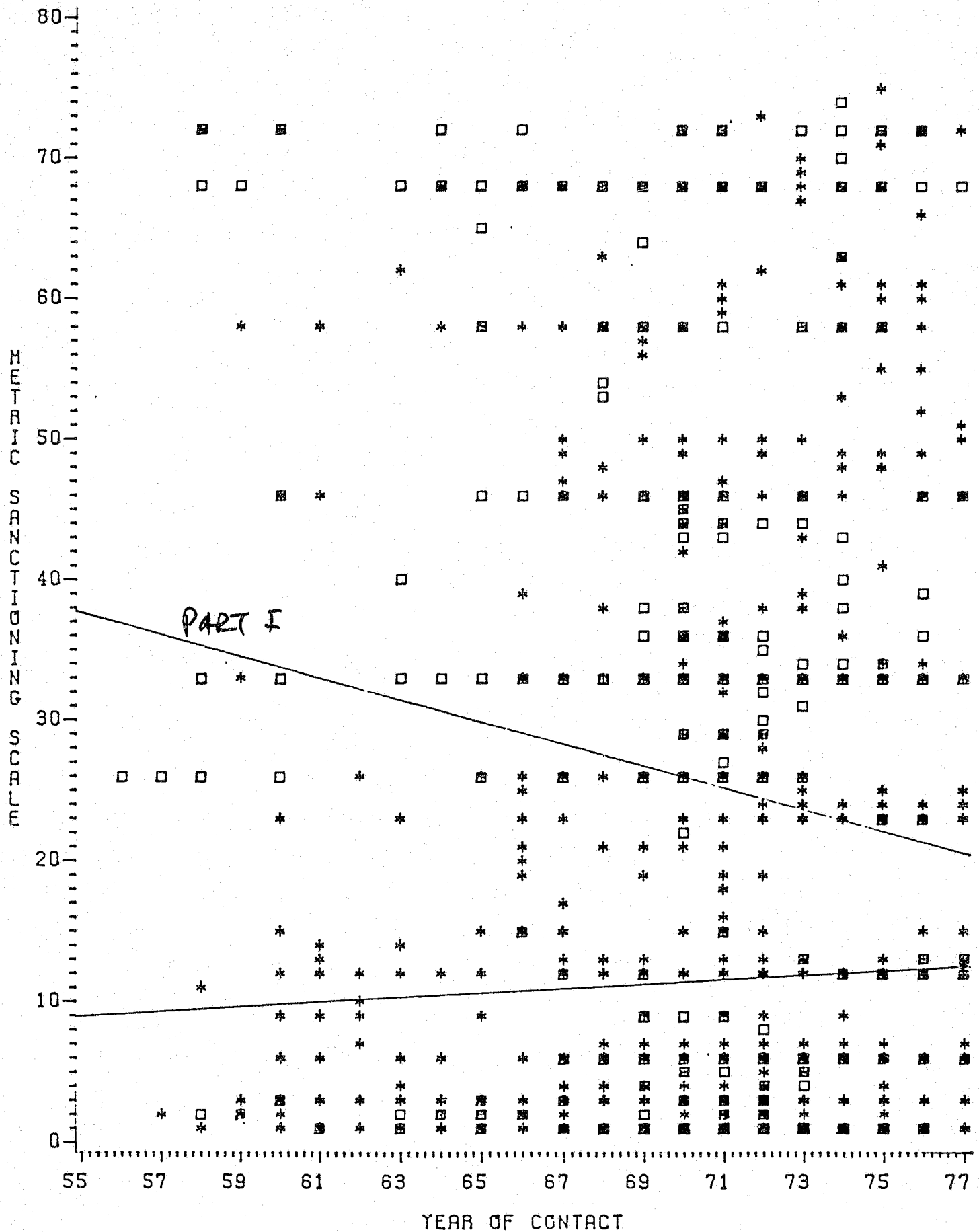
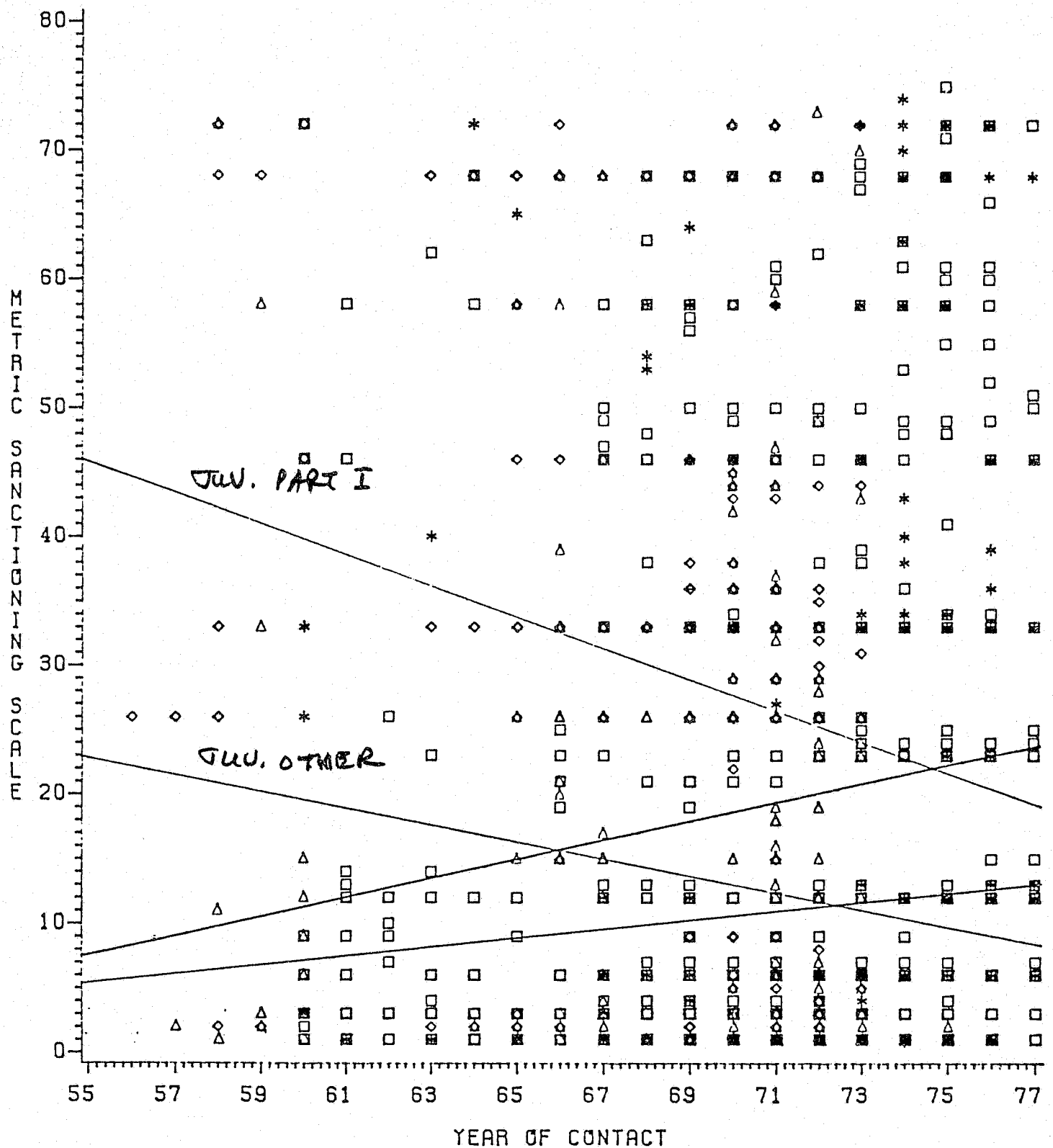


DIAGRAM 12

SEVERITY OF SANCTIONING BY YEAR CONTROLLING FOR TYPE AND AGE



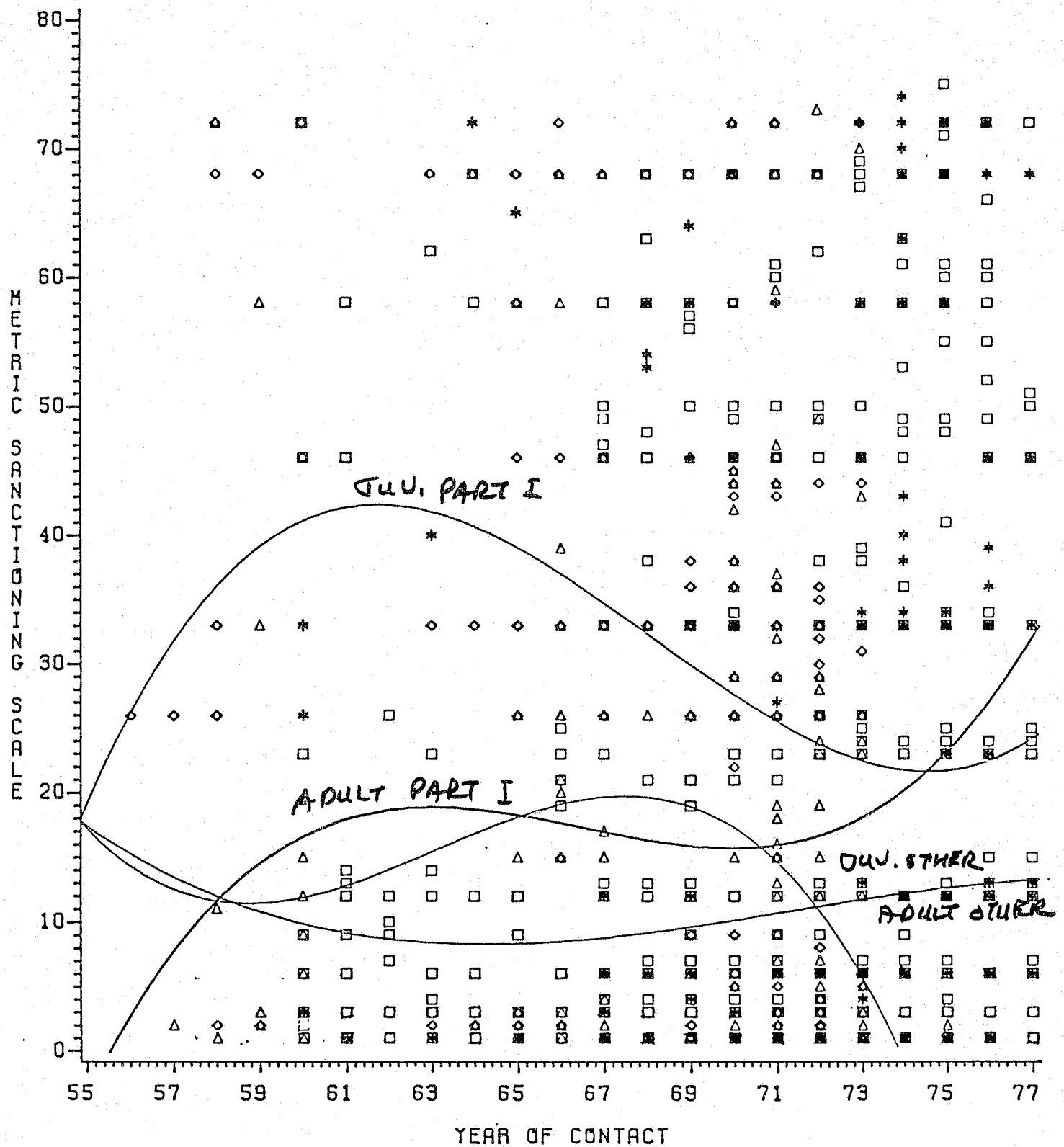
LEGEND: TYPE2

□-□-□ ADULT OTHER
△-△-△ JUVENILE OTHER

--* ADULT PART I
◇-◇-◇ JUVENILE PART I

DIAGRAM 13

SEVERITY OF SANCTIONING BY YEAR CONTROLLING FOR TYPE AND AGE



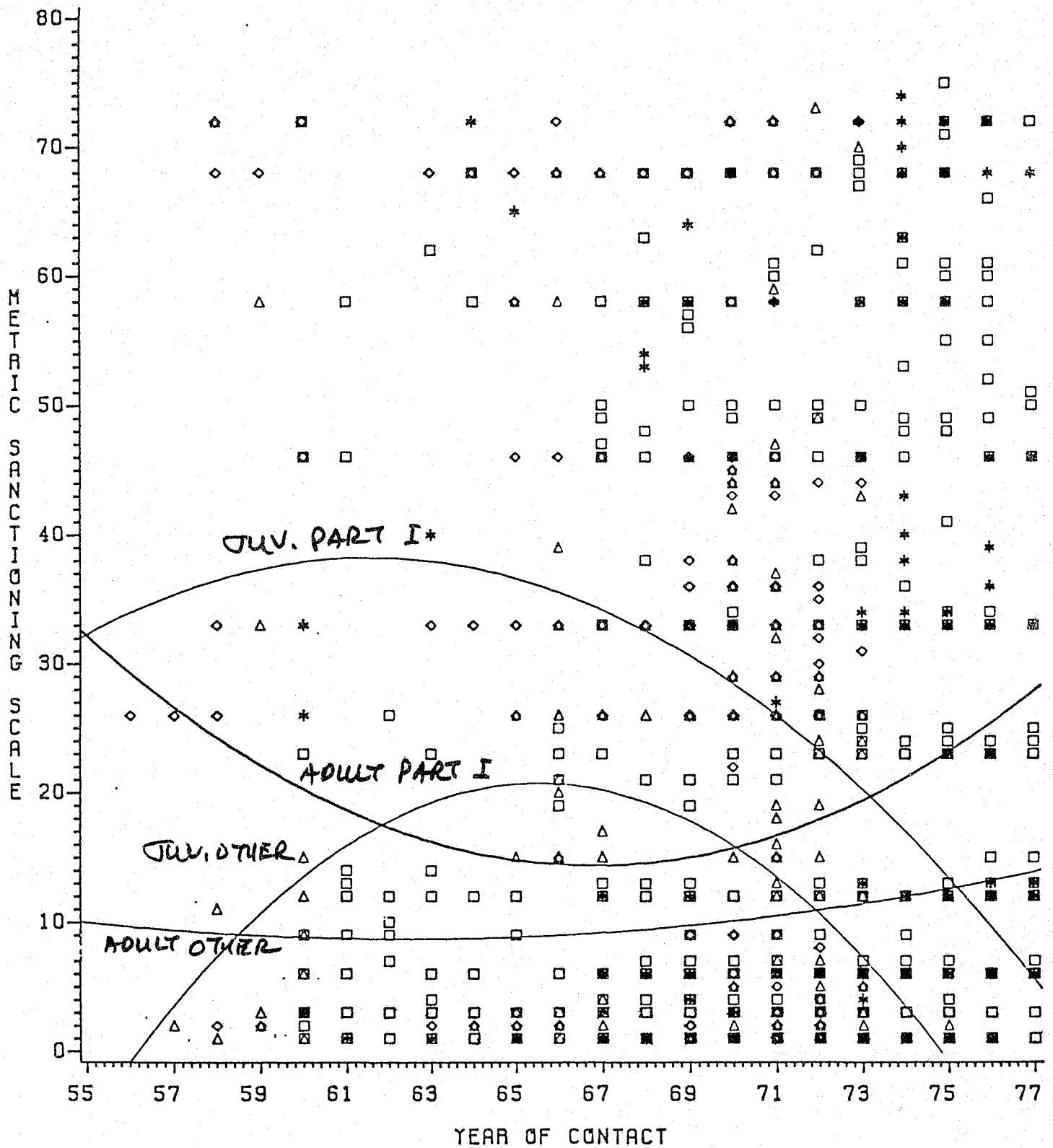
LEGEND: TYPE2

□-□-□ ADULT OTHER
△-△-△ JUVENILE OTHER

+--+ ADULT PART I
◇-◇-◇ JUVENILE PART I

DIAGRAM 14

SEVERITY OF SANCTIONING BY YEAR CONTROLLING FOR TYPE AND AGE



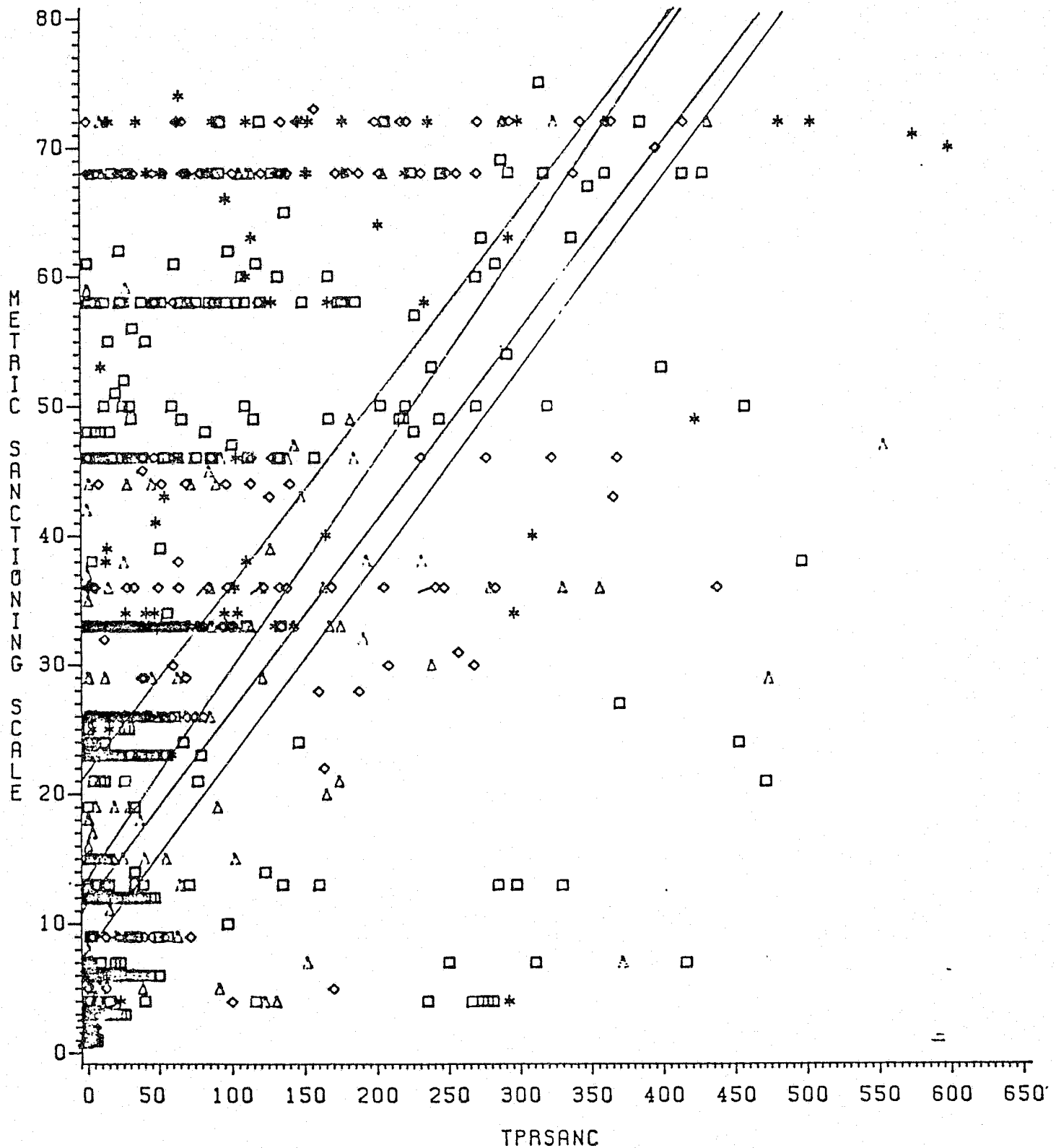
LEGEND: TYPE2

□-□-□ ADULT OTHER
 △-△-△ JUVENILE OTHER

--* ADULT PART I
 ◇-◇-◇ JUVENILE PART I

DIAGRAM 15

SEVERITY OF SANCTIONING BY TOTAL PRIOR SANCTIONING CONTROLLING FOR SERIOUSNESS AND AGE



LEGEND: TYPE

--* ADULT FELNY
 ◆◆◆ JUVENILE FELNY

□□□ ADULT MISD
 ▲▲▲ JUVENILE MISD

diagram tells us why the results are different when age-by-age data are analyzed (the events and consequences of a year are totalled) or when years are aggregated into age periods. Still, no matter which strategy is used, we do not know how much the policeman, court worker, or judge knows about the past and, if known, how much effect the past has on the decision-making process. What has happened in the court must, however, have considerable impact.

All of this indicates that when we examine the effects of sanctions on future behavior if we are to be precise we must be aware of cohort, age, and period effects as well as the other variables that enable us to better understand why sanctions have quite diverse effects on the future behavior of diverse types of persons.

APPENDIX B

CODE BOOK FOR POLICE CONTACT DATA SET

There are 15,245 police contacts in this data set. Some of the variables refer to the characteristics of the person who had the contact, such as ADULT (number of police contacts that this person had at ages 21 and older), while the other variables, such as AGE, are specific to that particular contact. Explication of various items may be requested from the Iowa Urban Community Research Center.

ADULT	Number of police contacts for ages 21 and older.
ADULT18	Number of police contacts for ages 18 through 20.
AGE	Actual age of cohort member when contact occurred.
AGECAT	Ages at time of contact grouped into 6 categories (6-9, 10-13, 14-17, 18-21, 22-25, and over 25).
ANGHBD	Identification number of neighborhood in which cohort member lived after age 18.
AVGPRSN	Average severity of the sanctions occurring in cohort member's record prior to each contact.
AVPRSER	Average seriousness of contacts occurring in cohort member's record prior to each contact.
BIRTH	Cohort member's birth date. Coded as actual date, e.g., May 5th, 1955 = 050555.
BLDUM	Cohort member's race/ethnicity coded as a dummy variable, Black vs. Non-Black, 1=Black, 0=Non-Black.
BLOCKC	1970 census tract and block number for address at which contact occurred (99999=not ascertained).
BLOCKH	1970 census tract and block number for home address of cohort member at time of contact (99999=not ascertained).
BLOCKP	1970 census tract and block number for cohort member's 1976 address if known. Not coded for 1955 Cohort. 99999=

not ascertained.

CASWGT	Weight of SPSS case.
CDATE	Date contact occurred. Coded with special date code for which code book is available. Example attached.
CHCDUM	Cohort member's race/ethnicity coded as a dummy variable, Chicano vs. Non-Chicano, 1=Chicano, 0=Non-Chicano.
CHT	Birth cohort identification (2=42, 9=49, and 5=55).
CHTDUM2	1942 Cohort dummy variable (1=42, 0=49, 55).
CHTDUM5	1955 Cohort dummy variable (1=55, 0=42, 49).
CHTDUM9	1949 Cohort dummy variable (1=49, 0=42, 55).
CONTN	Three-column code for the age period and sequence number of the contact within the age period. The first column is coded: 0=no contact, 1=juvenile contacts (ages 6 through 17), 2=young adult contact (ages 18 through 20), and 3=adult contact (ages 21 and older). For example, the first juvenile contact is coded 101.
COPS	Dummy variable. 1=Police as complainant, 0=someone else was complainant.
CPLAIN	Complainant in each contact: 1=Family or relative 2=Agency 3=Private citizen or business 4=Racine police or other law enforcement agency 5=Self 6=Other 7=Hospital 8=School 9=No ascertained 0=Not applicable.
CTYPE	Type of contact, e.g., disorderly conduct, theft, etc. Code Book is available. Has been replaced by RCTYPE. Sample page is attached.
DECADE	Decade in which contact occurred (1950, 1960, 1970).

DISORD	Contact was a disorderly conduct. Dummy variable, 1=yes, 0=no.
EIGHTEEN	Number of police contacts, ages 18 through 20.
FELDUM	Contact was a felony. Dummy variable, 1=yes, 0=no.
FUTUCONT	Number of contacts in record after cohort member's present contact.
FUTURSER	Total seriousness of contacts in record after cohort member's present contact.
ID	Cohort member's identification number.
INTERV	Was cohort member interviewed? Dummy variable, 1=yes, 0=no.
INVOLV	Actual number of persons involved in contact. 99=not ascertained.
JNGHBD	Identification number of neighborhood in which cohort member lived as a juvenile.
JNGHDUM	Dummy variable for juvenile neighborhood, 1=Inner City, 2=not Inner city, 9=Missing.
JUV18	Number of police contacts, ages 6 through 20.
JUVENILE	Number of police contacts, ages 6 through 17.
KIDSINV	Number of juveniles (6-17) involved if contact was a group offense.
LAGDATE	Number of days between date of police contact and police disposition of that contact.
MISDUM	Contact was at misdemeanor level. Dummy variable, 1=yes, 0=no.
MULTDISP	Multiple offenses which received a single sanction as the result of one court action.
NGHBDC	Identification number of neighborhood in which contact occurred.
NGHBDH	Identification number of neighborhood in which cohort member lived at time of contact.
NPRSANC	Number of sanctions in record prior to each contact.
NUMSANC	Number of contacts receiving a sanction,

including present contact.

NUMSEQ Numerical sequence of contact, regardless of age.

PARTIDUM Contact was a Part 1 offense. Dummy variable, 1=yes, 0=no.

PDATE Date of police disposition of contact. Coded according to special date coding scheme for which code book is available.

PDISP Disposition of contact by police:
1=Released, counseled and released, etc.
2=Referred to county probation department
3=Referred to county welfare agency
4=Referred to State Department of Public Welfare
5=Referred to Juvenile Traffic Court
6=Other
7=Referred to District Attorney (Adult)
8=Other adult referral
9=Not ascertained
0=Not applicable.
Note: Codes 2 and 7 represent referrals for possible further prosecution of juvenile or adult contacts, respectively.

PRIORS Number of contacts in record before but not including present contact.

RACE Race/ethnicity of cohort member: 0=Chicano, 1=Black, 2=White.

RCDATE Special recode used to then create RDATE.

RCHT Recode of cohort identification (1=1942, 1949 and 2=1955).

RCTYPE Contact type recoded to include multiple offenses at one contact, which were then recoded to the most serious of the incidents. Replaces CTYPE.

RDATE Recode of CDATE. 1=Non-Summer (or school year), 2=Summer.

RECSNC SNCSCALE collapsed to eliminate single-contact categories involving more than one sanction per contact. Replaces SNCSCALE. To translate the rank score one looks at the codes following the "----" and then looks at the scores preceding them to find each of the scores. For example, the rank of 57 contains scores 01, 07, 11, and

15. A score of 01 before the dashes is the code for dismissal, 07 is the code for a fine of \$61 to \$100, a score of 11 is the code for a driver license revocation or suspension, and a score of 15 is the code for institutionalization of 1 to 29 days.

<u>Rank</u>	<u>Original code---Code definition</u>
0	00---No contacts or no sanction
1	01---Dismissal
2	02---Supervision
3	05---Fine \$1 to \$30
4	69---02 05
5	06---Fine \$31 to \$60
6	10---Suspended sentence
7	07---Fine \$61 to \$100
8	11---Driver licence suspension or revocation
9	56---05 11
10	74---06 11
11	33---07 11
12	08---Fine of \$101 or more
13	21---08 11
14	13---Probation less than one year
15	62---05 13
16	79---08 13
17	14---Probation of a year or more
18	58---05 14
19	55---06 14
20	42---07 14
21	29---08 14
22	87---01 06 14
23	71---11 14
24	72---05 10 14
25	66---05 11 14
26	65---08 10 11 14
27	15---Institutionalization of 1 to 29 days
28	45---05 15
29	32---06 15
30	39---07 15
31	88---08 15
32	53---14 15
33	16---Institutionalization of 30 to 89 days
34	68---05 16
35	26---06 16
36	41---07 16
37	36---08 16
38	51---14 16
39	24---01 07 16
40	17---Institutionalization of 90 days to 1 year

41	57---14 17
42	93---08 14 17
43	18---Institutionalization of a year or more
44	94---07 18

RJNGHBD Used to compute JNGHDUM.

RSERI Recode of SERI.
 1=Juvenile Status
 2=Misdemeanor
 3=Felony
 9=Not ascertained
 0=No applicable.

SANCDATE Date sanction was imposed, coded according
 to special scheme. Code book is available.

SANCTION Uncollapsed, rank sanction codes.
 (See RECSNC.)

SEQNUM Sequence number of SPSS case.

SERI Type and seriousness of contact:
 1=Juvenile Non-adult
 2=Juvenile Misdemeanor
 3=Juvenile Felony
 4=Adult Misdemeanor
 5=Adult Felony
 6=Non-adult, ages 18-20
 7=Misdemeanor, ages 18-20
 8=Felony, ages 18-20
 9=Not ascertained
 0=Not applicable.

SEX Sex dummy variable, 1=male, 0=female.

SEXCOM Sex composition of contacts involving more
 than one offender:
 1=Males only
 2=Females only
 3=Mixed sex
 9=Not ascertained
 0=Not applicable (no contact or only one
 person involved.

SNCSCALE Rank Sanctioning Scale. (See RECSNC.)

SUBFILE Name of SPSS subfile for case.

SUMSER Total offense seriousness score.

TDUM50 Recoded date of contact, 1=1950.

TDUM60 Recoded date of contact, 1=1960.

TDUM70 Recoded date of contact, 1=1970.

TIME Cohort member's residence status. Codes 1, 2, 3, 4, 12, 13, and 14 represent "continuous residence" in Racine; that is, the cohort member was living continuously in Racine with place of residence not known for more than three years.

TIMEPER Date of contact recoded into decades:
 1=1950s
 2=1960s
 3=1970s
 0=No contact.

TOTAL Number of police contacts, all ages.

TOTPRSER Total of all seriousness prior to present contact.

TOTSANC Total of all SNCSCALE scores.

TOTSER Total TYPESER of all contacts.

TPRSANC Total of all SNCSCALE scores prior to present contact.

TRAFCON Dummy variable for traffic contacts,
 1=yes, 0=non-traffic.

TYPESER Ordinal ranking of six major categories of offense seriousness:
 6=Felony against Persons; includes robbery, assault, sex offenses, narcotics/drugs, homicide, escapee, and suicide.
 5=Felony against Property; includes burglary, theft, auto theft, fraud, forgery, and violent property destruction.
 4=Major Misdemeanor; includes escapee, theft, narcotics/drugs, weapons, fraud, assault, violent property destruction, burglary, and forgery.
 3=Minor Misdemeanor; includes obscene behavior, disorderly conduct, vagrancy, liquor violations, sex offenses, moving traffic violations, other traffic offenses, gambling, and family problems.
 2=Juvenile Status (persons under 18); includes vagrancy, disorderly conduct, incorrigible/runaway, and truancy.

1=Contact for Suspicion, Investigation,
Information.
0=No contact.

UID	Unique Identification Number (Cohort, ID) .
WHDUM	Cohort member's race/ethnicity coded as a dummy variable, White vs. Non-White, 1=White, 0=Non-White.
XC	X coordinate for location where contact occurred; used for mapping.
XCHT	Dummy variable for cohort, 1=1955, 0=1942 and 1949.
XH	X coordinate for cohort member's residence at time of contact; used for mapping.
YC	Y coordinate for location where contact occurred; used for mapping.
YEAR	Recode of date of contact to year of contact.
YH	Y coordinate for cohort member's residence at time of contact; used for mapping.

Sample Code Sheet. See CDATE, RCDATE, SANCDATE, PDATE

<u>Month, Day, Year = Day #</u>				<u>Month, Day, Year = Day #</u>				<u>Month, Day, Year = Day #</u>			
1	1	54	2193	1	1	55	2558	1	1	56	2923
1	31		2223	1	31		2588	1	31		2953
2	1	54	2224	2	1	55	2589	2	1	56	2954
2	28		2251	2	28		2616	2	29		2982
3	1	54	2252	3	1	55	2617	3	1	56	2983
3	31		2282	3	31		2647	3	31		3013
4	1	54	2283	4	1	55	2648	4	1	56	3014
4	30		2312	4	30		2677	4	30		3043
5	1	54	2313	5	1	55	2678	5	1	56	3044
5	31		2343	5	31		2708	5	31		3074
6	1	54	2344	6	1	55	2709	6	1	56	3075
6	30		2373	6	30		2738	6	30		3104
7	1	54	2374	7	1	55	2739	7	1	56	3105
7	31		2404	7	31		2769	7	31		3135
8	1	54	2405	8	1	55	2770	8	1	56	3136
8	31		2435	8	31		2800	8	31		3166
9	1	54	2436	9	1	55	2801	9	1	56	3167
9	30		2465	9	30		2830	9	30		3196
10	1	54	2466	10	1	55	2831	10	1	56	3197
10	31		2496	10	31		2861	10	31		3227
11	1	54	2497	11	1	55	2862	11	1	56	3228
11	30		2526	11	30		2891	11	30		3257
12	1	54	2527	12	1	55	2892	12	1	56	3258
12	31		2557	12	31		2922	12	31		3288

Sample Code Sheet. See CTYPE, RCTYPE

Detailed Codes for Type of Contact (CTYPE)

01 - ROBBERY	(Fel)	Armed robbery Robbery and assault Other robbery
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02 - BURGLARY	(Fel)	Burglary Breaking and entering or B & E
	(Misd)	Entering a locked vehicle
<hr/>		
03 - THEFT (EXCEPT AUTO)		Larceny and theft (except auto)
(Code according to value:		Tampering: bike, auto, machines
Over \$100 - Fel;		Larceny of money by use of slugs
Under \$100 - Misd)		Larceny from cars or trucks
		Purse snatching
		Petty theft
		Bake larceny
		Stolen property: receiving, selling, buying, possession
		Shoplifting
		Tampering with U.S. mail; theft of mail
		Looting; take junk
		Attempted theft
<hr/>		
04 - AUTO THEFT	(Fel)	Auto theft
		Joyride
		OMVWOC (car, plane, motorcycle, tractor, boat)
		Accomplice to such an act
<hr/>		
05 - DISORDERLY CONDUCT	(Misd)	Disorderly conduct
		Fighting
		"Bullying" younger children
		Throwing objects (stones, snowballs, tomatoes, etc.)
		Obscene language or phone calls; profanity
		Annoy animals
		Urinating on sidewalk
		Shooting darts in theater
		Expectorating on people in theater
		Disturbing the peace
		Disturbance; juvenile disturbance; kids disturb; disturb at construction
		Neighbor trouble
		Juvenile complaint (playing in street or on property)
		False fire alarm
		Resisting, interfering with an officer

APPENDIX C

DIFFERENCES IN CAREER TYPES BASED ON OFFENSE LEVEL, COHORT, AND JUSTICE SYSTEM INVOLVEMENT

Differences in the Distribution of Career Types Based on Offense Level and Cohort

Differences in findings within cohorts based on differences in offense seriousness levels and whether controls for sex have been made are illustrated by data presented in Table 1.

The first column for each cohort shows the distribution of cohort members according to whether or not they had police contacts for any reason during both the juvenile and adult periods, only during the juvenile period, only during the adult period, or during neither. Each succeeding column for each cohort involves a more serious offense level.

These within-cohort findings may be described as follows:

1. The percent of each cohort with police contacts as both juveniles and adults declines from the least serious offense level to the most serious offense level, i.e., from contacts for any reason to felony-level contacts.
2. At the two most serious offense levels a larger percentage of each cohort has juvenile police contacts but no adult police contacts than has contacts as both juveniles and adults. This is the case for males alone and for females at not only the two most serious offense levels but at the felony or misdemeanor levels as well.
3. At the two most serious offense levels a larger percentage of

TABLE 1. POLICE CONTACT TYPES BASED ON OFFICIAL RECORDS FOR AGES 6-17 VS. AGES 18 AND OLDER, BY PERCENT

1942 Cohort					1949 Cohort					1955 Cohort				
P C O N T A C T	F E L O R M I S D	F E L O R M A J M I S D	F E L O N Y	F E L O N Y	P C O N T A C T	F E L O R M I S D	F E L O R M A J M I S D	F E L O N Y	F E L O N Y	P C O N T A C T	F E L O R M I S D	F E L O R M A J M I S D	F E L O N Y	F E L O N Y
ALL														
Yes-Yes	32.4	20.2	3.2	1.3	35.3	20.7	4.8	1.9		25.4	15.9	6.4	3.5	
Yes-No	7.7	9.6	7.6	3.8	12.8	15.0	10.6	4.5		18.7	15.2	11.9	6.3	
No-Yes	28.4	17.7	5.7	3.3	21.0	14.2	5.0	3.8		14.9	12.7	4.8	4.7	
No-No	31.4	52.4	83.6	91.7	30.8	50.1	79.6	89.7		41.0	56.3	76.9	85.5	
MALES														
Yes-Yes	49.7	33.4	5.6	2.2	50.5	34.6	8.0	3.4		36.3	23.9	10.7	6.3	
Yes-No	6.7	12.6	12.4	6.5	12.6	19.7	14.5	6.9		19.7	18.0	14.8	8.8	
No-Yes	28.1	20.2	7.9	4.5	18.6	14.9	5.9	4.9		15.7	15.2	6.8	6.6	
No-No	15.4	33.7	74.2	86.8	18.2	30.8	71.6	84.9		28.3	42.9	67.7	78.3	
FEMALES														
Yes-Yes	10.1	3.2	----	----	15.1	7.2	.5	----		13.6	7.2	1.7	.6	
Yes-No	9.0	5.8	1.4	.4	13.1	8.8	5.4	1.4		17.6	12.1	8.8	3.7	
No-Yes	28.9	14.4	2.9	1.8	24.2	13.3	3.8	2.3		14.1	10.0	2.7	2.5	
No-No	52.8	76.5	95.7	97.8	47.6	70.7	90.3	96.2		54.7	70.7	86.8	93.2	

Yes-Yes = Police contacts at stated offense level 6-17 and 18 and older.

Yes-No = Police contacts at stated offense level 6-17.

No-Yes = Police contacts at stated offense level 18 and older.

No-No = No police contacts at that offense level.

PCONTACT = Recorded police contacts at any level of seriousness.

FELORMISD = Recorded police contacts at felony or misdemeanor level.

FELORMAJMISD = Recorded police contacts at felony or major misdemeanor level.

FELONY = Recorded police contacts at felony level.

the cohort has no juvenile police contacts but has adult contacts than has contacts as both juveniles and adults. This is the case for males at only the most serious level but for females at all offense levels.

4. Points 2 and 3, taken together, reveal that a relatively small proportion of even the male cohort members has police contacts for misdemeanors or more serious offenses during both the juvenile and adult periods compared to the proportion who have contacts for misdemeanors during the juvenile or adult periods. For the females, the proportion who have juvenile/adult continuity is very small compared to those who have police contacts at any level of seriousness during either period. Most females have no police contacts either period at any level of seriousness.

It is, therefore, quite clear that differences in offense seriousness levels have significant influences on findings.

Differences in findings from cohort to cohort are also important. These findings follow:

1. The percent with police contacts as both juveniles and adults increases from cohort to cohort if based on the major misdemeanor or felony level or the felony level alone, whether total cohort or males or females.
2. The percent who had contacts during the juvenile period increases from cohort to cohort for the two most serious offense levels for males and females combined, increases at all levels for females, and more so for females than males at the most serious offense levels.

3. The percent who had contacts during only the juvenile period increases from cohort to cohort for all seriousness levels, moreso for females than males.
4. The percent who had contacts during the adult period increases from cohort to cohort for the two most serious offense levels.
5. The percent who had contacts during only the adult period increases from cohort to cohort for only the most serious offense level.

It should also be noted that the proportion of each cohort that had continuity (Yes-Yes) is always considerably smaller than the proportion who desisted (Yes-No) between the juvenile and adult periods at the two most serious offense levels and that desistance is proportionately greater for females than for males. This, of course, produces higher coefficients of correlation between juvenile contacts and adult contacts for males than for females, whatever the level of offense seriousness. Even for the males, however, the correlations between measures for the juvenile and adult periods ranged between .285 and .376, scarcely a relationship which should lead researchers to begin to talk about predicting adult criminal records from juvenile records.

Career Type Continuity Differences Based on Offense Level and Justice System Involvement

Be all of that as it may, we now turn to Tables 2 through 10 in which all cohorts have been combined as a basis for describing continuity not by cohort but by offense type or seriousness and level of intervention with controls for sex and place of

TABLE 2. CAREER TYPE CONTINUITY FOR COMBINED COHORT MEMBERS ACROSS JUVENILE, 18 TO 20, AND 21 AND OLDER AGE PERIODS

<u>Contacts vs. No Contacts</u>								
	CONTACTS		NON-TRAFFIC		PART I		FELONY	
	N	%	N	%	N	%	N	%
Y-Y-Y	524	12.8	307	7.5	28	.7	22	.5
Y-Y-N	445	10.9	327	8.0	98	2.4	66	1.6
Y-N-Y	239	5.9	164	4.0	28	.7	18	.4
Y-N-N	616	15.1	716	17.6	436	10.7	210	5.1
N-Y-Y	146	3.6	81	2.0	12	.3	11	.3
N-Y-N	349	8.6	214	5.2	73	1.8	102	2.5
N-N-Y	282	6.9	189	4.6	31	.8	44	1.1
N-N-N	1478	36.2	2081	51.0	3373	82.7	3606	88.4
Totals	4079	100.0	4079	99.9	4079	100.1	4079	99.9
<u>Referred vs. Not Referred</u>								
Y-Y-Y	111	2.7	77	1.9	15	.4	13	.3
Y-Y-N	189	4.6	136	3.3	61	1.5	46	1.1
Y-N-Y	83	2.0	46	1.1	8	.2	11	.3
Y-N-N	570	14.0	426	10.4	280	6.9	180	4.4
N-Y-Y	37	.9	27	.7	6	.1	9	.2
N-Y-N	196	4.8	134	3.3	65	1.6	83	2.0
N-N-Y	98	2.4	73	1.8	26	.6	32	.8
N-N-N	2795	68.5	3160	77.5	3618	88.7	3705	90.8
Totals	4079	99.9	4079	100.0	4079	100.0	4079	99.9
<u>Sanctioned vs. Not Sanctioned</u>								
Y-Y-Y	52	1.3	27	.7	1	.0	1	.0
Y-Y-N	95	2.3	63	1.5	32	.8	24	.6
Y-N-Y	34	.8	15	.4	4	.1	3	.1
Y-N-N	221	5.4	162	4.0	140	3.4	106	2.6
N-Y-Y	76	1.9	25	.6	4	.1	4	.1
N-Y-N	218	5.3	120	2.9	48	1.2	47	1.2
N-N-Y	117	2.9	60	1.5	14	.3	11	.3
N-N-N	3266	80.1	3607	88.4	3836	94.0	3883	95.2
Totals	4079	100.0	4079	100.0	4079	99.9	4079	100.1

TABLE 3. CAREER TYPE CONTINUITY FOR MALE COHORT MEMBERS ACROSS JUVENILE, 18 TO 20, AND 21 AND OLDER AGE PERIODS

<u>Contacts vs. No Contacts</u>								
	CONTACTS		NON-TRAFFIC		PART I		FELONY	
	N	%	N	%	N	%	N	%
Y-Y-Y	449	20.3	257	11.6	27	1.2	21	1.0
Y-Y-N	331	15.0	258	11.7	87	3.9	64	2.9
Y-N-Y	175	7.9	125	5.7	27	1.2	16	.7
Y-N-N	339	15.3	445	20.1	332	15.0	173	7.8
N-Y-Y	100	4.5	60	2.7	10	.5	8	.4
N-Y-N	163	7.4	135	6.1	63	2.9	80	3.6
N-N-Y	148	6.7	126	5.7	23	1.0	33	1.5
N-N-N	505	22.9	804	36.4	1641	74.3	1815	82.1
Totals	2210	100.0	2210	100.0	2210	100.0	2210	100.0
<u>Referred vs. Not Referred</u>								
Y-Y-Y	103	4.7	70	3.2	14	.6	13	.6
Y-Y-N	162	7.3	117	5.3	57	2.6	45	2.0
Y-N-Y	74	3.3	43	1.9	8	.4	10	.5
Y-N-N	397	18.0	288	13.0	219	9.9	153	6.9
N-Y-Y	34	1.5	24	1.1	5	.2	7	.3
N-Y-N	146	6.6	106	4.8	56	2.5	70	3.2
N-N-Y	68	3.1	59	2.7	21	1.0	25	1.1
N-N-N	1226	55.5	1503	68.0	1830	82.8	1887	85.4
Totals	2210	100.0	2210	100.0	2210	100.0	2210	100.0
<u>Sanctioned vs. Not Sanctioned</u>								
Y-Y-Y	49	2.2	27	1.2	1	.1	1	.1
Y-Y-N	86	3.9	59	2.7	31	1.4	24	1.1
Y-N-Y	31	1.4	13	.6	4	.2	3	.1
Y-N-N	163	7.4	125	5.7	128	5.8	95	4.3
N-Y-Y	72	3.3	21	1.0	3	.1	4	.2
N-Y-N	172	7.8	100	4.5	43	1.9	44	2.0
N-N-Y	94	4.3	55	2.5	11	.5	8	.4
N-N-N	1543	69.8	1810	81.9	1989	90.0	2031	91.9
Totals	2210	100.1	2210	100.1	2210	100.0	2210	100.1

TABLE 4. CAREER TYPE CONTINUITY FOR FEMALE COHORT MEMBERS ACROSS JUVENILE, 18 TO 20, AND 21 AND OLDER AGE PERIODS

<u>Contacts vs. No Contacts</u>								
	CONTACTS		NON-TRAFFIC		PART I		FELONY	
	N	%	N	%	N	%	N	%
Y-Y-Y	75	4.0	50	2.7	1	.1	1	.1
Y-Y-N	114	6.1	69	3.7	11	.6	2	.1
Y-N-Y	64	3.4	39	2.1	1	.1	2	.1
Y-N-N	277	14.8	271	14.5	104	5.6	37	2.0
N-Y-Y	46	2.5	21	1.1	2	.1	3	.2
N-Y-N	186	10.0	79	4.2	10	.5	22	1.2
N-N-Y	134	7.2	63	3.4	8	.4	11	.6
N-N-N	973	52.1	1277	68.3	1732	92.7	1791	95.8
Totals	1869	100.1	1869	100.0	1869	100.1	1869	100.1
<u>Referred vs. Not Referred</u>								
Y-Y-Y	8	.4	7	.4	1	.1	---	---
Y-Y-N	27	1.4	19	1.0	4	.2	1	.1
Y-N-Y	9	.5	3	.2	---	---	1	.1
Y-N-N	173	9.3	138	7.4	61	3.3	27	1.4
N-Y-Y	3	.2	3	.2	1	.1	2	.1
N-Y-N	50	2.7	28	1.5	9	.5	13	.7
N-N-Y	30	1.6	14	.7	5	.3	7	.4
N-N-N	1569	83.9	1657	88.7	1788	95.7	1818	97.3
Totals	1869	100.0	1869	100.1	1869	100.2	1869	100.1
<u>Sanctioned vs. Not Sanctioned</u>								
Y-Y-Y	3	.2	---	---	---	---	---	---
Y-Y-N	9	.5	4	.2	1	.1	---	---
Y-N-Y	3	.2	2	.1	---	---	---	---
Y-N-N	58	3.1	37	2.0	12	.6	11	.6
N-Y-Y	4	.2	4	.2	1	.1	---	---
N-Y-N	46	2.5	20	1.1	5	.3	3	.2
N-N-Y	23	1.2	5	.3	3	.2	3	.2
N-N-N	1723	92.2	1797	96.1	1847	98.8	1852	99.1
Totals	1869	100.1	1869	100.0	1869	100.1	1869	100.1

residence. With the cohorts combined we are able to present eight contact patterns and these for all contacts, non-traffic contacts, Part I (Index Offenses), and Felony-level offenses, as well as the pattern for referrals and sanctions. The percentages in this table enable us to see in a different way than do those in Table 1 how not only offense type or seriousness effect but patterns show the extent to which cohort members have been involved in the justice system influences the conclusions which may be made about continuity between age periods and the prevalence of career offenders.

These eight types may also be consolidated into the four types shown in Table 1 by adding the percentages for the first three types and considering them as YY, considering the fourth type as YN, considering types 5 through 7 as NY, and considering the last type to be NN. The following basic findings may be derived from Table 2:

1. The proportion of each of these continuity types declines as one moves from police contacts to any sort of felony-level contacts.
2. The proportion of each of these continuity types declines as one moves from contacts to sanctions.
3. The proportion of the combined continuity types declines as one moves from contacts to felony-level offenses.
4. The proportion of the combined continuity types declines as one moves from contacts to sanctions.
5. The proportion of those who desist after the juvenile period

TABLE 5. CAREER TYPE CONTINUITY FOR INNER CITY COHORT MEMBERS
ACROSS JUVENILE, 18 TO 20, AND 21 AND OLDER AGE PERIODS

<u>Contacts vs. No Contacts</u>								
	CONTACTS		NON-TRAFFIC		PART I		FELONY	
	N	%	N	%	N	%	N	%
Y-Y-Y	191	22.8	132	15.8	20	2.4	13	1.6
Y-Y-N	118	14.1	106	12.6	49	5.8	35	4.2
Y-N-Y	55	6.6	39	4.7	14	1.7	12	1.4
Y-N-N	137	16.3	175	20.9	147	17.5	67	8.0
N-Y-Y	34	4.1	20	2.4	7	.8	3	.4
N-Y-N	57	6.8	47	5.6	22	2.6	36	4.3
N-N-Y	55	6.6	39	4.7	10	1.2	13	1.6
N-N-N	191	22.8	280	33.4	569	67.9	659	78.6
Totals	838	100.1	838	100.1	838	99.9	838	100.1
<u>Referred vs. Not Referred</u>								
Y-Y-Y	53	6.3	46	5.5	12	1.4	9	1.1
Y-Y-N	74	8.8	60	7.2	33	3.9	29	3.5
Y-N-Y	31	3.7	17	2.0	5	.6	6	.7
Y-N-N	140	16.7	126	15.0	105	12.5	65	7.8
N-Y-Y	7	.8	6	.7	3	.4	2	.2
N-Y-N	47	5.6	38	4.5	26	3.1	28	3.3
N-N-Y	34	4.1	24	2.9	13	1.6	12	1.4
N-N-N	452	53.9	521	62.2	641	76.5	687	82.0
Totals	838	99.9	838	100.0	838	100.0	838	100.0
<u>Sanctioned vs. Not Sanctioned</u>								
Y-Y-Y	31	3.7	16	1.9	1	.1	---	---
Y-Y-N	36	4.3	35	4.2	18	2.1	14	1.7
Y-N-Y	12	1.4	6	.7	3	.4	2	.2
Y-N-N	68	8.1	61	7.3	65	7.8	50	6.0
N-Y-Y	32	3.8	12	1.4	3	.4	---	---
N-Y-N	54	6.4	37	4.4	17	2.0	15	1.8
N-N-Y	38	4.5	24	2.9	7	.8	5	.6
N-N-N	567	67.7	647	77.2	724	86.4	752	89.7
Totals	838	99.9	838	100.0	838	100.0	838	100.0

TABLE 6. CAREER TYPE CONTINUITY FOR NON-INNER CITY COHORT MEMBERS
ACROSS JUVENILE, 18 TO 20, AND 21 AND OLDER AGE PERIODS

<u>Contacts vs. No Contacts</u>								
	CONTACTS		NON-TRAFFIC		PART I		FELONY	
	N	%	N	%	N	%	N	%
Y-Y-Y	300	11.5	159	6.1	7	.3	7	.3
Y-Y-N	281	10.8	194	7.5	44	1.7	25	1.0
Y-N-Y	161	6.2	118	4.5	13	.5	5	.2
Y-N-N	414	15.9	487	18.7	253	9.7	129	5.0
N-Y-Y	78	3.0	41	1.6	4	.2	6	.2
N-Y-N	233	8.9	132	5.1	34	1.3	50	1.9
N-N-Y	177	6.8	113	4.3	16	.6	26	1.0
N-N-N	960	36.9	1360	52.2	2233	85.8	2356	90.5
Totals	2604	100.0	2604	100.0	2604	100.1	2604	100.1
<u>Referred vs. Not Referred</u>								
Y-Y-Y	47	1.8	26	1.0	2	.1	3	.1
Y-Y-N	100	3.8	64	2.5	25	1.0	14	.5
Y-N-Y	44	1.7	28	1.1	2	.1	5	.2
Y-N-N	360	13.8	261	10.0	147	5.6	100	3.8
N-Y-Y	24	.9	15	.6	3	.1	4	.2
N-Y-N	116	4.5	73	2.8	28	1.1	41	1.6
N-N-Y	47	1.8	36	1.4	10	.4	17	.7
N-N-N	1866	71.7	2101	80.7	2387	91.7	2420	92.9
Totals	2604	100.0	2604	100.1	2604	100.1	2604	100.0
<u>Sanctioned vs. Not Sanctioned</u>								
Y-Y-Y	20	.8	10	.4	---	---	1	.0
Y-Y-N	49	1.9	23	.9	12	.5	8	.3
Y-N-Y	17	.7	9	.3	1	.0	1	.0
Y-N-N	132	5.1	91	3.5	66	2.5	49	1.9
N-Y-Y	35	1.3	10	.4	1	.0	3	.1
N-Y-N	132	5.1	63	2.4	24	.9	23	.9
N-N-Y	63	2.4	28	1.1	6	.2	5	.2
N-N-N	2156	82.8	2370	91.0	2494	95.8	2514	96.5
Totals	2604	100.1	2604	100.0	2604	99.9	2604	99.9

TABLE 7. CAREER TYPE CONTINUITY FOR INNER CITY MALE COHORT MEMBERS
ACROSS JUVENILE, 18 TO 20, AND 21 AND OLDER AGE PERIODS

<u>Contacts vs. No Contacts</u>								
	CONTACTS		NON-TRAFFIC		PART I		FELONY	
	N	%	N	%	N	%	N	%
Y-Y-Y	158	33.3	104	21.9	19	4.0	13	2.7
Y-Y-N	82	17.3	80	16.8	45	9.5	34	7.2
Y-N-Y	41	8.6	29	6.1	13	2.7	11	2.3
Y-N-N	70	14.7	101	21.3	101	21.3	57	12.0
N-Y-Y	21	4.4	15	3.2	5	1.1	2	.4
N-Y-N	20	4.2	24	5.1	17	3.6	26	5.5
N-N-Y	31	6.5	25	5.3	5	1.1	9	1.9
N-N-N	52	10.9	97	20.4	270	56.8	323	68.0
Totals	475	99.9	475	100.1	475	100.1	475	100.0
<u>Referred vs. Not Referred</u>								
Y-Y-Y	48	10.1	42	8.8	11	2.3	9	1.9
Y-Y-N	62	13.1	50	10.5	32	6.7	29	6.1
Y-N-Y	27	5.7	16	3.4	5	1.1	6	1.3
Y-N-N	95	20.0	83	17.5	77	16.2	56	11.8
N-Y-Y	5	1.1	4	.8	2	.4	1	.2
N-Y-N	35	7.4	29	6.1	20	4.2	23	4.8
N-N-Y	19	4.0	17	3.6	9	1.9	9	1.9
N-N-N	184	38.7	234	49.3	319	67.2	342	72.0
Totals	475	100.1	475	100.0	475	100.0	475	100.0
<u>Sanctioned vs. Not Sanctioned</u>								
Y-Y-Y	29	6.1	16	3.4	1	.2	---	---
Y-Y-N	33	6.9	32	6.7	17	3.6	14	2.9
Y-N-Y	12	2.5	5	1.1	3	.6	2	.4
Y-N-N	46	9.7	47	9.9	58	12.2	47	9.9
N-Y-Y	28	5.9	8	1.7	2	.4	---	---
N-Y-N	40	8.4	29	6.1	16	3.4	15	3.2
N-N-Y	26	5.5	20	4.2	4	.8	2	.4
N-N-N	261	54.9	318	66.9	374	78.7	395	83.2
Totals	475	99.9	475	100.0	475	99.9	475	100.0

declines at every level of involvement (with one exception) from contacts for any reason to felony-level contacts.

6. The proportion of those who desist or are not referred or sanctioned after the juvenile period decreases at every level of offense seriousness from contact to felonies. In other words, desistance, non-referral or non-sanction, is the pattern rather than continuity. This is an artifact of the table, however, because the declining proportion with serious contacts results in a declining proportion of persons sanctioned for that level of seriousness.
7. The greater the involvement with the justice system the less the decline in rate of desistance from contact to felony-level offenses.
8. The more serious the offense level the less the decline in rate of desistance from contact to referral to sanctions.
9. Desistance after the juvenile period is increasingly less for persons with more justice system involvement from contacts alone to felony-level contacts. In other words, increasing involvement with the justice system brings about less desistance the more serious the offense level.

Let us now turn to similar tables with controls for sex, place of residence as inner city vs. other, and so on. The main thrust of this appendix is to show how findings differ based on not only measurement levels but how relations vary with ecological and demographic controls.

TABLE 8. CAREER TYPE CONTINUITY FOR INNER CITY FEMALE COHORT MEMBERS ACROSS JUVENILE, 18 TO 20, AND 21 AND OLDER AGE PERIODS

<u>Contacts vs. No Contacts</u>								
	CONTACTS		NON-TRAFFIC		PART I		FELONY	
	N	%	N	%	N	%	N	%
Y-Y-Y	33	9.1	28	7.7	1	.3	---	---
Y-Y-N	36	9.9	26	7.2	4	1.1	1	.3
Y-N-Y	14	3.9	10	2.8	1	.3	1	.3
Y-N-N	67	18.5	74	20.4	46	12.7	10	2.8
N-Y-Y	13	3.6	5	1.4	2	.6	1	.3
N-Y-N	37	10.2	23	6.3	5	1.4	10	2.8
N-N-Y	24	6.6	14	3.9	5	1.4	4	1.1
N-N-N	139	38.3	183	50.4	299	82.4	336	92.6
Totals	363	100.1	363	100.1	363	100.2	363	100.2
<u>Referred vs. Not Referred</u>								
Y-Y-Y	5	1.4	4	1.1	1	.3	---	---
Y-Y-N	12	3.3	10	2.8	1	.3	---	---
Y-N-Y	4	1.1	1	.3	---	---	---	---
Y-N-N	45	12.4	43	11.8	28	7.7	9	2.5
N-Y-Y	2	.6	2	.6	1	.3	1	.3
N-Y-N	12	3.3	9	2.5	6	1.7	5	1.4
N-N-Y	15	4.1	7	1.9	4	1.1	3	.8
N-N-N	268	73.8	287	79.1	322	88.7	345	95.0
Totals	363	100.0	363	100.1	363	100.1	363	100.0
<u>Sanctioned vs. Not Sanctioned</u>								
Y-Y-Y	2	.6	---	---	---	---	---	---
Y-Y-N	3	.8	3	.8	1	.3	---	---
Y-N-Y	---	---	1	.3	---	---	---	---
Y-N-N	22	6.1	14	3.9	7	1.9	3	.8
N-Y-Y	4	1.1	4	1.1	1	.3	---	---
N-Y-N	14	3.9	8	2.2	1	.3	---	---
N-N-Y	12	3.3	4	1.1	3	.8	3	.8
N-N-N	306	84.3	329	90.6	350	96.4	357	98.3
Totals	363	100.1	363	100.0	363	100.0	363	99.9

TABLE 9. CAREER TYPE CONTINUITY FOR NON-INNER CITY MALE COHORT MEMBERS ACROSS JUVENILE, 18 TO 20, AND 21 AND OLDER AGE PERIODS

<u>Contacts vs. No Contacts</u>								
	CONTACTS		NON-TRAFFIC		PART I		FELONY	
	N	%	N	%	N	%	N	%
Y-Y-Y	260	18.6	137	9.8	7	.5	6	.4
Y-Y-N	209	15.0	153	11.0	37	2.7	24	1.7
Y-N-Y	113	8.1	89	6.4	13	.9	4	.3
Y-N-N	237	17.0	310	22.2	201	14.4	105	7.5
N-Y-Y	54	3.9	30	2.2	4	.3	5	.4
N-Y-N	107	7.7	85	6.1	30	2.2	40	2.9
N-N-Y	85	6.1	73	5.2	13	.9	19	1.4
N-N-N	330	23.7	518	37.1	1090	78.1	1192	85.4
Totals	1395	100.1	1395	100.0	1395	100.0	1395	100.0
<u>Referred vs. Not Referred</u>								
Y-Y-Y	44	3.2	23	1.6	2	.1	3	.2
Y-Y-N	85	6.1	55	3.9	22	1.6	13	.9
Y-N-Y	39	2.8	26	1.9	2	.1	4	.3
Y-N-N	253	18.1	177	12.7	118	8.5	84	6.0
N-Y-Y	24	1.7	15	1.1	3	.2	4	.3
N-Y-N	84	6.0	59	4.2	26	1.9	35	2.5
N-N-Y	36	2.6	31	2.2	9	.6	13	.9
N-N-N	830	59.5	1009	72.3	1213	87.0	1239	88.8
Totals	1395	100.0	1395	99.9	1395	100.0	1395	99.9
<u>Sanctioned vs. Not Sanctioned</u>								
Y-Y-Y	19	1.4	10	.7	---	---	1	.1
Y-Y-N	43	3.1	22	1.6	12	.9	8	.6
Y-N-Y	14	1.0	8	.6	1	.1	1	.1
Y-N-N	100	7.2	68	4.9	61	4.4	41	2.9
N-Y-Y	35	2.5	10	.7	1	.1	3	.2
N-Y-N	104	7.5	54	3.9	21	1.5	21	1.5
N-N-Y	54	3.9	27	1.9	6	.4	5	.4
N-N-N	1026	73.5	1196	85.7	1293	92.7	1315	94.3
Totals	1395	100.1	1395	100.0	1395	100.1	1395	100.1

TABLE 10. CAREER TYPE CONTINUITY FOR NON-INNER CITY FEMALE COHORT MEMBERS ACROSS JUVENILE, 18 TO 20, AND 21 AND OLDER AGE PERIODS

<u>Contacts vs. No Contacts</u>								
	CONTACTS		NON-TRAFFIC		PART I		FELONY	
	N	%	N	%	N	%	N	%
Y-Y-Y	40	3.3	22	1.8	---	---	1	.1
Y-Y-N	72	6.0	41	3.4	7	.6	1	.1
Y-N-Y	48	4.0	29	2.4	---	---	1	.1
Y-N-N	177	14.6	177	14.6	52	4.3	24	2.0
N-Y-Y	24	2.0	11	.9	---	---	1	.1
N-Y-N	126	10.4	47	3.9	4	.3	10	.8
N-N-Y	92	7.6	40	3.3	3	.2	7	.6
N-N-N	630	52.1	842	69.6	1143	94.5	1164	96.3
Totals	1209	100.0	1209	99.9	1209	99.9	1209	100.1
<u>Referred vs. Not Referred</u>								
Y-Y-Y	3	.2	3	.2	---	---	---	---
Y-Y-N	15	1.2	9	.7	3	.2	1	.1
Y-N-Y	5	.4	2	.2	---	---	1	.1
Y-N-N	107	8.9	84	6.9	29	2.4	16	1.3
N-Y-Y	---	---	---	---	---	---	---	---
N-Y-N	32	2.6	14	1.2	2	.2	6	.5
N-N-Y	11	.9	5	.4	1	.1	4	.3
N-N-N	1036	85.7	1092	90.3	1174	97.1	1181	97.7
Totals	1209	99.9	1209	99.9	1209	100.0	1209	100.0
<u>Sanctioned vs. Not Sanctioned</u>								
Y-Y-Y	1	.1	---	---	---	---	---	---
Y-Y-N	6	.5	1	.1	---	---	---	---
Y-N-Y	3	.2	1	.1	---	---	---	---
Y-N-N	32	2.6	23	1.9	5	.4	8	.7
N-Y-Y	---	---	---	---	---	---	---	---
N-Y-N	28	2.3	9	.7	3	.2	2	.2
N-N-Y	9	.7	1	.1	---	---	---	---
N-N-N	1130	93.5	1174	97.1	1201	99.3	1199	99.2
Totals	1209	99.9	1209	100.0	1209	99.9	1209	100.1

We commence by comparing a few percentages from Table 7, Inner City Males, with a few percentages from Other Males from Table 9. Note that 21.9% of the Inner City males (socialized in the Inner City neighborhoods) but only 9.8% of the Other males (socialized outside the Inner City) had at least one Non-Traffic police contact during each of the three age periods. Comparison of the percentages who were referred during each age period reveals that 8.8% of the Inner City males but only 1.6% of the Other males were referred.

Of course, there is the matter of offense seriousness: comparisons based on consideration of only Part I offenses provide further evidence that what happens in the Inner City differs from what happens in Other neighborhoods. Note that 4.0% of those socialized in the Inner City had Part I contacts during each age period but only .5% of those from Other neighborhoods did so. Although 2.3% of the Inner City group had been referred during each age period, only .1% of those from Other neighborhoods had been referred in that pattern. This suggests that Inner City males not only behave differently, i.e., engage in more serious delinquency and crime, but are dealt with differently from Others. Similar findings are made if only felony-level offenses are considered.

This is only one of many ways in which the YYY, etc., career types may be used to compare the behavior and/or experiences of male and female, Inner City and Other neighborhood cohort members. Appendix C is presented so that others may suggest

analytic approaches that we have overlooked as our own work develops.

One disclaimer must be added. We do not see this approach as in any way related to the attempts that have been made to profile delinquents or criminals. We are concerned about how behavior generates official responses which culminate in a YYY or some similar type of career. Or, what kinds of persons dealt with in such and such a fashion end up with this or that type of career? In this research we may well find that a demographic/spatial group with YYY sanctions differs from another group without YYY sanctions, although both demographic/spatial groups had YYY contacts, mainly because one group had YYY referrals to a greater extent than the other.

The difference may not be that dramatic but attaching to everyone their career type for different levels facilitates this kind of analysis.

APPENDIX D

A PATH ANALYSIS APPROACH TO EXPLAINING FUTURE OFFENSE SERIOUSNESS¹

The analysis just completed provides insight into the variables or factors that affect future total offense seriousness. We found that the variable with the most impact was age at contact. Although race, sex, number of prior sanctions (an inverse relationship), total prior offense seriousness, and juvenile neighborhood had some impact, they are not consistently significant in accounting for future offense seriousness. As was noted, the variables which may be of most interest to those in the position of policy making and enforcement, type seriousness of present contact, severity of sanction just received, and total severity of prior sanctions, do not appear to have much impact on future offense seriousness when the data are analyzed contact by contact with no controls for cohort.

The next step is the development of a causal model that will help account for (explain) the relationships found in the extensive regression analyses that we have just described. Of course, to do this we must make assumptions and this requires movement from the perspective that we have followed to the more theoretical and less observable realm of causality. In particular, this allows us to elaborate on whether or not a relationship that exists between future total offense seriousness and the variables that measure cumulative criminal career is

¹ This analysis was conducted and written by Kathleen Anderson.

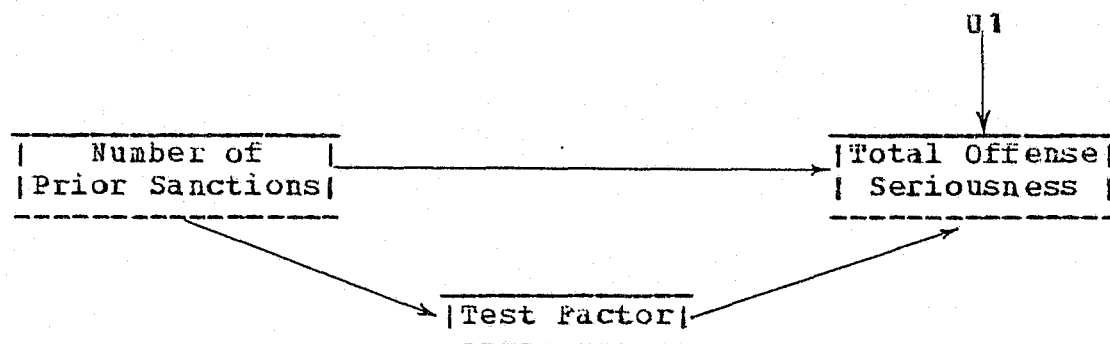
spurious or whether there are confounding or intervening effects produced by the characteristic variables or the discrete measures of criminal involvement.

First, we will look at some of the potential causal relationships implied by previous research results, bearing in mind that we are assuming causality in a weak sense and using the technique of path analysis. Models developed will be simple and limited to three or four variables.

Path analysis should enable us to see if there are intervening variables that affect the relationship between the cumulative measures of prior criminal career and future offense seriousness. As mentioned previously, age at police contact had the greatest impact on future offense seriousness, contact by contact. On the other hand, type seriousness of present contact and sanction just received seem to have virtually no effect. We would expect, then, that if the relationship between a prior cumulative measure and future offense seriousness was controlled for by one of the three characteristic variables (age at contact, race, or juvenile neighborhood), the relationship might change in strength. For example, number of prior sanctions has a significant negative correlation with future offense seriousness. When the test factor, age at contact, is introduced the relationship is no longer significant. The intrusion of age has a suppressing effect on the relationship. Another way of looking at this is to consider the indirect effects of number of prior sanctions through age on future offense seriousness.

Two cumulative career variables, number of prior sanctions and total prior seriousness, were chosen as independent variables and two models were developed based on the relationship of each to total future offense seriousness (referred to in the models as Total Offense Seriousness). Since there are changes in the strength and significance of various relationships as contact level changes, we chose to examine the models at an early career stage represented by the second contact level and at a more developed stage in careers represented by the sixth contact level.

MODEL 1

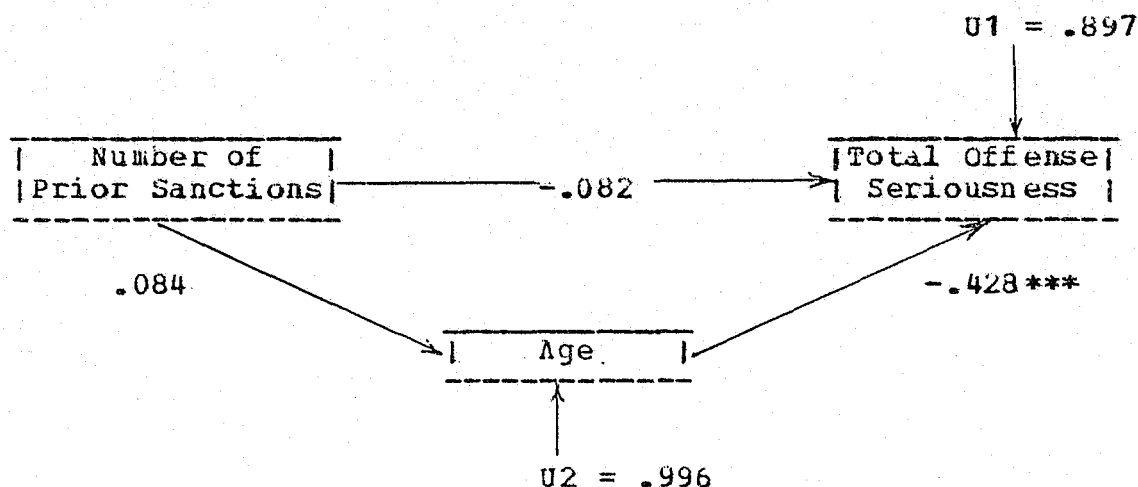


U2

TEST FACTOR: AGE WITH NO CONTROLS

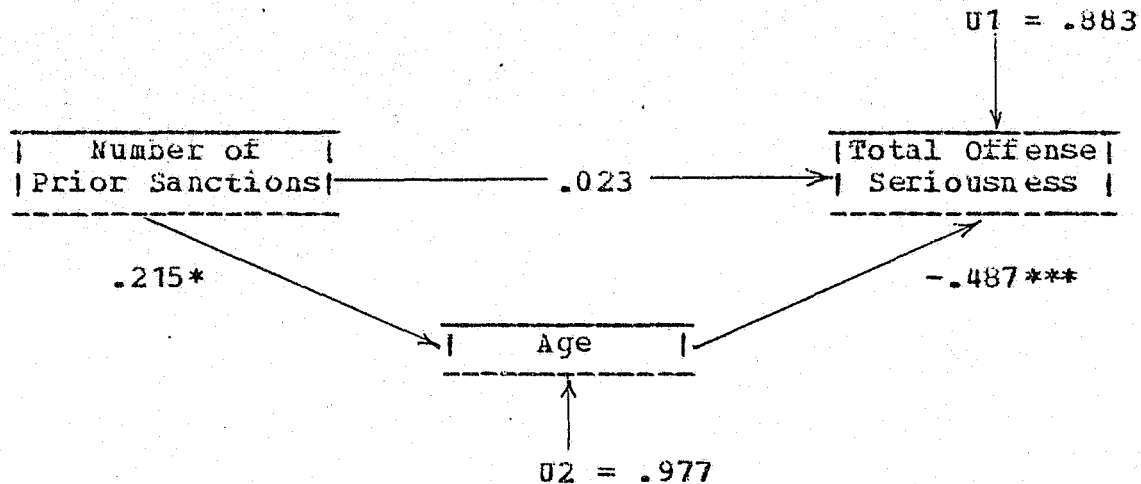
Second Contact. In this model the only significant relationship is between age at contact and future offense seriousness. Number of prior sanctions is not significantly related to either age or future offense seriousness. With no controls for age at contact, number of prior sanctions is significantly correlated (only at the .05 level) with future

offense seriousness. Controlling for age makes the relationship weaker and non-significant. There are some indirect causal effects but the results are not conclusive enough to say that age at contact is an intervening variable.



*** Significant at .001 level or greater.

Sixth Contact Level. Number of prior sanctions has a significant positive correlation with age and age has a significant negative correlation with future offense seriousness. The direct effects of number of prior sanctions on future offense seriousness are very small and not significant. This leads to the expectation that the original correlation between number of prior sanctions and future offense seriousness (which was neither very strong nor significant) is probably largely due to the intervening variable, age. In fact, it turns out that most of the relationship is due to the indirect causal effects of number of prior sanctions through age on future offense seriousness.



* Significant at .05 level but less than .01 level.
 *** Significant at .001 level or greater.

At the second contact level the relationship between number of prior sanctions and future offense seriousness is enhanced (somewhat) by the effect of age as an intervening variable. At the higher contact level age accounts for most of the relationship between the two. What we are seeing as a relationship between number of prior sanctions and future offense seriousness is largely due to age (number of prior sanctions has very little causal effect).

TEST FACTOR: AGE WITH CONTROLS FOR COHORT

Controlling for cohort produced slightly different results from those of the uncontrolled model. Overall, however, the same conclusions can be reached. The only really significant relationship found was between age and future offense seriousness. Number of prior sanctions was not significantly related to either age or future offense seriousness. Indirect causal effects are present to a degree that suggests again that

age may act as an intervening variable. Controlling for cohort did not have much of an impact on reducing the unexplained variance and the residual value, U1, remained at much the same level.

TEST FACTOR: AGE WITH CONTROLS FOR RACE

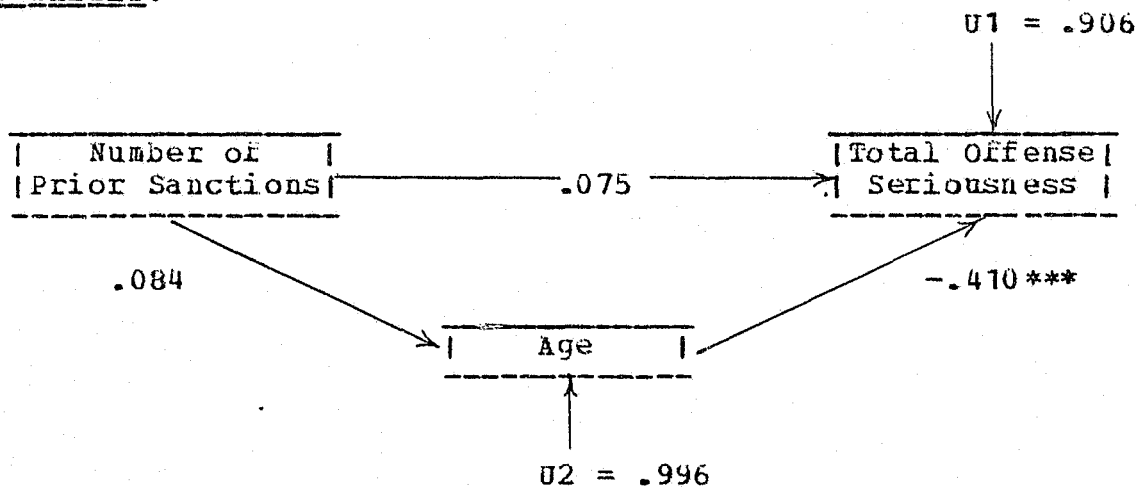
Controlling for race produced essentially the same results as found in the uncontrolled model but provided a more definitive basis for the conclusions. There is evidence of an intervening variable being present if, when the test factor is controlled, the original relationship disappears (or comes very close to it).

When the model with age as the test factor is analyzed with no additional controls for race, the original relationship is diminished. When the same model is analyzed separately for non-whites and whites, the original relationship (between number of prior sanctions and future total offense seriousness) decreases to almost zero.

Second Contact Level. The relationship between number of prior sanctions and future offense seriousness is not very strong, either with or without controls for age, but with control for age it diminishes further in strength. Looking at the relationship by race enhances this effect and makes evident some non-white/white differences. The relationship between number of prior sanctions and future offense seriousness is positive for the non-white group and negative for the white group but not significant in either case. The only significant relationship found is again between age at contact and future offense

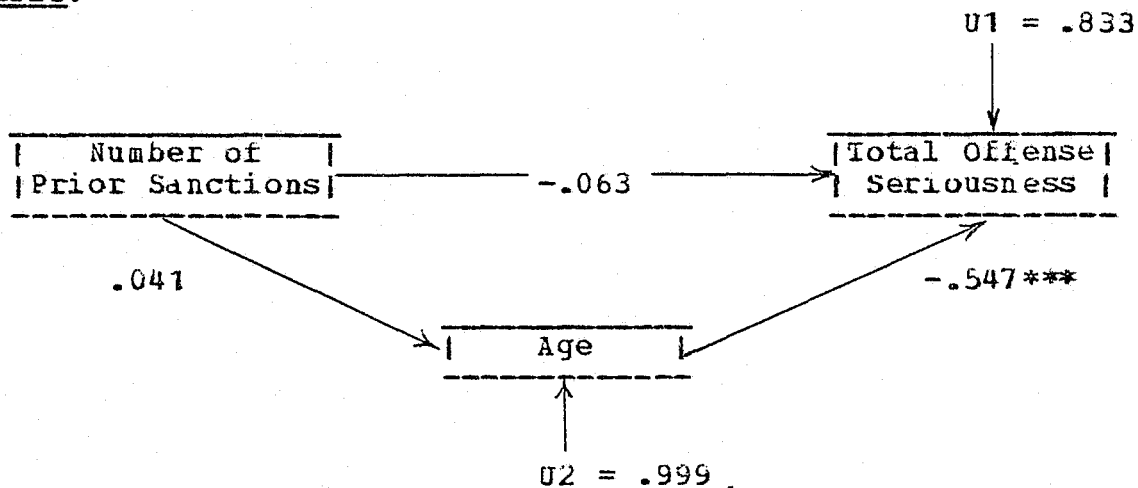
seriousness. This relationship is stronger for whites than non-whites but the indirect effects of number of prior sanctions through age on future offense seriousness are smaller for the whites than the non-whites. The unexplained variance is smaller for whites than non-whites and less than was found for this model with no controls for race.

NON-WHITES:



*** Significant at .001 level or greater.

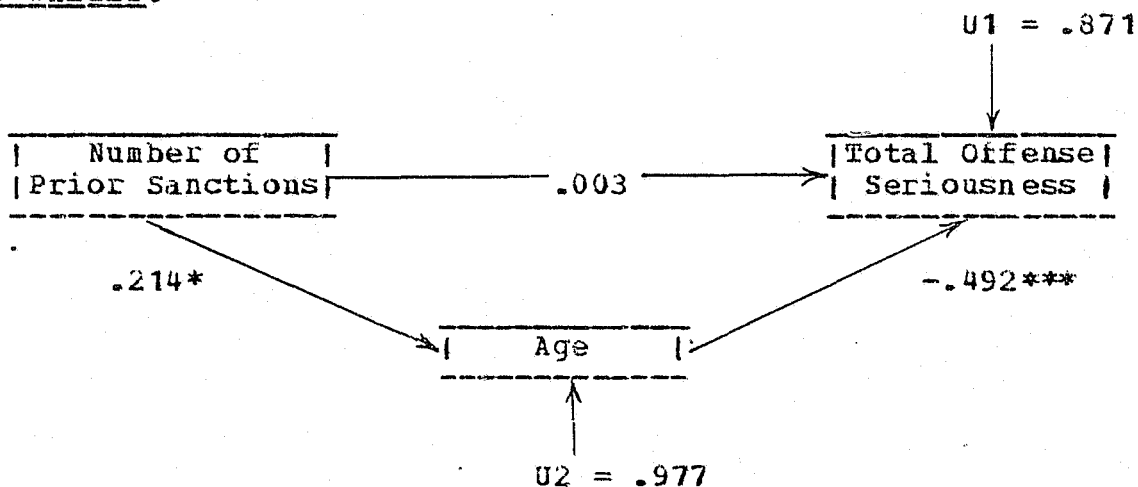
WHITES:



*** Significant at .001 level or greater.

Sixth Contact Level. Age accounts for nearly all of the causal effects of number of prior sanctions on future offense seriousness for both non-whites and whites. The introduction of age into the model eliminates almost completely the original relationships when race is controlled. For both the non-whites and whites number of prior sanctions has a significant positive relationship to age and age has a significant negative relationship to future offense seriousness. The residuals in both cases remain about the same as for the models without control for race.

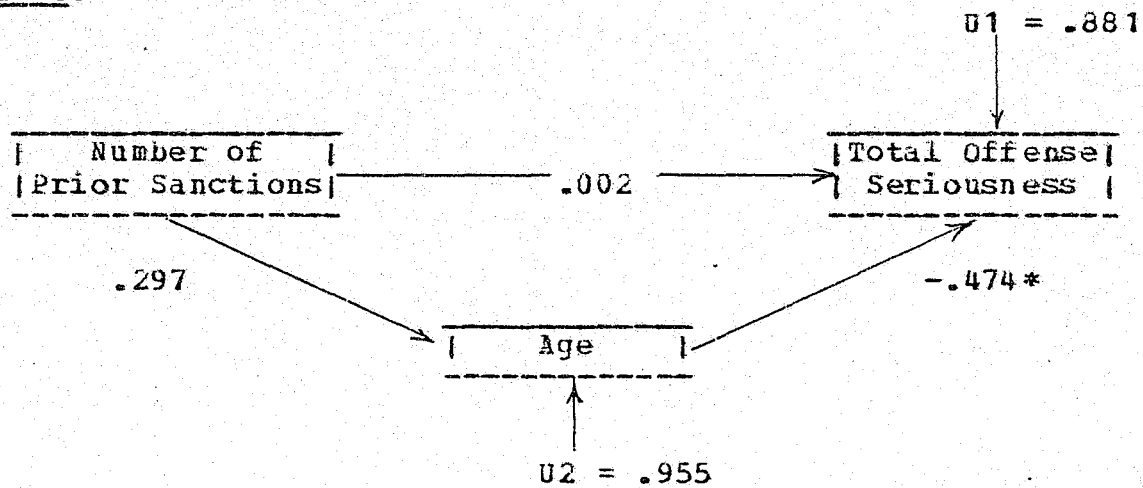
NON-WHITES:



* Significant at .05 level but less than .01 level.

*** Significant at .001 level or greater.

WHITES:



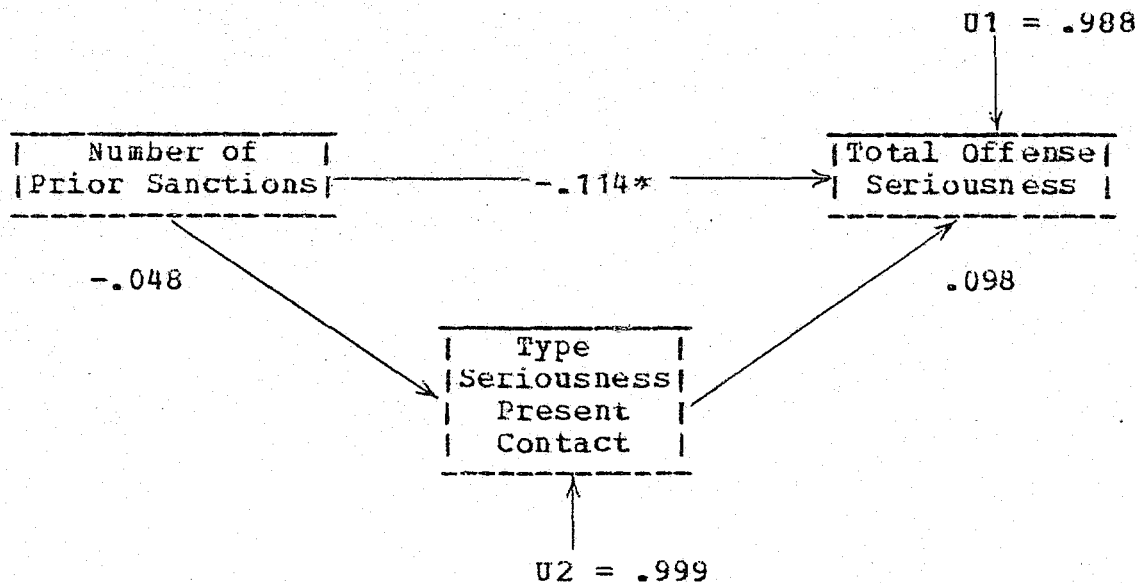
* Significant at .05 level but less than .01 level.

The relationship that appears to exist between number of prior sanctions and future offense seriousness is spurious, a function of age at contact and race. What is not accounted for by age is accounted for by race along with age. At this point it still appears to be that a cumulative criminal career variable, in this case number of prior sanctions, does not provide a very powerful explanatory basis for future offense seriousness.

TEST FACTOR: TYPE SERIOUSNESS WITH NO CONTROLS

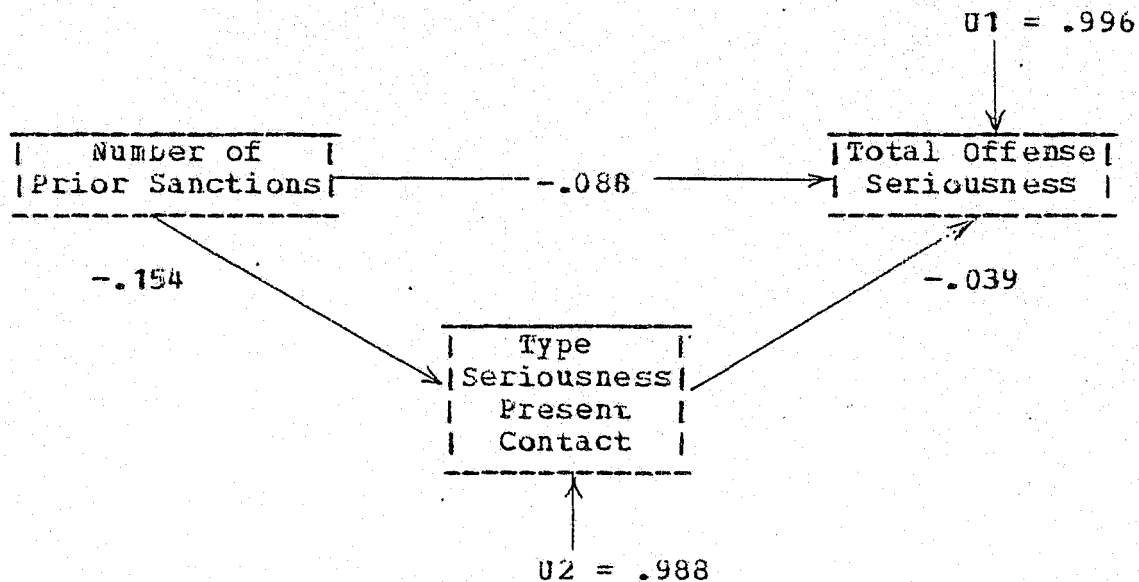
Second Contact Level. In this variation of the model the only significant relationship (only at the .05 level) is inverse and found between number of prior sanctions and future offense seriousness. As indicated by the residual values, the model is very low in explanatory power. Controlling for the test factor, in this case type seriousness of present contact, does not significantly alter the original relationship. The effect of number of prior sanctions through type seriousness of present

contact on future offense seriousness is very small ($-.005$). Nothing about the model indicates that type seriousness of present contact acts as an intervening variable.



* Significant at .05 level but less than .01 level.

Sixth Contact Level. At the sixth contact level the original relationship is not significant and controlling for type seriousness does not alter this. The expectation is that the only way type seriousness might influence the model would be if it turned out that not controlling for it had a suppressing effect on the relationship between number of prior sanctions and future offense seriousness. Since in the regression models considered earlier type seriousness never appeared to have much effect, this is not very likely to happen and the results tend to confirm this.

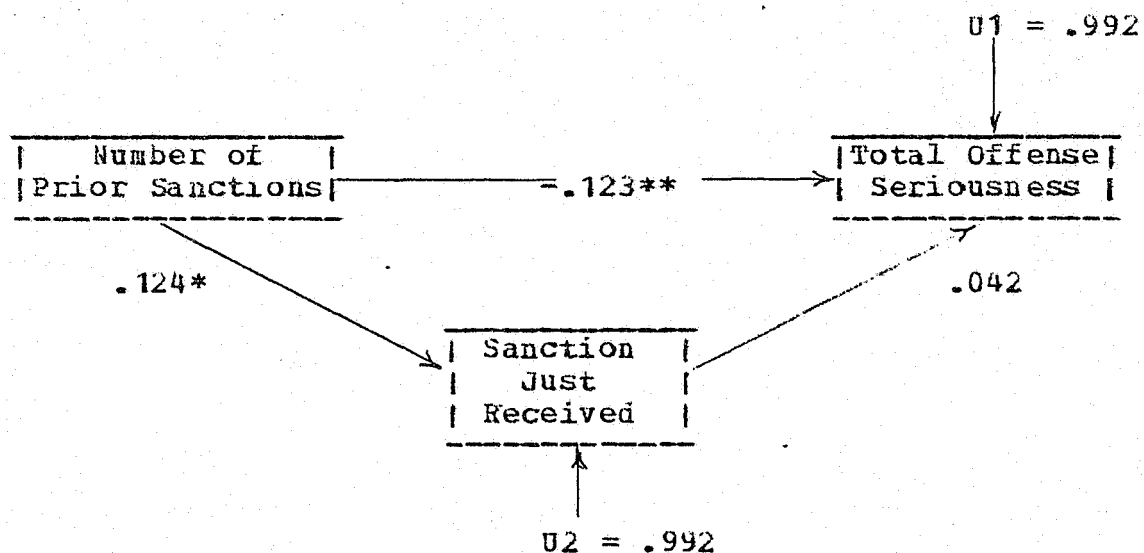


An analysis of the model considered separately for each cohort did not significantly alter the results. This is consistent with what was found when the same variation was employed in the case in which the test factor was age. Consideration of the model separately for non-whites and whites also made no differences in the conclusions reached. There were not the same dramatic effects found as when the test factor was age.

TEST FACTOR: SANCTION JUST RECEIVED WITH NO CONTROLS

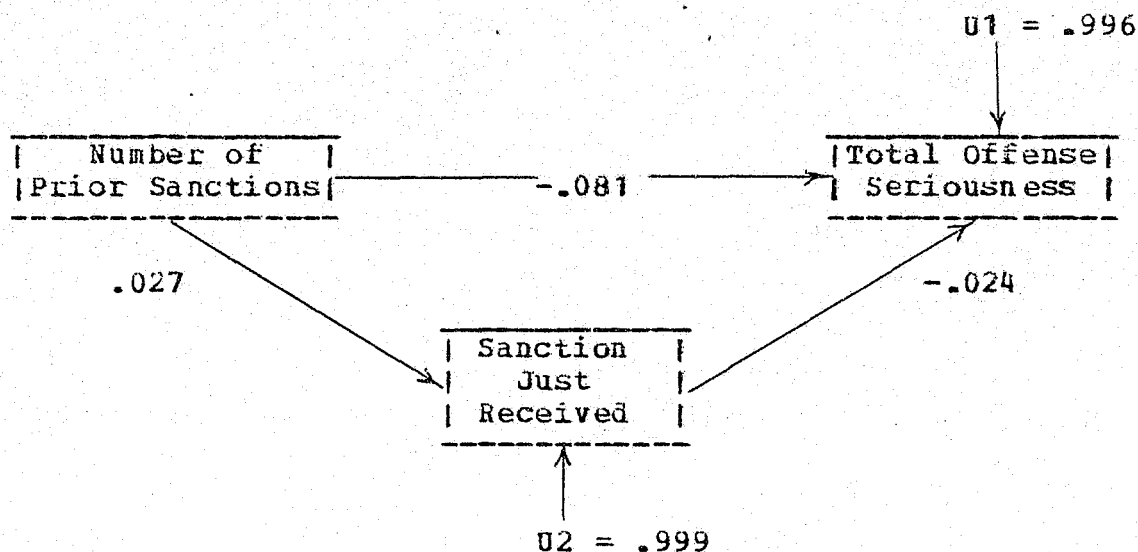
Second Contact Level. Number of prior sanctions has a significant negative correlation with future offense seriousness and a significant positive correlation with sanction just received. There is, however, practically no relationship between sanction just received and future offense seriousness (consistent with everything else). Controlling for sanction just received resulted in a slightly stronger relationship between the original

two variables considered. So, without the control for the test factor, the original relationship is slightly suppressed. The differences are very small, however; overall the conclusion is that the relationship between number of prior sanctions and future total offense seriousness exists and is not influenced by the sanction just received.



- * Significant at .05 level but less than .01 level.
- ** Significant at .01 level but less than .001 level.

Sixth Contact Level. At this contact level there were no significant relationships between any given pair of the three variables. There was a weak non-significant relationship between number of prior sanctions and future offense seriousness but it does not appear to be affected in any way by sanction just received.



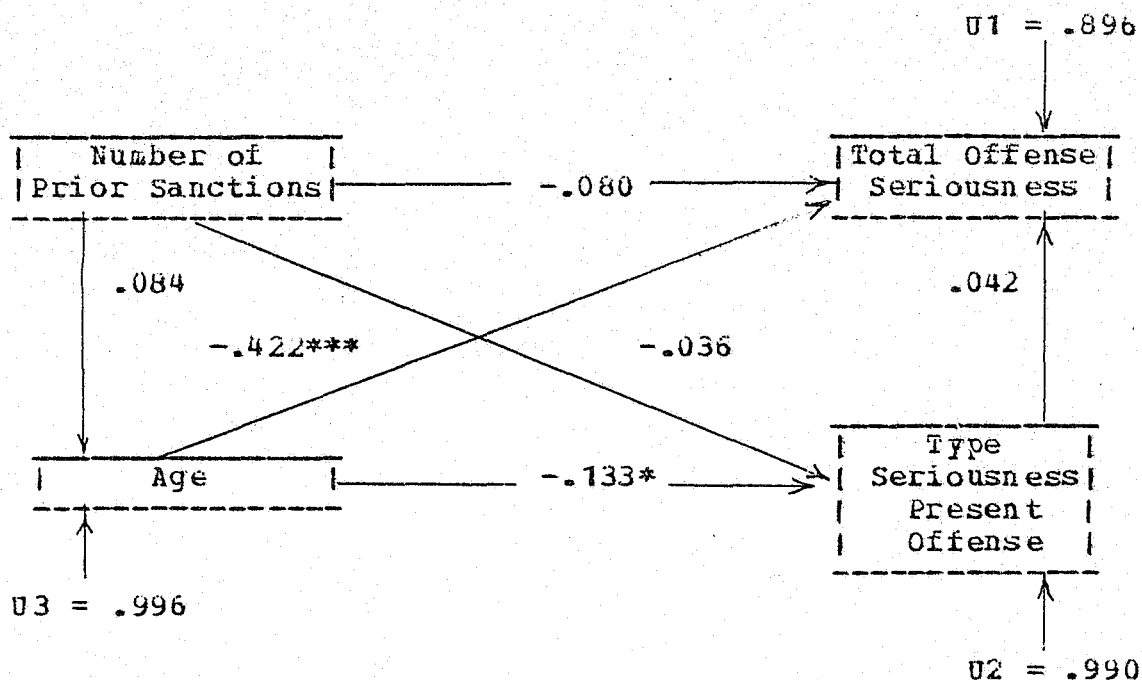
Again, adding controls for cohort or race did not result in any real changes from what was found in the analysis of the model without controls.

Before moving to a consideration of the second general model, in which total prior seriousness is the independent variable, the first model is expanded to include both age and type seriousness of present contact as test factors.

MODEL 1A

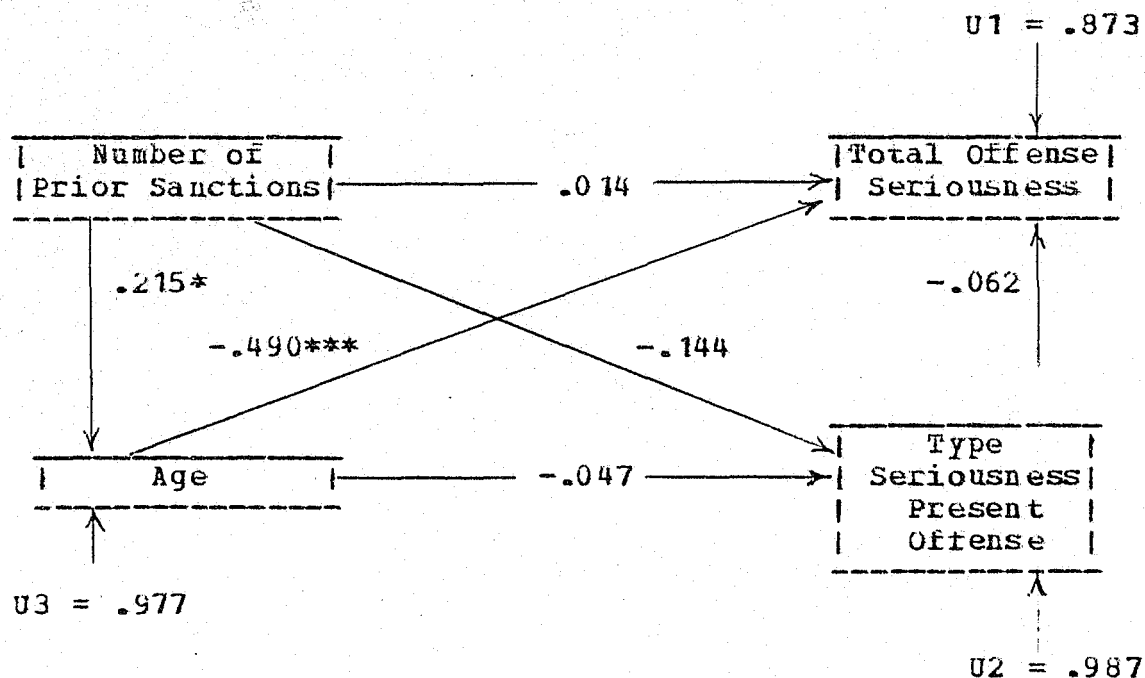
This model is an expansion of Model 1 which includes type seriousness of present contact.

Second Contact Level. At this level the largest indirect effect is found by following a path from number of prior sanctions through age to future offense seriousness. No matter how the model is considered, age always emerges as the most important determinant of future offense seriousness.



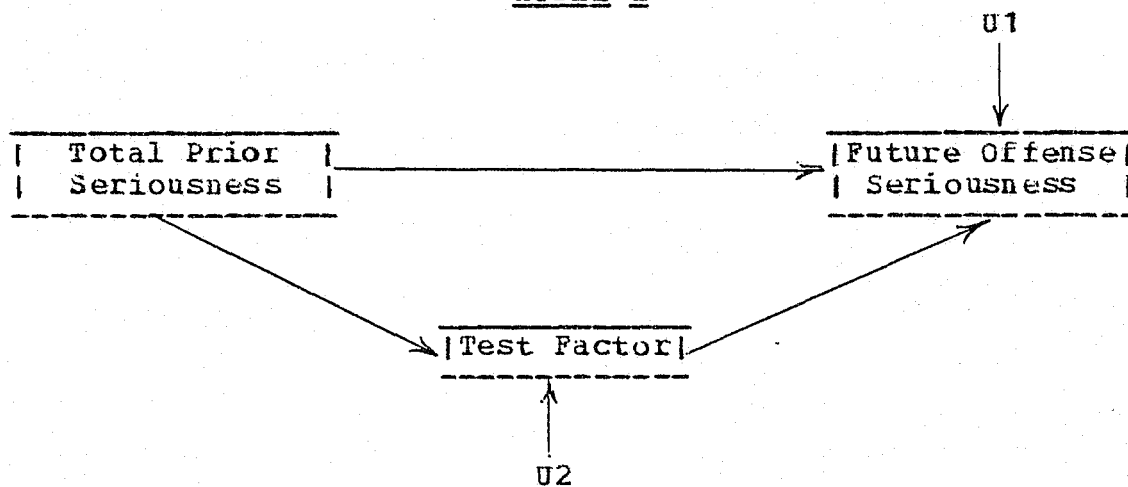
* Significant at .05 level but less than .01 level.
 *** Significant at .001 level or greater.

Sixth Contact Level. At this level the largest indirect effect is found by following a path from number of prior sanctions through age at contact to total offense seriousness. Inclusion of the test factors diminishes the strength of the original relationship found between number of prior sanctions and total offense seriousness. The indirect causal effects are greater than the direct causal effects, implying the presence of intervening effects through the variable age at contact.



* Significant at .05 level but less than .01 level.
 *** Significant at .001 level or greater.

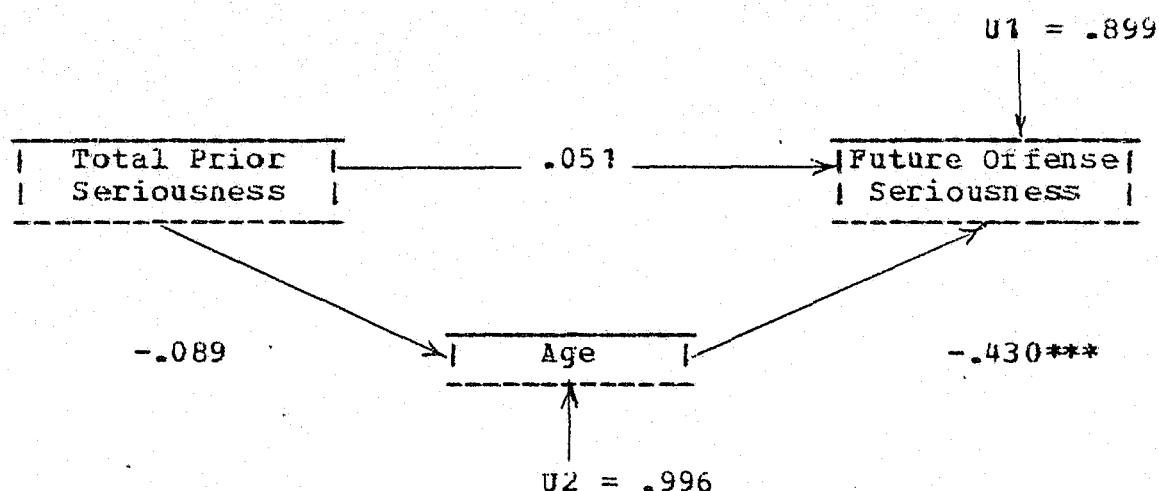
MODEL 2



TEST FACTOR: AGE WITH NO CONTROLS

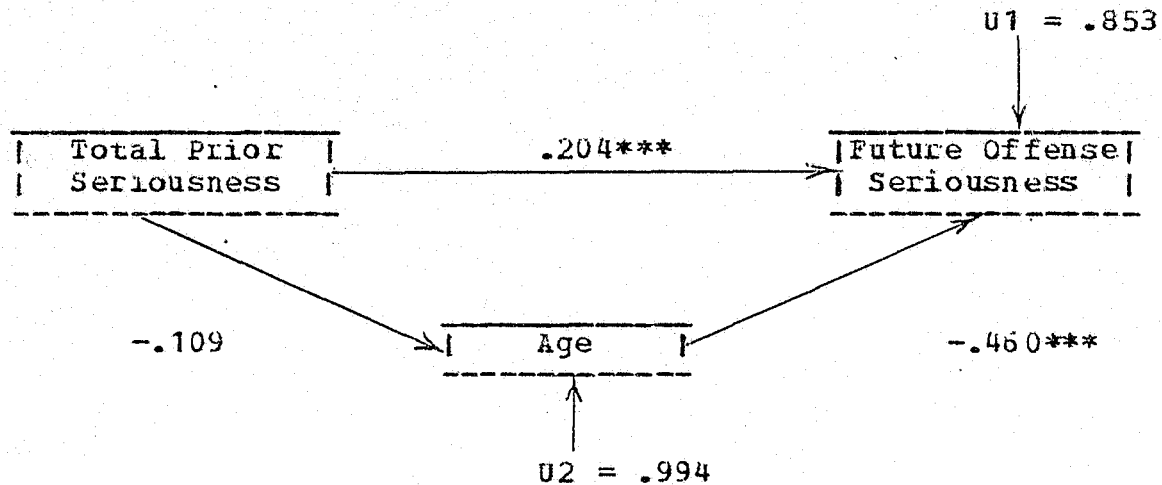
Second Contact Level. In this case the original relationship between the independent and dependent variables is very weak. When age is controlled a significant relationship is found between age and future offense seriousness. Although the

relationship between total prior seriousness and future offense seriousness is diminished, it does not disappear.



*** Significant at .001 level or greater.

Sixth Contact Level. There is a significant positive relationship between total prior seriousness and future offense seriousness at this contact level and a significant negative relationship between age and future offense seriousness. The relationship between total prior seriousness and age is not significant. When age is controlled, the direct relationship between total prior seriousness and future offense seriousness is diminished but not by much. Apparently the relationship between total prior seriousness and future offense seriousness is not "caused" by or a function of age. Instead, the explanation of future offense seriousness is a function of both variables but not through their relationship to each other.

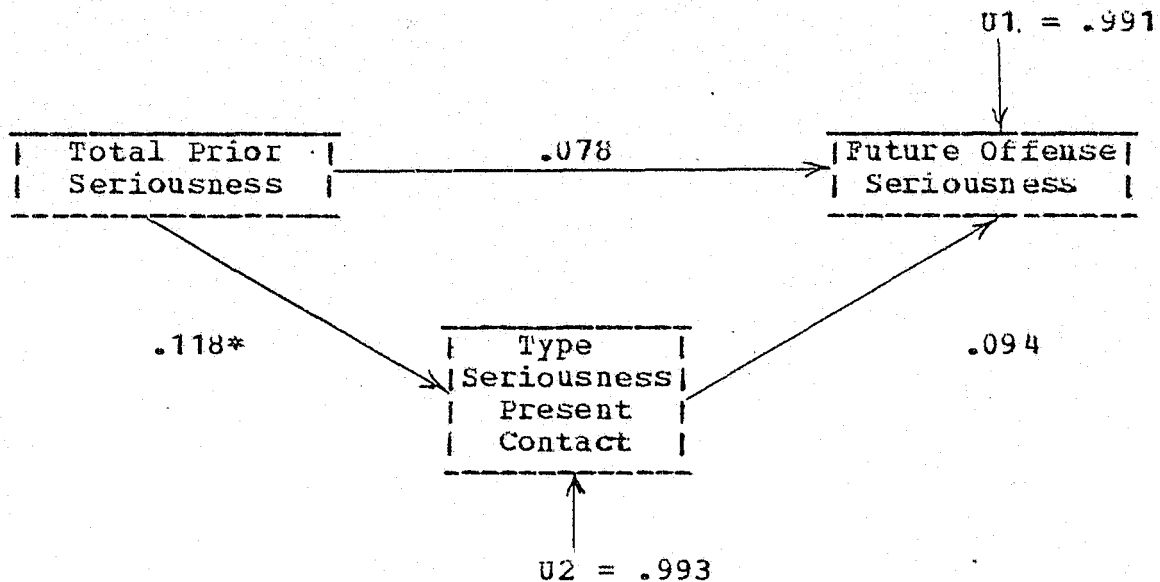


*** Significant at .001 level or greater.

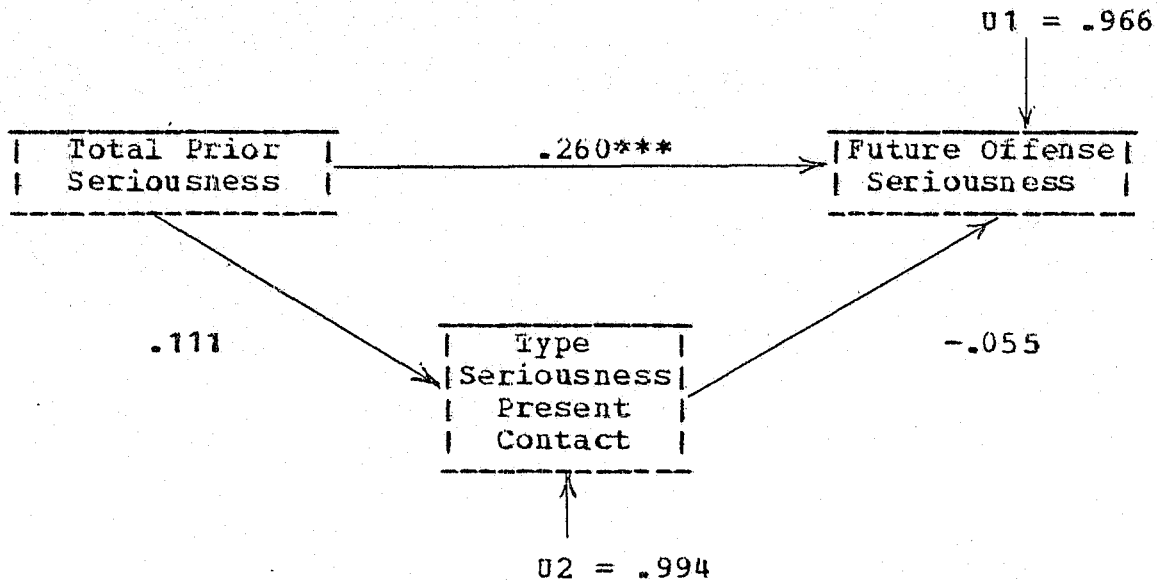
At both the second and sixth contact levels, however, the amount of unexplained variation is still high.

TEST FACTOR: TYPE SERIOUSNESS WITH NO CONTROLS

Second Contact Level. There is only one significant relationship, that found between total prior seriousness and type seriousness of present contact. Since there is not much relationship between total prior seriousness and future offense seriousness to begin with (perhaps due to the fact that there is only one prior contact) and there is only a slight amount of indirect causal effect, type seriousness of present contact does not seem to be an intervening variable at the second contact level.



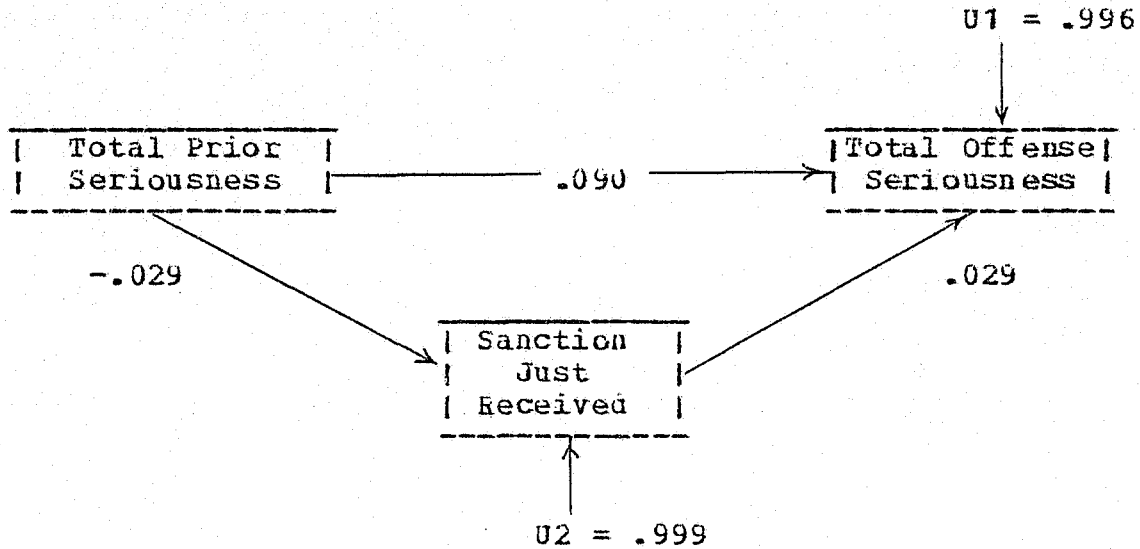
Sixth Contact Level. The sixth contact results change greatly from those of the second contact. Total prior offense seriousness has a positive significant relationship to future offense seriousness. There are no other significant effects. The effect of total prior seriousness through type seriousness on future offense seriousness is very small. Type seriousness is not an intervening variable and it appears that the relationship which appears between total prior seriousness and future offense seriousness is not spurious.



*** Significant at .001 level or greater.

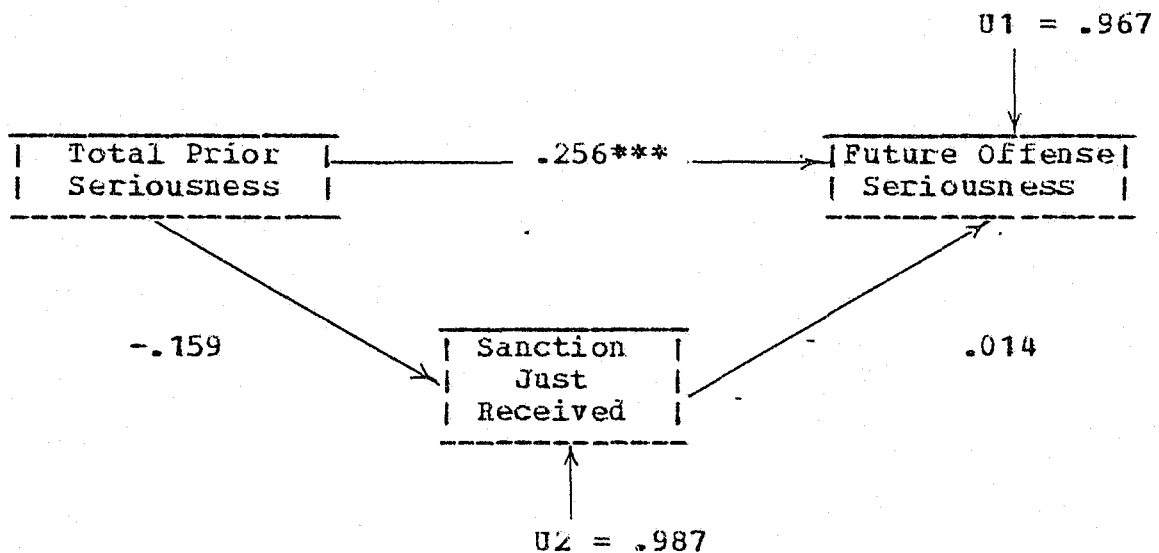
TEST FACTOR: SANCTION JUST RECEIVED WITH NO CONTROL

Second Contact Level. This model is similar in the relationships found to the model in which the test factor was type seriousness. At the second contact level none of the variables are significantly related to each other. There are practically no indirect effects of total prior seriousness through sanction just received on future offense seriousness. Sanction just received is not an intervening variable.



Sixth Contact Level. Total prior seriousness has a significant positive relationship to future offense seriousness. There are no other significant relationships. Sanction just received does not have an effect on the relationship of total prior seriousness to future offense seriousness.

As was expected, the immediate measures of criminal behavior do not play a part in the relationship between total prior seriousness and future offense seriousness.

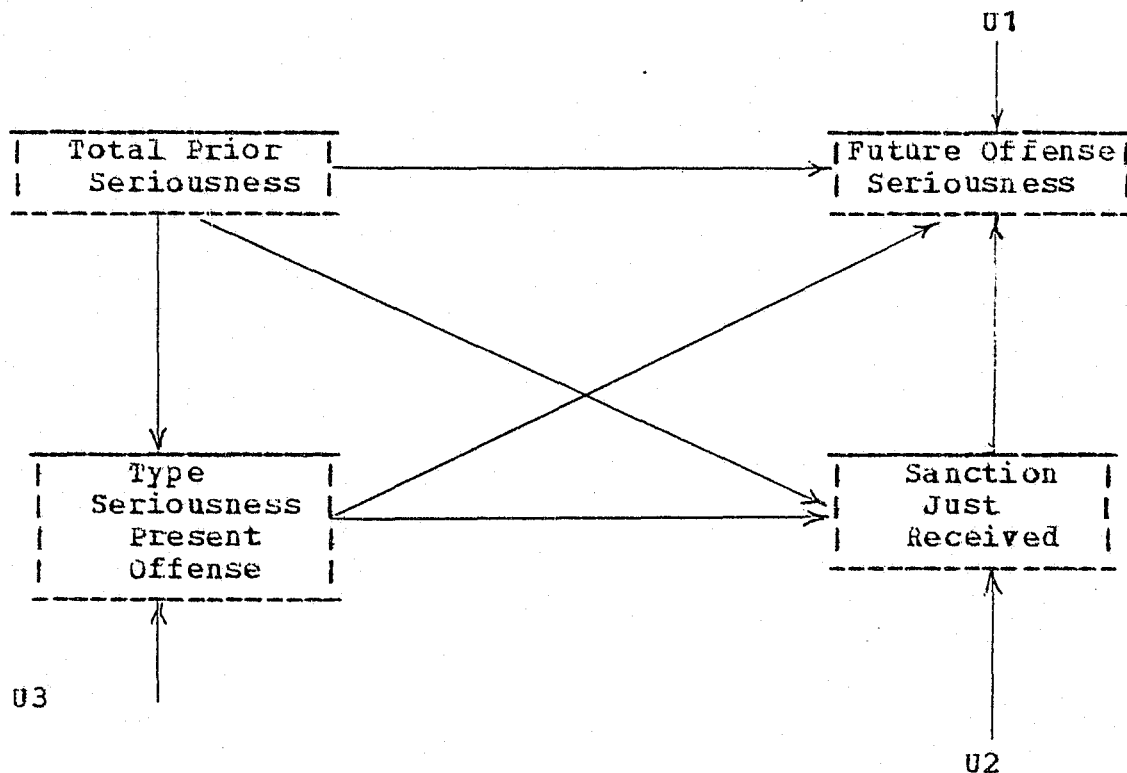


*** Significant at .001 level or greater.

Summary of Models 1 and 2

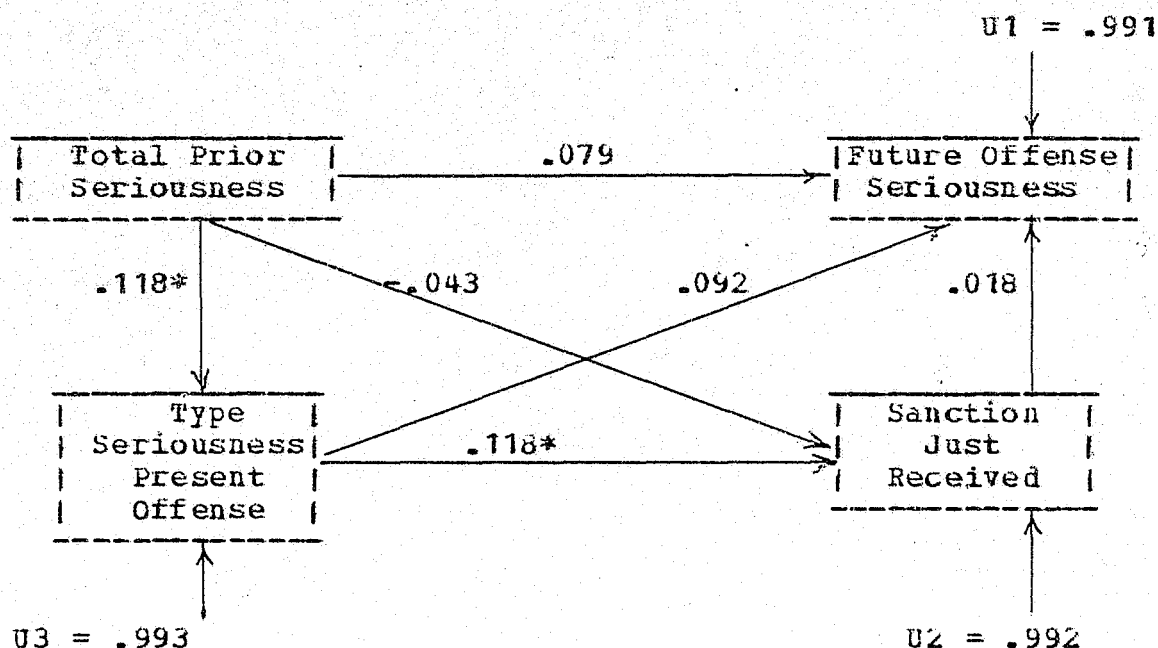
As was expected, the relationship between number of prior sanctions and future offense seriousness and the relationship between total prior seriousness and future offense seriousness is affected by age at police contact (a characteristic variable) but not by type seriousness of present contact or by sanction just received.

MODEL 3



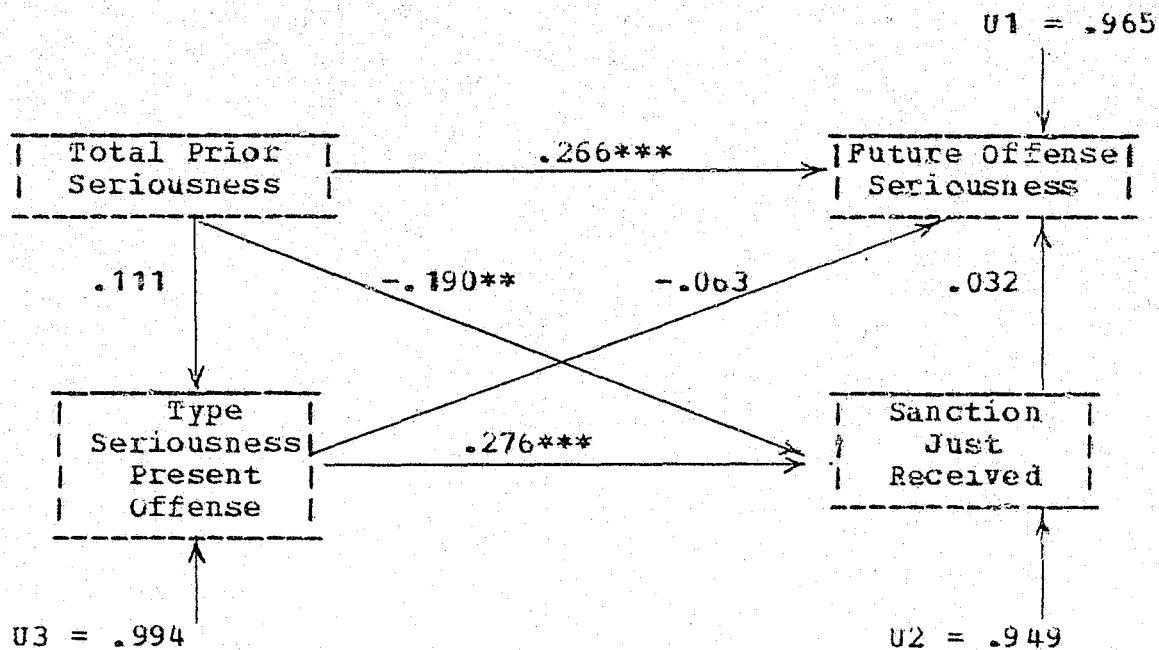
In the third model type seriousness of present contact and sanction just received are introduced simultaneously to see if there is a relationship between them and if the effect on future offense seriousness of total prior offense seriousness with of these two variables indicates the presence of any intervening effects.

Second Contact Level. Total prior seriousness has a significant positive (only at the .05 level) correlation with type seriousness of present contact and type seriousness of present contact has a significant positive correlation with sanction just received. None of the other relationships are significant, including the one between total prior seriousness and future offense seriousness. The largest indirect effects are found when only the test factor, type seriousness, is introduced. Type seriousness and sanction just received are not significantly related to future offense seriousness but the magnitude of the relationship is greater between type seriousness and future offense seriousness than between sanction just received and future offense seriousness. It would appear from this model that the immediate measures of criminal career do not act as intervening variables. Total prior seriousness does not act through type seriousness of present contact and/or sanction just received to affect future offense seriousness.



* Significant at .05 level but less than .01 level.

Sixth Contact Level. Total prior offense seriousness has a significant positive correlation with future offense seriousness and a significant negative correlation with sanction just received. There is, however, essentially no relationship between sanction just received and future offense seriousness. Type seriousness and sanction just received have a significant positive correlation with each other. Introducing both test factors, type seriousness of present contact and sanction just received does seem to augment the direct relationship between future offense seriousness and total prior seriousness but the total causal effects are greater than the original correlation by only .012. Part of this difference appears to be the result of the indirect negative effects and part appears to be non-causal or spurious.



** Significant at .01 level but less than .001 level.
 *** Significant at .001 level or greater.

Conclusion

Although this model leaves unexplained a large amount of the variance as evidenced by the large residual values $U1 = .965$, $U2 = .949$, and $U3 = .994$, the results are interesting for several reasons. At the second contact level, when only type seriousness is included as a test factor, type seriousness of present contact is not significantly related to future offense seriousness. When only sanction just received is included as a test factor, it is not significantly related to either total prior offense seriousness or future offense seriousness. However, when both type seriousness of present contact and sanction just received are included as test factors at the second contact level, there is a significant relationship between total prior seriousness and type seriousness of present contact and between type seriousness of present contact and sanction just received.

At the sixth contact level when type seriousness alone is included as a test factor there was only one significant relationship between total prior seriousness and future total offense seriousness. This was also the case when only sanction just received was introduced as a test factor. When both type seriousness of present contact and sanction just received are included in the model there is a significant positive relationship between total prior seriousness and future offense seriousness and between type seriousness of present contact and sanction just received. There is a negative significant relationship between total prior seriousness and sanction just received.

APPENDIX E

A COMPARISON OF DEMOGRAPHIC AND CAREER EFFECTS IN THE JUVENILE AND ADULT PERIODS¹

INTRODUCTION

The question we are addressing in this appendix is whether or not the effects of the demographic and career variables on future total offense seriousness differ for the juvenile and adult career periods, contact level by contact level. Lisrel provides one analytic approach to this question.

Lisrel analysis involves simultaneously estimating covariance structure models for each period, juvenile and adult, and then comparing the estimated variance-covariance structures that result with the sample covariance structure in order to assess the goodness of fit of the estimated model for each period. The estimated covariance structure model is derived using maximum likelihood estimates (MLE) in a way that minimizes the value of the "fitting function" and therefore provides the best possible fit given a particular set of hypotheses about the causal parameters, measurement errors, and the variances-covariances among the observed variables. Once the estimated covariance structure is derived, goodness of fit indicators can be computed and then the analysis can proceed by modifying the original set of assumptions. One of the greatest strengths of the Lisrel technique is that it allows simultaneous consideration

¹ The analysis described in this appendix was written by Kathleen Anderson and was conducted by her and W. Edgar Murph with the assistance of Professor Robert Nash Parker.

of a measurement model and a structural (causal) model. The measurement model relates observable exogenous or endogenous variables to unobservable exogenous or endogenous variables. The structural model relates the exogenous to the endogenous variables and allows for an assessment of the assumed causal effects and the hypotheses concerning the variance-covariance of the errors in the dependent variables and the variance-covariance of the true independent variables.

COMPARISON OF CONTACTS 3 THROUGH 8 FOR THE JUVENILE
AND ADULT PERIODS

Procedure

Returning to the original question, previous analysis seems to indicate that there are differences between the juvenile and the adult period in the effects of the independent variables, representing demographic and career characteristics, on the dependent variable, future total offense seriousness. This can be seen by comparing the unstandardized parameter estimates obtained from the multiple regression analysis for each of the two periods. Our analysis of the question will proceed in this way: we have seven exogenous variables, six of them directly observable (type seriousness of present contact, neighborhood, sex, race, age at contact, and sanction just received) and one variable, punish, a theoretical construct with three indicators (total severity of prior sanctions, total prior seriousness, and number of prior sanctions). Two models were constructed. The first model linked each of the seven "true" independent variables

to the dependent variable, future total offense seriousness, and defined a relationship between the observable independent variables (total prior sanctions, total prior offense seriousness, and number of prior sanctions) and the underlying construct "punish" for the juvenile period. The second model does the same thing for the adult period.

Assumptions are made which constrain all the coefficients linking the independent variables to the dependent variable and the indicators to the factor, punish, to be the same for both periods. The variance-covariance of the independent variables, and the variance of the errors in the equations are also constrained to be the same for both periods. Lisrel estimates are computed for each of the two periods under this set of assumptions. The goodness of fit of the model is then tested by comparing the Lisrel estimates for each of the two periods to the sample values. Using the results of this set of assumptions as baseline values, the assumptions can then be relaxed so that some of the parameters are not forced to be equal across periods. If the model is improved compared to the baseline model as the constraints are relaxed and if the best fit is achieved when all the parameters are freed, then we can say that the effects do in fact differ from the juvenile to the adult period. If the best fit is achieved with some of the parameters constrained to be the same, then this indicates that the effects of those particular variables on future total offense seriousness are the same for the two periods.

The procedure described above was followed contact level by contact level beginning with the third contact level and progressing through the eighth. The standardized coefficients of the independent variables from the best fitting model are presented in the tables. The results suggest that the effects of the immediate measures of criminal career and all the demographic variables, except residence, are different for the two periods while the effects of the cumulative career variables (measured by the construct, punish) are the same in the middle stage of career for the juvenile and adult periods. Punish can be constrained at the fourth, fifth, and sixth contact levels. The effect of punish is significant only at the fourth contact level. Residence can be constrained at the fifth and sixth contact levels. The effect of residence is never significant. At contact level seven, an anomaly, the effects of sex and race are the same for the two periods; neither effect is significant.

The effects of the independent variables on future total offense seriousness as indicated by the outcomes of the analysis can be interpreted in this way: a positive coefficient for sex implies that being male is associated with higher future offense seriousness. A positive coefficient for race implies that being Non-White is associated with higher future offense seriousness. A positive coefficient for neighborhood implies that inner city residence is associated with higher future offense seriousness. The other independent variables of the regression analysis (total prior seriousness, total prior sanctions, and number of prior

sanctions) are directly related to the future seriousness if the sign of the coefficient is positive. For example, a positive coefficient for total prior seriousness implies that a high value for this variable is associated with a high value for total future offense seriousness. In the Lisrel analysis these three variables are not directly linked to the dependent variable, future total offense seriousness. Instead, we have one latent variable, punish, which has as its measurable indicators the three cumulative career variables. The three individual variables are each a function of the underlying construct, punish. That is, the observed variances and covariances of the three individual variables are assumed to be determined by the underlying factor, punish, which represents the cumulative career status of the person. The cumulative career variables and the model itself defines the factor, punish. (If the fit of the model is good, then the validity of a definition is reliable.) The variances/covariances of the three indicators that result from the model can then be used in a regression procedure to arrive at the effects of punish on future total offense seriousness. A negative coefficient implies that a high value for punish is linked to a low future total offense seriousness while a positive coefficient implies that high values on punish are associated with high future total offense seriousness. It cannot be inferred from this that any one variable or all the variables necessarily have high values since their relationship to punish is in turn defined by the factor loadings that are a function of the assumptions of the best model.

Third Contact Level

In the first model presented (Table 1) all of the parameters

TABLE 1. LISREL ANALYSIS OF EFFECTS OF DEMOGRAPHIC AND CAREER VARIABLES ON FUTURE OFFENSE SERIOUSNESS AT THIRD JUVENILE VS. THIRD ADULT POLICE CONTACT

<u>Variables</u>	<u>Juvenile¹</u>	<u>Adult²</u>	<u>Juvenile Lisrel</u>	<u>Adult Lisrel</u>
Type Seriousness	.037	-.051	.045	-.030
Neighborhood	-.059	-.130*	-.222	.017
Sex	.077	.074	.101*	.054
Race	.108*	.064	.135*	.101
Age	-.513*	-.241*	-.687*	-.161*
Prior Snc. Sev. ³	.063	-.062	-.450	.103
Prior Contact Ser.	.037	-.428*		
Number Prior Snc.	-.060	-.124		
Snc. at Contact	.040	.035	.064	.022
R ²	.342*	.238*	.346	.217

Chi Square = 122.2
DF = 28
P = 0.0

Goodness of Fit Index

.988 .978

BASELINE
Chi Square = 6692.9
DF = 69

Goodness of Fit Index

.456 .796

¹ Standardized estimates from Table 17.

² Standardized estimates from Table 18.

³ For Lisrel analyses, prior sanction severity, prior contact severity, and number of prior sanctions are combined to create the independent variable, punish.

* Significant at .01 level.

were constrained to be the same. Under this assumption Chi Square was 6692.9, with 69 degrees of freedom (baseline Chi Square). The goodness of fit index was .456 for the juvenile period and .796 for the adult period. The second modeling

attempt freed all of Phi, the matrix of the variances-covariances of the independent variables. The fit was improved and Chi Square dropped from 6629.9 to 2771.7, with 41 degrees of freedom. The goodness of fit index improved for both the juvenile and adult periods (from .456 to .793 for the juvenile period and from .796 to .804 for the adult period). The third model freed Psi, the variance of the error terms of the equations. Again there was improvement in the fit of the model for both the juvenile and adult periods. The process of loosening constraints continued until finally all the parameters were freed except the off-diagonal Theta Deltas. With all the parameters freed except off-diagonal Theta Delta the goodness of fit index was .988 for the juvenile period and .978 for the adult period. Chi Square was 122.2 with 28 degrees of freedom (a respectable Chi Square to degrees of freedom ratio). Freeing the off-diagonal Theta Delta resulted in a worse fitting model. It appeared that the best possible model was that in which all parameters were freed except off diagonal Theta Delta.

To make sure this was the best possible model, the parameters of Gamma, which were most similar between the two periods, were constrained to be the same. Once all the elements of Gamma were constrained to be the same, then the process was reversed and the parameters that differed the most from the juvenile to the adult period were freed beginning with age, then neighborhood, race, punish, type seriousness, sex, and finally severity of most recent sanction. This confirmed that the best

model was that in which all the elements of Gamma were freed. Gamma is the matrix of the coefficients relating the independent variables to future total offense seriousness. The fact that all the elements of Gamma must be freed to achieve the best fit implies that the effects of all the independent variables are different for the juvenile and adult periods. For the third contact level it appears then that the effects of the independent variables on the dependent variable, future total offense seriousness, are different for the juvenile and adult career periods.

The standardized Lisrel coefficients that link the independent variables to future total offense seriousness (based on the best modelling attempt) are presented in Table 1 along with the standardized estimates of the multiple regression analysis for the juvenile and adult periods, the coefficients of determination, the goodness of fit indicators, and Chi Square values.

Lisrel allows a formalized test of whether the effects are the same or different for the juvenile and adult periods. To determine whether the effects are different between groups using multiple regression analysis the unstandardized coefficients are compared and if they are about the same the effects are assumed to be the same. At contact level three of the multiple regression it appears that the effects of neighborhood of residence might be the same. As seen from the Lisrel analysis this is not the case. All the effects are different for the two

periods (the best fit of the model occurs when all the elements of Gamma, the matrix of coefficients linking independent variables to the dependent variable, are free to differ). Constraining neighborhood effects to be the same for the two periods resulted in a worse fit for the model.

In multiple regression analysis the assumption is made that variables are measured without error. Lisrel takes correlated error specifically into account. The estimates of the effects are affected by assumptions about errors and thus the standardized estimates of the multiple regression analysis might be biased and different from those based on Lisrel. At contact level three for the juvenile period there appears to be little change in the standardized estimates except for neighborhood of residence, which changes in magnitude. For the adult period, too, the effect of neighborhood is different. Comparison is made more difficult given that three of the independent variables used in multiple regression are, for the Lisrel analysis, used as the indicators of a single independent variable, punish. Thus we cannot directly compare the Lisrel results to multiple regression results for the three cumulative career variables.

The standardized estimates measure the relative impact of the independent variables on the dependent variable. The relative importance of the effects changes for the juvenile and the adult periods when Lisrel is used. With the multiple regression analysis age dominates the effects of the other variables and is followed (not very closely) by race and sex.

The effects of the variables measuring criminal career involvement have relatively little impact. With Lisrel age dominates the effects but is followed closely by punish, the measure of cumulative career. For the adult period total prior offense seriousness is the dominant effect followed by age. With Lisrel age dominates the effects but is followed closely by punish and race. Based on the multiple regression analysis it appears that the effects of the cumulative career variables were not that important. There was no consistency in the direction of the impact for the juvenile period. High total prior sanctions was associated with high future offense seriousness, high total prior seriousness was associated with high future offense seriousness, and high number of prior sanctions was associated with "low" future offense seriousness. For the adult period the relationship between each of the career variables and future total offense seriousness was inverse; high values for each of the variables was associated with low total future offense seriousness. However, when the interactive effects of the three cumulative career measures were controlled for by the creation of a theoretical construct, punish, career emerges as an important effect at the third contact level. For the juvenile period punish and the dependent variable, total future offense seriousness, are inversely related. High value for punish implies low value for future offense seriousness. For the adult period punish and future total offense seriousness are directly related. A high value for punish implies high value for total future offense seriousness.

Fourth Contact Level

A similar strategy was adopted for contact level four (Table

TABLE 2. LISREL ANALYSIS OF EFFECTS OF DEMOGRAPHIC AND CAREER
VARIABLES ON FUTURE OFFENSE SERIOUSNESS AT FOURTH
JUVENILE VS. FOURTH ADULT POLICE CONTACT

<u>Variables</u>	<u>Juvenile¹</u>	<u>Adult²</u>	<u>Juvenile</u> <u>Lisrel</u>	<u>Inv.</u> <u>Lisrel</u>	<u>Adult</u> <u>Lisrel</u>
Type Seriousness	.025	.020	.035		.020
Neighborhood	-.071	-.115	-.270		.010
Sex	.090	.079	.124*		.058
Race	.108	.067	.145*		.092
Age	-.517*	-.278*	-.758*		-.170*
Prior Snc. Sev. ³	.058	-.030		.094*	
Prior Contact Ser.	-.059	.372*			
Number Prior Snc.	-.044	-.119			
Snc. at Contact	-.009	-.064	-.003		-.031
R ²	.353*	.219*	.358		.209

Chi Square = 136.6

DF = 29

P = 0.0

Goodness of Fit Index

.972

.978

BASELINE

Chi Square = 4397.7

DF = 69

Goodness of Fit Index

.509

.805

¹ Standardized estimates from Table 17.

² Standardized estimates from Table 18.

³ For Lisrel analyses, prior sanction severity, prior contact severity, and number of prior sanctions are combined to create the independent variable, punish.

* Significant at .01 level.

2). First, all the parameters were constrained to be equal.

This resulted in a Chi Square of 4397.7, with 69 degrees of freedom, and a goodness of fit index of .509 for the juvenile

period and .805 for the adult period. Using these figures as the

basis for comparison, the various parameters of the model were freed, step-by-step, in much the same way as for contact three.

In the second model the variances and covariances of the independent variables contained in the matrix were allowed to differ for the juvenile and adult periods. There was a substantial improvement in Chi Square (from 4397.7 to 1674.7) and a large improvement in the goodness of fit index, especially for the juvenile period. Next, the variances of the error terms of the equations (the variance in the errors of the dependent variables) were allowed to be different. This also led to an improvement in Chi Square (from 1674.7 to 1516.1) and an improvement in the goodness of fit index for both the juvenile and the adult periods. Further improvement in the model was achieved when the errors in the measurement of the indicators of the underlying construct, punish, were allowed to be different for the two periods. Chi Square dropped from 1516.1 to 349.4 and the goodness of fit indicators improved for both periods. When the coefficients relating total prior sanctions, total prior seriousness, and number of prior sanctions to punish were freed, there was improvement in Chi Square and in the goodness of fit indicators. Chi Square dropped from 349.4 to 251.8. At this point all the elements of the measurement model were freed and the parameters of the causal model (the variance of the errors in the dependent variables and the variance-covariance of the independent variables) which were most likely to be different from the juvenile to the adult period were also freed.

Since our main interest is in determining whether the effects of the independent variables on the dependent variable are different, we next focused our attention on Gamma, the matrix of coefficients relating the independent variables to the dependent variable. When all the effects were allowed to differ there was an improvement in Chi Square (from 251.8 to 136.6) and improvement in the goodness of fit indicators for both the juvenile and adult periods (especially for the juvenile period).

To make sure this was the best possible fit and that, in fact, the effects of the independent variables were different for the two periods, individual elements of Gamma were constrained to be the same. The fit was improved when the effects of punish were assumed to be the same in both periods.

The results of the multiple regression analysis suggest that the effects of the cumulative career variables on future total offense seriousness are different for the two career periods. With the Lisrel analysis in which it is assumed that the three measures are a function of punish, the effect of cumulative career on future career is the same for the two periods. The standardized Lisrel estimates for this model are presented in Table 2 along with the standardized estimates of the multiple regression analysis.

At the fourth contact level only the effect of neighborhood of residence on future total offense seriousness appeared to be the same (looking at unstandardized coefficients in the multiple regression analysis). The Lisrel analysis shows that the effect

of residence is not the same for the juvenile and adult periods but the effects of punish are the same. Although compared to the other coefficients for the juvenile period the effect of punish is not very strong, it is significant. The relative order of impact of the independent variables on future total offense seriousness based on the magnitude of the Lisrel estimates is only slightly different from the multiple regression analysis. For the adult period total prior contact seriousness and age are the dominant effects using multiple regression, while age followed by punish dominate the function using Lisrel results.

Fifth Contact Level

Here, again, the same procedure was followed (Table 3). A baseline model was constructed in which all the effects were assumed to be the same. Under this assumption there was a Chi Square of 3236.2 with 69 degrees of freedom. The goodness of fit indicators were .529 and .798, respectively. All the parameters were freed and then the various elements of Gamma were individually constrained. The model with the best fit was achieved with everything freed except residence and punish. Under this set of assumptions Chi Square was 112.6 with 30 degrees of freedom. The measures of goodness of fit were relatively high, .969 for the juveniles and .979 for the adults. Thus, it appears that the effects of these two variables, residence and punish, on future total offense seriousness are the same for the two periods.

TABLE 3. LISREL ANALYSIS OF EFFECTS OF DEMOGRAPHIC AND CAREER VARIABLES ON FUTURE OFFENSE SERIOUSNESS AT FIFTH JUVENILE VS. FIFTH ADULT POLICE CONTACT

<u>Variables</u>	<u>Juvenile¹</u>	<u>Adult²</u>	<u>Juvenile</u> <u>Lisrel</u>	<u>Inv.</u> <u>Lisrel</u>	<u>Adult</u> <u>Lisrel</u>
Type Seriousness	.102	-.031	.129*		-.025
Neighborhood	-.050	-.097		.002	
Sex	.062	.056	.088		.040
Race	.105	.043	.177*		.069
Age	-.540*	-.298*	-.816*		-.178*
Prior Snc. Sev. ³	.023	-.042		.067	
Prior Contact Ser.	.045	.379*			
Number Prior Snc.	-.041	-.178			
Snc. at Contact	-.033	.037	-.038		.044
R ²	.379*	.199*	.387		.195

Chi Square = 112.6
DF = 30
P = 0.0

Goodness of Fit Index .969 .979

BASELINE
Chi Square = 3236.2
DF = 69

Goodness of Fit Index .529 .798

¹ Standardized estimates from Table 17.

² Standardized estimates from Table 18.

³ For Lisrel analyses, prior sanction severity, prior contact severity, and number of prior sanctions are combined to create the independent variable, punish.

* Significant at .01 level.

The Lisrel estimates (the standardized coefficient values for the Gamma matrix) of the best model are presented in Table 3 along with the multiple regression results. Based on the unstandardized coefficients of multiple regression it appeared that the effects of neighborhood were the same for the two periods but that all the other effects were different. While the

effects of neighborhood of residence are the same for the Juvenile and adult periods, they are practically nil (.002). The effect of punish on future total offense seriousness is also the same for the two periods (not a very strong effect in either period). Relying on multiple regression the effects of the career variables appeared to be different in both magnitude and direction. The Lisrel results demonstrate the fallability of this conclusion.

Sixth Contact Level

A baseline model was constructed with the usual set of assumptions, yielding a Chi Square value of 2416.0 with 69 degrees of freedom (Table 4). All of the parameters were freed and then the individual elements of Gamma were constrained. The best fit was found when it was assumed that the effects of residence and punish were the same for the two periods. The addition of these two constraints to the model resulted in a Chi Square of 96.5 with 30 degrees of freedom. The goodness of fit indicators were .961 for the juveniles and .981 for the adults, suggesting that at this contact level as well the effects of residence and the cumulative career measures are the same for the two periods.

The standardized estimates of the "best" model are presented in Table 4. The effect of neighborhood, although the same for both periods, is very small on future total offense seriousness for either the juvenile or adult career. The effect of punish on future total offense seriousness (the same for the juvenile and

TABLE 4. LISREL ANALYSIS OF EFFECTS OF DEMOGRAPHIC AND CAREER VARIABLES ON FUTURE OFFENSE SERIOUSNESS AT SIXTH JUVENILE VS. SIXTH ADULT POLICE CONTACT

<u>Variables</u>	<u>Juvenile¹</u>	<u>Adult²</u>	<u>Juvenile Lisrel</u>	<u>Inv. Lisrel</u>	<u>Adult Lisrel</u>
Type Seriousness	-.018	-.172*	.001		-.113
Neighborhood	-.050	-.079		.008	
Sex	.044	.065	.085		.038
Race	.141*	.086	.236*		.091
Age	-.522*	-.348*	-.813*		-.206*
Prior Snc. Sev. ³	.011	-.041		.036	
Prior Contact Ser.	.121	.334			
Number Prior Snc.	-.059	-.203			
Snc. at Contact	-.049	.080	-.075		.054
R ²	.385*	.204*	.386		.210

Chi Square = 96.5

DF = 30

P = 0.0

Goodness of Fit Index

.961

.981

BASELINE

Chi Square = 2416.0

DF = 69

Goodness of Fit Index

.510

.799

¹ Standardized estimates from Table 17.

² Standardized estimates from Table 18.

³ For Lisrel analyses, prior sanction severity, prior contact severity, and number of prior sanctions are combined to create the independent variable, punish.

* Significant at .01 level.

adult periods) is also weak compared to the effects of the other independent variables.

The amount of variance in future total offense seriousness explained by the effects of the independent variables is nearly the same for the Lisrel analysis and the multiple regression analysis, the order of impact of the independent variables is

slightly different. For the juvenile period the Lisrel results show more concentration of effects in the two variables, age and race, with very little impact by the other variables. For the adults age again is dominant but while the multiple regression indicates that the effects of cumulative career variables are important the Lisrel coefficients suggest that they are not.

Seventh Contact Level

At contact level seven, as before, the initial set of assumptions constraining all the effects to be the same was used and resulted in a baseline Chi Square of 6821.4 with 69 degrees of freedom (Table 5). The goodness of fit indicators were relatively low, .431 for the juveniles and .730 for the adults. Successive freeing of parameters resulted in an improvement in the fit of the model. In the best model all the effects were freed except age and sex. So, at contact seven we find that the effects of sex and race are the same for the juvenile and adult periods. This is in startling contrast to the findings at the fourth, fifth, and sixth contact levels. Although the effects of sex and race are the same for both periods, neither effect is significant. The absolute magnitudes and the signs of the two variables do not change drastically when Lisrel is used for either the juvenile or the adult period.

The Lisrel estimates of the best model are presented in Table 5. Based on the unstandardized coefficients of the multiple regression, only the effect of neighborhood on future total offense seriousness appears to be the same. The Lisrel

TABLE 5. LISREL ANALYSIS OF EFFECTS OF DEMOGRAPHIC AND CAREER VARIABLES ON FUTURE OFFENSE SERIOUSNESS AT SEVENTH JUVENILE VS. SEVENTH ADULT POLICE CONTACT

Variables	Juvenile ¹	Adult ²	Juvenile Lisrel	Inv. Lisrel	Adult Lisrel
Type Seriousness	.018	-.126	.044		-.080
Neighborhood	-.066	-.101	.361		.011
Sex	.010	.092		.052	
Race	.127	.072		.107	
Age	-.489*	-.367*	-.760*		-.215*
Prior Snc. Sev. ³	-.048	-.035	-.221		.031
Prior Contact Ser.	.133	.279			
Number Prior Snc.	-.072	-.169			
Snc. at Contact	.047	-.014	.062		-.014
R ²	.347*	.180*	.348		.196

Chi Square = 79.0
DF = 30
P = 0.0

Goodness of Fit Index .962 .984

BASELINE
Chi Square = 6821.4
DF = 69

Goodness of Fit Index .431 .730

¹ Standardized estimates from Table 17.

² Standardized estimates from Table 18.

³ For Lisrel analyses, prior sanction severity, prior contact severity, and number of prior sanctions are combined to create the independent variable, punish.

* Significant at .01 level.

results indicate that the effect of neighborhood is not the same but the effects of race and sex are.

Differences in the magnitude, direction, and relative impact of the individual effects on future total offense seriousness are apparent when the standardized regression coefficients and the standardized Lisrel estimates are compared for the juvenile

period and the adult period. For the juvenile period (multiple regression) age dominates the function and is followed not very closely by total prior seriousness and race. With Lisrel age is the dominant effect followed by neighborhood and punish. The effect of neighborhood was negative and relatively weak using multiple regression. With the statistically more refined Lisrel the effect of neighborhood is greater in absolute magnitude, has relatively more impact, and is positive. When the adult period is considered (multiple regression results) age dominates all other effects and is followed in impact by total prior seriousness. With Lisrel, too, age dominates but is followed in relative impact by race. As an example of the disparity in the results of the multiple regression and Lisrel analyses we can again turn to the neighborhood effect. With multiple regression (adult period) the effect is negative and has a relatively moderate impact on future total offense seriousness. With Lisrel the neighborhood effect is positive and has virtually no impact on future total offense seriousness.

Eighth Contact Level

The same procedure followed at the eighth contact level yielded results that tend to support the hypothesis that the effects of the demographic and career variables on future total offense seriousness are different for the two periods (Table 6). With everything constrained to be the same, baseline Chi Square is 1627.9 with 69 degrees of freedom. The model was improved with each successive relaxation of the constraints until the best

TABLE 6. LISREL ANALYSIS OF EFFECTS OF DEMOGRAPHIC AND CAREER VARIABLES ON FUTURE OFFENSE SERIOUSNESS AT EIGHTH JUVENILE VS. EIGHTH ADULT POLICE CONTACT

<u>Variables</u>	<u>Juvenile¹</u>	<u>Adult²</u>	<u>Juvenile</u> <u>Lisrel</u>	<u>Inv.</u> <u>Lisrel</u>	<u>Adult</u> <u>Lisrel</u>
Type Seriousness	.045	-.008	.057		.001
Neighborhood	-.049	-.125	-.188		.011
Sex	.017	.059	.079		.035
Race	.130	.028	.175		.074
Age	-.505*	-.349*	-.789*		-.201*
Prior Snc. Sev. ³	-.003	-.031	-.026		.011
Prior Contact Ser.	.132	.311			
Number Prior Snc.	-.090	-.264			
Snc. at Contact	-.013	-.056	-.016		-.039
R ²	.348*	.131*	.357		.146

Chi Square = 87.3

DF = 28

P = 0.0

Goodness of Fit Index

.954

.980

BASELINE

Chi Square = 1627.9

DF = 69

Goodness of Fit Index

.513

.788

¹ Standardized estimates from Table 17.

² Standardized estimates from Table 18.

³ For Lisrel analyses, prior sanction severity, prior contact severity, and number of prior sanctions are combined to create the independent variable, punish.

* Significant at .01 level.

fit was achieved with everything freed. With everything freed

Chi Square declined to 87.3 with 28 degrees of freedom. The

goodness of fit indicators were .954 for the juveniles and .980

for the adults. These results along with the standardized

estimates of the best fit model are presented in Table 6.

When Lisrel is used a more refined and explicit modelling of the data is possible. Perhaps for this reason when the multiple regression and Lisrel results are compared we find that none of the variance in future total offense seriousness appears to be explained by the linear function of independent variables for both the juvenile and adult periods. The order of the effects changes very little, except for the effect of the cumulative career measures (adult period). The results of the multiple regression analysis suggest that total prior seriousness and number of prior sanctions are important effects. When these two variables are combined along with total sanction severity to form punish (Lisrel) it then appears that cumulative career has practically no effect on future total offense seriousness.

CONCLUSION

The results of the multiple regression analysis suggested that the effects of the demographic and career variables on future total offense seriousness are in general different for the juvenile and adult career periods. The fact that aspects of the criminal justice system are clearly and directly associated with child status vs. adult status implies that there exists at least a measure of consensus that the effect of criminal career (seriousness and sanctioning) past and present have different effects on future criminal career, depending on the period of criminal activity. This alone justifies a further consideration of the conclusions suggested by the multiple regression analysis. The Lisrel analysis was conducted for this purpose. The results

of the Lisrel analysis did not completely support the hypothesis that the effects of the independent variables on future offense seriousness are different for the two periods.

The effects of the characteristic variables, those least susceptible to external manipulation (age, sex, and race), are different for future total offense seriousness of juvenile and adult careers except at the seventh contact level. At the seventh contact level the effects of sex and race on future total offense seriousness are the same for the two periods. The effect of the cumulative career variable, punish, which is a composite of the cohort members' criminal behavior and official reactions to it, is the same for the two periods at the fourth, fifth, and sixth contact levels. The effect of place of residence on future total offense seriousness is also the same for the juvenile and adult careers at the fifth and sixth contact levels.

To test for the equality of effects between periods using multiple regression, the unstandardized coefficients, juvenile and adult, are compared contact level by contact level. None of the unstandardized coefficients were exactly the same for the two groups, contact by contact, for any of the variables. However, the unstandardized coefficients were close to being the same for neighborhood of residence (contact levels 3 through 7) and sex (contact level 6). Nothing in the results of the multiple regression analysis suggested that the effects of cumulative career or race were the same at any contact level.

So, with the multiple regression analysis some effects appear to be the same when they are in fact shown to be different by Lisrel analysis. Some effects which appear to be different are the same according to the Lisrel results.

There appears to be somewhat of a pattern in the similarity of effects using the Lisrel analysis. Except for the somewhat anomalous contact 7 which showed the effects of sex and race to be the same for the two periods, the effects of age, sex, race, and the immediate measures of criminal career are never the same. However, after career, either juvenile or adult, has progressed through the initial stages (contacts 1 through 3), the effects of neighborhood and the measure of cumulative career are the same for the two periods and then as career advances they again are different. This raises the question of why these effects would be similar at this particular stage of career. One possibility is that the effects of this stage of juvenile career are the same, not just at this same stage of adult career but at perhaps all stages of adult career. Comparing the two career periods, neither of which is static or unidimensional, required controlling for changes over time and activity within periods. Stage of career, as represented by contact level, encompassed both time and activity aspects of career period and seemed a logical choice for a control that would enable comparison. This simplification, however, may have caused a loss of substantive insight that is potentially available through the use of the Lisrel technique. Knowing whether or not the effects of the

independent variables (at least some of them) are the same across the juvenile period or across the adult period might allow further conclusions about the similarity of effects. It might, for example, be found that the effects of a more advanced stage of juvenile career are the same for both the early stage of adult career and the more advanced stage of adult career. This question, along with other concerns, will be addressed in later analysis.

APPENDIX F

A MULTIPLE DISCRIMINANT ANALYSIS OF CONTINUATION VS. DISCONTINUATION¹

Multiple discriminant analysis provides a method for deriving a linear combination of variables that is the most useful for discriminating between individuals with future police contacts and those with no future police contacts. This analysis is conducted on a contact level by contact level basis for the first nine contacts of the total career (juvenile and adult combined) and with cohorts combined. The nine variables included in the discriminant analysis are seriousness of present contact, juvenile neighborhood, sex, race, age at contact, total prior severity of sanctions, total prior seriousness, number of prior sanctions, and sanction just received.

For each contact level the linear combination of the variables just listed is derived (the discriminant function) that has the highest possible multiple correlation with the groups at each contact level. From this function a discriminant score can be computed for each observation. Because we are concerned with discriminating between two groups, only one discriminant function is possible at each contact level.

INTERPRETING THE STANDARDIZED CANONICAL COEFFICIENTS

The values of the standardized canonical coefficients (Table 1) represent the relative contribution of the associated variable to the function and thus the relative importance of each variable

¹ This analysis was conducted and is described in this appendix by Kathleen Anderson.

TABLE 1. STANDARDIZED CANONICAL COEFFICIENTS AT FIRST TO NINTH OFFENSES, COMBINED COHORTS, JUVENILES AND ADULTS

	<u>Contact Levels</u>								
	1	2	3	4	5	6	7	8	9
Type Seriousness, Present Ofense	-.032	.028	.068	.001	.089	-.080	.019	-.068	.115
Juvenile Neighborhood	.038	.063	.038	-.016	.124	-.067	-.250	.072	.006
Sex	-.521	-.287	-.191	-.130	-.245	-.149	-.192	-.029	.035
White/Non-White	-.149	-.106	-.116	-.075	.011	-.232	-.328	-.175	-.013
Age at Contact	.822	1.028	1.028	1.113	1.107	1.093	1.087	1.024	.929
Severity of Prior Sanctions	.000	.035	.013	-.077	.207	-.142	.081	.064	.002
Total Prior Seriousness	.000	.048	-.033	-.003	.156	.227	.112	.037	-.256
Number of Prior Sanctions	.000	-.096	.010	-.031	-.271	-.196	-.286	-.383	.200
Severity, Present Sanction	.058	-.022	-.111	-.042	-.015	-.058	.176	-.148	-.063

TABLE 2. WILK'S LAMBDA, CANONICAL CORRELATION COEFFICIENTS, AND CANONICAL CORRELATION COEFFICIENTS SQUARED

	<u>Contact Levels</u>								
	1	2	3	4	5	6	7	8	9
Wilk's Lambda	.801	.771	.817	.760	.763	.789	.835	.855	.922
Canonical Correlation	.446	.479	.428	.490	.486	.460	.406	.381	.279
Canonical Correlation Squared	.199	.230	.183	.240	.237	.211	.165	.145	.078

compared to the other variables. They also provide the coefficients for the linear combination of variables used in the computation of a discriminant score for each observation.

The sign (+ or -) associated with each coefficient indicates whether the impact of a particular variable on the discriminant score is positive or negative. Age is definitely the most important variable included in the discriminant analysis. It dominates the function at every contact level and is positive in its impact on the discriminant score. None of the other variables ever approaches age in relative impact. Age is followed by sex in relative contribution to the discriminant score and has a negative coefficient. The variable sex is coded as a dummy variable with male=1 and female=0. So in the case where the person is a female the impact on the discriminant score is positive while if the person is male the impact of the discriminant function is negative and decreases the total discriminant score. At the higher contact levels (5-8) number of prior sanctions or race is ranked after age on the basis of its contribution to the discriminant function. Both of these variables have negative coefficients. A high number of prior sanctions has a negative impact on the discriminant score. Race is coded as Non-White=1 and White=0. Therefore, being Non-White tends to have a negative impact on the discriminant score while being White tends to have a positive impact. At contact level 9 total prior seriousness follows age in relative impact. At higher levels of total prior seriousness the impact on the discriminant function is negative.

Once a discriminant score for each observation has been computed the mean discriminant score for the future contacts and no future contacts group can then be computed for each contact level. Across all nine contact levels the group centroid (the mean discriminant score) is always positive for the no future contacts group and negative for the group with future contacts.

Of immediate concern is how well the discriminant functions derived differentiate between members of the no future contact group and the future contact group. If there is good differentiation, then the discriminant scores for members of each group will be clustered around the appropriate group centroid with little overlap or merging of the scores for the two groups. To assess this aspect of the discriminant analysis we can look at Wilk's lambda, the canonical correlation, and the canonical correlation squared. The high values found for Wilk's lambda indicate that when using this set of variables there is not a very high degree of separation possible. This is further supported by the low values found for the canonical correlation, which indicate that the correlation of the discriminant function with the groups is not very strong. The low values for the canonical correlation squared also indicate that not much of the variance in the discriminant function is explained by group membership (Table 2).

As mentioned, the high values for Wilk's lambda and the low values for the canonical correlations squared indicate (Table 2) that there is not much discriminating power present in the

discriminant function at each of the nine contact levels when all nine independent variables are included. The most discriminatory power is found at the lower and middle contact levels, particularly at the second, fourth, fifth, and sixth contact levels. At the fourth contact level 24.0% of the variance in the discriminant function is explained by the groups. At the fifth contact level 23.7% of the variance is explained. At the upper contact levels the proportion of variance explained is very low, ranging from 16.5% down to 7.8% at the ninth contact level.

REDUCING THE NUMBER OF VARIABLES

At this point the discriminant function derived is based on the inclusion of all nine of the variables originally selected for the analysis. Using the stepwise discriminant procedure it is possible to narrow down and focus on a subset of these nine variables chosen on the basis of whether or not they each meet certain specific statistical requirements for inclusion.

Using the stepwise procedure (Table 3) yields these results: at the lower contact levels (1-3) only demographic variables are included as good discriminators (age, sex, and race, in that order). At the middle contact levels the set of variables included is greatly expanded to include not only demographic variables but also the measures of cumulative career involvement with the legal system. At the higher contact levels the number of variables included as good discriminators falls off sharply. Only age is included as a good discriminator at the seventh and ninth contact levels and only age, race, and number of prior

TABLE 3. STEPWISE ENTRY OF VARIABLES AND WILK'S LAMBDA FOR BEST DISCRIMINATORS OF FIRST TO NINTH OFFENSES, COMBINED COHORTS, JUVENILES AND ADULTS

<u>Stepwise Discriminant Procedure by Order of Entry of Variables</u>									
<u>Contact Levels</u>									
	1	2	3	4	5	6	7	8	9
First Entry	A	A	A	A	A	A	A	A	A
Second Entry	S	S	S	S	S	SS		NS	
Third Entry	R	R	R	SS	NS	R		R	
Fourth Entry					SS	TS			
Fifth Entry					TS	BS			
Sixth Entry					JN	S			

<u>Value of Wilk's Lambda as Best Discriminator</u> <u>Variables are Included</u>									
<u>Contact Levels</u>									
	1	2	3	4	5	6	7	8	9
First Entry	.845	.788	.827	.766	.788	.812	.859	.881	.928
Second Entry	.806	.776	.822	.763	.780	.806		.865	
Third Entry	.801	.773	.819	.761	.777	.802		.859	
Fourth Entry					.771	.799			
Fifth Entry					.767	.795			
Sixth Entry					.765	.791			

KEY: A = Age at Contact
 R = White/Non-White
 JN = Juvenile Neighborhood
 NS = Number of Prior Sanctions
 TS = Total Prior Seriousness
 S = Sex
 SS = Severity of Prior Sanctions

* Significant at .01 level.

sanctions are included as good discriminators at the eighth contact level.

A MORE ARBITRARY APPROACH

If we again consider the results of the discriminant procedure in which all nine variables are included in the analysis and use the rule that only those variables which have a standardized canonical coefficient with a value greater than .1 are useful for discriminating between the two groups, then we see approximately the same pattern of variable involvement as was found using the stepwise discriminant procedure but with some specific differences in the inclusion of certain variables. At the lower contact levels the demographic variables are still found to be the best discriminators while at the middle and upper contact levels demographic variables are included along with both cumulative and immediate measures of criminal careers.

The two methods of selection are based on different criteria. The stepwise procedure includes or excludes variables on the basis of whether or not specific significance criteria are met and includes or excludes the variables in a way that maximizes the change in Wilk's lambda at each step. On the other hand, the cutoff method is based on an arbitrary cut-off criterion and the results may be less defensible statistically.

CHARACTERISTIC VARIABLES BY GROUPS

Given that it is not possible to discriminate very effectively on the basis of variables chosen for the analysis and discriminant functions derived, it is still possible to gain

insight into what variables are characteristic of group membership at the various contact levels. There are several ways to approach this.

USING THE CUTOFF PROCEDURE

First, it is possible to designate which variables are characteristic of each group by using the cutoff procedure and the rule that of these variables that meet the .1 cutoff value criterion, those with a negative standardized canonical correlation coefficient are characteristic of the future contacts group and those variables with a positive standardized coefficient are characteristic of the no future contacts group (Table 4).

At the first through fourth contacts a member of the no future contacts group can be characterized as having a high age at police contact. At contact level 5, in the "middle" career stage, a member of the no future contacts group had a high age at police contact, resided as a juvenile in a non-inner city neighborhood, and had a high total prior seriousness and high severity of prior sanctions. At contact level six the no future contacts group member had a high age at police contact coupled with a high total prior seriousness of police contact. At the seventh contact level the no future contacts group member is characterized by high age at contact, high total prior seriousness, and high severity of sanction just received. At the eighth contact level having a high age at contact is the dominant characteristic of a person most likely to be a member of the

TABLE 4. DISCRIMINANT ANALYSIS RESULTS

	<u>Contact Levels</u>								
	1	2	3	4	5	6	7	8	9
<u>Group 1: No Future Contacts</u>									
Centroid	.765	.922	.939	1.150	1.260	1.314	1.168	1.140	.858
Characteristic Values	A	A	A	A	A JN SS TS	A TS	A TS PS	A	A NS SR
Standardized Coefficient	.822	1.028	1.028	1.113	1.107 .124 .207 .156	1.093 .227	1.087 .112 .176	1.024	.929 .200 .115
<u>Group 2: Future Contacts</u>									
Centroid	-.325	-.323	-.238	-.274	-.245	-.203	-.168	-.149	-.098
Characteristic Values	S R	S R	S R PS	S	S NS	S R SS NS	S R JN NS	R NS PS	TS
Standardized Coefficient	-.521 -.149	-.287 -.106	-.191 -.116 -.111	-.130	-.245 -.271	-.149 -.232 -.142 -.196	-.192 -.328 -.250 -.286	-.175 -.383 -.148	-.256
Canonical Correlation Squared*	.199	.230	.183	.240	.237	.211	.165	.145	.078

* With all variables included.

KEY: A = Age at Contact
R = White/Non-White
JN = Juvenile Neighborhood
NS = Number of Prior Sanctions
TS = Total Prior Seriousness
S = Sex
SS = Severity of Prior Sanctions
PS = Present sanction
SR = Seriousness of Present Offense

group of discontinuers. At the ninth contact level having high age at police contact and high seriousness of present offense along with a large number of prior sanctions is characteristic of members of the no future contacts group.

For the future contacts group being male and Non-White are characteristic of those cohort members in an early stage of career development. At the fourth contact level being male is characteristic of the future contacts group. At the fifth contact level being male and having a large number of prior sanctions is characteristic. At the sixth contact level a member of the future contacts group can be characterized as male, Non-White, and having both a large number and a high total severity of prior sanctions. At contact level seven the future contacts group member is characterized as being male and Non-White, residing as a juvenile in a non-inner city neighborhood, and having had a large number of prior sanctions.

Of the group of cohort members who reach the eighth contact level being Non-White, having a large number of prior sanctions, and having just received a sanction with a high level of severity are characteristic of those with future contacts. Finally, at the ninth contact level persons with future contacts tend to have a high total seriousness for their prior police contacts.

It is interesting to note that for some of the variables a high value is characteristic of the no future contacts group at one contact level but characteristic of the future contact group at another contact level. For example, at contact level five a

high total severity of sanction is characteristic of the no future contact group, while at contact level six a high value for total severity of sanctions is characteristic of the future contacts group. This points out the necessity of thinking of the characteristic variables all together, not singly. That is, one of the conditions is not sufficient; they must all be present together to maximize the likelihood of correctly assigning a person to membership in one group or the other. The same variable may be characteristic of both groups in common with other characteristics that are not.

To summarize very briefly, in the early career stage (contacts 1-3) as well as the fourth contact level it is primarily demographic variables that help differentiate between the future and no future contacts groups. In the middle and later stages of career both demographic and career variables are helpful in differentiating between members of the future contacts group and the no future contacts group.

THE RESULTS UTILIZING ONLY VARIABLES SELECTED BY THE STEPWISE PROCEDURE

There are some differences between the variables selected as best discriminators by the cutoff criterion and those selected by the stepwise discriminant procedure. We might, therefore, expect to find some differences in what variables are considered to be characteristic of the no future contacts group and future contacts group membership. Again, using the rule that those variables with a negative standardized coefficient are characteristic of the group having future contacts and those

variables with positive standardized coefficients are characteristic of the group having no future contacts and considering only those variables selected by the stepwise discriminant procedure yields the following results (Table 5).

In the early stage of career the no future contacts group is characterized by high age at police contact. By the middle stage of career (contact levels five and six) not only the demographic but also some of the career variables become important as discriminating characteristics of the no future contacts group. Specifically, at contact level five high age at contact, non-inner city residence, high total prior seriousness, and high total severity of sanction are characteristic. At the sixth contact level high age at contact and high total prior seriousness are characteristic of the no future contacts group. In the later stage of career again only high age at police contact is characteristic of the no future contacts group.

For the future contacts group being male and Non-White are characteristic of the early stage of career (contacts 1-3). In the middle stage of career (4-6) high values for the sanctioning variables also become important as characteristics of the future contacts group. At the fourth contact level being male and having a high value for severity of sanction is characteristic. At the fifth contact level being male and having a high number of prior sanctions is characteristic. At the sixth contact level being male, Non-White, and having both high total severity and a large number of prior sanctions are characteristic of the future

TABLE 5. DISCRIMINANT ANALYSIS RESULTS INCLUDING ONLY THOSE VARIABLES SELECTED BY THE STEPWISE CRITERION

	<u>Contact Levels</u>								
	1	2	3	4	5	6	7	8	9
<u>Group 1: No Future Contacts</u>									
Centroid	.763	.916	.932	1.146	1.255	1.304	1.068	1.121	.824
Characteristic Values	A	A	A	A	A JN SS TS	A TS	A	A	A
Standardized Coefficient	.831	1.023	.975	1.120	1.103 .110 .206 .163	1.094 .215	1.078	1.046	1.037
<u>Group 2: Future Contacts</u>									
Centroid	-.324	-.321	-.236	-.273	-.244	-.202	-.154	-.146	-.094
Characteristic Values	S R	S R	S R	S SS	S NS	S R SS NS		R NS	
Standardized Coefficient	-.520 -.167	-.284 -.131	-.294 -.216	-.124 -.098	-.248 -.268	-.149 -.199 -.153 -.197		-.223 -.368	
Canonical Correlation Squared	.199	.227	.181	.239	.235	.209	.141	.141	.072

KEY: A = Age at Contact
R = White/Non-White
JN = Juvenile Neighborhood
NS = Number of Prior Sanctions
TS = Total Prior Seriousness
S = Sex
SS = Severity of Prior Sanctions
PS = Present sanction
SR = Seriousness of Present Offense

contacts group. In the later stage of career being Non-White and having a large number of prior sanctions are characteristic of the future contacts group. It is interesting to note that at the middle contact levels more variables, including the career variables, contribute to the usefulness of the discriminant function and it is at these levels that the most discriminating power is present in the function. However, since so little of the variation is explained at any stage of a career, it may be assumed that other variables not included in the analysis account in large part for group membership.

SUMMARY

Based on the results of the multiple discriminant analysis and using variables selected by the stepwise criterion, the age at police contact of the offender is clearly the best discriminating factor of all the variables included for determining at each of the nine contact levels those cohort members who will continue to have future police contacts and those who will have no future contacts. Consideration of the cohort member's behavior and the resultant response of the legal system does not help discriminate between those who will or will not continue in the early stage of their careers. However, of the group including those cohort members who reach a more advanced stage of career (fourth, fifth, or sixth police contact), total prior seriousness of police contacts and number and severity of prior sanctions do become important as discriminators between those who will or will not continue.

Total prior seriousness of police contacts has a positive standardized canonical correlation coefficient at both the fifth and sixth contact levels and is therefore considered to be characteristic of the no future contacts group. A high severity of sanctions is characteristic of the future contacts group at the fourth and sixth contact levels but characteristic of the no future contact group at the fifth contact level. A large number of prior sanctions is characteristic of the future contacts group at the fifth and sixth contact levels. So, even though these three career variables act as indicators of group membership, there is not an over-riding consistency that allows a solid judgment on the basis of their values of what group membership will be for a cohort member.

As we look at an even further progression in criminal career (seventh, eighth, and ninth contacts), the behavior of the cohort members reaching this stage and official reaction to the behavior, once again, is not very helpful in discriminating between those with future police contacts and those with no future police contacts.

APPENDIX G

CODE BOOK FOR INTERVIEW VARIABLES

AFRDSAL	Additive scale measuring adult friends' trouble with law. Ranges from 0=no friends in trouble to 5=reported friends in trouble all the time.
ADAUTOSC	Additive scale measuring auto use by respondent and friends. 0=low use to 3=high use.
ADJFRTR	Additive scale measuring degree of respondent's juvenile friends' trouble with the law. Ranges from 0=no friends in trouble to 5=respondent reported friends in trouble all the time.
AGEDLR	Age respondent obtained driver license.
AGEFJOB	Age when respondent obtained first job.
AGEMARRY	Age when respondent got married.
AGEMOVED	Age when respondent moved away from home.
ANEGO17	Additive version of GNEG017. See APOS017. Range, 0-5.
APOS017	Additive version of GPOS017, which is a geometric scale based on responses about who influenced respondent and how. Range, 0-5.
ATTPOLR	Attitude of respondent and closest friends toward the police during junior high and high school. 1=negative, 2=indifferent, 3=positive.
ATTSCHR	Dummy variable created to measure attitudes toward school during high school. 1=positive, 0=negative.
BES1DUM	Self report of non-system reactions to offense. 0=something, 1=nothing.
DIFFJR	Respondent's desire to be different kind of person during school years. 1=yes, 0=no.
EDUC	Actual number of years of schooling attained by respondent. Computed to provide interval-level measure of education.
EFF1DUM	Self report of effect of experience on respondent's behavior. 1=rebellion toward authority, 2=none or little, 3=deterrent effect.
EVAL617	Additive summary index of self, parents', teachers', and friends delinquent evaluation, ages 6-17.

EVAL18P	Additive summary index of self, parents', and friends' criminal evaluation after the age of 17.
FAMDUM	Type of family structure in which respondent grew up.
FLPR617	Weighted sum of self report felonies against persons, for ages 6-17. Weight=6
FLPR18P	Same as FLPR617 but applies to age 18 and older.
FLPRTOTL	Same as FLPR617 but applies to all ages.
FLPY617	Weighted sum of self report felonies against property, ages 6-17. Weight=5.
FLPY18P	Same as FLPY617 but applies to age 18 and older.
FLPYTOTL	Same as FLPY617 but applies to all ages.
FTH1DUM	Self report of friends' responses to behavior. 1=anti, 2=indifferent, 3=supportive.
HHEMP	Dummy variable for regularity of head of household's employment during juvenile period. 1=regularly employed, 0=not regularly employed.
HHJOB	Head of household's job level.
HRSEX	Dummy variable for sex of head of household. 1=male, 0=female.
INCOME	Recorded dollar value of respondent's annual income.
JOBHSDUM	Respondent's employment history during high school. 0=did not work, 1=worked.
JOBNOW	Did respondent or respondent's husband have a job at time of interview? 1=yes, 2=no.
MAMI617	Weighted sum of self report major misdemeanors, ages 6-17. Weight=4.
MAMI18P	Same as MAMI617 but applies to age 18 and older.
MAMITOTL	Same as MAMI617 but applies to all ages.
MARITDUM	Respondent's current marital status. 0=never, 1=at least once.
MIMI617	Weighted sum of self report minor misdemeanors, ages 6-17. Weight=3.
MIMI18P	Same as MIMI617 but applies to age 18 and older.

MIMITOTL Same as MIMI617 but applies to all ages.

MWORK Mother's employment history, juvenile period.
Created to take into account all information
available regardless of whether she was head
of household or not.
1=never employed, 2=intermittently employed,
3=employed all the time.

NOCAUGHT Self report of undetected juvenile law violations.
1=yes, 2=no.

NODIPLMR Respondent's high school graduation status.
0=graduated, 1=dropped out.

PATROLR Perceived police patrol in respondent's neighborhood
during junior high and high school.
1=none, 2=light, 3=moderate, 4=heavy.

POLCONT Number of police contacts respondent reported
having before reaching age 18.

PTH1DUM Self report of parents' reactions to behavior.
1=disapproved, 2=indifferent, 3=child not at fault.

RDATE Contact date coded as 1=non-summer, 2=summer.

REACT1 Self report reaction to police and what they did.
1=positive, 2=indifferent, 3=negative.

SIBS Number of respondent's siblings.

SRN617 Summary type seriousness index for all self report
offenses, ages 6-17.

SRN18P Summary type seriousness index for all self report
offenses, age 18 and older.

SRNT617 Summary type seriousness index for all self report
non-traffic offenses, ages 6-17.

SRNTOTAL Summary type seriousness index for all self report
offenses, all ages.

VICDUM Was respondent ever a victim? 0=no, 1=yes.